



**CALL NO. 200**

**CONTRACT ID. 181011**

**JEFFERSON COUNTY**

**FED/STATE PROJECT NUMBER 056GR18D011-NHPP IM**

**DESCRIPTION I-64**

**WORK TYPE GRADE & DRAIN WITH BRIDGE**

**PRIMARY COMPLETION DATE 11/15/2019**

**LETTING DATE: April 27,2018**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME April 27,2018. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**PLANS AVAILABLE FOR THIS PROJECT.**

**DBE CERTIFICATION REQUIRED - 11%**

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

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

## ADMINISTRATIVE DISTRICT - 05

**CONTRACT ID - 181011**

**056GR18D011-NHPP IM**

**COUNTY - JEFFERSON**

**PCN - DE05600641811**

**NHPP IM 0642(197)**

I-64 WIDEN I-64 WB RAMP TO I-264 WB FROM ONE TO TWO LANES FOR ENTIRE LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264, A DISTANCE OF 02.35 MILES.GRADE & DRAIN WITH BRIDGE SYP NO. 05-00159.00.

GEOGRAPHIC COORDINATES LATITUDE 85:37:27.00 LONGITUDE 38:14:17.00

**PCN - DE05600641812**

**NHPP IM 0642(198)**

I-64 JPC REPAIR AND DIAMOND GRIND ON I-64 FROM 0.129 MILE EAST OF KY-1932(BRECKENRIDGE LANE)(MP 11.574) TO 0.412 MILE WEST OF OXMOOR AVE(MP 13.160) IN JEFFERSON COUNTY, A DISTANCE OF 01.60 MILES.JPC PAVEMENT REPAIRS - DIAMOND GRINDING SYP NO. 05-02086.01.

GEOGRAPHIC COORDINATES LATITUDE 38:12:00.00 LONGITUDE 85:40:00.00

### COMPLETION DATE(S):

COMPLETED BY 11/15/2019

APPLIES TO ENTIRE CONTRACT

COMPLETED BY 10/15/2018

APPLIES TO 5-2086.01

## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

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

### **BID SUBMITTAL**

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. ([www.transportation.ky.gov/construction-procurement](http://www.transportation.ky.gov/construction-procurement))

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

### **JOINT VENTURE BIDDING**

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

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

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

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

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

foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

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

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

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

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

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

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

### **HARDWOOD REMOVAL RESTRICTIONS**

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

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

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

### **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research

Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

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

January 10, 2018

### **FEDERAL CONTRACT NOTES**

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

102.02 Current Capacity Rating 102.10 Delivery of Proposals  
102.8 Irregular Proposals 102.14 Disqualification of Bidders  
102.9 Proposal Guaranty

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

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

### **NOTICE TO ALL BIDDERS**

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

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

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

### **SECOND TIER SUBCONTRACTS**

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

### **DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

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

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

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

### **DBE GOAL**

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

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

### **OBLIGATION OF CONTRACTORS**

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

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

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

### **CERTIFICATION OF CONTRACT GOAL**

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE 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 Project Code Number (PCN), 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, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors 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 and nine (9) copies of this information must be received in the office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

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

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

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

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

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

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

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

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

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

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

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

### **PROMPT PAYMENT**

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

### **CONTRACTOR REPORTING**

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a signed and notarized affidavit (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 submitted within 10 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.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at:

<http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx>

**The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.**

Photocopied payments and completed, signed and notarized affidavit must be submitted by the Prime Contractor to: Office of Civil Rights and Small Business Development  
6<sup>th</sup> Floor West 200 Mero Street  
Frankfort, KY 40622

### **DEFAULT OR DECERTIFICATION OF THE DBE**

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

1/27/2017

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

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

SECTION 7 is expanded by the following new Article:

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

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

### **ASPHALT MIXTURE**

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

### **DGA BASE**

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

### **DGA BASE FOR SHOULDERS**

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

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

### **INCIDENTAL SURFACING**

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

### **JPC RIDE QUALITY**

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

### **JPC PAVEMENT THICKNESS**

Contrary to Sections 501.03.21, 501.05.01, 502.03, and 502.05, the Department will accept JPC Pavement and JPC Pavement 24/48/72 pavement thickness according to Special note for Acceptance of JPC Pavement Thickness [10T].

### **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.

**I-64 WEST AT I-264 WEST INTERCHANGE IMPROVEMENT PROJECT**  
**JEFFERSON COUNTY**  
**ITEM # 5-159**  
**PUBLIC INFORMATION PLAN**

The primary goal of the Public Information Plan (PIP) is to inform the motoring public and area stakeholders of project information including Maintenance of Traffic (MOT) which includes shoulder, lane and ramp closures. The KYTC District 5 Public Information Officer (PIO) will coordinate and disseminate to stakeholders and the media appropriate information regarding the construction plans.

**LOCAL STAKEHOLDERS**

- Elected Officials
  - State Senator Julie Raque Adams – (502) 564-8100; [julie.adams@lrc.ky.gov](mailto:julie.adams@lrc.ky.gov)
  - State Senator Morgan McGarvey – (502) 564-8100; [morgan.mcgarvey@lrc.ky.gov](mailto:morgan.mcgarvey@lrc.ky.gov)
  - State Representative Mary Lou Marzian – (502) 564-8100;  
[Marylou.marzian@lrc.ky.gov](mailto:Marylou.marzian@lrc.ky.gov)
  - State Representative Phil Moffett – (502) 564-8100; [phil.moffett@lrc.ky.gov](mailto:phil.moffett@lrc.ky.gov)
  - State Representative Steve Riggs – (502) 564-8100; [steve.riggs@lrc.ky.gov](mailto:steve.riggs@lrc.ky.gov)
  - Mayor Greg Fischer – (502) 574-2003; [greg.fischer@louisvilleky.gov](mailto:greg.fischer@louisvilleky.gov)
  - Metro Councilwoman Marilyn Parker – (502) 574-1118;  
[marilyn.parker@louisvilleky.gov](mailto:marilyn.parker@louisvilleky.gov)
  - Metro Councilman Brent Ackerson – (502) 574-1126;  
[brent.ackerson@louisvilleky.gov](mailto:brent.ackerson@louisvilleky.gov)
  
- Local Agencies
  - Randy Frantz, Director of Transportation for Jefferson County Public Schools – (502) 485-3470; [randy.frantz@jefferson.kyschools.us](mailto:randy.frantz@jefferson.kyschools.us)
  - Barry Barker, Transit Authority of the River City (TARC) – (502) 561-5100;  
[jbarrybarker@ridetarc.org](mailto:jbarrybarker@ridetarc.org)
  - Lt. Micah Scheu, Louisville Metro Police Department Traffic Division – (502) 643-5149; [micah.scheu@louisvilleky.gov](mailto:micah.scheu@louisvilleky.gov)
  
- Utility Companies
  - Local utility companies are kept apprised of this project at the monthly utility coordination meetings hosted by District 5
  
- Neighborhoods and their Mayors, other organizations
  - Kurt Gessner, Norton Suburban Hospital – (502) 893-1217;  
[kurt.gessner@nortonhealthcare.org](mailto:kurt.gessner@nortonhealthcare.org)
  - Dorie Shelburne, Jewish Hospital Medical Center – (502) 259-6061;  
[dorieshelburne@kentuckyonehealth.org](mailto:dorieshelburne@kentuckyonehealth.org)

- Ashley Davis, Jewish Hospital – (502) 259-6010;  
[ashleydavis3@kentuckyonehealth.org](mailto:ashleydavis3@kentuckyonehealth.org)
- Jillian Detherage, The Brook Hospital – (502) 814-3730;  
[jillian.detherage@uhsinc.com](mailto:jillian.detherage@uhsinc.com)
- Marc Miller, Baptist Hospital Regional Security Manager – (502) 897-8234;  
[mmiller3@bhsi.com](mailto:mmiller3@bhsi.com)
- Nicole Miller, Baptist Hospital EM Coordinator – (502) 896-7026;  
[Nicole.miller@bhsi.com](mailto:Nicole.miller@bhsi.com)
- Roy Williams III, Baptist Hospital Regional Security Director – (502) 897-8258;  
[roy.williams@bhsi.com](mailto:roy.williams@bhsi.com)

### **TRUCKING FIRMS AND OUT OF STATE STAKEHOLDERS**

Information will be distributed electronically to trucking firms via Rick Taylor at the Department of Vehicle Regulation (502-564-4540; [rick.taylor@ky.gov](mailto:rick.taylor@ky.gov)). Information will also be posted on the 511 website ([www.511.ky.gov](http://www.511.ky.gov)) and on the 511 telephone information system.

### **PRESENTATIONS**

A project description including anticipated schedule will be provided to the media, stakeholders and other emergency service agencies via e-mail prior to construction. Information will be provided to these groups via traffic advisories, press releases, the District 5 website and the weekly District 5 Road Show of Construction and Maintenance Activities.

### **MEDIA RELATIONS**

The District PIO will prepare an initial news release regarding the contract award for the project. The PIO will conduct interviews with the media throughout the project duration to keep the public informed of construction progress. Traffic advisories will be submitted to the media when a change in the MOT occurs. The contractor must provide to the PIO via the Resident Engineer notification of any change in the MOT at least five (5) days prior to the change.

COMMONWEALTH OF KENTUCKY  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

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JEFFERSON COUNTY

**ITEM NUMBER 5-159.00**

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## PROJECT DESCRIPTION

### GENERAL

This project includes furnishing and installing WEB cameras on lowering pole. This equipment will replace the traffic monitoring and advisory capabilities of the District 5 and TRIMARC.

This ITS Project complies with the requirements of 23 CFR 940. The ITS work to be performed is referenced in the current Kentucky 2009 Statewide ITS Architecture at Appendix C-4,5 and C-4 (Traffic Incident Management System ATMS08, and Traffic Information Dissemination ATMS06), and in the Updated Section 5 and Appendix B of the 2009 Addendum to the Original Kentucky ITS Business Plan.

#### EQUIPMENT AND MATERIALS

All equipment and materials shall be new, free of defects and damage.

#### SPECIFICATIONS AND WORKMANSHIP

Unless otherwise specified, all work shall conform to the following:

- Kentucky Standard Specifications for Road and Bridge Construction, latest edition.
- FHWA, Manual on Uniform Traffic Control Devices, latest edition.
- National Electrical Code, latest edition.
- National Electric Safety Code, latest edition.
- KYTC Department of Highways Standard Drawings, current editions.
- KYTC Department of Highways Sepia Drawings, current editions.
- International Municipal Signal Association (IMSA) Specification No. 51-7, current edition.
- AASHTO, Roadside Design Guide, latest edition.
- AASHTO, Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, latest edition.

All work shall be performed in a neat and professional manner. The Contractor shall remove debris and trash from work areas during construction. The Contractor shall restore areas to original condition and clean up all debris after construction.

#### DAMAGE TO EXISTING FACILITIES

The Contractor shall be responsible for locating all underground utilities prior to excavation. The contractor shall repair damage caused to any public or private facilities at his expense. Utilities include but are not limited to telephone, power, water, gas, fiber optic cable, underground vaults, roadway lighting wiring, traffic signal wiring, and roadway drainage systems.

#### MATERIALS LIST

The contractor shall provide an equipment list in Microsoft Excel format to the Engineer containing the following information:

- Type of equipment
- Field location
- Make
- Model
- Serial number
- Date of purchase
- Manufacturer contact information
- Equipment vendor contact information (if different)
- Date of Installation
- Date warranty expires

This list shall be provided to the Division of Traffic Operations prior to burn-in testing.

#### WARRANTY

The Contractor shall provide a copy of all equipment warranty information to the Division of Traffic Operations. The Contractor shall provide documentation from the manufacturer that ownership of the warranty is transferred to the following:

Kentucky Transportation Cabinet  
Division of Traffic Operations  
200 Mero Street  
Frankfort, KY 40622

#### TESTING

The contractor shall demonstrate proper functioning of all devices at the field communications demarcation point. After each device can be successfully operated at the field communications demarcation point the devices will be integrated into the TRIMARC Traffic Operations Center. A 30 day equipment burn-in test will begin after each device is integrated and can be remotely controlled from the operations centers. The Contractor is responsible for repairing or replacing defective equipment during the period between the field test and the start of the 30 day burn-in test.

The 30 day burn-in test will be conducted by TRIMARC from the operations center and consist of operational control of PTZ and video of the remote camera location.

If a device fails during the 30 burn-in day test, TRIMARC personnel will test the device at the field cabinet. If the device cannot be operated at the field cabinet the Contractor shall repair or replace the device and a new 30 day burn-in test will begin for that device.

The project will be accepted after all devices have completed their 30 day test successfully, acceptable as-built drawings and warranty information have been received.

#### SYSTEM COMPATIBILITY

The Contractor is responsible for coordinating with TRIMARC to insure equipment compatibility and to complete integration of equipment into the TRIMARC project.

## COMMUNICATIONS

Camera shall communicate with the control center over the new phone lines and/or DSL connection (coordinated with the TRIMARC). The Contractor shall be responsible for furnishing and installing all conduits, junction boxes and communication cables installed on Kentucky right-of-way as specified in the plans. The Contractor shall be responsible for the installation and correct operation of all communications systems located in the field cabinet to the field devices. Testing of the Contractor's work will be performed both locally at the cabinet and remotely at the TRIMARC Traffic Operations Center. TRIMARC personnel will assist with any troubleshooting necessary to resolve problems with the communication equipment.

## EQUIPMENT LIST

The contractor shall provide an equipment list in Microsoft Excel format to the Engineer containing the following information:

- Type of equipment
- Field location
- Make
- Model
- Serial number
- Date of purchase
- Manufacturer contact information
- Equipment vendor contact information (if different)
- Date of Installation
- Date warranty expires

This list shall be provided to the Division of Traffic Operations and TRIMARC Systems Administrator prior to burn-in testing. See below for TRIMARC Info:

Mr. Todd Hood  
TRIMARC Systems Administrator  
901 W. Main St.  
Louisville, KY 40202  
Phone: 502-587-6624  
Fax: 502-587-6645  
Email: Todd.Hood@ngc.com

## SHOP DRAWINGS

All items that are used on this project shall have shop drawings sent to Engineer, who will contact Division of Traffic Operations for approval. All items shall be approved before purchase of said items.

## AS-BUILT DRAWINGS

The Contractor, at the completion of the project, shall submit as-built drawings. As-built drawings shall be submitted in electronic format such as .pdf, .tiff, .dgn or other standard image format acceptable to the Engineer. As-built drawings may be scanned from marked up field plans or drawn in MicroStation. As-built drawings shall be scanned at a resolution that will allow them to be clearly legible on a computer display. As-built

drawings shall include the exact location of all above ground equipment, underground conduit, wire, sensors and other equipment. Drawings shall indicate any changes to the design including changes to the numbers of conductors, wire gage, splices, additional conduit, etc. Conduit locations shall be drawn to scale or shall be dimensioned and referenced to permanent roadway features. Turns in conduit shall be referenced so that the conduit paths may be derived from the as-built drawings. Existing underground utilities shall be indicated on the drawings. Two copies of the drawings shall be submitted. One copy of the drawings shall be submitted to the Engineer. One copy of the drawings shall be submitted to the KYTC Division of Traffic Operations Design Services Branch. The Contractor shall correct any drawings that are deemed unacceptable to the Engineer. As-built drawings shall be delivered prior to burn-in testing.

## **SITE PREPARATION**

### **DESCRIPTION**

Site Preparation shall be performed in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

Site Preparation shall include all materials required to access and protect the work area.

### **INSTALLATION**

The Contractor shall coordinate with the Engineer prior to performing any site preparation work. This item includes excavation, guardrail removal, guardrail replacement, temporary ditch crossings, temporary barriers and clearing of debris and foliage. Salvaged materials may be used at the discretion of the Engineer. Site preparation shall be one per VMS sign location/Web camera location. There shall not be site preparation for locations where services are installed (this is incidental to the installation of the service).

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Site Preparation will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **ADVANCED GROUNDING SYSTEM**

### **DESCRIPTION**

Furnish and install Advanced Grounding System in accordance with the plans, specifications and Standard Drawings.

## **MATERIALS**

Unless otherwise specified, the grounding system provided will be as shown in “Advanced Grounding System Details”. Minimum ground resistance reading needs to be 10 ohms or less as tested via the 3 point fall of potential test method.

If the installation of the advanced grounding system is not possible due to physical constraints of the location or other extenuating factors, the TRIMARC Engineer may allow for a standard ground installation. The standard installation would be with ground wiring consisting of solid bare copper #4 AWG and securely connected inside enclosures with #4 AWG copper clamp connectors. Nuts and washers securing the wire are not acceptable. All grounding shall meet the National Electric Code. Ground wires shall be exothermically welded to the ground rods. Ground rod clamps are not acceptable. The following devices shall be grounded to an array of two or three, 10’ X 1” copper coated steel ground rods:

- Model 334/336 Enclosures (two ground rods required)
- Camera Poles (three ground rods required)
- Side-mounted VMS(two ground rods required)
- Service Locations(two ground rods required)

All ground rods in arrays shall have a minimum of 6’ separation.

The resistance to ground shall be less than 10 Ohms as measured with an AEMC clamp on ground resistance meter or equivalent. The Contractor shall leave all exothermic welds exposed for inspection by the Traffic Engineer before backfilling.

## **INSTALLATION**

All grounding shall be according to standards shown on “Advanced Grounding System Details”. If contractor needs help with installation, they can contact Alltec Corporation for further assistance at 800-203-2658.

## **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Advanced Grounding System will be measured for payment per each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **POLE BASE**

### **DESCRIPTION**

Furnish and install Pole Base in accordance with the plans, specifications and Standard Drawings.

## **MATERIALS**

Pole Base includes concrete, anchor bolts, reinforcing steel, and conduit within base. The Contractor shall submit to material testing at the discretion of the Engineer.

## **INSTALLATION**

The Contractor shall stake all proposed pole base locations and obtain approval before excavation. The TRIMARC Engineer will approve locations for pole bases. The Contractor shall have utilities marked in the field prior to requesting approval. The Contractor shall allow two weeks to schedule the location approval. TRIMARC approval of field device location does not relieve the contractor from his responsibility to avoid utilities and repair any damage to buried infrastructure. The Contractor shall grade and re-seed all disturbed areas and restore the area to the satisfaction of the Engineer. Poles located behind guardrail shall have a minimum 4' spacing from edge of pole to face of guardrail. Otherwise, poles shall be located as according to the plans sheets or a minimum of 30' from all driving lanes. This item includes all excavation including any special equipment required to install the base in rock. Near the pole base 3' wide x 3' long x 3' deep concrete pads will be required for the technician to stand on while accessing the hand hole. Concrete for the pad is incidental to this item. This item shall include a vented rodent barrier furnished and installed by the contractor. See Vented rodent barrier detail.

## **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Pole Base/Pole Base-High Mast will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **POLE WITH LOWERING DEVICE**

### **DESCRIPTION**

Pole with lowering device shall be designed to support and lower/raise a CCTV camera, lens, housing, PTZ mechanism, cabling, connectors and other supporting field components without damage or causing degradation of camera operations. The lowering device and the pole are interdependent and thus, must be considered a single unit or system. The lowering device system shall consist of a pole, suspension contact unit, divided support arm, pole adapter for attachment to a pole top tenon, pole top junction box, and camera connection box. The lowering device to be furnished shall be the product of a manufacturer with a minimum of two years of experience in the manufacturing of such systems.

### **MATERIALS**

#### **LOWERING DEVICE**

Lowering device shall be [MG]<sup>2</sup> Model CLDMG2, Camera Lowering Systems CDP series or approved equal.

## SUSPENSION CONTACT UNIT

The suspension contact unit shall have a load capacity 200 lbs. with a 4 to 1 safety factor. There shall be a locking mechanism between the fixed and moveable components of the lowering device. The movable assembly shall have a latching mechanism with a minimum of two latches. This latching mechanism shall securely hold the device and its mounted equipment. The latching mechanism shall operate by alternately raising and lowering the assembly using the winch and lowering cable. When latched, all weight shall be removed from the lowering cable. The fixed unit shall have a heavy duty cast tracking guide and means to allow latching in the same position each time. The contact unit housing shall be weatherproof with a gasket provided to seal the interior from dust and moisture.

The prefabricated components of the lift unit support system shall be designed to preclude the lifting cable from contacting the power or video cabling. The only cable permitted to move within the pole or lowering device during lowering/raising shall be the stainless steel lowering cable. All other cables must remain stable and secure during lowering/raising operations.

The female side of the socket contact connector shall be made of thermosetting synthetic polymer. The connector shall be suitable for Ethernet type camera installation.. All wire shall be 18 AWG stranded. Pin contact half of connector shall be made of thermosetting synthetic polymer. All pins and wires shall be molded in place. A complete disconnect unit shall have two identical sets of 10 contacts each (20 contacts total). Male Pin contact halves shall be mounted to lower portion of disconnect unit.

The portable lowering device and pulleys for the lowering device shall have sealed, self lubricated bearings, oil tight bronze bearings, or sintered bronze bushings. The lowering cable shall be a minimum 1/8 inch diameter stainless steel aircraft cable with a minimum breaking strength of 1740 pounds and shall be 19 x 7 or 7 x 19.

All electrical and video connections between the fixed and moveable portion of the contact block shall be protected from exposure to the weather by a waterproof seal to prevent degradation of the electrical contacts. The electrical connections between the fixed and movable lowering device components shall be designed to conduct high frequency data bits, one volt peak-to-peak video signals, and power requirements for operation of dome environmental controls. A direct coax connection is acceptable but not required.

The interface and locking components shall be made of stainless steel or aluminum. All external components of the lowering device shall be made of corrosion resistant materials, powder-coated, galvanized, or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment.

## POLE MATERIALS

All materials and products shall be manufactured in the United States of America, and comply with ASTM or AASHTO specifications. Mill certifications shall be supplied as proof of compliance with the specifications.

#### POLE DESIGN

Pole design shall be in accordance with loading and allowable stress requirements of 2013 AASHTO “Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals”, current edition. Loading shall be based on:

- basic wind speed of 90 mph
- 30 percent gust factor using
- design life/recurrence interval of 50 years
- fatigue category I.

The lowering device manufacturer shall furnish independent laboratory testing documents certifying adherence to the stated wind force criteria utilizing, as a minimum EPA, an EPA equal to or greater than that of the camera system to be attached. All drawings and detail analysis shall be submitted in detail demonstrating compliance with the AASHTO Specification.

To avoid vortex shedding, the steel pole members shall have a taper of 0.14 in/ft. All structures shall be designed to natural wind gust conditions. The yearly mean wind speed for natural wind gusts will be assumed to be 11.2 per hour.

Poles up to 50' in length shall be one-piece construction. Poles greater than 50' in length shall be of two-piece construction. Poles shall conform to ASTM A 595, Grade A minimum yield strength of 55 ksi, ASTM A 572 Grade 65, ASTM A 53. Pole, base plate, and all associated hardware shall be galvanized per ASTM A 123 or A 153. The shaft shall be round or 16 sided with a four inch corner radius and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Longitudinal seam welds within 6 inches of complete penetration pole to base plate welds shall be complete penetration welds. The shaft shall be hot dip galvanized per the requirements of the contract documents.

The pole top deflection shall not exceed one inch in a 30-mph (non-gust) wind. The calculations shall include a pole, base plate, and anchor bolt analysis. The pole detail analysis shall be analyzed at the pole base, at 5-ft. pole intervals, and at each slip joint splice. Design shall be based on wind loading (EPA) from a CCTV assembly dome enclosure.

**A detail analysis of the pole shall be submitted. The detailed analysis shall include, but not be limited to, the following calculations:**

- 1. Provide Group I, II, III, IV load combinations as listed in Table 3-1 Group Load Combinations in AASTHO.**

2. Provide dimensions and weights for all attachments. This includes areas used for wind, ice and fatigue loads, drag coefficients, projected areas, velocity pressures and wind force for each segment.
3. For Group Loads II, III, and IV, which have wind loads, provide calculations for each controlling "worst case" wind direction that controls any aspect of the design (anchor bolts, pole sizing, ect.)
4. Anchor Bolts shall be designed for the orientation that would provide the maximum stress on any individual bolt.
5. Provide all structural properties for poles, anchor bolts and base plates. This includes the poles diameter, thickness, section modulus, moment of inertia, and cross sectional area.
6. Calculations for each member shall include loads, section properties, member forces (axial, shear and bending), member deflections (angular and linear), member stresses (actual and allowable), and the combined stress ratio (CSR).
7. Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress category and example from Table 11-2 in AASHTO.
8. In fatigue calculations, the effective throat thickness of a complete joint penetration groove weld shall be the thickness of the thinner part joined per AISC J2.1a.

Provide steel strain poles with a permanently affixed label 6 feet from the bottom of the base plate on the outside with the following information:

manufacturer  
height  
minimum stringing tension at yield  
order number, and  
maximum deflection rate.

Provide detailed calculations of the pole. The detailed calculations shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.

#### POLE HAND HOLES

The pole hand hole opening shall be reinforced with a minimum 2-inch wide hot rolled steel rim. The nominal outside dimensions shall be 6.5 inches x 27 inches. The handhole shall have a tapped hole for mounting the portable winch as shown on the drawings.

The handhole cover shall be removable from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to provide adjustability to insure a weather-tight fit for the cover. The handhole shall

have a 3' L x3' W x4" D concrete pad install beside the opening of the handhole. Concrete for the pad is incidental to this item.

#### POLE TOP TENON

A tenon shall be welded to the pole top with mounting holes and slot as required for the mounting of the lowering system. The tenon shall be of dimensions required to facilitate camera lowering device component installation. Each slot shall be parallel to the pole centerline for mounting the lowering device.

#### POLE CABLE SUPPORTS

Electrical Cable Guides and Parking Stand (Eyebolts): Top and bottom electrical cable guides shall be located within the pole and aligned with each other as referenced in the drawings. One cable guide shall be positioned 2 inches below the handhole and the other shall be positioned 1 inch directly below the top of the tenon. A parking stand shall be positioned 2.75 inches below the top of the handhole.

#### BASE PLATE

Provide base plates that conform to ASTM A36 for grade 36 or ASTM 572 for grade 50. Ensure transverse plates have a thickness  $\geq 2$  inches. Provide a base plate for the vertical pole that fits inside a 48 in diameter concrete base. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration butt weld with backup bar. Plates shall be hot dip galvanized per the requirements of the contract documents.

#### POLE ANCHOR BOLTS

The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications. Use anchor bolts that conform to the requirement of ASTM F 1554 grade 55 for hooked smooth bars or grade 105 for headed. Anchor bolts shall conform to AASHTO M 314 grade 55. Anchor bolts and all associated hardware shall be fully galvanized per ASTM A 153. . Each anchor bolt shall be supplied with two hex nuts and two flat washers. The strength of the nuts shall equal or exceed the proof load of the bolts. For anchor bolt design, pole forces shall be positioned in such a manner to maximize the force on any individual anchor bolt regardless of the actual anchor bolt orientation with the pole. There shall be two steel templates (one can be used for the headed part of the anchor bolt when designed in this manner) provided per pole. Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized (ASTM A 153). Anchor bolt lengths should be based on NCHRP Report 494 Section 2.4.5.5 using #8 bars for the foundation reinforcing steel. The headed anchor bolt assembly shall be contained within 26.5 inch diameter. Minimum edge distance for bolt holes shall follow Table J3.4 of AISC Steel Construction Manual. NCHRP Report 494:

[http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_494.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_494.pdf)

NCHRP Report 469:

[http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_469-a.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_469-a.pdf)

## POLE WELDING

All welding shall be in accordance with Sections 1 through 8 of the AWS D1.1 Structural Welding Code. Tackers and welders shall be qualified in accordance with the code. Tube longitudinal seam welds shall be free of cracks and excessive undercut, performed with automatic processes, and shall be visually inspected. Tube shall contain only one longitudinal seam weld. Longitudinal welds suspected to contain defects shall be magnetic-particle inspected by the manufacturer. All circumferential butt-welded pole and arm splices shall be ultrasonically or radiographically inspected by the manufacturer.

This item includes all assembly, mounting hardware, wiring, grounding, and mechanical and electrical adjustments. Due to the electrical connections involved, the CCTV Assembly must be installed to properly test the lowering device. The contractor shall demonstrate to the Engineer the proper and repeated operation of the lowering device. Proper camera operation and electrical connections shall be verified after each lowering/raising cycle.

## INSTALLATION

### POLE

Pole shall be installed in the correct orientation and plumb. Pole shall be grounded in accordance with the plans and specifications. Damaged galvanizing shall be repaired with a paint approved by the Engineer. The pole shall have a 3' L x 3' W x 4" D concrete pad install for each door. Concrete for the pad is incidental to the cabinets. The Contractor shall grade and re-seed all disturbed areas to the satisfaction of the Engineer. This item includes the furnishing and installing of Fastrac bait bag in each pole for rodent control.

### CAMERA BALANCING

The Camera shall be weighted and balanced to assure that the alignment of pins and connectors are proper for the camera support to be raised into position without binding. The lowering unit shall have sufficient weight to disengage the camera and its control components in order that it can be lowered properly.

### CAMERA CONNECTIONS

The Contractor shall be responsible for meeting the Ethernet and power requirements and camera (120 volt, 18 AWG minimum).

## METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Pole with Lowering Device will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **PORTABLE WINCH LOWERING TOOL**

### **DESCRIPTION**

Furnish Portable Winch Lowering Tool in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

Portable winch lowering tool shall be made of durable and corrosion resistant materials, powder coated, galvanized, or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment. The tool shall consist of a lightweight metal frame and winch assembly with cable as described herein, a quick release cable connector, an adjustable safety clutch and a variable-speed, industrial-duty, battery powered drill motor. The tool shall be compatible with the winch accessible through the hand hole of the pole. When attached to the winch, the tool shall support itself and the load assuring raising/lowering operations and provide a means to prevent freewheeling when loaded. The tool shall have a reduction gear to reduce the manual effort required to operate the lifting handle to raise/lower a capacity load. The tool shall be provided with an adapter for operating the lowering device by a portable drill using a clutch mechanism. The tool shall be equipped with a positive locking mechanism to secure the cable reel during raising/lowering operations.

### **INSTALLATION**

No installation is required. Portable winch lowering tools shall be delivered to a location determined by the Engineer.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Portable Winch Lowering Tool will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **WEB CAMERA ASSEMBLY**

### **DESCRIPTION**

Furnish and install Web Camera Assembly in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

The Web Camera Assembly shall be an Axis Network Dome Model Q5635-E or approved equivalent. This item shall include the color camera, zoom lenses,

environmental enclosure, pan/tilt unit, housing, dome, parapet mount, and all mounting hardware, POE power cable, connections, and incidentals necessary to complete the work.

Proposed alternates shall be commercially available. The Contractor shall identify an installed site where the proposed alternate Web Camera Assembly has been operating for a period of at least one year in a similar climate region. The contractor shall supply a spare camera/POE and deliver it to Trimarc.

### **INSTALLATION**

Web Camera Assembly shall be installed on a wood pole or steel strain pole as specified in the plans and in accordance with the manufacturer's instructions. Installation shall comply with all warranty provisions and warranty contract maintenance services. Installation shall comply with all local, state, and federal building, electrical and construction codes, and Motorola R-56 requirements. All wiring access to the Web Camera Assembly shall be through watertight fittings. Wiring access points shall be on the side or underneath components; no exposed top access is permitted. The Web Camera Assembly shall be installed so that the assembly is located on the side of the pole closest to the roadway when the camera is in its fixed position at the top of the pole. The contractor is responsible to verified all functions of the web camera through a laptop interface.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Web Camera Assembly will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **VIDEO SURVEILLANCE CONTROLLER**

### **DESCRIPTION**

Furnish Video Surveillance Controller in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

The Video surveillance controller shall be compatible with supplied Web Camera Assemblies. The controller shall include handheld installation display (Axis T8412 or approved equal) and video surveillance joystick (Axis 295 or approved equal) or as follows:

Handheld installation display

- 3.5 inch color LCD
- Resolution: 320x240
- Image settings: autosensing

- IP settings: Static IP address, DHCP
- 128 MB RAM
- Battery: rechargeable
- Connectors: BNC in, RJ-45, CAT-5 USB 2.0, PoE
- Local Storage: Micro SD card (should include 8 GIG Micro SD with reader)
- Accessories: Soft carrying case with sunshield, built-in stylus, terminal block for CAT-5, Ethernet cable, BNC cable , car charger 12 V DC, power supply.

#### Video Surveillance Joystick

- Hall-effect joystick with three axes
- PTZ compatible
- Joystick travel: X/Y-axis +/- 18 degrees, Z-axis +/- 40 degrees
- Housing: High impact ABS
- Power: Via USB interface (5V DC)
- Operating conditions: -25 to 85 degrees Celsius
- Approvals: EN 55024:1998, EN 55022, FCC Part 15 Subpart B Class B
- Connectors: USB A
- Supported protocols: USB 2.0, DirectX

#### **INSTALLATION**

There will be no installation required. Items should be delivered to TRIMARC personnel.

#### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Video Surveillance Controller will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

### **UNINTERRUPTIBLE POWER SUPPLY (RACK MOUNTED UPS)**

#### **DESCRIPTION**

Furnish and install Uninterruptible Power Supply in accordance with the plans, specifications and Standard Drawings.

#### **MATERIALS**

The Uninterruptible Power Supply shall be provided emergency power to the load when the input power sources fails. The Uninterruptible Power Supply shall be APC UPS 1500VA USB RM 2U (networkable card AP9630) or approved equal. The Uninterruptible Power Supply shall be networkable and have the following technical specifications:

Output Power Capacity: 980 Watts/ 1440 VA  
Nominal Output/Input voltage: 120 Volts  
Efficiency at Full Load: 95%  
Waveform Type: Sine Wave  
Output/Input Connections: (6) NEMA 5-15R  
Battery Type: Maintenance-free sealed Lead-Acid Battery with suspended electrolyte:leakproof

Interface Ports: DB-9 Rs 232, USB  
Surge Energy Rating: 459 Joules  
Filtering: Meets UL 1449  
Mounting: shall be able to mount in 19" rack  
Operating Environment: 0-40 degrees Celsius  
Regulatory Approvals: CSA, FCC Part 15 Class A, UL 1778  
Warranty: At least 3 year for repair or replace

Network card shall have the following:

Protocols: HTTP, HTTPS, IPv4, SMTP, SNMP v1, SNMP v3, SSH V1, SSH V2, SSL, TCP/IP, Telnet  
Network Interface Connections: RJ-45 10/100 Base-T  
Regulatory Approvals: AS/NZS 3548 (C-Tick) Class A, EN 55022 Class A, En 55024, FCC Part 15 Class A, GOST, ICES-003, VCCI Class A  
Warranty: At least 3 year for repair or replace

## **INSTALLATION**

Uninterruptible Power Supply shall be installed in 334/336 Cabinet as specified in the plans sheets. It shall be securely mounted the 19" frame which is included in supplied 334/336 cabinet. All cables, rack Mounting Brackets, Rack Mounting support rails shall be incidental to the item.

## **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Uninterruptible Power Supply will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **COMMUNICATIONS CABLE**

### **DESCRIPTION**

Furnish and install Communications Cable in accordance with the plans, specifications and Standard Drawings.

## MATERIALS

Communications cable shall be General Cable GenSpeed 5000 CAT 5e Outside Plant Cable 8 wire PN: 5136100 or approved equal. The cable shall meet or exceed the following specifications:

Performance:

- ANSI/TIA/EIA 568B (Category 5e)
- MIL-C-24640A Water Penetration
- Propagation Delay: 583 ns @ 100 MHz
- Return Loss @ 100 MHz: 20.1 DB
- Frequency Range: 1-350 MHz

Physical characteristics:

- Nominal Outside Diameter: 0.230 in
- Insulation Type: Polyolefin
- Maximum Pulling Tension: 25 lbs
- Maximum DC Resistance: 9.38 Ohms/100m
- Mutual Capacitance @ 1kHz: 17 pF/100m
- Operating Temperature: -45° C to 80° C

All connectors, terminators, fittings, etc. shall be incidental to the cost of installing the Communications Cable and no separate payment will be made. [Wireless router shall be Sierra Wireless Airlink GX450 with ethernet add-on shall support ATT 3G/4G/LTE services at each location. The antenna should be Laird Lp-800-2500-9NF sku393969.](#) All antennas for the wireless router shall be installed on the outside of the 336 cabinet shall be waterproof.

The Contractor shall deliver the wireless router (GX450) to Central Office Traffic Operations for provisioning on the KYTC APN. The cabinet will provision the router within 4 weeks of receipt and return via mail to the contractor. The cabinet will pay the monthly data plan charges. The cabinet will allow temporary access to the router until the close of the contract for configuring of the adaptive system.

All system components shall arrive at the job site completely factory pre-wired and ready for field installation. All connections shall be clearly and permanently labeled to facilitate correct and easy termination of equipment.

## INSTALLATION

The Contractor shall install all cable and wire splice-free from the controller/service location to each cabinet, VMS sign, or CCTV camera the cable or wire is feeding. The Contractor shall not use excessive force when pulling wire through duct. The Contractor shall replace all wire damaged during installation. The Contractor shall submit to material testing at the discretion of the Engineer.

## METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Communications Cable will be measured for payment per unit linear foot. The Department will make payment for complete, functioning, inspected, and accepted

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

## **CONDUIT**

### **DESCRIPTION**

Furnish and install Conduit in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

Conduit shall be rigid steel, schedule 80 PVC, or flexible, non-metallic conduit as specified. This item includes fittings, connectors, clamps, caps and other materials necessary for proper installation. The Contractor shall submit to material testing at the discretion of the Engineer.

### **INSTALLATION**

All conduit installed above ground or below ground under pavement shall be rigid steel. All conduits installed below ground, not under pavement shall be PVC. Flexible, non-metallic conduit shall be used as required and shall be incidental to the project. Unused conduits shall be capped on both ends. Conduit containing wire or cable shall be sealed with a piece of steel wool and capped off with duct seal putty. All conduits shall be accessible inside junction boxes. All conduits shall have bushings included. If rigid steel conduit, the bushings shall be bonded together with other similar types of conduits.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Rigid Steel and PVC Conduit will be measured for payment per unit linear foot. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section. A direct measurement will not be made for flexible, non-metallic conduit. All flexible, non-metallic conduits shall be incidental to the project.

## **ELECTRICAL SERVICE**

### **DESCRIPTION**

Furnish and install Electrical Service in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

The Contractor shall coordinate with the local power company to determine the exact materials for the service. This includes but is not limited to conduit, meter base, stainless steel disconnect, fused cutout, ground rod, wire, 35 foot wood pole, 2 anchors, connectors, fittings and all associated hardware required to construct the service. For Jefferson/Oldham, [The local power company has stated that all new services will be 3 wires and care should be taken to install the meter in a direction it can be easily read.](#)

Some locations will require an AWR meter. This include structures and concrete shown on the plan sheets.

## INSTALLATION

The Contractor shall coordinate with the local power company and coordinate with TRIMARC representative for the exact location of the service. This item also includes all electrical inspection and other fees required to provide electrical service.

## METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Electrical Service will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## MODEL 334 AND 336 ENCLOSURES

### DESCRIPTION

Furnish and install Enclosure in accordance with the plans, specifications and Standard Drawings.

### MATERIALS

The two types of enclosures are Model 336 (36" H x 24" W x 22" D) and Model 334 (66" H x 24" W x 30" D). All enclosures shall be NEMA 3R rated. The enclosures shall include: all mounting accessories, access doors (minimum of two doors), ventilation, locking system, handles, door stops, rack assembly, light(s), shelves, drawer, and all required peripherals per the requirements of the contract documents and per the equipment submitted by the Contractor. **The contractor shall provide a cabinet, wiring, and all components that are approved as an assembly. This approved assembly shall be incidental to this item. Verification that the cabinet, wiring, and all components are an approved assembly shall be submitted to Central Office Traffic Operations.**

This item includes all excavation and any special equipment required to install the enclosure on a pole for a Model 336 enclosure or construct the concrete base for a Model 334 enclosure.

The Contractor shall provide a terminal facility harness by means of mating "MS" type connectors for interconnections of the field equipment specified. All cabinets of the same type shall be identical in size, shape and quality. In addition, the cabinets shall be equipped internally as specified herein and as required to suit the specific equipment specified on the plans.

Cabinets shall be of welded construction, using 0.125" minimum thickness 5052H32 or equivalent sheet aluminum. The equipment design shall utilize the latest available techniques, minimum number of different parts, subassemblies, circuits, cards and/or modules to maximize standardization and commonality.

Cabinets shall be provided with fully wired back and side panels with all necessary terminal boards, wiring harnesses, connectors and attachment hardware. All equipment shall be shelf

or 19" rack mounted. Terminals and panel facilities shall be installed on the lower portion of the cabinet walls below all shelves.

Each field cabinet shall, at a minimum, be supplied with the following:

- Fan and Thermostat
- Left Side Power Distribution Panel
- Air Filter
- Adjustable Shelves (1-4 as needed for equipment submitted by the Contractor)
- Back Panel
- Right Side Panel
- Locking System
- Ground Bus (2)
- Terminal Blocks
- Duplex power outlet
- Drawer that slides out for supporting a laptop computer
- All necessary installation and mounting hardware

All external screws, nuts and locking washers shall be stainless steel; no self-tapping screws are permitted unless specifically approved by the Engineer. All screws, nuts and locking washers used internally shall be manufactured from corrosion resistant materials.

All parts of the cabinet shall be cleaned, smoothed and free from flaws, cracks, dents and other imperfections. The cabinet shall be rigidly constructed to provide vibration free operation of the field equipment when installed. The cabinets shall be dust and rain tight and capable of maintaining a dry internal condition when subject to rain and wind gusts.

All components shall be made of corrosion resistant materials such as plastic, stainless steel, aluminum or brass; or shall be treated with corrosion resistance such as cadmium plating or galvanizing. All materials shall be resistant to fungus growth and moisture deterioration.

Individual cabinet components shall be pre-assembled upon installation in the cabinet such that the components can be easily replaced in the field. Modules of unlike function shall be mechanically keyed to prevent insertion into the wrong socket or connector.

Panels shall be designed to mount in the cabinet on mounting studs. It shall not be necessary to remove the panel to replace any panel-mounted equipment. The panels shall be capable of supporting specified equipment mounted on the panel. A lower input termination panel shall be provided to terminate all input field wires.

Electronic components shall meet the requirements contained herein and shall, at a minimum, comply with EIA Specifications. No component shall be of such design, fabrication, nomenclature or other identification as to preclude the purchase of said component from a wholesale electronics distributor or from the component manufacturer.

Components shall be down-rated by 50 percent with regard to ambient temperature, applied voltage, and power dissipation. All circuits shall be designed for reliability and maximum performance.

The design life of all components, under continuous operating conditions in their circuit application, shall be a minimum of ten years.

Each component shall meet all of its specified performance requirements when the input power is AC, 60 Hz, single phase, 120 volts +/- 20 volts. The equipment shall be designed such that the failure of a particular piece of equipment will not cause the failure of any other.

The cabinets shall be furnished with a power distribution panel mounted on the lower left hand inside wall when facing the front of the cabinet. This panel shall include a 115 VAC, convenience, dual outlet with integral ground fault interrupt protected by a circuit breaker. The left panel shall have:

- Circuit Breaker(s)
- Radio Interference Suppressor
- Power Cable Input and Junction Terminals

Circuit breakers shall be approved and listed by UL. Each cabinet shall have, at a minimum, a circuit breaker to protect the lamp, vent fan, and dual outlet. In addition, a properly rated equipment circuit breaker(s) shall be provided for the equipment shown on the plans. At each cabinet that houses VMS control equipment, a 220 VAC circuit breaker, sized to suit the cables that provide power to the VMS pixels shall be furnished and installed. Breakers shall have a minimum interrupt capacity of 50 amperes.

Each cabinet shall be equipped with a radio interference suppressor installed at the circuit breaker. The suppressor shall provide a minimum attenuation of 50 dB over a frequency range of 200 kHz to 75 MHz. The suppressor shall be hermetically sealed in a case filled with a suitable insulation compound.

The suppressor terminals shall be nickel-plated, with brass studs of sufficient external length to provide space for connection of two appropriately sized conductors and shall be mounted such that the terminals cannot be turned in the case. The suppressors shall be designed for operation at the proper current ampere rating as determined by the Contractor per the equipment specified on the plans and shall be approved by UL and EIA.

Power distribution blocks suitable for use as a power feed and junction points shall be furnished and installed for two and three wire circuits. The line side of each circuit shall be capable of handling the specified number of and size of all wires.

Each cabinet shall include a fully wired equipment panel mounted on the lower rear inside of the wall of the cabinet. The back panel shall be utilized to distribute and properly interconnect all cabinet wiring related to the specific equipment. Each piece of equipment specified shall have its cable harness properly connected at terminal boards on the back panel. All functions available at the equipment connector shall be carried in the connector cable harness to a terminal board point on the back panel.

Wiring shall be provided for the equipment specified. All cabinet wiring, where connected to terminal strips, switches, radio interference suppressor, etc., shall be identified by the use of

insulated pre-printed sleeving (wire markers) slipped over the wire before attachment of the lug or terminating the connection. The wire markers shall have a text label with sufficient detail so that a translating sheet is not required.

All wires shall be cut to the proper length before assembly. No wires shall be doubled back to take up slack. Wires shall be neatly secured with nylon lacing or cable ties. Cables shall be secured with nylon cable clamps.

The grounded side of the electric service shall be carried throughout the cabinet to the ground bus without a break.

All electrical connections in the cabinet shall have sufficient clearance between each terminal and the cabinet to prevent a leakage path or physical contact under stress. Where these distances cannot be maintained, barriers must be provided. All equipment grounds shall run directly and independently to the ground bus. The lay of the interconnect cable between the components must be such that when the door is closed, it does not press against the cables or force the cables against the various components inside the cabinet. Sufficient length of cable harnesses shall be provided to easily reach the electronic equipment placed anywhere on the shelves.

All wiring containing line voltage AC shall be routed and bundled separately and/or shielded from all low voltage (i.e. control) circuits. All conductors and live terminals or parts, which could be hazardous to maintenance personnel, shall be covered with suitable insulating materials.

All conductors used in the cabinet wiring shall be 22 AWG or larger with a minimum of 19 strands. The insulation shall have a minimum thickness of 10 MILS. All wiring containing line voltage shall be 14 AWG or larger.

The AC+, AC-, and equipment ground wiring shall be electrically isolated from the other by an insulation resistance of at least 10 Megohms when measured at 250 VAC. Return and equipment grounding wiring shall be color-coded white and green respectively.

Terminal blocks located on the panels shall be accessible such that it shall not be necessary to remove the electronic equipment from the cabinet to make a connection or perform an inspection.

Terminal blocks shall be two-position, multiple-pole, and barrier type. Shorting bars, along with integral marking strip, shall be provided. Terminal blocks shall be arranged such that they do not impede the entrance, training, or connection of incoming field conductors. All terminals shall be identified by legends permanently attached to the terminal blocks. Not more than three conductors shall be brought to any one terminal screw. No electrically live parts shall extend beyond the protection afforded by the barriers. All terminal blocks shall be located below the shelves.

AC terminal blocks shall be Underwriter's Laboratory approved for 600 volts AC minimum and shall be suitable for outdoor use. Terminals used for field connections or interwiring

connections shall secure conductors by means of a nickel or cadmium plated brass binder head screw.

All connections to and from the electronic equipment shall terminate at an interwiring block. These blocks shall act as intermediate connection points for all electronic equipment inputs and outputs.

A varistor shall be installed across the thermostat used to control the fan to act as a surge and transient noise suppressor. The varistor shall be GE VI5OLAIOA, Stetron 250NRO7-1, Siemens SIOK150, or approved equal.

#### MOUNTING

Model 336 cabinets shall be pole mounted or mounted to an existing concrete wall as specified. Model 334 cabinets shall be mounted on a poured concrete base or on existing concrete surfaces as specified. All holes drilled into existing concrete surfaces shall penetrate the concrete no more than 4 inches unless otherwise approved by the Engineer. Bolts inserted into any concrete surface shall be properly secured and epoxied, per manufacturer's recommendations. Prefabricated fiberglass bases used in lieu of poured concrete bases must be approved by the Engineer. Cabinet installation shall conform to the details shown. All cabinets shall be furnished with stainless steel mounting plates, nuts, bolts, washers and all other necessary hardware to mount the cabinet as shown or described.

#### DOORS

All cabinets shall be provided with doors in the front and back. Doors shall have secure gaskets to prevent the entrance of dust and moisture. Doors shall be sized to encompass the full area of the cabinet opening. Doors shall be provided with two stop positions to hold the door open at 90 degrees and 135 degrees. The stops shall hold the door securely open until released manually. The front door shall be hinged on the right-hand side by means of three butt hinges with 1/4" minimum stainless steel hinge pins.

#### VENTILATION

Cabinets shall be furnished with louvers properly designed to provide natural ventilation to the interior. The louver area shall be of sufficient size to permit the free flow of air corresponding to the rated capacity of the associated cabinet fan. A pleated media fiber filter shall be provided and shall cover all louvers.

Cabinets shall be furnished with an electric, thermostatically-controlled ventilation fan or fans mounted in the cabinet. The fan(s) shall have a rated capacity of at least 200 cubic feet per minute. The fan and cabinet ventilation louvers shall be located with respect to each other so as to direct the bulk of the air flow throughout the entire cabinet and, in particular, over the field equipment units. The thermostat shall be adjustable to turn on between 90 degrees and 120 degrees Fahrenheit.

#### LOCKING SYSTEM

Each door shall be furnished with a 3-point positive locking system. The lock for the door shall be a self-locking, heavy-duty, five-pin tumbler cylinder rim type. The handles shall be

made of stainless steel and shall be provided with a padlock feature. Locks shall be keyed identically to Corbin #2. Two keys shall be provided for each cabinet.

#### LIGHT

A fluorescent light shall be provided in front for all cabinets and also in the back for Model 334 cabinets. A panel mounted 40-Watt weatherproof incandescent lamp with an on-off switch shall be positioned to provide light to the face of the equipment installed in the cabinet.

#### SHELF/DRAWER/RACK

A removable 19" EIA rack shall be provided for mounting sub-assemblies in Model 334 cabinet. Adjustable shelves shall be provided to hold the equipment. Vertical shelf adjustment intervals shall be 2" maximum. The shelves shall be positioned from the top of the cabinet in accordance with the actual equipment configuration of the particular cabinet. All devices/sub-assemblies shall be mounted on the rack if possible. Otherwise, they shall be placed on the shelves.

A sliding drawer shall be provided in each cabinet. The drawer shall be installed below the shelves in a suitable position for placement of a laptop computer. The drawer shall have a nominal depth of 1" and a hinged lid.

#### LABELING

The letters "KYTC ITS" shall be permanently displayed along the top of each door on the outside of each cabinet. The letters shall be a minimum of 1" tall. The letters shall be die-cut or engraved into the metal before galvanizing and shall be readable after galvanizing. All excess galvanizing shall be brushed off. The location and description of the label must be shown on the shop plan submittal for the cabinets. Stenciling with paint or other markers is not permitted. If required information is placed on a steel plate, the plate must match the surface profile of the cabinet. The plate must then be welded completely around the plate before galvanizing.

#### QUALITY ASSURANCE PROVISIONS

The following water spray test shall be performed on each empty cabinet: Water shall be sprayed from a point directly overhead at an angle of 60° from the vertical axis of the cabinet. This procedure shall be repeated for each of eight equally spaced positions around the cabinet for a period of not less than five minutes in each position. The water shall be sprayed using a domestic type-sprinkling nozzle at a rate of not less than one gallon per minute per square foot of the cabinet's surface area. The cabinet shall then be inspected for leakage. Evidence of water leakage shall be cause for rejection.

A manufacturer's certification of successful completion of the water spray test and that the cabinet conforms to these specifications shall be the basis of acceptance of the cabinet. Separate submission of test cabinets shall not be required.

#### MAINTENANCE

All components and assemblies shall be clearly identified with name, model number, serial number and any other pertinent information required to facilitate equipment maintenance.

All equipment shall be designed for ease of installation and maintenance. Location, accessibility, serviceability and features that will lead to simplified maintenance shall be a prime consideration. All component parts shall be readily accessible for inspection and maintenance. The only tools and test instruments required by maintenance personnel shall be simple hand tools and basic meters.

After the wiring is complete, all conduit penetrations into the cabinets shall be sealed in such a manner as to prevent rodents and insects from entering the cabinet. The conduit sealants and insect traps used shall be approved by the Engineer prior to installation.

#### **DOCUMENTATION**

Each field cabinet shall be supplied with three copies of the final cabinet wiring diagram. One copy shall be placed in a clear plastic envelope and left in the cabinet drawer. Two sets of Mylar plans shall be delivered to the Engineer.

#### **INSTALLATION**

Model 334/336 enclosure shall be installed in accordance with the plans and specifications. The Contractor shall stake all proposed enclosure locations and shall obtain approval of staked locations before excavation. A representative from the KYTC Division of Traffic Operations, Design Services Branch or the Traffic Engineer, District 5, TRIMARC representatives will approve locations for all field devices. The Contractor shall have all utilities marked in the field prior to requesting approval. The Contractor shall allow two weeks to schedule this location approval with TRIMARC. TRIMARC approval of field device locations does not relieve the contractor from his responsibility to repair any damage incurred during construction. Enclosures located behind guardrail shall have minimum 5 foot spacing from edge of pole to face of guardrail. Otherwise, enclosures shall be located as specified on the plan sheets or a minimum of 30' from all driving lanes. All materials shall be installed in a neat and professional manner. All pole mount cabinets shall be mounted approximately 42" from the ground. All 336 pole mounted cabinets shall have a 3' L x 3' W x 4" D concrete pad installed for each door. Concrete for the pad is incidental to the cabinets. The Contractor shall grade and re-seed all disturbed areas to the satisfaction of the Engineer. This item includes the furnishing and installing of Fastrac bait bag in each cabinet for rodent control.

#### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Model 334/336 Enclosure will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **JUNCTION BOX**

### **DESCRIPTION**

Furnish and install Junction Box in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

Junction box shall meet or exceed ANSI/SCTE 77-2002, tier 15. Junction box covers shall be marked "TRIMARC." Covers shall be attached with a minimum of two 3/8" stainless steel hex bolts.

### **INSTALLATION**

Where required, junction box shall be oriented such that the dimensions comply with the NEC. Junction boxes used as pull boxes along a conduit run shall be spaced at a maximum of 250'. Junction boxes shall not be placed in ditch lines or in areas where standing water may accumulate. Junction box covers shall be flush with the finished surface. The Contractor shall restore all disturbed areas to the satisfaction of the Engineer. This item includes the furnishing and installing of Fastrac bait bag in each junction box for rodent control.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Junction Box will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **SURGE DEVICES**

### **DESCRIPTION**

Furnish and install video surge device, data surge device, power surge device, and RF surge device in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

#### **GENERAL**

Each surge device shall be compatible with the equipment it is protecting. Each surge device shall include cables, connectors, power supplies, and all incidentals required for operation.

#### **VIDEO SIGNAL COAX CONDUCTOR SURGE DEVICE**

Video Signal Coax Conductor Surge Device shall be EDCO CX12-BNC-Y or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond

- Have a maximum clamping voltage of 12 volts when subjected to a 3 kA, 8x20 microsecond wave
- Have a peak surge current of 20kA with 8x20 microsecond wave
- Have BNC connectors
- Pass signals from DC to 80 MHz with less than 3 dB insertion losses
- Be UL 497B listed

#### DATA SIGNAL CONDUCTOR SURGE DEVICE

Data Signal Conductor Surge Device shall be for RS 422 and RS 485 Communication conductors shall be EDCO PC642C-015 or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 12 volts when subjected to a 1 kA 8x20 microsecond wave
- Have a peak surge current per wire of 10 kA with 8x20 microsecond wave
- Have a maximum inline resistance of 6 ohms
- Have a maximum attenuation of -3db at 50MHz

#### RS 232 COMMUNICATION DATA SIGNAL CONDUCTOR SURGE DEVICE

Data Signal Conductor Surge Device for RS 232 Communication conductors shall be EDCO PC642C-015 or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 30 volts when subjected to a 1 kA 8x20 microsecond wave
- Have a peak surge current per wire of 3kA with 8x20 microsecond wave
- Have a maximum inline resistance of 6 ohms
- Have a maximum attenuation of -3 db at 0.5 MHz

#### 100 BASE-T AND 10 BASE-T COMMUNICATION DATA SIGNAL CONDUCTOR SURGE DEVICE

Data Signal Conductor Surge Device for 100BaseT and 10BaseT Communication conductors shall be EDCO LCDP-30 or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 30 volts when subjected to a 0.5 kA 8x20 microsecond wave
- Have a peak surge current per wire shall be 1kA with 8x20 microsecond wave
- Have a maximum attenuation shall be -3db at 100 MHz
- Have a N.E.X.T. worst pair of better than -40 db at 100 MHz
- Have a maximum attenuation of -3db at 0.5 MHz

#### POWER CONDUCTOR SURGE DEVICE

Conductor Surge Device for power carrying conductors shall be EDCO SHA-1210 or approved equal. This surge protector shall meet or exceed the following specifications:

- Nominal Line Voltage            120 V

- Peak Current 20,000 Amps
- Clamp Voltage 280 volt typical @ 20kA
- Response time <5ns
- Continuous Service Current 10 Amps max. 120 VAC, 60 Hz

#### RF ANTENNA COAX CONDUCTOR SURGE DEVICE

RF Antenna Coax Conductor Surge Devices shall meet all manufacturer recommendations for the particular use of the radio antenna coax conductors.

#### INSTALLATION

The Contractor shall supply surge devices in model 334/336 enclosures, VMS signs, on poles, and on sign trusses as specified on layout sheets. Surge devices shall be located in said equipment such that they are easily accessible for maintenance activities.

#### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Surge Device will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

### TRENCHING AND BACKFILLING

#### DESCRIPTION

Trenching and Backfilling shall be performed in accordance with the plans, specifications and Standard Drawings.

#### MATERIALS

All trenches shall be marked with underground utility warning tape.

#### INSTALLATION

The Contractor shall be responsible for locating all underground utilities prior to excavation. The Contractor shall excavate the trench, place warning tape above the conduit, backfill the trench and restore all disturbed areas to the satisfaction of the Engineer. Backfill material shall be placed and compacted in lifts of 9 inches or less.

#### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Trenching and Backfilling will be measured for payment per unit linear foot. The Department will make payment for complete, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **WIRE AND CABLE**

### **DESCRIPTION**

Furnish and install Wire and Cable in accordance with the plans, specifications and Standard Drawings.

### **MATERIALS**

Unless otherwise specified, wire shall be stranded copper type USE-2. This item shall include all connectors, splicing and insulating hardware, ties, tape, labels and incidentals required for electrical connections. The Contractor shall submit to material testing at the discretion of the Engineer.

### **INSTALLATION**

The Contractor shall install all cable or wire runs splice-free from the controller/service location to each cabinet, VMS sign, or CCTV camera the cable or wire is feeding. All wire shall be labeled inside cabinets and junction boxes. The contractor shall not use excessive force when pulling wire through duct. The contractor shall replace all wire damaged during installation. The Engineer may require testing of wiring for damaged insulation. Wire that does not pass an insulation resistance test of a minimum of 100 hundred megohms to ground shall be replaced by the Contractor at his cost.

### **METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

Wire and cable will be measured for payment per unit linear foot. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

## **Vented Rodent Barrier Detail**

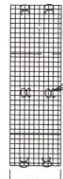
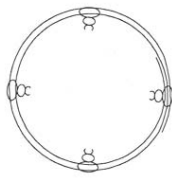
Vented rodent barrier – Prior to erecting tubular structures and poles on concrete foundations formed with conduit sweeps, a double lapped ring barrier of standard commercial grade 27 gauge hot dipped galvanized 1/8 inch woven wire mesh shall be placed inside the foundations bolt circle. The height of the wire mesh ring barrier shall be from the concrete foundation to the top of the leveling nuts and washers plus 1/4 inch. The Contractor shall take all necessary steps to assure the wire mesh ring will remain in place to eliminate any access through the base plate opening of the tubular structure or pole when erected and plumbed. The Contractor shall not weld or drill to the base plate of the pole. Optional vented rodent barrier designs and materials may be used when approved by the Engineer and at no additional cost to the Department.

Vented Rodent Barrier

Notes:

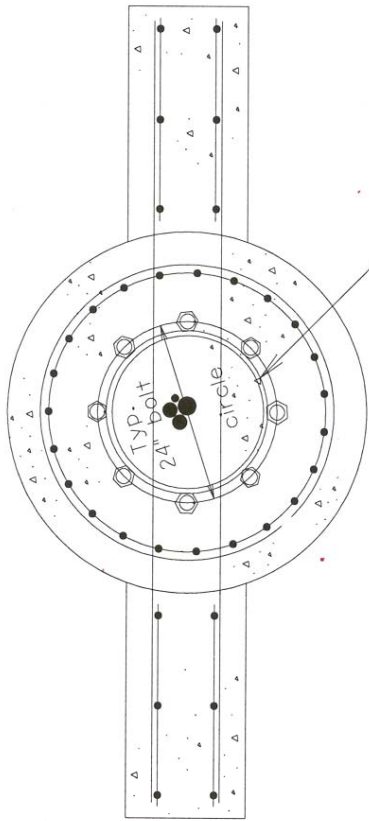
- 1) Wire Mesh Ring  
1/2" Woven Hardware Cloth  
20 Gauge (Commercial Grade)  
Hot dipped galvanized  
Doubled Lapped  
Length & Height determined by  
field measurements  
Secured with Wire Twist Ties
- 2) Wire mesh shall be placed inside the  
bolt circle before pole is erected and plumbed.
- 3) Wire mesh ring shall be compressed between  
pole base plate, concrete foundation and  
bolt circle. Take all necessary steps to assure  
the wire mesh ring will remain in place and  
any access through the pole base plate  
opening is eliminated.
- 4) Welding or drilling is not permitted on base  
plate of pole.

DETAIL "A"



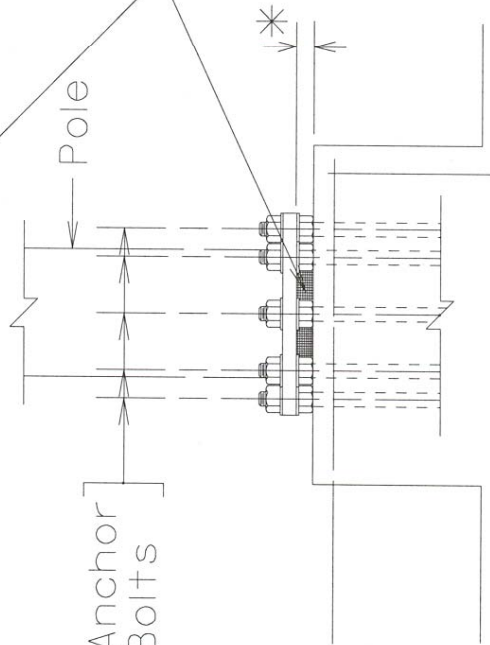
\* +1/4"  
Wire Twist Ties

WIRE MESH RING  
(DETAIL "A")



Anchor Bolts

Pole



Vented  
Rodent Barrier

SCALE: NONE

...I\Spec\CADD\special\RATBAR~1.DGN 04/08/2004 09:52:45 AM

## GLOSSARY

The following acronyms, abbreviations, and definitions shall govern this specification:

- AASHTO – American Association of State Highway and Transportation Officials
- ABS - Acrylonitrile Butadiene Styrene
- AC – Alternating Current
- AlInGaP – Aluminum Indium Gallium Phosphide (refers to the chemical composition of an LED).
- ANSI – American National Standards Institute
- ASCII – American Standard Code for Information Interchange
- ASN.1 – Abstract Syntax Notation 1
- ASTM – American Society for Testing and Materials
- AWG - American Wire Gauge
- AWS – American Welding Society
- BCD – Binary Coded Decimal
- B frames – Bi-directional Predicted Frames
- BGP – Border Gateway Protocol
- Bin – Group of LEDs categorized and sorted by intensity or color. Each bin has upper and lower intensity or color specifications and contains only LEDs that are measured to be within that range. LED manufacturers sort LEDs into bins to ensure consistent intensity and color properties.
- BOOTP – Bootstrap Protocol
- CALTRANS – California Department of Transportation
- CAN – Control Area Network
- CCTV – Closed Circuit Television
- CDPD – Cellular Digital Packet Data
- CLI – Command Line Interface
- CNC – Computer Network Control
- Control Computer – A desktop or laptop computer used in conjunction with VMS control software to communicate with VMS sign controllers. The control computer can instruct a VMS sign controller to program and control the VMS, monitor VMS status, and run VMS diagnostic tests. A control computer can be used for remote control of one of more VMS, as well as for local control of a single VMS
- DC – Direct Current
- DHCP – Dynamic Host Configuration Protocol
- DMS – Dynamic Message Sign. An industry term that applies to various types of changeable sign technology
- DVI-D – Digital Visual Interface - Digital
- EIA – Electronic Industries Association
- ELFEXT – Equal Level Far End Crosstalk
- EPA – Effective Projected Area
- FCC – Federal Communications Commission
- FDA – Food and Drug Administration

- Font – The style and shape of alphanumeric characters that are displayed on the VMS matrix to create messages viewed by motorists and travelers
- Frame – see *Page*
- FSORS – Full, Standardized Object Range Support – an NTCIP term. See the NTCIP standards for additional information.
- GUI – Graphical User Interface
- HDPE – High Density Polyethylene
- HHR – Half Horizontal Resolution
- HTTP – Hypertext Transfer Protocol
- IEEE – Institute of Electrical and Electronic Engineers
- I frames – Intra-frames
- IC – Integrated Circuit
- IGMP
- InGaAlP – Indium Gallium Aluminum Phosphide
- I/O – Input/Output
- IP – Internet Protocol – in transceivers
- IRE – Institute of Radio Engineers
- ISO – International Organization for Standardization
- ITE – Institute of Transportation Engineers
- ITS – Intelligent Transportation System
- Kbps – Kilobits per second
- KYTC – Kentucky Transportation Cabinet
- LAN – Local Area Network
- LCD – Liquid Crystal Display
- LED – Light Emitting Diode
- MDPE – Medium Density Polyethylene
- Message – Information displayed on the VMS for the purpose of visually communicating with motorists. A VMS message can consist of one or more pages of data that are displayed consecutively
- MIB – Management Information Base
- Module – Assembly consisting of a two-dimensional LED pixel array, pixel drive circuitry, and mounting hardware. Modules are installed in the display adjacent to each other to form the display matrix.
- MTBF – Mean Time Between Failures
- MPEG – Moving Picture Experts Group
- NEC – National Electrical Code
- NEMA – National Electrical Manufacturers Association
- NESC – National Electrical Safety Code
- NEXT – Near End Crosstalk
- NCHRP – National Cooperative Highway Research Program
- NRZ – Non Return to Zero
- NRZI – Non Return to Zero Inverted
- NTCIP – National Transportation Communications for ITS Protocol

- NTSC - National Transmission Standards Committee
- Object – An NTCIP term referring to an element of data in an NTCIP-compatible device that can be manipulated to control or monitor the device.
- OER – Octet Encoding Rules
- OSHA – Occupational Safety and Health Administration
- OTDR – Optical Time Domain Reflectometer
- Page – An NTCIP term referring to the data that is displayed on the VMS display matrix at a given moment in time. Also referred to as a frame.
- P frames – Forward Predicted Frames
- PCB – Printed Circuit Board
- Pixel – Picture element. The smallest changeable (programmable) portion of a VMS display matrix
- PMPP – Point to Multi-Point Protocol
- PPP – Point to Point Protocol
- PSELFEXT – Power Sum Equal Level Far End Cross Talk
- PSNEXT – Power Sum Near End Crosstalk
- PTZ – Pan/Tilt/Zoom
- PVC – Polyvinyl Chloride
- PWM – Pulse Width Modulation
- QSIF – Quarter Source Input Format
- RAM – Random Access Memory
- RARP – Reverse Address Resolution Protocol
- RGB – Red-Green-Blue
- Schedule – A set of data that determines the time and date when a VMS sign controller will cause a stored message to be displayed on the VMS
- SDRAM – Synchronous Dynamic Random Access Memory
- SIF – Source Input Format
- SNMP – Simple Network Management Protocol
- STMP – Simple Transportation Management Framework
- Stroke – Refers to the vertical and horizontal width of the lines and curves of a display font. Single stroke denotes character segments that are one pixel wide. Double stroke denotes character segments that are two pixels wide.
- TFTP – Trivial File Transfer Protocol
- TIA - Telecommunications Industry Association
- TMA – Truck Mounted Attenuator
- TOC – Traffic Operations Center
- UL – Underwriters Laboratories
- UPS – Uninterruptible Power Supply
- USB – Universal Serial Bus
- VLAN – Virtual Local Area Network
- VMS – Variable Message Sign. A type of VMS that is fully programmable such that the content of its messages are fully changeable remotely and electronically.
- VMS Controller – A stand-alone computer that is located at a VMS site, which

controls a single VMS. A sign controller receives commands from and sends information to a control computer

- WAN – Wide Area Network
- WYSIWYG – What You See Is What You Get. More specifically, what you see on the VMS control computer monitor is a scaled representation of how a message will appear when it is being displayed on the VMS. Similarly, after a pixel diagnostic test routine has been run, what you see on the control computer monitor is a scaled representation of the functional status of each pixel in the VMS display matrix.

**SPECIAL NOTE FOR CONTRACT COMPLETION & LIQUIDATED DAMAGES**  
**I-64/I-264 INTERCHANGE IMPROVEMENTS: Item No.: 5-159.00**

**COMPLETION DATE**

All work associated with the I-64/I-264 Interchange Improvement project (5-159.00) is to be completed in the 2019 construction season by November 15, 2019.

**LIQUIDATED DAMAGES**

The Contractor shall be assessed liquidated damages in the amount of \$3,250 per calendar day after November 15, 2019, until the project is considered complete to the satisfaction of the Engineer. Liquidated damages shall be assessed in accordance with Section 108.09 of the current edition of the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction.

### Paving Summary

Item Number	Item	Amount	Units
02058	REMOVE PCC PAVEMENT (1)	3,365	SQYD
02071	JPC PAVEMENT - 11 INCH (1)	3,365	SQYD
02110	PARTIAL DEPTH PATCHING (3)	200	CUFT
02115	SAW-CLEAN-RESEAL TVERSE JOINT (2)	59,144	LF
02116	SAW-CLEAN-RESEAL LONGIT JOINT (2)	47,315	LF
21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS (2)	5,421	LF

### General Summary

Item Number	Item	Amount	Units
02562	TEMPORARY SIGNS	750	SF
02569	DEMOBILIZATION	1	LS
02650	MAINTAIN & CONTROL TRAFFIC	1	LS
02671	PORTABLE CHANGEABLE MESSAGE SIGN	4	EACH
02775	ARROW PANEL	4	EACH
06511	PAVE STRIPING-TEMP PAINT-6 IN (2)	45,000	LF
06549	PAVEMENT STRIPING-TEMP TAPE W (2)	1,000	LF
06550	PAVEMENT STRIPING-TEMP TAPE Y (2)	1,000	LF
06551	PAVEMENT STRIPING-TEMP TAPE B (2)	1,000	LF
06592	PAVEMENT MARKER TY V - B W/R (2)	20	EACH
24189ER	DURABLE WATERBORNE MARKING-6 IN W (2)	24,000	LF
24190ER	DURABLE WATERBORNE MARKING-6 IN Y (2)	16,000	LF
24191ER	DURABLE WATERBORNE MARKING-12 IN W (2)	5,000	LF

(1) Includes additional 50% to be used at the discretion of the Engineer. This additional quantity may not be necessary

(2) Estimated quantities.

(3) Use as directed by the Engineer.

**Jefferson County  
I-64  
Concrete Pavement Repairs  
Item# 5-2086.01**

**This project consists of full and partial depth JPC repairs. The tables below indicate the locations for full depth removal and replacement. These areas may be modified or additional areas added as directed by the engineer. Partial depth repairs (if required) will be identified by the engineer.**

**Approximate Location of Full Depth Concrete Repairs**

<b>I-64-Westbound</b>		<b>0.0 = Beginning of concrete near MP 13.35</b>		
<b>0 + FT</b>	<b>Lane 1</b>	<b>Lane 2</b>	<b>Lane 3</b>	<b>Lane 4</b>
0		53	107	
44		27		
92		27	80	
225		53		
235			27	
318		27		
348		27		
380		27		
457			80	
514		53		
621			80	
785		27	53	
839	27	53		
869	27			
913		53		
1018		53		
1289			80	
6409		27		
6733		27		
7054		27		
7727	27			
8007	133	133		
<b>Sum</b>	<b>213</b>	<b>693</b>	<b>507</b>	<b>0</b>
<b>TOTAL WB SY</b>				<b>1413</b>

<b>I-64-Eastbound</b>		<b>0.0 = end of bridge near MP 11.8</b>		
<b>0 + FT</b>	<b>Lane 1</b>	<b>Lane 2</b>	<b>Lane 3</b>	<b>Lane 4</b>
934		107		
1043		53		
2032		80		
4032		133		
7041			53	
7162		403		
<b>Sum</b>	<b>0</b>	<b>776</b>	<b>53</b>	<b>0</b>
<b>TOTAL EB SY</b>				<b>830</b>

# TRAFFIC CONTROL PLAN

## 5-2086.01

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### JEFFERSON COUNTY

#### I-64

#### Concrete Repairs

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#### THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

#### TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "**MAINTAIN AND CONTROL TRAFFIC**".

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work. Traffic control devices will conform to current MUTCD.

Reduce the speed limit in work areas by 10 miles per hour and establish double fines for work zone speeding violations. The extent of these areas within the project limits shall be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the "WARNING FINE DOUBLED IN WORK ZONE" signs shall be dual mounted. At the end of the work zone, the "END DOUBLE FINE" signs shall also be dual mounted. Remove or cover the signs when the highway work zone does not have workers present for more than a two hour period of time. Payment for the signs will be at the unit bid price for "**TEMPORARY SIGNS**". Any relocation or covering of the signs will be incidental to "**MAINTAIN AND CONTROL TRAFFIC**", lump sum.

Night work will be **required** on this project. Obtain approval from the Engineer for the method of lighting prior to its use.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

Maintain all lanes open to traffic and perform no work during the following days:

Friday March 30 – Monday April 2, 2018  
Saturday April 21 – Sunday April 22, 2018  
Friday May 4 – Monday May 7, 2018  
Friday May 25 – Monday May 28, 2018  
Tuesday July 3 – Thursday July 5, 2018  
Friday August 31 – Monday Sept. 3, 2018

Easter Weekend  
Thunder Over Louisville  
Oaks/Derby Weekend  
Memorial Day Weekend  
Independence Day  
Labor Day Weekend

Traffic Control Plan  
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The Engineer may specify additional days and hours when lane closures will not be allowed. The clear lane width will be a minimum of 10 feet; however, make provisions for the passage of wide loads up to 16 feet in width. Use a lane closure at all times when work is performed in the lane or adjacent shoulder. No long term lane closures will be allowed until paving and pavement repair operations begin. Once paving and pavement repairs have begun, these operations are to be continuous until all paving is complete.

If the Contractor suspends work for more than seven (7) days for any reason, traffic shall be placed back in the original lane configuration, with all lanes operational. All work necessary to perform these traffic shifts, due to non-working days, shall be considered incidental to the bid item, **"MAINTAIN AND CONTROL TRAFFIC."** The Department reserves the right to place traffic back into its original configuration at any time and will reimburse the Contractor for the cost of doing so.

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

Access to and from all ramps on the project shall be maintained at all times unless otherwise directed by the Engineer. Stripe and taper according to the MUTCD and Standard Drawings or as directed by the Engineer.

Take these restrictions into account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor as a result of these restrictions.

### **LANE CLOSURES**

Limit the lengths of lane closures to a maximum of 1.5 miles, or as directed by the Engineer.

Lane closures shall be permitted nightly between 9:00 P.M. and 5:00 A.M.

Lane closures over the weekend between 9:00 P.M. Friday and 5:00 A.M. Monday will be permitted a maximum of 3 weekends per direction. Only one lane may be shut down at a time during these weekend or nightly closures.

All debris must be removed from the shoulder lane prior to use as a traffic lane. **A detailed plan for phasing and detouring traffic is to be submitted to the Engineer three (3) weeks prior to beginning work and must be approved by the Chief District Engineer prior to use.** Contrary to section 112, lane closures shall **NOT** be measured for payment, but are considered incidental to **"MAINTAIN AND CONTROL TRAFFIC"**, lump sum. The Engineer may specify additional days and hours when lane closures will not be allowed.

Traffic Control Plan  
Page 3 of 5

**LIQUIDATED DAMAGES**

Do not leave lane closures in place during non-working hours.

In the event that lane closures are in place outside of the days and/or times listed above, Liquidated Damages shall be applied as follows:

\$1,000/LANE for the first hour or any portion thereof  
\$30,000/LANE for the second hour or any portion thereof  
\$75,000/LANE for any additional hour or portion thereof

A lane closure shall be defined as any traffic control device or Contract worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes but not limited to signs, barricades, barrels, cones, arrow boards, flaggers, Contractor work vehicles and striping operations.

All liquidated damages will be applied cumulatively.

**FIXED COMPLETION DATE**

Contrary to Section 108.09, Liquidated Damages of \$10,000 per calendar day will be assessed for each day work remains incomplete beyond October 15, 2018.

Also contrary to Section 108, liquidated damages will be charged during the months of December through March.

**SIGNS**

Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

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

Relocate and reset or cover existing permanent signs as required by work. Obtain the Engineer's approval before removing or covering an existing sign. The Department will not measure relocating and resetting or covering existing permanent signs, but shall be incidental to "**MAINTAIN AND CONTROL TRAFFIC**", lump sum.

**ARROW PANELS**

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department **WILL NOT** take possession of the arrow panels upon completion of work.

Traffic Control Plan  
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### **PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide Portable Changeable Message Signs in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions provide additional Portable Changeable Message Signs. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The Portable Changeable Message Signs will be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor will repair or replace the Portable Changeable Message Sign immediately. Portable Changeable Message Signs will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the signs upon the completion of the work.

### **PAVEMENT MARKINGS**

If lane closures are in place during nighttime hours, remove or cover the lenses of pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but will be incidental to "**MAINTAIN AND CONTROL TRAFFIC**", lump sum.

1. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used. Removable tape shall be measured and paid as Pavement Striping – Temp Tape B, W, or Y.
2. Edge lines shall be required for temporary striping
3. Existing, temporary, or permanent striping shall be in place before a lane is opened to traffic.
4. Place permanent striping on bridge decks and pavement within the project limits.
5. Permanent striping shall be Durable Waterborne Markings. Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration after a certain period of time especially if no work is anticipated for a period of time ((i.e. Winter shutdown).
6. Water blasting shall be used to remove existing and temporary striping. Water blasting is incidental to the bid item "Maintain & Control Traffic", lump sum.

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

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with plastic drums, vertical panels, or barricades as shown on the Standard Drawings. Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" – No protection required. Warning signs should be placed in advance of and throughout the drop off area.

## Traffic Control Plan

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2" to 4" – Protect with a lane closure. Place plastic drums, vertical panels, or barricades every 50 feet. Cones may not be used in place of plastic drums, panels, and barricades at any time. Construct a wedge with compacted cuttings from milling, trenching, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

Greater than 4" – In areas where pavement is to be removed, work should proceed continuously so that traffic is exposed to a drop-off for the minimum amount of time necessary to bring the pavement back up to existing grade. Barrel spacing should be 20 feet and appropriate lighting should be utilized to illuminate the area during nighttime operations.

### **TRAFFIC COORDINATOR**

The Contractor shall designate an employee to be Traffic Coordinator. The designated Traffic Coordinator must be certified in accordance with Section 112.03.12. The Traffic Coordinator shall inspect the project maintenance of traffic once daily, including weekends, during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times. During any period when a lane closure is in place, the Traffic Coordinator shall arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and other traffic control devices, and relocate portable changeable message boards as queue lengths change. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

### **SIGNIFICANT PROJECT**

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

### **SPECIAL NOTE FOR INTELLIGENT TRANSPORTATION SYSTEM (ITS)**

In the vicinity of the I-64/I-264 interchange there is an existing ITS camera. This camera and supporting equipment shall not be disturbed and shall remain operational. Any damage resulting from the contractor's work shall be repaired and/or replaced immediately. All repairs shall be the contractor's responsibility and shall be at no additional cost to the Department.

### **COORDINATION OF WORK**

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

**SPECIAL NOTE FOR CONCRETE PAVEMENT  
JOINT AND RANDOM CRACK SEALING  
5-2086.01**

**I. DESCRIPTION**

Except as specified herein, perform all work in accordance with the Department's 2012 Standard and Supplemental Specifications, Special Notes and Special Provisions, and Standard and Sepia Drawings, current editions, as applicable. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

Saw, Clean, and Reseal Longitudinal Joints, Transverse Joints, and Random Cracks.

**II. MATERIALS**

The Department will sample and test all materials according to the Department's Sampling Manual. 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, unless otherwise specified in these notes.

**A. Joint Sealant.** Contrary to Section 501.03.18 (B), use hot poured elastic, no alternates.

**III. CONSTRUCTION METHODS**

**A. Site Preparation.** Be responsible for all site preparation, including, but not limited to, removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; and any other incidentals. All site preparation shall be only as approved or directed by the Engineer.

**B. Sealing Joints and Random Cracks.** Saw cut, clean, and reseal longitudinal, transverse, and random cracks within the project limits as directed by the Engineer. Contrary to Standard Drawing RPX- 015-04, saw cut the joint or crack a minimum of 1/8 inch wider than the existing joint or crack or to the width necessary to provide a clean, new face for a reservoir for the new seal. Except as provided herein, perform all joint and crack sealing according to section 501.03.18(F) except random cracks only need to be routed to a depth of approximately one inch.

**IV. METHOD OF MEASUREMENT**

Except as provided herein, the Department will measure all work in accordance with the 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. The Department will measure only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

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

**B. Saw-Clean-Reseal Joints and Random Cracks.** The Department will measure sawed and resealed joints and random cracks in linear feet along the joint or crack. The Department will not measure removing existing joint material or cleaning joints but shall be incidental to Saw-Clean-Reseal Joints and Random Cracks.

**V. BASIS OF PAYMENT**

The Department will make direct payment only for the bid items listed. Consider all other items required to complete the construction to be incidental to the bid items listed.

**A. Saw-Clean-Reseal Joints and Random Cracks.** Accept payment at the contract unit price per linear foot of each type as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified.

<u>CODE</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
02115	Saw-Clean-Reseal Transverse Joint	Linear Foot
02116	Saw-Clean-Reseal Longitudinal Joint	Linear Foot
021173EC	Saw-Clean-Reseal Random Cracks	Linear Foot

July 2016

**SPECIAL NOTE FOR POLYMER MODIFIED PARTIAL DEPTH PATCHING  
5-2086.01**

**DESCRIPTION**

This work consists of milling or routing, cleaning and patching pot holes, transverse and longitudinal cracks reflected in the existing bituminous surface or longitudinal shoulder joints, transverse and longitudinal random cracks, centerline joints, contraction joints, longitudinal and transverse expansion joints or spalled areas in Portland cement concrete pavement.

**APPLICATIONS**

The installed product shall be a hot applied, flexible repair made from a highly polymer modified asphalt binder. The installed product shall provide a load transferring repair that has superior tensile strength and flexibility to accommodate joint and crack movement associated with thermal expansion and contraction, and vibratory movements. The patch must have exceptional resistance to water intrusion and to a broad range of salts, bases, and organic materials.

**MATERIAL SPECIFICATIONS**

<u>PROPERTY</u>	<u>METHOD</u>	<u>REQUIREMENT</u>
Tensile Strain	FTL 548-C	35%Minimum @ 2"/minute
Cone Flow	FTL 549-C	10% Maximum
Aggregate Settlement	FTL 551-C	5% Maximum
Flexibility / Mandrel	FTL 550-C	Good/ Better (No tearing at bend point)
Resilience	FTL 547-C	50% Recovery
Application Temp.		300°F - 380°F
Specific Gravity		1.7 -2.0

**SITE PREPARATION**

The joint or crack shall be milled with an approved milling machine to the specified width and depth. The pot hole or spall shall be milled, saw cut and jack hammered, or cored and jackhammered to remove the defective areas. The repair surfaces will be cleaned and dried with a hot air lance. The recessed area and vertical walls will be treated with a primer agent to promote adhesion and prevent moisture intrusion (for concrete applications only).

July 2016

**INSTALLATION**

Installation of the material shall be by factory trained and certified installation professionals.

The material will be heated in a thermostatically controlled purpose built mixer, having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 300 - 320°F, the molten material will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion.

If the depth of the repair exceeds 1 inch, the remainder of the repair process will consist of layering coarse hot angular aggregate (cleaned and dried) at a rate of 25%-35% by volume with the molten material until within ¾" of the top of the repair. The bulking aggregate must be worked into the patch completely.

NO DRY LAYERS OF BULKING AGGREGATE WILL BE ALLOWED.

The final ¾" of the repair will be material for optimum flexibility of the repair. Once this top layer has been screeded to a level grade, a high PSV aggregate will be applied to the top of the repair to ensure proper skid resistance. The patch shall be ready for traffic in no more than 1 hour.

All removed materials and residual repair materials will be recovered and disposed of away from the site at the Contractor's expense.

**MEASUREMENT**

The Department will measure the quantity of PARTIAL DEPTH PATCHING in cubic feet, either from field measurements or the metered quantity from the mixer, as the Engineer determines.

**PAYMENT**

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02110	Partial Depth Patching	Cubic Foot

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

An acceptable product to meet this specification is "Fibrecrete B". Other products that fully meet this specification will also be accepted.

## **SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS**

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

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

### **2.0 MATERIALS.**

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

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

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

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

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

/KEEP/RIGHT/=>>>/	/MIN/SPEED/**MPH/
/KEEP/LEFT/<<</	/ICY/BRIDGE/AHEAD/ /ONE
/LOOSE/GRAVEL/AHEAD/	LANE/BRIDGE/AHEAD/
/RD WORK/NEXT/**MILES/	/ROUGH/ROAD/AHEAD/
/TWO WAY/TRAFFIC/AHEAD/	/MERGING/TRAFFIC/AHEAD/
/PAINT/CREW/AHEAD/	/NEXT/**/MILES/
/REDUCE/SPEED/**MPH/	/HEAVY/TRAFFIC/AHEAD/
/BRIDGE/WORK/**0 FT/	/SPEED/LIMIT/**MPH/
/MAX/SPEED/**MPH/	/BUMP/AHEAD/
/SURVEY/PARTY/AHEAD/	/TWO/WAY/TRAFFIC/

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

**2.3 Power.**

- 1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

**3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

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**4.0 MEASUREMENT.** The final quantity of Variable Message Sign will be the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

**5.0 PAYMENT.** The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02671	Portable Changeable Message Sign	Each

Effective June 15, 2012

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### **SPECIAL NOTE FOR FULL DEPTH CONCRETE PAVEMENT REPAIR**

This Special Note applies to full depth repairs of concrete pavement. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

**1.0 DESCRIPTION.** Remove and replace concrete pavement. Comply with the applicable Standard Drawings and the Standard Specifications except as specifically superseded herein.

#### **2.0 MATERIALS AND EQUIPMENT.**

**2.1 JPC Pavement.** Test concrete materials according to section 601.03.03. Conform to 501, 502, and 601 except that the concrete must achieve 3000 psi in accordance with Section 4.4 of this note. The Engineer may allow pavement to be opened to traffic at less than 3,000 psi subject to the deductions described in Section 4.4 of this note.

**2.2 Dowel Bars and Sleeves.** Conform to 811.

**2.3 Tie Bars.** Conform to Section 811. Use epoxy coated tie bars in longitudinal and transverse joints.

**2.4 Joint Sealants.** Conform to Subsection 807.03.01 or 807.03.05.

**2.5 Grout Adhesives and Epoxy Resin Systems.** Conform to Section 826.

**2.6 Dense Graded Aggregate (DGA) and Crushed Stone Base (CSB).** Conform to Section 805.

**2.7 Geotextile Fabric.** Conform to Section 843.

**2.8 Drills.** Drill holes using a gang drill, capable of drilling a minimum of four simultaneously. Misalignment of holes shall not exceed 1/4 inch in the vertical or oblique plane.

**2.9 Hammers.** Only use chisel point hammers weighing less than 40 pounds to remove deteriorated concrete.

#### **3.0 CONSTRUCTION.**

**3.1 Removal of Existing Pavement.** Remove existing pavement to the extent the Contract specifies or as the Engineer directs. The minimum length of patches measured along centerline is 3 feet on each side of an existing joint.

When working with pavements with non-skewed transverse joints, if it is necessary to remove existing pavement closer than 6 feet to a transverse joint, remove the pavement 3 feet beyond that joint .

When working with pavements with skewed transverse joints, if it is necessary to remove existing pavement closer than 3 feet to a transverse joint, remove the pavement 3 feet beyond that joint.

Details of configurations of pavement and joints for various situations are depicted in the drawings herein.

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When small areas of removal and replacement are performed at bridge ends, maintain or reconstruct existing expansion joints at their existing location. When the Engineer determines extensive full width removal and replacement is required, construct new expansion joints at the locations shown on Standard Drawing No. RPN-010.

In the removal operation, make a full depth saw cut longitudinally along the centerline joint and shoulder joint and transversely along the area marked for removal. To prevent damage to the subbase, do not allow the saw to penetrate more than ½" into the subbase. The Engineer may direct or approve additional cuts within the removal area for ease of removal of the damaged slab and to prevent damage to adjacent pavement to remain in place. Do not overcut beyond the limits of the removal area. Prevent saw slurry from entering existing joints and cracks. To avoid pumping and erosion beneath the slab, do not allow traffic on sawed pavement for more than 48 hours before beginning removal procedures, unless directed by the Engineer.

Lift out the deteriorated concrete vertically with lift pins. If approved by the Engineer, use other methods that do not damage the base, shoulder, or sides of pavement that is to be left in place. If any damage does occur, repair as the Engineer directs and use an acceptable alternative method for the removal process. Do not damage the pavement base during these operations.

**3.2 Pavement Replacement.** Do not damage the pavement base during these operations.

**3.2.1 Preparation of Base.** Compact the new and existing aggregate base to the Engineer's satisfaction. The Engineer will accept compaction by either visual inspection or by nuclear gauge. When the Engineer deems it necessary to stabilize the existing base or replace unsuitable materials, excluding bridge ends, use 12 inches of geotextile fabric wrapped No. 2 aggregate topped with 4 inches of DGA or CSB. Use either Type III or Type IV geotextile fabric. Flowable fill and cement stabilization may be used as an alternative to stabilize the existing base or to replace unsuitable materials when a plan for such is presented to and approved by the Engineer. The Engineer may also direct using only DGA or CSB to correct base deficiencies. At bridge ends, treat existing base and subgrade as the Contract specifies. During compaction, wet the base as the Engineer directs. Compact areas not accessible to compaction equipment by hand tamping.

**3.2.2 Underdrains.** Construct, or repair damage to, pavement edge drains according to Section 704. If underdrains are placed omitting areas to be patched, construct additional lateral drains as necessary to provide outlets for the installed underdrain until performing the pavement replacement and completing the underdrain system. Provide drainage for any undercut or base repair areas.

**3.2.3 Pavement Replacement.** Using load transfer assemblies for dowel joints drill into the existing slab according to the details shown herein and on the Standard Drawings.

Use plain epoxy coated dowels of the size specified on the standard drawings based on the pavement thickness for contraction and expansion joints.

Drill holes for dowel bars and tie bars into the face of the existing slab, at a diameter as specified in the following. Drill the dowel bar holes and tie bar

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holes to a depth equal to 1/2 the length of the bars. Anchor tie bars into the existing pavement using an epoxy resin. Anchor dowel bars into the existing pavement using either an epoxy resin or an adhesive grout. For tie bars and dowel bars where an epoxy resin is to be used drill the holes 1/8 inch larger than the bar diameter. For dowel bars where an adhesive grout product is to be used, drill holes 1/4 inch larger than the bar diameter. Use a clear or opaque grout retention disk in both grout and epoxy applications. Operate the equipment to prevent damage to the pavement being drilled. Obtain the Engineer's approval of the drilling procedure. Install load transfer assemblies according to the Standard Drawings and Standard Specifications.

When indicated herein or in the Standard Drawings, use 1 inch deformed tie bars, 18 inches long on 30-inch centers and starting and ending 20 inches inside the edges of the repair area in the longitudinal joint. Use 1 inch deformed tie bars, or plain epoxy coated dowel bars sized in accordance with the Standard Drawings, 18 inches long beginning 12 inches inside of each edge and on 12-inch centers in transverse construction joints.

Install the dowels and tie bars according to Section 511 unless contradicted here. Ensure the holes are dry and free of dust and debris. Use a nozzle to insert the grout or epoxy starting at the back of the drilled hole to allow for full coating of the dowel or tie bar. After placement, use a bond breaker on the section of the dowel bar that is protruding from the hole.

Mix, place, finish, and cure concrete according to Section 501 with the exception that the Department will allow truck mixing, 2-bag mixers, and hand finishing.

When required, use a form on the side of the slab at longitudinal joints. When the adjacent traffic lane is not closed to traffic or the drop-off is not protected, temporarily fill the space between the form and the adjacent pavement with DGA. After placing the slab, remove the DGA and form. Fill the hole with concrete and thoroughly consolidate by rodding, spading, and sufficient vibration to form a dense homogeneous mass. Use a form on the side of the slab adjacent to shoulders. Excavate and backfill as shown on Section F'-F'.

For patches less than 25 feet in length, use a bond breaker and do not install tie bars at the longitudinal joint. Bond breakers should not exceed 1/8 inch in thickness, e.g. tar paper.

When resurfacing is required, a float finish is satisfactory. Otherwise, broom finish or, when the adjacent surface has a grooved finish, texture the surface according to Subsection 501.03.13 H). Finish the surface, including joints, to meet a surface tolerance of 1/8 inch in 10 feet that will be verified by straightedge. Cure the pavement and apply curing membranes according to 501.03.15.

Keep all pavement surfaces adjacent to this operation reasonably clean of excess grout and other materials at all times. Maintain all original longitudinal joints. Place transverse joints according to the details shown herein and on the Standard Drawings.

**3.3 Joint Sealing.** Seal all new or partially new joints with silicone rubber sealant or hot-poured elastic joint sealant according to Subsection 501.03.18.

#### **4.0 MEASUREMENT.**

**4.1 Remove JPC Pavement.** The Department will measure the quantity in square yards of surface area. The Department will not measure removal of

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underlying base material for payment and will consider it incidental to Remove JPC Pavement.

**4.2 DGA or CSB.** The Department will measure the quantity used to stabilize the existing base or to replace unsuitable material in tons. The Department will not measure removal of existing base material or underlying material for payment and will consider incidental to DGA or CSB. The quantity of DGA used for the drop-off protection shall be incidental to this work and will not be measured for payment.

**4.3 JPC Pavement Non-Reinforced.** The Department will measure according to 501.04.01. The Department will not measure dowels, tie bars, or joint sealing for payment and will consider it incidental to Non-Reinforced JPC Pavement.

JPC Pavement will be paid according to section 5.0 below and according to the following payment schedule based on the compressive strength. The cylinders for payment will be tested two hours prior the scheduled opening of traffic.

3000 psi and up	100% payment
2750 to 3000 psi	75% payment and approval from the Engineer to open to traffic*
2500 to 2750 psi	50% payment and approval from the Engineer to open to traffic*
2250 to 2500 psi	25% payment and approval from the Engineer to open to traffic*
Below 2250 psi	10% payment and no potential to open to traffic. Maintain traffic closure until concrete reaches a minimum of 2250 psi.

\*If the Engineer approves opening to traffic, the Engineer will evaluate the concrete at 28 days (or sooner) to determine if the removal and replacement of the concrete is necessary due to pavement distress induced by the early opening (i.e. noticeable cracking). If required by the Engineer, remove and replace those slabs showing distress at no cost to the Department.

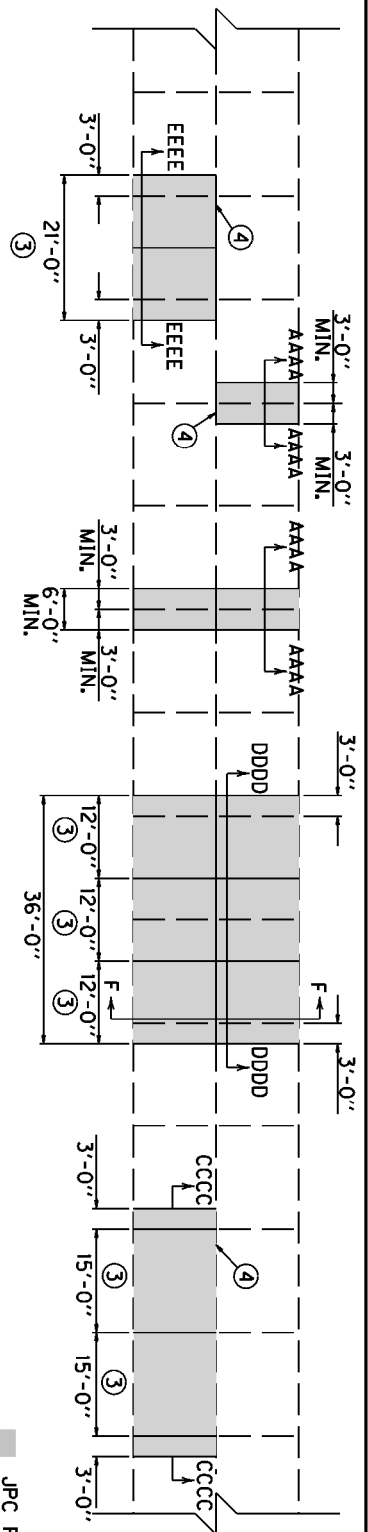
**4.4 Underdrains.** The Department will measure the quantity according to Subsection 704.04. The Department will not measure lateral drains for payment and will consider them incidental to the Underdrains.

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

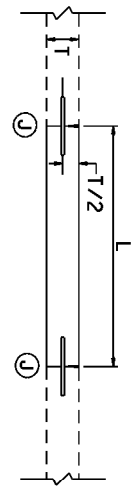
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
----	Remove PCC Pavement	Square Yard
00001	DGA Base	Ton
00003	Crushed Stone Base	Ton
02069-02071, 02073, 02075, 02084, 02086, 02088	JPC Pavement Non-Reinforced, thickness	See Subsection 501.05
01000	Perforated Pipe, 4-inch	Linear Foot
02598, 02599	Fabric-Geotextile, Type	Square Yard

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

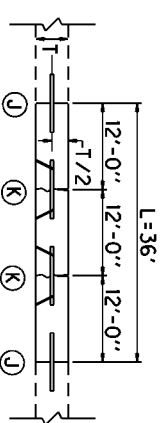
June 15, 2012



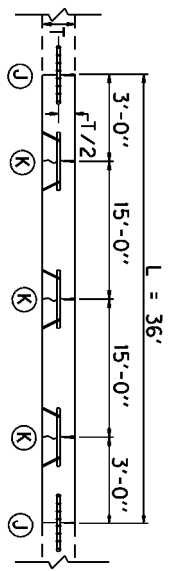
PLAN VIEW



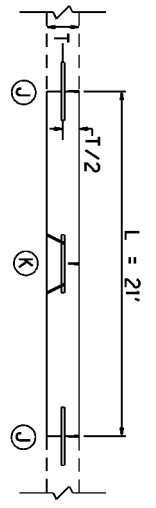
SECTION AAAA  
JOINT REPLACEMENT



SECTION DDDD  
FULL WIDTH REPLACEMENT  
(INCLUDING JPC SHOULDERS)



SECTION CCCC  
LANE REPLACEMENT WHERE ADJACENT  
LANES OR JPC SHOULDERS WILL REMAIN

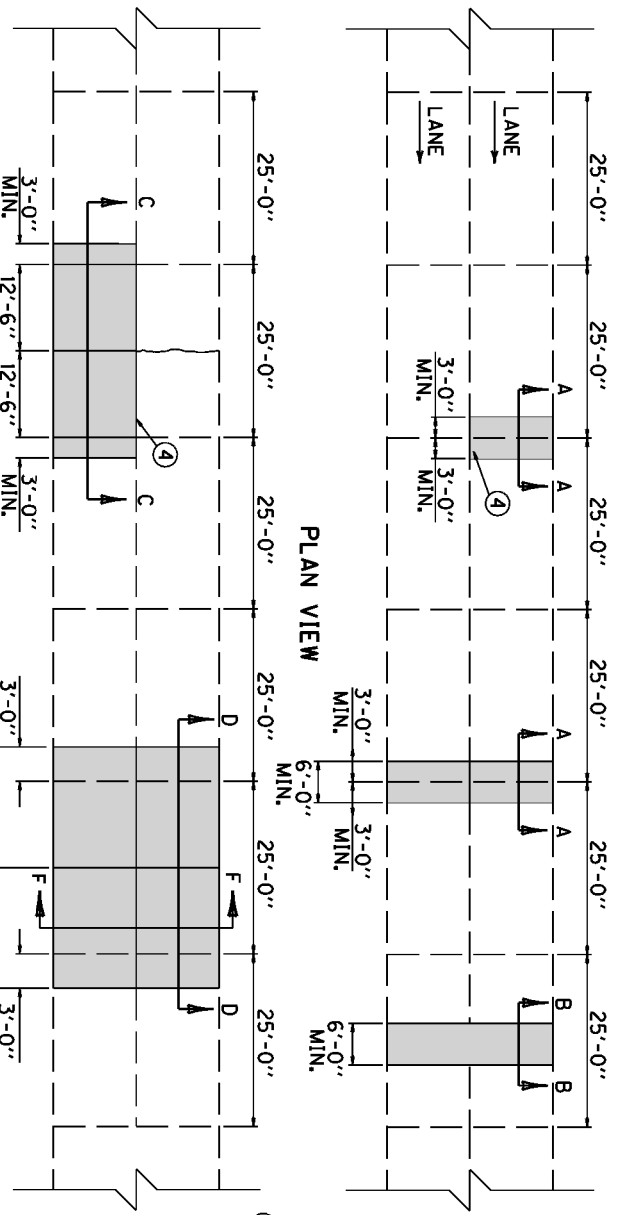


SECTION EEEE  
LANE REPLACEMENT L&25'

1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE TIE BARS FOR SECTION CCCC), 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR TIE BARS FOR SECTION CCCC) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR TIE BARS FOR SECTION CCCC) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB.
3. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND CONSTRUCT CONTRACTION JOINTS SUCH THAT THE DISTANCE BETWEEN JOINTS IN THE REPLACED SECTION IS NO LESS THAN 10 FEET OR MORE THAN 20 FEET. TRANSVERSE JOINTS SHALL BE SPACED APPROXIMATELY 15' EQUIDISTANT, BUT NOT LESS THAN 10 FEET OR NO MORE THAN 20 FEET. ADJUST JOINTS TO PROVIDE THE MINIMUM NUMBER OF JOINTS WITHOUT EXCEEDING THE 10-20 FOOT RANGE. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH AN EXISTING JOINT OR CRACK IN THE ADJACENT SLAB IF ONLY ONE LANE IS BEING REPLACED.
4. IF ONLY ONE LANE IS REMOVED, AND L&25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L&25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE. USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
5. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION CCCC) AT LOCATIONS "J".
6. SEE "CROSS SECTION" FOR SECTION F.

KENTUCKY DEPARTMENT OF HIGHWAYS
15' JOINT SPACING

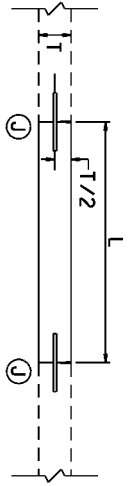
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18th DIVISION OF DESIGN



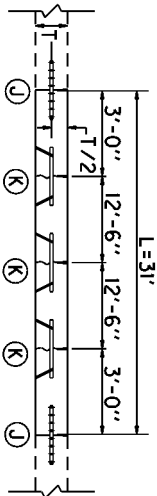
PLAN VIEW

■ JPC PAVEMENT  
TO BE REMOVED

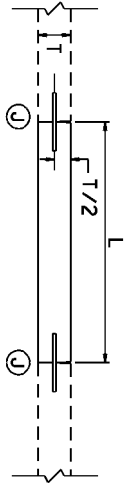
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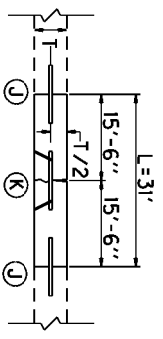
SECTION A  
JOINT REPLACEMENT



SECTION C  
LANE REPLACEMENT WHERE ADJACENT  
LANES OR JPC SHOULDERS WILL REMAIN



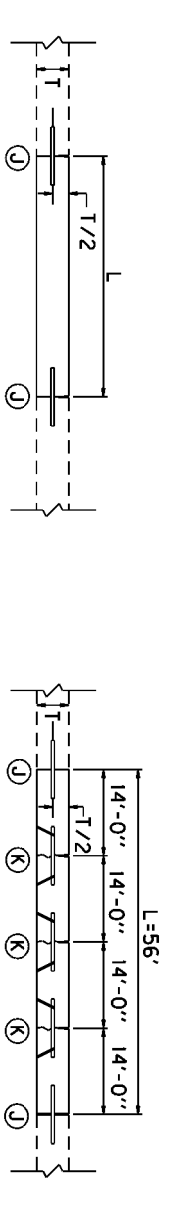
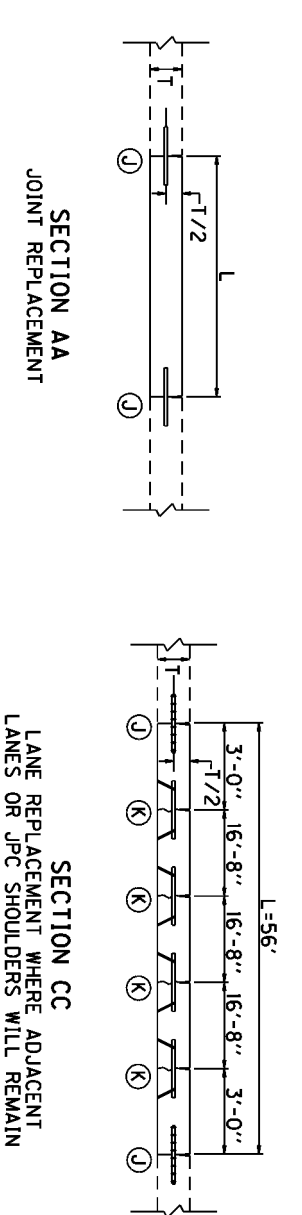
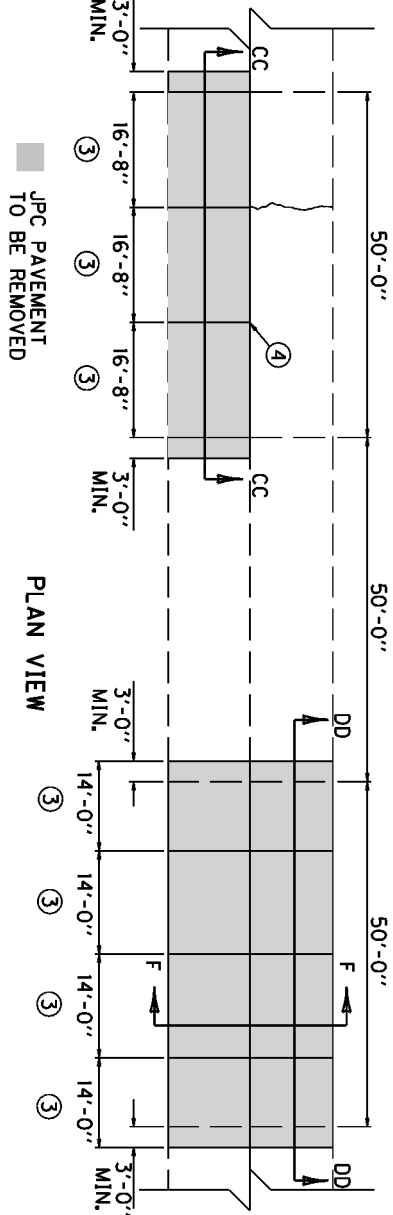
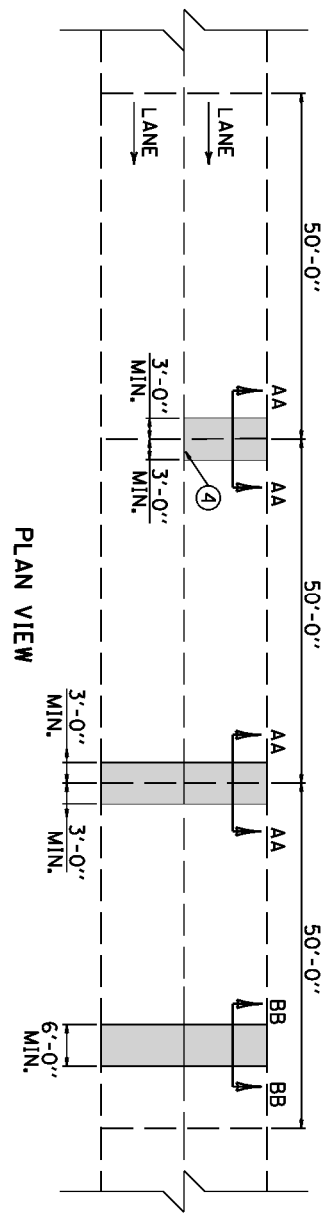
SECTION B  
MID-SLAB REPLACEMENT



SECTION D  
FULL WIDTH REPLACEMENT  
(INCLUDING JPC SHOULDERS)

1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE THE BARS FOR SECTION C). 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR THE BARS FOR SECTION C) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR THE BARS FOR SECTION C) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB.
3. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND CONSTRUCT CONTRACTION JOINTS SUCH THAT THE DISTANCE BETWEEN JOINTS IN THE REPLACED SECTION IS NO LESS THAN 10 FEET OR MORE THAN 20 FEET. TRANSVERSE JOINTS SHALL BE SPACED APPROXIMATELY 15' EQUIDISTANT, BUT NOT LESS THAN 10 FEET OR NO MORE THAN 20 FEET. ADJUST JOINTS TO PROVIDE THE MINIMUM NUMBER OF JOINTS WITHOUT EXCEEDING THE 10-20 FOOT RANGE. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH AN EXISTING JOINT OR CRACK IN THE ADJACENT SLAB IF ONLY ONE LANE IS BEING REPLACED.
4. IF ONLY ONE LANE IS REMOVED, AND L ≥ 25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L ≥ 25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE. USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
5. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION C) AT LOCATIONS "J". SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.

KENTUCKY DEPARTMENT OF HIGHWAYS
25' JOINT SPACING
APPROVED _____ DATE _____ TECHNICAL DIVISION OF DESIGN

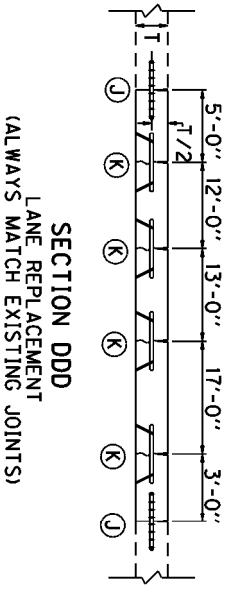
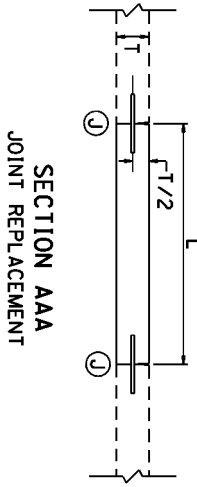
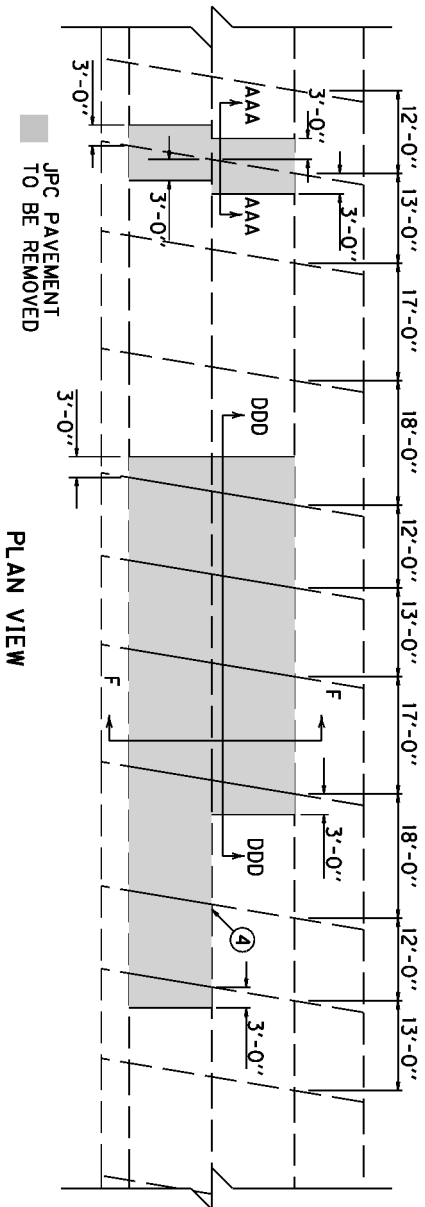


1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE THE BARS FOR SECTION CC), 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR TIE BARS FOR SECTION CC) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR TIE BARS FOR SECTION CC) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB.

3. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND CONSTRUCT CONTRACTION JOINTS SUCH THAT THE DISTANCE BETWEEN JOINTS IN THE REPLACED SECTION IS NO LESS THAN 10 FEET OR MORE THAN 20 FEET. TRANSVERSE JOINTS SHALL BE SPACED APPROXIMATELY 15'-EQUIDISTANT, BUT NOT LESS THAN 10 FEET OR NO MORE THAN 20 FEET. ADJUST JOINTS TO PROVIDE THE MINIMUM NUMBER OF JOINTS WITHOUT EXCEEDING THE 10-20 FOOT RANGE. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH AN EXISTING JOINT OR CRACK IN THE ADJACENT SLAB IF ONLY ONE LANE IS BEING REPLACED.

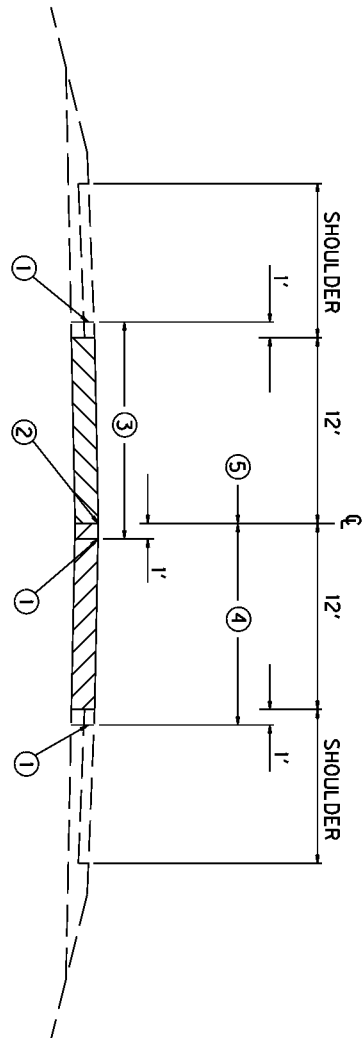
4. IF ONLY ONE LANE IS REMOVED, AND L > 25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L < 25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE; USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
5. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION CC) AT LOCATIONS "J"; SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.

KENTUCKY DEPARTMENT OF HIGHWAYS
50' JOINT SPACING
SUBMITTED _____ TEAM DIVISION OF DESIGN _____ DATE _____



1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE TIE BARS FOR SECTION DDD). 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR TIE BARS FOR SECTION DDD) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR TIE BARS FOR SECTION DDD) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB.
3. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND MATCH EXISTING JOINTS. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH EXISTING JOINTS IN ADJACENT SLABS.
4. IF ONLY ONE LANE IS REMOVED, AND L > 25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L < 25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE; USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
5. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION DDD) AT LOCATIONS "J". SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.

KENTUCKY DEPARTMENT OF HIGHWAYS
RANDOM SKEWED
APPROVED _____ TEAM DIVISION OF DESIGN _____ DATE _____



SECTION F

- ① SAW-CUT LINE. THIS ONE FOOT IS TO ALLOW FOR A FORM AND THE REMOVAL AND REPLACEMENT SHALL BE INCIDENTAL TO THE WORK, EXCEPT NEW ASPHALT MIXTURE SHALL BE PAID DIRECT ON A TONNAGE BASIS, AND NEW JPC PAVEMENT WILL BE PAID BY THE SQUARE YARD. COMPACT THE DGA BASE BY MECHANICAL TAMPERS TO THE ENGINEER'S SATISFACTION, EXISTING LONGITUDINAL JOINT.
- ② FIRST SLAB REMOVAL LIMITS AND REPLACE 12-FOOT LANE.
- ③ SECOND SLAB REMOVAL LIMITS AND REPLACE 12-FOOT LANE.
- ④ THIS ONE FOOT IS TO ALLOW FOR A FORM ON THE FIRST POUR, AND A TEMPORARY PAVEMENT IS REQUIRED. THE DEPARTMENT WILL NOT REQUIRE REMOVAL OF THIS ONE FOOT IF THE GRADE OF THE EXISTING PAVEMENT IS ADEQUATE TO ENSURE THE NEW CONCRETE CAN BE PLACED AND FINISHED TO THE SATISFACTION OF THE ENGINEER. ANY TEMPORARY PAVEMENT IS INCIDENTAL TO JPC PAVEMENT.
- ⑤ THE ABOVE DRAWING DEPICTS THE ORDER OF SLAB REMOVAL WHEN BOTH ARE TO BE REMOVED AT THE SAME LOCATION, WHEN ONLY ONE SLAB OR LANE IS TO BE REMOVED, REMOVE AND REPLACE ACCORDING TO SECTION C, CC, OR CCCC. TRAFFIC CONTROL WILL SPECIFY WHICH LANE TO REMOVE FIRST.

KENTUCKY  
DEPARTMENT OF HIGHWAYS

CROSS SECTION

APPROVED \_\_\_\_\_  
TERRI OWSON, P.E. DATE \_\_\_\_\_

***SPECIAL NOTE***

**For Tree Removal**

**Jefferson County  
I-64 WB to I-264 WB Ramp Improvements  
Item No. 5-159.00**

**NO CLEARING OF TREES 5 INCHES OR GREATER  
(DIAMETER BREAST HEIGHT) FROM JUNE 1 TO JULY 31.**

**If there are any questions regarding this note, please contact David Waldner,  
Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY  
40601, Phone: (502) 564-7250.**

### **Special Note for Bridge Demolition, Renovation and Asbestos Abatement**

**If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 days prior to commencement of any bridge demolition or renovation work.**

**Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.**



**Matthew G. Bevin**  
Governor

**COMMONWEALTH OF KENTUCKY**  
**TRANSPORTATION CABINET**  
Frankfort, Kentucky 40622  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

**Greg Thomas**  
Secretary

## **Asbestos Inspection Report**

To: Lindsay Ashby

District: 5

Date: February 12, 2018

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

---

### **Project and Structure Identification**

Project Number: Jefferson 05-0159.00

Structure ID: 056B00260N

Structure Location: I-264 over Weicher Creek

Sample Description: There were no suspect materials present on structure.

Inspection Date: February 9, 2018

### **Results and Recommendations**

The results of the samples collected were negative for the presence of asbestos above 1%.  
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



**ENVIRONMENTAL TRAINING CONCEPTS, INC**  
P.O. Box 99603 Louisville, KY 40269  
(502)640-2951

Certification Number: ETC-AIR-061317-00518

# O'Dail Lawson

has on 06-13-2017, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

## ASBESTOS INSPECTOR REFRESHER

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management and Tennessee Department of Environment & Conservation The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA).

Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

  
Name - Training Manager

Expiration Date: 06-13-2018

  
Name - Instructor



**COMMONWEALTH OF KENTUCKY**  
**TRANSPORTATION CABINET**  
Frankfort, Kentucky 40622  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

**Matthew G. Bevin**  
Governor

**Greg Thomas**  
Secretary

## **Asbestos Inspection Report**

To: Lindsay Ashby

District: 5

Date: February 12, 2018

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

---

### **Project and Structure Identification**

Project Number: Jefferson 05-0159.00

Structure ID: 056B00443N

Structure Location: I-64 Ramp to I-264 Westbound over I-64

Sample Description: The samples collected were negative for asbestos.

Inspection Date: February 9, 2018

### **Results and Recommendations**

The results of the samples collected were negative for the presence of asbestos above 1%.  
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.







# Chain of Custody Record

Kentucky Transportation Cabinet

200 Metro Street, 5th Floor West  
Frankfort, Kentucky 40622  
(502) 564-7250 fax (502) 564-5655

O'Dail Lawson [odail.lawson@kv.gov](mailto:odail.lawson@kv.gov)

KYTC

Address: 200 Metro Street

Frankfort KY

Phone: 502-564-7250

Fax: 502-564-5655

PO#:

Project or Subject Reference

Jefferson 05-159-00 056 B00-2694

Client Information KY TRANS CABINET

Results Code:

ND = None Detected

FTD = Filter Tampering or Damaged

N/A = Not Applicable

*See above*

*T-64 on ramp onto I-264*

Samplers (signature):

*Carly CA*

Sample ID	Sample Description	Collected		Analysis Requested	Grab/Comp.	No. of Cont.	Cont. Type	Preservative
		Date	Time					
260-1	Joint Compound	2/9/19	12:15	Asbestos bulk				N/A

Relinquished By: *Carly CA* Date/Time: *2/9/19*

Received By: *Michael Murray* Date/Time: *2/9/19*

Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received at Lab By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

**ENVIRONMENTAL TRAINING CONCEPTS, INC**

P.O Box 99603 Louisville, KY 40269  
(502)640-2951

Certification Number: ETC-AIR-061317-00518

**O'Dail Lawson**

has on 06-13-2017, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

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Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 06-13-2018

  
Name - Training Manager

  
Name - Instructor



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

TC 62-226  
Rev. 01/2016  
Page 1 of 1

RIGHT OF WAY CERTIFICATION

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	<b>RIGHT OF WAY CERTIFICATION</b>	
<b>ITEM #</b>	<b>COUNTY</b>	<b>PROJECT # (STATE)</b>	<b>PROJECT # (FEDERAL)</b>
5-159.00	Jefferson	1200 FD52 056 7617301R	NHPP 0642192 0642193

**PROJECT DESCRIPTION**

Widen I-64 westbound ramp from one to two lanes for entire length

**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	6	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired			
Signed Deed	6		
Condemnation			
Signed ROE			

Notes/ Comments (Use Additional Sheet if necessary)

<b>LPA RW Project Manager</b>		<b>Right of Way Supervisor</b>	
Printed Name		Printed Name	Tom Boyton
Signature		Signature	<i>Tom Boyton</i>
Date		Date	3-20-18
<b>Right of Way Director</b>		<b>FHWA</b>	
Printed Name	DM Loy	Printed Name	Carroll Robinson
Signature	<i>DM Loy</i>	Signature	<i>Carroll Robinson</i>
Date	20 MAR 2018	Date	3.22.18

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

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	<b>RIGHT OF WAY CERTIFICATION</b>	
<b>ITEM #</b>	<b>COUNTY</b>	<b>PROJECT # (STATE)</b>	<b>PROJECT # (FEDERAL)</b>
5-2086.01	Jefferson	FD52 056 0064 011-014	NHPP IM 0642(191)

**PROJECT DESCRIPTION**  
 JPC REPAIR AND DIAMOND GRIND ON I-64 FROM 0.129 MI E OF KY 1932 (BRECKENRIDGE LN) (MP 11.574) TO 0.412 MI W OF OXMOOR AVE. (MP 13.160) IN JEFFERSON CO. (2016BOP) Construction Federal No: NHPP IM 0642(191)

**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.


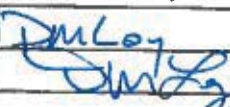
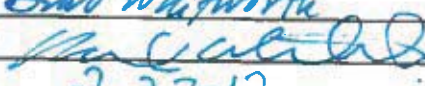
**Condition # 1 (Additional Right of Way Required and Cleared)**  
 All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There 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	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired		
Signed Deed		
Condemnation		
Signed ROE		

Notes/ Comments (Use Additional Sheet if necessary)

<b>LPA RW Project Manager</b>		<b>Right of Way Supervisor</b>	
Printed Name		Printed Name	Tom Bouffon
Signature		Signature	
Date		Date	2-27-2012
<b>Right of Way Director</b>		<b>FHWA</b>	
Printed Name	DuLoy	Printed Name	Daryl Whitworth
Signature		Signature	
Date	27 Feb 12	Date	2-27-12

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County, NHPP 0642192**

**000IM0642159**

**FD52 056 76173 01U**

**Mile point: 0.232 TO 0.779**

**WIDEN I-64 WESTBOUND RAMP TO I-264 WESTBOUND FROM ONE TO TWO LANES FOR ENTIRE LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264.**

**(2006BOPP)(12CCR)**

**ITEM NUMBER: 159.00**

### PROJECT NOTES ON UTILITIES

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

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

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

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

## UTILITIES AND RAIL CERTIFICATION NOTE

Jefferson County, NHPP 0642192

000IM0642159

FD52 056 76173 01U

Mile point: 0.232 TO 0.779

**WIDEN I-64 WESTBOUND RAMP TO I-264 WESTBOUND FROM ONE TO TWO LANES FOR ENTIRE LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264.**

**(2006BOPP)(12CCR)**

**ITEM NUMBER: 159.00**

**NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS**

### Metropolitan Sewer District – Sanitary Sewer

MSD facilities tend to run parallel to the roadway to the north. A sanitary line approaches disturb limits at approx. STA 602+60 and continues to run parallel to the disturb limits until roughly STA 609+30. Sanitary sewer lines continue to run parallel to Ramp 7 to the northwest. Sewer lines cross the roadway again at approx. STA 629+90. **Use caution between stations 603+00 and 609+00.**

**These existing facilities are not to be disturbed and shall remain in place.**

### AT&T - KY – Communication

Telecommunication facilities typically run parallel to the roadway, north of the disturb limits. A buried fiber optic line crosses the roadway at approx. STA 602+80.

**These existing facilities are not to be disturbed and shall remain in place.**

### LG&E KU – Electric

Location of electric facilities vary throughout the project. Overhead electric facilities cross the roadway at approx. STA 582+30 and STA 625+90. Underground electric facilities (3x3 duct bank) cross the roadway at roughly STA 626+52. A transmission pole route runs along the north side of the roadway from approx. Sta 625+00 to 648+00. Poles are located at approximately Sta. 628+22 110ft Lt, Sta. 632+24 110ft LT, Sta. 636+40 110ft LT, Sta. 640+44 108ft LT, Sta. 644+40 108ft LT, and Sta 648+15 109ft LT.

**Use caution around overhead electric lines when installing the proposed overhead sign near Sta 635+47.** Buried electric facilities cross Ramp 5 at approx. STA 120+00. Underground high mast lighting wiring crosses Ramp 5 around STA 131+74. Aerial electric facilities cross Ramp 5 around station 139+44 and 141+56.

**These existing facilities are not to be disturbed and shall remain in place.**

### LG&E - Natural Gas

The facilities primarily run outside of project limits to the north of the roadway. A 20" gas main in a 24" casing crosses the roadway at approx. STA 588+11. A gas main also crosses ramp 5 at approx. STA 139+22.

**These existing facilities are not to be disturbed and shall remain in place.**

## UTILITIES AND RAIL CERTIFICATION NOTE

Jefferson County, NHPP 0642192  
000IM0642159  
FD52 056 76173 01U  
Mile point: 0.232 TO 0.779  
**WIDEN I-64 WESTBOUND RAMP TO I-264 WESTBOUND FROM ONE TO TWO LANES FOR ENTIRE  
LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264.  
(2006BOPP)(12CCR)  
ITEM NUMBER: 159.00**

### Louisville Water Company – Water

LWCo facilities cross the roadway at several points. A 12" water main crosses the roadway at approx. STA 590+70. A 12" water main in a 24" casing crosses the roadway around STA 600+54. A 12" water main crosses ramp 5 around STA 139+44.

**These existing facilities are not to be disturbed and shall remain in place.**

### Windstream dba Kentucky Data Link (KDL) – Communication

Aerial communication facilities cross Ramp 5 around station 139+44 and 141+56.

**These existing facilities are not to be disturbed and shall remain in place.**

### Charter Communications – Communication

Aerial communication facilities cross Ramp 5 around station 139+44 and 141+56.

**These existing facilities are not to be disturbed and shall remain in place.**

### Level 3 Communications-Communication

Aerial facilities follow the LG&E pole route to the north of the roadway. Aerial communication facilities cross Ramp 5 around station 139+44 and 141+56.

**These existing facilities are not to be disturbed and shall remain in place.**

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

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

## UTILITIES AND RAIL CERTIFICATION NOTE

<p>Jefferson County, NHPP 0642192 000IM0642159 FD52 056 76173 01U Mile point: 0.232 TO 0.779 WIDEN I-64 WESTBOUND RAMP TO I-264 WESTBOUND FROM ONE TO TWO LANES FOR ENTIRE LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264. (2006BOPP)(12CCR) ITEM NUMBER: 159.00</p>
--

Not Applicable

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

Not Applicable

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

Not Applicable

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

No Rail Involvement    Rail Involved    Rail Adjacent

### AREA FACILITY OWNER CONTACT LIST

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County, NHPP 0642192**  
**000IM0642159**  
**FD52 056 76173 01U**  
**Mile point: 0.232 TO 0.779**  
**WIDEN I-64 WESTBOUND RAMP TO I-264 WESTBOUND FROM ONE TO TWO LANES FOR ENTIRE LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264.**  
**(2006BOPP)(12CCR)**  
**ITEM NUMBER: 159.00**

Facility Owner	Address	Contact Name	Phone	Email
AT&T - KY - Communication	1340 E. John Rowan Blvd Bardstown KY 40004	Scott Roche	5023484528	sr8832@att.com
Charter Communications - Communication	10168 Linn Station Road, Suite 120 Louisville KY 40223	Deno Barbour	5026647395	Dwight.Barbour@charter.com
Level 3 Communications	1025 El Dorado Blvd Broomfield, CO 80021	Patrick Provost	7208884686	Patrick.provost@level3.com
LG&E - Natural Gas	820 West Broadway Louisville KY 40202	Greg Geiser	5026273708	greg.geiser@lge-ku.com
LG&E KU - Electric	820 West Broadway Louisville KY 40202	Greg Geiser	5026273708	greg.geiser@lge-ku.com
Louisville Water Company - Water	550 South Third Street Louisville KY 40202	Daniel Tegene	5025693649	dtegene@lwcky.com
Metropolitan Sewer District - Sewer	700 West Liberty Street Louisville KY 40203	Brandon Flaherty	5025406632	brandon.flaherty@louisvillemsd.org
Windstream dba Kentucky Data Link (KDL) - Communication	111 S. Main St Elizabethtown KY 42701	James Galvin	2707651818	james.galvin@windstream.net

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
I-64 /JPC REPAIR AND DIAMOND GRIND M.P. 11.574 TO  
13.160 5-2086.01**

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

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

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

### UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

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

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

### SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The

Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
I-64 /JPC REPAIR AND DIAMOND GRIND M.P. 11.574 TO 13.160  
5-2086.00**

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

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

### AREA UTILITIES CONTACT LIST AS PROVIDED BY KY 811

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
<p><b>1.</b> LG&amp;E KU (Electric) 820 West Broadway Louisville, KY 40202</p> <p>LG&amp;E Emergency Number (502) 589-1444 LG&amp;E and KU Emergency Number 1-800-331-7370</p>		<p>Greg Geiser work: (502) 627-3708 <a href="mailto:Greg.Geiser@LGE-KU.com">Greg.Geiser@LGE-KU.com</a></p>
<p><b>2.</b> LG&amp;E (Gas) 820 West Broadway Louisville, KY 40202 Gas Emergency Number (502) 589-5511 LG&amp;E and KU Emergency Number 1-800-331-7370</p>		<p>Greg Geiser work: (502) 627-3708 <a href="mailto:Greg.Geiser@LGE-KU.com">Greg.Geiser@LGE-KU.com</a></p>
<p><b>3.</b> Louisville Water Company 550 South Third Street Louisville, KY 40202</p>		<p>Daniel Tegene, PE (502) 569-3649 <a href="mailto:DTegene@LWCky.com">DTegene@LWCky.com</a></p>
<p><b>4.</b> AT&amp;T KY 1340 E. John Rowan Blvd Bardstown, KY 40004</p>		<p>Scott Roche <a href="mailto:sr8832@att.com">sr8832@att.com</a> Office - (502) 348-4528 Cell – (502) 827-4703</p>
<p><b>5.</b> Metropolitan Sewer District 700 West Liberty Street Louisville, KY 40203-1911</p>		<p>Brandon Flaherty <a href="mailto:Brandon.Flaherty@LouisvilleMSD.org">Brandon.Flaherty@LouisvilleMSD.org</a> Office: (502) 540-6632 : (502) 381-0804 Greg Powell</p>

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
I-64 /JPC REPAIR AND DIAMOND GRIND M.P. 11.574 TO 13.160  
5-2086.00**

[Greg.Powell@LouisvilleMSD.org](mailto:Greg.Powell@LouisvilleMSD.org)

6. Charter Communications  
10168 Linn Station Road  
Suite 120  
Louisville, KY 40223
- Deno Barbour  
(502) 664-7395 – Cell  
(502) 357-4376 – Office  
[Dwight.Barbour@charter.com](mailto:Dwight.Barbour@charter.com)  
Kevin Mercer  
(502) 817-5055 – Cell  
(502) 357-4724 - Office  
[kevin.mercer@charter.com](mailto:kevin.mercer@charter.com)  
Richard Bast  
(502) 817-0734 – Cell  
(502) 357-4118 - Office  
[richard.bast@charter.com](mailto:richard.bast@charter.com)
7. Texas Gas Transmission, LLC  
2332 Hwy 60 West  
Hardinsburg, KY 40143
- 10327 Gaslight Way  
Louisville, KY 40299
- Carman  
Kevin.Carman@bwpmlp.com  
Cell: (270) 779-3893
- John Weaver  
[John.Weaver@BWPMLP.com](mailto:John.Weaver@BWPMLP.com)  
(502) 438-2407  
Howard Menser  
[Howard.Menser@BWPMLP.com](mailto:Howard.Menser@BWPMLP.com)  
Office: (502) 491-0251  
Cell: (502) 396-2418
8. Marathon Pipeline, LLC  
539 South Main Street, Room X-05-018  
Findlay, OH 45840  
OR  
20-C Industrial Drive  
Lexington, OH 44904
- Ed May  
Office – (419) 421-3704  
[edmay@marathonpetroleum.com](mailto:edmay@marathonpetroleum.com)  
Greg Newman  
[gcneman@marathonpetroleum.com](mailto:gcneman@marathonpetroleum.com)  
Office - (419) 884-0800x236  
Cell – (419) 564-8826
9. Indiana Gas Company Inc  
d.b.a. Vectren Energy Delivery of Indiana, Inc  
or  
Ohio River Pipeline Corporation  
2520 Lincoln Drive  
Clarksville, Indiana 47129
- Mary Barber  
[MBarber@Vectren.com](mailto:MBarber@Vectren.com)  
(812) 948-4952

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
I-64 /JPC REPAIR AND DIAMOND GRIND M.P. 11.574 TO 13.160  
5-2086.00**

**Line Maintained By**

Texas Gas Transmission, LLC  
3800 Frederica Street  
Owensboro, Kentucky 42302  
Cell: (270) 485-1152

- |            |   |   |
|------------|---|---|
| <b>10.</b> | Indiana Utilities Corporation<br>123 West Chestnut Street<br>Corydon, Indiana 47112<br>(812) 738-3235 | Scott Schmitt<br><a href="mailto:scotts@indianautilitiescorp.com">scotts@indianautilitiescorp.com</a><br>Corey Thatcher<br><a href="mailto:coreyt@indianautilitiescorp.com">coreyt@indianautilitiescorp.com</a><br>Kevin Kinney<br>Ron Timberlake |
| <b>11.</b> | Sprint - Fiber Optics<br>11370 Enterprise Park Dr.<br>Sharonville, OH 45241                           | Joe Thomas<br><a href="mailto:Joseph.J.Thomas@sprint.com">Joseph.J.Thomas@sprint.com</a><br>Office (440) 447-6163<br>Cell (937) 209-9754  |
| <b>12.</b> | Mid - Valley Pipeline Company<br>4910 Limaburg Road<br>Burlington, KY 41005<br>FAX (866) 699-1185     | Richard (Todd) Calfee<br>(859) 371-4469x14<br>Cell: 859-630-8271<br><a href="mailto:RTCalfee@SunocoLogistics.com">RTCalfee@SunocoLogistics.com</a>  |
| <b>13.</b> | Level 3 Communications (Transmission)<br>848 S. 8 <sup>th</sup> St.<br>Louisville, KY 40203           | Kevin Webster<br><a href="mailto:Kevin.Webster@Level3.com">Kevin.Webster@Level3.com</a><br>Office (502) 777-8622<br>Cell (502) 777-8622<br>Fax (502) 561-6950   |
|            | Level 3 Communications (Distribution)<br>11857 Commonwealth Drive<br>Louisville, KY 40299             | Mark Sewell<br><a href="mailto:Mark.Sewell@Level3.com">Mark.Sewell@Level3.com</a><br>Office (502) 389-4811<br>Cell (502) 295-0939   |
|            |   | Harold Waters<br><a href="mailto:Harold.Waters@Level3.com">Harold.Waters@Level3.com</a><br>Office (502) 719-2393<br>Cell (502) 435-0956   |
|            | 3770 Lucius Rd.<br>Columbia, SC 29201   | Russ Wheat, Relocation Project Manager<br><a href="mailto:russ.wheat@level3.com">russ.wheat@level3.com</a><br>Office (803) 239-1116   |

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
I-64 /JPC REPAIR AND DIAMOND GRIND M.P. 11.574 TO 13.160  
5-2086.00**

Cell (803) 206-9563

**Send to Relocations Email**

Relocations

[relo@level3.com](mailto:relo@level3.com)

- 14.** Jefferson County Public Schools (JCPS)  
C B Young  
Building 7  
3001 Crittenden Dr.  
Louisville, KY 40209
- Jeff Hardy  
[Jeff.Hardy@Jefferson.kyschools.us](mailto:Jeff.Hardy@Jefferson.kyschools.us)  
(502) 485-7975  
Scott McMahan (Team Fishel)  
cell: (502) 664-9312  
office: (502) 456-2900
- 15.** Kentucky Data Link (KDL now Windstream)  
111 S. Main St.  
Elizabethtown, KY 42071
- James Galvin  
Office: 270-765-1818  
Mobile: 270-748-9249  
[James.Galvin@windstream.com](mailto:James.Galvin@windstream.com)  
Mark Ware  
[Mark.Ware@windstream.com](mailto:Mark.Ware@windstream.com)  
**Send to both contacts**  
Timothy Gibson  
[Timothy.Gibson@Windstream.com](mailto:Timothy.Gibson@Windstream.com)  
**Emergency contact ONLY**
- 16.** AT&T Legacy  
7555 E. Pleasant Valley Rd. – Suite 140  
Independence, OH 44131
- Mike Diederich  
[MD4145@att.com](mailto:MD4145@att.com)  
Phone - (216) 750-0135  
Cell - (216) 212-8556  
Don Garr  
[DRGarr@Hughes.net](mailto:DRGarr@Hughes.net)  
Cell - (502) 741-8374  
**Send to both contacts**
- 18.** City of Taylorsville Sewer & Water  
70 Taylorsville Rd., P O Box 279  
Taylorsville, KY 40071  
Consultant: Kevin Sisler  
220 Reynolds Rd  
Lexington, KY 40517
- Harold Compton  
[HCompton@TaylorsvilleWater.org](mailto:HCompton@TaylorsvilleWater.org)  
(502) 477-3235  
Fax: (502) 477-1310  
[Kevin.@SislerMaggard.com](mailto:Kevin.@SislerMaggard.com)  
(859) 271-2978 (859) 509-3799  
Steve Biven-City Clerk  
[SBiven@taylorsvillewater.org](mailto:SBiven@taylorsvillewater.org)  
(502) 477-3235 ext. 106

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
I-64 /JPC REPAIR AND DIAMOND GRIND M.P. 11.574 TO 13.160  
5-2086.00**

19. CenturyLink  
260 Winn Ave  
Winchester, KY 40391
- CenturyLink National Network Construction  
3625 Brookside Parkway Suite 400  
Alpharetta, GA 30022
20. Shelby Energy Cooperative  
P.O. Box 311, 620 Old Finchville Road  
Shelbyville, KY 40065  
(502) 633-4420
21. Atmos Energy  
105 Hudson Blvd  
Shelbyville, KY 40065
22. Crown Castle Network Operations  
10300 Ormsby Park Place  
Suite 501  
Louisville, KY 40223
23. Zayo  
9209 Castlegate Dr  
Indianapolis, IN 46256
24. MCI/Verizon(Owns WUTEL)  
MCI/Verizon  
730 West Henry Street  
Indianapolis, IN 46225
- Jim Trapnell  
[jim.trapnell@centurylink.com](mailto:jim.trapnell@centurylink.com)  
Cell (859) 806-5833
- Chad Kirkland  
[Chadrick.kirkland@centurylink.com](mailto:Chadrick.kirkland@centurylink.com)  
Cell (770) 328-2449
- Jason Ginn  
[Jason@ShelbyEnergy.com](mailto:Jason@ShelbyEnergy.com)  
cell: 502-643-2778
- Bernie Anderson  
cell: (502) 321-8073  
[Bernie.Anderson@AtmosEnergy.com](mailto:Bernie.Anderson@AtmosEnergy.com)  
Ryne White  
[Ryne.white@atmosenergy.com](mailto:Ryne.white@atmosenergy.com)  
Cell: (270) 929-1706  
**Send to both contacts**
- Rebecca Gray  
[rebecca.gray@CrownCastle.com](mailto:rebecca.gray@CrownCastle.com)  
(502)318-1313  
Chris Gladstone  
[Chris.Gladstone@CrownCastle.com](mailto:Chris.Gladstone@CrownCastle.com)  
(502) 689-2162
- Manny Naves  
[manuel.naves@zayo.com](mailto:manuel.naves@zayo.com)  
(812) 459-9696
- Chris Fowler  
[chris.fowler@verizon.com](mailto:chris.fowler@verizon.com)  
Office: (317) 685-8050  
Cell: (317) 435-6225
- Dave Wiley (Field)  
(502) 439-8783  
[dave.wiley@verizon.com](mailto:dave.wiley@verizon.com)

## UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 0642(191)  
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5-2086.00**

- |     |   |  |
|-----|---|--|
| 25. | TRIMARC<br>Public Safety & Transportation Systems<br>901 West Main Street<br>Louisville, KY 40202 | Todd Hood<br><a href="mailto:Todd.Hood@ngc.com">Todd.Hood@ngc.com</a><br>Office: (502) 587-6624<br>Cell: (270) 307-7456          |
| 26. | Lighttower/Fibertech<br>3310 Ruckreigel Parkway<br>Jeffersontown, KY 40299                        | Mike Prather<br>- (585) 445-5823<br>Cell: (502) 612-3102<br><a href="mailto:mprather@lighttower.com">mprather@lighttower.com</a> |

# *N O T I C E*

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**DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
NATIONWIDE PERMIT AUTHORIZATION  
KENTUCKY DIVISION OF WATER 401 WQC**

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**PROJECT:** Jefferson County, Item No. 5-159  
Widen I64 Westbound ramp to I264 westbound from one  
to two lanes

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The Section 404 & 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 “Linear Transportation Projects” & Division of Water General Water Quality Certification. In order for these authorizations to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit & General WQC in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

Station 629+92  
See sheet R9

Widen the existing bridge over Weicher Creek to accommodate extra lanes for traffic. The **perennial** stream will have impacts below the normal high water mark due to widening the crossing, headwalls, and riprap. The estimated area of impact is **20 linear feet** and **0.002 acres**. The drainage area at the bridge is **920 acres**.  
**Lat 38.230581, Long -85.632995**

This project involves work near and/or within Jurisdictional Waters of the United States as defined by the United States Army Corps of Engineers and therefore requires a Nationwide 14 General 404 Permit. The Division of Water certified this General Permit with several conditions (See attached). One that should be brought to your attention is regarding the use of heavy equipment in the stream channel. If there is need to cross the stream channel with heavy equipment or conduct work from within the stream channel a working platform or temporary crossing is authorized. This should be constructed with clean rock and sufficient pipe to allow stream flow to continue unimpeded (see attached typical drawing).

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Approval in a conspicuous location at the project site for the duration of 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 Division of Environmental Analysis. If such changes necessitate further permitting then the contractor will be responsible for applying to the Army Corps of Engineers and the Kentucky Division of Water (KDOW). A copy of any request to the Corps of Engineers or the KDOW 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.



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.

**General Certification--Nationwide Permit # 14**  
**Linear Transportation Projects**  
**Page 2**

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,

**General Certification--Nationwide Permit # 14**  
**Linear Transportation Projects**  
**Page 3**

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.

## 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).

Notifications for all Nationwide Permits (NWP) 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 NWP 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 NWP (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).

**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, 3<sup>rd</sup> Floor  
Frankfort, KY 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, KY 40601

Terms for Nationwide Permit No. 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.

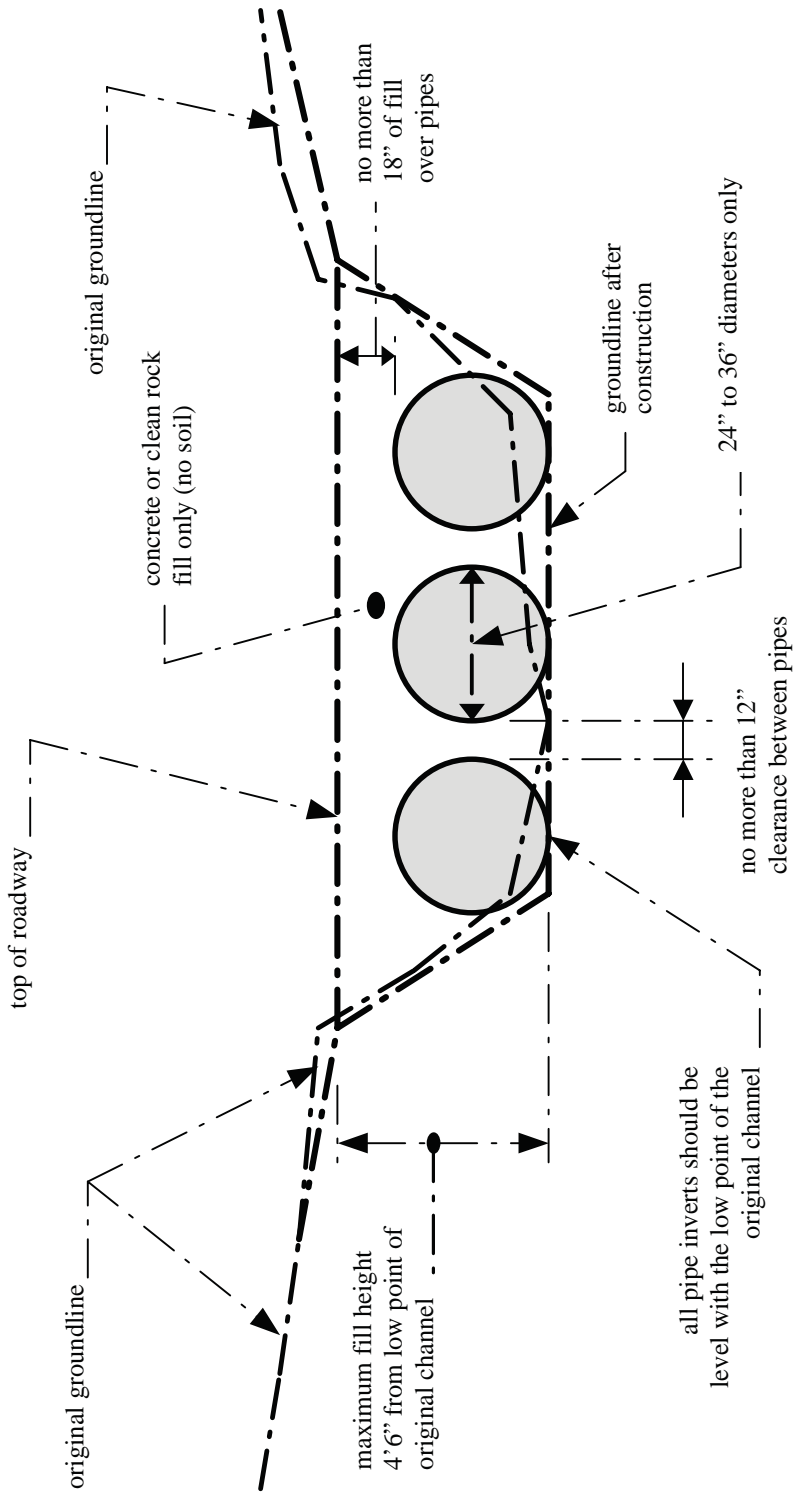
Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: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

# 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

KyTC BMP Plan for Project CID ## - #####



**Kentucky Transportation Cabinet**

**Highway District 5**

**And**

\_\_\_\_\_ **(2), Construction**

**Kentucky Pollutant Discharge Elimination System**

**Permit KYR10**

**Best Management Practices (BMP) plan**

**Groundwater protection plan**

**For Highway Construction Activities**

**For**

**I-64/I-264 Interchange Improvement:**

**Widen I-64 WB Ramp/Bridge to I-264 WB; Add 2 lanes from I-64/I-264 Interchange to I-264/Breckenridge Ln Interchange; Widen NB Breckenridge Exit ramp; Extend WB I-264 Auxiliary lane to NB Exit Taylorsville Rd.**

**Project: CID ## - #####**

KPDES BMP Plan Page 1 of 15

Revised 3/4/2016

## KyTC BMP Plan for Project CID ## - ####

### Project information

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

1. Owner – Kentucky Transportation Cabinet, District 5
2. Resident Engineer: (2)
3. Contractor name: (2)  
Address: (2)  
  
Phone number: (2)  
Contact: (2)  
Contractors agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number (2)
5. Route (Address) **WB I-64/WB I-264 ramp extending to WB I-264 Exit ramp to NB Taylorsville Road (KY 155)**
6. Latitude/Longitude (project mid-point) **38/14/11, 85/37/24**
7. County (project mid-point) **Jefferson**
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KyTC BMP Plan for Project CID ## - ####

## A. Site description:

1. Nature of Construction Activity (from letting project description) **Widen I-64 WB Ramp to I-264 WB from one to two lanes for entire length and other needed improvements to address weave issues at merge on I-264.**
2. Order of major soil disturbing activities (2) and (3)
3. Projected volume of material to be moved **27,833 CY**
4. Estimate of total project area (acres) **19.26 AC**
5. Estimate of area to be disturbed (acres) **12.15 AC**
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.(1)
7. Data describing existing soil condition **Project area has high karst potential. Existing soils are mostly low plasticity clays with low plasticity silt-clay mixtures and high plasticity clays being secondary soil types. Soil testing indicated wet conditions with natural moisture contents exceeding the optimum moisture content for the majority of the project. Subgrade problems may occur in area where the existing pavement will be removed or where soft soils are present and the roadway template in in a shallow fill or cut condition. The wet/saturated conditions and poor soils mentioned above could also create problems during embankment construction. & (2)**
8. Data describing existing discharge water quality (if any) (1) & (2)
9. Receiving water name **MS4 - MSD**
10. TMDLs and Pollutants of Concern in Receiving Waters: (1 DEA)
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed

## KyTC BMP Plan for Project CID ## - ####

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. All DDA's will have adequate BMP's in place before being disturbed.

### KyTC BMP Plan for Project CID ## - ####

3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
- Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
  - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
  - Clearing and Grubbing – The following BMP's will be considered and used where appropriate.
    - Leaving areas undisturbed when possible.
    - Silt basins to provide silt volume for large areas.
    - Silt Traps Type A for small areas.
    - Silt Traps Type C in front of existing and drop inlets which are to be saved
    - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
    - Brush and/or other barriers to slow and/or divert runoff.
    - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
    - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
    - Non-standard or innovative methods.
  - Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
    - Silt Traps Type B in ditches and/or drainways as they are completed
    - Silt Traps Type C in front of pipes after they are placed
    - Channel Lining
    - Erosion Control Blanket
    - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
    - Non-standard or innovative methods
  - Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
    - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.

## KyTC BMP Plan for Project CID ## - ####

- Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
  - Additional Channel Lining and/or Erosion Control Blanket.
  - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
  - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probably changes include:
- Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
  - Permanent Seeding and Protection
  - Placing Sod
  - Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are : **Silt fence; Silt Traps; Erosion Control Blankets**

### 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

## KyTC BMP Plan for Project CID ## - ####

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

## KyTC BMP Plan for Project CID ## - #####

### **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**

## KyTC BMP Plan for Project CID ## - ####

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

### **D. Other State and Local Plans**

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

## KyTC BMP Plan for Project CID ## - ####

### 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. **(1) There are no such BMPs**

### 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.

## KyTC BMP Plan for Project CID ## - #####

- 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:

### KyTC BMP Plan for Project CID ## - ####

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

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

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

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

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

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

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

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

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

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

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job

### KyTC BMP Plan for Project CID ## - ####

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.)





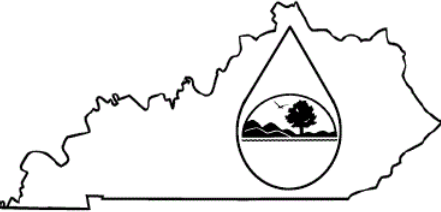
## **SPECIAL NOTE**


### **Filing of eNOI for KPDES Construction Stormwater Permit**

**County: Jefferson**                      **Route: WB I-64/ WB I-264**  
**Item No.: 5-159.00**                      **KDOW Submittal ID: 119738**  
**Project Description:**                      **I-64/I-264 Interchange Improvements**

A Notice of Intent 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 it will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work 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.

If there are any questions regarding this note, please contact David Waldner, Director, Division of Environmental Analysis, TCOP, 200 Mero Street, Frankfort, KY 40622, Phone: (502) 564-7250.

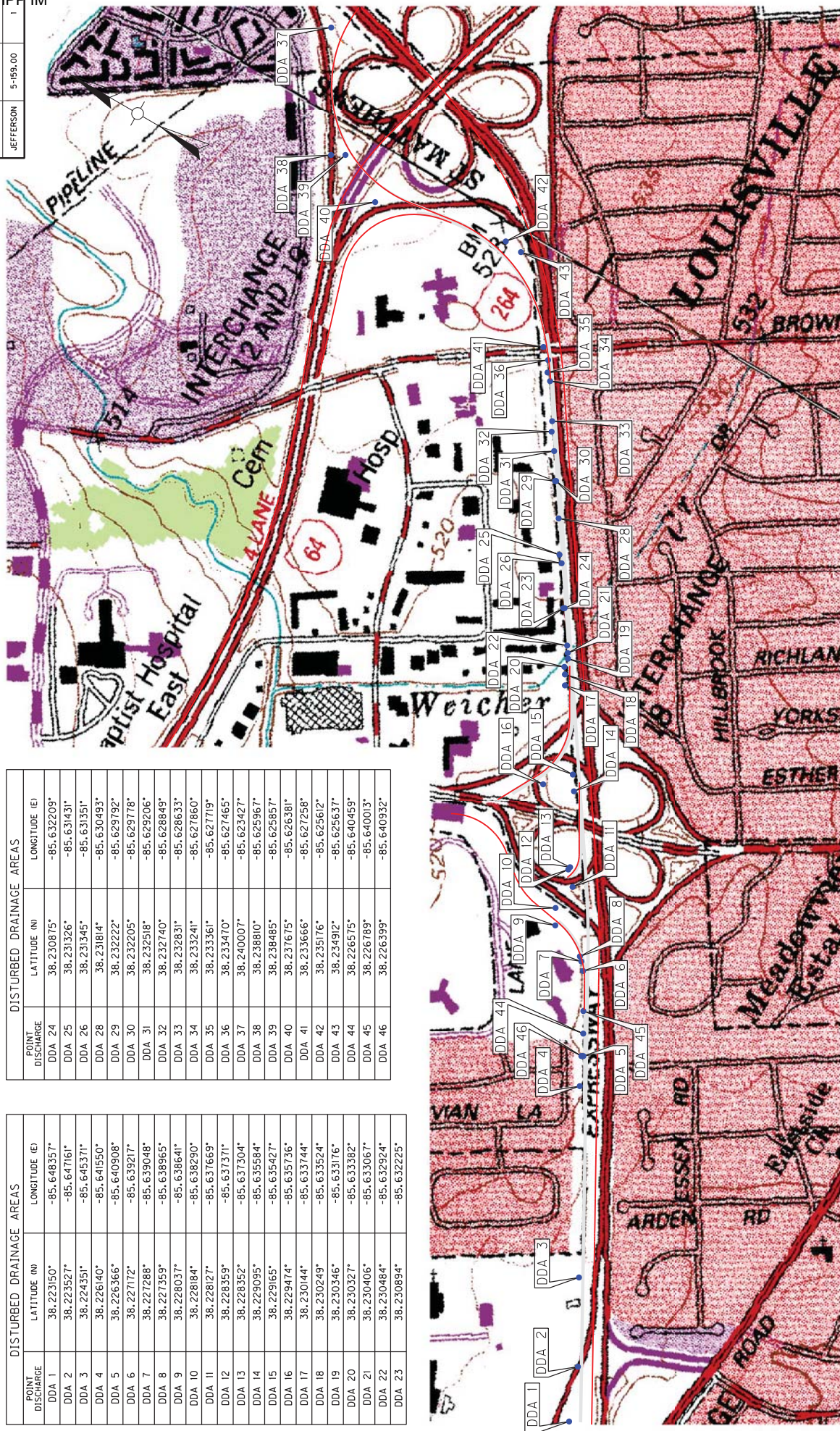
	<h2 style="text-align: center;">KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)</h2> <p style="text-align: center;">Notice of Intent (NOI) for coverage of Storm Water Discharge Associated with Construction Activities Under the KPDES Storm Water General Permit KYR100000</p> <p style="text-align: center;"> <a href="#">Click here for Instructions (Controls/KPDES_FormKYR10_Instructions.htm)</a>  <a href="http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf">Click here to obtain information and a copy of the KPDES General Permit. (http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf)</a> </p> <p style="text-align: center; font-size: small;">(*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field</p>
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Reason for Submittal:(*) Application for New Permit Coverage <input type="button" value="v"/>	Agency Interest ID: <input type="text" value="Agency Interest ID"/>	Permit Number:(✓) <input type="text" value="KPDES Permit Number"/>
If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓) <input type="text"/>		
<b>ELIGIBILITY:</b> 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.		
<b>EXCLUSIONS:</b> 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.		
<b>SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)</b>		
Company Name:(✓) <input type="text" value="Kentucky Department of Highways, District 5"/>	First Name:(✓) <input type="text" value="Matt"/>	M.I.: <input type="text" value="MI"/>
		Last Name:(✓) <input type="text" value="Bullock"/>
Mailing Address:(*) <input type="text" value="8310 Westport Road"/>	City:(*) <input type="text" value="Louisville"/>	State:(*) <input type="button" value="v"/> Kentucky
		Zip:(*) <input type="text" value="40242"/>
eMail Address:(*) <input type="text" value="matt.bullock@ky.gov"/>	Business Phone:(*) <input type="text" value="502-210-5400"/>	Alternate Phone: <input type="text" value="Phone"/>
<b>SECTION II -- GENERAL SITE LOCATION INFORMATION</b>		
Project Name:(*) <input type="text" value="I-64/I-264 Interchange Improvements"/>	Status of Owner/Operator(*) <input type="button" value="v"/> State Government	SIC Code(*) <input type="button" value="v"/> 1622 Bridge, Tunnel, and I
Company Name:(✓) <input type="text" value="Kentucky Department of Highways, District 5"/>	First Name:(✓) <input type="text" value="Matt"/>	M.I.: <input type="text" value="MI"/>
		Last Name:(✓) <input type="text" value="Bullock"/>
Site Physical Address:(*) <input type="text" value="WB I-64/WB I-264 ramp extending to WB I-264 Exit ramp to NB Taylorsville Road (KY 155)"/>		
City:(*) <input type="text" value="Louisville"/>	State:(*) <input type="button" value="v"/> Kentucky	Zip:(*) <input type="text" value="40205"/>
County:(*) <input type="button" value="v"/> Jefferson	Latitude(decimal degrees)(*)DMS to DD Converter ( <a href="https://www.fcc.gov/media/radio/dms-decimal">https://www.fcc.gov/media/radio/dms-decimal</a> ) <input type="text" value="38.236389"/>	Longitude(decimal degrees)(*) <input type="text" value="-85.623333"/>
<b>SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION </b>		
Project Description:(*) <input type="text" value="Widen WB I-64 Ramp/Bridge to WB I-264;Add 2 lanes from I-64/I-264 Interchange to I-264/Breckenridge Lane (KY 1932) Interchange; Widen NB B"/>		
a. For single projects provide the following information		
Total Number of Acres in Project:(✓)	Total Number of Acres Disturbed:(✓)	

19.26	12.15																																												
Anticipated Start Date:(✓) <input type="text"/>	Anticipated Completion Date:(✓) <input type="text"/>																																												
b. For common plans of development provide the following information																																													
Total Number of Acres in Project:(✓) # Acre(s) <input type="text"/>	Total Number of Acres Disturbed:(✓) # Acre(s) <input type="text"/>																																												
Number of individual lots in development, if applicable:(✓) # lot(s) <input type="text"/>	Number of lots in development:(✓) # lot(s) <input type="text"/>																																												
Total acreage of lots intended to be developed:(✓) Project Acres <input type="text"/>	Number of acres intended to be disturbed at any one time:(✓) Disturbed Acres <input type="text"/>																																												
Anticipated Start Date:(✓) <input type="text"/>	Anticipated Completion Date:(✓) <input type="text"/>																																												
List Building Contractor(s) at the time of Application:(*)																																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:5%;">+</th> <th style="width:65%;">Company Name</th> <th style="width:10%;"></th> <th style="width:10%;"></th> <th style="width:10%;"></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		+	Company Name																																										
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Discharge Point(s):																																													
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+	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name																																									
SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED <a href="#">?</a>																																													
Name of MS4: <input type="text" value="MSD-MSD"/>																																													
Date of application/notification to the MS4 for construction site permit coverage: <input type="text" value="Date"/>	Discharge Point(s):(*)																																												
	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Latitude</th> <th>Longitude</th> <th>Delete</th> </tr> </thead> <tbody> <tr><td>1</td><td>38.223150</td><td>-85.648357</td><td>Delete</td></tr> <tr><td>2</td><td>38.223527</td><td>-85.647161</td><td>Delete</td></tr> <tr><td>3</td><td>38.224351</td><td>-85.645371</td><td>Delete</td></tr> <tr><td>4</td><td>38.226140</td><td>-85.641550</td><td>Delete</td></tr> <tr><td>5</td><td>38.226366</td><td>-85.640908</td><td>Delete</td></tr> <tr><td>6</td><td>38.226399</td><td>-85.640932</td><td>Delete</td></tr> <tr><td>7</td><td>38.226575</td><td>-85.640459</td><td>Delete</td></tr> <tr><td>8</td><td>38.226789</td><td>-85.640013</td><td>Delete</td></tr> <tr><td>9</td><td>38.227172</td><td>-85.639217</td><td>Delete</td></tr> <tr style="background-color: #e0e0e0;"><td>10</td><td>38.227288</td><td>-85.639048</td><td>Delete</td></tr> </tbody> </table>		Latitude	Longitude	Delete	1	38.223150	-85.648357	Delete	2	38.223527	-85.647161	Delete	3	38.224351	-85.645371	Delete	4	38.226140	-85.641550	Delete	5	38.226366	-85.640908	Delete	6	38.226399	-85.640932	Delete	7	38.226575	-85.640459	Delete	8	38.226789	-85.640013	Delete	9	38.227172	-85.639217	Delete	10	38.227288	-85.639048	Delete
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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?:(*)	<input type="text" value="No"/>																																												
If Yes, describe scope of activity: (✓)	<input type="text" value="describe scope of activity"/>																																												
Is a Clean Water Act 404 permit required?:(*)	<input type="text" value="Yes"/>																																												
Is a Clean Water Act 401 Water Quality Certification required?:(*)	<input type="text" value="Yes"/>																																												
SECTION VII -- NOI PREPARER INFORMATION																																													

First Name: (*) Elizabeth	M.I.: MI	Last Name: (*) Niemann	Company Name: (*) Kentucky Department of Highways, District 5	
Mailing Address: (*) 8310 Westport Road		City: (*) Louisville	State: (*) Kentucky	Zip: (*) 40242
eMail Address: (*) elizabeth.niemann@ky.gov		Business Phone: (*) 502-210-5521	Alternate 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: (*) Signature		Title: (*) TE II		
First Name: (*) Elizabeth	M.I.: MI	Last Name: (*) Niemann		
eMail Address: (*) elizabeth.niemann@ky.gov	Business Phone: (*) 502-210-5521	Alternate Phone: Phone	Signature Date: (*) 1/30/2018	
<div style="display: flex; justify-content: space-around;"> <span>Click to Save Values for Future Retrieval</span> <span>Click to Submit to DEP</span> </div>				

COUNTY OF	ITEM NO.	SHEET
JEFFERSON	5-159.00	1



DISTURBED DRAINAGE AREAS		
POINT DISCHARGE	LATITUDE (N)	LONGITUDE (E)
DDA 24	38.230875*	-85.632209*
DDA 25	38.231326*	-85.631431*
DDA 26	38.231345*	-85.631351*
DDA 28	38.231814*	-85.630493*
DDA 29	38.232222*	-85.629792*
DDA 30	38.232205*	-85.629778*
DDA 31	38.232518*	-85.629206*
DDA 32	38.232740*	-85.628849*
DDA 33	38.232831*	-85.628633*
DDA 34	38.233241*	-85.627860*
DDA 35	38.233361*	-85.627719*
DDA 36	38.233470*	-85.627465*
DDA 37	38.240007*	-85.623427*
DDA 38	38.238810*	-85.625967*
DDA 39	38.238485*	-85.625857*
DDA 40	38.237675*	-85.626381*
DDA 41	38.233666*	-85.627258*
DDA 42	38.235176*	-85.625612*
DDA 43	38.234912*	-85.625637*
DDA 44	38.226575*	-85.640459*
DDA 45	38.226789*	-85.640013*
DDA 46	38.226399*	-85.640932*

DISTURBED DRAINAGE AREAS		
POINT DISCHARGE	LATITUDE (N)	LONGITUDE (E)
DDA 1	38.223150*	-85.648357*
DDA 2	38.223527*	-85.647161*
DDA 3	38.224351*	-85.645371*
DDA 4	38.226140*	-85.641550*
DDA 5	38.226366*	-85.640908*
DDA 6	38.227172*	-85.639217*
DDA 7	38.227288*	-85.639048*
DDA 8	38.227359*	-85.638965*
DDA 9	38.228037*	-85.638641*
DDA 10	38.228184*	-85.638290*
DDA 11	38.228127*	-85.637669*
DDA 12	38.228359*	-85.637371*
DDA 13	38.228352*	-85.637304*
DDA 14	38.229095*	-85.635584*
DDA 15	38.229165*	-85.635427*
DDA 16	38.229474*	-85.635736*
DDA 17	38.230144*	-85.633744*
DDA 18	38.230249*	-85.633524*
DDA 19	38.230346*	-85.633176*
DDA 20	38.230327*	-85.633382*
DDA 21	38.230406*	-85.633067*
DDA 22	38.230484*	-85.632924*
DDA 23	38.230894*	-85.632225*



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

**15 MAR 2018**

<b>Item No.</b>	5 - 159			<b>Project Mgr.</b>	kytc\Elizabeth.Niemann
			<b>County</b>	JEFFERSON	<b>Route</b> I-64
<b>CAP #</b>	<b>Date of Promise</b>	<b>Promise made to:</b>	<b>Location of Promise</b>		
1	26-FEB-18	PT Company, LLC	P7		
<b>CAP Description</b>					
1. Please do not disturb the parking on Parcel 7.					
2. Please notify Tim Brown when construction is scheduled to begin. Tim Brown can be reached at (502) 753-2087, by cell at (502) 435-1613 or via email at tim@hoaglandcommercial.com. The property owners have two signs located in the proposed Right of Way and are responsible for moving these signs. Please let Tim Brown know a few days before construction begins, so he can move the signs.					

# MATERIAL SUMMARY

**CONTRACT ID: 181011**

**056GR18D011-NHPP IM**

**DE05600641811**

I-64 WIDEN I-64 WB RAMP TO I-264 WB FROM ONE TO TWO LANES FOR ENTIRE LENGTH AND OTHER NEEDED IMPROVEMENTS TO ADDRESS WEAVE ISSUES AT MERGE ON I-264 GRADE & DRAIN WITH BRIDGE, A DISTANCE OF 2.35 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	16,897.00	TON
0010	00003	CRUSHED STONE BASE	462.00	TON
0015	00008	CEMENT STABILIZED ROADBED	32,748.00	SQYD
0020	00022	JPC PAVEMENT DRAINAGE BLANKET	6,549.00	TON
0025	00100	ASPHALT SEAL AGGREGATE	86.00	TON
0030	00103	ASPHALT SEAL COAT	10.30	TON
0035	00212	CL2 ASPH BASE 1.00D PG64-22	946.00	TON
0040	00339	CL3 ASPH SURF 0.38D PG64-22	102.00	TON
0045	00356	ASPHALT MATERIAL FOR TACK	2.40	TON
0050	00358	ASPHALT CURING SEAL	83.40	TON
0055	02071	JPC PAVEMENT-11 IN - (FOR ITEM# 5-159.00) (REVISED: 4-25-18)	22,086.00	SQYD
0060	02072	JPC PAVEMENT-11 IN SHLD	10,660.00	SQYD
0065	02542	CEMENT	831.00	TON
0070	02702	SAND FOR BLOTTER	232.00	TON
0075	00021	DRAINAGE BLANKET-EMBANKMENT	5,050.00	CUYD
0080	01310	REMOVE PIPE	924.00	LF
0085	01584	CAP DROP BOX INLET	5.00	EACH
0090	01585	REMOVE DROP BOX INLET	8.00	EACH
0095	01953	CONC MEDIAN BARRIER TYPE 12B2	1,886.00	LF
0100	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	69.00	EACH
0105	01984	DELINEATOR FOR BARRIER - WHITE	35.00	EACH
0110	02003	RELOCATE TEMP CONC BARRIER	3,300.00	LF
0115	02184	BACKFILLING	400.00	CUYD
0120	02200	ROADWAY EXCAVATION	27,833.00	CUYD
0125	02242	WATER	500.00	MGAL
0130	02265	REMOVE FENCE	1,429.00	LF
0135	02267	REMOVE & RESET FENCE	289.00	LF
0140	02268	REMOVE & REPLACE FENCE	25.00	LF
0145	02273	FENCE-4 FT CHAIN LINK	672.00	LF
0150	02274	FENCE-6 FT CHAIN LINK	815.00	LF
0155	02287	DOUBLE VEHICULAR CHAIN LINK GATE	1.00	EACH
0160	02351	GUARDRAIL-STEEL W BEAM-S FACE	4,437.00	LF
0165	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	3.00	EACH
0170	02369	GUARDRAIL END TREATMENT TYPE 2A	4.00	EACH
0175	02381	REMOVE GUARDRAIL	4,832.00	LF
0180	02387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	3.00	EACH
0185	02391	GUARDRAIL END TREATMENT TYPE 4A	3.00	EACH
0190	02429	RIGHT-OF-WAY MONUMENT TYPE 1	16.00	EACH
0195	02432	WITNESS POST	8.00	EACH
0200	02545	CLEARING AND GRUBBING - 19.3 ACRES	1.00	LS
0205	02599	FABRIC-GEOTEXTILE TYPE IV	15,140.00	SQYD
0210	02625	REMOVE HEADWALL	10.00	EACH

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0215	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0220	02653	LANE CLOSURE	2.00	EACH
0225	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0230	02695	RUMBLE STRIPS TYPE 3	280.00	LF
0235	02726	STAKING	1.00	LS
0240	02775	ARROW PANEL	2.00	EACH
0245	02898	RELOCATE CRASH CUSHION	6.00	EACH
0250	03171	CONCRETE BARRIER WALL TYPE 9T	11,500.00	LF
0255	06511	PAVE STRIPING-TEMP PAINT-6 IN	65,000.00	LF
0260	06556	PAVE STRIPING-DUR TY 1-6 IN W	14,031.00	LF
0265	06557	PAVE STRIPING-DUR TY 1-6 IN Y	4,192.00	LF
0270	06560	PAVE STRIPING-DUR TY 1-12 IN W	5,393.00	LF
0275	06589	PAVEMENT MARKER TYPE V-MW	109.00	EACH
0280	06592	PAVEMENT MARKER TYPE V-B W/R	419.00	EACH
0285	06593	PAVEMENT MARKER TYPE V-B Y/R	47.00	EACH
0290	08903	CRASH CUSHION TY VI CLASS BT TL3	6.00	EACH
0295	10020NS	FUEL ADJUSTMENT	37,164.00	DOLL
0300	20411ED	LAW ENFORCEMENT OFFICER	200.00	HOURL
0305	20550ND	SAWCUT PAVEMENT	9,710.00	LF
0310	20591EC	REMOVE BARRIER	1,069.00	LF
0315	21597EN	REMOVE PERF PIPE HEADWALL	15.00	EACH
0320	23335EC	CONCRETE MEDIAN BARRIER TY 9B2	709.00	LF
0325	00078	CRUSHED AGGREGATE SIZE NO 2	12.00	TON
0330	00466	CULVERT PIPE-30 IN	24.00	LF
0335	00468	CULVERT PIPE-36 IN	12.00	LF
0340	00471	CULVERT PIPE-54 IN	8.00	LF
0345	00496	CULVERT PIPE-36 IN EQUIV	16.00	LF
0350	00521	STORM SEWER PIPE-15 IN	16.70	LF
0355	00522	STORM SEWER PIPE-18 IN	692.90	LF
0360	00524	STORM SEWER PIPE-24 IN	16.00	LF
0365	00529	STORM SEWER PIPE-42 IN	28.70	LF
0370	00530	STORM SEWER PIPE-48 IN	170.90	LF
0375	01005	PERFORATED PIPE EDGE DRAIN-4 IN	9,495.00	LF
0380	01010	NON-PERFORATED PIPE-4 IN	221.00	LF
0385	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS
0390	01020	PERF PIPE HEADWALL TY 1-4 IN	3.00	EACH
0395	01024	PERF PIPE HEADWALL TY 2-4 IN	3.00	EACH
0400	01028	PERF PIPE HEADWALL TY 3-4 IN	2.00	EACH
0405	01032	PERF PIPE HEADWALL TY 4-4 IN	4.00	EACH
0410	01204	PIPE CULVERT HEADWALL-18 IN	2.00	EACH
0415	01208	PIPE CULVERT HEADWALL-24 IN	1.00	EACH
0420	01210	PIPE CULVERT HEADWALL-30 IN	2.00	EACH
0425	01212	PIPE CULVERT HEADWALL-36 IN	1.00	EACH
0430	01214	PIPE CULVERT HEADWALL-42 IN	1.00	EACH
0435	01450	S & F BOX INLET-OUTLET-18 IN	1.00	EACH
0440	01453	S & F BOX INLET-OUTLET-36 IN	1.00	EACH
0445	01490	DROP BOX INLET TYPE 1	1.00	EACH
0450	01559	DROP BOX INLET TYPE 13G	11.00	EACH
0455	01580	DROP BOX INLET TYPE 15	3.00	EACH
0460	01619	CONC MED BARR BOX INLET TY 9A1	1.00	EACH

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0465	01642	JUNCTION BOX-18 IN	1.00	EACH
0470	01646	JUNCTION BOX-42 IN	2.00	EACH
0475	01647	JUNCTION BOX-48 IN	13.00	EACH
0480	01740	CORED HOLE DRAINAGE BOX CON-4 IN	16.00	EACH
0485	02159	TEMP DITCH	6,220.00	LF
0490	02160	CLEAN TEMP DITCH	3,110.00	LF
0495	02483	CHANNEL LINING CLASS II	1,437.00	TON
0500	02484	CHANNEL LINING CLASS III	10.00	TON
0505	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	720.00	SQYD
0510	02701	TEMP SILT FENCE	6,220.00	LF
0515	02703	SILT TRAP TYPE A	20.00	EACH
0520	02704	SILT TRAP TYPE B	20.00	EACH
0525	02705	SILT TRAP TYPE C	20.00	EACH
0530	02706	CLEAN SILT TRAP TYPE A	20.00	EACH
0535	02707	CLEAN SILT TRAP TYPE B	20.00	EACH
0540	02708	CLEAN SILT TRAP TYPE C	20.00	EACH
0545	05950	EROSION CONTROL BLANKET	3,739.00	SQYD
0550	05952	TEMP MULCH	62,200.00	SQYD
0555	05953	TEMP SEEDING AND PROTECTION	46,600.00	SQYD
0560	05963	INITIAL FERTILIZER	1.80	TON
0565	05964	20-10-10 FERTILIZER	3.00	TON
0570	05985	SEEDING AND PROTECTION	53,000.00	SQYD
0575	05989	SPECIAL SEEDING CROWN VETCH	12,200.00	SQYD
0580	05992	AGRICULTURAL LIMESTONE	33.00	TON
0585	22620NN	CONC MED BARR BOX INLET TY 12A1-50	1.00	EACH
0590	23611NN	CONC MED BAR BOX INLET TY 12B1-50	4.00	EACH
0595	24026EC	PIPE CULVERT HEADWALL-54 IN	1.00	EACH
0600	24814EC	PIPELINE INSPECTION	970.00	LF
0605	02231	STRUCTURE GRANULAR BACKFILL	119.00	CUYD
0610	02403	REMOVE CONCRETE MASONRY	86.20	CUYD
0615	02599	FABRIC-GEOTEXTILE TYPE IV	119.00	SQYD
0620	02998	MASONRY COATING	766.70	SQYD
0625	03299	ARMORED EDGE FOR CONCRETE	25.00	LF
0630	08001	STRUCTURE EXCAVATION-COMMON	265.10	CUYD
0635	08020	CRUSHED AGGREGATE SLOPE PROT	55.00	TON
0640	08033	TEST PILES	156.00	LF
0645	08046	PILES-STEEL HP12X53	465.00	LF
0650	08094	PILE POINTS-12 IN	33.00	EACH
0655	08100	CONCRETE-CLASS A	93.20	CUYD
0660	08104	CONCRETE-CLASS AA	129.50	CUYD
0665	08150	STEEL REINFORCEMENT	15,842.00	LB
0670	08151	STEEL REINFORCEMENT-EPOXY COATED	41,245.00	LB
0675	08500	APPROACH SLAB	62.20	SQYD
0680	08634	PRECAST PC I BEAM TYPE 4	609.00	LF
0685	21532ED	RAIL SYSTEM TYPE III	308.00	LF
0690	23331EC	EPOXY-URETHANE WATERPROOFING - 3/8 IN	3,339.00	SQFT
0695	08100	CONCRETE-CLASS A	16.30	CUYD
0700	08150	STEEL REINFORCEMENT	2,156.00	LB
0705	08003	FOUNDATION PREPARATION	1.00	LS
0710	21532ED	RAIL SYSTEM TYPE III	20.00	LF

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0715	08100	CONCRETE-CLASS A	61.60	CUYD
0720	08150	STEEL REINFORCEMENT	6,881.00	LB
0725	08003	FOUNDATION PREPARATION	1.00	LS
0730	08002	STRUCTURE EXCAV-SOLID ROCK	3.90	CUYD
0735	21532ED	RAIL SYSTEM TYPE III	39.00	LF
0740	02223	GRANULAR EMBANKMENT	2,207.00	CUYD
0745	02998	MASONRY COATING	801.00	SQYD
0750	08018	RETAINING WALL	6,201.00	SQFT
0755	08003	FOUNDATION PREPARATION	1.00	LS
0760	02223	GRANULAR EMBANKMENT	380.00	CUYD
0765	02998	MASONRY COATING	177.00	SQYD
0770	08002	STRUCTURE EXCAV-SOLID ROCK	2.00	CUYD
0775	08003	FOUNDATION PREPARATION	1.00	LS
0780	08018	RETAINING WALL	1,050.00	SQFT
0785	02403	REMOVE CONCRETE MASONRY	127.00	CUYD
0790	21532ED	RAIL SYSTEM TYPE III	106.00	LF
0795	02562	TEMPORARY SIGNS	800.00	SQFT
0800	06400	GMSS GALV STEEL TYPE A	342.00	LB
0805	06401	FLEXIBLE DELINEATOR POST-M/W	64.00	EACH
0810	06404	FLEXIBLE DELINEATOR POST-M/Y	30.00	EACH
0815	06405	SBM ALUMINUM PANEL SIGNS	2,044.80	SQFT
0820	06406	SBM ALUM SHEET SIGNS .080 IN	45.00	SQFT
0825	06407	SBM ALUM SHEET SIGNS .125 IN	200.30	SQFT
0830	06410	STEEL POST TYPE 1	458.00	LF
0835	06415	OSS GALV STEEL CANTILEVER	1.00	EACH
0840	06441	GMSS GALV STEEL TYPE C	1,408.00	LB
0845	06449	REM OVERHEAD SIGN SUPPORT STR	1.00	EACH
0850	06450	REM OVERHEAD STRUC CONC BASE	1.00	EACH
0855	06451	REMOVE SIGN SUPPORT BEAM	4.00	EACH
0860	06455	OSS ALUMINUM 100 FT TRUSS	1.00	EACH
0865	06490	CLASS A CONCRETE FOR SIGNS	8.18	CUYD
0870	06491	STEEL REINFORCEMENT FOR SIGNS	248.00	LB
0875	20418ED	REMOVE & RELOCATE SIGNS	2.00	EACH
0880	20419ND	ROADWAY CROSS SECTION	4.00	EACH
0885	21373ND	REMOVE SIGN	9.00	EACH
0890	21596ND	GMSS TYPE D	10.00	EACH
0895	24631EC	BARCODE SIGN INVENTORY	16.00	EACH
0900	04740	POLE BASE - (REVISED: 4-16-18)	3.00	EACH
0905	04780	FUSED CONNECTOR KIT	14.00	EACH
0910	04797	CONDUIT-3 IN	180.00	LF
0915	04800	MARKER	17.00	EACH
0920	04810	ELECTRICAL JUNCTION BOX - 24"	3.00	EACH
0925	04820	TRENCHING AND BACKFILLING	8,700.00	LF
0930	04833	WIRE-NO. 8	2,703.00	LF
0935	04834	WIRE-NO. 6 - (REVISED: 4-23-18)	324.00	LF
0940	04940	REMOVE LIGHTING	1.00	LS
0945	04942	REMOVE STORE & REINSTALL POLE	5.00	EACH
0950	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	3.00	EACH
0955	20392NS835	ELECTRICAL JUNCTION BOX TYPE C	13.00	EACH
0960	21543EN	BORE AND JACK CONDUIT	180.00	LF

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0965	24589ED	LED LUMINAIRE	104.00	EACH
0970	24901EC	PVC CONDUIT-2 IN-SCHEDULE 80	650.00	LF
0975	20257NC	SITE PREPARATION	1.00	LS
0980	04795	CONDUIT-2 IN	150.00	LF
0985	24901EC	PVC CONDUIT-2 IN-SCHEDULE 80	1,020.00	LF
0990	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	4.00	EACH
0995	04820	TRENCHING AND BACKFILLING	540.00	LF
1000	04835	WIRE-NO. 4	1,800.00	LF
1005	23157EN	TRAFFIC SIGNAL POLE BASE	4.32	CUYD
1010	23941EC	VIDEO SURVEILLANCE CONTROLLER	1.00	EACH
1015	21058ND	WINCH LOWERING TOOL	1.00	EACH
1020	22403NN	WEB CAMERA ASSEMBLY	1.00	EACH
1025	21066ND	MODEL 336 ENCLOSURE	1.00	EACH
1030	23151NN	POLE WITH LOWERING DEVICE	1.00	EACH
1035	21069ND	SURGE DEVICE 120 VOLT	1.00	EACH
1040	21071ND	DATA SURGE DEVICE	1.00	EACH
1045	23150NN	COMMUNICATION CABLE	40.00	LF
1050	04899	ELECTRICAL SERVICE	1.00	EACH
1055	21489ND	RACK MOUNTED UPS	1.00	EACH
1060	23944EC	ADVANCED GROUNDING SYSTEM	2.00	EACH
1065	21543EN	BORE AND JACK CONDUIT	150.00	LF
1070	02568	MOBILIZATION	1.00	LS
1075	02569	DEMOBILIZATION	1.00	LS
1080	04741	POLE BASE IN MEDIAN WALL - (ADDED: 4-16-18)	2.00	EACH
1085	22939ND	INSTALL LUMINAIRE POLE - (ADDED: 4-16-18)	5.00	EACH
1090	04861	CABLE-NO. 6/3C DUCTED - (ADDED: 4-23-18)	5,397.00	LF
1095	04862	CABLE-NO. 4/3C DUCTED - (ADDED: 4-23-18)	5,504.00	LF

# MATERIAL SUMMARY

**CONTRACT ID: 181011**

**056GR18D011-NHPP IM**

**DE05600641812**

I-64 JPC REPAIR AND DIAMOND GRIND ON I-64 FROM 0.129 MILE EAST OF KY-1932(BRECKENRIDGE LANE) (MP 11.574) TO 0.412 MILE WEST OF OXMOOR AVE(MP 13.160) IN JEFFERSON COUNTY JPC PAVEMENT REPAIRS - DIAMOND GRINDING, A DISTANCE OF 1.6 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
1100	02058	REMOVE PCC PAVEMENT	3,365.00	SQYD
1105	02110	PARTIAL DEPTH PATCHING	200.00	CUFT
1110	02115	SAW-CLEAN-RESEAL TVERSE JOINT	59,144.00	LF
1115	02116	SAW-CLEAN-RESEAL LONGIT JOINT	47,315.00	LF
1120	21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	5,421.00	LF
1125	02562	TEMPORARY SIGNS	750.00	SQFT
1130	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
1135	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
1140	02775	ARROW PANEL	4.00	EACH
1145	06511	PAVE STRIPING-TEMP PAINT-6 IN	45,000.00	LF
1150	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF
1155	06550	PAVE STRIPING-TEMP REM TAPE-W	1,000.00	LF
1160	06551	PAVE STRIPING-TEMP REM TAPE-Y	1,000.00	LF
1165	06592	PAVEMENT MARKER TYPE V-B W/R	20.00	EACH
1170	24189ER	DURABLE WATERBORNE MARKING-6 IN W	24,000.00	LF
1175	24190ER	DURABLE WATERBORNE MARKING-6 IN Y	16,000.00	LF
1180	24191ER	DURABLE WATERBORNE MARKING-12 IN W	5,000.00	LF
1185	02569	DEMOBILIZATION	1.00	LS
1190	02071	JPC PAVEMENT-11 IN - (FOR ITEM# 5-2086.01) (ADDED: 4-25-18)	3,365.00	SQYD

# GUARDRAIL DELIVERY VERIFICATION SHEET

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**PART II**  
**SPECIFICATIONS AND STANDARD DRAWINGS**

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2012* and *Standard Drawings, Edition of 2016*.

## **SUPPLEMENTAL SPECIFICATIONS**

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

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

## **SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS**

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

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

### **2.0 MATERIALS.**

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

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

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

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

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

/KEEP/RIGHT/=>=>=>/	/MIN/SPEED/**MPH/
/KEEP/LEFT/<=<=</	/ICY/BRIDGE/AHEAD/ /ONE
/LOOSE/GRAVEL/AHEAD/	LANE/BRIDGE/AHEAD/
/RD WORK/NEXT/**MILES/	/ROUGH/ROAD/AHEAD/
/TWO WAY/TRAFFIC/AHEAD/	/MERGING/TRAFFIC/AHEAD/
/PAINT/CREW/AHEAD/	/NEXT/***/MILES/
/REDUCE/SPEED/**MPH/	/HEAVY/TRAFFIC/AHEAD/
/BRIDGE/WORK/***0 FT/	/SPEED/LIMIT/**MPH/
/MAX/SPEED/**MPH/	/BUMP/AHEAD/
/SURVEY/PARTY/AHEAD/	/TWO/WAY/TRAFFIC/

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

**2.3 Power.**

- 1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

**3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

**4.0 MEASUREMENT.** The final quantity of Variable Message Sign will be

11

the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

**5.0 PAYMENT.** The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02671	Portable Changeable Message Sign	Each

Effective June 15, 2012

2E

### **SPECIAL NOTE FOR ROADBED STABILIZATION AT BRIDGE ENDS**

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

**1.0 DESCRIPTION.** Due to the wet and yielding embankments commonly encountered at bridge ends, undercut the existing roadbed within the limits the Contract specifies and backfill.

#### **2.0 MATERIALS.**

**2.1 Geotextile Fabric.** Furnish Type III fabric conforming to Section 843.

**3.0 CONSTRUCTION.** After removing the existing pavement and base, undercut the existing roadbed under the traffic lanes and shoulders as the Engineer directs. The minimum undercut shall be one foot, except undercut depth may be reduced where rock embankment constructed principally of limestone is encountered. Place geotextile fabric in the bottom and against the sides and ends of the undercut. The Department will not require a minimum lap between adjacent sheets of geotextile fabric for the longitudinal joint under the pavement centerline. Backfill the undercut with one or more of the following materials;

- 1) Crushed limestone size No. 1, 2, 23, or 57; or
- 2) Layered composition of several limestone sizes, with larger sizes on the bottom.

Use Dense Graded Aggregate (DGA), Crushed Stone Base (CSB), or Stabilized Aggregate Base (SAB) in the top 4 inches, and only in the top 4 inches, of the backfill.

Place geotextile fabric between the coarse backfill material and the 4-inch upper layer.

Compact the backfill material by "walking down" with equipment, or other methods the Engineer approves. See attached drawing for details of backfill placement and drainage.

Waste all removed materials, not used for purposes the Contract or Engineer specifies or permits, off the right-of-way at no expense to the Department.

#### **4.0 MEASUREMENT.**

**4.1 Removing Pavement.** The Department will measure the quantity in square yards. The Department will consider the pavement to include existing pavement, existing asphalt patching, and existing DGA base.

2E

**4.2 Roadway Excavation.** The Department will measure the quantity in cubic yards.

**4.3 Backfilling Undercut.** The Department will measure the quantity in cubic yards. The Department will not measure coarse aggregate for payment and will consider it incidental to this item of work.

**4.4 Perforated Pipe.** The Department will measure the quantity in linear feet.

**4.5 Non-Perforated Pipe.** The Department will measure the quantity in linear feet.

**4.6 Geotextile Fabric, Type III.** The Department will measure the quantity in square yards.

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

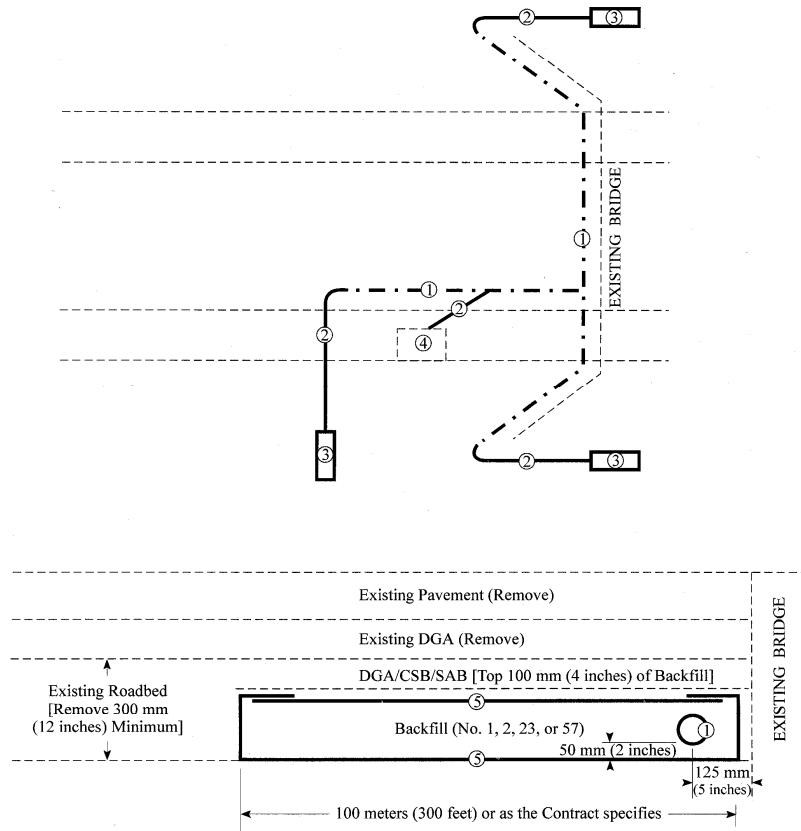
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02091	Removing Pavement	Square Yard
01000	Perforated Pipe - 4 inches	Linear Foot
01010	Non-Perforated Pipe, 4 inches	Linear Foot
02235	Backfilling Undercut	Cubic Yard
02598	Fabric - Geotextile Type III	Square Yard

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

June 15, 2012

2E

**BRIDGE END DRAINAGE AND STABILIZATION  
(DETAILS)**



**NOTES**

Contrary to Section 705 of the Standard Specifications, use only coarse aggregate for trench backfill.

Slope all pipe to drain to the outside. Provide a 1:24 (1/2":1') or greater slope for the outlet pipe.

The Department may require additional transverse drains within the stabilization area.

**LEGEND**

- ① 100-mm (4-inch) Perforated Pipe
- ② 100-mm (4-inch) Non-perforated Pipe
- ③ Perforated Pipe Headwall
- ④ Existing Box Inlet
- ⑤ Geotextile Fabric, Type III

### 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 2012 Standard Specifications for Road and Bridge Construction.

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

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

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

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

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

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

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

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

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

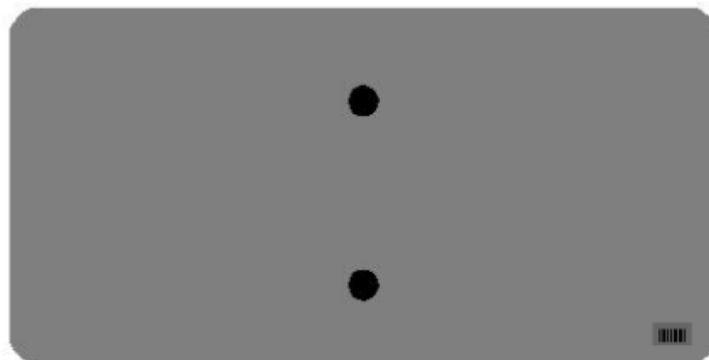
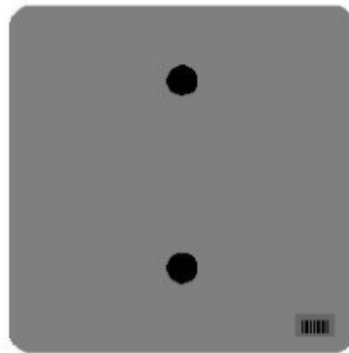
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

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

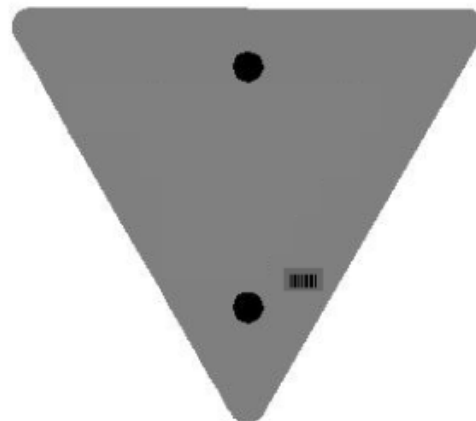
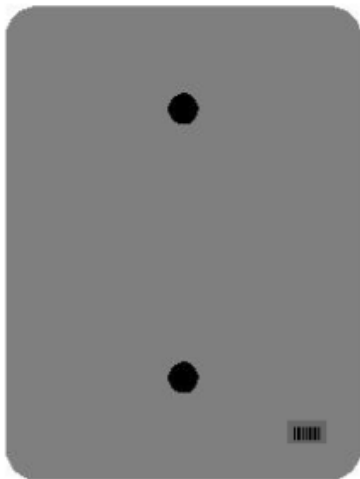
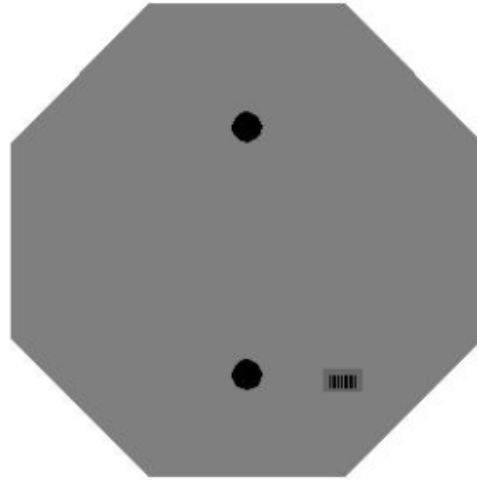
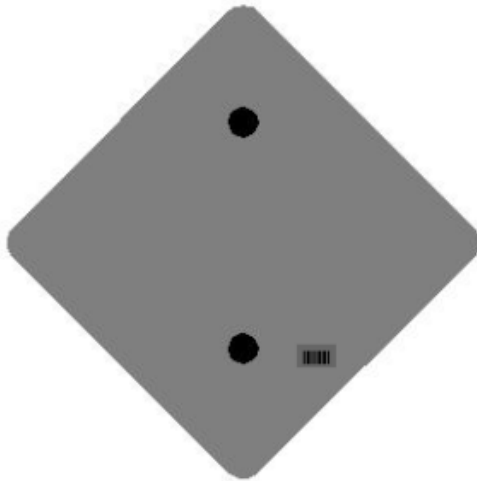
### One Sign Post



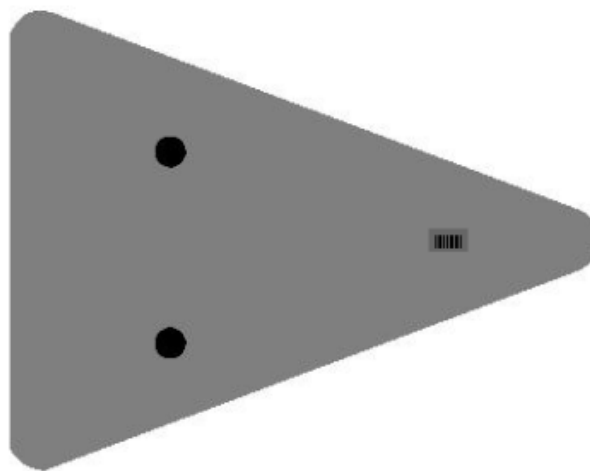
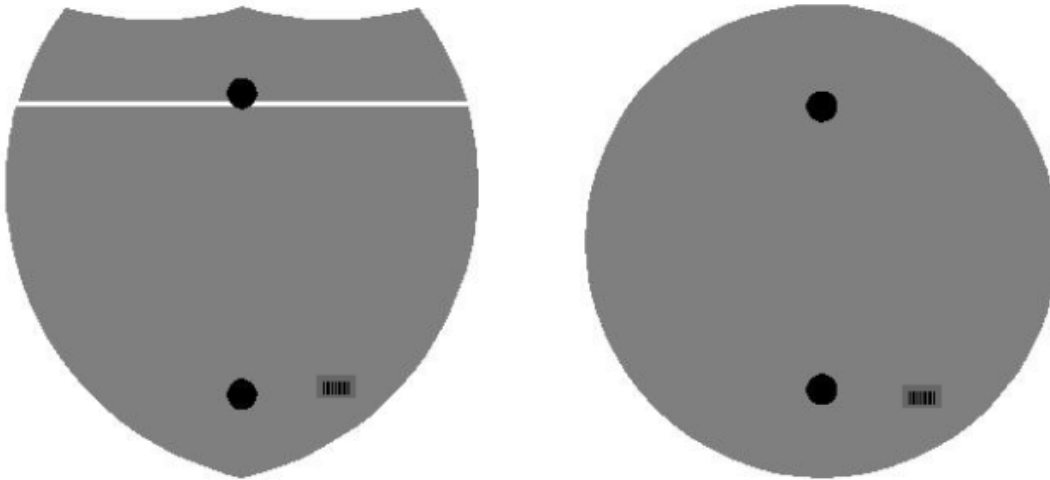
↑  
2" Wide Post



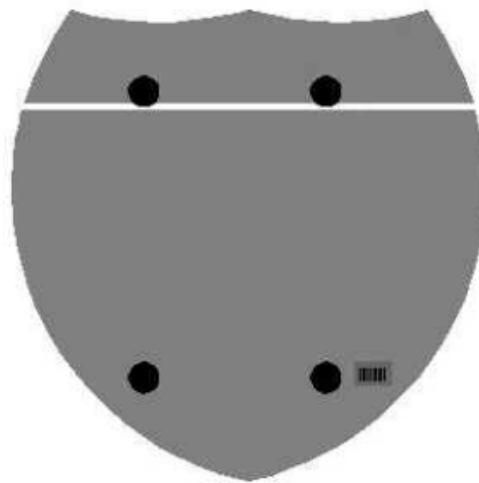
### One Sign Post



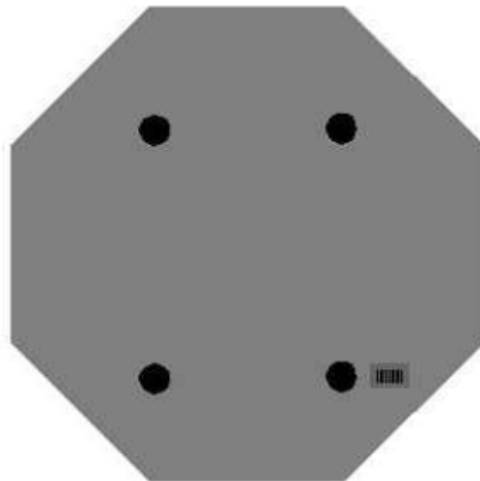
### One Sign Post



### Double Sign Post



Interstate  
Shield

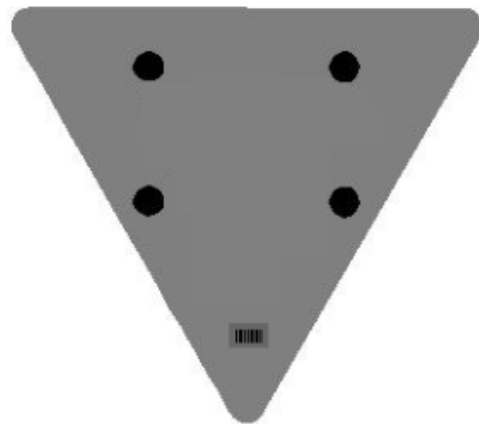


48" Stop

### 2 Post Signs



↑  
2" Wide Post



### **SPECIAL PROVISION FOR EMBANKMENT AT BRIDGE END BENT STRUCTURES**

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

**1.0 DESCRIPTION.** Construct a soil, granular, or rock embankment with soil, granular or cohesive pile core and place structure granular backfill, as the Plans require. Construct the embankment according to the requirements of this Special Provision, the Plans, Standard Drawing RGX 100 and 105, and the Standard Specifications, Current Edition.

#### **2.0 MATERIALS.**

**2.1 Granular Embankment.** Conform to Subsection 805.10. When Granular Embankment materials are erodible or unstable according to Subsection 805.03.04, use the Special Construction Methods found in 3.2 of the Special Provision.

**2.2 Rock Embankment.** Provide durable rock from roadway excavation that consists principally of Unweathered Limestone, Durable Shale (SDI equal to or greater than 95 according to KM 64-513), or Durable Sandstone.

**2.3 Pile Core.** Provide a pile core in the area of the embankments where deep foundations are to be installed unless otherwise specified. The Pile Core is the zone indicated on Standard Drawings RGX 100 and 105 designated as Pile Core. Material control of the pile core area during embankment construction is always required. Proper Pile Core construction is required for installation of foundation elements such as drilled or driven piles or drilled shafts. The type of material used to construct the pile core is as directed in the plans or below. Typically, the pile core area will be constructed from the same material used to construct the surrounding embankment. Pile Core can be classified as one of three types:

**A) Pile Core -** Conform to Section 206 of the Standard Specifications. Provide pile core material consisting of the same material as the adjacent embankment except the material in the pile core area shall be free of boulders or particle sizes larger than 4 inches in any dimension or any other obstructions that may hinder pile driving operations. If the pile core material hinders pile driving operations, take the appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.

**B) Granular Pile Core.** Granular pile core is required only when specified in the plans. Select a gradation of durable rock to facilitate pile driving that conforms to Subsection 805.11. If granular pile core material hinders pile driving operations, take appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.

**C) Cohesive Pile Core.** Cohesive Pile Core is required only when specified in the plans. Conform to Section 206 of the Standard Specifications and use soil with at least 50 percent passing a No. 4 sieve having a minimum Plasticity Index (PI) of 10. In addition, keep the cohesive pile core free of boulders, larger than 4 inches in any dimension, or any other obstructions, which would interfere with drilling operations. If cohesive pile core material interferes with drilling operations, take appropriate means necessary to maintain

excavation stability, at no expense to the Department.

**2.4 Structure Granular Backfill.** Conform to Subsection 805.11

**2.5 Geotextile Fabric.** Conform to Type I or Type IV in Section 214 and 843.

### **3.0 CONSTRUCTION.**

**3.1 General.** Construct roadway embankments at end bents according to Section 206 and in accordance with the Special Provision, the Plans, and Standard Drawings for the full embankment section. In some instances, granular or rock embankment will be required for embankment construction for stability purposes, but this special provision does not prevent the use of soil when appropriate. Refer to the plans for specific details regarding material requirements for embankment construction.

Place and compact the pile core and structure granular backfill according to the applicable density requirements for the project. If the embankment and pile core are dissimilar materials (i.e., a granular pile core is used with a soil embankment or a cohesive pile core is used with a granular embankment), a Geotextile Fabric, Type IV, will be required between the pile core and embankment in accordance with Sections 214 and 843 of the Standard Specifications.

When granular or rock embankment is required for embankment construction, conform to the general requirements of Subsection 206.03.02 B. In addition, place the material in no greater than 2-foot loose lifts and compact with a vibrating smooth wheel roller capable of producing a minimum centrifugal force of 15 tons. Apply these requirements to the full width of the embankment for a distance of half the embankment height or 50 feet, whichever is greater, as shown on Standard Drawing RGX-105.

When using granular pile core, install 8-inch perforated underdrain pipe at or near the elevation of the original ground in the approximate locations depicted on the standard drawing, and as the Engineer directs, to ensure positive drainage of the embankment. Wrap the perforated pipe with a fabric of a type recommended by the pipe manufacturer.

After constructing the embankment, excavate for the end bent cap, drive piling, install shafts or other foundation elements, place the mortar bed, construct the end bent, and complete the embankment to finish grade according to the construction sequence shown on the Plans or Standard Drawings and as specified hereinafter.

Certain projects may require widening of existing embankments and the removal of substructures. Construct embankment according to the plans. Substructure removal shall be completed according to the plans and Section 203. Excavation may be required at the existing embankment in order to place the structure granular backfill as shown in the Standard Drawings.

After piles are driven or shafts installed (see design drawings), slope the bottom of the excavation towards the ends of the trench as noted on the plans for drainage. Using a separate pour, place concrete mortar, or any class concrete, to provide a base for forming and placing the cap. Place side forms for the end bent after the mortar has set sufficiently to support workmen and forms without being disturbed.

Install 4-inch perforated pipe in accordance with the plans and Standard Drawings. In the event slope protection extends above the elevation of the perforated pipe, extend the pipe through the slope protection.

After placing the end bent cap and achieving required concrete cylinder strengths, remove adjacent forms and fill the excavation with compacted structure granular backfill material (maximum 1' loose lifts) to the level of the berm prior to placing beams for the bridge. Place Type IV geotextile fabric between embankment material and structure granular backfill. After completing the end bent backwall, or after completing the span end

wall, place the compacted structure granular backfill (maximum 1' loose lifts) to subgrade elevation. If the original excavation is enlarged, fill the entire volume with compacted structure granular backfill (maximum 1' loose lifts) at no expense to the Department. Do not place backfill before removing adjacent form work. Place structure granular backfill material in trench ditches at the ends of the excavation. Place Geotextile Fabric, Type IV over the surface of the compacted structure granular backfill prior to placing aggregate base course.

Tamp the backfill with hand tampers, pneumatic tampers, or other means approved by the Engineer. Thoroughly compact the backfill under the overhanging portions of the structure to ensure that the backfill is in intimate contact with the sides of the structure.

Do not apply seeding, sodding, or other vegetation to the exposed granular embankment.

**3.2 Special Construction Methods.** Erodible or unstable materials may erode even when protected by riprap or channel lining; use the special construction method described below when using these materials.

Use fine aggregates or friable sandstone granular embankment at "dry land" structures only. Do not use them at stream crossings or locations subject to flood waters.

For erodible or unstable materials having 50 percent or more passing the No. 4 sieve, protect with geotextile fabric. Extend the fabric from the original ground to the top of slope over the entire area of the embankment slopes on each side of, and in front of, the end bent. Cover the fabric with at least 12 inches of non-erodible material.

For erodible or unstable materials having less than 50 percent passing a No. 4 sieve, cover with at least 12 inches of non-erodible material.

Where erodible or unstable granular embankment will be protected by riprap or channel lining, place Type IV geotextile fabric between the embankment and the specified slope protection.

#### **4.0 MEASUREMENT.**

**4.1 Granular Embankment.** The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment any Granular Embankment that is not called for in the plans.

The Department will not measure for payment any special construction caused by using erodible or unstable materials and will consider it incidental to the Granular Embankment regardless of whether the erodible or unstable material was specified or permitted.

**4.2 Rock Embankment.** The Department will not measure for payment any rock embankment and will consider it incidental to roadway excavation or embankment in place, as applicable. Rock embankments will be constructed using granular embankment on projects where there is no available rock present within the excavation limits of the project.

**4.3 Pile Core.** Pile core will be measured and paid under roadway excavation or embankment in place, as applicable. The Department will not measure the pile core for separate payment. The Department will not measure for payment the 8-inch perforated underdrain pipe and will consider it incidental to the Pile Core.

**4.4 Structure Granular Backfill.** The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure any additional material required for backfill outside the limits shown on the Plans and Standard Drawings for payment and will

consider it incidental to the work.

The Department will not measure for payment the 4-inch perforated underdrain pipe and will consider it incidental to the Structure Granular Backfill.

**4.5 Geotextile Fabric.** The Department will not measure the quantity of fabric used for separating dissimilar materials when constructing the embankment and pile core and will consider it incidental to embankment construction.

The Department will not measure for payment the Geotextile Fabric used to separate the Structure Granular Backfill from the embankment and aggregate base course and will consider it incidental to Structure Granular Backfill.

The Department will not measure for payment the Geotextile Fabric required for construction with erodible or unstable materials and will consider it incidental to embankment construction.

**4.6 End Bent.** The Department will measure the quantities according to the Contract. The Department will not measure furnishing and placing the 2-inch mortar or concrete bed for payment and will consider it incidental to the end bent construction.

**4.7 Structure Excavation.** The Department will not measure structure excavation on new embankments for payment and will consider it incidental to the Structure Granular Backfill or Concrete as applicable.

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02223	Granular Embankment	Cubic Yards
02231	Structure Granular Backfill	Cubic Yards

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

September 16, 2016

## **PART III**

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

FHWA-1273 -- Revised May 1, 2012

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

### 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 (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).

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.

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

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

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.

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

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

### II. NONDISCRIMINATION

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

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

The 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**6. Training and Promotion:**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

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

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

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

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

**III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

**IV. DAVIS-BACON AND RELATED ACT PROVISIONS**

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

**1. Minimum wages**

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

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

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

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

**2. Withholding**

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

**3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

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

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

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

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

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

**4. Apprentices and trainees**

a. Apprentices (programs of the USDOL).

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

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

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

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

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

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

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

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

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

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

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

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

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

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

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

Shall be fined under this title or imprisoned not more than 5 years or both."

**IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

**X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

**1. Instructions for Certification – First Tier Participants:**

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

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

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

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

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

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

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

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**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

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

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

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

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

**2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

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

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

this transaction originated may pursue available remedies, including suspension and/or debarment.

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

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

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

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

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

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

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

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

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

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

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

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

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

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

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

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

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

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

Revised: January 25, 2017

### Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

### Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*)

## EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY180100 03/23/2018 KY100

Superseded General Decision Number: KY20170100

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 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 calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/05/2018
1	01/19/2018
2	03/23/2018

BRIN0004-003 06/01/2017

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER.....	\$ 26.80	12.38

BRKY0001-005 06/01/2017

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE

COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.80	12.38
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BRKY0002-006 06/01/2017		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 27.81	13.01
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BRKY0007-004 06/01/2017		

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 32.98	19.02
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BRKY0017-004 06/01/2017		

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN,  
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,  
OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.47	12.76
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CARP0064-001 05/01/2015		

	Rates	Fringes
CARPENTER.....	\$ 27.50	16.06
Diver.....	\$ 41.63	16.06
PILEDRIVERMAN.....	\$ 27.75	16.06
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ELEC0212-008 06/05/2017		

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.90	17.56
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ELEC0212-014 12/01/2014		

BRACKEN, GALLATIN & GRANT COUNTIES:

	Rates	Fringes
Sound & Communication Technician.....	\$ 22.75	10.08
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ELEC0317-012 06/01/2016		

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

	Rates	Fringes
ELECTRICIAN (Wiremen)		
Cable Splicer.....	\$ 32.68	18.13
Electrician.....	\$ 33.31	22.98

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ELEC0369-007 05/31/2017

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL,  
CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY,  
JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER,  
MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT,  
SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 31.07	16.60

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\* ELEC0575-002 01/01/2018

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 32.45	15.88

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ENGI0181-018 07/01/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 31.95	15.15
GROUP 2.....	\$ 29.09	15.15
GROUP 3.....	\$ 29.54	15.15
GROUP 4.....	\$ 28.77	15.15

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller;  
Batcher Plant; Bituminous Paver; Bituminous Transfer  
Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All  
Scoop; Carry Deck Crane; Central Compressor Plant; Cherry  
Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over);  
Concrete Paver; Truck-Mounted Concrete Pump; Core Drill;  
Crane; Crusher Plant; Derrick; Derrick Boat; Ditching &  
Trenching Machine; Dragline; Dredge Operator; Dredge  
Engineer; Elevating Grader & Loaders; Grade-All; Gurries;  
Heavy Equipment Robotics Operator/Mechanic; High Lift;  
Hoe-Type Machine; Hoist (Two or More Drums); Hoisting  
Engine (Two or More Drums); Horizontal Directional Drill  
Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau;  
Locomotive; Mechanic; Mechanically Operated Laser Screed;  
Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel  
Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete;  
Push Dozer; Rock Spreader, attached to equipment; Rotary  
Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier;

Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

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IRON0044-009 06/01/2017

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,  
BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);  
CARROLL (Eastern third, including the Township of Ghent);  
FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);  
MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);  
NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

	Rates	Fringes
IRONWORKER		
Fence Erector.....	\$ 23.76	19.15
Structural.....	\$ 27.60	20.10

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IRON0070-006 06/01/2017

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD  
BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);  
CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);  
CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);  
OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);  
SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

	Rates	Fringes
IRONWORKER.....	\$ 28.30	21.85

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IRON0769-007 06/01/2017

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN  
CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson);  
FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksville, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);  
MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale);  
NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout)

	Rates	Fringes
IRONWORKER		
ZONE 1.....	\$ 31.33	23.97
ZONE 2.....	\$ 31.33	23.97
ZONE 3.....	\$ 31.33	23.97

ZONE 1 - (no base rate increase) Up to 10 mile radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 2 - (add \$0.40 per hour to base rate) 10 to 50 mile radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 3 - (add \$2.00 per hour to base rate) 50 mile radius & over of Union Hall, 1643 Greenup Ave, Ashland, KY.

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LABO0189-003 07/01/2016

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.14	13.29
GROUP 2.....	\$ 23.39	13.29
GROUP 3.....	\$ 23.44	13.29
GROUP 4.....	\$ 24.04	13.29

LABORERS CLASSIFICATIONS

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

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

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;  
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste  
- Levels A & B; Miner & Driller (Free Air); Tunnel Blaster;  
& Tunnel Mucker (Free Air); Directional & Horizontal  
Boring; Air Track Drillers (All Types); Powdermen &  
Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0189-008 07/01/2017

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE,  
MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE &  
WASHINGTON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.14	13.29
GROUP 2.....	\$ 23.39	13.29
GROUP 3.....	\$ 23.44	13.29
GROUP 4.....	\$ 24.04	13.29

LABORERS CLASSIFICATIONS

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

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

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman;  
Gunnite Operator & Mixer; Grout Pump Operator; Side Rail  
Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free  
Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;  
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste  
- Levels A & B; Miner & Driller (Free Air); Tunnel Blaster;  
& Tunnel Mucker (Free Air); Directional & Horizontal

Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0189-009 07/01/2014

BRECKINRIDGE & GRAYSON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 22.66	11.10
GROUP 2.....	\$ 22.91	11.10
GROUP 3.....	\$ 22.96	11.10
GROUP 4.....	\$ 23.56	11.10

LABORERS CLASSIFICATIONS

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

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

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN,

HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,  
ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER		
Bridge/Equipment Tender and/or Containment Builder..\$	18.90	5.90
Brush & Roller.....\$	21.30	5.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....\$	22.30	5.90
Sandblasting & Waterblasting.....\$	22.05	5.90
Spray.....\$	21.80	5.90
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PAIN0012-017 05/01/2015		

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping)		
Bridge Equipment Tender and Containment Builder.....\$	20.73	9.06
Brush & Roller.....\$	23.39	9.06
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....\$	24.39	9.06
Sandblasting & Water Blasting.....\$	24.14	9.06
Spray.....\$	23.89	9.06
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PAIN0118-004 06/01/2014		

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN,  
HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY,  
SPENCER, TRIMBLE & WASHINGTON COUNTIES:

	Rates	Fringes
PAINTER		
Brush & Roller.....\$	18.50	11.97
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning.....\$	19.50	11.97
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PAIN1072-003 12/01/2017		

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

	Rates	Fringes
Painters:		
Bridges; Locks; Dams; Tension Towers & Energized		

Substations.....	\$ 33.33	15.45
Power Generating Facilities..	\$ 30.09	15.45

PLUM0248-003 06/01/2017

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
Plumber and Steamfitter.....	\$ 35.00	25.12

PLUM0392-007 06/01/2014

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 29.80	17.79

PLUM0502-003 08/01/2017

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 33.12	20.78

SUKY2010-160 10/08/2001

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 16.57	7.34
GROUP 2.....	\$ 16.68	7.34
GROUP 3.....	\$ 16.86	7.34
GROUP 4.....	\$ 16.96	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

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 [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing

this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have 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 after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.**

Director  
Division of Construction Procurement  
Frankfort, Kentucky 40622  
502-564-3500

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

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

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
11.2%	6.9%

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

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

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

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

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

**PART IV**  
**INSURANCE**

## INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form – not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
  - a) \$100,000 Each Accident Bodily Injury
  - b) \$500,000 Policy limit Bodily Injury by Disease
  - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
  - a) "policy contains no deductible clauses."
  - b) "policy contains \_\_\_\_\_ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) **KENTUCKY WORKMEN'S COMPENSATION INSURANCE.** The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

**PART V**  
**BID ITEMS**

### PROPOSAL BID ITEMS

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Report Date 4/25/18

#### Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	16,897.00	TON		\$	
0020	00003		CRUSHED STONE BASE	462.00	TON		\$	
0030	00008		CEMENT STABILIZED ROADBED	32,748.00	SQYD		\$	
0040	00022		JPC PAVEMENT DRAINAGE BLANKET	6,549.00	TON		\$	
0050	00100		ASPHALT SEAL AGGREGATE	86.00	TON		\$	
0060	00103		ASPHALT SEAL COAT	10.30	TON		\$	
0070	00212		CL2 ASPH BASE 1.00D PG64-22	946.00	TON		\$	
0080	00339		CL3 ASPH SURF 0.38D PG64-22	102.00	TON		\$	
0090	00356		ASPHALT MATERIAL FOR TACK	2.40	TON		\$	
0100	00358		ASPHALT CURING SEAL	83.40	TON		\$	
0110	02058		REMOVE PCC PAVEMENT	3,365.00	SQYD		\$	
0120	02071		JPC PAVEMENT-11 IN (FOR ITEM# 5-159.00) (REVISED: 4-25-18)	22,086.00	SQYD		\$	
0121	02071		JPC PAVEMENT-11 IN (FOR ITEM# 5-2086.01) (ADDED: 4-25-18)	3,365.00	SQYD		\$	
0130	02072		JPC PAVEMENT-11 IN SHLD	10,660.00	SQYD		\$	
0140	02110		PARTIAL DEPTH PATCHING	200.00	CUFT		\$	
0150	02115		SAW-CLEAN-RESEAL TVERSE JOINT	59,144.00	LF		\$	
0160	02116		SAW-CLEAN-RESEAL LONGIT JOINT	47,315.00	LF		\$	
0170	02542		CEMENT	831.00	TON		\$	
0180	02702		SAND FOR BLOTTER	232.00	TON		\$	
0190	21173EC		SAW-CLEAN-RESEAL RANDOM CRACKS	5,421.00	LF		\$	

#### Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0200	00021		DRAINAGE BLANKET-EMBANKMENT	5,050.00	CUYD		\$	
0210	01310		REMOVE PIPE	924.00	LF		\$	
0220	01584		CAP DROP BOX INLET	5.00	EACH		\$	
0230	01585		REMOVE DROP BOX INLET	8.00	EACH		\$	
0240	01953		CONC MEDIAN BARRIER TYPE 12B2	1,886.00	LF		\$	
0250	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	69.00	EACH		\$	
0260	01984		DELINEATOR FOR BARRIER - WHITE	35.00	EACH		\$	
0280	02003		RELOCATE TEMP CONC BARRIER	3,300.00	LF		\$	
0290	02184		BACKFILLING	400.00	CUYD		\$	
0300	02200		ROADWAY EXCAVATION	27,833.00	CUYD		\$	
0310	02242		WATER	500.00	MGAL		\$	
0320	02265		REMOVE FENCE	1,429.00	LF		\$	
0330	02267		REMOVE & RESET FENCE	289.00	LF		\$	
0340	02268		REMOVE & REPLACE FENCE	25.00	LF		\$	
0350	02273		FENCE-4 FT CHAIN LINK	672.00	LF		\$	
0360	02274		FENCE-6 FT CHAIN LINK	815.00	LF		\$	
0370	02287		DOUBLE VEHICULAR CHAIN LINK GATE	1.00	EACH		\$	
0380	02351		GUARDRAIL-STEEL W BEAM-S FACE	4,437.00	LF		\$	

**PROPOSAL BID ITEMS**

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0390	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	3.00	EACH		\$	
0400	02369		GUARDRAIL END TREATMENT TYPE 2A	4.00	EACH		\$	
0410	02381		REMOVE GUARDRAIL	4,832.00	LF		\$	
0420	02387		GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	3.00	EACH		\$	
0430	02391		GUARDRAIL END TREATMENT TYPE 4A	3.00	EACH		\$	
0440	02429		RIGHT-OF-WAY MONUMENT TYPE 1	16.00	EACH		\$	
0450	02432		WITNESS POST	8.00	EACH		\$	
0460	02545		CLEARING AND GRUBBING 19.3 ACRES	1.00	LS		\$	
0470	02562		TEMPORARY SIGNS	750.00	SQFT		\$	
0480	02599		FABRIC-GEOTEXTILE TYPE IV	15,140.00	SQYD		\$	
0490	02625		REMOVE HEADWALL	10.00	EACH		\$	
0500	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0510	02653		LANE CLOSURE	2.00	EACH		\$	
0520	02671		PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH		\$	
0530	02695		RUMBLE STRIPS TYPE 3	280.00	LF		\$	
0540	02726		STAKING	1.00	LS		\$	
0550	02775		ARROW PANEL	6.00	EACH		\$	
0560	02898		RELOCATE CRASH CUSHION	6.00	EACH		\$	
0570	03171		CONCRETE BARRIER WALL TYPE 9T	11,500.00	LF		\$	
0580	06511		PAVE STRIPING-TEMP PAINT-6 IN	110,000.00	LF		\$	
0590	06549		PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF		\$	
0600	06550		PAVE STRIPING-TEMP REM TAPE-W	1,000.00	LF		\$	
0610	06551		PAVE STRIPING-TEMP REM TAPE-Y	1,000.00	LF		\$	
0620	06556		PAVE STRIPING-DUR TY 1-6 IN W	14,031.00	LF		\$	
0630	06557		PAVE STRIPING-DUR TY 1-6 IN Y	4,192.00	LF		\$	
0640	06560		PAVE STRIPING-DUR TY 1-12 IN W	5,393.00	LF		\$	
0650	06589		PAVEMENT MARKER TYPE V-MW	109.00	EACH		\$	
0660	06592		PAVEMENT MARKER TYPE V-B W/R	439.00	EACH		\$	
0670	06593		PAVEMENT MARKER TYPE V-B Y/R	47.00	EACH		\$	
0680	08903		CRASH CUSHION TY VI CLASS BT TL3	6.00	EACH		\$	
0690	10020NS		FUEL ADJUSTMENT	37,164.00	DOLL	\$1.00	\$	\$37,164.00
0700	20411ED		LAW ENFORCEMENT OFFICER	200.00	HOUR		\$	
0710	20550ND		SAWCUT PAVEMENT	9,710.00	LF		\$	
0720	20591EC		REMOVE BARRIER	1,069.00	LF		\$	
0730	21597EN		REMOVE PERF PIPE HEADWALL	15.00	EACH		\$	
0740	23335EC		CONCRETE MEDIAN BARRIER TY 9B2	709.00	LF		\$	
0750	24189ER		DURABLE WATERBORNE MARKING-6 IN W	24,000.00	LF		\$	
0760	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	16,000.00	LF		\$	
0770	24191ER		DURABLE WATERBORNE MARKING-12 IN W	5,000.00	LF		\$	

**Section: 0003 - DRAINAGE**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0780	00078		CRUSHED AGGREGATE SIZE NO 2	12.00	TON		\$	
0790	00466		CULVERT PIPE-30 IN	24.00	LF		\$	
0800	00468		CULVERT PIPE-36 IN	12.00	LF		\$	

**PROPOSAL BID ITEMS**

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0810	00471		CULVERT PIPE-54 IN	8.00	LF		\$	
0820	00496		CULVERT PIPE-36 IN EQUIV	16.00	LF		\$	
0830	00521		STORM SEWER PIPE-15 IN	16.70	LF		\$	
0840	00522		STORM SEWER PIPE-18 IN	692.90	LF		\$	
0850	00524		STORM SEWER PIPE-24 IN	16.00	LF		\$	
0860	00529		STORM SEWER PIPE-42 IN	28.70	LF		\$	
0870	00530		STORM SEWER PIPE-48 IN	170.90	LF		\$	
0880	01005		PERFORATED PIPE EDGE DRAIN-4 IN	9,495.00	LF		\$	
0890	01010		NON-PERFORATED PIPE-4 IN	221.00	LF		\$	
0900	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS		\$	
0910	01020		PERF PIPE HEADWALL TY 1-4 IN	3.00	EACH		\$	
0920	01024		PERF PIPE HEADWALL TY 2-4 IN	3.00	EACH		\$	
0930	01028		PERF PIPE HEADWALL TY 3-4 IN	2.00	EACH		\$	
0940	01032		PERF PIPE HEADWALL TY 4-4 IN	4.00	EACH		\$	
0950	01204		PIPE CULVERT HEADWALL-18 IN	2.00	EACH		\$	
0960	01208		PIPE CULVERT HEADWALL-24 IN	1.00	EACH		\$	
0970	01210		PIPE CULVERT HEADWALL-30 IN	2.00	EACH		\$	
0980	01212		PIPE CULVERT HEADWALL-36 IN	1.00	EACH		\$	
0990	01214		PIPE CULVERT HEADWALL-42 IN	1.00	EACH		\$	
1000	01450		S & F BOX INLET-OUTLET-18 IN	1.00	EACH		\$	
1010	01453		S & F BOX INLET-OUTLET-36 IN	1.00	EACH		\$	
1020	01490		DROP BOX INLET TYPE 1	1.00	EACH		\$	
1030	01559		DROP BOX INLET TYPE 13G	11.00	EACH		\$	
1040	01580		DROP BOX INLET TYPE 15	3.00	EACH		\$	
1050	01619		CONC MED BARR BOX INLET TY 9A1	1.00	EACH		\$	
1060	01642		JUNCTION BOX-18 IN	1.00	EACH		\$	
1070	01646		JUNCTION BOX-42 IN	2.00	EACH		\$	
1080	01647		JUNCTION BOX-48 IN	13.00	EACH		\$	
1090	01740		CORED HOLE DRAINAGE BOX CON-4 IN	16.00	EACH		\$	
1100	02159		TEMP DITCH	6,220.00	LF		\$	
1110	02160		CLEAN TEMP DITCH	3,110.00	LF		\$	
1120	02483		CHANNEL LINING CLASS II	1,437.00	TON		\$	
1130	02484		CHANNEL LINING CLASS III	10.00	TON		\$	
1140	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	720.00	SQYD	\$2.00	\$	\$1,440.00
1150	02701		TEMP SILT FENCE	6,220.00	LF		\$	
1160	02703		SILT TRAP TYPE A	20.00	EACH		\$	
1170	02704		SILT TRAP TYPE B	20.00	EACH		\$	
1180	02705		SILT TRAP TYPE C	20.00	EACH		\$	
1190	02706		CLEAN SILT TRAP TYPE A	20.00	EACH		\$	
1200	02707		CLEAN SILT TRAP TYPE B	20.00	EACH		\$	
1210	02708		CLEAN SILT TRAP TYPE C	20.00	EACH		\$	
1220	05950		EROSION CONTROL BLANKET	3,739.00	SQYD		\$	
1230	05952		TEMP MULCH	62,200.00	SQYD		\$	
1240	05953		TEMP SEEDING AND PROTECTION	46,600.00	SQYD		\$	
1250	05963		INITIAL FERTILIZER	1.80	TON		\$	
1260	05964		20-10-10 FERTILIZER	3.00	TON		\$	
1270	05985		SEEDING AND PROTECTION	53,000.00	SQYD		\$	
1280	05989		SPECIAL SEEDING CROWN VETCH	12,200.00	SQYD		\$	
1290	05992		AGRICULTURAL LIMESTONE	33.00	TON		\$	
1300	22620NN		CONC MED BARR BOX INLET TY 12A1-50	1.00	EACH		\$	

### PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1310	23611NN		CONC MED BAR BOX INLET TY 12B1-50	4.00	EACH		\$	
1320	24026EC		PIPE CULVERT HEADWALL-54 IN	1.00	EACH		\$	
1330	24814EC		PIPELINE INSPECTION	970.00	LF		\$	

#### Section: 0004 - BRIDGE-25979

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1340	02231		STRUCTURE GRANULAR BACKFILL	119.00	CUYD		\$	
1350	02403		REMOVE CONCRETE MASONRY	86.20	CUYD		\$	
1360	02599		FABRIC-GEOTEXTILE TYPE IV	119.00	SQYD		\$	
1370	02998		MASONRY COATING	766.70	SQYD		\$	
1380	03299		ARMORED EDGE FOR CONCRETE	25.00	LF		\$	
1390	08001		STRUCTURE EXCAVATION-COMMON	265.10	CUYD		\$	
1400	08020		CRUSHED AGGREGATE SLOPE PROT	55.00	TON		\$	
1410	08033		TEST PILES	156.00	LF		\$	
1420	08046		PILES-STEEL HP12X53	465.00	LF		\$	
1430	08094		PILE POINTS-12 IN	33.00	EACH		\$	
1440	08100		CONCRETE-CLASS A	93.20	CUYD		\$	
1450	08104		CONCRETE-CLASS AA	129.50	CUYD		\$	
1460	08150		STEEL REINFORCEMENT	15,842.00	LB		\$	
1470	08151		STEEL REINFORCEMENT-EPOXY COATED	41,245.00	LB		\$	
1480	08500		APPROACH SLAB	62.20	SQYD		\$	
1490	08634		PRECAST PC I BEAM TYPE 4	609.00	LF		\$	
1500	21532ED		RAIL SYSTEM TYPE III	308.00	LF		\$	
1510	23331EC		EPOXY-URETHANE WATERPROOFING 3/8 IN	3,339.00	SQFT		\$	

#### Section: 0005 - BRIDGE-CULVERT 26543

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1520	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1530	08100		CONCRETE-CLASS A	16.30	CUYD		\$	
1540	08150		STEEL REINFORCEMENT	2,156.00	LB		\$	
1550	21532ED		RAIL SYSTEM TYPE III	20.00	LF		\$	

#### Section: 0006 - BRIDGE-CULVERT 26544

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1560	08002		STRUCTURE EXCAV-SOLID ROCK	3.90	CUYD		\$	
1570	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1580	08100		CONCRETE-CLASS A	61.60	CUYD		\$	
1590	08150		STEEL REINFORCEMENT	6,881.00	LB		\$	
1600	21532ED		RAIL SYSTEM TYPE III	39.00	LF		\$	

#### Section: 0007 - BRIDGE-RETAINING WALL 27655

### PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1610	02223		GRANULAR EMBANKMENT	2,207.00	CUYD		\$	
1620	02998		MASONRY COATING	801.00	SQYD		\$	
1630	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1640	08018		RETAINING WALL	6,201.00	SQFT		\$	

#### Section: 0008 - BRIDGE-RETAINING WALL 27656

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1650	02223		GRANULAR EMBANKMENT	380.00	CUYD		\$	
1660	02403		REMOVE CONCRETE MASONRY	127.00	CUYD		\$	
1670	02998		MASONRY COATING	177.00	SQYD		\$	
1680	08002		STRUCTURE EXCAV-SOLID ROCK	2.00	CUYD		\$	
1690	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1700	08018		RETAINING WALL	1,050.00	SQFT		\$	
1710	21532ED		RAIL SYSTEM TYPE III	106.00	LF		\$	

#### Section: 0009 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1720	02562		TEMPORARY SIGNS	800.00	SQFT		\$	
1730	06400		GMSS GALV STEEL TYPE A	342.00	LB		\$	
1740	06401		FLEXIBLE DELINEATOR POST-M/W	64.00	EACH		\$	
1750	06404		FLEXIBLE DELINEATOR POST-M/Y	30.00	EACH		\$	
1760	06405		SBM ALUMINUM PANEL SIGNS	2,044.80	SQFT		\$	
1770	06406		SBM ALUM SHEET SIGNS .080 IN	45.00	SQFT		\$	
1780	06407		SBM ALUM SHEET SIGNS .125 IN	200.30	SQFT		\$	
1790	06410		STEEL POST TYPE 1	458.00	LF		\$	
1800	06415		OSS GALV STEEL CANTILEVER	1.00	EACH		\$	
1810	06441		GMSS GALV STEEL TYPE C	1,408.00	LB		\$	
1820	06449		REM OVERHEAD SIGN SUPPORT STR	1.00	EACH		\$	
1830	06450		REM OVERHEAD STRUC CONC BASE	1.00	EACH		\$	
1840	06451		REMOVE SIGN SUPPORT BEAM	4.00	EACH		\$	
1850	06455		OSS ALUMINUM 100 FT TRUSS	1.00	EACH		\$	
1860	06490		CLASS A CONCRETE FOR SIGNS	8.18	CUYD		\$	
1870	06491		STEEL REINFORCEMENT FOR SIGNS	248.00	LB		\$	
1880	20418ED		REMOVE & RELOCATE SIGNS	2.00	EACH		\$	
1890	20419ND		ROADWAY CROSS SECTION	4.00	EACH		\$	
1900	21373ND		REMOVE SIGN	9.00	EACH		\$	
1910	21596ND		GMSS TYPE D	10.00	EACH		\$	
1920	24631EC		BARCODE SIGN INVENTORY	16.00	EACH		\$	

#### Section: 0010 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1930	04740		POLE BASE (REVISED: 4-16-18)	3.00	EACH		\$	

### PROPOSAL BID ITEMS

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Report Date 4/25/18

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1931	04741		POLE BASE IN MEDIAN WALL (ADDED: 4-16-18)	2.00	EACH		\$	
1940	04780		FUSED CONNECTOR KIT	14.00	EACH		\$	
1950	04797		CONDUIT-3 IN	180.00	LF		\$	
1960	04800		MARKER	17.00	EACH		\$	
1970	04810		ELECTRICAL JUNCTION BOX 24"	3.00	EACH		\$	
1980	04820		TRENCHING AND BACKFILLING	8,700.00	LF		\$	
1990	04833		WIRE-NO. 8	2,703.00	LF		\$	
2000	04834		WIRE-NO. 6 (REVISED: 4-23-18)	324.00	LF		\$	
2020	04940		REMOVE LIGHTING	1.00	LS		\$	
2030	04942		REMOVE STORE & REINSTALL POLE	5.00	EACH		\$	
2040	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	3.00	EACH		\$	
2050	20392NS835		ELECTRICAL JUNCTION BOX TYPE C	13.00	EACH		\$	
2052	04861		CABLE-NO. 6/3C DUCTED (ADDED: 4-23-18)	5,397.00	LF		\$	
2053	04862		CABLE-NO. 4/3C DUCTED (ADDED: 4-23-18)	5,504.00	LF		\$	
2060	21543EN		BORE AND JACK CONDUIT	180.00	LF		\$	
2065	22939ND		INSTALL LUMINAIRE POLE (ADDED: 4-16-18)	5.00	EACH		\$	
2070	24589ED		LED LUMINAIRE	104.00	EACH		\$	
2080	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	650.00	LF		\$	

### Section: 0011 - INTELLIGENT TRANSPORTATION SYSTEMS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2090	04795		CONDUIT-2 IN	150.00	LF		\$	
2100	04820		TRENCHING AND BACKFILLING	540.00	LF		\$	
2110	04835		WIRE-NO. 4	1,800.00	LF		\$	
2120	04899		ELECTRICAL SERVICE	1.00	EACH		\$	
2130	20257NC		SITE PREPARATION	1.00	LS		\$	
2140	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	4.00	EACH		\$	
2150	21058ND		WINCH LOWERING TOOL	1.00	EACH		\$	
2160	21066ND		MODEL 336 ENCLOSURE	1.00	EACH		\$	
2170	21069ND		SURGE DEVICE 120 VOLT	1.00	EACH		\$	
2180	21071ND		DATA SURGE DEVICE	1.00	EACH		\$	
2190	21489ND		RACK MOUNTED UPS	1.00	EACH		\$	
2200	21543EN		BORE AND JACK CONDUIT	150.00	LF		\$	
2210	22403NN		WEB CAMERA ASSEMBLY	1.00	EACH		\$	
2220	23150NN		COMMUNICATION CABLE	40.00	LF		\$	
2230	23151NN		POLE WITH LOWERING DEVICE	1.00	EACH		\$	
2240	23157EN		TRAFFIC SIGNAL POLE BASE	4.32	CUYD		\$	
2250	23941EC		VIDEO SURVEILLANCE CONTROLLER	1.00	EACH		\$	
2260	23944EC		ADVANCED GROUNDING SYSTEM	2.00	EACH		\$	
2270	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	1,020.00	LF		\$	

### Section: 0012 - DEMOBILIZATION &/OR MOBILIZATION

# PROPOSAL BID ITEMS

Report Date 4/25/18

## SECTION: 0012 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2280	02568		MOBILIZATION	1.00	LS		\$	
2290	02569		DEMOBILIZATION	1.00	LS		\$	



Kentucky Transportation Cabinet  
Division of Highway Design  
**TRAFFIC MANAGEMENT PLAN**

County: Jefferson Item No.: 5-159.00

Federal Project No.: FD52 056 0064 012-013 NHPPIM 0642 (197)

Project Description:

Improve ramp capacity of the I-64 westbound ramp to I-264 westbound from one to two lanes for entire length and other needed improvements to address weave issues at merge on I-264.

Roadway Classification:  Urban  Rural  
 Local  Collector  Arterial  Interstate

ADT (current) \* AM Peak Current \* PM Peak Current \* % Trucks \* \* See comments below.

Project Designation:  Significant  Other: \_\_\_\_\_

**Traffic Control Plan Design:**

Taper and Diversion Design Speeds I-264 = 45 MPH, Ramps = 35 MPH

Minimum Lane Width I-264 = 12', Ramps = 11' Minimum Shoulder Width 2'

Minimum Bridge Width 17' Usable

Minimum Radius I-264 = 3274', Ramps = 173.52' (loop) Maximum Grade 4.13%

Minimum Taper Length 35\*Width Minimum Intersection Level of Service N/A

Existing Traffic Queue Lengths N/A Projected Traffic Queue Lengths N/A

Comments:

I-64 – 2014 ADT = 68,000, 2014 AM Peak = 7,550, 2014 PM Peak = 7,680, 2014 %T = 7.0%  
I-264 – 2014 ADT = 84,000, 2014 AM Peak = 8,230, 2014 PM Peak = 8,650, 2014 %T = 7.0%  
Ramp 1 – 2014 ADT = 11,200, 2014 AM Peak = 880, 2014 PM Peak = 580, 2014 %T = 1.2%  
Ramp 5 – 2014 ADT = 20,400, 2014 AM Peak = 1,420, 2014 PM Peak = 1,600, 2014 %T = 7.5%  
Ramp 6 – 2014 ADT = 3,300, 2014 AM Peak = 200, 2014 PM Peak = 300, 2014 %T = 3.0%  
Ramp 7 – 2014 ADT = 20,800, 2014 AM Peak = 1,140, 2014 PM Peak = 1,560, 2014 %T = 2.2%  
Ramp 8 – 2014 ADT = 7,100, 2014 AM Peak = 520, 2014 PM Peak = 800, 2014 %T = 3.6%



Kentucky Transportation Cabinet  
**Division of Highway Design**  
**TRAFFIC MANAGEMENT PLAN**

Item No. 5-159.00

**Discussion:**

<b>1) Public Information Plan</b>	
a) Prepare with assistance from <input checked="" type="checkbox"/> KYTC or <input type="checkbox"/> _____	
b) Identify Trip Generators      Referenced	f) Railroad Involvement      N/A
c) Identify Types of Road Users      Referenced	g) Address Pedestrians, Bikes Mass Transit      Referenced
d) Public Information Message      Referenced	h) Address Timing, Frequency, Updates, Effectiveness of Plan      Referenced
e) Public Information Strategies to be used      Referenced	i) Police & Other Emergency Services      Referenced



Kentucky Transportation Cabinet  
Division of Highway Design  
**TRAFFIC MANAGEMENT PLAN**

Item No. 5-159.00

<b>2) Temporary Traffic Control Plan – Phase 1</b>	
<b>Exposure Control Measures</b>	<b>Positive Protection Measures</b>
a) Is Road Closure Allowed Type: No	a) Address Drop Off Protection Criteria Yes - Referenced
b) Detour Conditions N/A	b) Temporary Barrier Requirements Yes – Referenced
c) Working Hour Restrictions No	c) Evaluation of Existing Guardrail Conditions N/A
d) Holiday or Special Event Work Restrictions Yes - Referenced	d) Address Temporary Drainage Yes – Referenced
e) Evaluation of Intersection LOS N/A	<b>Uniformed Law Enforcement Officers</b> Yes - Referenced
f) Evaluation of Queue Lengths N/A	<b>Payment for Traffic Control*</b>
g) Evaluation of User Costs and Incentives/Disincentives Yes - Referenced	a) Method of Project Bidding Yes – Referenced
h) Address Pedestrians, Bikes, Mass Transit N/A	b) Special Notes Yes - Referenced
<b>Work Vehicles and Equipment</b> Yes - Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction
Comments:	
See attached maintenance of traffic general notes, construction phasing plan notes, and maintenance of traffic and construction phasing plans.	



Kentucky Transportation Cabinet  
Division of Highway Design  
**TRAFFIC MANAGEMENT PLAN**

Item No. 5-159.00

<b>2) Temporary Traffic Control Plan – Phase 2</b>	
<b>Exposure Control Measures</b>	<b>Positive Protection Measures</b>
a) Is Road Closure Allowed      Yes - Referenced Type: Full Ramp Closure, Night time rolling roadblocks on I-64, I-264	a) Address Drop Off Protection Criteria      Yes - Referenced
b) Detour Conditions      Yes - Referenced	b) Temporary Barrier Requirements      Yes – Referenced
c) Working Hour Restrictions      No	c) Evaluation of Existing Guardrail Conditions      N/A
d) Holiday or Special Event Work Restrictions      Yes - Referenced	d) Address Temporary Drainage      Yes – Referenced
e) Evaluation of Intersection LOS      N/A	<b>Uniformed Law Enforcement Officers</b> Yes - Referenced
f) Evaluation of Queue Lengths      N/A	<b>Payment for Traffic Control*</b>
g) Evaluation of User Costs and Incentives/Disincentives      Yes - Referenced	a) Method of Project Bidding      Yes - Referenced
h) Address Pedestrians, Bikes, Mass Transit      N/A	b) Special Notes      Yes - Referenced
<b>Work Vehicles and Equipment</b> Yes - Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction
Comments:	
See attached maintenance of traffic general notes, construction phasing plan notes, and maintenance of traffic and construction phasing plans.	



Kentucky Transportation Cabinet  
Division of Highway Design  
**TRAFFIC MANAGEMENT PLAN**

Item No. 5-159.00

<b>2) Temporary Traffic Control Plan – Phase 3</b>	
<b>Exposure Control Measures</b>	<b>Positive Protection Measures</b>
a) Is Road Closure Allowed      Yes - Referenced Type: Night time ramp closures	a) Address Drop Off Protection Criteria      Yes - Referenced
b) Detour Conditions      Yes - Referenced	b) Temporary Barrier Requirements      Yes – Referenced
c) Working Hour Restrictions      No	c) Evaluation of Existing Guardrail Conditions      N/A
d) Holiday or Special Event Work Restrictions      Yes - Referenced	d) Address Temporary Drainage      Yes – Referenced
e) Evaluation of Intersection LOS      N/A	<b>Uniformed Law Enforcement Officers</b> Yes - Referenced
f) Evaluation of Queue Lengths      N/A	<b>Payment for Traffic Control*</b>
g) Evaluation of User Costs and Incentives/Disincentives      Yes – Referenced	a) Method of Project Bidding      Yes – Referenced
h) Address Pedestrians, Bikes, Mass Transit      N/A	b) Special Notes      Yes - Referenced
<b>Work Vehicles and Equipment</b> Yes - Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction
Comments:	
See attached maintenance of traffic general notes, construction phasing plan notes, and maintenance of traffic and construction phasing plans.	



Kentucky Transportation Cabinet  
Division of Highway Design  
**TRAFFIC MANAGEMENT PLAN**

Item No. 5-159.00

**APPROVAL:**

Bett Numan 3-8-18  
Project Manager Date

Thomas Wright 3-14-18  
Project Delivery and Preservation Manager Date

Mahamad Abdol 3-8-18  
Engineering Support Manager Date

\_\_\_\_\_  
FHWA Representative Date

Revisions to the TMP require review/approval by the signatories.

## I-64 WB TO I-264 WB RAMP IMPROVEMENTS

### JEFFERSON COUNTY

#### ITEM NO. 5-159.00

### TRAFFIC MANAGEMENT PLAN

#### MAINTENANCE OF TRAFFIC – GENERAL NOTES

##### FIXED COMPLETION DATE

Project to have a fixed completion date of November 15, 2019.

The Contractor shall be assessed liquidated damages in the amount of \$3,250 per calendar day after November 15, 2019, until the project is considered complete to the satisfaction of the Engineer. Liquidated damages shall be assessed in accordance with Section 108.09 of the current edition of the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction.

##### HOLIDAY / SPECIAL EVENT WORK RESTRICTIONS

No lane closures or ramp closures will be allowed during the following days and hours unless otherwise directed and / or approved by the Engineer:

Thunder over Louisville – 6 a.m. on April 21, 2018, to 6 a.m. on April 22, 2018; 6 a.m. on April 20, 2019, to 6 a.m. on April 21, 2019

Kentucky Derby – 6 a.m. on May 5, 2018, to 6 a.m. on May 6, 2018; 6 a.m. on May 4, 2019, to 6 a.m. on May 5, 2019

Memorial Day – 6 a.m. on May 28, 2018, to 6 a.m. on May 29, 2018; 6 a.m. on May 27, 2019, to 6 a.m. on May 28, 2019

Labor Day – 6 a.m. on September 3, 2018, to 6 a.m. on September 4, 2018; 6 a.m. September 2, 2019, to 6 a.m. on September 3, 2019

Veterans Day (observed) – 6 a.m. on November 12, 2018, to 6 a.m. on November 13, 2018; 6 a.m. on November 11, 2019, to 6 a.m. on November 12, 2019

Thanksgiving – 6 a.m. on November 22, 2018, to 6 a.m. on November 23, 2018

Christmas Day – 6 a.m. on December 25, 2018, to 6 a.m. on December 26, 2018

New Year's Day – 6 a.m. on January 1, 2019, to 6 a.m. on January 2, 2019

Martin Luther King Jr. Day – 6 a.m. on January 21, 2019, to 6 a.m. on January 22, 2019

President's Day – 6 a.m. on February 18, 2019, to 6 a.m. on February 19, 2019

##### MAINTENANCE OF TRAFFIC AND PHASING PLAN

The maintenance of traffic and construction phasing shall be maintained as shown and specified in these plans unless otherwise approved by the Engineer.

Traffic shall be maintained in accordance with the most current editions of the Manual of Uniform Traffic Control Devices (MUTCD), the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction, and the Kentucky Transportation Cabinet Standard Drawings. All traffic control devices and all materials shall conform to the most current editions of the Manual of Uniform Traffic Control Devices (MUTCD), the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction, and the Kentucky Transportation Cabinet Standard Drawings.

Except for roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price for "Maintain and Control Traffic" as set forth in the KYTC Standard Specifications for Road and Bridge Construction, current edition, unless otherwise provided for in the maintenance of traffic plans. The lump sum bid to "Maintain and Control Traffic" shall also include, but is not limited to the following items and operations:

1. All grading and necessary drainage for any temporary pavement and removal thereof when it is no longer needed.
2. All temporary ditches and temporary pipes. Also includes any channel lining that may be needed for the temporary ditches and temporary pipe outlets.
3. All flag persons and traffic control devices such as, but not limited to, flashers, signs, barricades, vertical panels, plastic drums (steel drums will not be permitted), and cones necessary for the control and protection of vehicular and pedestrian traffic as specified in these notes, the plans, the MUTCD, or by the Engineer.
4. If the Contractor desires to deviate from the traffic control scheme and construction phases outlined in these plans and this proposal, he shall prepare an alternate plan and present it in writing to the Engineer. This alternate plan can be used only after review and approval of the Divisions of Traffic, Design, and Construction.
5. In general, all traffic control devices shall be placed starting and proceeding in the direction of the flow of traffic and removed starting and proceeding in the direction opposite of the flow of traffic.
6. The Engineer and the Contractor or their authorized representatives, shall review the signing before traffic is allowed to use any lane closures, crossovers or detours. All signing shall be approved by the Engineer before work can be started by the Contractor.

#### **WORK ZONE SPEED LIMIT**

The temporary posted speed limit in the construction areas shall be 45 MPH for I-264 and 35 MPH for all interchange ramps during construction unless otherwise noted.

#### **CLOSURES**

The Contractor shall provide KYTC with two weeks advance notice for any closure.

The closures of Ramp 6 and Ramp 8 shall be non-concurrent with a minimum of 5 days between closures. The Ramp 8 closure shall occur first and the closures shall occur between May 15<sup>th</sup> and August 15<sup>th</sup>.

#### **LANE WIDTHS**

Minimum lane widths shall be maintained – 12 feet for I-264 WB and Diversions, and 11 feet for all interchange ramps.

#### **LANE CLOSURES**

Lane closures will only be allowed on the existing roadways as indicated on the following sheets. Lane closures shall be in accordance with Standard Drawing TTC-120. See Maintenance of Traffic and Construction Phasing Plan notes and plans for details and allowable locations of lane closures for each Phase.

#### **SHOULDER CLOSURES**

The Contractor will be allowed to close the shoulders of I-264 WB and all interchange ramps to allow for construction. A minimum of four (4) feet of inside useable shoulder width shall be maintained adjacent to the permanent barrier wall along I-264 and a minimum of two (2) feet of outside shoulder shall be maintained adjacent to the temporary barrier wall. Shoulder closures shall be in accordance with Standard Drawing No. TTC-135.

#### **TRAFFIC STOPPAGE**

Traffic on I-264 WB and the interchange ramps, and any other facility adjacent to the project may not be halted without prior approval of the Engineer. This is applicable to all construction activities.

#### **DRUMS**

Drums shall be used for typical lane and shoulder closures except when temporary concrete barrier wall is specified. Drums shall meet all specifications of and be installed in accordance with the most current edition of the MUTCD.

### **CONTRACTOR'S VEHICLES**

The Contractor's vehicles shall always move with and not against the flow of traffic. Vehicles shall enter and leave the work areas in a manner which will not be hazardous to or interfere with normal traffic. Vehicles shall not park or stop except within work areas designated by the Engineer.

### **PAVEMENT EDGE DROP OFF**

A pavement edge that traffic is not expected to cross, except accidentally, should be treated as follows:

Less than 2 inches – No protection required. Warning signs should be placed in advance and throughout the drop-off area.

2 to 4 inches – Place plastic drums, vertical panels, or barricades every 50 feet on tangent sections and curves. Spacing for tapers should be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), current edition.

Greater than 4 inches – Positive separation with 3:1 or flatter slope is needed. If there is 8 feet or more distance between the edge of pavement and drop-off, then drums, panels, or barricades may be used. If concrete barriers are used, then special reflective devices or steady burn lights shall be used for overnight installations.

For temporary conditions, drop-offs greater than 4 inches may be protected with plastic drums, vertical panels, or barricades for short distances during daylight hours while work is being done in the drop-off area.

Payment will be allowed for DGA material used for wedging.

### **SIGNING**

The signing for the construction and traffic control shall be in accordance with the most current editions of the referenced Standard Drawings, the Manual of Uniform Traffic Control Devices, and the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction. Payment will be made for furnishing, erecting, maintaining, and removing these signs, and is paid for on a square foot basis under the bid item "Signs". The signs and posts shall remain the property of the Contractor.

### **TEMPORARY AND PERMANENT SIGNING MODIFICATIONS**

Existing ground mounted and overhead panel signs are not to be covered unless absolutely necessary. The Engineer will determine if covering is required and the duration that the covering shall remain in place. Since most materials used in covering signs may cause permanent damage to the sign face, porous cloth covers which are folded over the sign edges and secured on the back of the sign are to be used. The use of tape, paper, plastic, or sheet material for cover signs is strictly prohibited. If any sign is damaged as a result of being covered, the sign shall be replaced by the Contractor at no cost to the Department.

Rather than covering existing ground mounted and overhead signs that do not apply to the traffic patterns in use during a particular phase, the sign may remain in place except that the copy that does not apply shall be removed at the direction of the Engineer. Extreme care should be taken when removing the copy to prevent damage to the sign face. When the roadway is reopened to traffic, the original sign message shall be restored by installing a new copy. The copy that was removed shall not be reused. The cost for this procedure shall be incidental to the contract. Any sign damaged as a result of this process shall be replaced by the Contractor at no cost to the Department.

If it is determined by the Engineer that an existing ground mounted or overhead panel sign must be removed, extreme caution should be used so as not to damage the sign. Once a sign is removed, it shall be stored in an upright position with nothing coming in contact with the sign face. Under no circumstances is the sign to be laid flat on the ground. Any sign damaged shall be replaced by the Contractor at no cost to the Department. The cost for all hardware necessary to re-install the sign shall be incidental to the contract.

Existing sheeting signs that must be removed or relocated during construction shall be reinstalled at their original location. The cost for removing and reinstalling sheeting signs shall be incidental to the contract.

#### **TEMPORARY CONCRETE BARRIER WALLS**

The temporary concrete barrier walls shall be placed at the locations specified in the Maintenance of Traffic and Construction Phasing Plans and as specified in the Standard Drawings. The locations of all concrete barrier walls in the plans are subject to change as directed and approved by the Engineer. Concrete barrier walls will be in place and approved by the Engineer before work is started by the Contractor. Concrete barrier wall shall conform to the current applicable Standard Drawing(s).

#### **BOX BEAM STIFFENING OF TEMPORARY CONCRETE BARRIER**

Box beam stiffening shall be used on all temporary concrete barriers used during construction.

#### **TEMPORARY CONCRETE BARRIER WALL DELINEATORS**

The Contractor shall provide and install delineators for temporary concrete barrier wall as shown on Standard Drawing No. RBM-020. Payment will be made at the contract unit price for each and shall include compensation for providing, placing, relocating, and maintaining the delineators. Delineators shall be placed with a spacing requirement of 40 feet.

The Contractor shall provide at all times a reserve stockpile of concrete barrier wall delineators for the replacement of damaged or missing delineators. No direct payment for the reserve stockpile will be permitted and the reserve units shall become the property of the Contractor at the completion of the project.

#### **TEMPORARY CRASH CUSHION**

The Contractor shall provide Type VI Class BT TL2 and Type VI Class BT TL3 temporary crash cushions as indicated in the phasing plans and as described in Special Provisions for Crash Cushions in the current edition of the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction. Contrary to the Special Provisions for Crash Cushions, Concrete, Class AA (For Pad) shall be considered incidental to "Crash Cushion TY VI Class BT TL2" and "Crash Cushion TY VI Class BT TL3".

#### **PORTABLE FLASHING ARROW**

The Contractor shall provide Portable Flashing Arrows as specified in the Maintenance of Traffic and Construction Phasing Plans and as required by the Standard Drawings. The Portable Flashing Arrows shall be mounted in traffic-worthy carriages. The arrows shall meet the requirements specified in the current Standard Drawings. Payment for the Portable Flashing Arrows will be based on a unit price for each.

Payment shall be full compensation for providing, placing, operating, relocating, and maintaining the Portable Flashing Arrows. The Contractor shall have available one reserve Portable Flashing Arrow to be placed in operation in the event of damage or electrical/mechanical failure. No direct payment will be allowed for the reserve unit. All Portable Flashing Arrows shall remain the property of the Contractor at the completion of the project.

#### **PORTABLE CHANGEABLE MESSAGE SIGNS**

The Contractor shall provide Portable Changeable Message Signs as indicated in the Maintenance of Traffic and Construction Phasing Plans. Exact locations and messages of the Portable Changeable Message Signs shall be determined by the Engineer for each phase of construction. Payment for a Portable Changeable Message Sign will be based on a unit price for each. Payment shall be full compensation for providing, placing, operating, relocating, and maintaining the Portable Changeable Message Signs.

The Contractor shall have available one reserve Portable Changeable Message Sign to be placed in operation in the event of damage or mechanical/electrical failure. No direct payment will be allowed for

the reserve unit. All Portable Changeable Message Signs shall remain the property of the Contractor at the completion of the project.

#### **REMOVAL OF PAVEMENT MARKINGS**

The Contractor shall remove all pavement markings that do not conform to the traffic operation in use. In areas where the marking will conform to the final marking scheme or for other reasons will not be removed, markings shall be of a permanent type pavement marking material. All temporary markings which must be subsequently removed from the ultimate pavement shall be an approved temporary striping paint. Temporary striping paint shall be measured in linear feet for payment. Markings on existing or temporary pavement shall be removed by water blasting to the satisfaction of the Engineer and shall be considered incidental to the bid item "Maintain and Control Traffic". Painting of existing markings with bituminous or other materials to obliterate the markings shall not be allowed.

#### **LAW ENFORCEMENT OFFICERS**

The Contractor shall provide Law Enforcement Officer Units, consisting of an off-duty police officer and a police vehicle equipped with flashing blue lights, at locations and for durations directed and approved by the Engineer. For locations in Jefferson County, the Law Enforcement Officer shall be an off-duty police officer from any police agency in Jefferson County, Kentucky. Payment at the contract unit price per hour shall be full compensation for all labor, equipment, materials, and incidentals for the police unit consisting of one police officer and one vehicle. Locations requiring Law Enforcement Officers shall be coordinated with and as directed by the Engineer.

#### **EMERGENCY VEHICLES**

If traffic should be stopped due to construction operations and an emergency vehicle on an official emergency run arrives at the scene, the Contractor shall make the provisions for passage of the vehicle as quickly as possible.

#### **RUMBLE STRIPS**

Rumble strips shall be measured for payment per Kentucky Standard Specifications for Road and Bridge Construction 501.04.04. Rumble strips in areas where the proposed shoulder is being used to maintain traffic shall be constructed in a separate operation after the roadway is open to traffic.

## **MAINTENANCE OF TRAFFIC – PHASING NOTES**

### **PHASE 1 TRAFFIC CONTROL**

During this phase, traffic will be maintained along existing roadways and interchange ramps as detailed below. See the Maintenance of Traffic and Construction Phasing Plans for details.

All signing and traffic control procedures for work in these locations shall be in accordance with Standard Drawing No. TTC-135.

#### **I-64**

The Contractor shall maintain all existing lanes of traffic with a minimum lane width of twelve (12) feet at all times unless otherwise noted below.

#### **I-264 WESTBOUND**

The Contractor shall maintain all existing lanes of traffic at their existing widths at all times unless otherwise noted.

The Contractor will be allowed to install shoulder closures on I-264 and all approach roads during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

The Contractor will be allowed to install temporary single-lane closures at the discretion of the Engineer during night-time hours only for completion of the tie-ins for Diversion No. 1 and Diversion No. 2. These shall be installed according to Standard Drawing No. TTC-115. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. The following damages will be assessed if lane closures are in place outside of the time prescribed above:

- \$1,000 for the first hour or any portion thereof
- \$30,000 for the second hour or any portion thereof
- \$75,000 for any additional hour or any portion thereof

All liquidated damages will be applied cumulatively.

Temporary lane closures are not to be left in place during hours when no work is being completed in these locations or during non-working hours.

A lane closure shall be defined as any traffic control device or Contractor worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes but is not limited to signs, barricades, barrels, cones, arrow boards, flaggers, Contractor work vehicles, and striping operations.

#### **RAMP 7**

The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 7 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

#### **RAMP 8**

The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

#### **RAMP 1**

The Contractor shall maintain all existing lanes of traffic with a minimum lane width of eleven (11) feet during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 1 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

#### **RAMP 5**

The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

#### **RAMP 6**

The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

#### **PHASE 1 CONSTRUCTION**

1. Construct Diversion No. 1.
2. Construct Diversion No. 2.

#### **PHASE 2 TRAFFIC CONTROL**

During this phase, traffic will be maintained along existing roadways, interchange ramps, and diversions built in the previous phase. See the Maintenance of Traffic and Construction Phasing Plans for details.

#### **I-64**

The Contractor shall maintain all existing lanes of traffic with a minimum lane width of twelve (12) feet at all times unless otherwise noted below. I-64 traffic will need to be shifted onto the existing paved shoulders as shown in the Maintenance of Traffic and Construction Phasing Plans to allow adequate space for pier construction for the Ramp 5 bridge over I-64.

The Contractor will be allowed to install temporary lane closures at the discretion of the Engineer during night-time hours only for completion of bridge construction for the Ramp 5 bridge over I-64. These shall be installed according to Standard Drawing No. TTC-115. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. at the discretion of the Engineer. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. The following damages will be assessed if lane closures are in place outside of the time prescribed above:

- \$1,000 for the first hour or any portion thereof
- \$30,000 for the second hour or any portion thereof
- \$75,000 for any additional hour or any portion thereof

All liquidated damages will be applied cumulatively.

Temporary lane closures are not to be left in place during hours when no work is being completed in these locations or during non-working hours.

A lane closure shall be defined as any traffic control device or Contractor worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes but is not limited to signs, barricades, barrels, cones, arrow boards, flaggers, Contractor work vehicles, and striping operations.

"Rolling roadblocks" are required for the erection of Ramp 5 bridge beams over traffic lanes on I-64. Erection of bridge beams are limited to night-time periods between the hours of 9 p.m. and 5:00am on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000

- Each additional fifteen (15) minutes are an extra \$10,000

Bridge beams must be secured in place at the discretion of the Engineer prior to the Contractor deeming the operation complete and I-64 being fully reopened to traffic. If the Contractor leaves bridge beams that are not secured at the discretion of the Engineer, the above damages will be applied until such time the Engineer agrees that the bridge beams are secured and I-64 can be fully reopened to traffic.

All liquidated damages will be applied cumulatively.

#### **I-264**

The Contractor shall maintain four (4) lanes of traffic with a minimum lane width of twelve (12) feet at all times. I-264 WB traffic will be maintained by shifting traffic on the median shoulder.

For erection of the sign truss and the removal/installation of overhead signs on the existing and proposed sign trusses over traffic lanes, the Contractor will be allowed to utilize a "rolling roadblock" for each proposed sign location. These shall take place during night-time periods between the hours of 9 p.m. and 5:00am on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are in place for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000
- Each additional fifteen (15) minutes are an extra \$10,000

All liquidated damages will be applied cumulatively.

#### **RAMP 7**

The Contractor shall maintain one (1) lane of traffic along Diversion No. 1 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 7 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

#### **RAMP 8**

The Contractor will be allowed to close Ramp 8 for a duration of no more than nine (9) calendar days to complete its construction. The closure shall begin on a Friday at 8 p.m., with work being permitted for nine (9) consecutive full days. Ramp 8 shall be re-opened no later than 5:00am on the second Monday following the closure. The following disincentives will be assessed for any time after 5:00am Monday that Ramp 8 is not open to traffic:

- Up to one (1) hour: \$1,500
- One (1) hour to two (2) hours: \$2,500
- Each additional hour: \$7,500

The full amount per hour will be charged the Contractor for each full hour and portion of an hour after 5:00am.

All liquidated damages will be applied cumulatively.

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of twelve (12) feet during this phase at all times that Ramp 8 is open to traffic.

After completion of Ramp 8 construction within Phase 2, traffic shall be maintained as shown in Phase 3 of the Maintenance of Traffic and Construction Phasing Plans on Ramp 8.

### **RAMP 1**

The Contractor shall maintain one (1) lane of traffic along Diversion No. 2 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 1 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

### **RAMP 5**

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of eleven (11) feet during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 5 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. Shoulder closures will only be allowed in areas indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

To provide maximum space for the Contractor to work, it is the intent that the substructures of Piers 1 and 2 or Piers 2 and 3 may not be constructed concurrently. I-64 lanes shall be shifted as shown in the Maintenance of Traffic and Construction Phasing Plans to maximize space for the Contractor to work on Piers 1 and 3. When sufficient work is completed on Piers 1 and 3 that the Contractor and the Engineer agree that lane shifts are no longer needed for Piers 1 and 3, work may begin on Pier 2 and I-64 traffic shall be shifted as shown in the Maintenance of Traffic and Construction Phasing Plans to maximize space for the Contractor to work on Pier 2.

"Rolling roadblocks" are required for the erection of Ramp 5 bridge beams over traffic lanes on I-64. Erection of bridge beams are limited to night-time periods between the hours of 9 p.m. and 5:00am on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000
- Each additional fifteen (15) minutes are an extra \$10,000

Bridge beams must be secured in place at the discretion of the Engineer prior to the Contractor deeming the operation complete and I-64 being fully reopened to traffic. If the Contractor leaves bridge beams that are not secured at the discretion of the Engineer, the above damages will be applied until such time the Engineer agrees that the bridge beams are secured and I-64 can be fully reopened to traffic.

All liquidated damages will be applied cumulatively.

### **RAMP 6**

The Contractor will be allowed to close Ramp 6 for a duration of no more than thirty (30) calendar days to complete its construction. A disincentive in the amount of \$5,000 per day shall be assessed the Contractor for any time after thirty (30) calendar days that Ramp 6 construction is not complete and is not open to traffic. The full amount per day will be charged the Contractor for each full day and portion of a day after thirty (30) Calendar days has passed.

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of eleven (11) feet during this phase at all times that Ramp 6 is open to traffic.

After completion of Ramp 6 construction within Phase 2, traffic shall be maintained as shown in Phase 3 of the Maintenance of Traffic and Construction Phasing Plans for Ramp 6.

## PHASE 2 CONSTRUCTION

1. Construct widening along I-264 WB in the following areas:
  - Ex. I-264 Sta. 578+56.65 to Ex. I-264 Sta. 606+00.00.
  - Ex. I-264 Sta. 610+25.00 to Ex. I-264 Sta. 624+50.00.
  - Ex. I-264 Sta. 629+13.47 to Ex. I-264 Sta. 648+26.31.
2. Construct Ramp 5 Bridge Widening.
3. Construct Ramp 7.
4. Construct Ramp 8.
5. Construct the right lane of Ramp 1.
6. Construct Ramp 5.
7. Construct Ramp 6.
8. Construct Overhead Sign Truss.
9. Construct Cantilever Sign Truss.

## PHASE 3 TRAFFIC CONTROL

During this phase, traffic will be maintained along existing roadways, interchange ramps, and previous construction. See the Maintenance of Traffic and Construction Phasing Plans for details.

### I-64

The Contractor shall maintain all existing lanes of traffic with a minimum lane width of twelve (12) feet at all times unless otherwise noted below.

### I-264

The Contractor shall maintain four (4) lanes of traffic with a minimum lane width of twelve (12) feet at all times. I-264 WB traffic will be maintained by shifting traffic on the median shoulder.

For the removal/installation of overhead signs on the existing and proposed sign trusses over traffic lanes, the Contractor will be allowed to utilize a "rolling roadblock" for each proposed sign location. These shall take place during night-time periods between the hours of 9 p.m. and 5:00am on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000
- Each additional fifteen (15) minutes are an extra \$10,000

All liquidated damages will be applied cumulatively.

### RAMP 7

The Contractor shall maintain one (1) lane of traffic along previous construction on the right station side of Ramp 7 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 7 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

### **RAMP 8**

The Contractor shall maintain one (1) lane of traffic along previous construction of Ramp 8 with a minimum lane width of twelve (12) feet at all times.

### **RAMP 1**

The Contractor shall maintain one (1) lane of traffic along previous construction on the right lane of Ramp 1 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 1 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

### **RAMP 5**

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of eleven (11) feet during this phase at all times.

For erection of the cantilever sign truss over traffic lanes, the Contractor will be allowed to utilize a "rolling roadblock" for each proposed sign location. These shall take place during night-time periods between the hours of 9 p.m. and 5:00am on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to 30 minutes: \$15,000
- Each additional fifteen (15) minutes are an extra \$10,000

All liquidated damages will be applied cumulatively.

The Contractor will be allowed to install shoulder closures on Ramp 5 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

### **RAMP 6**

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of twelve (12) feet along Ramp 6 during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 6 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

### **BRECKENRIDGE LANE RAMP TO I-264 EB**

After all proposed lighting construction is complete, the Contractor will be allowed to close the ramp from Breckenridge Lane to I-264 EB for the duration of one (1) night to complete the removal of existing light poles on the south side of I-264 EB as indicated on the lighting plans. The closure shall begin at 9 p.m. and shall end the next morning by 5:00am. The following disincentives will be assessed for any time after 5:00am that this ramp is not open to traffic:

- Up to one (1) hour: \$1,500
- One (1) hour to two (2) hours: \$2,500
- Each additional hour: \$7,500

The full amount per hour will be charged the Contractor for each full hour and portion of an hour after 5 a.m.

All liquidated damages will be applied cumulatively.

### **I-264 EB RAMP TO BRECKENRIDGE LANE**

After all proposed lighting construction is complete, the contractor will be allowed to close the outside lane of the ramp from I-264 EB to Breckenridge Lane for the duration of one (1) night to complete the removal of existing light poles on the south side of I-264 EB as indicated on the lighting plans. The closure shall begin at 9 p.m. and shall end the next morning by 5 a.m. The following disincentives will be assessed for any time after 5 a.m. that this ramp is not open to traffic:

- Up to one (1) hour: \$1,500
- One (1) hour to two (2) hours: \$2,500
- Each additional hour: \$7,500

The full amount per hour will be charged the Contractor for each full hour and portion of an hour after 5 a.m.

All liquidated damages will be applied cumulatively.

### **PHASE 3 CONSTRUCTION**

1. Construct widening along I-264 WB in the following areas:
  - Ex. I-264 Sta. 606+00.00 to Ex. I-264 Sta. 610+25.00.
  - Ex. I-264 Sta. 624+50.00 to Ex. I-264 Sta. 630+86.50.
2. Construct the left lane of Ramp 1.
3. Remove existing light poles along Breckenridge Lane Ramp to I-264 EB as noted in the Lighting Plans.
4. Remove existing light poles along ramp from I-264 EB to Breckenridge Lane as noted in the Lighting Plans.

COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159.00	3/23/18

# MAINTENANCE OF TRAFFIC - GENERAL NOTES

### FIXED COMPLETION DATE

Project to have a fixed completion date of November 15, 2019.

The Contractor shall be assessed liquidated damages in the amount of \$3,250 per calendar day after November 15, 2019, until the project is considered complete to the satisfaction of the Engineer. Liquidated damages shall be assessed in accordance with Section 108.09 of the current edition of the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction.

**HOLIDAY / SPECIAL EVENT WORK RESTRICTIONS**

No lane closures or ramp closures will be allowed during the following days and hours unless otherwise directed and / or approved by the Engineer:

Thunder over Louisville - 6 a.m. on April 21, 2018, to 6 a.m. on April 22, 2018; 6 a.m. on April 20, 2019, to 6 a.m. on April 21, 2019

Kentucky Derby - 6 a.m. on May 5, 2018, to 6 a.m. on May 6, 2018; 6 a.m. on May 4, 2019, to 6 a.m. on May 5, 2019

Memorial Day - 6 a.m. on May 28, 2018, to 6 a.m. on May 29, 2018; 6 a.m. on May 27, 2019, to 6 a.m. on May 28, 2019

Labor Day - 6 a.m. on September 3, 2018, to 6 a.m. on September 4, 2018; 6 a.m. on September 2, 2019, to 6 a.m. on September 3, 2019

Veterans Day (observed) - 6 a.m. on November 12, 2018, to 6 a.m. on November 13, 2018; 6 a.m. on November 11, 2019, to 6 a.m. on November 12, 2019

Thanksgiving - 6 a.m. on November 22, 2018, to 6 a.m. on November 23, 2018

Christmas Day - 6 a.m. on December 25, 2018, to 6 a.m. on December 26, 2018

New Year's Day - 6 a.m. on January 1, 2019, to 6 a.m. on January 2, 2019

Martin Luther King Jr. Day - 6 a.m. on January 21, 2019, to 6 a.m. on January 22, 2019

President's Day - 6 a.m. on February 18, 2019, to 6 a.m. on February 19, 2019

### MAINTENANCE OF TRAFFIC AND PHASING PLAN

The maintenance of traffic and construction phasing shall be maintained as shown and specified in these plans unless otherwise approved by the Engineer.

Traffic shall be maintained in accordance with the most current editions of the Manual of Uniform Traffic Control Devices (MUTCD), the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction, and the Kentucky Transportation Cabinet Standard Drawings. All traffic control devices and all materials shall conform to the most current editions of the Manual of Uniform Traffic Control Devices (MUTCD), the Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction, and the Kentucky Transportation Cabinet Standard Drawings.

Except for roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price for 'Maintain and Control Traffic' as set forth in the KYTC Standard Specifications for Road and Bridge Construction, current edition, unless otherwise provided for in the maintenance of traffic plans. The lump sum bid to 'Maintain and Control Traffic' shall also include, but is not limited to the following items and operations:

- All grading and necessary drainage for any temporary pavement and removal thereof when it is no longer needed.
- All temporary ditches and temporary pipes. Also includes any channel lining that may be needed for the temporary ditches and temporary pipe outlets.
- All flag persons and traffic control devices such as, but not limited to, flashers, signs, barricades, vertical panels, plastic drums (steel drums will not be permitted), and cones necessary for the control and protection of vehicular and pedestrian traffic as specified in these notes, the plans, the MUTCD, or by the Engineer.
- If the Contractor desires to deviate from the traffic control scheme and construction phases outlined in these plans and this proposal, he shall prepare an alternate plan and present it in writing to the Engineer. This alternate plan can be used only after review and approval of the Divisions of Traffic, Design, and Construction.
- In general, all traffic control devices shall be placed starting and proceeding in the direction of the flow of traffic and removed starting and proceeding in the direction opposite of the flow of traffic.
- The Engineer and the Contractor or their authorized representatives, shall review the signing before traffic is allowed to use any lane closures, crossovers or detours. All signing shall be approved by the Engineer before work can be started by the Contractor.

### LANE WIDTHS

Minimum lane widths shall be maintained - 12 feet for I-264 WB and Divisions, and 11 feet for all interchange ramps.

### LANE CLOSURES

Lane closures will only be allowed on the existing roadways as indicated on the following sheets. Lane closures shall be in accordance with Standard Drawing TTC-120. See Maintenance of Traffic and Construction Phasing Plan notes and plans for details and allowable locations of lane closures for each Phase.

### SHOULDER CLOSURES

The Contractor will be allowed to close the shoulders of I-264 WB and all interchange ramps to allow for construction. A minimum of four (4) feet of inside useable shoulder width shall be maintained adjacent to the permanent barrier wall along I-264 and a minimum of two (2) feet of outside shoulder shall be maintained adjacent to the temporary barrier wall. Shoulder closures shall be in accordance with Standard Drawing No. TTC-135.

### TRAFFIC STOPPAGE

Traffic on I-264 WB and the interchange ramps, and any other facility adjacent to the project may not be halted without prior approval of the Engineer. This is applicable to all construction activities.

### DRUMS

Drums shall be used for typical lane and shoulder closures except when temporary concrete barrier wall is specified. Drums shall meet all specifications of and be installed in accordance with the most current edition of the MUTCD.

### CONTRACTOR'S VEHICLES

The Contractor's vehicles shall always move with and not against the flow of traffic. Vehicles shall enter and leave the work areas in a manner which will not be hazardous to or interfere with normal traffic. Vehicles shall not park or stop except within work areas designated by the Engineer.

### PAVEMENT EDGE DROP OFF

A pavement edge that traffic is not expected to cross, except accidentally, should be treated as follows:  
Less than 2 inches - No protection required. Warning signs should be placed in advance and throughout the drop-off area.

### 2 to 4 inches

- Place plastic drums, vertical panels, or barricades every 50 feet on tangent sections and curves. Spacing for tapers should be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), current edition.

### Greater than 4 inches

- Positive separation with 3:1 or flatter slope is needed. If there is 8 feet or more distance between the edge of pavement and drop-off, then drums, panels, or barricades may be used. If concrete barriers are used, then special reflective devices or steady burn lights shall be used for overnight installations.

### For temporary conditions

drop-offs greater than 4 inches may be protected with plastic drums, vertical panels, or barricades for short distances during daylight hours while work is being done in the drop-off area.

### Payment will be allowed for DGA material used for wedding.

MAINTENANCE OF TRAFFIC  
GENERAL NOTES



COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159.00	4/20/11

# MAINTENANCE OF TRAFFIC - PHASING NOTES

**PHASE 1 TRAFFIC CONTROL**  
During this phase, traffic will be maintained along existing roadways and interchange ramps as detailed below. See the Maintenance of Traffic and Construction Phasing Plans for details.

All signing and traffic control procedures for work in these locations shall be in accordance with Standard Drawing No. TTC-135.

**I-64**  
The Contractor shall maintain all existing lanes of traffic with a minimum lane width of twelve (12) feet at all times unless otherwise noted below.

**I-264 WESTBOUND**  
The Contractor shall maintain all existing lanes of traffic at their existing widths at all times unless otherwise noted.

The Contractor will be allowed to install shoulder closures on I-264 and all approach roads during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

The Contractor will be allowed to install temporary single-lane closures at the discretion of the Engineer during night-time hours only for completion of the tie-ins for Diversion No. 1 and Diversion No. 2. These shall be installed according to Standard Drawing No. TTC-115. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. The following damages will be assessed if lane closures are in place outside of the time prescribed above:

- \$10,000 for the first hour or any portion thereof
- \$30,000 for the second hour or any portion thereof
- \$15,000 for any additional hour or any portion thereof

All liquidated damages will be applied cumulatively.

Temporary lane closures are not to be left in place during hours when no work is being completed in these locations or during non-working hours.

A lane closure shall be defined as any traffic control device or Contractor worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes but is not limited to signs, barricades, barrels, cones, arrow boards, flaggers, Contractor work vehicles, and striping operations.

**RAMP 7**  
The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 7 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**RAMP 8**  
The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

**RAMP 1**  
The Contractor shall maintain all existing lanes of traffic with a minimum lane width of eleven (11) feet during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 1 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**RAMP 5**  
The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

**RAMP 6**  
The Contractor shall maintain all existing lanes of traffic at their existing lane widths during this phase at all times.

**PHASE 1 CONSTRUCTION**  
1. Construct Diversion No. 1.  
2. Construct Diversion No. 2.

**PHASE 2 TRAFFIC CONTROL**  
During this phase, traffic will be maintained along existing roadways, interchange ramps, and diversions built in the previous phase. See the Maintenance of Traffic and Construction Phasing Plans for details.

**I-64**  
The Contractor shall maintain all existing lanes of traffic with a minimum lane width of twelve (12) feet at all times unless otherwise noted below. I-64 traffic will need to be shifted onto the existing paved shoulders as shown in the Maintenance of Traffic and Construction Phasing Plans to allow adequate space for pier construction for the Ramp 5 bridge over I-64.

The Contractor will be allowed to install temporary lane closures at the discretion of the Engineer during night-time hours only for completion of bridge construction for the Ramp 5 bridge over I-64. These shall be installed according to Standard Drawing No. TTC-115. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. at the discretion of the Engineer. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. The following damages will be assessed if lane closures are in place outside of the time prescribed above:

- \$10,000 for the first hour or any portion thereof
- \$30,000 for the second hour or any portion thereof
- \$15,000 for any additional hour or any portion thereof

All liquidated damages will be applied cumulatively.

Temporary lane closures are not to be left in place during hours when no work is being completed in these locations or during non-working hours.

A lane closure shall be defined as any traffic control device or Contractor worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes but is not limited to signs, barricades, barrels, cones, arrow boards, flaggers, Contractor work vehicles, and striping operations.

\*Rolling roadblocks\* are required for the erection of Ramp 5 bridge beams over traffic lanes on I-64. Erection of bridge beams are limited to night-time periods between the hours of 9 p.m. and 5 a.m. on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000
- Each additional fifteen (15) minutes are an extra \$10,000

Bridge beams must be secured in place at the discretion of the Engineer prior to the Contractor deeming the operation complete and I-64 being fully reopened to traffic. If the Contractor leaves bridge beams that are not secured at the discretion of the Engineer, the above damages will be applied until such time the Engineer agrees that the bridge beams are secured and I-64 can be fully reopened to traffic.

All liquidated damages will be applied cumulatively.

**I-264**  
The Contractor shall maintain four (4) lanes of traffic with a minimum lane width of twelve (12) feet at all times. I-264 NB Traffic will be maintained by shifting traffic on the median shoulder.

For erection of the sign trusses and the removal/installation of overhead signs on the existing and proposed sign trusses over traffic lanes, the Contractor will be allowed to utilize a "rolling roadblock" for each proposed sign location. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are in place for longer than ten (10) minutes:

- Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000
- Each additional fifteen (15) minutes are an extra \$10,000

All liquidated damages will be applied cumulatively.

**RAMP 7**  
The Contractor shall maintain one (1) lane of traffic along Diversion No. 1 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 7 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**RAMP 8**  
The Contractor will be allowed to close Ramp 8 for a duration of no more than nine (9) calendar days to complete its construction. The closure shall begin on a Friday at 9 p.m. All work being permitted for nine (9) consecutive full days of 9 p.m. shall be permitted to take place on the second Monday following the closure. The following damages will be assessed for any time after 5 a.m. Monday that Ramp 8 is not open to traffic:

- One (1) hour to one (1) hour: \$1,500
- One (1) hour to two (2) hours: \$2,500
- Each additional hour: \$7,500

The full amount per hour will be charged the Contractor for each full hour and portion of an hour after 5 a.m.

All liquidated damages will be applied cumulatively.

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of twelve (12) feet during this phase at all times that Ramp 8 is open to traffic.

After completion of Ramp 8 construction within Phase 2, traffic shall be maintained as shown in Phase 3 of the Maintenance of Traffic and Construction Phasing Plans on Ramp 8.

**RAMP 1**  
The Contractor shall maintain one (1) lane of traffic along Diversion No. 2 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 1 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

MAINTENANCE OF TRAFFIC PHASING NOTES

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

# MAINTENANCE OF TRAFFIC - PHASING NOTES

**RAMP 5 (CONTINUED)**  
 than ten (10) minutes;  
 - For a closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000  
 - Each additional fifteen (15) minutes are an extra \$10,000

All liquidated damages will be applied cumulatively.  
 The Contractor will be allowed to install shoulder closures on Ramp 5 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**RAMP 6**  
 The Contractor shall maintain one (1) lane of traffic with a minimum lane width of twelve (12) feet along Ramp 6 during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 6 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**BRECKENRIDGE LANE RAMP TO I-264 EB**  
 After all proposed lighting construction is complete, the Contractor will be allowed to close the ramp from Breckenridge Lane to I-264 EB for the duration of one (1) night to complete the removal of existing light poles on the south side of I-264 EB as indicated on the lighting plans. The closure shall begin at 9 p.m. and shall end the next morning by 5 a.m. The following disincentives will be assessed for any time after 5 a.m. that this ramp is not open to traffic:  
 - Up to one (1) hour: \$1,500  
 - One (1) hour to two (2) hours: \$2,500  
 - Each additional hour: \$1,500

The full amount per hour will be charged the Contractor for each full hour and portion of an hour after 5 a.m.  
 All liquidated damages will be applied cumulatively.

**I-264 EB RAMP TO BRECKENRIDGE LANE**  
 After all proposed lighting construction is complete, the contractor will be allowed to close the outside lane of the ramp from I-264 EB to Breckenridge Lane for the duration of one (1) night to complete the removal of existing light poles on the south side of I-264 EB as indicated on the lighting plans. The closure shall begin at 9 p.m. and shall end the next morning by 5 a.m. The following disincentives will be assessed for any time after 5 a.m. that this ramp is not open to traffic:  
 - Up to one (1) hour: \$1,500  
 - One (1) hour to two (2) hours: \$2,500  
 - Each additional hour: \$1,500

The full amount per hour will be charged the Contractor for each full hour and portion of an hour after 5 a.m.  
 All liquidated damages will be applied cumulatively.

**PHASE 3 CONSTRUCTION**  
 1. Construct widening along I-264 WB in the following areas:  
 - Ex. I-264 Sta. 606+00.00 To Ex. I-264 Sta. 610+25.00.  
 - Ex. I-264 Sta. 624+50.00 To Ex. I-264 Sta. 630+86.50.  
 2. Construct the left lane of Ramp 1.  
 3. Construct existing light poles along Breckenridge Lane Ramp to I-264 EB as noted in the Lighting Plans.  
 4. Remove existing light poles along ramp from I-264 EB to Breckenridge Lane as noted in the Lighting Plans.

**PHASE 3 TRAFFIC CONTROL**  
 During this phase, traffic will be maintained along existing roadways, inter-change ramps, and previous construction. See the Maintenance of Traffic and Construction Phasing Plans for details.

**I-64**  
 The Contractor shall maintain all existing lanes of traffic with a minimum lane width of twelve (12) feet at all times unless otherwise noted below.

**I-264**  
 The Contractor shall maintain four (4) lanes of traffic with a minimum lane width of twelve (12) feet at all times. I-264 WB traffic will be maintained by shifting traffic on the median shoulder.

For the removal/installation of overhead signs on the existing and proposed sign trusses over traffic lanes, the Contractor will be allowed to utilize a "rolling roadblock" for each proposed sign location. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:  
 - Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000  
 - Each additional fifteen (15) minutes are an extra \$10,000

All liquidated damages will be applied cumulatively.  
**RAMP 7**  
 The Contractor shall maintain one (1) lane of traffic along previous construction on the right station side of Ramp 7 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 7 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**RAMP 8**  
 The Contractor shall maintain one (1) lane of traffic along previous construction of Ramp 8 with a minimum lane width of twelve (12) feet at all times.

**RAMP 1**  
 The Contractor shall maintain one (1) lane of traffic along previous construction on the right lane of Ramp 1 with a minimum lane width of twelve (12) feet at all times.

The Contractor will be allowed to install shoulder closures on Ramp 1 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. The shoulder closures will only be allowed in those areas as indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

**RAMP 5**  
 The Contractor shall maintain one (1) lane of traffic with a minimum lane width of eleven (11) feet during this phase at all times.

For erection of the cantilever sign truss over traffic lanes, the Contractor will be allowed to utilize a "rolling roadblock" for each proposed sign location. These shall take place during night-time periods between the hours of 9 p.m. and 5 a.m. on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer

**RAMP 5**  
 The Contractor shall maintain one (1) lane of traffic with a minimum lane width of eleven (11) feet during this phase at all times.

The Contractor will be allowed to install shoulder closures on Ramp 5 during this phase. Shoulder closures shall be installed according to Standard Drawing No. TTC-135. Shoulder closures will only be allowed in those areas indicated on the Maintenance of Traffic and Construction Phasing Plans where construction occurs adjacent to the travel way.

To provide maximum space for the Contractor to work, it is the intent that the substructures of Piers 1 and 2 or Piers 2 and 3 may not be constructed concurrently. I-64 lanes shall be shifted as shown in the Maintenance of Traffic and Construction Phasing Plans to maximize space for the Contractor to work on Piers 1 and 3. When sufficient work is completed on Piers 1 and 3 that the Contractor and the Engineer agree that lane shifts are no longer needed for Piers 1 and 3, work may begin on Pier 2 and I-64 traffic shall be shifted as shown in the Maintenance of Traffic and Construction Phasing Plans to maximize space for the Contractor to work on Pier 2.

'Rolling roadblocks' are required for the erection of Ramp 5 bridge beams over traffic lanes on I-64. Erection of bridge beams are limited to night-time periods between the hours of 9 p.m. and 5 a.m. on a Friday night / Saturday morning or Saturday night / Sunday morning. The Engineer shall be notified by the Contractor at least three (3) days in advance of the date the Contractor expects to begin this construction. It is the intent that road closures be held to a maximum of ten (10) minutes, once per hour unless prior approval is granted by the Engineer. The following damages will be assessed if road closures are kept for longer than ten (10) minutes:  
 - Total closure exceeds ten (10) minutes up to thirty (30) minutes: \$15,000  
 - Each additional fifteen (15) minutes are an extra \$10,000

Bridge beams must be secured in place at the discretion of the Engineer prior to the Contractor ceasing the operation complete and I-64 being fully reopened to traffic. If the Contractor reserves bridge beams that are not needed at the discretion of the Engineer, the Contractor will be allowed to apply until such time the Engineer orders that the bridge beams are secured and I-64 can be fully reopened to traffic.  
 All liquidated damages will be applied cumulatively.

**RAMP 6**  
 The Contractor will be allowed to close Ramp 6 for a duration of no more than thirty (30) calendar days to complete its construction. A disincentive in the amount of \$5,000 per day shall be assessed the Contractor for any time after thirty (30) calendar days that Ramp 6 construction is not complete and is not open to traffic. The full amount per day will be charged the Contractor for each full day and portion of a day after thirty (30) calendar days has passed.

The Contractor shall maintain one (1) lane of traffic with a minimum lane width of eleven (11) feet during this phase at all times that Ramp 6 is open to traffic.

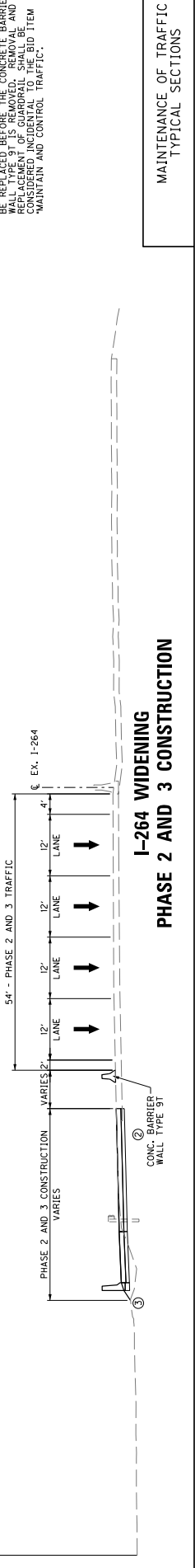
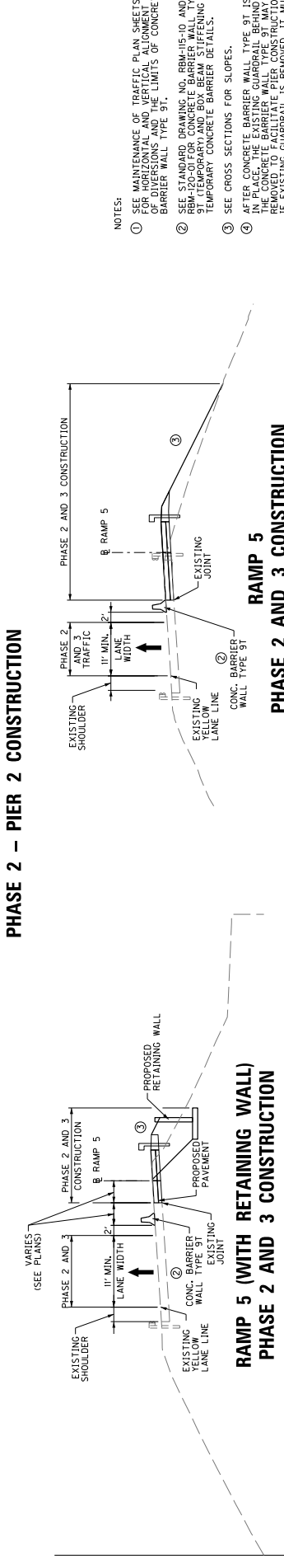
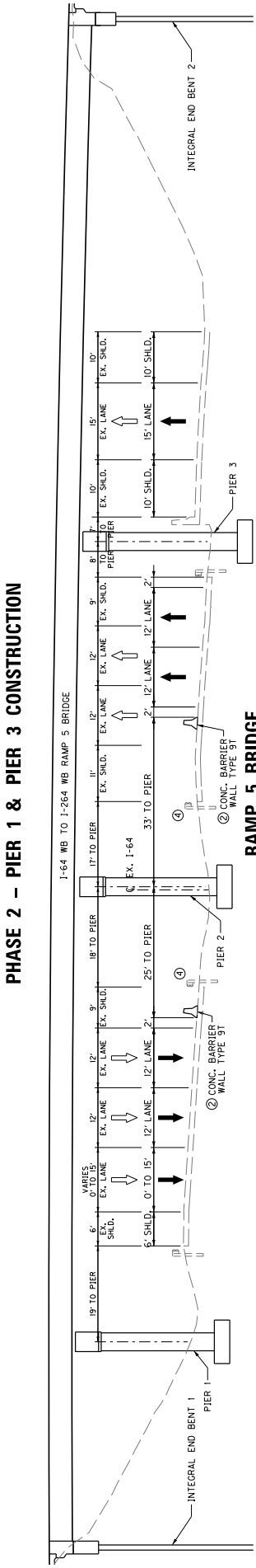
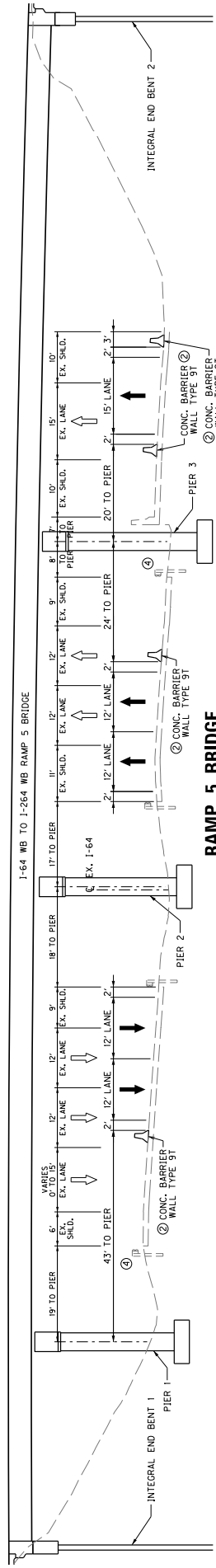
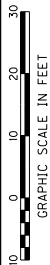
After completion of Ramp 6 construction within Phase 2, traffic shall be maintained as shown in Phase 3 of the Maintenance of Traffic and Construction Phasing Plans for Ramp 6.

**PHASE 2 CONSTRUCTION**  
 1. Construct widening along I-264 WB in the following areas:  
 - Ex. I-264 Sta. 578+56.65 To Ex. I-264 Sta. 606+00.00.  
 - Ex. I-264 Sta. 610+25.00 To Ex. I-264 Sta. 624+50.00.  
 - Ex. I-264 Sta. 629+13.47 To Ex. I-264 Sta. 648+26.31.  
 2. Construct Ramp 5 Bridge Widening.  
 3. Construct Ramp 7.  
 4. Construct Ramp 8.  
 5. Construct the right lane of Ramp 1.  
 6. Construct Ramp 6.  
 7. Construct Overhead Sign Truss.  
 8. Construct Cantilever Sign Truss.

MAINTENANCE OF TRAFFIC PHASING NOTES

# MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

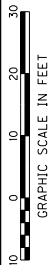


- NOTES:
- SEE MAINTENANCE OF TRAFFIC PLAN SHEETS FOR THE LIMITS OF CONSTRUCTION OF DIVERSIONS AND THE LIMITS OF CONCRETE BARRIER WALL TYPE 9T.
  - SEE STANDARD DRAWING NO. RBM-105-10 AND RBM-120-01 FOR CONCRETE BARRIER WALL TYPE 9T TEMPORARY AND BOX BEAM STIFFENING OF TEMPORARY CONCRETE BARRIER DETAILS.
  - SEE CROSS SECTIONS FOR SLOPES.
  - AFTER CONCRETE BARRIER WALL TYPE 9T IS IN PLACE, THE EXISTING GUARDRAIL BEHIND IT SHOULD BE REMOVED TO FACILITATE PIER CONSTRUCTION. IF EXISTING GUARDRAIL IS REMOVED, IT MUST BE REINSTALLED BEFORE THE CONCRETE BARRIER IS REPLACED. THE GUARDRAIL SHALL BE REPLACED INCIDENTAL TO THE BID ITEM "MAINTAIN AND CONTROL TRAFFIC".

MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS

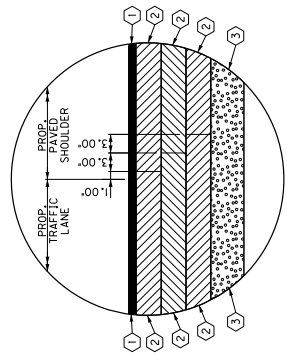
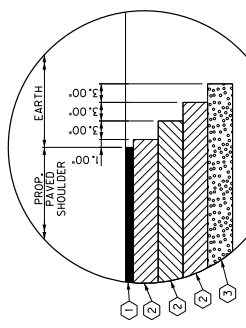
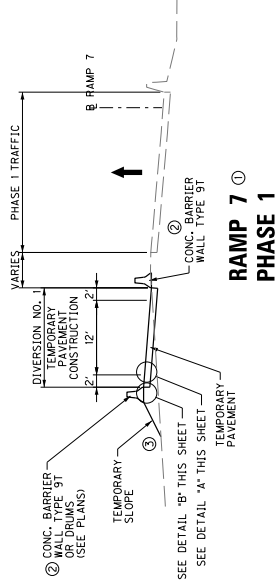
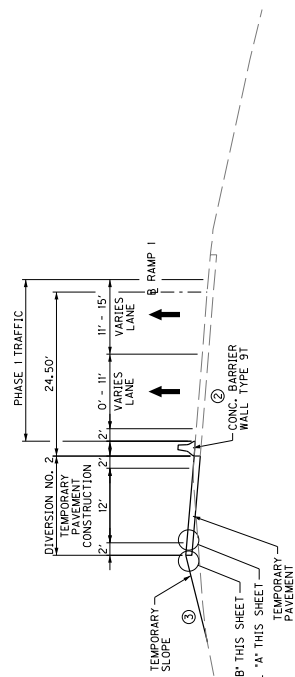
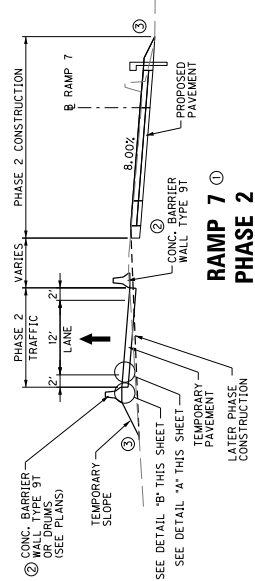
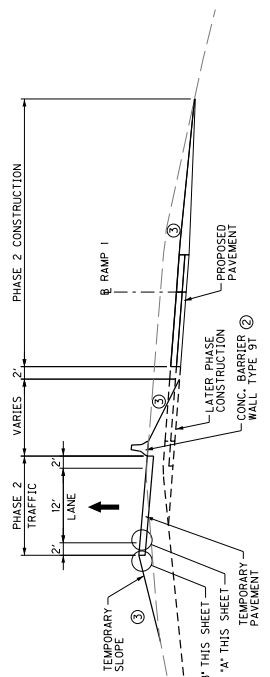
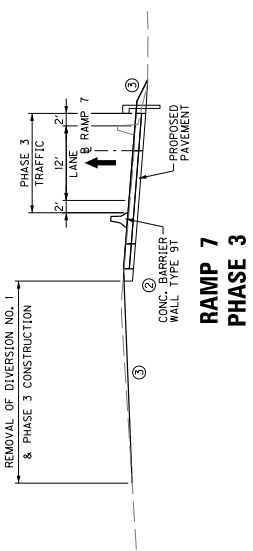
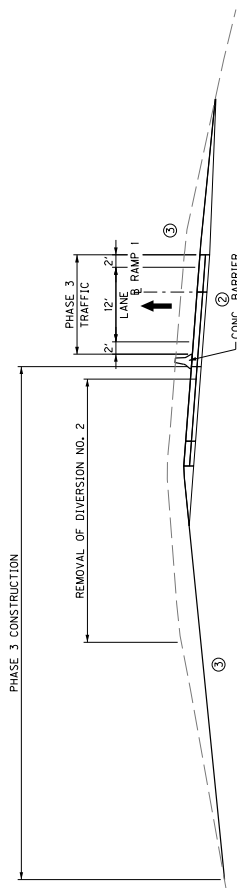
COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

# MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS



**NOTES:**

- ① SEE MAINTENANCE OF TRAFFIC PLAN SHEETS FOR VERTICAL ALIGNMENT, DIVERSIONS AND THE LIMITS OF CONCRETE BARRIER WALL TYPE 9T.
- ② SEE STANDARD DRAWING NO. RBM-115-10 AND RBM-120-01 FOR CONCRETE BARRIER WALL TYPE 9T AND THE FINISHING OF TEMPORARY CONCRETE BARRIER DETAILS.
- ③ SEE CROSS SECTIONS FOR SLOPES.

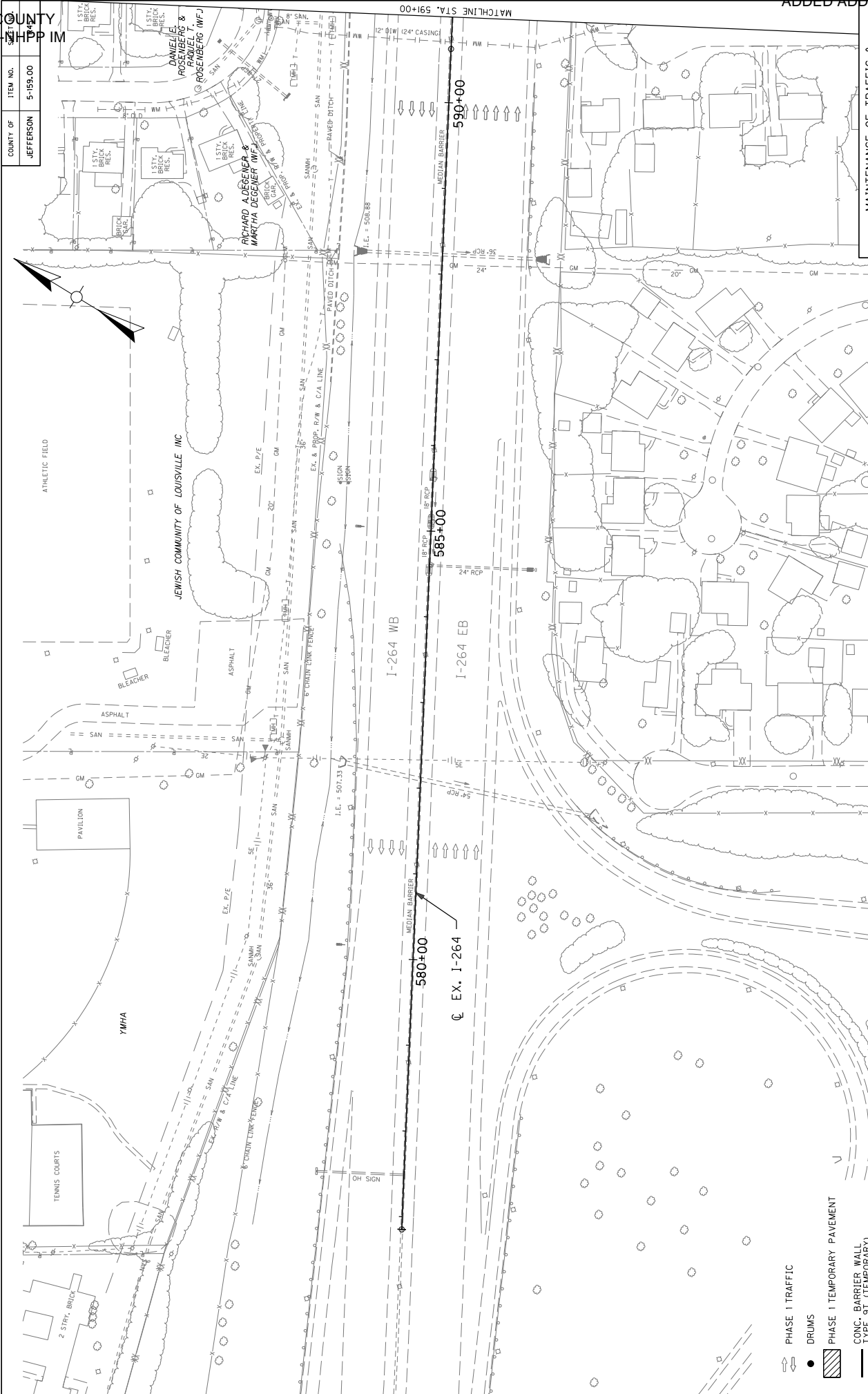
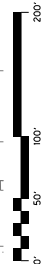


MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS



MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 1

SCALE: 1"=50'



- PHASE 1 TRAFFIC
- DRUMS
- PHASE 1 TEMPORARY PAVEMENT
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)
- TYPE 3 BARRICADE

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

DATE PLOTTED: FEBRUARY 25, 2018

E-SHEET NAME:

MicroStation V8.11.9.655

USDT Ricem

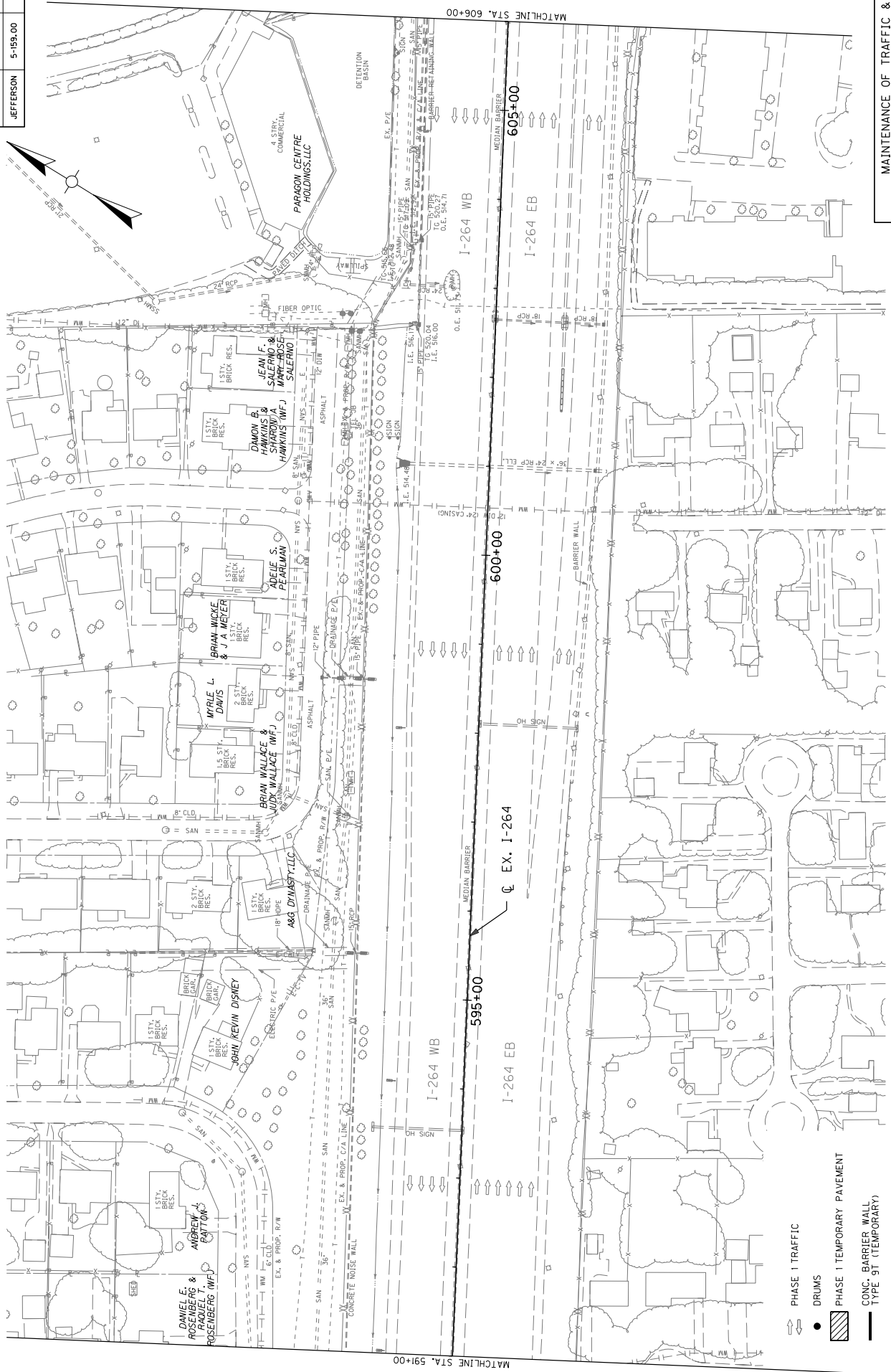
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MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 1

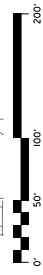
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JEFFERSON COUNTY  
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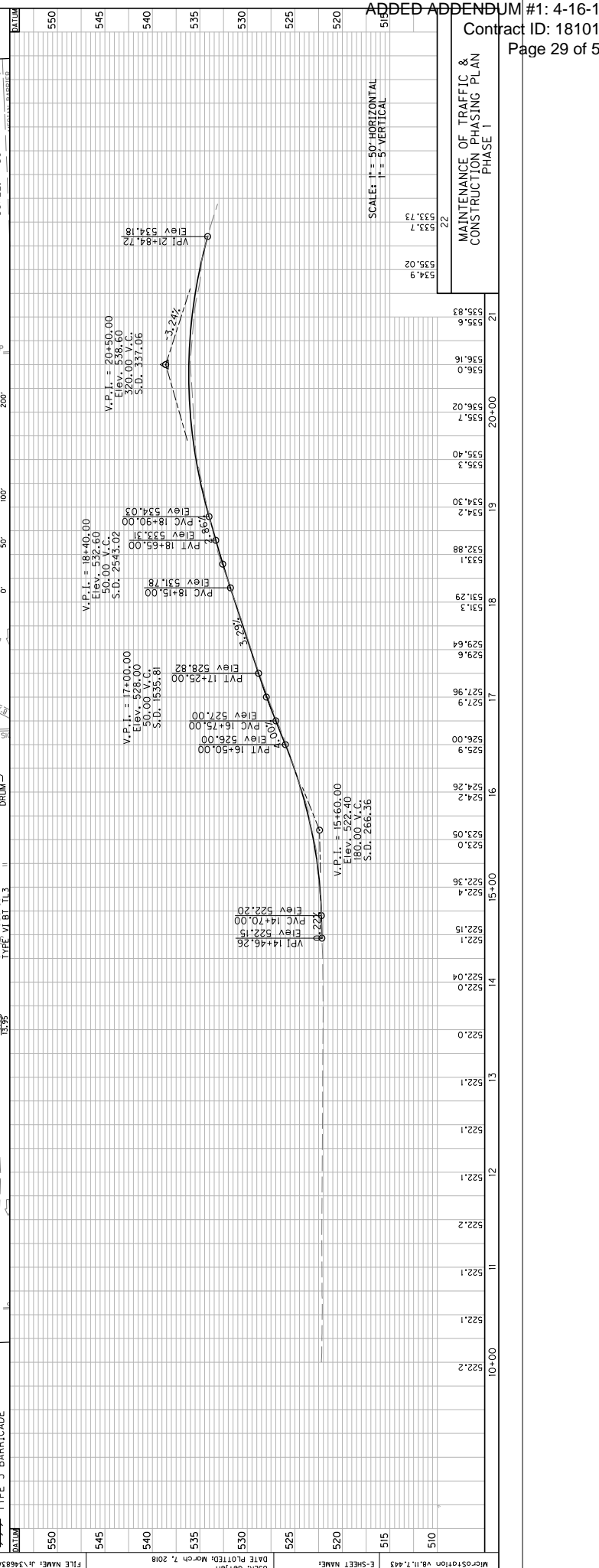
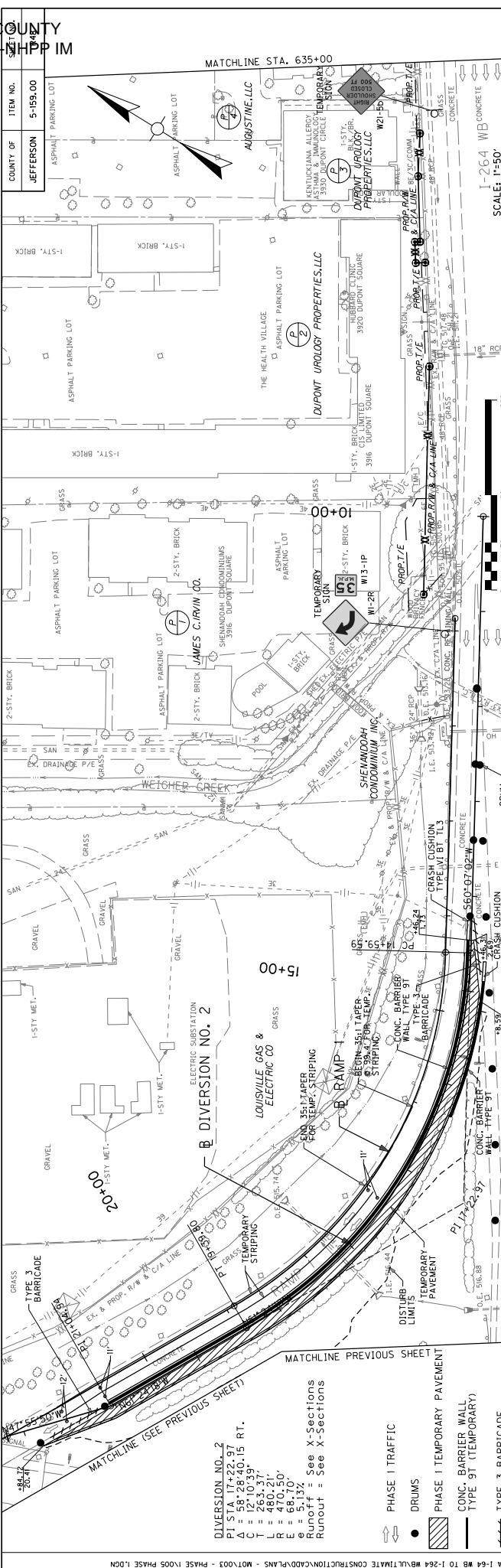
COUNTY OF	ITEM NO.
JEFFERSON	5-159.00



- PHASE 1 TRAFFIC
- DRUMS
- PHASE 1 TEMPORARY PAVEMENT
- CONC. BARRIER WALL
- TYPE 3T (TEMPORARY)
- TYPE 3 BARRICADE







MicroStation v8.11.7.443 E-SHEET NAME: DATE PLOTTED: March 7, 2018 USFR: Jefferson FILE NAME: J:\6383A\1-64 WB TO 1-264 WB\PLATE CONSTRUCTION\CAD\PLANS - MOT\03 - PHASE 1\05 PHASE 1.DWG

**DIVERSION NO. 2**  
 P.I. STA. 17+23.97  
 Δ = 58° 28' 40.15" RT.  
 C = 12' 10.39"  
 T = 263.37'  
 L = 460.21'  
 E = 687.0'  
 φ = 5.13%  
 Runoff = See X-Sections  
 Runoff = See X-Sections

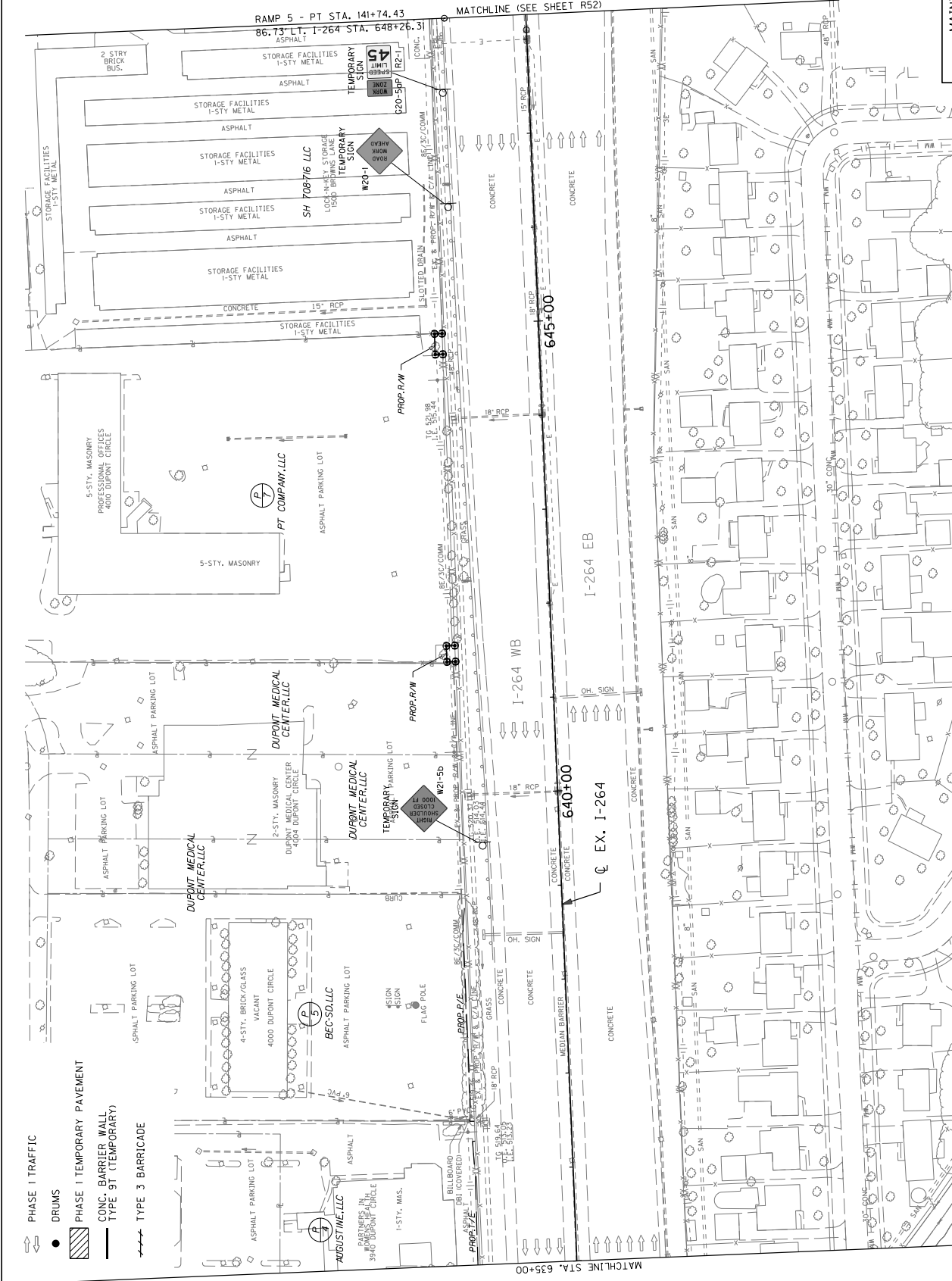
PHASE 1 TRAFFIC  
 DRUMS  
 PHASE 1 TEMPORARY PAVEMENT  
 CONC. BARRIER WALL TYPE 9T (TEMPORARY)  
 TYPE 3 BARRICADE

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 1

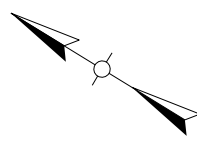
ITEM NO.	COUNTY OF	SCALE: 1" = 50'
5-159.00	JEFFERSON	550
ASPHALT PAVING LOT		545
		540
		535
		530
		525
		520
		515
		510

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 1

SCALE: 1"=50'



COUNTY OF	ITEM NO.	DESCRIPTION
JEFFERSON	5-159.00	PHASE 1

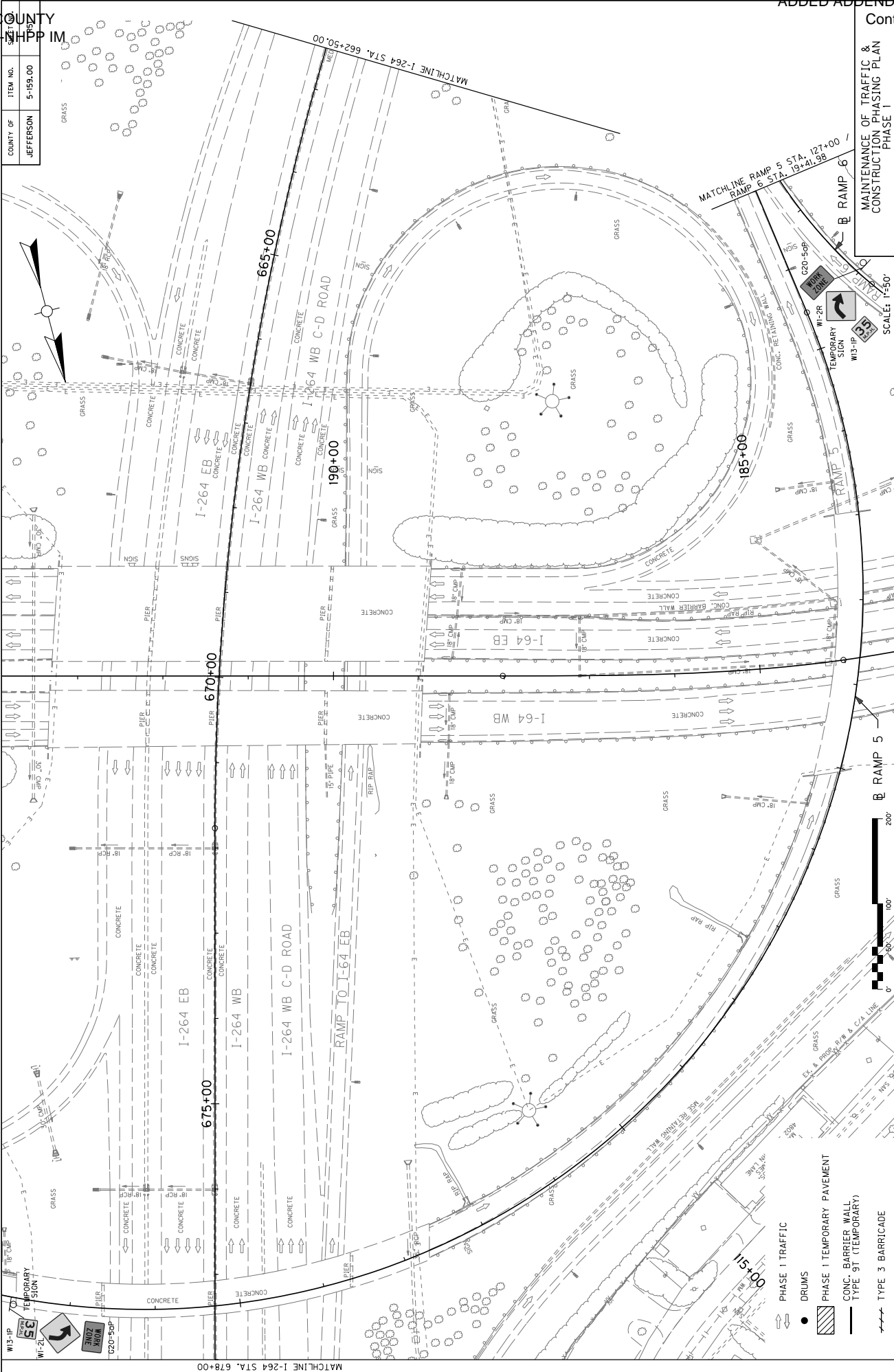


- PHASE 1 TRAFFIC
- DRUMS
- PHASE 1 TEMPORARY PAVEMENT
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)
- TYPE 3 BARRICADE



MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 1

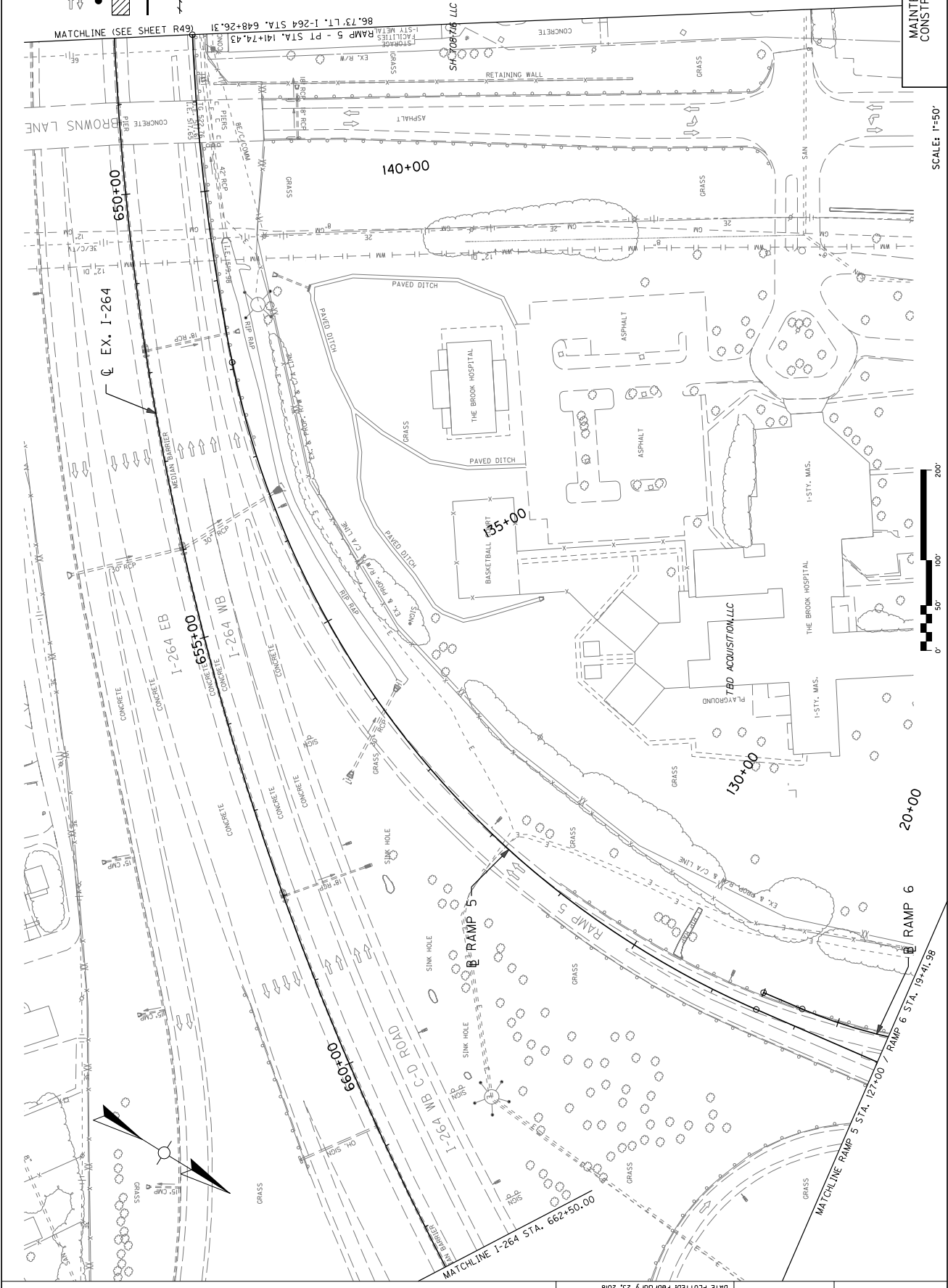
SCALE: 1"=50'



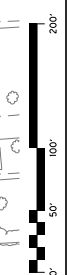
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
5-159.00			

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

- PHASE 1 TRAFFIC
- DRUMS
- PHASE 1 TEMPORARY PAVEMENT
- CONC. BARRIER WALL
- TYPE 9T (TEMPORARY)
- TYPE 3 BARRIADADE

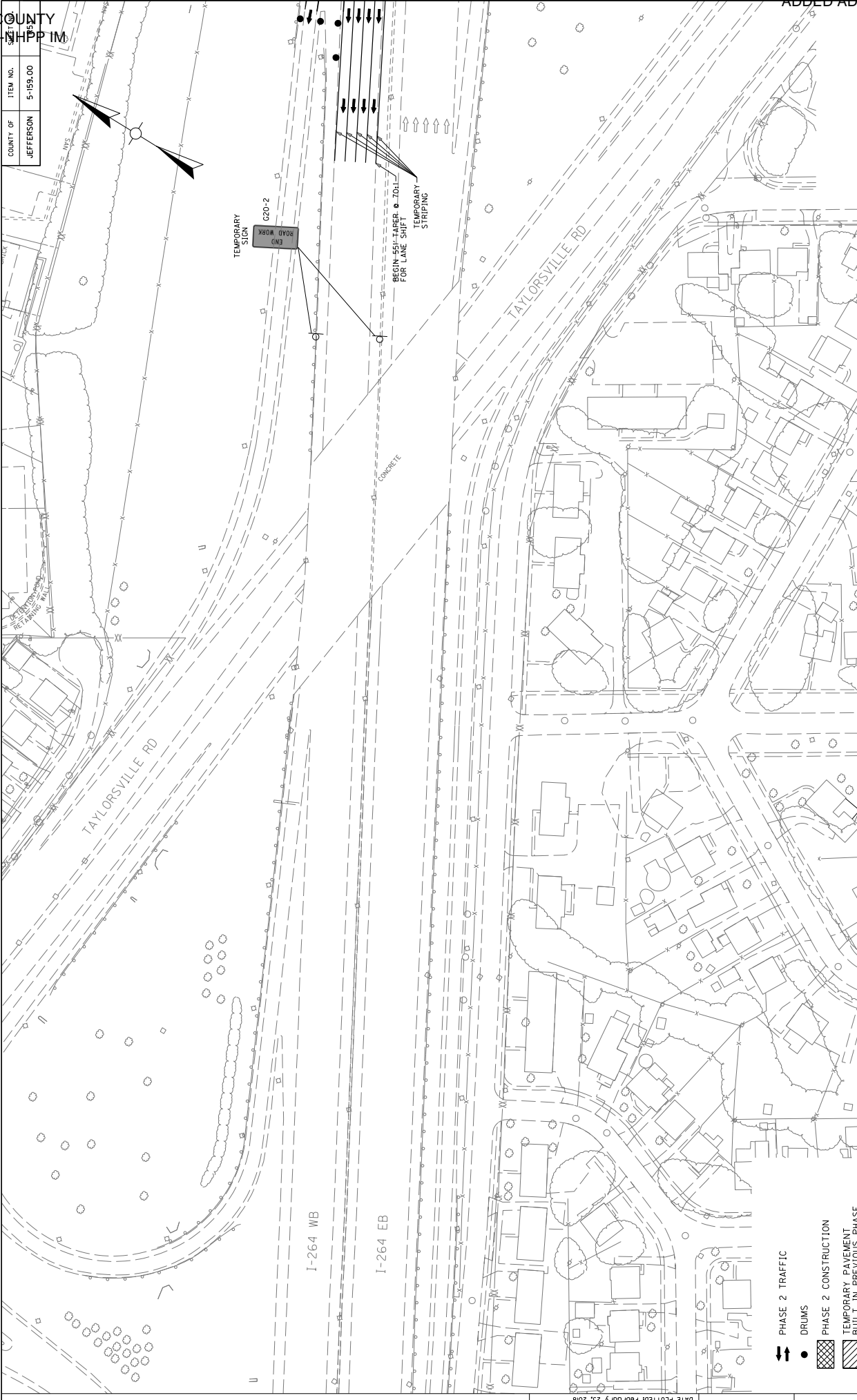


SCALE: 1"=50'



MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

SCALE: 1"=50'

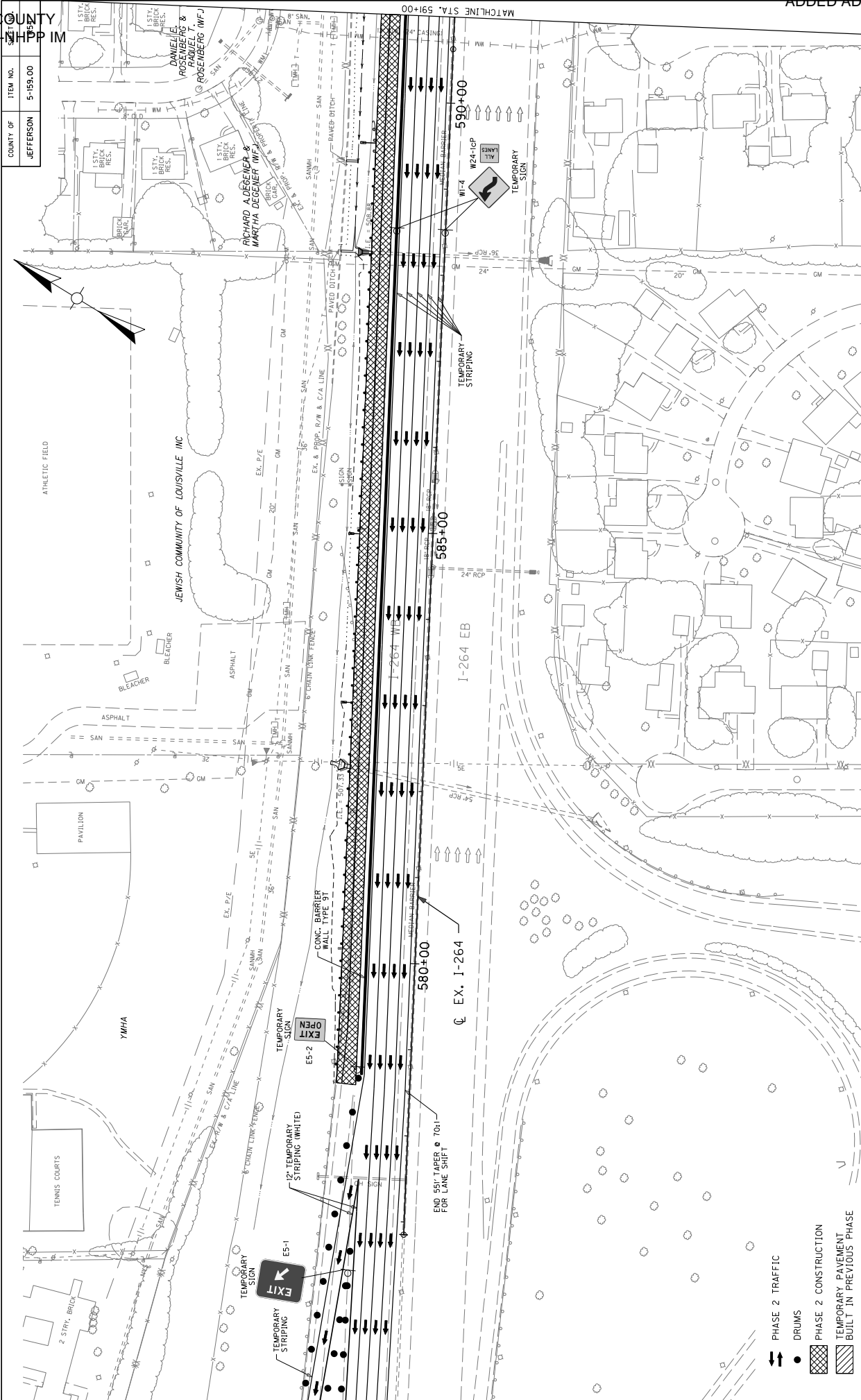


COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159.00	1/15/18

JEFFERSON COUNTY  
056GR18D011-NHPP IM

- PHASE 2 TRAFFIC
- DRUMS
- PHASE 2 CONSTRUCTION
- TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00



MAINTENANCE OF TRAFFIC &  
CONSTRUCTION PHASING PLAN  
PHASE 2

SCALE: 1"=50'



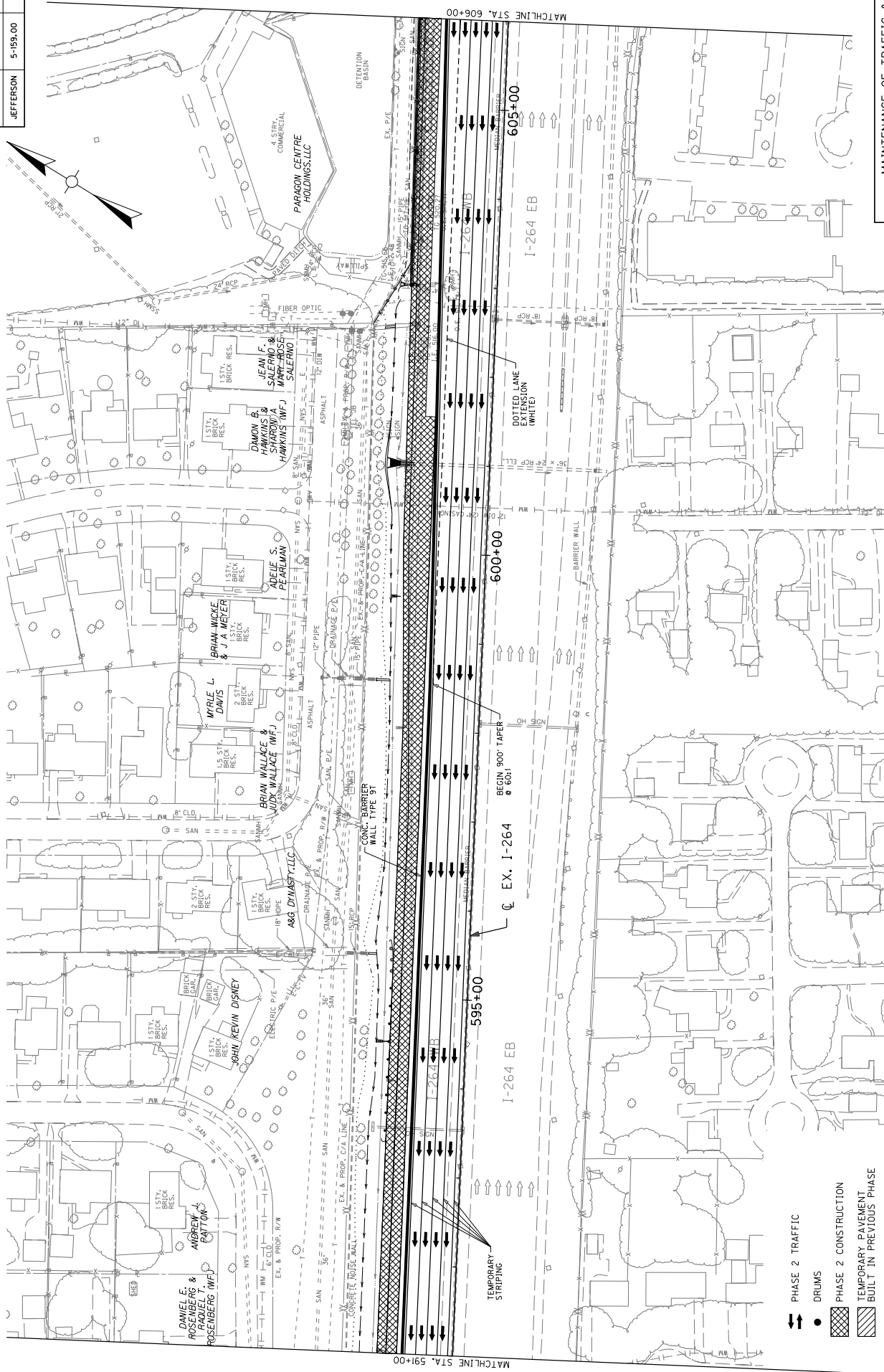
- PHASE 2 TRAFFIC
- DRUMS
- PHASE 2 CONSTRUCTION
- TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE
- CONC. BARRIER WALL TYPE 91 (TEMPORARY)

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

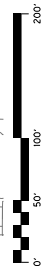
SCALE: 1"=50'

JEFFERSON COUNTY  
056GR18D011-NHPP IM

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00



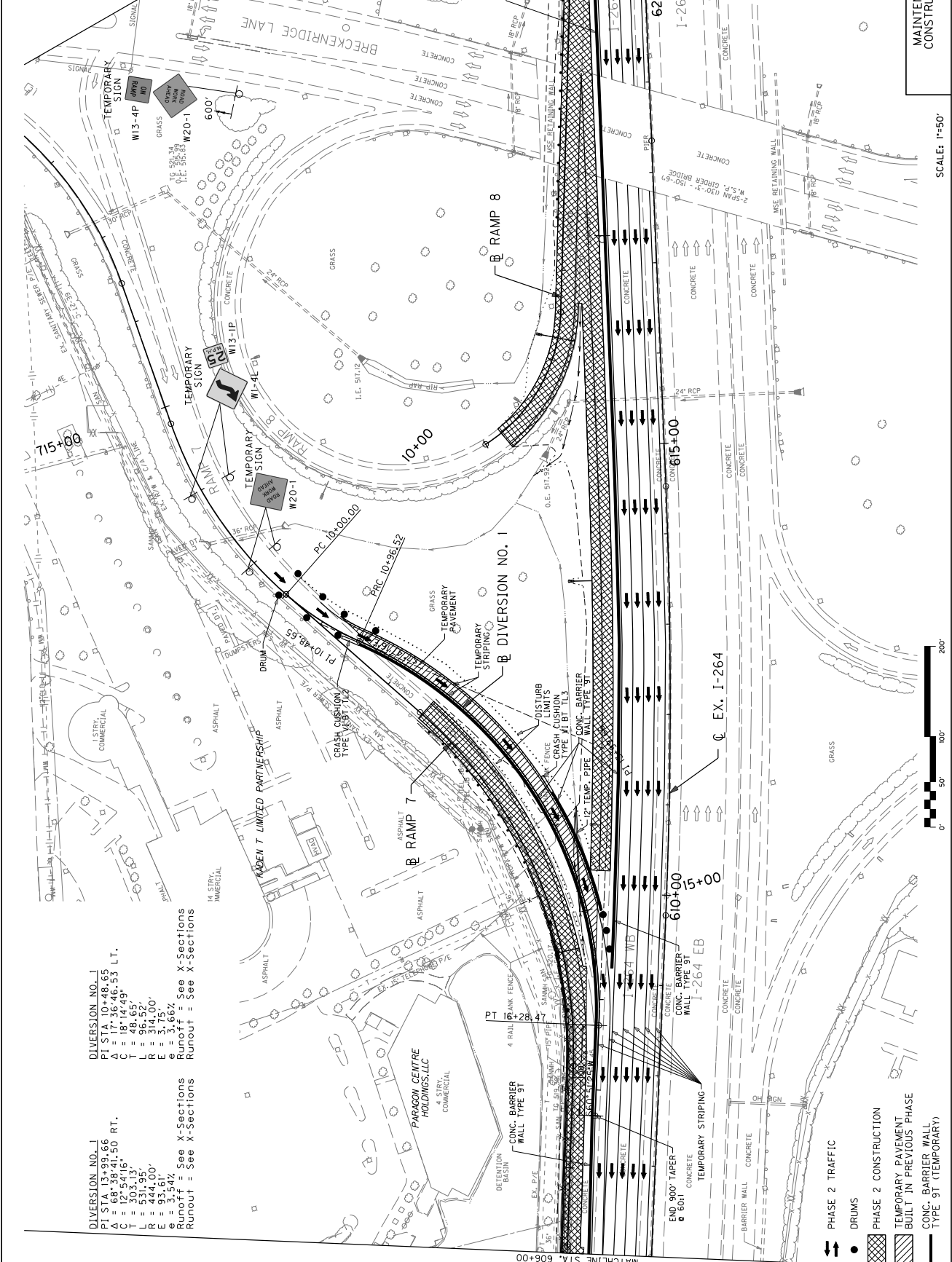
- PHASE 2 TRAFFIC
- DRUMS
- PHASE 2 CONSTRUCTION
- TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)



MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

SCALE: 1"=50'

COUNT OF	ITEM NO.	DESCRIPTION
JEFFERSON	5-159.00	

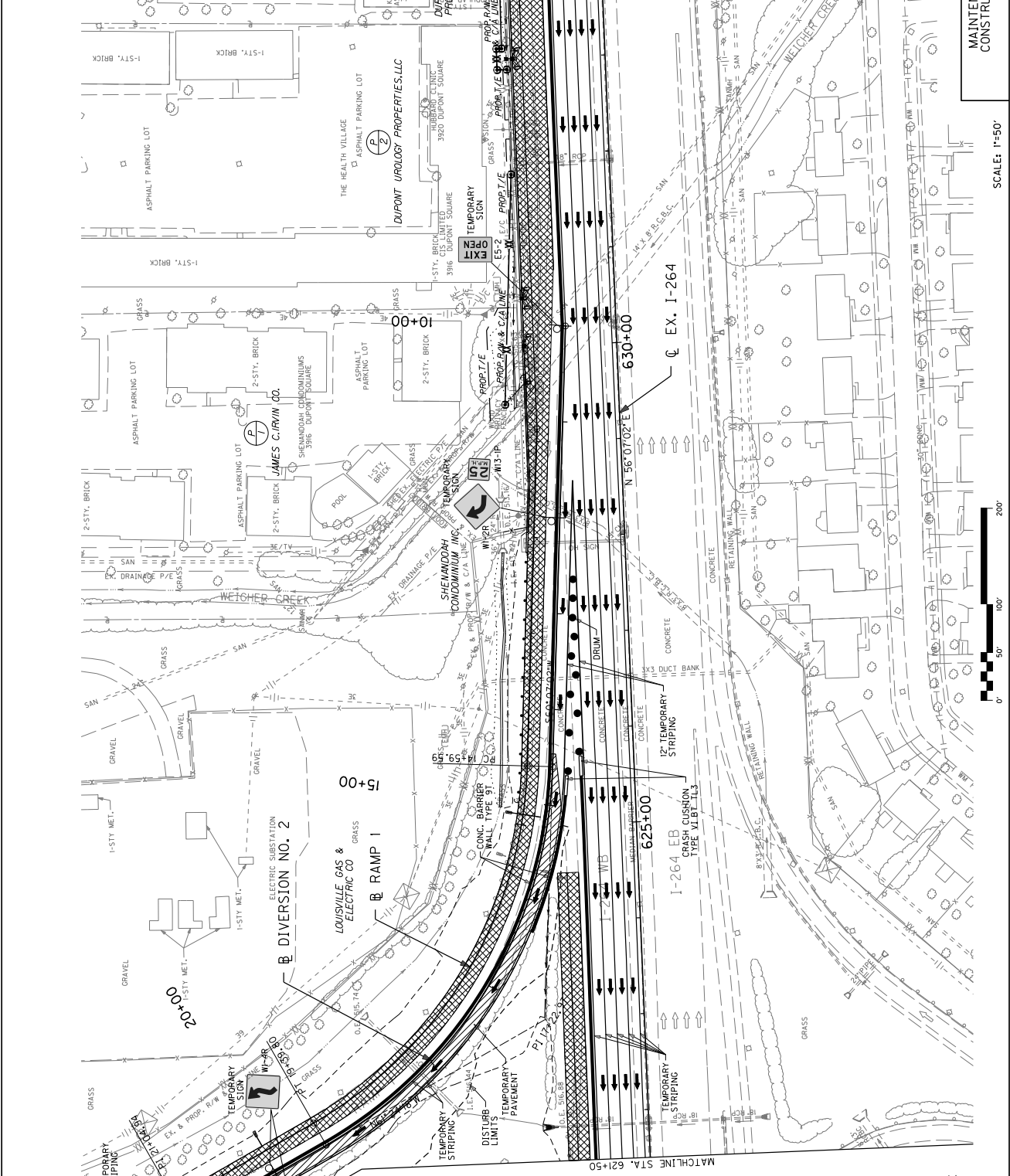


**DIVERSION NO. 1**  
 P = 68.39+4.30 RT.  
 L = 12.54+16.30 RT.  
 C = 303.13'  
 T = 531.95'  
 E = 644.00'  
 e = 3.54%  
 Runoff = See X-Sections  
 Runout = See X-Sections

**DIVERSION NO. 1**  
 P = 17.30+46.55  
 L = 18.14+49.55 LT.  
 C = 48.65'  
 T = 96.52'  
 E = 314.00'  
 e = 3.66%  
 Runoff = See X-Sections  
 Runout = See X-Sections

- PHASE 2 TRAFFIC
- DRUMS
- PHASE 2 CONSTRUCTION
- TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00



DIVERSION NO. 2  
 PI STA = 7+22.57 RT.  
 D = 12+00.15 RT.  
 C = 263.37'  
 L = 480.21'  
 R = 470.50'  
 E = 57.37'  
 Runoff = See X-Sections  
 Runout = See X-Sections

MATCHLINE (SEE PREVIOUS SHEET)  
 MATCHLINE STA. 621+50  
 MATCHLINE STA. 635+00

DATE PLOTTED: March 7, 2018  
 USFR: Jefferson  
 E-SHEET NAME: I-264 EB CONSTRUCTION PHASING PLAN PHASE 2

MICROSTATION: V8.11.7.443

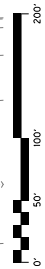
SCALE: 1"=50'  
 0 50 100 200

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

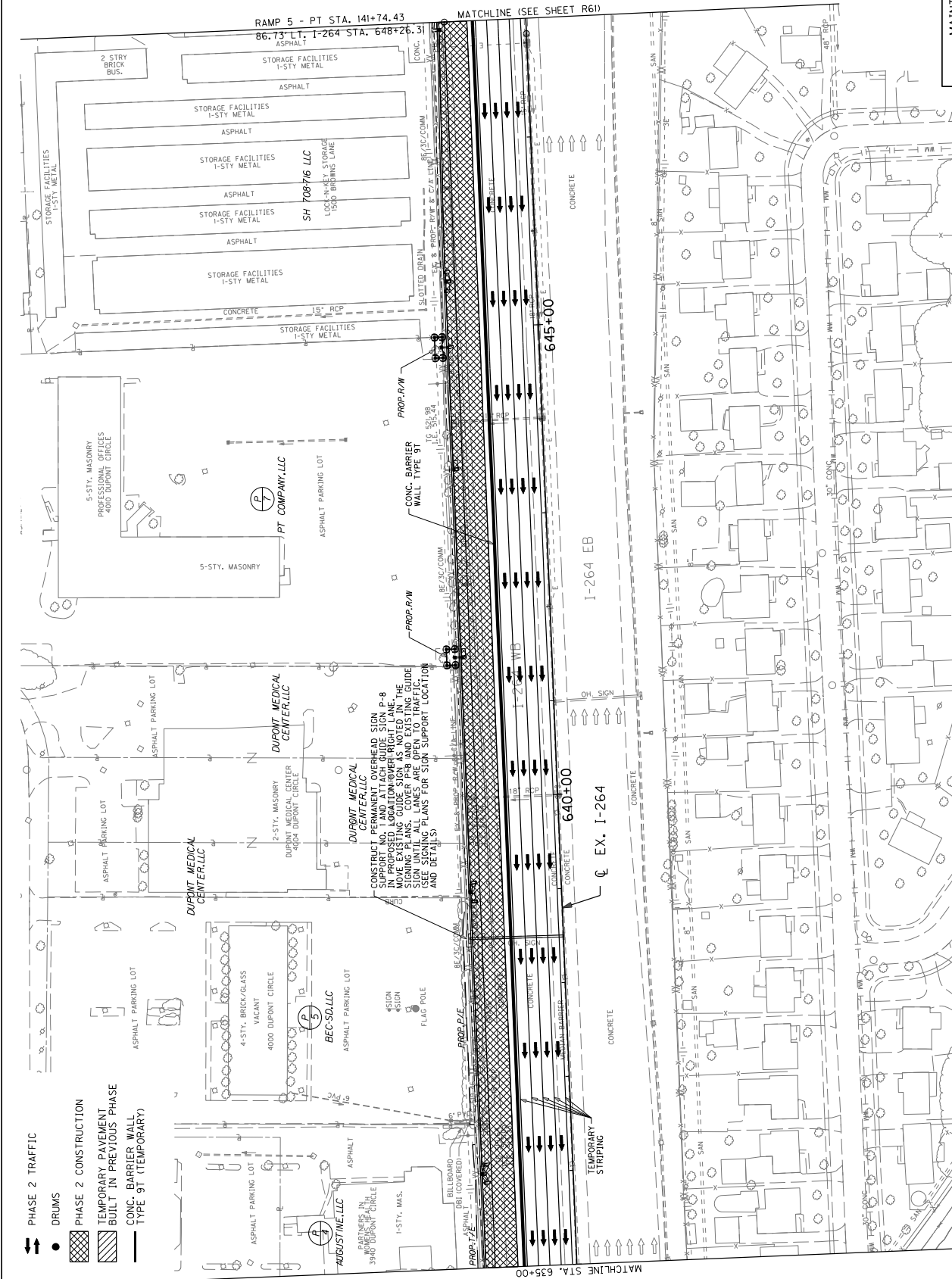
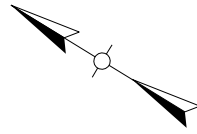
PHASE 2 TRAFFIC  
 DRUMS  
 PHASE 2 CONSTRUCTION  
 TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE  
 CONC. BARRIER WALL TYPE 9T (TEMPORARY)

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

SCALE: 1"=50'



COUNTY OF	JEFFERSON
ITEM NO.	5-159.00

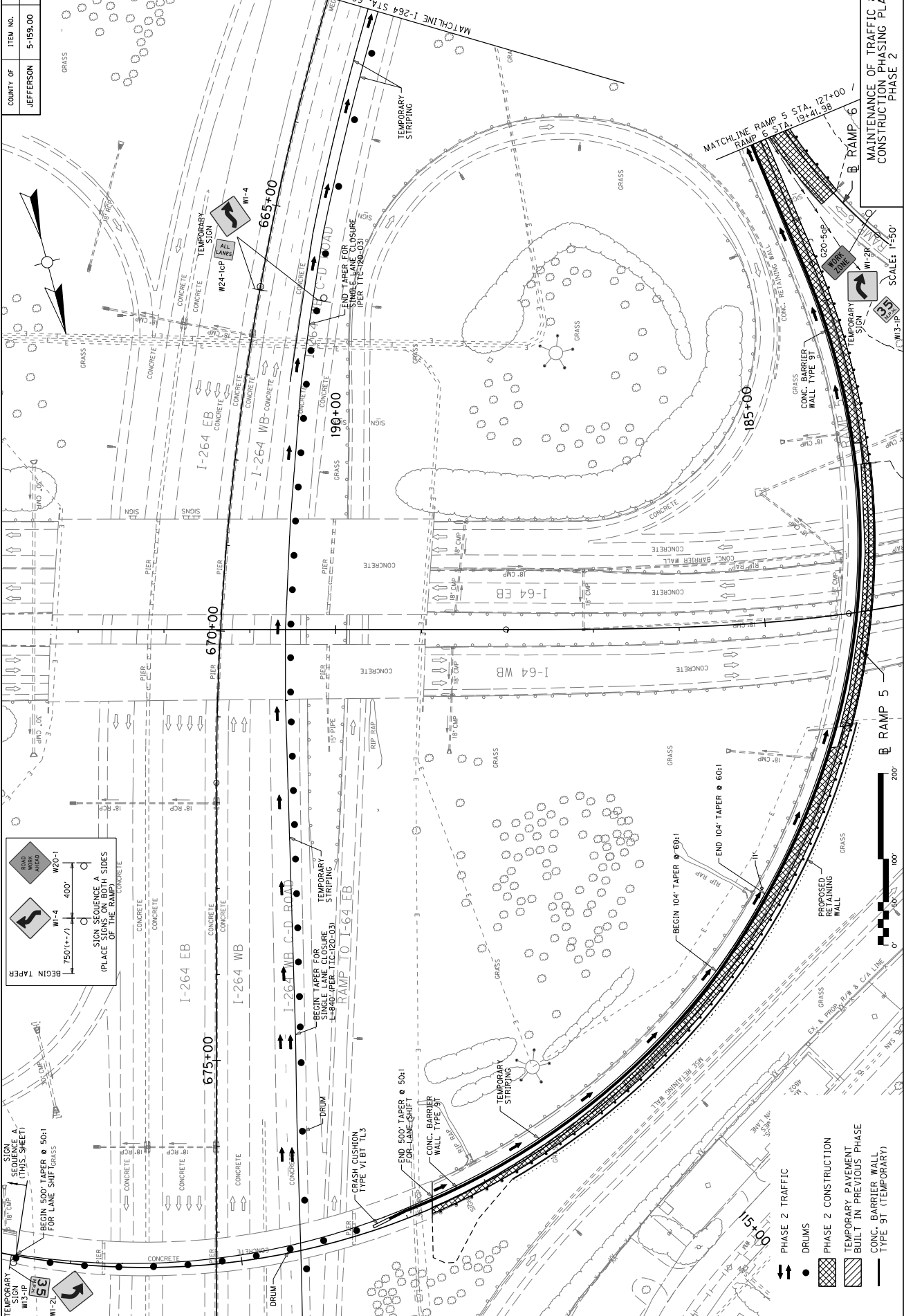


FILE NAME: J:\346831A\1-64 WB TO I-264 WB\TRAFFIC CONSTRUCTION\CADD\PLANS - MOT\04 - PHASE 2\06 PHASE 2.DGN  
 USFR: defen DATE PLOTTED: February 25, 2018  
 E-SHEET NAME: MicroStation v8.11.7.443



MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

SCALE: 1"=50'

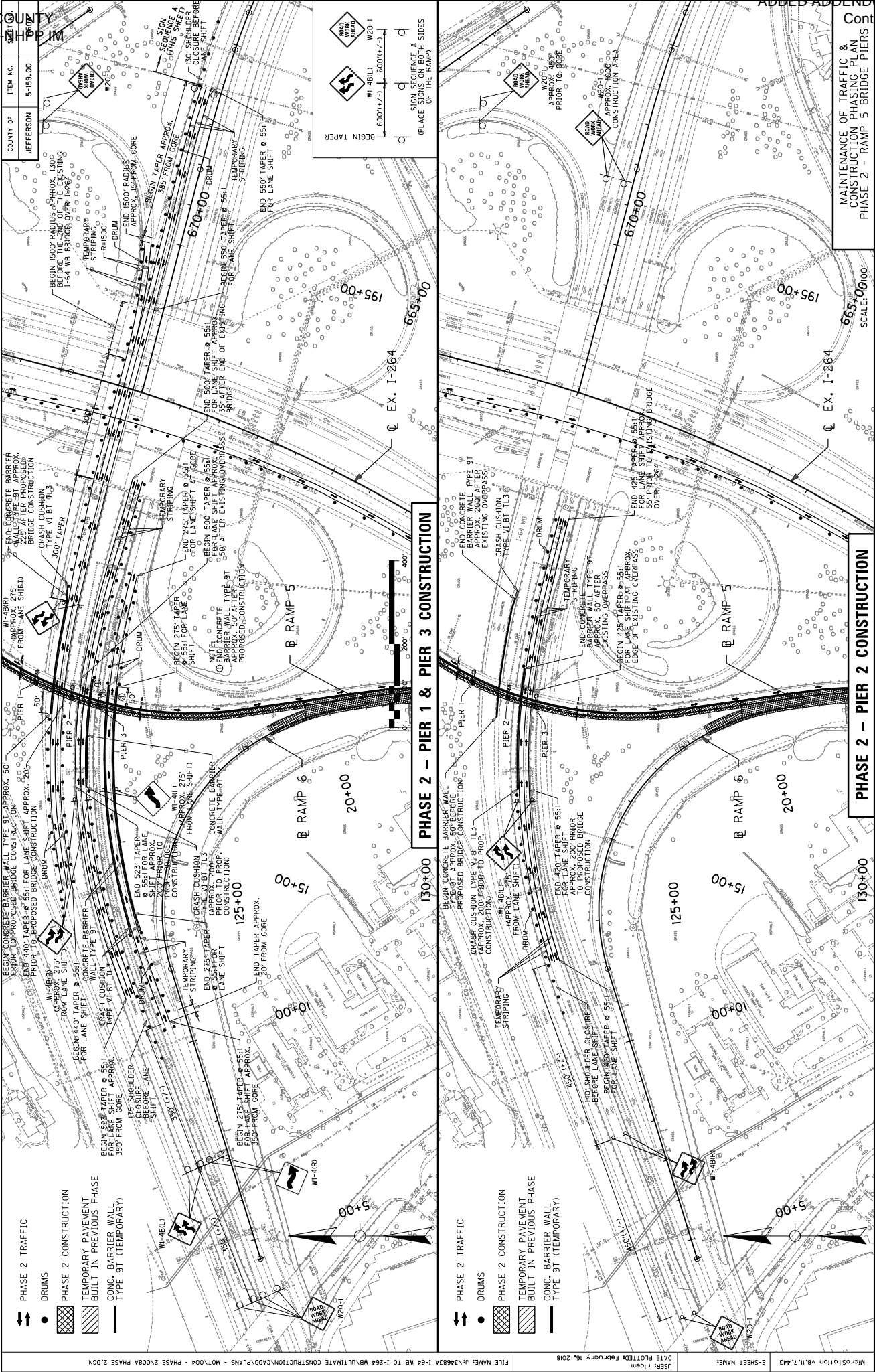


**SIGN SEQUENCE A (THIS SHEET)**  
 BEGIN TAPER  
 W20-1  
 W1-4  
 750' (+/-) 400'  
**SIGN SEQUENCE A (PLACE SIGNS ON BOTH SIDES OF THE RAMP)**

**SIGN SEQUENCE A (THIS SHEET)**  
 BEGIN TAPER FOR LANE SHIFT  
 W20-1  
 W1-4  
 750' (+/-) 400'

USFR: Jefferson	DATE PLOTTED: March 7, 2018	FILE NAME: J:\4683A\I-264 WB\I-264 WB\TRAFFIC CONSTRUCTION\CADD\PLANS - MOT\04 - PHASE 2\08 PHASE 2.DGN
MicroStation v8.11.7.443	E-SHEET NAME:	

PHASE 2 TRAFFIC: DRUMS (●), PHASE 2 CONSTRUCTION (▨), TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE (▤), CONC. BARRIER WALL TYPE 9T (—), CONC. BARRIER WALL TYPE 9T (TEMPORARY) (---)



COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159.00	11/11/11

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN  
PHASE 2 - RAMP 5 BRIDGE PIERS

SCALE: 1"=100'

PHASE 2 - PIER 1 & PIER 3 CONSTRUCTION

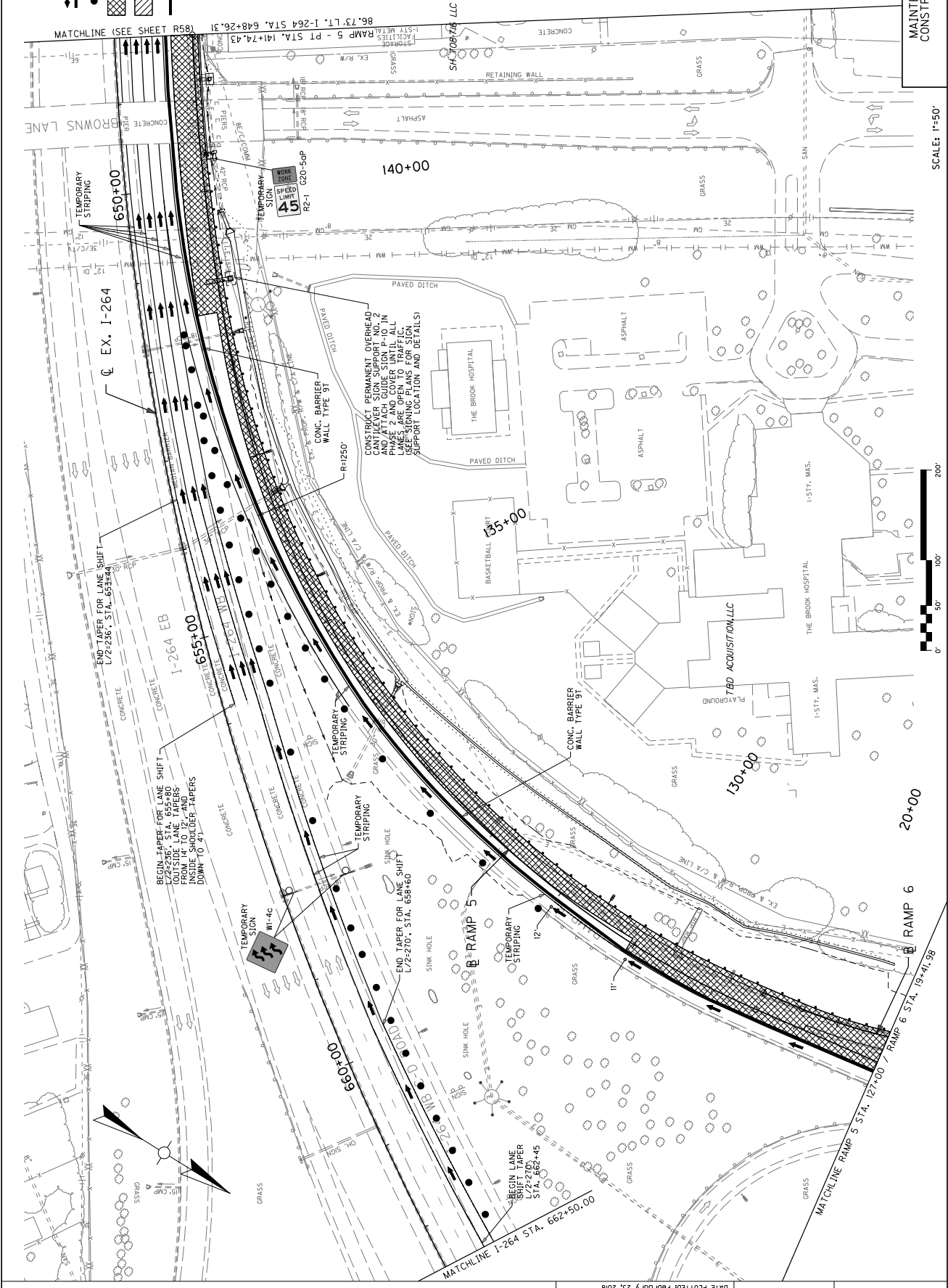
PHASE 2 - PIER 2 CONSTRUCTION

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 2

SCALE: 1"=50'

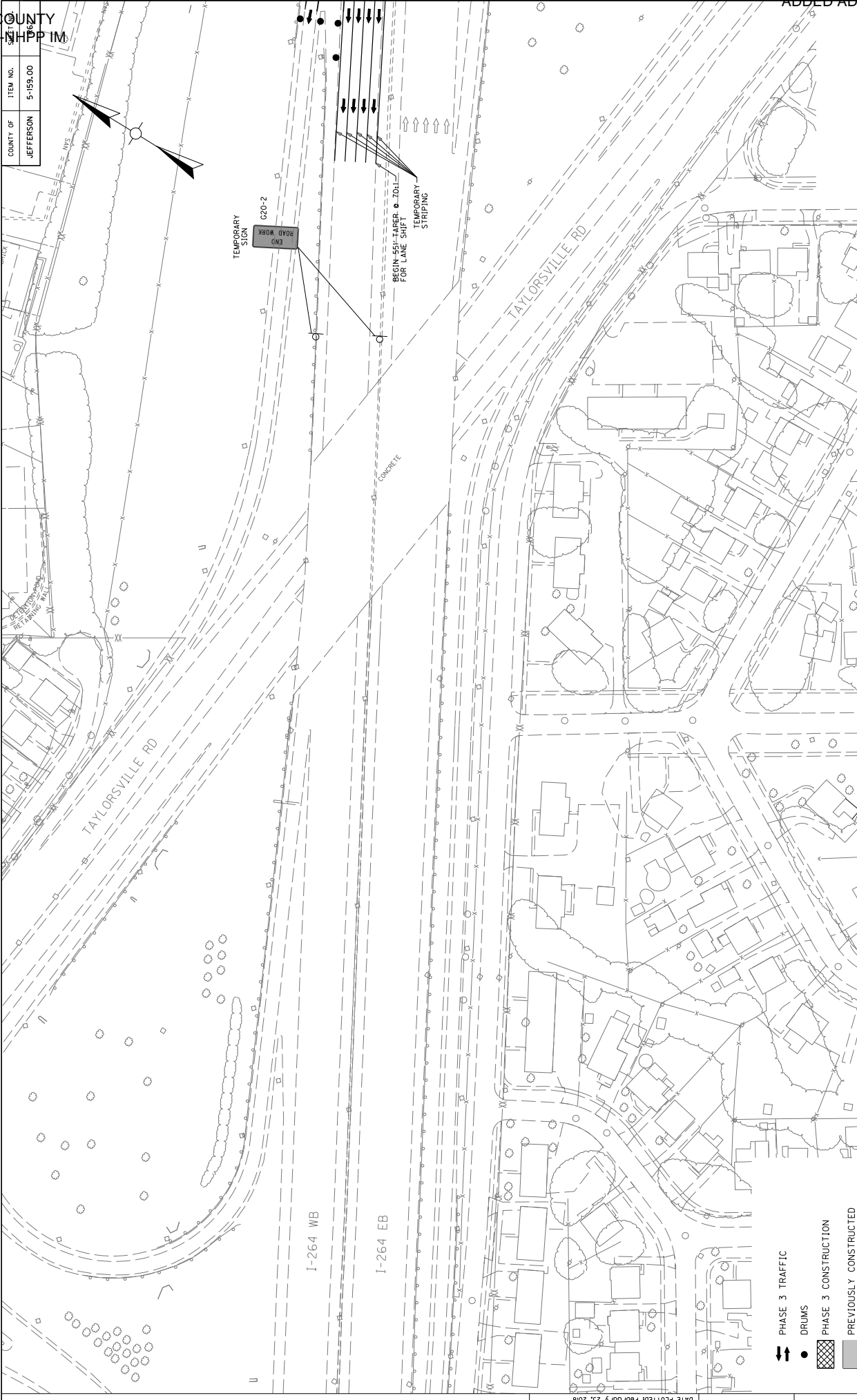
COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

- PHASE 2 TRAFFIC DRUMS
- TEMPORARY PAVEMENT BUILT IN PREVIOUS PHASE
  - CONC. BARRIER WALL TYPE 9T (TEMPORARY)



MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 3

SCALE: 1"=50'



- PHASE 3 TRAFFIC
- DRUMS
- PHASE 3 CONSTRUCTION
- PREVIOUSLY CONSTRUCTED
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

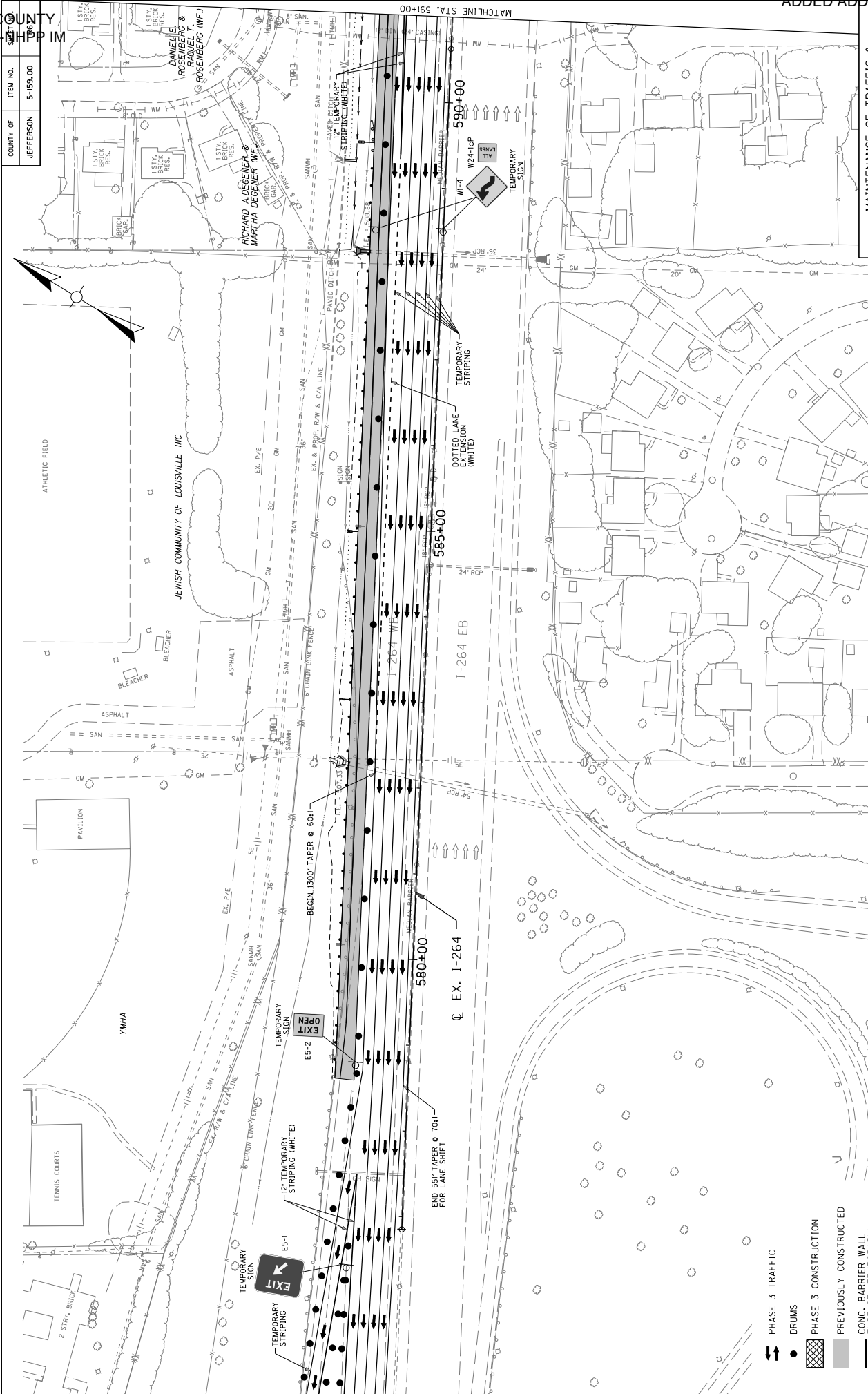
JEFFERSON COUNTY  
056GR18D011-NHPP IM

MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 3

SCALE: 1"=50'

JEFFERSON COUNTY  
056GR18D011-NHPP IM

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00

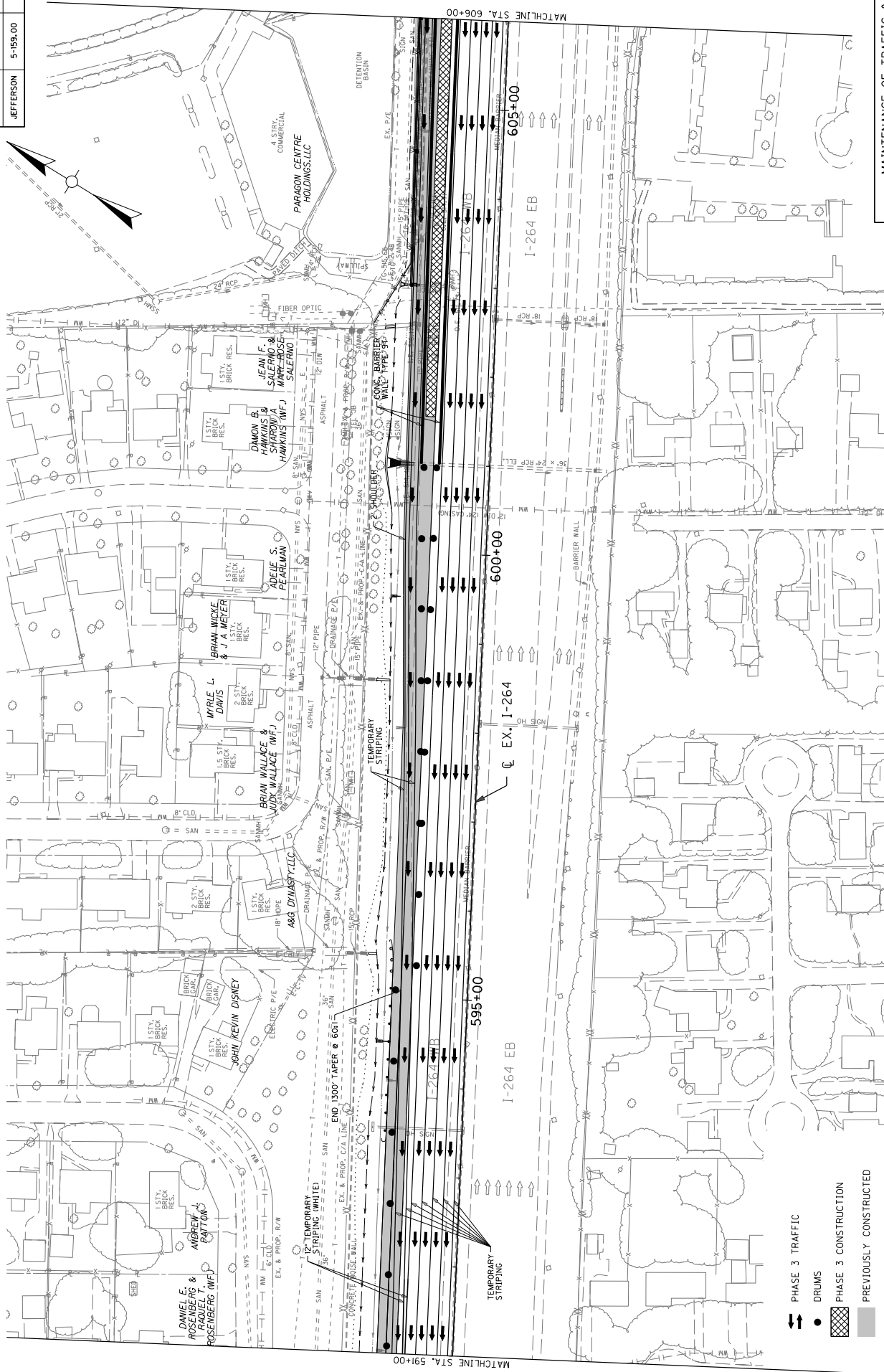


MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 3

SCALE: 1"=50'

JEFFERSON COUNTY  
056GR18D011-NHPP IM

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00



- PHASE 3 TRAFFIC
- DRUMS
- PHASE 3 CONSTRUCTION
- PREVIOUSLY CONSTRUCTED
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)

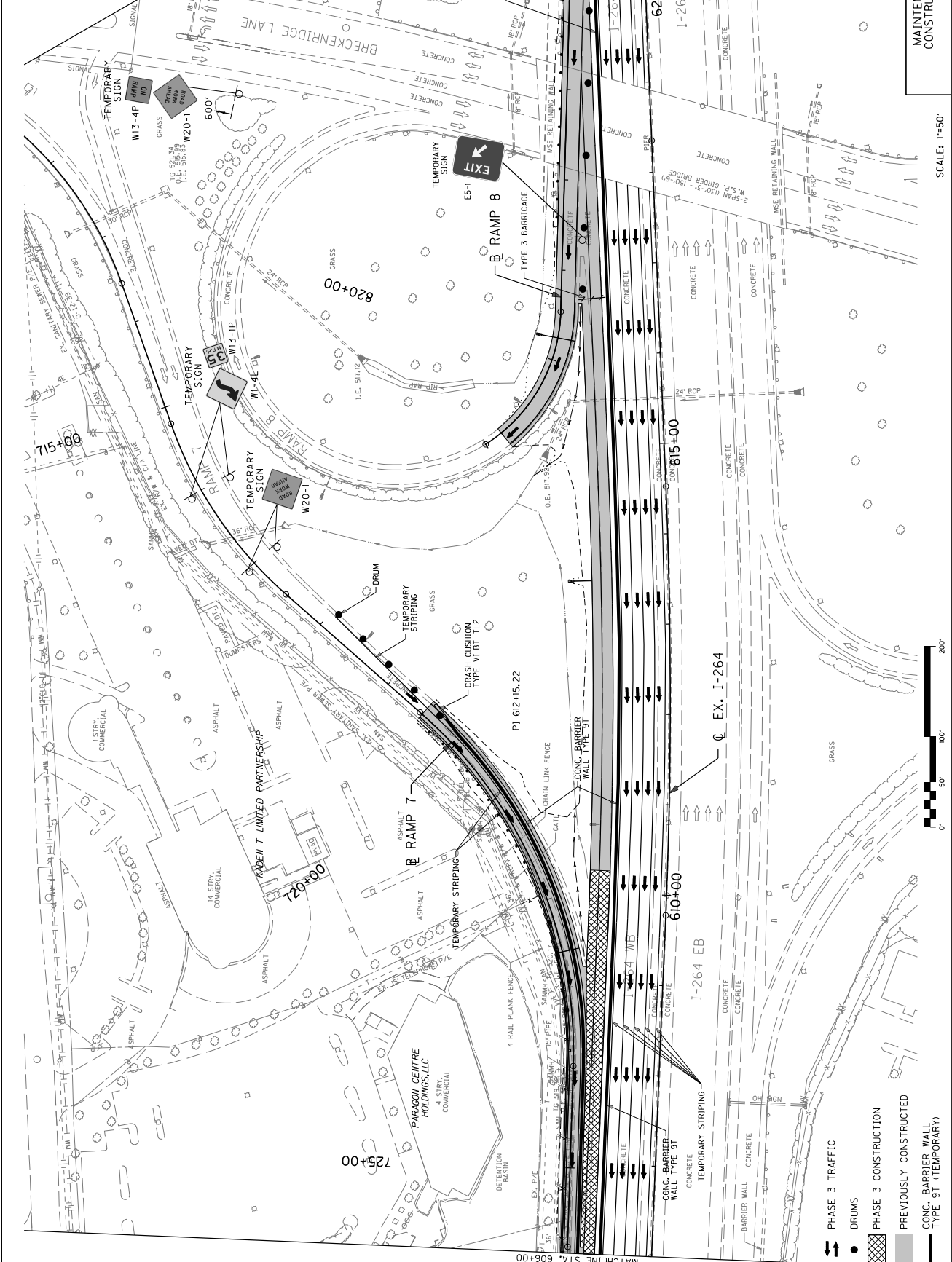


MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 3

SCALE: 1"=50'

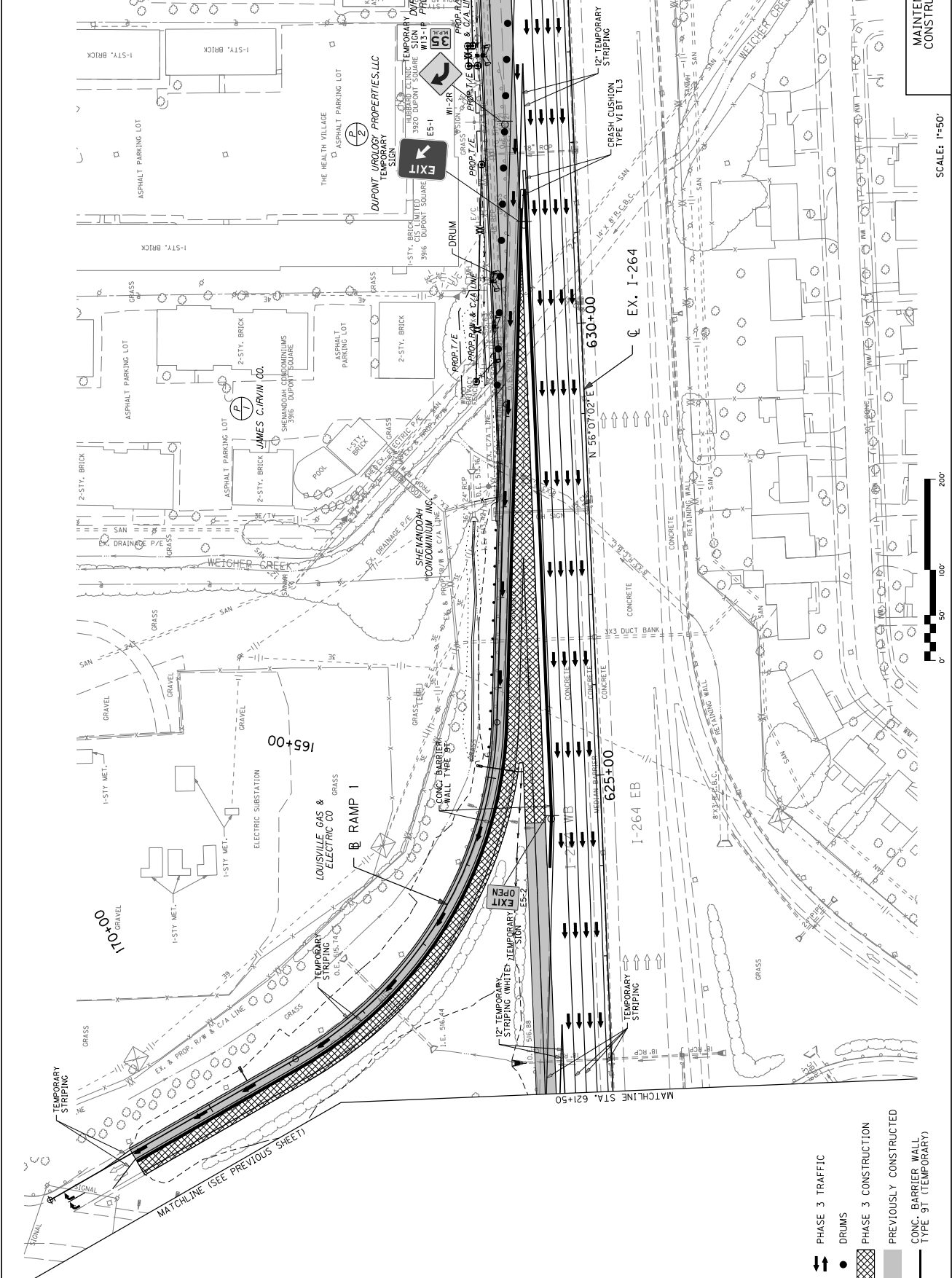
JEFFERSON COUNTY  
056GR18D011-NHPP IM

COUNTY OF	ITEM NO.
JEFFERSON	5-159.00



- PHASE 3 TRAFFIC
- DRUMS
- PHASE 3 CONSTRUCTION
- PREVIOUSLY CONSTRUCTED
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)

COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159-00	06/20/18



MAINTENANCE OF TRAFFIC &  
CONSTRUCTION PHASING PLAN  
PHASE 3

SCALE: 1"=50'



- PHASE 3 TRAFFIC
- DRUMS
- PHASE 3 CONSTRUCTION
- PREVIOUSLY CONSTRUCTED
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)

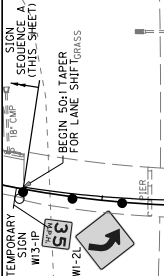
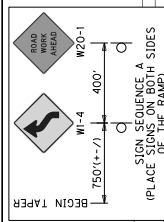
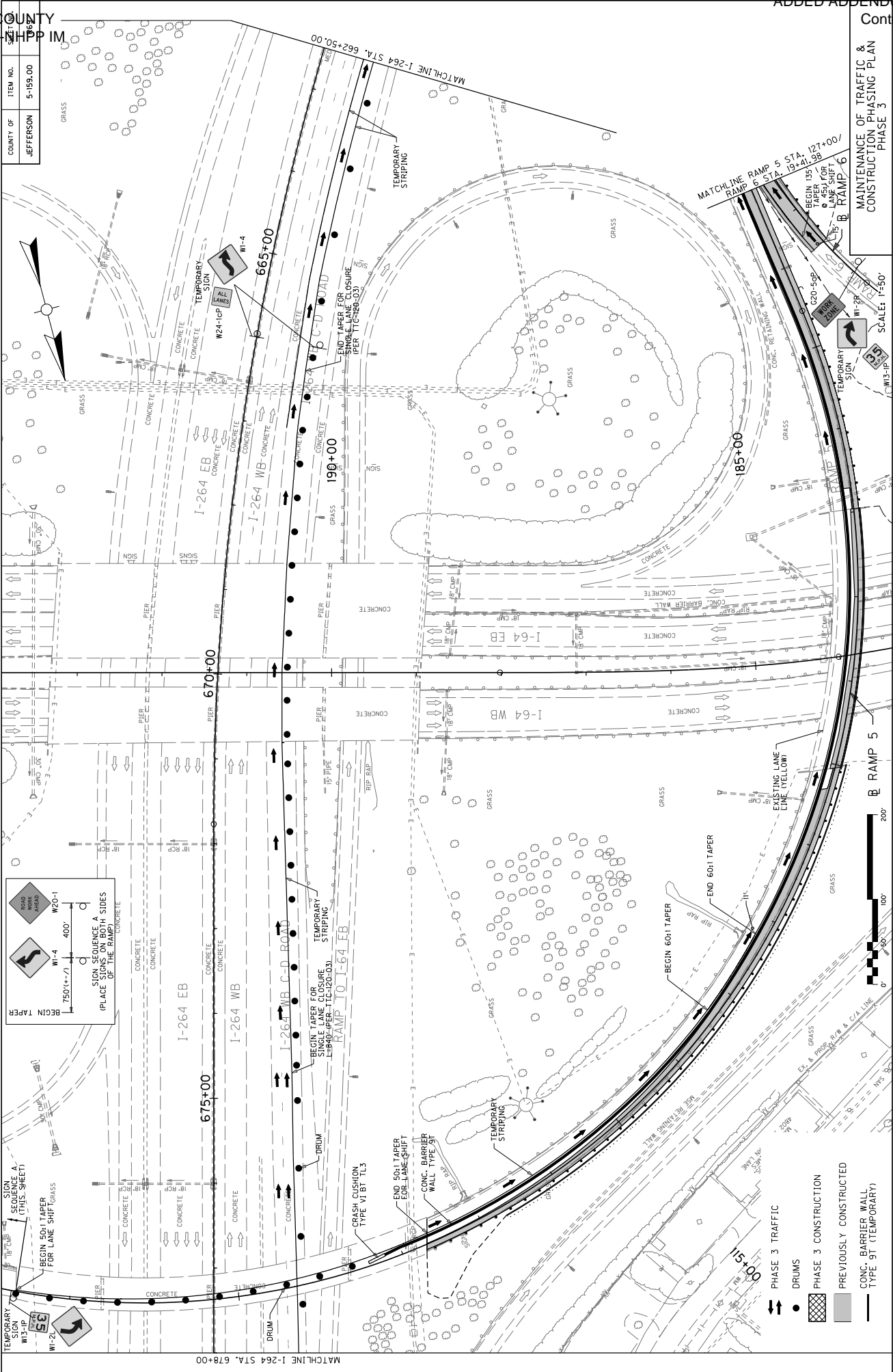




MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 3

SCALE: 1"=50'

JEFFERSON COUNTY  
056GR18D011-NHPP IM

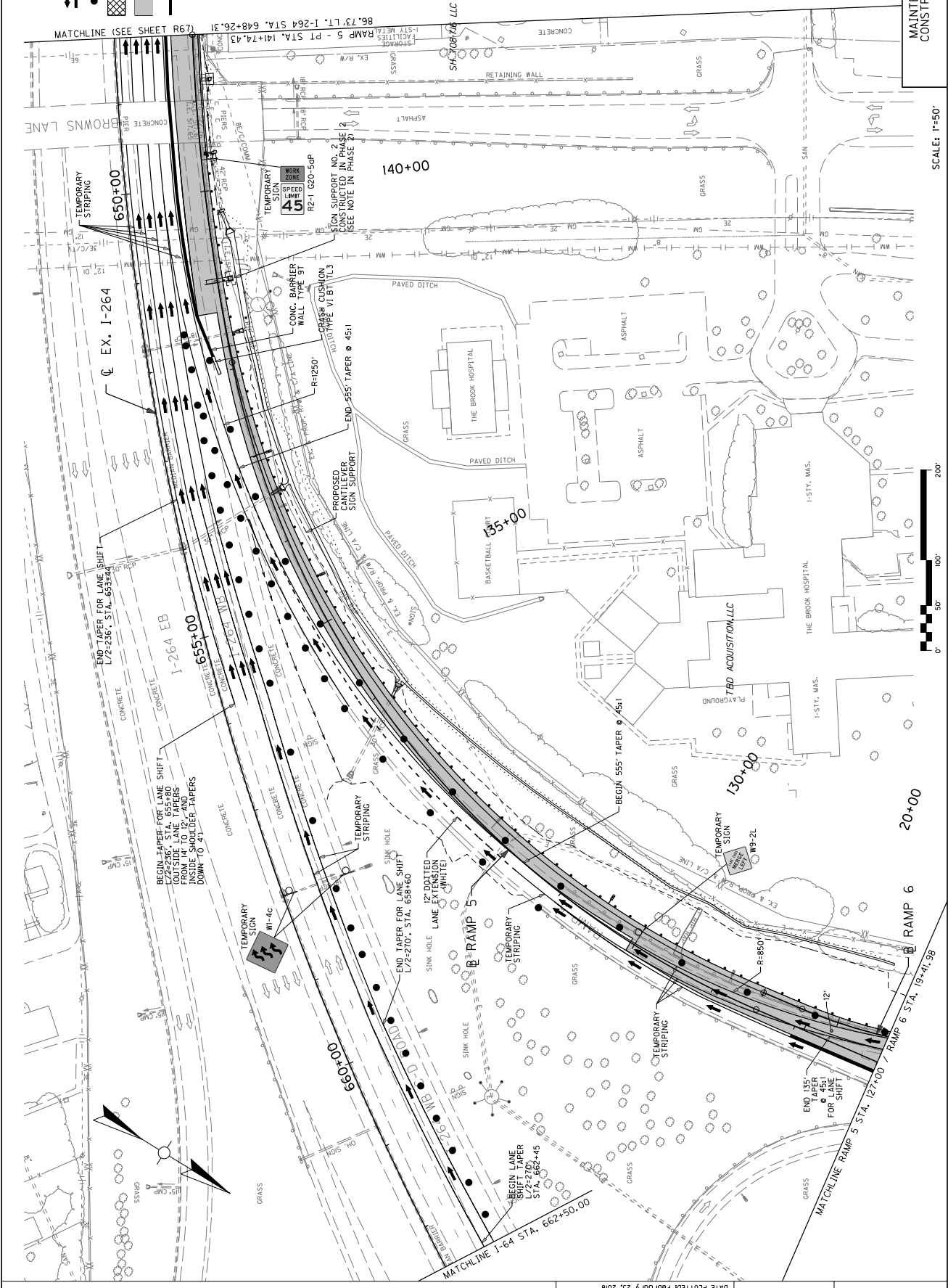


MAINTENANCE OF TRAFFIC & CONSTRUCTION PHASING PLAN PHASE 3

SCALE: 1"=50'

COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159.00	7/17/18

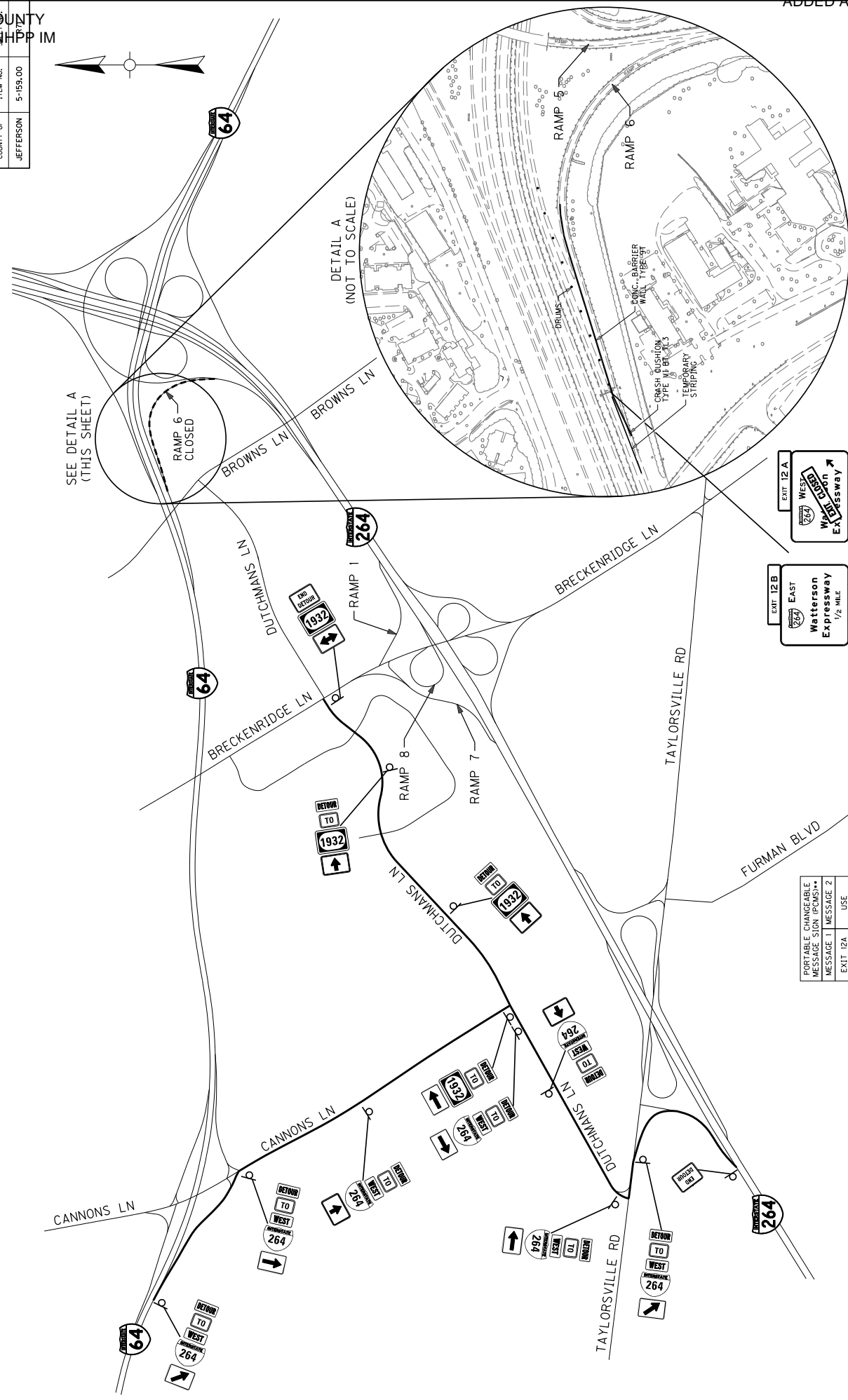
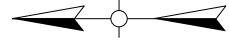
- PHASE 3 TRAFFIC DRUMS
- PHASE 3 CONSTRUCTION
- PREVIOUSLY CONSTRUCTED
- CONC. BARRIER WALL TYPE 9T (TEMPORARY)



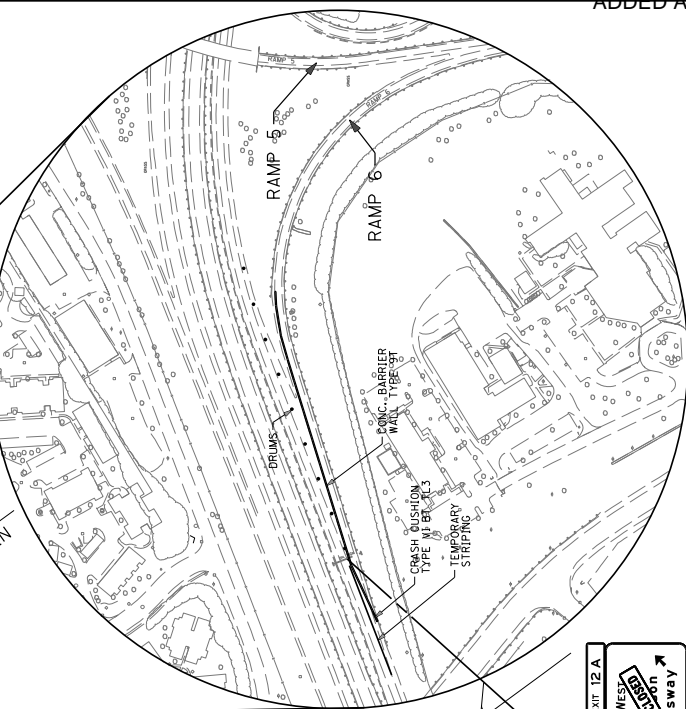
MAINTENANCE OF TRAFFIC  
DETOUR PLAN FOR  
RAMP 6 CLOSURE

NOT TO SCALE

COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159-00	1/17/18

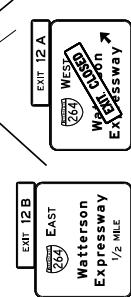


DETAIL A  
(NOT TO SCALE)



SEE DETAIL A  
(THIS SHEET)

RAMP 6  
CLOSED



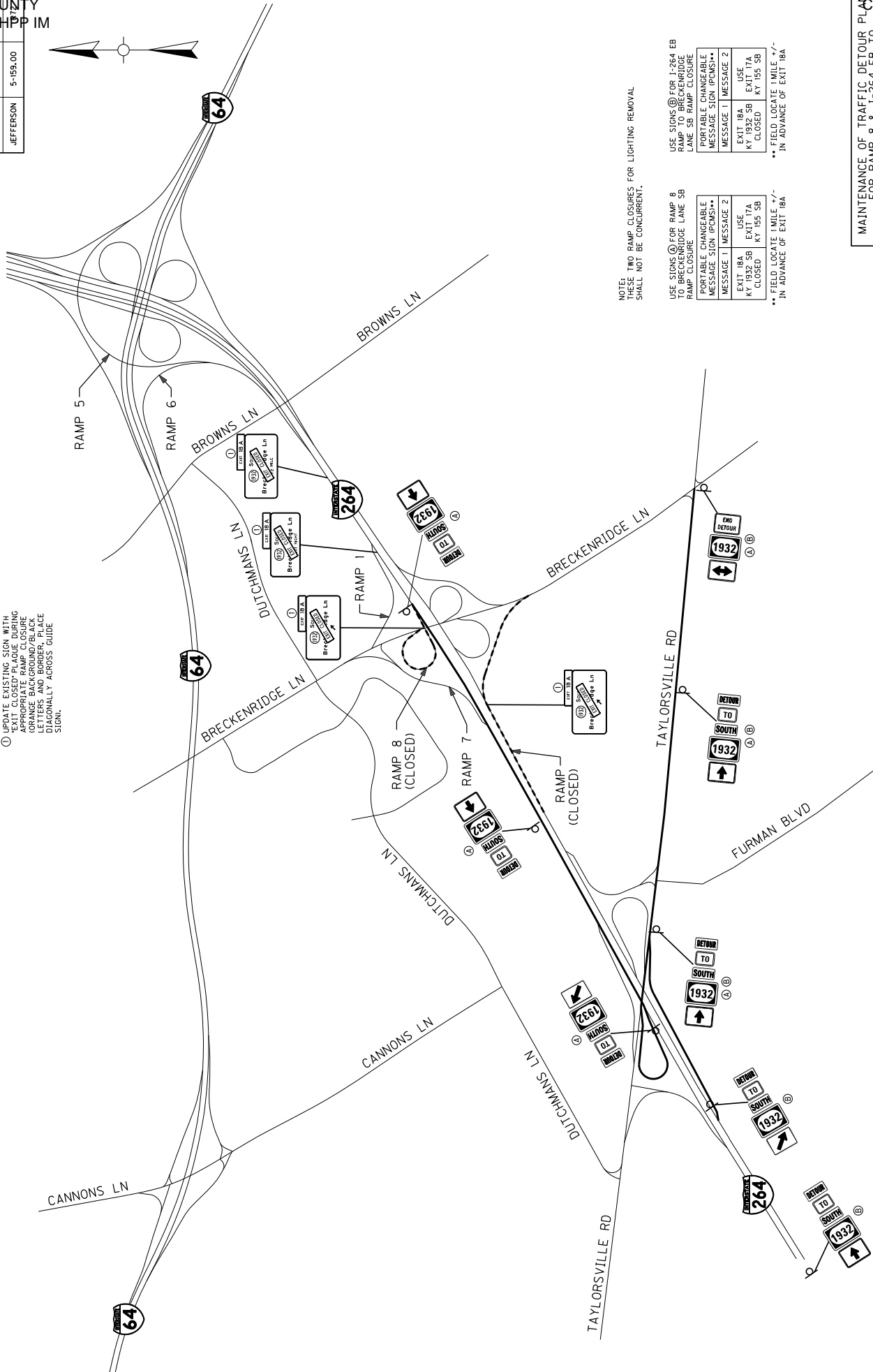
UPDATE EXISTING SIGN WITH  
(ORANGE BACKGROUND/BLACK  
LETTERS AND BORDER)  
(PLACE DIAGONALLY  
ACROSS GUIDE SIGN)

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)**	MESSAGE 1	MESSAGE 2
EXIT 12A	USE	USE
RAMP 6	EXIT 10	EXIT 10
CLOSED	RAMP	RAMP
** FIELD LOCATE TRIPLE /-		
IN LANE OF EXIT 10		
(CANNONS LANE)		

COUNTY OF	ITEM NO.	DATE
JEFFERSON	5-159.00	1/17/20



① UPDATE EXISTING SIGN WITH "EXIT CLOSED" OR "RAMP CLOSED" DURING APPROPRIATE RAMP CLOSURE (ORANGE BACKGROUND/BLACK LETTERS AND BORDER, PLACE PROVISIONALLY ACROSS GUIDE SIGN).



NOTE: USE TWO RAMP CLOSURES FOR LIGHTING REMOVAL SHALL NOT BE CONCURRENT.

USE SIGNS (A) FOR RAMP 8 TO BRECKENRIDGE LANE SB RAMP CLOSURE

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)**	MESSAGE 1	MESSAGE 2
EXIT 18A	USE KY 1932 SB	EXIT 17A KY 155 SB
CLOSED	USE KY 1932 SB	EXIT 17A KY 155 SB

\*\* FIELD LOCATE 1 MILE +/- IN ADVANCE OF EXIT 18A

USE SIGNS (B) FOR I-264 EB RAMP TO BRECKENRIDGE LANE SB RAMP CLOSURE

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)**	MESSAGE 1	MESSAGE 2
EXIT 18A	USE KY 1932 SB	EXIT 17A KY 155 SB
CLOSED	USE KY 1932 SB	EXIT 17A KY 155 SB

\*\* FIELD LOCATE 1 MILE +/- IN ADVANCE OF EXIT 18A

NOT TO SCALE

MAINTENANCE OF TRAFFIC DETOUR PLAN FOR RAMP 8 & I-264 EB TO BRECKENRIDGE LN SB RAMP CLOSURE

