

CALL NO. 204

CONTRACT ID. 195066

ALLEN - TODD - WARREN COUNTIES

FED/STATE PROJECT NUMBER 121GR19D066-STP

DESCRIPTION KY-585,KY-3499,CR-1233,CR-1333,KY-2632

WORK TYPE BRIDGE SUBSTRUCTURE REHAB

PRIMARY COMPLETION DATE 10/15/2020

LETTING DATE: March 22,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME March 22,2019. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 4%

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

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PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 03

CONTRACT ID - 195066

121GR19D066-STP

COUNTY - ALLEN

PCN - BR00205851964 STP 9030 (016)

KY 585 (MP 8.326) ADDRESS DEFICIENCIES OF KY 585 BRIDGE OVER MIDDLE FORK DRAKES CREEK (002B00021N), FROM MP 8.326 TO MP 8.354 (MP 8.354), A DISTANCE OF 0.03 MILES.BRIDGE SUPERSTRUCTURE REHAB SYP NO. 03-10011.00.

GEOGRAPHIC COORDINATES LATITUDE 36:45:09.00 LONGITUDE 86:24:33.00

PCN - BR00234991963 STP 9030 (017)

KY 3499 (MP 1.412) ADDRESS DEFICIENCIES OF KY-3499 BRIDGE OVER BAYS FORK (002B00004N), FROM MP 1.412 TO MP 1.422 (MP 1.422), A DISTANCE OF 0.01 MILES.BRIDGE SUPERSTRUCTURE REHAB SYP NO. 03-10000.00.

GEOGRAPHIC COORDINATES LATITUDE 34:46:17.00 LONGITUDE 86:10:06.00

COUNTY - TODD

PCN - BR11012331966 STP 9030 (019)

ROGER Q MILL ROAD (1233) (MP .028) ADDRESS DEFICIENCIES OF ROGER Q MILL ROAD BRIDGE OVER RED RIVER W FORK BRANCH (110C00061N), FROM MP .028 TO MP .032 (MP .032), A DISTANCE OF 0.01 MILES.BRIDGE REPLACEMENT SYP NO. 03-10013.00.

GEOGRAPHIC COORDINATES LATITUDE 36:50:37.00 LONGITUDE 87:17:47.00

PCN - BR11013331965 STP 9030 (018)

RATTLESNAKE ROAD (1333) (MP 1.471) ADDRESS DEFICIENCIES OF RATTLESNAKE ROAD BRIDGE OVER BUCK FORK (110C00059N), FROM MP 1.471 TO MP 1.475 (MP 1.475), A DISTANCE OF 0.01 MILES.BRIDGE REPLACEMENT SYP NO. 03-10009.00.

GEOGRAPHIC COORDINATES LATITUDE 36:57:22.00 LONGITUDE 87:15:49.00

COUNTY - WARREN

PCN - BR11426321967 STP 9030 (020)

KY 2632 (MP 4.96) ADDRESS DEFICIENCIES OF HAMMET HILL ROAD BRIDGE OVER SALT LICK CREEK (114B00071N), FROM MP 4.96 TO MP 4.966 (MP 4.966), A DISTANCE OF 0.01 MILES.BRIDGE REPLACEMENT SYP NO. 03-10014.00.

GEOGRAPHIC COORDINATES LATITUDE 36:59:47.00 LONGITUDE 86:32:23.00

COMPLETION DATE(S):

COMPLETED BY 10/15/2020 APPLIES TO ENTIRE CONTRACT
COMPLETED BY 08/01/2019 FOR TODD COUNTY 110C00061N

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

April 30, 2018

FEDERAL CONTRACT NOTES

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

102.02 Current 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:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- 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;
- 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
- 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:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- 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;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- 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;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- 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;
- 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;
- 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
- Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

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

PROMPT PAYMENT

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

CONTRACTOR REPORTING

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

6th Floor West 200 Mero Street Frankfort, KY 40622

DEFAULT OR DECERTIFICATION OF THE DBE

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

1/27/2017

<u>LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).</u>

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

SECTION 7 is expanded by the following new Article:

102.10 <u>Cargo Preference Act – Use of United States-flag vessels.</u>

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.

ALLEN - TODD - WARREN COUNTIES 121GR19D066-STP

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EXPEDITE PROJECT WORK ORDER

The Contractor may request that the Department expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this task, the Contractor may be required to "hand carry" all required project documentation to facilitate the process. Immediately UPON NOTIFICATION OF AWARD OF THE CONTRACT, deliver required project documentation to:

Division of Construction Procurement 200 Mero St. Frankfort, KY 40602

ASPHALT MIXTURE

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

INCIDENTAL SURFACING

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

OPTION B

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

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

Allen County SYP 03-10000.00

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. 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, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. 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.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

Bridging KY

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

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VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

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

For temporary conditions, drop-offs greater than four 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.

VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

VIII. BARRICADES

For projects which allow full closure of the bridge, , ensure a minimum of (4) type III barricades are used at each end of the bridge during closures for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR AND ON SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

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- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4) For projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

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SPECIAL NOTE FOR CONCRETE COATING

Allen County SYP 03-10000.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
- 4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
- 5. Apply Ordinary Surface Finish
- 6. Prepare the surfaces to receive coating.
- 7. Apply concrete coating.
- 8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u>Prime Coat</u>	<u>Finish Coat</u>
Macropoxy 646	Acrolon 218 HS
Amerlock 2	Devoe Devflex HP
Carboguard 890	Carbothane 133 HB
Elastogrip 151	Envirocrete 156
	Macropoxy 646 Amerlock 2 Carboguard 890

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	a*	<u>b*</u>
Grey	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

Bridging KY 1 of 3

III. CONSTRUCTION

- **A. Perform Concrete Repairs.** Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.
- **B.** Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Coating:

- 1. Every exposed surface above a point 6" below ground or fill line of abutments, wing walls, end bent and pier caps, pedestals, back walls, columns, and exposed footings.
- 2. All exposed surfaces of concrete barrier walls, parapets, curbs, and plinths. Do not apply to the riding surface of the concrete deck.
- 3. The underneath surfaces of slab overhangs outside of exterior girders and to the exterior side and bottom of exterior concrete girders, beams, and box beams.
- **D. Prepare Concrete Surfaces for Repair.** All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Preform all pressure washing at temperatures above 40 degrees Fahrenheit.
- **E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface.

Bridging KY 2 of 3

All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor's paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Preform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity in square feet. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of coatings that do not satisfy the Engineer's approval for payment and will consider them incidental to "Concrete Coating".

V. PAYMENT.

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

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u> 24982EC Concrete Coating Lump Sum

The plans may show an estimate quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

Bridging KY 3 of 3

SPECIAL NOTE FOR EROSION PREVENTION AND SEDIMENT CONTROL

Allen County SYP 03-10000.00

When required, the Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

The Contractor shall perform all final seeding and protection, in accordance with the plans and Section 212 of the KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. If corrections are not made within the 5 days specified, liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.

Contrary to Section 212. 05 and 213.05, bid items for temporary BMPs and items for permanent erosion control will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices". The contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the 2012 Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT

Allen County SYP 03-10000.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, and equipment.
- 2. Removal of existing abutment backfill, if needed.
- 3. Structural Granular Backfill, as needed.
- 4. Mill the existing pavement.
- 5. Place new DGA, asphalt base, and asphalt surface
- 6. Repair the roadway shoulders, if needed.
- 7. Provide Pavement Markings if needed.
- 8. Any other work specified as part of this contract.

II. MATERIALS

- A. Structural Granular Backfill. See Section 8.05.11
- **B. DGA**. See Section 302.
- **C. Tack Coat.** This material shall be in accordance with the Standard Specifications.
- D. CL2 ASPH BASE 1.0D PG 64-22. See Standard Specifications
- E. ASPHALT LEVEL AND WEDGE. See Standard Specifications
- **F. CL2 ASPH SURF 0.38D PG 64-22.** This material shall be in accordance with the Standard Specifications.
- **G. GRANULAR EMBANKMENT.** This material shall be in accordance with the Standard Specifications.
- H. Pavement Striping. See Section 713.

III. CONSTRUCTION – DECK, SUPERSTRUCTURE, AND FULL BRIDGE REPLACEMENTS

A. Foundation Preparation. For projects involving the removal and replacement of the asphalt and backfill behind the existing abutments and new abutments or end bents, the required excavation, Type IV geotextile fabric, 4" perforated pipe, and new Structural Granular Backfill as shown in Figure 1 as well as any excavation and grading needed to shape the bridge approaches to match the existing roadway template, will be paid for by the bid item for Foundation Preparation. See Special Provision 69 and the Standard Drawings regarding additional construction details as required.

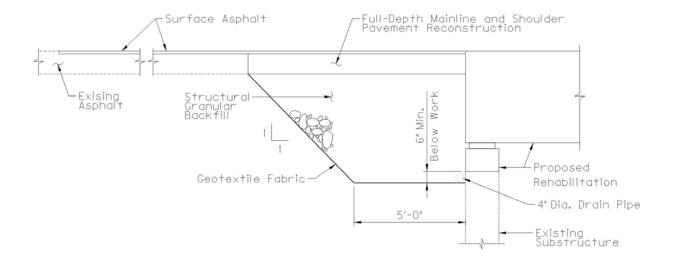


Figure 1: Detail showing proposed work for deck and superstructure replacements

- **B.** Remove Existing Asphalt Surface. Remove the existing pavement material beyond the limits of full depth asphalt replacement to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will match the elevation of the end of the full depth asphalt replacement and the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- C. Produce and Place New Asphalt Base. Replace any full depth mainline and shoulder pavement removed as part of bridge backwall construction, superstructure replacement, or other work (if included in the Contract Documents) with a minimum of 8 inches of DGA, placed in two lifts of 4 inches each compacted and 8 inches of CL2 ASPH BASE 1.0D PG 64-22, placed in two lifts of 4 inches each compacted. Final elevation of the Asphalt Base at the approaches to match the width and new elevation of the riding surface on the bridge less the New Asphalt Surface to be placed. Shoulders shall receive identical treatment to the mainline pavement.
- **D. Produce and Place New Asphalt Surface**. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ½" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project, and/or the new abutment backwall.
- E. Granular Embankment for Guardrails. When necessary to ensure compliance with

standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.

F. Pavement Markings. Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. CONSTRUCTION – OVERLAY PROJECTS

- A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge, if applicable, and matches the elevation of the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- **B.** Mainline and Shoulder Reconstruction. Replace shoulders in kind at the approaches to match the width and new elevation of the riding surface on the bridge. Shoulders shall receive identical treatment to the mainline pavement.
- C. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project and the bridge end.

For bridge decks specified to receive a new asphalt overlay as part of the work, place asphalt level and wedge and CL2 ASPH SURF 0.38D PG 64-22 as detailed in the plans to smoothly connect to the bridge approaches. If plans call for use of a waterproof membrane, this shall be addressed as a separate bid item.

- **D.** Granular Embankment for Guardrails. When necessary to ensure compliance with standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with the plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.
- **E. Pavement Markings.** Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach

Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

V. MEASUREMENT

- A. Granular Embankment: The Department will measure the quantity in cubic yards. The Department will measure along the centerline to determine a linear foot of placement multiplied by a theoretical cross section of 12 square feet to achieve the quantity per side of the roadway.
- B. Bridge Overlay Approach Pavement: The Department will measure the quantity of in square yards. The Department will measure along the centerline from each end of the limits of the work as detailed on the plans to the point where the new pavement ties into the exiting pavement and across the width of the new pavement perpendicular to the centerline of the roadway.
- C. Foundation Preparation: See Section 603.

VI. PAYMENT

- A. Granular Embankment: Payment at the contract unit price per cubic yard of granular embankment is full compensation for granular embankment and DGA used for widening the shoulder for guardrail as directed. Variance of actual cross sectional quantities versus theoretical quantities will not be considered for additional payment.
- B. Bridge Overlay Approach Pavement: Payment at the contract unit price per square yard of is full compensation for removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, reconstruct shoulders as needed, furnishing and installing the asphalt tack coat, producing and placing the new asphalt and DGA, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown in the Contract Documents.
- C. Foundation Preparation: See Section 603. Payment for Structural Granular Backfill to be incidental to Foundation Preparation.

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
03304	Bridge Overlay Approach Pavement	Square Yards
08803	Foundation Preparation	Lump Sum

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

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR SYP 3-10000.00 Bridge 002B00004N

These Notes or designated portions thereof, apply where so indicated on the plans, proposals or bidding instruction.

I. DESCRIPTION. Perform all work in accordance with the Department's 2012 Standard Specifications, and applicable Supplemental Specifications, the attached sketches, and these Notes. Section references are to the Standard Specifications.

This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing spalled/delaminated concrete; (3) Prepare the existing surface for concrete patching; (4) Place hook fasteners and welded wire fabric over surfaces to be repaired (where applicable); (5) Apply concrete patching as specified by this note and as shown on the attached detail drawings; (6) Finish and cure the new Concrete Patches; (7) Maintain & control traffic; and, (8) Any other work specified as part of this contract.

II. MATERIALS.

- **A.** Class "M" Concrete. Use either "M1" or "M2". See Section 601.
- **B.** Steel Reinforcement. Use Grade 60. See Section 602
- C. Welded Steel Wire Fabric (WWF). Conform to Section 811
- **D. Hook Fasteners.** Use commercial grade galvanized hook fasteners. Minimum 3/16" diameter.

III. CONSTRUCTION.

A. Concrete Removal and Preparation. The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Sounding shall be used to locate delaminated areas. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. Concrete removal shall be in accordance with a sequence approved by the Engineer.

Concrete removal shall be accomplished by chipping with hand picks, chisels or light duty pneumatic or electric chipping hammers (not to exceed 15 lbs.). Remove all deteriorated loose concrete to a minimum depth of 4". When reinforcing steel is exposed, concrete removal shall continue until there is a minimum ¾ inch clearance around the exposed reinforcing bar. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. Unless specifically *directed by the Engineer*, depth of removal shall not exceed 6 inches.

The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent featheredging unless otherwise approved by the Engineer.

After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by abrasive blast cleaning. Abrasive blast

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cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete.

The Contractor shall dispose all removed material off State Right Of Way in an approved site.

B. Steel Reinforcement. All corroded reinforcing steel exposed during concrete removal shall have corrosion products removed by abrasive grit blasting or wire brush whichever is more appropriate. Furnish for replacement, as directed by the Engineer, additional linear feet of steel reinforcing bars ½" diameter by 20-foot lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Deliver unused bars to the nearest County Maintenance Barn. Payment will be made in accordance with Section 602.

Reinforcing steel displaying deep pitting or loss of more than 20 percent of cross-sectional area shall be removed and replaced. Such bars shall be placed in accordance with the recommendations of ACI 506R, Sections 5.4 and 5.5. In particular, bars shall not be bundled in lapped splices, but shall be placed such that the minimum spacing around each bar is three times the maximum aggregate size to allow for proper encapsulation with concrete patching.

Intersecting reinforcing bars shall be tightly secured to each other using tie wire and adequately supported to minimize movement during concrete placement. Welded wire fabric (WWF) shall be provided when shown on the attached sketches and at each repair area larger than 1 square foot if the depth of the repair exceeds 3 inches from the original dimension of the repaired member. Sheets of adjoining WWF shall be lapped by at least one and one-half spaces at all intersections, in both directions, and be securely fastened. WWF fabric shall be supported no closer than ½ inch to the prepared concrete surface and shall have a minimum concrete cover of 1.5 inches.

WWF shall be fastened to preset anchors on a grid not more than 12 inches square. Large knots of tie wire which could result in sand pockets and voids during patching shall be avoided.

C. Hook Fasteners. Hook fasteners shall be positioned at the spacing as stated above or as directed by the Engineer. Any given area shall have a minimum of four anchors. The WWF shall not move or deform excessively during concrete patching. Maximum hook fastener spacing shall not exceed 2 feet on a grid pattern over the entire repair area.

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Hook fasteners shall be of commercial grade galvanized steel with a minimum diameter of 3/16". They may be mechanically set or grouted, as approved by the Engineer.

The Department will randomly select hook fasteners to be tested to verify pullout force is sufficient. If any anchors fail to meet the minimum acceptable pullout value, corrective measures shall be taken by the Contractor and further testing will be conducted.

- **D.** Class M Concrete. Place and finish the new concrete for the patching area as shown on the attached detail drawings, or as directed by the Engineer. The Engineer shall approve the Contractor's method of placing and consolidating the concrete prior to the beginning of this operation.
- **E. Curing.** On completion of finishing operation, patching concrete shall immediately be prevented from drying out and cracking by fogging, wetting, and/or any appropriate method approved by the Engineer. See Section 501.03.15.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department. Quantities given are approximate. The quantity for "Concrete Patching Repair" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer. Dispose of all removed material entirely away from the job site as approved by the Engineer. This work is incidental to the contract unit price for "Concrete Patching Repair".

IV. MEASUREMENT

- **A.** Concrete Patching Repair. The Department will measure the quantity per square feet of each area restored. Double payment will not be made on both faces of corner repairs.
- **B. Steel Reinforcement.** See Section 602.
- C. Welded Wire Fabric & Hook Fasteners. Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

V. PAYMENT

- A. Concrete Patching Repair. Payment at the contract unit price per square feet is full compensation for the following: (1) Furnish all labor, materials, tools, equipment; (2) preparation of specified areas including removing and disposing of specified existing materials; (3) place, finish, and cure new concrete patches; and (4) all incidentals necessary to complete the work as specified by this note and as shown on the attached detail drawings.
- **B. Steel Reinforcement.** See Section 602.

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The Department will consider payment as full compensation for all work required by these notes and detail drawings.

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SPECIAL NOTE FOR EPOXY INJECTION CRACK REPAIR SYP 3-10000.00 Bridge 002B00004N

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Drill injection port holes.
- 4. Epoxy injection.
- 5. Finish the repaired surface.
- 6. Obtain core samples for the Engineer's visual inspection.
- 7. Repair core holes.
- 8. Any other work specified as part of this contract.

II. MATERIALS, EQUIPMENT, PERSONNEL

- **A. Type IV Epoxy Resin.** Use either Category I or II suitable for epoxy injection applications. See Section 826. All cracks shall be injected using an adhesive suitable for the field conditions (crack width, temperature, humidity, etc.) recommended by the adhesive manufacture as shown on material data sheets.
- **B. Equipment.** Equipment used to inject the epoxy shall meet the recommendations of the epoxy injection material manufacturer.
- **C. Personnel.** Arrange to have a manufacturer's representative at the job site to familiarize him and the Engineer with the epoxy materials, application procedures and recommended pressure practice. The representative shall direct at least one complete crack or area injection and be assured prior to his departure from the project that the personnel are adequately informed to satisfactorily perform the remaining repairs.

Furnish the Engineer a copy of the manufacturer's comprehensive preparation, mixing and application instructions which have been developed especially for use with the proposed epoxy injection system. Ensure that any significant changes to these instructions which are recommended by the representative for an unanticipated situation have been approved by the Engineer prior to the adoption of such changes.

Bridging KY 1 of 3

III. CONSTRUCTION

- **A. Investigate Remedial Action.** If the crack is larger than or equal to 0.025" wide or has rust stains, repair the crack by epoxy injection. If the crack is less than 0.025" wide, the crack shall be sealed in accordance with the Special Note for Concrete Sealing. Areas of map cracking are to be sounded by the Engineer with a hammer. If the areas are delaminated or spalled, they shall be repaired in accordance with the Special Note for Concrete Patching. Otherwise, the cracks shall be repaired in accordance with this Note.
- **B. Drill Injection Port Holes.** Install injection ports or tees in cracks to be injected. Space injection ports or tees at 6 to 12 inches vertically and 6 to 18 inches horizontally but in no case closer together than the thickness of the concrete member if full depth penetration is desired unless otherwise specified or directed. Set ports or tees in dust free holes made either with vacuum drills or chipping hammers.
- **C. Epoxy Injection.** Seal all surface cracks in the area to be repaired, after injection ports or tees have been inserted into the holes, with paste epoxy between ports to insure retention of the pressure injection within the confines of the member. An alternate procedure of sealing the cracks before the injection holes have been made can be submitted to the Engineer for approval. Limit the application of paste epoxy to clean and dry surfaces. Limit substrate temperatures to not less than 45°F during epoxy applications.

Begin the epoxy injection at the bottom of the fractured area and progress upward using a port or tee filling sequence that will ensure the filling of the lowermost injection ports or tees first.

Establish injection procedures and the depths and spacings of holes at injection ports or tees. Use epoxy with flow characteristics and injection pressure that ensure no further damage will be done to the member being repaired. Ensure that the epoxy will first fill the innermost portion of the cracked concrete and that the potential for creating voids within the crack or epoxy will be minimized.

- **D. Finish the Repaired Surface.** Remove the injection ports or tees flush with the concrete surface after the fractured area has been filled and the epoxy has partially cured (24 hours at ambient temperature not less than 60°F, otherwise not less than 48 hours). Roughen the surfaces of the repaired areas to achieve uniform surface texture. Remove any injection epoxy runs or spills from concrete surfaces.
- **E.** Obtain Core Samples. Obtain two 4-inch diameter core samples in the first 25 linear feet of crack repaired and one core for each 25 linear feet thereafter. Take the core samples from locations determined by the Engineer and for the full crack depth. Cores will be visibly examined by the Engineer to determine the extent of epoxy penetration.
- **F. Repair Core Holes.** Repair core holes in the concrete with non-shrink grout in accordance with Section 601.03.03(B) within 24 hours.

Bridging KY 2 of 3

IV. MEASUREMENT

The Department will measure the quantity in linear feet along the centerline of the cracks. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of repairs that do not satisfy the Engineer's approval for payment and will consider them incidental to "Epoxy Injection Crack Repair".

V. PAYMENT.

The Department will make payment for the completed and accepted quantities of concrete cracks repaired with epoxy injection under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
23744EC	Epoxy Injection Crack Repair	Linear Feet

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

Bridging KY 3 of 3

SPECIAL NOTE FOR STRUCTURES WITH OVER THE SIDE DRAINAGE SYP 3-10000.00 Bridge 002B00004N

1.0 DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This note applies to structures with over the side drainage.

This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Install the drip strip; (3) Maintain and control traffic as applicable; and (4) Any other work specified as part of this contract.

2.0 MATERIALS.

- **2.1 Drip Strip.** Drip strip shall be stainless steel with a minimum of 22 gage ASTM A167, Type 304, mill finish.
- **3.0 CONSTRUCTION.** The Contractor shall bear full responsibility and expense for any and all damage to the structure, should such damage result from the Contractor's actions.
 - **3.1 Installation of Drip Strip.** Install lower stainless steel drip strip, as detailed, along the full length of each side of the bridge. If splices are required in the lower drip strip, tightly butt the individual pieces together, do not lap. Install a 1'-6" long upper drip strip at each railing post.

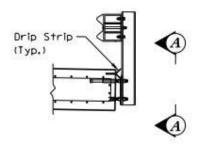
For concrete decks/slabs: Bend up strips at 90° against the inside face of the forms before concrete is placed. After the forms are removed, bend the drip strips into the final position of 45° as shown in the attached detail drawing. Use care when stripping formwork so as not to damage or wrinkle the stainless steel drip strip. To further ensure that wrinkling of the strips does not occur, use an adequate length backup bar during the bending out operation.

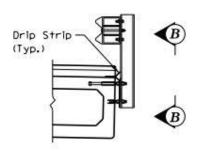
For asphalt overlays: Prior to placing the asphalt overlay, install the bent drip strips along the edge of the prestressed box beam as shown. Fasten the drip strips with (1½" length, 3/32" shank diameter) button head spikes with deformed shanks or expansion anchors at 1'-6" c/c max. All installation devices shall be galvanized or stainless steel. Other similar devices shall not be used unless approved by the Engineer.

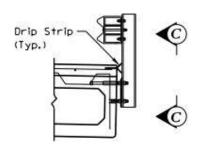
4.0 PAYMENT.

5.1 Drip Strip. Cost of all work, including all materials, labor, equipment, tools, and incidentals necessary to complete the work as specified by this note, shall be considered incidental to the project.

Bridging KY 1 of 3



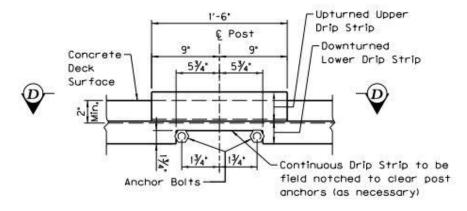




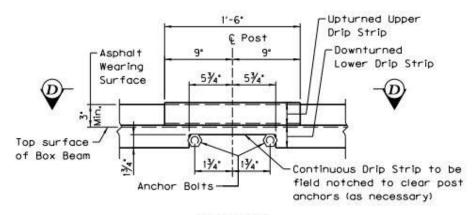
CONCRETE SLAB WITH
TYPE II RAILING

NONCOMPOSITE BOX BEAM
WITH TYPE II RAILING

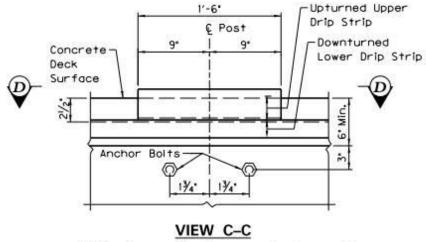
WITH TYPE II RAILING



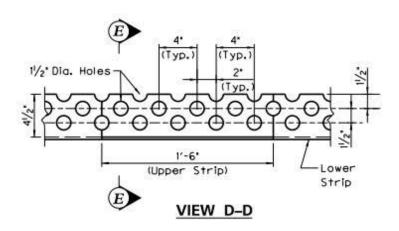
VIEW A-A
(Strip shown prior to concrete placement)

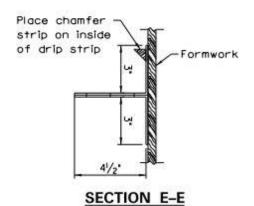


VIEW B-B

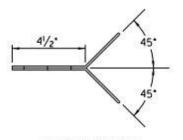


(Strip shown prior to concrete placement)





(For concrete deck prior to concrete placement)



SECTION E-E

(For concrete deck after concrete placement)

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

Todd County SYP 03-1009.00

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. 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, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. 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.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

Bridging KY

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

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

For temporary conditions, drop-offs greater than four 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.

VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

VIII. BARRICADES

For projects which allow full closure of the bridge, , ensure a minimum of (4) type III barricades are used at each end of the bridge during closures for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR AND ON SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4) For projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT

Todd County SYP 03-1009.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, and equipment.
- 2. Removal of existing abutment backfill, if needed.
- 3. Structural Granular Backfill, as needed.
- 4. Mill the existing pavement.
- 5. Place new DGA, asphalt base, and asphalt surface
- 6. Repair the roadway shoulders, if needed.
- 7. Provide Pavement Markings if needed.
- 8. Any other work specified as part of this contract.

II. MATERIALS

- A. Structural Granular Backfill. See Section 8.05.11
- **B. DGA**. See Section 302.
- **C. Tack Coat.** This material shall be in accordance with the Standard Specifications.
- D. CL2 ASPH BASE 1.0D PG 64-22. See Standard Specifications
- E. ASPHALT LEVEL AND WEDGE. See Standard Specifications
- **F. CL2 ASPH SURF 0.38D PG 64-22.** This material shall be in accordance with the Standard Specifications.
- **G. GRANULAR EMBANKMENT.** This material shall be in accordance with the Standard Specifications.
- **H. Pavement Striping.** See Section 713.

III. CONSTRUCTION – DECK, SUPERSTRUCTURE, AND FULL BRIDGE REPLACEMENTS

A. Foundation Preparation. For projects involving the removal and replacement of the asphalt and backfill behind the existing abutments and new abutments or end bents, the required excavation, Type IV geotextile fabric, 4" perforated pipe, and new Structural Granular Backfill as shown in Figure 1 as well as any excavation and grading needed to shape the bridge approaches to match the existing roadway template, will be paid for by the bid item for Foundation Preparation. See Special Provision 69 and the Standard Drawings regarding additional construction details as required.

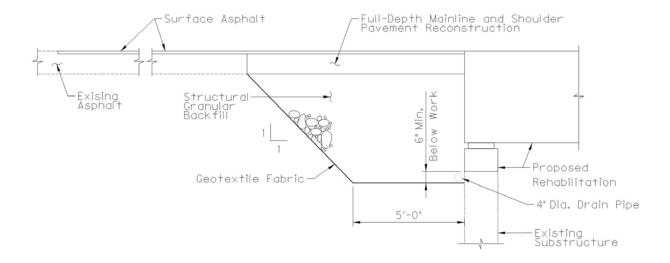


Figure 1: Detail showing proposed work for deck and superstructure replacements

- **B.** Remove Existing Asphalt Surface. Remove the existing pavement material beyond the limits of full depth asphalt replacement to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will match the elevation of the end of the full depth asphalt replacement and the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- C. Produce and Place New Asphalt Base. Replace any full depth mainline and shoulder pavement removed as part of bridge backwall construction, superstructure replacement, or other work (if included in the Contract Documents) with a minimum of 8 inches of DGA, placed in two lifts of 4 inches each compacted and 8 inches of CL2 ASPH BASE 1.0D PG 64-22, placed in two lifts of 4 inches each compacted. Final elevation of the Asphalt Base at the approaches to match the width and new elevation of the riding surface on the bridge less the New Asphalt Surface to be placed. Shoulders shall receive identical treatment to the mainline pavement.
- **D. Produce and Place New Asphalt Surface**. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¹/₄" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project, and/or the new abutment backwall.
- E. Granular Embankment for Guardrails. When necessary to ensure compliance with

standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.

F. Pavement Markings. Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. CONSTRUCTION – OVERLAY PROJECTS

- A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge, if applicable, and matches the elevation of the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- **B.** Mainline and Shoulder Reconstruction. Replace shoulders in kind at the approaches to match the width and new elevation of the riding surface on the bridge. Shoulders shall receive identical treatment to the mainline pavement.
- C. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project and the bridge end.

For bridge decks specified to receive a new asphalt overlay as part of the work, place asphalt level and wedge and CL2 ASPH SURF 0.38D PG 64-22 as detailed in the plans to smoothly connect to the bridge approaches. If plans call for use of a waterproof membrane, this shall be addressed as a separate bid item.

- **D.** Granular Embankment for Guardrails. When necessary to ensure compliance with standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with the plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.
- **E. Pavement Markings.** Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach

Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

V. MEASUREMENT

- A. Granular Embankment: The Department will measure the quantity in cubic yards. The Department will measure along the centerline to determine a linear foot of placement multiplied by a theoretical cross section of 12 square feet to achieve the quantity per side of the roadway.
- B. Bridge Overlay Approach Pavement: The Department will measure the quantity of in square yards. The Department will measure along the centerline from each end of the limits of the work as detailed on the plans to the point where the new pavement ties into the exiting pavement and across the width of the new pavement perpendicular to the centerline of the roadway.
- C. Foundation Preparation: See Section 603.

VI. PAYMENT

- A. Granular Embankment: Payment at the contract unit price per cubic yard of granular embankment is full compensation for granular embankment and DGA used for widening the shoulder for guardrail as directed. Variance of actual cross sectional quantities versus theoretical quantities will not be considered for additional payment.
- B. Bridge Overlay Approach Pavement: Payment at the contract unit price per square yard of is full compensation for removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, reconstruct shoulders as needed, furnishing and installing the asphalt tack coat, producing and placing the new asphalt and DGA, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown in the Contract Documents.
- C. Foundation Preparation: See Section 603. Payment for Structural Granular Backfill to be incidental to Foundation Preparation.

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
03304	Bridge Overlay Approach Pavement	Square Yards
08803	Foundation Preparation	Lump Sum

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

SPECIAL NOTE FOR CONCRETE COATING

Todd County SYP 03-1009.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
- 4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
- 5. Apply Ordinary Surface Finish
- 6. Prepare the surfaces to receive coating.
- 7. Apply concrete coating.
- 8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u>Prime Coat</u>	<u>Finish Coat</u>
Macropoxy 646	Acrolon 218 HS
Amerlock 2	Devoe Devflex HP
Carboguard 890	Carbothane 133 HB
Elastogrip 151	Envirocrete 156
	Amerlock 2 Carboguard 890

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	a*	<u>b*</u>
Grey	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

III. CONSTRUCTION

- **A. Perform Concrete Repairs.** Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.
- **B.** Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Coating:

- 1. Every exposed surface above a point 6" below ground or fill line of abutments, wing walls, end bent and pier caps, pedestals, back walls, columns, and exposed footings.
- 2. All exposed surfaces of concrete barrier walls, parapets, curbs, and plinths. Do not apply to the riding surface of the concrete deck.
- 3. The underneath surfaces of slab overhangs outside of exterior girders and to the exterior side and bottom of exterior concrete girders, beams, and box beams.
- **D. Prepare Concrete Surfaces for Repair.** All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Preform all pressure washing at temperatures above 40 degrees Fahrenheit.
- **E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface.

All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor's paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Preform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity in square feet. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of coatings that do not satisfy the Engineer's approval for payment and will consider them incidental to "Concrete Coating".

V. PAYMENT.

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

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u> 24982EC Concrete Coating Lump Sum

The plans may show an estimate quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

SPECIAL NOTE FOR EROSION PREVENTION AND SEDIMENT CONTROL

Todd County SYP 03-1009.00

When required, the Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

The Contractor shall perform all final seeding and protection, in accordance with the plans and Section 212 of the KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. If corrections are not made within the 5 days specified, liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.

Contrary to Section 212. 05 and 213.05, bid items for temporary BMPs and items for permanent erosion control will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices". The contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the 2012 Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS Allen County SYP 03-10011.00

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. 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, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. 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.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

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The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

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

For temporary conditions, drop-offs greater than four 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.

VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

VIII. BARRICADES

For projects which allow full closure of the bridge, , ensure a minimum of (4) type III barricades are used at each end of the bridge during closures for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR AND ON SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4) For projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT Allen County SYP 03-10011.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, and equipment.
- 2. Removal of existing abutment backfill, if needed.
- 3. Structural Granular Backfill, as needed.
- 4. Mill the existing pavement.
- 5. Place new DGA, asphalt base, and asphalt surface
- 6. Repair the roadway shoulders, if needed.
- 7. Provide Pavement Markings if needed.
- 8. Any other work specified as part of this contract.

II. MATERIALS

- A. Structural Granular Backfill. See Section 8.05.11
- B. DGA. See Section 302.
- **C. Tack Coat.** This material shall be in accordance with the Standard Specifications.
- D. CL2 ASPH BASE 1.0D PG 64-22. See Standard Specifications
- E. ASPHALT LEVEL AND WEDGE. See Standard Specifications
- **F. CL2 ASPH SURF 0.38D PG 64-22.** This material shall be in accordance with the Standard Specifications.
- **G. GRANULAR EMBANKMENT.** This material shall be in accordance with the Standard Specifications.
- H. Pavement Striping. See Section 713.

III. CONSTRUCTION – DECK, SUPERSTRUCTURE, AND FULL BRIDGE REPLACEMENTS

A. Foundation Preparation. For projects involving the removal and replacement of the asphalt and backfill behind the existing abutments and new abutments or end bents, the required excavation, Type IV geotextile fabric, 4" perforated pipe, and new Structural Granular Backfill as shown in Figure 1 as well as any excavation and grading needed to shape the bridge approaches to match the existing roadway template, will be paid for by the bid item for Foundation Preparation. See Special Provision 69 and the Standard Drawings regarding additional construction details as required.

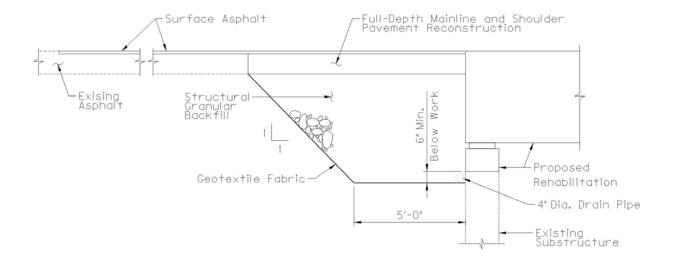


Figure 1: Detail showing proposed work for deck and superstructure replacements

- **B.** Remove Existing Asphalt Surface. Remove the existing pavement material beyond the limits of full depth asphalt replacement to provide for a minimum of 1½" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will match the elevation of the end of the full depth asphalt replacement and the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- C. Produce and Place New Asphalt Base. Replace any full depth mainline and shoulder pavement removed as part of bridge backwall construction, superstructure replacement, or other work (if included in the Contract Documents) with a minimum of 8 inches of DGA, placed in two lifts of 4 inches each compacted and 8 inches of CL2 ASPH BASE 1.0D PG 64-22, placed in two lifts of 4 inches each compacted. Final elevation of the Asphalt Base at the approaches to match the width and new elevation of the riding surface on the bridge less the New Asphalt Surface to be placed. Shoulders shall receive identical treatment to the mainline pavement.
- **D. Produce and Place New Asphalt Surface**. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ½" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project, and/or the new abutment backwall.
- E. Granular Embankment for Guardrails. When necessary to ensure compliance with

standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.

F. Pavement Markings. Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. CONSTRUCTION – OVERLAY PROJECTS

- A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge, if applicable, and matches the elevation of the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- **B.** Mainline and Shoulder Reconstruction. Replace shoulders in kind at the approaches to match the width and new elevation of the riding surface on the bridge. Shoulders shall receive identical treatment to the mainline pavement.
- C. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project and the bridge end.

For bridge decks specified to receive a new asphalt overlay as part of the work, place asphalt level and wedge and CL2 ASPH SURF 0.38D PG 64-22 as detailed in the plans to smoothly connect to the bridge approaches. If plans call for use of a waterproof membrane, this shall be addressed as a separate bid item.

- **D.** Granular Embankment for Guardrails. When necessary to ensure compliance with standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with the plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.
- **E. Pavement Markings.** Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach

Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

V. MEASUREMENT

- A. Granular Embankment: The Department will measure the quantity in cubic yards. The Department will measure along the centerline to determine a linear foot of placement multiplied by a theoretical cross section of 12 square feet to achieve the quantity per side of the roadway.
- B. Bridge Overlay Approach Pavement: The Department will measure the quantity of in square yards. The Department will measure along the centerline from each end of the limits of the work as detailed on the plans to the point where the new pavement ties into the exiting pavement and across the width of the new pavement perpendicular to the centerline of the roadway.
- C. Foundation Preparation: See Section 603.

VI. PAYMENT

- A. Granular Embankment: Payment at the contract unit price per cubic yard of granular embankment is full compensation for granular embankment and DGA used for widening the shoulder for guardrail as directed. Variance of actual cross sectional quantities versus theoretical quantities will not be considered for additional payment.
- B. Bridge Overlay Approach Pavement: Payment at the contract unit price per square yard of is full compensation for removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, reconstruct shoulders as needed, furnishing and installing the asphalt tack coat, producing and placing the new asphalt and DGA, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown in the Contract Documents.
- C. Foundation Preparation: See Section 603. Payment for Structural Granular Backfill to be incidental to Foundation Preparation.

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
03304	Bridge Overlay Approach Pavement	Square Yards
08803	Foundation Preparation	Lump Sum

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

SPECIAL NOTE FOR CONCRETE COATING

Allen County SYP 03-10011.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
- 4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
- 5. Apply Ordinary Surface Finish
- 6. Prepare the surfaces to receive coating.
- 7. Apply concrete coating.
- 8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u>Prime Coat</u>	<u>Finish Coat</u>
Macropoxy 646	Acrolon 218 HS
Amerlock 2	Devoe Devflex HP
Carboguard 890	Carbothane 133 HB
Elastogrip 151	Envirocrete 156
	Macropoxy 646 Amerlock 2 Carboguard 890

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	a*	<u>b*</u>
Grey	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

III. CONSTRUCTION

- **A. Perform Concrete Repairs.** Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.
- **B.** Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Coating:

- 1. Every exposed surface above a point 6" below ground or fill line of abutments, wing walls, end bent and pier caps, pedestals, back walls, columns, and exposed footings.
- 2. All exposed surfaces of concrete barrier walls, parapets, curbs, and plinths. Do not apply to the riding surface of the concrete deck.
- 3. The underneath surfaces of slab overhangs outside of exterior girders and to the exterior side and bottom of exterior concrete girders, beams, and box beams.
- **D. Prepare Concrete Surfaces for Repair.** All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Preform all pressure washing at temperatures above 40 degrees Fahrenheit.
- **E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface.

All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor's paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Preform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity in square feet. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of coatings that do not satisfy the Engineer's approval for payment and will consider them incidental to "Concrete Coating".

V. PAYMENT.

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

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u> 24982EC Concrete Coating Lump Sum

The plans may show an estimate quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

SPECIAL NOTE FOR EROSION PREVENTION AND SEDIMENT CONTROL Allen County SYP 03-10011.00

When required, the Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

The Contractor shall perform all final seeding and protection, in accordance with the plans and Section 212 of the KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. If corrections are not made within the 5 days specified, liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.

Contrary to Section 212. 05 and 213.05, bid items for temporary BMPs and items for permanent erosion control will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices". The contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the 2012 Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR SYP 3-10011.00 Bridge 002B00021N

These Notes or designated portions thereof, apply where so indicated on the plans, proposals or bidding instruction.

I. DESCRIPTION. Perform all work in accordance with the Department's 2012 Standard Specifications, and applicable Supplemental Specifications, the attached sketches, and these Notes. Section references are to the Standard Specifications.

This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing spalled/delaminated concrete; (3) Prepare the existing surface for concrete patching; (4) Place hook fasteners and welded wire fabric over surfaces to be repaired (where applicable); (5) Apply concrete patching as specified by this note and as shown on the attached detail drawings; (6) Finish and cure the new Concrete Patches; (7) Maintain & control traffic; and, (8) Any other work specified as part of this contract.

II. MATERIALS.

- **A.** Class "M" Concrete. Use either "M1" or "M2". See Section 601.
- **B.** Steel Reinforcement. Use Grade 60. See Section 602
- C. Welded Steel Wire Fabric (WWF). Conform to Section 811
- **D. Hook Fasteners.** Use commercial grade galvanized hook fasteners. Minimum 3/16" diameter.

III. CONSTRUCTION.

A. Concrete Removal and Preparation. The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Sounding shall be used to locate delaminated areas. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. Concrete removal shall be in accordance with a sequence approved by the Engineer.

Concrete removal shall be accomplished by chipping with hand picks, chisels or light duty pneumatic or electric chipping hammers (not to exceed 15 lbs.). Remove all deteriorated loose concrete to a minimum depth of 4". When reinforcing steel is exposed, concrete removal shall continue until there is a minimum ¾ inch clearance around the exposed reinforcing bar. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. Unless specifically *directed by the Engineer*, depth of removal shall not exceed 6 inches.

The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent featheredging unless otherwise approved by the Engineer.

After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by abrasive blast cleaning. Abrasive blast

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cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete.

The Contractor shall dispose all removed material off State Right Of Way in an approved site.

B. Steel Reinforcement. All corroded reinforcing steel exposed during concrete removal shall have corrosion products removed by abrasive grit blasting or wire brush whichever is more appropriate. Furnish for replacement, as directed by the Engineer, additional linear feet of steel reinforcing bars ½" diameter by 20-foot lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Deliver unused bars to the nearest County Maintenance Barn. Payment will be made in accordance with Section 602.

Reinforcing steel displaying deep pitting or loss of more than 20 percent of cross-sectional area shall be removed and replaced. Such bars shall be placed in accordance with the recommendations of ACI 506R, Sections 5.4 and 5.5. In particular, bars shall not be bundled in lapped splices, but shall be placed such that the minimum spacing around each bar is three times the maximum aggregate size to allow for proper encapsulation with concrete patching.

Intersecting reinforcing bars shall be tightly secured to each other using tie wire and adequately supported to minimize movement during concrete placement. Welded wire fabric (WWF) shall be provided when shown on the attached sketches and at each repair area larger than 1 square foot if the depth of the repair exceeds 3 inches from the original dimension of the repaired member. Sheets of adjoining WWF shall be lapped by at least one and one-half spaces at all intersections, in both directions, and be securely fastened. WWF fabric shall be supported no closer than ½ inch to the prepared concrete surface and shall have a minimum concrete cover of 1.5 inches.

WWF shall be fastened to preset anchors on a grid not more than 12 inches square. Large knots of tie wire which could result in sand pockets and voids during patching shall be avoided.

C. Hook Fasteners. Hook fasteners shall be positioned at the spacing as stated above or as directed by the Engineer. Any given area shall have a minimum of four anchors. The WWF shall not move or deform excessively during concrete patching. Maximum hook fastener spacing shall not exceed 2 feet on a grid pattern over the entire repair area.

Hook fasteners shall be of commercial grade galvanized steel with a minimum diameter of 3/16". They may be mechanically set or grouted, as approved by the Engineer.

The Department will randomly select hook fasteners to be tested to verify pullout force is sufficient. If any anchors fail to meet the minimum acceptable pullout value, corrective measures shall be taken by the Contractor and further testing will be conducted.

- **D.** Class M Concrete. Place and finish the new concrete for the patching area as shown on the attached detail drawings, or as directed by the Engineer. The Engineer shall approve the Contractor's method of placing and consolidating the concrete prior to the beginning of this operation.
- **E. Curing.** On completion of finishing operation, patching concrete shall immediately be prevented from drying out and cracking by fogging, wetting, and/or any appropriate method approved by the Engineer. See Section 501.03.15.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department. Quantities given are approximate. The quantity for "Concrete Patching Repair" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer. Dispose of all removed material entirely away from the job site as approved by the Engineer. This work is incidental to the contract unit price for "Concrete Patching Repair".

IV. MEASUREMENT

- **A.** Concrete Patching Repair. The Department will measure the quantity per square feet of each area restored. Double payment will not be made on both faces of corner repairs.
- **B. Steel Reinforcement.** See Section 602.
- C. Welded Wire Fabric & Hook Fasteners. Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

V. PAYMENT

- **A.** Concrete Patching Repair. Payment at the contract unit price per square feet is full compensation for the following: (1) Furnish all labor, materials, tools, equipment; (2) preparation of specified areas including removing and disposing of specified existing materials; (3) place, finish, and cure new concrete patches; and (4) all incidentals necessary to complete the work as specified by this note and as shown on the attached detail drawings.
- **B. Steel Reinforcement.** See Section 602.

The Department will consider payment as full compensation for all work required by these notes and detail drawings.

SPECIAL NOTE FOR EPOXY INJECTION CRACK REPAIR SYP 3-10011.00 Bridge 002B00021N

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Drill injection port holes.
- 4. Epoxy injection.
- 5. Finish the repaired surface.
- 6. Obtain core samples for the Engineer's visual inspection.
- 7. Repair core holes.
- 8. Any other work specified as part of this contract.

II. MATERIALS, EQUIPMENT, PERSONNEL

- **A. Type IV Epoxy Resin.** Use either Category I or II suitable for epoxy injection applications. See Section 826. All cracks shall be injected using an adhesive suitable for the field conditions (crack width, temperature, humidity, etc.) recommended by the adhesive manufacture as shown on material data sheets.
- **B. Equipment.** Equipment used to inject the epoxy shall meet the recommendations of the epoxy injection material manufacturer.
- **C. Personnel.** Arrange to have a manufacturer's representative at the job site to familiarize him and the Engineer with the epoxy materials, application procedures and recommended pressure practice. The representative shall direct at least one complete crack or area injection and be assured prior to his departure from the project that the personnel are adequately informed to satisfactorily perform the remaining repairs.

Furnish the Engineer a copy of the manufacturer's comprehensive preparation, mixing and application instructions which have been developed especially for use with the proposed epoxy injection system. Ensure that any significant changes to these instructions which are recommended by the representative for an unanticipated situation have been approved by the Engineer prior to the adoption of such changes.

III. CONSTRUCTION

- **A. Investigate Remedial Action.** If the crack is larger than or equal to 0.025" wide or has rust stains, repair the crack by epoxy injection. If the crack is less than 0.025" wide, the crack shall be sealed in accordance with the Special Note for Concrete Sealing. Areas of map cracking are to be sounded by the Engineer with a hammer. If the areas are delaminated or spalled, they shall be repaired in accordance with the Special Note for Concrete Patching. Otherwise, the cracks shall be repaired in accordance with this Note.
- **B. Drill Injection Port Holes.** Install injection ports or tees in cracks to be injected. Space injection ports or tees at 6 to 12 inches vertically and 6 to 18 inches horizontally but in no case closer together than the thickness of the concrete member if full depth penetration is desired unless otherwise specified or directed. Set ports or tees in dust free holes made either with vacuum drills or chipping hammers.
- **C. Epoxy Injection.** Seal all surface cracks in the area to be repaired, after injection ports or tees have been inserted into the holes, with paste epoxy between ports to insure retention of the pressure injection within the confines of the member. An alternate procedure of sealing the cracks before the injection holes have been made can be submitted to the Engineer for approval. Limit the application of paste epoxy to clean and dry surfaces. Limit substrate temperatures to not less than 45°F during epoxy applications.

Begin the epoxy injection at the bottom of the fractured area and progress upward using a port or tee filling sequence that will ensure the filling of the lowermost injection ports or tees first.

Establish injection procedures and the depths and spacings of holes at injection ports or tees. Use epoxy with flow characteristics and injection pressure that ensure no further damage will be done to the member being repaired. Ensure that the epoxy will first fill the innermost portion of the cracked concrete and that the potential for creating voids within the crack or epoxy will be minimized.

- **D. Finish the Repaired Surface.** Remove the injection ports or tees flush with the concrete surface after the fractured area has been filled and the epoxy has partially cured (24 hours at ambient temperature not less than 60°F, otherwise not less than 48 hours). Roughen the surfaces of the repaired areas to achieve uniform surface texture. Remove any injection epoxy runs or spills from concrete surfaces.
- **E.** Obtain Core Samples. Obtain two 4-inch diameter core samples in the first 25 linear feet of crack repaired and one core for each 25 linear feet thereafter. Take the core samples from locations determined by the Engineer and for the full crack depth. Cores will be visibly examined by the Engineer to determine the extent of epoxy penetration.
- **F. Repair Core Holes.** Repair core holes in the concrete with non-shrink grout in accordance with Section 601.03.03(B) within 24 hours.

IV. MEASUREMENT

The Department will measure the quantity in linear feet along the centerline of the cracks. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of repairs that do not satisfy the Engineer's approval for payment and will consider them incidental to "Epoxy Injection Crack Repair".

V. PAYMENT.

The Department will make payment for the completed and accepted quantities of concrete cracks repaired with epoxy injection under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
23744EC	Epoxy Injection Crack Repair	Linear Feet

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

SPECIAL NOTE FOR STRUCTURES WITH OVER THE SIDE DRAINAGE SYP 3-10011.00 Bridge 002B00021N

1.0 DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This note applies to structures with over the side drainage.

This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Install the drip strip; (3) Maintain and control traffic as applicable; and (4) Any other work specified as part of this contract.

2.0 MATERIALS.

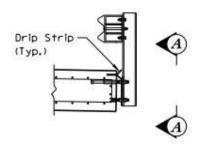
- **2.1 Drip Strip.** Drip strip shall be stainless steel with a minimum of 22 gage ASTM A167, Type 304, mill finish.
- **3.0 CONSTRUCTION.** The Contractor shall bear full responsibility and expense for any and all damage to the structure, should such damage result from the Contractor's actions.
 - **3.1 Installation of Drip Strip.** Install lower stainless steel drip strip, as detailed, along the full length of each side of the bridge. If splices are required in the lower drip strip, tightly butt the individual pieces together, do not lap. Install a 1'-6" long upper drip strip at each railing post.

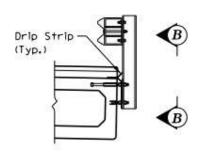
For concrete decks/slabs: Bend up strips at 90° against the inside face of the forms before concrete is placed. After the forms are removed, bend the drip strips into the final position of 45° as shown in the attached detail drawing. Use care when stripping formwork so as not to damage or wrinkle the stainless steel drip strip. To further ensure that wrinkling of the strips does not occur, use an adequate length backup bar during the bending out operation.

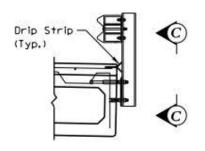
For asphalt overlays: Prior to placing the asphalt overlay, install the bent drip strips along the edge of the prestressed box beam as shown. Fasten the drip strips with (1½" length, 3/32" shank diameter) button head spikes with deformed shanks or expansion anchors at 1'-6" c/c max. All installation devices shall be galvanized or stainless steel. Other similar devices shall not be used unless approved by the Engineer.

4.0 PAYMENT.

5.1 Drip Strip. Cost of all work, including all materials, labor, equipment, tools, and incidentals necessary to complete the work as specified by this note, shall be considered incidental to the project.



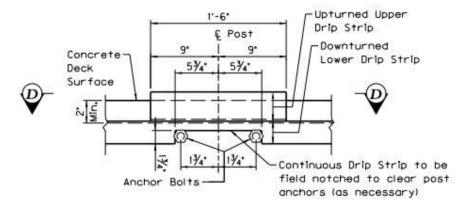




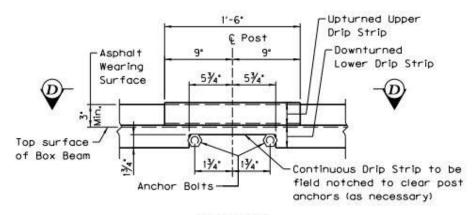
CONCRETE SLAB WITH
TYPE II RAILING

NONCOMPOSITE BOX BEAM
WITH TYPE II RAILING

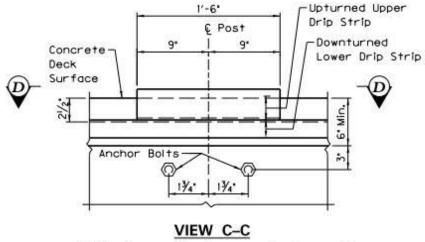
WITH TYPE II RAILING



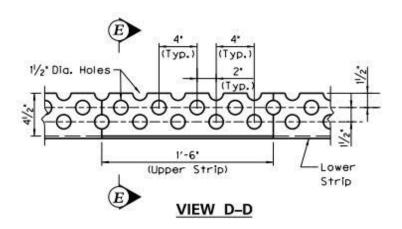
VIEW A-A
(Strip shown prior to concrete placement)

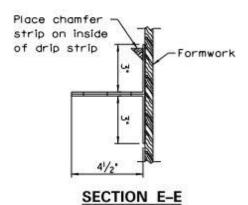


VIEW B-B

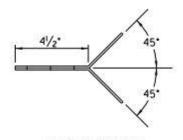


(Strip shown prior to concrete placement)





(For concrete deck prior to concrete placement)



SECTION E-E
(For concrete deck after concrete placement)

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

Todd County SYP 03-10013.00

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. 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, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. 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.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

Bridging KY

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

Bridging KY 2 of 4

VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

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

For temporary conditions, drop-offs greater than four 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.

VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

VIII. BARRICADES

For projects which allow full closure of the bridge, , ensure a minimum of (4) type III barricades are used at each end of the bridge during closures for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR AND ON SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

Bridging KY 3 of 4

- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4) For projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

Bridging KY 4 of 4

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT

Todd County SYP 03-10013.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, and equipment.
- 2. Removal of existing abutment backfill, if needed.
- 3. Structural Granular Backfill, as needed.
- 4. Mill the existing pavement.
- 5. Place new DGA, asphalt base, and asphalt surface
- 6. Repair the roadway shoulders, if needed.
- 7. Provide Pavement Markings if needed.
- 8. Any other work specified as part of this contract.

II. MATERIALS

- A. Structural Granular Backfill. See Section 8.05.11
- **B. DGA**. See Section 302.
- **C. Tack Coat.** This material shall be in accordance with the Standard Specifications.
- D. CL2 ASPH BASE 1.0D PG 64-22. See Standard Specifications
- E. ASPHALT LEVEL AND WEDGE. See Standard Specifications
- **F. CL2 ASPH SURF 0.38D PG 64-22.** This material shall be in accordance with the Standard Specifications.
- **G. GRANULAR EMBANKMENT.** This material shall be in accordance with the Standard Specifications.
- **H. Pavement Striping.** See Section 713.

III. CONSTRUCTION – DECK, SUPERSTRUCTURE, AND FULL BRIDGE REPLACEMENTS

A. Foundation Preparation. For projects involving the removal and replacement of the asphalt and backfill behind the existing abutments and new abutments or end bents, the required excavation, Type IV geotextile fabric, 4" perforated pipe, and new Structural Granular Backfill as shown in Figure 1 as well as any excavation and grading needed to shape the bridge approaches to match the existing roadway template, will be paid for by the bid item for Foundation Preparation. See Special Provision 69 and the Standard Drawings regarding additional construction details as required.

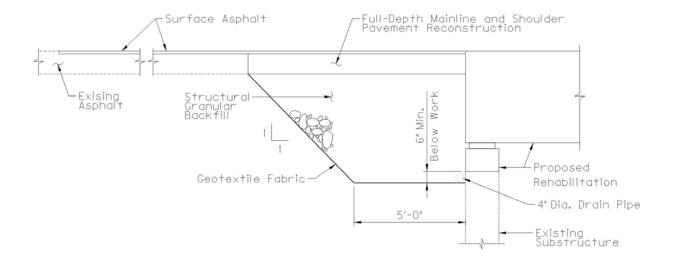


Figure 1: Detail showing proposed work for deck and superstructure replacements

- **B.** Remove Existing Asphalt Surface. Remove the existing pavement material beyond the limits of full depth asphalt replacement to provide for a minimum of 1½" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will match the elevation of the end of the full depth asphalt replacement and the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- C. Produce and Place New Asphalt Base. Replace any full depth mainline and shoulder pavement removed as part of bridge backwall construction, superstructure replacement, or other work (if included in the Contract Documents) with a minimum of 8 inches of DGA, placed in two lifts of 4 inches each compacted and 8 inches of CL2 ASPH BASE 1.0D PG 64-22, placed in two lifts of 4 inches each compacted. Final elevation of the Asphalt Base at the approaches to match the width and new elevation of the riding surface on the bridge less the New Asphalt Surface to be placed. Shoulders shall receive identical treatment to the mainline pavement.
- **D. Produce and Place New Asphalt Surface**. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ½" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project, and/or the new abutment backwall.
- E. Granular Embankment for Guardrails. When necessary to ensure compliance with

standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.

F. Pavement Markings. Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. CONSTRUCTION – OVERLAY PROJECTS

- A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge, if applicable, and matches the elevation of the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- **B.** Mainline and Shoulder Reconstruction. Replace shoulders in kind at the approaches to match the width and new elevation of the riding surface on the bridge. Shoulders shall receive identical treatment to the mainline pavement.
- C. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project and the bridge end.

For bridge decks specified to receive a new asphalt overlay as part of the work, place asphalt level and wedge and CL2 ASPH SURF 0.38D PG 64-22 as detailed in the plans to smoothly connect to the bridge approaches. If plans call for use of a waterproof membrane, this shall be addressed as a separate bid item.

- **D.** Granular Embankment for Guardrails. When necessary to ensure compliance with standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with the plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.
- **E. Pavement Markings.** Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach

Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

V. MEASUREMENT

- A. Granular Embankment: The Department will measure the quantity in cubic yards. The Department will measure along the centerline to determine a linear foot of placement multiplied by a theoretical cross section of 12 square feet to achieve the quantity per side of the roadway.
- B. Bridge Overlay Approach Pavement: The Department will measure the quantity of in square yards. The Department will measure along the centerline from each end of the limits of the work as detailed on the plans to the point where the new pavement ties into the exiting pavement and across the width of the new pavement perpendicular to the centerline of the roadway.
- C. Foundation Preparation: See Section 603.

VI. PAYMENT

- A. Granular Embankment: Payment at the contract unit price per cubic yard of granular embankment is full compensation for granular embankment and DGA used for widening the shoulder for guardrail as directed. Variance of actual cross sectional quantities versus theoretical quantities will not be considered for additional payment.
- B. Bridge Overlay Approach Pavement: Payment at the contract unit price per square yard of is full compensation for removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, reconstruct shoulders as needed, furnishing and installing the asphalt tack coat, producing and placing the new asphalt and DGA, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown in the Contract Documents.
- C. Foundation Preparation: See Section 603. Payment for Structural Granular Backfill to be incidental to Foundation Preparation.

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
03304	Bridge Overlay Approach Pavement	Square Yards
08803	Foundation Preparation	Lump Sum

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

SPECIAL NOTE FOR CONCRETE COATING

Todd County SYP 03-10013.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
- 4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
- 5. Apply Ordinary Surface Finish
- 6. Prepare the surfaces to receive coating.
- 7. Apply concrete coating.
- 8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u>Prime Coat</u>	<u>Finish Coat</u>
Macropoxy 646	Acrolon 218 HS
Amerlock 2	Devoe Devflex HP
Carboguard 890	Carbothane 133 HB
Elastogrip 151	Envirocrete 156
	Macropoxy 646 Amerlock 2 Carboguard 890

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	a*	<u>b*</u>
Grey	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

Bridging KY 1 of 3

III. CONSTRUCTION

- **A. Perform Concrete Repairs.** Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.
- **B.** Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Coating:

- 1. Every exposed surface above a point 6" below ground or fill line of abutments, wing walls, end bent and pier caps, pedestals, back walls, columns, and exposed footings.
- 2. All exposed surfaces of concrete barrier walls, parapets, curbs, and plinths. Do not apply to the riding surface of the concrete deck.
- 3. The underneath surfaces of slab overhangs outside of exterior girders and to the exterior side and bottom of exterior concrete girders, beams, and box beams.
- **D. Prepare Concrete Surfaces for Repair.** All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Preform all pressure washing at temperatures above 40 degrees Fahrenheit.
- **E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface.

Bridging KY 2 of 3

All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor's paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Preform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity in square feet. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of coatings that do not satisfy the Engineer's approval for payment and will consider them incidental to "Concrete Coating".

V. PAYMENT.

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

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u> 24982EC Concrete Coating Lump Sum

The plans may show an estimate quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

Bridging KY 3 of 3

SPECIAL NOTE FOR EROSION PREVENTION AND SEDIMENT CONTROL

Todd County SYP 03-10013.00

When required, the Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

The Contractor shall perform all final seeding and protection, in accordance with the plans and Section 212 of the KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. If corrections are not made within the 5 days specified, liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.

Contrary to Section 212. 05 and 213.05, bid items for temporary BMPs and items for permanent erosion control will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices". The contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the 2012 Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

Warren County SYP 03-10014.00

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. 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, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. 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.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

Bridging KY

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

Bridging KY 2 of 4

VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

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

For temporary conditions, drop-offs greater than four 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.

VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

VIII. BARRICADES

For projects which allow full closure of the bridge, , ensure a minimum of (4) type III barricades are used at each end of the bridge during closures for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR AND ON SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

Bridging KY 3 of 4

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

Warren County SYP 03-10014.00

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. 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, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. 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.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

Bridging KY

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allows for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

Bridging KY 2 of 4

VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

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

For temporary conditions, drop-offs greater than four 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.

VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

VIII. BARRICADES

For projects which allow full closure of the bridge, , ensure a minimum of (4) type III barricades are used at each end of the bridge during closures for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR AND ON SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

Bridging KY 3 of 4

- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4) For projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

Bridging KY 4 of 4

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT

Warren County SYP 03-10014.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, and equipment.
- 2. Removal of existing abutment backfill, if needed.
- 3. Structural Granular Backfill, as needed.
- 4. Mill the existing pavement.
- 5. Place new DGA, asphalt base, and asphalt surface
- 6. Repair the roadway shoulders, if needed.
- 7. Provide Pavement Markings if needed.
- 8. Any other work specified as part of this contract.

II. MATERIALS

- A. Structural Granular Backfill. See Section 8.05.11
- **B. DGA**. See Section 302.
- **C. Tack Coat.** This material shall be in accordance with the Standard Specifications.
- D. CL2 ASPH BASE 1.0D PG 64-22. See Standard Specifications
- E. ASPHALT LEVEL AND WEDGE. See Standard Specifications
- **F. CL2 ASPH SURF 0.38D PG 64-22.** This material shall be in accordance with the Standard Specifications.
- **G. GRANULAR EMBANKMENT.** This material shall be in accordance with the Standard Specifications.
- **H. Pavement Striping.** See Section 713.

III. CONSTRUCTION – DECK, SUPERSTRUCTURE, AND FULL BRIDGE REPLACEMENTS

A. Foundation Preparation. For projects involving the removal and replacement of the asphalt and backfill behind the existing abutments and new abutments or end bents, the required excavation, Type IV geotextile fabric, 4" perforated pipe, and new Structural Granular Backfill as shown in Figure 1 as well as any excavation and grading needed to shape the bridge approaches to match the existing roadway template, will be paid for by the bid item for Foundation Preparation. See Special Provision 69 and the Standard Drawings regarding additional construction details as required.

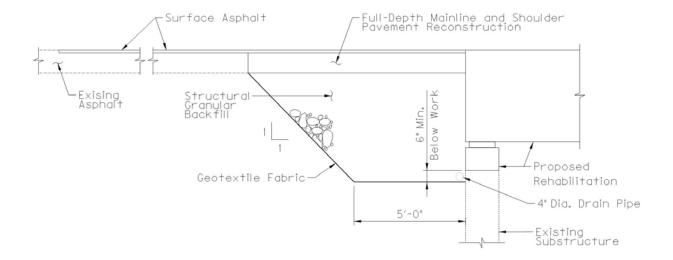


Figure 1: Detail showing proposed work for deck and superstructure replacements

- **B.** Remove Existing Asphalt Surface. Remove the existing pavement material beyond the limits of full depth asphalt replacement to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will match the elevation of the end of the full depth asphalt replacement and the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- C. Produce and Place New Asphalt Base. Replace any full depth mainline and shoulder pavement removed as part of bridge backwall construction, superstructure replacement, or other work (if included in the Contract Documents) with a minimum of 8 inches of DGA, placed in two lifts of 4 inches each compacted and 8 inches of CL2 ASPH BASE 1.0D PG 64-22, placed in two lifts of 4 inches each compacted. Final elevation of the Asphalt Base at the approaches to match the width and new elevation of the riding surface on the bridge less the New Asphalt Surface to be placed. Shoulders shall receive identical treatment to the mainline pavement.
- **D. Produce and Place New Asphalt Surface**. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ½" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project, and/or the new abutment backwall.
- E. Granular Embankment for Guardrails. When necessary to ensure compliance with

standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.

F. Pavement Markings. Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. CONSTRUCTION – OVERLAY PROJECTS

- A. Remove Existing Materials. Remove the existing pavement material to provide for a minimum of 1¼" new pavement surface from the bridge end extending approximately 25 feet, or as shown in the plans, into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge, if applicable, and matches the elevation of the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- **B.** Mainline and Shoulder Reconstruction. Replace shoulders in kind at the approaches to match the width and new elevation of the riding surface on the bridge. Shoulders shall receive identical treatment to the mainline pavement.
- C. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" Asphalt Surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG 64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project and the bridge end.

For bridge decks specified to receive a new asphalt overlay as part of the work, place asphalt level and wedge and CL2 ASPH SURF 0.38D PG 64-22 as detailed in the plans to smoothly connect to the bridge approaches. If plans call for use of a waterproof membrane, this shall be addressed as a separate bid item.

- **D.** Granular Embankment for Guardrails. When necessary to ensure compliance with standards, widen shoulders behind guardrail with granular embankment and cap with DGA in accordance with the plans or as directed by the Engineer. Remove existing topsoil as needed and place embankment in a manner to ensure proper compaction.
- **E. Pavement Markings.** Pavement striping will be required to match the existing pavement striping on both approaches and the structure. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be incidental to the work. Raised pavement markers within the limits of the "Bridge Overlay Approach

Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

V. MEASUREMENT

- A. Granular Embankment: The Department will measure the quantity in cubic yards. The Department will measure along the centerline to determine a linear foot of placement multiplied by a theoretical cross section of 12 square feet to achieve the quantity per side of the roadway.
- B. Bridge Overlay Approach Pavement: The Department will measure the quantity of in square yards. The Department will measure along the centerline from each end of the limits of the work as detailed on the plans to the point where the new pavement ties into the exiting pavement and across the width of the new pavement perpendicular to the centerline of the roadway.
- C. Foundation Preparation: See Section 603.

VI. PAYMENT

- A. Granular Embankment: Payment at the contract unit price per cubic yard of granular embankment is full compensation for granular embankment and DGA used for widening the shoulder for guardrail as directed. Variance of actual cross sectional quantities versus theoretical quantities will not be considered for additional payment.
- B. Bridge Overlay Approach Pavement: Payment at the contract unit price per square yard of is full compensation for removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, reconstruct shoulders as needed, furnishing and installing the asphalt tack coat, producing and placing the new asphalt and DGA, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown in the Contract Documents.
- C. Foundation Preparation: See Section 603. Payment for Structural Granular Backfill to be incidental to Foundation Preparation.

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
03304	Bridge Overlay Approach Pavement	Square Yards
08803	Foundation Preparation	Lump Sum

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

SPECIAL NOTE FOR CONCRETE COATING

Warren County SYP 03-10014.00

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
- 4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
- 5. Apply Ordinary Surface Finish
- 6. Prepare the surfaces to receive coating.
- 7. Apply concrete coating.
- 8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

<u>Prime Coat</u>	<u>Finish Coat</u>
Macropoxy 646	Acrolon 218 HS
Amerlock 2	Devoe Devflex HP
Carboguard 890	Carbothane 133 HB
Elastogrip 151	Envirocrete 156
	Amerlock 2 Carboguard 890

The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal. The finish coat shall be gray and will meet the following values:

	<u>L*</u>	a*	<u>b*</u>
Grey	74.94	-1.54	3.92

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

Bridging KY 1 of 3

III. CONSTRUCTION

- **A. Perform Concrete Repairs.** Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair if included in the contract documents.
- **B.** Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Coating:

- 1. Every exposed surface above a point 6" below ground or fill line of abutments, wing walls, end bent and pier caps, pedestals, back walls, columns, and exposed footings.
- 2. All exposed surfaces of concrete barrier walls, parapets, curbs, and plinths. Do not apply to the riding surface of the concrete deck.
- 3. The underneath surfaces of slab overhangs outside of exterior girders and to the exterior side and bottom of exterior concrete girders, beams, and box beams.
- **D. Prepare Concrete Surfaces for Repair.** All areas specified shall be pressure washed. Equip the pressure washers with calibrated gages and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure of up 3,500 to 4,500 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum of 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Division of Construction approval. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Preform all pressure washing at temperatures above 40 degrees Fahrenheit.
- **E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry a minimum of 24 hours before any coating is applied. The coating must be applied with 72 hours of pressure washing. The coating must be applied to a clean and dry surface.

Bridging KY 2 of 3

All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted.

The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. Test samples shall be taken at the Contractor's paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint. It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process. Preform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity in square feet. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of coatings that do not satisfy the Engineer's approval for payment and will consider them incidental to "Concrete Coating".

V. PAYMENT.

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

<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u> 24982EC Concrete Coating Lump Sum

The plans may show an estimate quantity in square feet. The Department will consider payment as full compensation for all work required as described in this note.

Bridging KY 3 of 3

SPECIAL NOTE FOR EROSION PREVENTION AND SEDIMENT CONTROL

Warren County SYP 03-10014.00

When required, the Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

The Contractor shall perform all final seeding and protection, in accordance with the plans and Section 212 of the KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. If corrections are not made within the 5 days specified, liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.

Contrary to Section 212. 05 and 213.05, bid items for temporary BMPs and items for permanent erosion control will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices". The contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the 2012 Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

Allen County SYP 03-10000.00

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 45 calendar days once the bridge is closed to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the bridge to traffic unless prior approval is obtained from the engineer for use of temporary railing.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Any approval of cold weather plans or allowance of construction operations to occur outside Section 606 and/or Section 601 does not alleviate the 45 day maximum bridge closure. In the event the closure lasts longer than 45 calendar days as specified, liquidated damages will apply to all excess days regardless of weather limitations.

Bridge 002B0004N 1 of 1

Todd County SYP 03-1009.00

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 60 calendar days once the bridge is closed and traffic is on the diversion to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the bridge to traffic unless prior approval is obtained from the engineer for use of temporary railing.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Maintenance of the diversion must be completed within 24 hours for items that do not adversely affect traffic. In the event of a washout, and access is no longer maintained, the contractor has 4 hours to reopen the roadway to traffic. Failure to meet either the 24 hour requirement or the 4 hour requirement will result in Liquidated Damages being charged at a rate of \$750 per hour beyond the required time specified, once notified. Re-grading of the diversion will be incidental to maintain and control traffic, however additional material if deemed necessary by the Engineer will be paid as specified in the contract.

Allen County SYP 03-10011.00

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 120 calendar days once work begins to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the lane to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications.

The Engineer will begin charging calendar days for a structure on the day the Contractor begins work, with the exception of placement of signs, regardless of holidays or seasonal weather limitations.

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 112.03.15A, when the bridge remains closed beyond the allotted number of calendar days. Liquidated Damages will be assessed per the Standard Specification Section 108.09 when the contract time extends beyond the contract date but the bridge closure is removed and the roadway has reopened to the public.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Bridge 002B00021N 1 of 1

Todd County SYP 03-10013.00

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 45 calendar days once the bridge is closed to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the bridge to traffic unless prior approval is obtained from the engineer for use of temporary railing.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Any approval of cold weather plans or allowance of construction operations to occur outside Section 606 and/or Section 601 does not alleviate the 45 day maximum bridge closure. In the event the closure lasts longer than 45 calendar days as specified, liquidated damages will apply to all excess days regardless of weather limitations.

Bridge 110C00061N 1 of 1

Warren County SYP 03-10014.00

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted **45** calendar days once the bridge is closed to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the bridge to traffic unless prior approval is obtained from the engineer for use of temporary railing.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 112.03.15A, when the lane closures are used beyond the allotted number of calendar days. Liquidated Damages will be assessed per the Standard Specification Section 108.09 when the contract time extends beyond the contract date but the roadway has reopened to the public.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Any approval of cold weather plans or allowance of construction operations to occur outside Section 606 and/or Section 601 does not alleviate the **45** day maximum bridge closure. In the event the closure lasts longer than **45** calendar days as specified, liquidated damages will apply to all excess days regardless of weather limitations.

Tree Clearing Restriction

Allen County

Item No. 3-10000

Bridge No. 002B00004N

DUE TO THE RECOVERY PLAN FOR ENDANGERED BATS, NO TREE CLEARING IS PERMITTED FROM JUNE 1 THROUGH JULY 31.

Tree Clearing Restriction

Todd County

Item No. 3-10009

Bridge No. 110C00059N

DUE TO THE RECOVERY PLAN FOR ENDANGERED BATS, NO TREE CLEARING IS PERMITTED FROM JUNE 1 THROUGH JULY 31.

Tree Clearing Restriction

Allen County

Item No. 3-10011

Bridge No. 002B00021N

DUE TO THE RECOVERY PLAN FOR ENDANGERED BATS, NO TREE CLEARING IS PERMITTED FROM JUNE 1 THROUGH JULY 31.

Tree Clearing Restriction

Todd County

Item No. 3-10013

Bridge No. 110C00061N

DUE TO THE RECOVERY PLAN FOR ENDANGERED BATS, NO TREE CLEARING IS PERMITTED FROM JUNE 1 THROUGH JULY 31.

SPECIAL NOTE

Tree Clearing Restriction

Warren County

Item No. 3-10014

Bridge No. 114B00071N

DUE TO THE RECOVERY PLAN FOR ENDANGERED BATS, NO TREE CLEARING IS PERMITTED FROM JUNE 1 THROUGH JULY 31.

If there are any questions regarding this note, please contact Danny Peake, 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.



Asbestos Inspection Report

Contract ID: 195066

Page 111 of 266

To: Tom Springer, QK4, Inc.

Date: December 12, 2018

Conducted By: Russell Brooks, LFI, Inc.

Kentucky Accredited Asbestos Inspector #118-06-9270

Project and Structure Identification

Project: Allen County: Item No. 3-10000

Structure ID: #002B00004N

Structure Location: Ky-3499 Over Bays Fork, Allen County, Kentucky

Sample Description: Expansion joint board

Inspection Date: November 29, 2018

Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) 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.

No suspect asbestos containing (ACM) were observed.

Analysis N#

Client Name:

MRS, INC.

MRS, Inc. Analytical Laboratory Division

Address: Allen County - 3 - 10000

332 West Broadway / Suite # 902 Louisville, Kentucky - 40202 - 2133

12093 A

LFI

(502) 495-1212 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Sampled	Ву:	Russell B	rooks								
				%	FIBROUS	ASBESTOS	I	% N	ON-ASBES	TOS FIBER	RS
Sample ID	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
#1A	Black	Yes	No				None	3%			97%
#1B	Black	Yes	No				None	2%			98%

Methodology:	EPA	Method	600/	R-93-116
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Date Analyzed: 9-Dec-18

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459 AJHA #1 02459

Contract ID: 195066 Page 113 of 266

MRS, Inc. P.O. Box 19424 Louisville, Kentucky 40259-0424 Phon (502) 495 - 1212 Fax (502) 491 - 7111

Client : Linebach Funkhouser, Inc.

Project : LFI Project # 168-18

CHAIN OF CUSTODY RECORD

PROJECT: Allen 3-10000	COMMENTS AND/OR INSTRUCTIONS:
LOCATION:	Stop First Positive
SAMPLED BY: R. Brooks	Point Count <4%
DATE:	

SAMPLE NUMBER	LOCATION	MATRIX	COLOR	SIZE	COMMENTS	T/L W/C	PLM
1 A/B	5000	BOARD					Х
2 A/B			Miles Van September 1981	National Investor	Name and Administration of the Parketter		х
3 A/B			Carried In Street		Married and left amount	THE RESIDENCE ALLEYS	х
4 A/B		ñ.	A MARIA				x
5 A/B	and the						х
6 A/B							х
7 A/B						V.	х
8 A/B				31			x
9 A/B							х
10 A/B							х
11 A/B							X
12 A/B			10				X
13 A/B					D-		
14 A/B							
15 A/B			N.				

Relinquished Bv: (Signature) Russell & Brooks	Date	Time	Received By: (Signature)
	11/30/2018	Time	Received By: (Signature)
Relinquished By: (Signature	Date		

Commonwealth of Kentucky

Department for Environmental Protection **Division for Air Quality**

Russell Henry Brooks

Has met the requirements of 401 KAR 58,005 and is accredited as an:

Asbestos

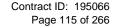
118-06-9270 6/12/2018

Accreditation Number:

6/5/2019

Expiration Date:

Issue Date:





Asbestos Inspection Report

To: Tom Springer, QK4, Inc.

Date: October 26, 2018

Conducted By: Russell Brooks, LFI, Inc.

Kentucky Accredited Asbestos Inspector #I18-06-9270

Project and Structure Identification

Project: Todd County: Item No. 3-10009

Structure ID: #110C00059N

Structure Location: Rattlesnake Road over Buck Fork, Todd County, Kentucky

Sample Description: No suspect asbestos containing (ACM) were observed

Inspection Date: October 26, 2018

Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) 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.

No suspect asbestos containing (ACM) were observed.

Commonwealth of Kentucky

Department for Environmental Protection **Division for Air Quality**

Russell Henry Brooks

Has met the requirements of 401 KAR 58,005 and is accredited as an:

Asbestos

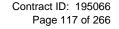
118-06-9270 6/12/2018

Accreditation Number:

6/5/2019

Expiration Date:

Issue Date:





Asbestos Inspection Report

To: Tom Springer, QK4, Inc.

Date: December 12, 2018

Conducted By: Russell Brooks, LFI, Inc.

Kentucky Accredited Asbestos Inspector #118-06-9270

Project and Structure Identification

Project: Allen County: Item No. 3-10011

Structure ID: #002B00021N

Structure Location: Ky-585 over Middle Fork Drakes Creek, Allen County, Kentucky

Sample Description: Expansion joint board and mastic on bridge deck

Inspection Date: November 29, 2018

Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) 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.

No suspect asbestos containing (ACM) were observed.

MRS, Inc. Analytical Laboratory Division

332 West Broadway / Suite # 902 Louisville, Kentucky - 40202 - 2133 (502) 495-1212 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Analysis N#	# 12093 B	Address	Allen County - 3 - 10011
Client Name:	LFI		
Sampled By:	Russell Brooks		
		_	
		0/ FIRROLIC ACRECTO	C 0/ NON ACRECTOC FIRE

				%	FIBROUS	ASBESTOS		% N	ON-ASBES	TOS FIBER	₹S
Sample ID	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
#1A	Black	Yes	No	3%	(To Be	Point Cou	ınted)	2%			95%
#1B	Black	Yes	No	3%	(To Be	Point Cou	ınted)	2%			95%
# 2 A	Black	Yes	No	3%	(To Be	Point Cou	ınted)	2%			95%
# 2 B	Black	Yes	No	3%	(To Be	Point Cou	ınted)	2%			95%
											1

Methodology:	EPA	Method	600/	R-93-116
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Date Analyzed: 9-Dec-18

Analyst : Winterford Mensah Reviewed By:

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459 AJHA #1 02459

MRS, Inc. Analytical Laboratory Division

332 West Broadway / Suite # 902 Phone #: (502) 495-1212 Louisville, Kentucky - 40202 - 2133 E-Mail Address: CEOMRSInc@AOL.Com

Client: # 12093 B LFI **Project No:** Address: 114 Fairfax Avenue Sample ID: #1A Louisville, Kentucky Sampled: 29-Nov-18 Received: 30-Nov-18 40207 Analyzed: 10-Dec-18 - Point Count -Attention: Russell Brooks **Bulk Sample Analysis** Sampled By **Russell Brooks Facility/Location:** Allen County - 3 - 10011 **Field Description:** Mastic - Tar - Deck **Laboratory Description:** Thick Black Material **Asbestos Materials:** Chrysotiile = 2/400 = 0.50 % (< 1 %) Sample Is Negative **Non-Asbestos Fibrous Materials:** Cellulose 0.25 % 99.25 % Binders Remarks: The sample was analyzed for asbestos content following the EPA Methodology

(600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.

Analyst:	Winterford Mensah	Reviewed By:	Wintergard Menna!
•			Signature

AIHA #102459 AIHA #102459 / AIHA #102459

MRS, Inc. Analytical Laboratory Division

(502) 495-1212

332 West Broadway / Suite # 902 Phone #: Louisville, Kentucky - 40202 - 2133 E-Mail Address: CEOMRSInc@AOL.Com

Client: LFI **Project No:** # 12093 B Address: 114 Fairfax Avenue Sample ID: #1B Sampled: Louisville, Kentucky 29-Nov-18 40207 Received: 30-Nov-18 Analyzed: 10-Dec-18 - Point Count -Attention: Russell Brooks

	Bulk	Sample Analysis
Sampled By :	Russell Brooks	
Facility/Location:	Allen County - 3 - 10	
Field Description:	Mastic - Tar - Deck	5011
Laboratory Descrip		
Laboratory Descrip	Thick Black Material	1
Asbestos Materials	:	
	Chrysotiile = 2/400 =	= 0.50 % (< 1 %) Sample Is Negative
Non-Asbestos Fibro	ous Materials :	
	Cellulose	0.25 %
	Binders	99.25 %
•	·	bestos content following the EPA Methodology es only to the items tested. This report does not
	· ·	LAP or any agency of the U.S. Government.
, op. 555.	,	- u - u - u - u - u - u - u - u - u - u
Analyst: W	interford Mensah	Reviewed By:
• —		Signature

/ AIHA #102459 AIHA #102459 AIHA #102459

MRS, Inc. Analytical Laboratory Division

(502) 495-1212

332 West Broadway / Suite # 902 Phone #: Louisville, Kentucky - 40202 - 2133 E-Mail Address: CEOMRSInc@AOL.Com

Client: LFI **Project No:** # 12093 B Address: 114 Fairfax Avenue Sample ID: #2A Louisville, Kentucky Sampled: 29-Nov-18 40207 Received: 30-Nov-18 Analyzed: 10-Dec-18 - Point Count -Attention: Russell Brooks

Sampled By :	Russell Brooks		
Facility/Location:	Allen County - 3 - 100)11	
Field Description:	Joint Board	11	
Laboratory Descripti			
aboratory Descripti	Thick Black Material		
Asbestos Materials:			
	Chrysotiile = 2/400 = 0	0.50 % (< 1 %) Sample	Is Negative
V Arberta Fibra			
Non-Asbestos Fibro			
	Cellulose		0.25 %
	Binders		99.25 %
•	le was analyzed for asbe 3/116). The test relates	•	-
	t endorsement by NVLA	· ·	•
			0.01 00.0
	nterford Mensah	Reviewed By:	Historyers Mercal

/ AIHA #102459 AIHA #102459 AIHA #102459

MRS, Inc. Analytical Laboratory Division

(502) 495-1212

332 West Broadway / Suite # 902 Phone #: Louisville, Kentucky - 40202 - 2133 E-Mail Address: CEOMRSInc@AOL.Com

Client: LFI **Project No:** # 12093 B Address: 114 Fairfax Avenue Sample ID: #2B Sampled: Louisville, Kentucky 29-Nov-18 40207 Received: 30-Nov-18 Analyzed: 10-Dec-18 - Point Count -Attention: Russell Brooks

	Bulk	Sample Analysis				
Sampled By :	Russell Brooks					
Facility/Location:	Allen County - 3 - 10	0011				
Field Description:	Joint Board					
Laboratory Description	on:					
	Thick Black Materia	l				
Asbestos Materials:						
	Chrysotiile = 2/400	= 0.50 % (< 1 %) Sampl	e Is Negative			
Non-Asbestos Fibrou	s Materials :					
	Cellulose		0.25 %			
	Binders		99.25 %			
•	•		ng the EPA Methodology			
• -	· ·	es only to the items tes LAP or any agency of tl	sted. This report does not			
тергезеп	endorsement by NV	LAP OF any agency of the	ie 0.5. dovernment.			
Analyst: Wir	nterford Mensah	Reviewed By:	Winterpers Mensal			
-			Signature			

/ AIHA #102459 AIHA #102459 AIHA #102459 MRS, Inc. P.O. Box 19424 Louisville, Kentucky 40259-0424

Phon (502) 495 - 1212 Fax (502) 491 - 7111

Client: Linebach Funkhouser, Inc.

Project : LFI Project # 168-18

CHAIN OF CUSTODY RECORD

LOCATION:	Allen 3			COMMENTS AN	ND/OR INSTRUCTIONS: Stop First Positive Point Count <4%		
SAMPLE NUMBER	LOCATION	MATRIX	COLOR	SIZE	COMMENTS	T/L W/C	· PLM
1 A/B	MASTIC	/ TAR - 0	ecV	7	7		X
2 A/B	Exam.	TAR - DO	ARD	Mary Mary Mary			x
3 A/B					lan a a mora ana ana andisa and P		x
4 A/B		Ben de la company			V 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		х
5 A/B						2 3	x
6 A/B							х
7 A/B					S 40 5 5 11 455 24		х
8 A/B	West of the second						х
9 A/B				Ĭ			х
10 A/B	,		p = 2				x
11 A/B							x
12 A/B							x
13 A/B					D-		
14 A/B							- 1
15 A/B							
Relinauished Bv: (Si	104		Date 11/30/2018	Time	Received By: (Signature)	es The	en
Relinquished By: (Si	gnature		Date	Time	Received By: (Signature)		. –

Commonwealth of Kentucky

Department for Environmental Protection
Division for Air Quality

Russell Henry Brooks

Has met the requirements of 401 KAR 58,005 and is accredited as an:

Asbestos

Accreditation Number 118-

118-06-9270 6/12/2018

6/5/2019

Expiration Date:

Issue Date:



Asbestos Inspection Report

To: Tom Springer, QK4, Inc.

Date: October 26, 2018

Conducted By: Russell Brooks, LFI, Inc.

Kentucky Accredited Asbestos Inspector #118-06-9270

Project and Structure Identification

Project: Todd County: Item No. 3-10013

Structure ID: #110C00061N

Structure Location: Roger Q Mill Road over Red River W Fork Branch, Todd County,

Kentucky

Sample Description: No suspect asbestos containing (ACM) were observed

Inspection Date: October 26, 2018

Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) 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.

No suspect asbestos containing (ACM) were observed.

Commonwealth of Kentucky Department for Environmental Protection

Division for Air Quality

Russell Henry Brooks

Has met the requirements of 401 KAR 58,005 and is accredited as an:

Asbestos

118-06-9270 6/12/2018

Accreditation Number:

6/5/2019

Expiration Date:

Issue Date:



Asbestos Inspection Report

To: Tom Springer, QK4, Inc.

Date: October 26, 2018

Conducted By: Russell Brooks, LFI, Inc.

Kentucky Accredited Asbestos Inspector #118-06-9270

Project and Structure Identification

Project: Warren County: Item No. 3-10014

Structure ID: #114B00071N

Structure Location: Hammet Hill Road over Salt Lick Creek, Warren County, Kentucky

Sample Description: No suspect asbestos containing (ACM) were observed

Inspection Date: October 26, 2018

Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) 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.

No suspect asbestos containing (ACM) were observed.

Commonwealth of Kentucky

Department for Environmental Protection **Division for Air Quality**

Russell Henry Brooks

Has met the requirements of 401 KAR 58,005 and is accredited as an:

Asbestos

118-06-9270 6/12/2018

Accreditation Number:

Expiration Date:

Issue Date:

6/5/2019



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

○ Original	Re-C	ertification	on	RIGHT OF WAY CERTIFICATION			
ITEM	#		COUNTY	PROJE	CT # (STATE)	PROJECT # (FEDERAL)	
3-10000	3-10000 Allen			1100 FD04 1	21 9414001R		
PROJECT DESC	RIPTION						
		1004N - K	/-3499 over Bays Fork	(rehabilitation)			
	onal Right o	-		(renabilitation)	Selection of the selection		
				The right of way w	es sequired in secon	dance to FHWA regulations	
						. No additional right of way or	
relocation assist				disitions I only Act c	// 1370, 83 Billelideu	. No additional right of way of	
Condition # 1 (Additional Right of Way Required and Cleared)							
					een acquired includi	ing legal and physical	
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							
		-	-			as physical possession and the	
						een paid or deposited with the	
						vailable to displaced persons	
The state of the s	The state of the s		ance with the provision		VA directive.		
			of Way Required wit				
The right of way	has not been	fully acqui	red, the right to occupy	and to use all rights	-of-way required for	the proper execution of the	
						ion has not been obtained, but	
						has physical possession and right	
			be paid or deposited w			the court for most parcels. Just	
			of Way Required wit		O AVVARD OF CONSCI	action contract	
					nalata and/ar cama	parcels still have occupants. All	
			ent housing made availa				
						ne necessary right of way will not	
						e paid or deposited with the	
						635.309(c)(3) and 49 CFR	
24.102(j) and wil	l expedite con	npletion of	all acquisitions, relocat	ions, and full payme	ents after bid letting	and prior to	
The second second		ntract or f	orce account construction	on.			
Total Number of Pare	-	0	EXCEPTION (S) Parcel #	ANTICI	PATED DATE OF POSSESS	ION WITH EXPLANATION	
Number of Parcels T	hat Have Been A	cquired					
Signed Deed							
Condemnation Signed ROE		0					
Notes/ Comments (Use Additional Sheet if necessary)							
LPA RW Project Manager Right of Way Supervisor							
Printed Name Steve W. Emly, PE				Printed Name	1	Mark Askin, PE	
Signature	Steve W. Listy, FL			Signature	1/11		
Date	1/7/19			Date	1/1/1	1/0/10	
Date	Di-La -fia			Date	51000	1/9/19	
Bulanta d Brassa	Right of W	•			FHW	4	
Printed Name		Dean N	И. Ļoy	Printed Name			
Signature	4	Des		Signature		TWILDOW .	
Date		0	30JAN 2019	Date			
			VIV.		h		



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

	Original		Re-Cer	tification		RIGHT O	F WAY CERTIFICATI	ON
	ITEM	#			COUNTY	PROJE	GT # (STATE)	PROJECT # (FEDERAL)
3-100	011		1	Allen		1100 FD04 1	21 9414001R	
PROJ	PROJECT DESCRIPTION							
-		-	-	1N . KV.	585 over Middle Forl	Drakes Creek (re	shahilitation)	
	No Addition					C Diakes Cleek (I	enabilitation)	
						The right of way w	use acquired in accord	ance to FHWA regulations
under	the Uniform	n Relo	cation As	sistance a	nd Real Property Acqu	isitions Policy Act o	if 1970, as amended. I	No additional right of way or
	tion assista						. 237 o, do dinendedi i	vo additional right of way of
	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							
posse	ssion. Trial (or appe	eal of cas	es may be	pending in court but I	egal possession has	been obtained. There	e may be some improvements
remai	ning on the	right-c	of-way, b	ut all occu	pants have vacated the	e lands and improv	ements, and KYTC has	physical possession and the
								n paid or deposited with the
court.	All relocation	ons ha	ve been i	elocated 1	to decent, safe, and sa	nitary housing or th	nat KYTC has made ava	ilable to displaced persons
					nce with the provisions		VA directive.	
				-	f Way Required with	The second secon		
								he proper execution of the n 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							
					f Way Required wit			
							nplete and/or some pa	arcels still have occupants. All
remai	ning occupa	ints ha	ve had re	placemen	it housing made availa	ble to them in acco	rdance with 49 CFR 24	1.204. KYTC is hereby
								necessary right of way will not
								paid or deposited with the
court	ior some pa	oveed	intil after	bid lettin	g. KY I C will fully meet	all the requiremen	ts outlined in 23 CFR 6	635.309(c)(3) and 49 CFR
					Il acquisitions, relocati ce account construction		ents after bid letting a	no prior to
	umber of Parce			The second second	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION		N WITH EXPLANATION
	r of Parcels Th	-		U		Marian Alexandra of Lossessian Anti-extremitation		
Signed (Deed							
Conden								
Signed I	Comments	Ilso Ad	ditional S	0 heat if pac	occamil .			
1100037	Comments	OSE AL	idicional 3	meet II Het	633a1 Y J			
-		I PΔ R	W/ Proje	ct Manag	rer l		Right of Way Su	nervisor
Printe	ed Name					Printed Name		
	nature		50	eve W. E	mly, PE		M	ark Askin, PE
			/U	IK W.	any	Signature	011	
	Date			1/7/1		Date		1/9/19
		Righ	t of Wa	y Directo	r		FHWA	
Printe	d Name			Dean M.	Loy	Printed Name		ii .
Sign	nature	P	MX	4		Signature		
D	ate		(77	TAN 2019	Date		



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

TIEM# COUNTY PROJECT # (STATE) PROJECT # (FEDERAL)						
Bridging Kentucky - 110C00059N - Rattlesnake Road over Buck Fork (replacement) 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						
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The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the						
project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but						
right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just						
Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract						
Condition # 3 (Additional Right of Way Required with Exception)						
The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All						
remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby						
requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not						
be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the						
court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to						
AWARD of the construction contract or force account construction.						
Total Number of Parcels on Project 1 EXCEPTION (S) Parcel # ANTICIPATED DATE OF POSSESSION WITH EXPLANATION						
Number of Parcels That Have Been Acquired						
Signed Deed 1						
Condemnation Signed ROE 0						
Notes/ Comments (Use Additional Sheet if necessary)						
LPA RW Project Manager Right of Way Supervisor						
Printed Name Steve W. Emly, PE Printed Name Mark Askin, BE						
Signature Signature Signature						
Date 1/18/19 Date 1/22/19						
Right of Way Director FHWA						
Printed Name Dean M. Loy Printed Name						
Signature Signature						
Date 300702019 Date						



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	Original		Re-C	ertificatio	n		RIGHT (OF WAY CERTIFICAT	ION
	ITEN	#			COUNTY	STEELS A	PROJ	ECT # (STATE)	PROJECT # (FEDERAL)
3-10	3-10013.00 Todd			1100 FD04 1	121 9414001R				
PRO	JECT DESC	RIPTIO	N						
BRID	GING KEN	TUCKY	PROJE	CT - REPL	ACE BRIDGE O	N ROGE	R Q MILL RD OV	ER RED RIVER W FOI	RK BRANCH (110C00061N).
	No Addit								
Cons						of way.	The right of way v	vas acquired in accord	ance to FHWA regulations
unde	r the Unifo	rm Relo	cation /	Assistance	and Real Prope	rty Acqui	sitions Policy Act	of 1970, as amended.	No additional right of way or
	ation assist								
\boxtimes					of Way Requir				
All n	All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical								
posse	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								
right	s to remove	ealvad Hight-C	orde	out all occ	improvements	cated the	lands and improv	ements, and KYIC has	s physical possession and the en paid or deposited with the
court	t. All relocat	ions ha	ve beer	relocated	to decent, safe	and sar	itary housing or t	hat KYTC has made av	ailable to displaced persons
adeq	uate replac	ement l	housing	in accord	ance with the pr	ovisions	of the current FH	WA directive.	mable to displaced persons
		the same and the same			of Way Requi			Classification	1000
The r	ight of way	has not	been f	ully acquir	ed, the right to	occupy a	nd to use all right	s-of-way required for t	the proper execution of the
proje	ct has been	acquir	ed. Som	ne parcels	may be pending	in court	and on other pard	els full legal possessio	n has not been obtained, but
right	of entry ha	s been (btaine	d, the occi	upants of all land	ds and im	provements have	vacated, and KYTC ha	s physical possession and right
									e court for most parcels. Just
Com					of Way Requi			to AWARD of construc	tion contract
The								malete and/er seme =	arcels still have occupants. All
rema	ining occup	ants ha	ve had	replaceme	nt housing mad	naming p le availah	le to them in acco	ordance with 49 CFR 24	1 204 KYTC is bereby
reque	esting author	rizatio	n to adv	ertise this	project for bids	and to p	roceed with bid le	etting even though the	necessary right of way will not
be fu	lly acquired	, and/o	r some	occupants	will not be relo	cated, an	d/or the just com	pensation will not be	paid or deposited with the
court	for some p	arcels u	intil afte	er bid letti	ng. KYTC will ful	ly meet a	il the requiremen	ts outlined in 23 CFR 6	535.309(c)(3) and 49 CFR
24.10)2(j) and wil	l exped	ite com	pletion of	all acquisitions,	relocatio	ns, and full paym	ents after bid letting a	nd prior to
	lumber of Pari				orce account cor			DATED DATE OF DOCCESSIO	
	er of Parcels T		-	4 urired	EXCEPTION (S) Pa	rcei #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION		
Signed				4					
	mnation			0					-
Signed		/11	1 144 7	0	1		1	,	,
Notes	/ Comments	(Use Ad	lditional	Sheet if ne	cessary)				
		ΙΡΔ R	\/\ Proi	ect Mana	ger			Right of Way Su	nonvisor
Print	ed Name		** 110)	CCC IVIGITA	BCI		Printed Name	T	k.R.Askin, P.E.
Sig	nature					Signature	IVIdi	K.C. ASKIN, P.C.	
	Date						Date	000	02/12/19
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TC 62-226 Rev. 01/2016 Page 1 of 1

⊠ Origi	nal	Re-C	ertification	on	RIGHT C	F WAY CERTIFICATI	ON
	EM#			COUNTY	PROJE	CT # (STATE)	PROJECT # (FEDERAL)
3-10014 Warren				1100 FD04 1	.21 9414001R		
PROJECT D	SCRIPTION	ON		77.0			
Bridging Ke	ntucky -	114B00	071N -H=	mmet Hill Road over	Salt Lick Crook (ro	nlacomont)	1 10
			Way Re		Jan Lick Creek (16	placement	
					The right of way w	use appropriate in accord	ance to FHWA regulations
under the U	iform Rel	ocation	uniits or t Assistance	and Real Property Aca	. The right of way w	vas acquired in accorda	ance to FHWA regulations No additional right of way or
relocation as	sistance v	ere req	uired for t	his project.	disitions Folicy Act (or 1970, as afficilities. I	to additional right of way or
	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.	rial or ap	peal of c	ases may l	be pending in court but	legal possession has	s been obtained. There	may be some improvements
remaining or	the right	-of-way,	but all occ	cupants have vacated the	ne lands and improv	ements, and KYTC has	physical possession and the
rights to rem	ove, salva	ge, or de	emolish all	improvements and ent	ter on all land. Just (Compensation has bee	n paid or deposited with the
court. All rel	cations h	ave bee	n relocate	d to decent, safe, and sa	anitary housing or tl	hat KYTC has made ava	ilable to displaced persons
				ance with the provision		NA directive.	
				of Way Required wit			
The right of	vay has no	t been f	ully acqui	red, the right to occupy	and to use all rights	s-of-way required for t	he proper execution of the
project nas t	een acqui	red. Son	ne parcels	may be pending in cou	rt and on other pard	els full legal possession	n has not been obtained, but
right of entry	nas been	obtaine	d, the occ	upants of all lands and	improvements have	vacated, and KYTC ha	s physical possession and right
Companyation	n for all n	aemolis andina r	n all impro	vements. Just Compen	sation has been paid	d or deposited with the	e court for most parcels. Just
Condi	tion #2 f	vaqqista enging b	arteis Will	be paid or deposited w	with the court prior i	O AWARD of construct	tion contract
The pequiciti	HOIL # 3 (Additio	nai kight	of Way Required wit	tn Exception)		
remaining or	nupante h	or occu	pancy and	use of a few remaining	g parcels are not cor	nplete and/or some pa	arcels still have occupants. All
requesting a	thorizatio	ave nau an to ada	replaceme	ent housing made availa	able to them in acco	rdance with 49 CFR 24	necessary right of way will not
be fully acqu	red. and/	or some	occupant	s project for blus and to s will not be relocated:	proceed with bid is	etting even though the	necessary right of way will not paid or deposited with the
court for son	e parcels	until aft	er bid letti	ing. KYTC will fully meet	t all the requiremen	pensation will not be p to outlined in 22 CEP 6	35.309(c)(3) and 49 CFR
24.102(j) and	wili expe	dite com	pletion of	all acquisitions, relocat	tions, and full payme	ents after hid letting a	nd prior to
AWARD of th	e constru	ction co	ntract or fo	orce account constructi	on.	and area of a feeting of	id prior to
Total Number of			0	EXCEPTION (S) Parcel #	# ANTICIPATED DATE OF POSSESSION WITH EXPLANAT		N WITH EXPLANATION
Number of Parc	ls That Hav	e Been Ac	quired				
Signed Deed							
Condemnation							
Signed ROE Notes/ Comm	nts /lise A	dditiona	Sheet if n	reessand)			I .
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Date			1/8/		Date	1	1/10/19
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Printed Nam	2		Dean N		Printed Name		
Signature		T	Vos		Signature		
Date			03	BOSANZOG	Date		

ALLEN COUNTY KY-3499 OVER BAYS FORK (Milepost 1.417) SIX YEAR PLAN ITEM NUMBER 3-10000

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.

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THE FOLLOWING RA	IL COMPANIES HAVE FACILITIES IN CONJUNC	TION 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.

ALLEN COUNTY KY-3499 OVER BAYS FORK (Milepost 1.417) SIX YEAR PLAN ITEM NUMBER 3-10000

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

Tri-County REMC (Electric) 620 Veterans Memorial Highway Scottsville, KY 42164 270-237-4418 Attn: Blanton Calvert

Attn: Blanton Calvert bcalvert@tcemc.org

City of Scottsville (Water, Sewer & Natural Gas) 201 W. Main Street, Suite 10 Scottsville, KY 42164 270-237-3238 Attn: Gayle Davis

Windstream Kentucky East (Communication) 130 West New Circle Road, Suite #170 Lexington, KY 40505 800-347-1991

AT&T (Communication)
ATTN: Travis Parley
Tp2087@att.com

RATTLESNAKE ROAD OVER BUCK FORK (Milepost 1.473) SIX YEAR PLAN ITEM NUMBER 3-10009

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.

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THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS

AT&T will be responsible for the removal and relocation/abandonment of the utility pole(s) and overhead lines on the north side of the bridge, necessary for the construction of the temporary diversion. This work is expected to take place by 4/30/19. The Contractor shall coordinate with AT&T as needed for this relocation.

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

TODD COUNTY RATTLESNAKE ROAD OVER BUCK FORK (Milepost 1.473) **SIX YEAR PLAN ITEM NUMBER 3-10009**

possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely

to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

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

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

AREA UTILITIES CONTACT LIST AS PROVIDED BY KY 811

Pennyrile RECC (Electric) 2000 Harrison Street Hopkinsville, KY 42241 270-886-2555

Todd County Water District (Water) 617 West Main Street Elkton, KY 42220 270-265-2229 Attn: John Haley

tcw00@gmail.com

ATT (Telephone/Communication) 270-889-9782 ATTN: Michael Forrest mf6322@att.com

ALLEN COUNTY KY-585 OVER MIDDLE FORK DRAKES CREEK (Milepost 0.001) SIX YEAR PLAN ITEM NUMBER 3-10011

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.

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SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

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

ALLEN COUNTY KY-585 OVER MIDDLE FORK DRAKES CREEK (Milepost 0.001) SIX YEAR PLAN ITEM NUMBER 3-10011

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Tri-County REMC (Electric) 620 Veterans Memorial Highway Scottsville, KY 42164 270-237-4418 Attn: Blanton Calvert

Attn: Blanton Calvert bcalvert@tcemc.org

Allen County Water District (Water) 330 New Gallatin Road Scottsville, KY 42164 270-622-3040 Attn: Gary Wade

Windstream Kentucky East (Communication) 130 West New Circle Road, Suite #170 Lexington, KY 40505 800-347-1991

AT&T (Communication) ATTN: Travis Parley Tp2087@att.com

TODD COUNTY ROGER Q MILL ROAD OVER RED RIVER W. FORK BRANCH (Milepost 0.030) **SIX YEAR PLAN ITEM NUMBER 3-10013**

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 RAI	L COMPANIES HAVE FACILITIES IN CONJUNC	TION WITH THIS PROJECT AS NOTED		
☑ No Rail Involved	☐ Minimal Rail Involved (See Below)	☐ Rail Involved (See Below)		
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THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS

Pennyrile RECC will be responsible for the relocation of a guy pole and guy wires 12' left Sta. 48+10 to accommodate the installation of the final guardrail. The contractor may begin work prior to this relocation if desired, and will coordinate as needed with Pennyrile RECC.

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

TODD COUNTY ROGER Q MILL ROAD OVER RED RIVER W. FORK BRANCH (Milepost 0.030) SIX YEAR PLAN ITEM NUMBER 3-10013

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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

Pennyrile RECC (Electric) 2000 Harrison Street Hopkinsville, KY 42241 270-886-2555

Todd County Water District (Water)
617 West Main Street
Elkton, KY 42220
270-265-2229
Attn: John Haley
tcw00@gmail.com

ATT (Telephone/Communication) 270-889-9782 ATTN: Michael Forrest mf6322@att.com

WARREN COUNTY HAMMET HILL RD OVER SALT LICK CREEK (Milepost 4.963) SIX YEAR PLAN ITEM NUMBER 3-10014

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					
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UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

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<u>SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES</u>

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

WARREN COUNTY HAMMET HILL RD OVER SALT LICK CREEK (Milepost 4.963) SIX YEAR PLAN ITEM NUMBER 3-10014

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

Warren County RECC (Electric) 1800 W. 4th Street Owensboro, KY 42303 270-316-3736

Attn: Scott Atherton

Warren County Water District (Water) 523 US 31-W Bypass Bowling Green, KY 42101 270-842-0052

Attn: John Dix

Atmos Energy Corporation 2850 Russellville Road Bowling Green, KY 42101 270-901-1677

Time Warner Cable (Communication, CATV)

270-222-0861

Attn: Brent Rafferty

ATT (Telephone/Communication)

ATTN: Travis Parsley

WARREN COUNTY
HAMMET HILL RD OVER SALT LICK CREEK (Milepost 4.963)
SIX YEAR PLAN ITEM NUMBER 3-10014

tp2087@att.com

Kentucky Transportation Cabinet Project:

NOTICE

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

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

PROJECT DESCRIPTION: Bridge Superstructure Replacement
KY 3499 over Bays Fork
Allen County, KY
KYTC Item No. 3-10000

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

Locations Impacting Water Quality

Station-Location	Description
Bridge ID: 002B00004N	The rehabilitation of Bridge 002B00004N (KY 3499 over Bays Fork) includes a new superstructure with beams, deck, and railing and repairs to the existing abutment. Substructure concrete will be patched and sealed. The abutment will be slightly modified to accommodate the new bridge superstructure. Channel protection will be added around the existing abutments. Approach roadway pavement will be replaced in the direct vicinity of the bridge from the SW. The project will be constructed within the existing right-of-way. The bridge will be completely closed to traffic during construction. Project will not result in the loss of greater than 0.1 acre of waters of the U.S.; will not result in the loss of greater than 300 linear feet of ephemeral, intermittent, or perennial stream; and will not discharge to a special aquatic site.

Kentucky Transportation Cabinet Project:

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

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

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

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MATTHEW G. BEVIN

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT

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.
- 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.
- 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.

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Louisville District

of Engineers

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- Navigation. (a) No activity may cause more than a minimal adverse effect on
- authorized facilities in navigable waters of the United States. regulations or otherwise, must be installed and maintained at the permittee's expense on (b) Any safety lights and signals prescribed by the US Coast Guard, through
- authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, removal or alteration. the United States. No claim shall be made against the United States on account of any such navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to said structure or work shall cause unreasonable obstruction to the free navigation of the States require the removal, relocation, or other alteration, of the structure or work herein remove, relocate, or alter the structural work or obstructions caused thereby, without expense to (c) The permittee understands and agrees that, if future operations by the United
- species that normally migrate through the area, unless the activity's primary purpose is to cycle movements of those species of aquatic life indigenous to the waterbody, including those movement of those aquatic species. culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the impound water. All permanent and temporary crossings of waterbodies shall be suitably 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life
- spawning area are not authorized. through excavation, fill, or downstream smothering by substantial turbidity) of an important avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. Spawning Areas. Activities in spawning areas during spawning seasons must be
- as breeding areas for migratory birds must be avoided to the maximum extent practicable. Migratory Bird Breeding Areas. Activities in waters of the United States that serve
- 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27 unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and Shellfish Beds. No activity may occur in areas of concentrated shellfish populations
- pollutants in toxic amounts (see Section 307 of the Clean Water Act). bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car
- intake structures or adjacent bank stabilization. supply intake, except where the activity is for the repair or improvement of public water supply 7. Water Supply Intakes. No activity may occur in the proximity of a public water
- restricting its flow must be minimized to the maximum extent practicable. water, adverse effects to the aquatic system due to accelerating the passage of water, and/or 8. Adverse Effects From Impoundments. If the activity creates an impoundment of
- and location of open waters if it benefits the aquatic environment (e.g., stream restoration or or manage high flows. The activity may alter the pre-construction course, condition, capacity, passage of normal or high flows, unless the primary purpose of the activity is to impound water constructed to withstand expected high flows. The activity must not restrict or impede the temporary and permanent road crossings, except as provided below. The activity must be each activity, including stream channelization, storm water management activities, and construction course, condition, capacity, and location of open waters must be maintained for 9. Management of Water Flows. To the maximum extent practicable, the pre-
- approved state or local floodplain management requirements. 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA

mats, or other measures must be taken to minimize soil disturbance

- species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been a species proposed for such designation, as identified under the Federal Endangered Species Act directly or indirectly jeopardize the continued existence of a threatened or endangered species or that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such tribal resources, or tribal lands. (b) Federal agencies should follow their own procedures for complying with the 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to
- appropriate documentation has been submitted. If the appropriate documentation has not been demonstrate compliance with those requirements. The district engineer will verify that the submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the Federal permittee must provide the district engineer with the appropriate documentation to requirements of the ESA. If pre-construction notification is required for the proposed activity, the

- work within waters of the United States during periods of low-flow or no-flow, or during low tides. be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform soil and other fills, as well as any work below the ordinary high water mark or high tide line, must must be used and maintained in effective operating condition during construction, and all exposed 12. Removal of Temporary Fills. Temporary fills must be removed in their entirety and Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls
- revegetated, as appropriate the affected areas returned to pre-construction elevations. The affected areas must be 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained
- authorization. conditions, as well as any activity-specific conditions added by the district engineer to an NWP including maintenance to ensure public safety and compliance with applicable NWP general
- The same NWP cannot be used more than once for the same single and complete project. Single and Complete Project. The activity must be a single and complete project.
- Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate the proposed activity will not adversely affect the Wild and Scenic River designation or study Federal agency with direct management responsibility for such river, has determined in writing that 16. <u>Wild and Scenic Rivers</u>. (a) No activity may occur in a component of the National
- will not adversely affect the Wild and Scenic River designation or study status. construction notification (see general condition 32). The district engineer will coordinate the PCN River System, or in a river officially designated by Congress as a "study river" for possible with the Federal agency with direct management responsibility for that river. The permittee shall inclusion in the system while the river is in an official study status, the permittee must submit a premanagement responsibility for that river has determined in writing that the proposed NWP activity not begin the NWP activity until notified by the district engineer that the Federal agency with direct (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic
- Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and land management agency responsible for the designated Wild and Scenic River or study river (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal
- 17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected

- (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.
- (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

 (h) Endered permittees should follow their own procedures for complaints with the
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

- adverse effect, and adverse effect. Where the non-Federal applicant has identified historic determinations for the purposes of section 106 of the NHPA: no historic properties affected, no parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect consultation is required when the district engineer determines that the activity has the potential to the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out current procedures for addressing the requirements of Section 106 of the National Historic on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal affected by the proposed activity or include a vicinity map indicating the location of the historic pre-construction notification must state which historic properties might have the potential to be consultation has been completed. the non-Federal applicant shall not begin the activity until notified by the district engineer either properties on which the activity might have the potential to cause effects and notified the Corps cause effects on historic properties. The district engineer will conduct consultation with consulting consultation is not required when the district engineer determines that the activity does not have appropriate identification efforts, which may include background research, consultation, oral 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the properties or the potential for the presence of historic properties. Assistance regarding information Register of Historic Places, including previously unidentified properties. For such activities, the engineer if the NWP activity might have the potential to cause effects to any historic properties that the activity has no potential to cause effects to historic properties or that NHPA section 106 history interviews, sample field investigation, and field survey. Based on the information submitted representative, as appropriate, and the National Register of Historic Places (see 33 CFR listed on, determined to be eligible for listing on, or potentially eligible for listing on the National (c) Non-federal permittees must submit a pre-construction notification to the district
- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the circumstances, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

 21. Discovery of Previously Unknown Remains and Artifacts. If you discover any
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecologica significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all
- wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- on what is best for the aquatic environmental on a watershed basis. In cases where riparian quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or compensatory mitigation for wetland losses. mitigation, the district engineer may waive or reduce the requirement to provide wetland areas are determined to be the most appropriate form of minimization or compensatory appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based both wetlands and open waters exist on the project site, the district engineer will determine the maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where but the district engineer may require slightly wider riparian areas to address documented water loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, The width of the required riparian area will address documented water quality or aquatic habitat compensatory mitigation required. Restored riparian areas should consist of native species. cases, the restoration or maintenance/protection of riparian areas may be the only legal protection (e.g. conservation easements) of riparian areas next to open waters. In some waters will normally include a requirement for the restoration or enhancement, maintenance, and (e) Compensatory mitigation plans for NWP activities in or near streams or other open
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the Unitec States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization instead of components of a compensatory mitigation plan.
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

activity does not result in more than minimal degradation of water quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized

- management requirements. measures to ensure that the authorized activity is consistent with state coastal zone must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional zone management consistency concurrence must be obtained, or a presumption of concurrence received a state coastal zone management consistency concurrence, an individual state coastal 27. Regional and Case-By-Case Conditions. The activity must comply with any 26. Coastal Zone Management. In coastal states where an NWP has not previously
- and with any case specific conditions added by the Corps or by the state, Indian Tribe, or Management Act consistency determination. USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone regional conditions that may have been added by the Division Engineer (see $33\ {\sf CFR}\ 330.4(e))$
- of waters of the United States for the total project cannot exceed 1/3-acre. specified acreage limit. For example, if a road crossing over tidal waters is constructed under and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss Use of Multiple Nationwide Permits. The use of more than one NWP for a single
- conditions, have the transferee sign and date below." nationwide permit and the associated liabilities associated with compliance with its terms and will continue to be binding on the new owner(s) of the property. To validate the transfer of this transferred, the terms and conditions of this nationwide permit, including any special conditions, work authorized by this nationwide permit are still in existence at the time the property is letter, and the letter must contain the following statement and signature: "When the structures or to validate the transfer. A copy of the nationwide permit verification must be attached to the permit verification to the new owner by submitting a letter to the appropriate Corps district office associated with a nationwide permit verification, the permittee may transfer the nationwide 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property

(Transferee)

(Date)

- standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance from the Corps must provide a signed certification documenting completion of the authorized Compliance Certification. Each permittee who receives an NWP verification letter
- authorization, including any general, regional, or activity-specific conditions; (a) A statement that the authorized work was done in accordance with the NWP
- the appropriate number and resource type of credits; and include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must (b) A statement that the implementation of any required compensatory mitigation was
- of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later. The completed certification document must be submitted to the district engineer within 30 days (c) The signature of the permittee certifying the completion of the work and mitigation
- or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter 31. Activities Affecting Structures or Works Built by the United States. If an NWP

- a written NWP verification. section 408 permission to altar, occupy, or use the USACE project, and the district engineer issues Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires
- prospective permittee does not provide all of the requested information, then the district engineer additional information necessary to make the PCN complete only once. However, if the information necessary to make the PCN complete. As a general rule, district engineers will request complete within 30 calendar days of the date of receipt and, if the PCN is determined to be The prospective permittee shall not begin the activity until either:

 (1) He or she is notified in writing by the district engineer that the activity may proceed will notify the prospective permittee that the PCN is still incomplete and the PCN review process incomplete, notify the prospective permittee within that 30 day period to request the additional notification (PCN) as early as possible. The district engineer must determine if the PCN is will not commence until all of the requested information has been received by the district engineer NWP, the prospective permittee must notify the district engineer by submitting a pre-construction 32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the
- under the NWP with any special conditions imposed by the district or division engineer; or
- accordance with the procedure set forth in 33 CFR 330.5(d)(2) the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see notification from the Corps that there is "no effect" on listed species or "no potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written engineer. However, if the permittee was required to notify the Corps pursuant to general condition PCN and the prospective permittee has not received written notice from the district or division the permittee cannot begin the activity until an individual permit has been obtained. Subsequently the district engineer issues the waiver. If the district or division engineer notifies the permittee in the permittee has received written approval from the Corps. If the proposed activity requires a the Corps pursuant to general condition 20 that the activity might have the potential to cause 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify (2) 45 calendar days have passed from the district engineer's receipt of the complete
- the following information: (b) Contents of Pre-Construction Notification: The PCN must be in writing and include
- (1) Name, address and telephone numbers of the prospective permittee
- authorize the proposed activity; (2) Location of the proposed activity;(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to
- aquatic sites, and other waters. Sketches should be provided when necessary to show that the the adverse environmental effects of the activity will be no more than minimal and to determine the used to authorize any part of the proposed project or any related activity, including other separate and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in provided results in a quicker decision. Sketches should contain sufficient detail to provide an activity complies with the terms of the NWP. (Sketches usually clarify the project and when sites, and other water for each single and complete crossing of those wetlands, other special projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic need for compensatory mitigation or other mitigation measures. For single and complete linear mitigation measures should be sufficiently detailed to allow the district engineer to determine that and distant crossings for linear projects that require Department of the Army authorization but do measures intended to reduce the adverse environmental effects caused by the proposed activity acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation adverse environmental effects the activity would cause, including the anticipated amount of loss of not require pre-construction notification. The description of the proposed activity and any proposed (4) A description of the proposed activity; the activity's purpose; direct and indirect

detailed engineering plans); illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be (5) The PCN must include a delineation of wetlands, other special aquatic sites, and

- especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; and other waters on the project site, but there may be a delay if the Corps does the delineation the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams,
- and a PCN is required, the prospective permittee must submit a statement describing how the alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. no more than minimal and why compensatory mitigation should not be required. As an mitigation requirement will be satisfied, or explaining why the adverse environmental effects are (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands
- pre-construction notification, Federal permittees must provide documentation demonstrating critical habitat that may be affected by the proposed activity. For any NWP activity that requires compliance with the Endangered Species Act; threatened species that might be affected by the proposed activity or utilize the designated habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or be affected or is in the vicinity of the project, or if the project is located in designated critical (7) For non-federal permittees, if any listed species or designated critical habitat might
- effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic demonstrating compliance with Section 106 of the National Historic Preservation Act indicating the location of the historic property. Federal permittees must provide documentation property might have the potential to be affected by the proposed activity or include a vicinity map (8) For non-federal permittees, if the NWP activity might have the potential to cause
- Wild and Scenic River or the "study river" (see general condition 16); and inclusion in the system while the river is in an official study status, the PCN must identify the River System, or in a river officially designated by Congress as a "study river" for possible (9) For an activity that will occur in a component of the National Wild and Scenic
- a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project. Engineers federally authorized civil works project, the pre-construction notification must include because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408
- established tools and procedures for electronic submittals. may provide electronic files of PCNs and supporting materials if the district engineer has this general condition. A letter containing the required information may also be used. Applicants NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of ENG 4345) may be used, but the completed application form must clearly indicate that it is an (c) Form of PCN Notification: The standard individual permit application form (Form
- conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal. Federal and state agencies conceming the proposed activity's compliance with the terms and (d) Agency Coordination: (1) The district engineer will consider any comments from
- activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve water line or ordinary high water mark. excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United (2) Agency coordination is required for: (i) all NWP activities that require
- copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a (3) When agency coordination is required, the district engineer will immediately

in accordance with the procedures at 33 CFR 330.5. record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proposed activity are no more than minimal. The district engineer will provide no response to the time frame concerning the proposed activity's compliance with the terms and conditions of the adverse environmental effects will be more than minimal. If so contacted by an agency, the district substantive, sites pecific comments. The comments must explain why the agency believes the received to decide whether the NWP 37 authorization should be modified, suspended, or revoked proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of resource agency, except as provided below. The district engineer will indicate in the administrative NWPs, including the need for mitigation to ensure the net adverse environmental effects of the engineer will wait an additional 15 calendar days before making a decision on the pre-construction the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide 37, these agencies will have 10 calendar days from the date the material is transmitted to notify resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP property or economic hardship will occur. The district engineer will consider any comments notification. The district engineer will fully consider agency comments received within the specified

- Stevens Fishery Conservation and Management Act Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnusonengineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish (4) In cases of where the prospective permittee is not a Federal agency, the district
- copies of PCN notifications to expedite agency coordination. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple
- and conditions of an NWP District Engineers have authority to determine if an activity complies with the terms
- approvals, or authorizations required by law. NWPs do not obviate the need to obtain other federal, state, or local permits
- NWPs do not grant any property rights or exclusive privilege
- (see general condition 31). NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project

<u>Terms for Nationwide Permit No. 14 – Linear Transportation Projects</u>

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).

Kentucky Transportation Cabinet Project:

NOTICE

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

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

PROJECT DESCRIPTION: Bridge Replacement

Rattlesnake Road over Buck Fork

Todd County, KY

KYTC Item No. 3-10009

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

Locations Impacting Water Quality

Station-Location	Description
Bridge ID: 110C00059N	This replacement project will entail complete removal of the bridge and construction of a new bridge. The design objectives are to remove any load restrictions and have a design life of at least 75 years. The project will replace the bridge in the same location with current geometrics (bridge width, length, hydraulic opening, etc.) to avoid environmental impacts, utility impacts, and minimize the need for new right of way. The project will not include any reconstruction of the roadways approaching the bridge. Traffic will be detoured onto existing roads, rather than onto a temporary crossing of the stream. The project will not result in the loss of greater than 0.1 acre of waters of the U.S.; will not result in loss greater than 300 feet of ephemeral, intermittent, or perennial stream; and will not discharge to a special aquatic site.

Contract ID: 195066 Page 157 of 266

Kentucky Transportation Cabinet Project:

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

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

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT

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.
- 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.

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Louisville District

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- Navigation. (a) No activity may cause more than a minimal adverse effect on
- authorized facilities in navigable waters of the United States. regulations or otherwise, must be installed and maintained at the permittee's expense on (b) Any safety lights and signals prescribed by the US Coast Guard, through
- authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, removal or alteration. the United States. No claim shall be made against the United States on account of any such navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to said structure or work shall cause unreasonable obstruction to the free navigation of the States require the removal, relocation, or other alteration, of the structure or work herein remove, relocate, or alter the structural work or obstructions caused thereby, without expense to (c) The permittee understands and agrees that, if future operations by the United
- species that normally migrate through the area, unless the activity's primary purpose is to cycle movements of those species of aquatic life indigenous to the waterbody, including those movement of those aquatic species. culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the impound water. All permanent and temporary crossings of waterbodies shall be suitably 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life
- spawning area are not authorized. through excavation, fill, or downstream smothering by substantial turbidity) of an important avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. Spawning Areas. Activities in spawning areas during spawning seasons must be
- as breeding areas for migratory birds must be avoided to the maximum extent practicable. Migratory Bird Breeding Areas. Activities in waters of the United States that serve
- 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27 unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and Shellfish Beds. No activity may occur in areas of concentrated shellfish populations
- pollutants in toxic amounts (see Section 307 of the Clean Water Act). bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car
- water, adverse effects to the aquatic system due to accelerating the passage of water, and/or intake structures or adjacent bank stabilization. supply intake, except where the activity is for the repair or improvement of public water supply 8. Adverse Effects From Impoundments. If the activity creates an impoundment of 7. Water Supply Intakes. No activity may occur in the proximity of a public water
- constructed to withstand expected high flows. The activity must not restrict or impede the temporary and permanent road crossings, except as provided below. The activity must be each activity, including stream channelization, storm water management activities, and construction course, condition, capacity, and location of open waters must be maintained for restricting its flow must be minimized to the maximum extent practicable. 9. Management of Water Flows. To the maximum extent practicable, the pre-
- approved state or local floodplain management requirements. 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA

and location of open waters if it benefits the aquatic environment (e.g., stream restoration or or manage high flows. The activity may alter the pre-construction course, condition, capacity,

passage of normal or high flows, unless the primary purpose of the activity is to impound water

mats, or other measures must be taken to minimize soil disturbance 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on

- work within waters of the United States during periods of low-flow or no-flow, or during low tides. be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform soil and other fills, as well as any work below the ordinary high water mark or high tide line, must must be used and maintained in effective operating condition during construction, and all exposed 12. Removal of Temporary Fills. Temporary fills must be removed in their entirety and Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls
- revegetated, as appropriate the affected areas returned to pre-construction elevations. The affected areas must be
- authorization. conditions, as well as any activity-specific conditions added by the district engineer to an NWP including maintenance to ensure public safety and compliance with applicable NWP general 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained
- The same NWP cannot be used more than once for the same single and complete project. Single and Complete Project. The activity must be a single and complete project.
- Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate the proposed activity will not adversely affect the Wild and Scenic River designation or study Federal agency with direct management responsibility for such river, has determined in writing that 16. <u>Wild and Scenic Rivers</u>. (a) No activity may occur in a component of the National
- will not adversely affect the Wild and Scenic River designation or study status. construction notification (see general condition 32). The district engineer will coordinate the PCN River System, or in a river officially designated by Congress as a "study river" for possible with the Federal agency with direct management responsibility for that river. The permittee shall inclusion in the system while the river is in an official study status, the permittee must submit a premanagement responsibility for that river has determined in writing that the proposed NWP activity not begin the NWP activity until notified by the district engineer that the Federal agency with direct (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic
- Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and land management agency responsible for the designated Wild and Scenic River or study river (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal
- tribal resources, or tribal lands. 17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected
- species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been a species proposed for such designation, as identified under the Federal Endangered Species Act directly or indirectly jeopardize the continued existence of a threatened or endangered species or that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to
- appropriate documentation has been submitted. If the appropriate documentation has not been demonstrate compliance with those requirements. The district engineer will verify that the submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the Federal permittee must provide the district engineer with the appropriate documentation to requirements of the ESA. If pre-construction notification is required for the proposed activity, the (b) Federal agencies should follow their own procedures for complying with the

- (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.
- (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, ham, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Places, the activity of the National Historic Places of th
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

- requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- adverse effect, and adverse effect. Where the non-Federal applicant has identified historic determinations for the purposes of section 106 of the NHPA: no historic properties affected, no parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect consultation is required when the district engineer determines that the activity has the potential to the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out current procedures for addressing the requirements of Section 106 of the National Historic on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal affected by the proposed activity or include a vicinity map indicating the location of the historic pre-construction notification must state which historic properties might have the potential to be consultation has been completed. the non-Federal applicant shall not begin the activity until notified by the district engineer either properties on which the activity might have the potential to cause effects and notified the Corps cause effects on historic properties. The district engineer will conduct consultation with consulting consultation is not required when the district engineer determines that the activity does not have appropriate identification efforts, which may include background research, consultation, oral 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the properties or the potential for the presence of historic properties. Assistance regarding information Register of Historic Places, including previously unidentified properties. For such activities, the engineer if the NWP activity might have the potential to cause effects to any historic properties that the activity has no potential to cause effects to historic properties or that NHPA section 106 history interviews, sample field investigation, and field survey. Based on the information submitted representative, as appropriate, and the National Register of Historic Places (see 33 CFR listed on, determined to be eligible for listing on, or potentially eligible for listing on the National (c) Non-federal permittees must submit a pre-construction notification to the district
- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

 21. Discovery of Previously Unknown Remains and Artifacts. If you discover any
- previously unknown historic, cultural or archeological remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecologica significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- practicable at the project site (i.e., on site).

 (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the
- individual and cumulative adverse environmental effects are no more than minimal.

 (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-ace and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR a32.3(e)(3)).
- on what is best for the aquatic environmental on a watershed basis. In cases where riparian quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or compensatory mitigation for wetland losses. mitigation, the district engineer may waive or reduce the requirement to provide wetland areas are determined to be the most appropriate form of minimization or compensatory appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based both wetlands and open waters exist on the project site, the district engineer will determine the maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where but the district engineer may require slightly wider riparian areas to address documented water loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, The width of the required riparian area will address documented water quality or aquatic habitat compensatory mitigation required. Restored riparian areas should consist of native species. cases, the restoration or maintenance/protection of riparian areas may be the only legal protection (e.g. conservation easements) of riparian areas next to open waters. In some waters will normally include a requirement for the restoration or enhancement, maintenance, and (e) Compensatory mitigation plans for NWP activities in or near streams or other open
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization instead of components of a compensatory mitigation plan.
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality.</u> Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

activity does not result in more than minimal degradation of water quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized

- management requirements. measures to ensure that the authorized activity is consistent with state coastal zone must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional zone management consistency concurrence must be obtained, or a presumption of concurrence received a state coastal zone management consistency concurrence, an individual state coastal 27. Regional and Case-By-Case Conditions. The activity must comply with any 26. Coastal Zone Management. In coastal states where an NWP has not previously
- and with any case specific conditions added by the Corps or by the state, Indian Tribe, or Management Act consistency determination. USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone regional conditions that may have been added by the Division Engineer (see $33\ {\sf CFR}\ 330.4(e))$
- work authorized by this nationwide permit are still in existence at the time the property is of waters of the United States for the total project cannot exceed 1/3-acre. specified acreage limit. For example, if a road crossing over tidal waters is constructed under and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest transferred, the terms and conditions of this nationwide permit, including any special conditions, letter, and the letter must contain the following statement and signature: "When the structures or to validate the transfer. A copy of the nationwide permit verification must be attached to the permit verification to the new owner by submitting a letter to the appropriate Corps district office associated with a nationwide permit verification, the permittee may transfer the nationwide NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property Use of Multiple Nationwide Permits. The use of more than one NWP for a single

(Date)	(Transferee)	

conditions, have the transferee sign and date below."

nationwide permit and the associated liabilities associated with compliance with its terms and will continue to be binding on the new owner(s) of the property. To validate the transfer of this

- standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance from the Corps must provide a signed certification documenting completion of the authorized Compliance Certification. Each permittee who receives an NWP verification letter
- authorization, including any general, regional, or activity-specific conditions; (a) A statement that the authorized work was done in accordance with the NWP
- the appropriate number and resource type of credits; and include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must (b) A statement that the implementation of any required compensatory mitigation was
- of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later. The completed certification document must be submitted to the district engineer within 30 days (c) The signature of the permittee certifying the completion of the work and mitigation
- or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter 31. Activities Affecting Structures or Works Built by the United States. If an NWP

a written NWP verification. section 408 permission to altar, occupy, or use the USACE project, and the district engineer issues Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires

- prospective permittee does not provide all of the requested information, then the district engineer additional information necessary to make the PCN complete only once. However, if the information necessary to make the PCN complete. As a general rule, district engineers will request complete within 30 calendar days of the date of receipt and, if the PCN is determined to be The prospective permittee shall not begin the activity until either:

 (1) He or she is notified in writing by the district engineer that the activity may proceed will notify the prospective permittee that the PCN is still incomplete and the PCN review process incomplete, notify the prospective permittee within that 30 day period to request the additional will not commence until all of the requested information has been received by the district engineer notification (PCN) as early as possible. The district engineer must determine if the PCN is NWP, the prospective permittee must notify the district engineer by submitting a pre-construction 32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the
- under the NWP with any special conditions imposed by the district or division engineer; or
- accordance with the procedure set forth in 33 CFR 330.5(d)(2) the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see notification from the Corps that there is "no effect" on listed species or "no potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written engineer. However, if the permittee was required to notify the Corps pursuant to general condition the permittee cannot begin the activity until an individual permit has been obtained. Subsequently the district engineer issues the waiver. If the district or division engineer notifies the permittee in the permittee has received written approval from the Corps. If the proposed activity requires a the Corps pursuant to general condition 20 that the activity might have the potential to cause 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify PCN and the prospective permittee has not received written notice from the district or division (2) 45 calendar days have passed from the district engineer's receipt of the complete
- the following information: (b) Contents of Pre-Construction Notification: The PCN must be in writing and include
- (1) Name, address and telephone numbers of the prospective permittee
- authorize the proposed activity; (2) Location of the proposed activity;(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to
- aquatic sites, and other waters. Sketches should be provided when necessary to show that the the adverse environmental effects of the activity will be no more than minimal and to determine the used to authorize any part of the proposed project or any related activity, including other separate and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in provided results in a quicker decision. Sketches should contain sufficient detail to provide an activity complies with the terms of the NWP. (Sketches usually clarify the project and when sites, and other water for each single and complete crossing of those wetlands, other special projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic need for compensatory mitigation or other mitigation measures. For single and complete linear mitigation measures should be sufficiently detailed to allow the district engineer to determine that and distant crossings for linear projects that require Department of the Army authorization but do measures intended to reduce the adverse environmental effects caused by the proposed activity acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation adverse environmental effects the activity would cause, including the anticipated amount of loss of not require pre-construction notification. The description of the proposed activity and any proposed (4) A description of the proposed activity; the activity's purpose; direct and indirect

detailed engineering plans); illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be (5) The PCN must include a delineation of wetlands, other special aquatic sites, and

- especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; and other waters on the project site, but there may be a delay if the Corps does the delineation the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams,
- and a PCN is required, the prospective permittee must submit a statement describing how the alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. no more than minimal and why compensatory mitigation should not be required. As an mitigation requirement will be satisfied, or explaining why the adverse environmental effects are (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands
- pre-construction notification, Federal permittees must provide documentation demonstrating critical habitat that may be affected by the proposed activity. For any NWP activity that requires compliance with the Endangered Species Act; threatened species that might be affected by the proposed activity or utilize the designated habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or be affected or is in the vicinity of the project, or if the project is located in designated critical (7) For non-federal permittees, if any listed species or designated critical habitat might
- effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic demonstrating compliance with Section 106 of the National Historic Preservation Act indicating the location of the historic property. Federal permittees must provide documentation property might have the potential to be affected by the proposed activity or include a vicinity map (8) For non-federal permittees, if the NWP activity might have the potential to cause
- Wild and Scenic River or the "study river" (see general condition 16); and inclusion in the system while the river is in an official study status, the PCN must identify the River System, or in a river officially designated by Congress as a "study river" for possible (9) For an activity that will occur in a component of the National Wild and Scenic
- a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project. Engineers federally authorized civil works project, the pre-construction notification must include because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408
- established tools and procedures for electronic submittals. may provide electronic files of PCNs and supporting materials if the district engineer has this general condition. A letter containing the required information may also be used. Applicants NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of ENG 4345) may be used, but the completed application form must clearly indicate that it is an (c) Form of PCN Notification: The standard individual permit application form (Form
- conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal. Federal and state agencies conceming the proposed activity's compliance with the terms and (d) Agency Coordination: (1) The district engineer will consider any comments from
- water line or ordinary high water mark. excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United (2) Agency coordination is required for: (i) all NWP activities that require
- copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a (3) When agency coordination is required, the district engineer will immediately

in accordance with the procedures at 33 CFR 330.5. record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proposed activity are no more than minimal. The district engineer will provide no response to the time frame concerning the proposed activity's compliance with the terms and conditions of the adverse environmental effects will be more than minimal. If so contacted by an agency, the district substantive, sites pecific comments. The comments must explain why the agency believes the received to decide whether the NWP 37 authorization should be modified, suspended, or revoked proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of resource agency, except as provided below. The district engineer will indicate in the administrative NWPs, including the need for mitigation to ensure the net adverse environmental effects of the engineer will wait an additional 15 calendar days before making a decision on the pre-construction the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide 37, these agencies will have 10 calendar days from the date the material is transmitted to notify resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP property or economic hardship will occur. The district engineer will consider any comments notification. The district engineer will fully consider agency comments received within the specified

- Stevens Fishery Conservation and Management Act Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnusonengineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish (4) In cases of where the prospective permittee is not a Federal agency, the district
- copies of PCN notifications to expedite agency coordination. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple
- and conditions of an NWP District Engineers have authority to determine if an activity complies with the terms
- approvals, or authorizations required by law. NWPs do not obviate the need to obtain other federal, state, or local permits
- NWPs do not grant any property rights or exclusive privilege
- (see general condition 31). NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project

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).

Kentucky Transportation Cabinet Project:

NOTICE

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

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

PROJECT DESCRIPTION: Bridge Super Strength Super Strength/Super Replacement
KY 585 over Middle Fork Drakes Creek
Allen County, KY
KYTC Item No. 3-10011

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

Locations Impacting Water Quality

Station-Location	Description
Bridge ID: 002B00021N	The rehabilitation of Bridge 002B00021N (KY 585 over Middle Fork of Drakes Creek) includes a new superstructure with beams, deck, and railing, and repairs to the existing abutment. Substructure concrete will be patched and sealed. The abutment will be slightly modified to accommodate the new bridge superstructure. Channel protection will be added around the existing abutments. Approach roadway pavement will be replaced in the direct vicinity of the bridge. The project will be constructed within the existing right-of-way. Construction will be performed using phased construction. Access to the stream will be from the NW. Project will not result in the loss of greater than 0.1 acre of waters of the U.S.; will not result in the loss of greater than 300 linear feet of ephemeral, intermittent, or perennial stream; and will not discharge to a special aquatic site.

Kentucky Transportation Cabinet Project:

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

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

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT

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.
- 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.
- 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,

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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.

of Engineers JS Army Corps

Louisville District

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- Navigation. (a) No activity may cause more than a minimal adverse effect on
- authorized facilities in navigable waters of the United States. regulations or otherwise, must be installed and maintained at the permittee's expense on (b) Any safety lights and signals prescribed by the US Coast Guard, through
- authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, removal or alteration. the United States. No claim shall be made against the United States on account of any such navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to said structure or work shall cause unreasonable obstruction to the free navigation of the States require the removal, relocation, or other alteration, of the structure or work herein remove, relocate, or alter the structural work or obstructions caused thereby, without expense to (c) The permittee understands and agrees that, if future operations by the United
- species that normally migrate through the area, unless the activity's primary purpose is to cycle movements of those species of aquatic life indigenous to the waterbody, including those movement of those aquatic species. culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the impound water. All permanent and temporary crossings of waterbodies shall be suitably 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life
- spawning area are not authorized. through excavation, fill, or downstream smothering by substantial turbidity) of an important avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. Spawning Areas. Activities in spawning areas during spawning seasons must be
- as breeding areas for migratory birds must be avoided to the maximum extent practicable. Migratory Bird Breeding Areas. Activities in waters of the United States that serve
- 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27 unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and Shellfish Beds. No activity may occur in areas of concentrated shellfish populations
- pollutants in toxic amounts (see Section 307 of the Clean Water Act). bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car
- intake structures or adjacent bank stabilization. supply intake, except where the activity is for the repair or improvement of public water supply 8. Adverse Effects From Impoundments. If the activity creates an impoundment of 7. Water Supply Intakes. No activity may occur in the proximity of a public water

water, adverse effects to the aquatic system due to accelerating the passage of water, and/or

- and location of open waters if it benefits the aquatic environment (e.g., stream restoration or or manage high flows. The activity may alter the pre-construction course, condition, capacity, passage of normal or high flows, unless the primary purpose of the activity is to impound water constructed to withstand expected high flows. The activity must not restrict or impede the temporary and permanent road crossings, except as provided below. The activity must be each activity, including stream channelization, storm water management activities, and construction course, condition, capacity, and location of open waters must be maintained for restricting its flow must be minimized to the maximum extent practicable. 9. Management of Water Flows. To the maximum extent practicable, the pre-
- approved state or local floodplain management requirements. 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA
- mats, or other measures must be taken to minimize soil disturbance 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on

- work within waters of the United States during periods of low-flow or no-flow, or during low tides. be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform soil and other fills, as well as any work below the ordinary high water mark or high tide line, must must be used and maintained in effective operating condition during construction, and all exposed 12. Removal of Temporary Fills. Temporary fills must be removed in their entirety and Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls
- revegetated, as appropriate 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained

the affected areas returned to pre-construction elevations. The affected areas must be

- authorization. conditions, as well as any activity-specific conditions added by the district engineer to an NWP including maintenance to ensure public safety and compliance with applicable NWP general
- The same NWP cannot be used more than once for the same single and complete project. Single and Complete Project. The activity must be a single and complete project.
- Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate the proposed activity will not adversely affect the Wild and Scenic River designation or study Federal agency with direct management responsibility for such river, has determined in writing that 16. <u>Wild and Scenic Rivers</u>. (a) No activity may occur in a component of the National
- will not adversely affect the Wild and Scenic River designation or study status. construction notification (see general condition 32). The district engineer will coordinate the PCN River System, or in a river officially designated by Congress as a "study river" for possible with the Federal agency with direct management responsibility for that river. The permittee shall inclusion in the system while the river is in an official study status, the permittee must submit a premanagement responsibility for that river has determined in writing that the proposed NWP activity not begin the NWP activity until notified by the district engineer that the Federal agency with direct (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic
- Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and land management agency responsible for the designated Wild and Scenic River or study river (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal
- tribal resources, or tribal lands. 17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected
- species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been a species proposed for such designation, as identified under the Federal Endangered Species Act directly or indirectly jeopardize the continued existence of a threatened or endangered species or that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to
- appropriate documentation has been submitted. If the appropriate documentation has not been demonstrate compliance with those requirements. The district engineer will verify that the submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the Federal permittee must provide the district engineer with the appropriate documentation to requirements of the ESA. If pre-construction notification is required for the proposed activity, the (b) Federal agencies should follow their own procedures for complying with the

- (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.
- (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

- requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- adverse effect, and adverse effect. Where the non-Federal applicant has identified historic determinations for the purposes of section 106 of the NHPA: no historic properties affected, no parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect consultation is required when the district engineer determines that the activity has the potential to the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out current procedures for addressing the requirements of Section 106 of the National Historic on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal affected by the proposed activity or include a vicinity map indicating the location of the historic pre-construction notification must state which historic properties might have the potential to be consultation has been completed. the non-Federal applicant shall not begin the activity until notified by the district engineer either properties on which the activity might have the potential to cause effects and notified the Corps cause effects on historic properties. The district engineer will conduct consultation with consulting consultation is not required when the district engineer determines that the activity does not have appropriate identification efforts, which may include background research, consultation, oral 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the properties or the potential for the presence of historic properties. Assistance regarding information Register of Historic Places, including previously unidentified properties. For such activities, the engineer if the NWP activity might have the potential to cause effects to any historic properties that the activity has no potential to cause effects to historic properties or that NHPA section 106 history interviews, sample field investigation, and field survey. Based on the information submitted representative, as appropriate, and the National Register of Historic Places (see 33 CFR listed on, determined to be eligible for listing on, or potentially eligible for listing on the National (c) Non-federal permittees must submit a pre-construction notification to the district
- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the adverse effect created or permitted by the ACHP and provide documentation specifying the circumstances, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

 21. Discovery of Previously Unknown Remains and Artifacts. If you discover any
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecologica significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- on what is best for the aquatic environmental on a watershed basis. In cases where riparian quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or compensatory mitigation for wetland losses. mitigation, the district engineer may waive or reduce the requirement to provide wetland areas are determined to be the most appropriate form of minimization or compensatory appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based both wetlands and open waters exist on the project site, the district engineer will determine the maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where but the district engineer may require slightly wider riparian areas to address documented water loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, The width of the required riparian area will address documented water quality or aquatic habitat compensatory mitigation required. Restored riparian areas should consist of native species. cases, the restoration or maintenance/protection of riparian areas may be the only legal protection (e.g. conservation easements) of riparian areas next to open waters. In some waters will normally include a requirement for the restoration or enhancement, maintenance, and (e) Compensatory mitigation plans for NWP activities in or near streams or other open
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the Unitec States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization instead of components of a compensatory mitigation plan.
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

activity does not result in more than minimal degradation of water quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized

- management requirements. measures to ensure that the authorized activity is consistent with state coastal zone must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional zone management consistency concurrence must be obtained, or a presumption of concurrence received a state coastal zone management consistency concurrence, an individual state coastal 27. Regional and Case-By-Case Conditions. The activity must comply with any 26. Coastal Zone Management. In coastal states where an NWP has not previously
- and with any case specific conditions added by the Corps or by the state, Indian Tribe, or Management Act consistency determination. USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone regional conditions that may have been added by the Division Engineer (see $33\ {\sf CFR}\ 330.4(e))$
- of waters of the United States for the total project cannot exceed 1/3-acre. specified acreage limit. For example, if a road crossing over tidal waters is constructed under and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss Use of Multiple Nationwide Permits. The use of more than one NWP for a single
- conditions, have the transferee sign and date below." nationwide permit and the associated liabilities associated with compliance with its terms and will continue to be binding on the new owner(s) of the property. To validate the transfer of this transferred, the terms and conditions of this nationwide permit, including any special conditions, work authorized by this nationwide permit are still in existence at the time the property is letter, and the letter must contain the following statement and signature: "When the structures or to validate the transfer. A copy of the nationwide permit verification must be attached to the permit verification to the new owner by submitting a letter to the appropriate Corps district office associated with a nationwide permit verification, the permittee may transfer the nationwide 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property

(Transferee)

(Date)

- standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance from the Corps must provide a signed certification documenting completion of the authorized Compliance Certification. Each permittee who receives an NWP verification letter
- authorization, including any general, regional, or activity-specific conditions; (a) A statement that the authorized work was done in accordance with the NWP
- the appropriate number and resource type of credits; and include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must (b) A statement that the implementation of any required compensatory mitigation was
- of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later. The completed certification document must be submitted to the district engineer within 30 days (c) The signature of the permittee certifying the completion of the work and mitigation
- or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter 31. Activities Affecting Structures or Works Built by the United States. If an NWP

- a written NWP verification. section 408 permission to altar, occupy, or use the USACE project, and the district engineer issues Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires
- prospective permittee does not provide all of the requested information, then the district engineer additional information necessary to make the PCN complete only once. However, if the information necessary to make the PCN complete. As a general rule, district engineers will request complete within 30 calendar days of the date of receipt and, if the PCN is determined to be The prospective permittee shall not begin the activity until either:

 (1) He or she is notified in writing by the district engineer that the activity may proceed will notify the prospective permittee that the PCN is still incomplete and the PCN review process incomplete, notify the prospective permittee within that 30 day period to request the additional notification (PCN) as early as possible. The district engineer must determine if the PCN is will not commence until all of the requested information has been received by the district engineer NWP, the prospective permittee must notify the district engineer by submitting a pre-construction 32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the
- under the NWP with any special conditions imposed by the district or division engineer; or
- accordance with the procedure set forth in 33 CFR 330.5(d)(2) the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see notification from the Corps that there is "no effect" on listed species or "no potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written engineer. However, if the permittee was required to notify the Corps pursuant to general condition PCN and the prospective permittee has not received written notice from the district or division the permittee cannot begin the activity until an individual permit has been obtained. Subsequently the district engineer issues the waiver. If the district or division engineer notifies the permittee in the permittee has received written approval from the Corps. If the proposed activity requires a the Corps pursuant to general condition 20 that the activity might have the potential to cause 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify (2) 45 calendar days have passed from the district engineer's receipt of the complete
- the following information: (b) Contents of Pre-Construction Notification: The PCN must be in writing and include
- (1) Name, address and telephone numbers of the prospective permittee
- authorize the proposed activity; (2) Location of the proposed activity;(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to
- the adverse environmental effects of the activity will be no more than minimal and to determine the used to authorize any part of the proposed project or any related activity, including other separate and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic need for compensatory mitigation or other mitigation measures. For single and complete linear mitigation measures should be sufficiently detailed to allow the district engineer to determine that and distant crossings for linear projects that require Department of the Army authorization but do measures intended to reduce the adverse environmental effects caused by the proposed activity acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation adverse environmental effects the activity would cause, including the anticipated amount of loss of not require pre-construction notification. The description of the proposed activity and any proposed (4) A description of the proposed activity; the activity's purpose; direct and indirect

aquatic sites, and other waters. Sketches should be provided when necessary to show that the

provided results in a quicker decision. Sketches should contain sufficient detail to provide an activity complies with the terms of the NWP. (Sketches usually clarify the project and when sites, and other water for each single and complete crossing of those wetlands, other special

detailed engineering plans); illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be (5) The PCN must include a delineation of wetlands, other special aquatic sites, and

- especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; and other waters on the project site, but there may be a delay if the Corps does the delineation the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams,
- and a PCN is required, the prospective permittee must submit a statement describing how the alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. no more than minimal and why compensatory mitigation should not be required. As an mitigation requirement will be satisfied, or explaining why the adverse environmental effects are (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands
- pre-construction notification, Federal permittees must provide documentation demonstrating critical habitat that may be affected by the proposed activity. For any NWP activity that requires compliance with the Endangered Species Act; threatened species that might be affected by the proposed activity or utilize the designated habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or be affected or is in the vicinity of the project, or if the project is located in designated critical (7) For non-federal permittees, if any listed species or designated critical habitat might
- effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic demonstrating compliance with Section 106 of the National Historic Preservation Act indicating the location of the historic property. Federal permittees must provide documentation property might have the potential to be affected by the proposed activity or include a vicinity map (8) For non-federal permittees, if the NWP activity might have the potential to cause
- Wild and Scenic River or the "study river" (see general condition 16); and inclusion in the system while the river is in an official study status, the PCN must identify the River System, or in a river officially designated by Congress as a "study river" for possible (9) For an activity that will occur in a component of the National Wild and Scenic
- a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project. Engineers federally authorized civil works project, the pre-construction notification must include because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408
- established tools and procedures for electronic submittals. may provide electronic files of PCNs and supporting materials if the district engineer has this general condition. A letter containing the required information may also be used. Applicants NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of ENG 4345) may be used, but the completed application form must clearly indicate that it is an (c) Form of PCN Notification: The standard individual permit application form (Form
- conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal. Federal and state agencies conceming the proposed activity's compliance with the terms and (d) Agency Coordination: (1) The district engineer will consider any comments from
- water line or ordinary high water mark. excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United (2) Agency coordination is required for: (i) all NWP activities that require
- copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a (3) When agency coordination is required, the district engineer will immediately

in accordance with the procedures at 33 CFR 330.5. record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proposed activity are no more than minimal. The district engineer will provide no response to the time frame concerning the proposed activity's compliance with the terms and conditions of the adverse environmental effects will be more than minimal. If so contacted by an agency, the district substantive, sites pecific comments. The comments must explain why the agency believes the received to decide whether the NWP 37 authorization should be modified, suspended, or revoked proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of resource agency, except as provided below. The district engineer will indicate in the administrative NWPs, including the need for mitigation to ensure the net adverse environmental effects of the engineer will wait an additional 15 calendar days before making a decision on the pre-construction the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide 37, these agencies will have 10 calendar days from the date the material is transmitted to notify resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP property or economic hardship will occur. The district engineer will consider any comments notification. The district engineer will fully consider agency comments received within the specified

- Stevens Fishery Conservation and Management Act Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnusonengineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish (4) In cases of where the prospective permittee is not a Federal agency, the district
- copies of PCN notifications to expedite agency coordination. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple
- and conditions of an NWP District Engineers have authority to determine if an activity complies with the terms
- approvals, or authorizations required by law. NWPs do not obviate the need to obtain other federal, state, or local permits
- NWPs do not grant any property rights or exclusive privilege
- (see general condition 31). NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project

<u>Terms for Nationwide Permit No. 14 – Linear Transportation Projects</u>

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).

Kentucky Transportation Cabinet Project:

NOTICE

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

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

PROJECT DESCRIPTION: Bridge Replacement

Roger Q Mill Road over Red River West Fork Branch

Todd County, KY

KYTC Item No. 3-10013

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

Locations Impacting Water Quality

Station-Location	Description
Bridge ID: 110C00061N	This replacement project will entail complete removal of the bridge and construction of a new bridge. The design objectives are to remove any load restrictions and have a design life of at least 75 years. The project will replace the bridge in the same location with current geometrics (bridge width, length, hydraulic opening, etc.) to avoid environmental impacts, utility impacts, and minimize the need for new right of way. The project will not include any reconstruction of the roadways approaching the bridge. Traffic will be detoured onto existing roads, rather than onto a temporary crossing of the stream. The project will not result in the loss of greater than 0.1 acre of waters of the U.S.; will not result in loss greater than 300 feet of ephemeral, intermittent, or perennial stream; and will not discharge to a special aquatic site.

Contract ID: 195066 Page 179 of 266

Kentucky Transportation Cabinet Project:

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

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

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

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MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

R. BRUCE SCOTT

ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

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

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Louisville District

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- Navigation. (a) No activity may cause more than a minimal adverse effect on
- authorized facilities in navigable waters of the United States. regulations or otherwise, must be installed and maintained at the permittee's expense on (b) Any safety lights and signals prescribed by the US Coast Guard, through
- authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, removal or alteration. the United States. No claim shall be made against the United States on account of any such navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to said structure or work shall cause unreasonable obstruction to the free navigation of the States require the removal, relocation, or other alteration, of the structure or work herein remove, relocate, or alter the structural work or obstructions caused thereby, without expense to (c) The permittee understands and agrees that, if future operations by the United
- species that normally migrate through the area, unless the activity's primary purpose is to cycle movements of those species of aquatic life indigenous to the waterbody, including those movement of those aquatic species. culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the impound water. All permanent and temporary crossings of waterbodies shall be suitably 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life
- spawning area are not authorized. through excavation, fill, or downstream smothering by substantial turbidity) of an important avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. Spawning Areas. Activities in spawning areas during spawning seasons must be
- as breeding areas for migratory birds must be avoided to the maximum extent practicable. Migratory Bird Breeding Areas. Activities in waters of the United States that serve
- 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27 unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and Shellfish Beds. No activity may occur in areas of concentrated shellfish populations
- pollutants in toxic amounts (see Section 307 of the Clean Water Act). bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car
- intake structures or adjacent bank stabilization. supply intake, except where the activity is for the repair or improvement of public water supply 7. Water Supply Intakes. No activity may occur in the proximity of a public water
- restricting its flow must be minimized to the maximum extent practicable. water, adverse effects to the aquatic system due to accelerating the passage of water, and/or 8. Adverse Effects From Impoundments. If the activity creates an impoundment of
- and location of open waters if it benefits the aquatic environment (e.g., stream restoration or or manage high flows. The activity may alter the pre-construction course, condition, capacity, passage of normal or high flows, unless the primary purpose of the activity is to impound water constructed to withstand expected high flows. The activity must not restrict or impede the temporary and permanent road crossings, except as provided below. The activity must be each activity, including stream channelization, storm water management activities, and construction course, condition, capacity, and location of open waters must be maintained for 9. Management of Water Flows. To the maximum extent practicable, the pre-
- approved state or local floodplain management requirements. 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA
- mats, or other measures must be taken to minimize soil disturbance 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on

- work within waters of the United States during periods of low-flow or no-flow, or during low tides. be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform soil and other fills, as well as any work below the ordinary high water mark or high tide line, must must be used and maintained in effective operating condition during construction, and all exposed 12. Removal of Temporary Fills. Temporary fills must be removed in their entirety and Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls
- revegetated, as appropriate 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained

the affected areas returned to pre-construction elevations. The affected areas must be

- authorization. conditions, as well as any activity-specific conditions added by the district engineer to an NWP including maintenance to ensure public safety and compliance with applicable NWP general
- The same NWP cannot be used more than once for the same single and complete project. Single and Complete Project. The activity must be a single and complete project.
- Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate the proposed activity will not adversely affect the Wild and Scenic River designation or study Federal agency with direct management responsibility for such river, has determined in writing that 16. <u>Wild and Scenic Rivers</u>. (a) No activity may occur in a component of the National
- will not adversely affect the Wild and Scenic River designation or study status. construction notification (see general condition 32). The district engineer will coordinate the PCN River System, or in a river officially designated by Congress as a "study river" for possible with the Federal agency with direct management responsibility for that river. The permittee shall inclusion in the system while the river is in an official study status, the permittee must submit a premanagement responsibility for that river has determined in writing that the proposed NWP activity not begin the NWP activity until notified by the district engineer that the Federal agency with direct (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic
- Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and land management agency responsible for the designated Wild and Scenic River or study river (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal
- tribal resources, or tribal lands. 17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected
- species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been a species proposed for such designation, as identified under the Federal Endangered Species Act directly or indirectly jeopardize the continued existence of a threatened or endangered species or that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to
- appropriate documentation has been submitted. If the appropriate documentation has not been demonstrate compliance with those requirements. The district engineer will verify that the submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the Federal permittee must provide the district engineer with the appropriate documentation to requirements of the ESA. If pre-construction notification is required for the proposed activity, the (b) Federal agencies should follow their own procedures for complying with the

- (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.
- (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

- requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- adverse effect, and adverse effect. Where the non-Federal applicant has identified historic determinations for the purposes of section 106 of the NHPA: no historic properties affected, no parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect consultation is required when the district engineer determines that the activity has the potential to the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out current procedures for addressing the requirements of Section 106 of the National Historic on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal affected by the proposed activity or include a vicinity map indicating the location of the historic pre-construction notification must state which historic properties might have the potential to be consultation has been completed. the non-Federal applicant shall not begin the activity until notified by the district engineer either properties on which the activity might have the potential to cause effects and notified the Corps cause effects on historic properties. The district engineer will conduct consultation with consulting consultation is not required when the district engineer determines that the activity does not have appropriate identification efforts, which may include background research, consultation, oral 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the properties or the potential for the presence of historic properties. Assistance regarding information Register of Historic Places, including previously unidentified properties. For such activities, the engineer if the NWP activity might have the potential to cause effects to any historic properties that the activity has no potential to cause effects to historic properties or that NHPA section 106 history interviews, sample field investigation, and field survey. Based on the information submitted representative, as appropriate, and the National Register of Historic Places (see 33 CFR listed on, determined to be eligible for listing on, or potentially eligible for listing on the National (c) Non-federal permittees must submit a pre-construction notification to the district
- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

 21. Discovery of Previously Unknown Remains and Artifacts. If you discover any
- previously unknown historic, cultural or archeological remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecologica significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- on what is best for the aquatic environmental on a watershed basis. In cases where riparian quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or compensatory mitigation for wetland losses. mitigation, the district engineer may waive or reduce the requirement to provide wetland areas are determined to be the most appropriate form of minimization or compensatory appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based both wetlands and open waters exist on the project site, the district engineer will determine the maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where but the district engineer may require slightly wider riparian areas to address documented water loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, The width of the required riparian area will address documented water quality or aquatic habitat compensatory mitigation required. Restored riparian areas should consist of native species. cases, the restoration or maintenance/protection of riparian areas may be the only legal protection (e.g. conservation easements) of riparian areas next to open waters. In some waters will normally include a requirement for the restoration or enhancement, maintenance, and (e) Compensatory mitigation plans for NWP activities in or near streams or other open
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the Unitec States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization instead of components of a compensatory mitigation plan.
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality.</u> Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

activity does not result in more than minimal degradation of water quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized

- management requirements. measures to ensure that the authorized activity is consistent with state coastal zone must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional zone management consistency concurrence must be obtained, or a presumption of concurrence received a state coastal zone management consistency concurrence, an individual state coastal 27. Regional and Case-By-Case Conditions. The activity must comply with any 26. Coastal Zone Management. In coastal states where an NWP has not previously
- and with any case specific conditions added by the Corps or by the state, Indian Tribe, or Management Act consistency determination. USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone regional conditions that may have been added by the Division Engineer (see $33\ {\sf CFR}\ 330.4(e))$ Use of Multiple Nationwide Permits. The use of more than one NWP for a single
- of waters of the United States for the total project cannot exceed 1/3-acre. specified acreage limit. For example, if a road crossing over tidal waters is constructed under and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property

conditions, have the transferee sign and date below." nationwide permit and the associated liabilities associated with compliance with its terms and will continue to be binding on the new owner(s) of the property. To validate the transfer of this transferred, the terms and conditions of this nationwide permit, including any special conditions, work authorized by this nationwide permit are still in existence at the time the property is letter, and the letter must contain the following statement and signature: "When the structures or to validate the transfer. A copy of the nationwide permit verification must be attached to the permit verification to the new owner by submitting a letter to the appropriate Corps district office associated with a nationwide permit verification, the permittee may transfer the nationwide

(Transferee)	

- standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance from the Corps must provide a signed certification documenting completion of the authorized Compliance Certification. Each permittee who receives an NWP verification letter
- authorization, including any general, regional, or activity-specific conditions; (a) A statement that the authorized work was done in accordance with the NWP
- the appropriate number and resource type of credits; and include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must (b) A statement that the implementation of any required compensatory mitigation was
- of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later. The completed certification document must be submitted to the district engineer within 30 days (c) The signature of the permittee certifying the completion of the work and mitigation
- or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter 31. Activities Affecting Structures or Works Built by the United States. If an NWP

aquatic sites, and other waters. Sketches should be provided when necessary to show that the

provided results in a quicker decision. Sketches should contain sufficient detail to provide an activity complies with the terms of the NWP. (Sketches usually clarify the project and when sites, and other water for each single and complete crossing of those wetlands, other special projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic need for compensatory mitigation or other mitigation measures. For single and complete linear mitigation measures should be sufficiently detailed to allow the district engineer to determine that

the adverse environmental effects of the activity will be no more than minimal and to determine the

a written NWP verification. section 408 permission to altar, occupy, or use the USACE project, and the district engineer issues Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires

- prospective permittee does not provide all of the requested information, then the district engineer additional information necessary to make the PCN complete only once. However, if the information necessary to make the PCN complete. As a general rule, district engineers will request complete within 30 calendar days of the date of receipt and, if the PCN is determined to be The prospective permittee shall not begin the activity until either:

 (1) He or she is notified in writing by the district engineer that the activity may proceed will notify the prospective permittee that the PCN is still incomplete and the PCN review process incomplete, notify the prospective permittee within that 30 day period to request the additional will not commence until all of the requested information has been received by the district engineer notification (PCN) as early as possible. The district engineer must determine if the PCN is NWP, the prospective permittee must notify the district engineer by submitting a pre-construction 32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the
- under the NWP with any special conditions imposed by the district or division engineer; or
- accordance with the procedure set forth in 33 CFR 330.5(d)(2) the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see notification from the Corps that there is "no effect" on listed species or "no potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written engineer. However, if the permittee was required to notify the Corps pursuant to general condition the permittee cannot begin the activity until an individual permit has been obtained. Subsequently the district engineer issues the waiver. If the district or division engineer notifies the permittee in the permittee has received written approval from the Corps. If the proposed activity requires a the Corps pursuant to general condition 20 that the activity might have the potential to cause PCN and the prospective permittee has not received written notice from the district or division 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify (2) 45 calendar days have passed from the district engineer's receipt of the complete
- the following information: (b) Contents of Pre-Construction Notification: The PCN must be in writing and include
- (1) Name, address and telephone numbers of the prospective permittee
- authorize the proposed activity; (2) Location of the proposed activity;(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to
- used to authorize any part of the proposed project or any related activity, including other separate and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in and distant crossings for linear projects that require Department of the Army authorization but do measures intended to reduce the adverse environmental effects caused by the proposed activity acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation adverse environmental effects the activity would cause, including the anticipated amount of loss of not require pre-construction notification. The description of the proposed activity and any proposed (4) A description of the proposed activity; the activity's purpose; direct and indirect

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detailed engineering plans); illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be (5) The PCN must include a delineation of wetlands, other special aquatic sites, and

- especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; and other waters on the project site, but there may be a delay if the Corps does the delineation the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams,
- and a PCN is required, the prospective permittee must submit a statement describing how the alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. no more than minimal and why compensatory mitigation should not be required. As an mitigation requirement will be satisfied, or explaining why the adverse environmental effects are (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands
- pre-construction notification, Federal permittees must provide documentation demonstrating critical habitat that may be affected by the proposed activity. For any NWP activity that requires compliance with the Endangered Species Act; threatened species that might be affected by the proposed activity or utilize the designated habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or be affected or is in the vicinity of the project, or if the project is located in designated critical (7) For non-federal permittees, if any listed species or designated critical habitat might
- effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic demonstrating compliance with Section 106 of the National Historic Preservation Act indicating the location of the historic property. Federal permittees must provide documentation property might have the potential to be affected by the proposed activity or include a vicinity map (8) For non-federal permittees, if the NWP activity might have the potential to cause
- Wild and Scenic River or the "study river" (see general condition 16); and inclusion in the system while the river is in an official study status, the PCN must identify the River System, or in a river officially designated by Congress as a "study river" for possible (9) For an activity that will occur in a component of the National Wild and Scenic
- a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project. Engineers federally authorized civil works project, the pre-construction notification must include because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408
- established tools and procedures for electronic submittals. may provide electronic files of PCNs and supporting materials if the district engineer has this general condition. A letter containing the required information may also be used. Applicants NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of ENG 4345) may be used, but the completed application form must clearly indicate that it is an (c) Form of PCN Notification: The standard individual permit application form (Form
- conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal. Federal and state agencies conceming the proposed activity's compliance with the terms and (d) Agency Coordination: (1) The district engineer will consider any comments from
- water line or ordinary high water mark. excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United (2) Agency coordination is required for: (i) all NWP activities that require
- copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a (3) When agency coordination is required, the district engineer will immediately

in accordance with the procedures at 33 CFR 330.5. record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proposed activity are no more than minimal. The district engineer will provide no response to the time frame concerning the proposed activity's compliance with the terms and conditions of the adverse environmental effects will be more than minimal. If so contacted by an agency, the district substantive, sites pecific comments. The comments must explain why the agency believes the received to decide whether the NWP 37 authorization should be modified, suspended, or revoked proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of resource agency, except as provided below. The district engineer will indicate in the administrative NWPs, including the need for mitigation to ensure the net adverse environmental effects of the engineer will wait an additional 15 calendar days before making a decision on the pre-construction the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide 37, these agencies will have 10 calendar days from the date the material is transmitted to notify resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP property or economic hardship will occur. The district engineer will consider any comments notification. The district engineer will fully consider agency comments received within the specified

- Stevens Fishery Conservation and Management Act Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnusonengineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish (4) In cases of where the prospective permittee is not a Federal agency, the district
- copies of PCN notifications to expedite agency coordination. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple
- and conditions of an NWP District Engineers have authority to determine if an activity complies with the terms
- approvals, or authorizations required by law. NWPs do not obviate the need to obtain other federal, state, or local permits
- NWPs do not grant any property rights or exclusive privilege
- (see general condition 31). NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project

<u>Terms for Nationwide Permit No. 14 – Linear Transportation Projects</u>

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).

Kentucky Transportation Cabinet Project:

NOTICE

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

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

PROJECT DESCRIPTION: Bridge Replacement

Hammet Hill Road over Salt Lick Creek

WarrenCounty, KY KYTC Item No. 3-10014

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

Locations Impacting Water Quality

Station-Location	Description
Bridge ID: 114B00071N	This replacement project will entail complete removal of the bridge and construction of a new bridge. The design objectives are to remove any load restrictions and have a design life of at least 75 years. The project will replace the bridge in the same location with current geometrics (bridge width, length, hydraulic opening, etc.) to avoid environmental impacts, utility impacts, and minimize the need for new right of way. The project will not include any reconstruction of the roadways approaching the bridge. Traffic will be detoured onto existing roads, rather than onto a temporary crossing of the stream. The project will not result in the loss of greater than 0.1 acre of waters of the U.S.; will not result in loss greater than 300 feet of ephemeral, intermittent, or perennial stream; and will not discharge to a special aquatic site.

Kentucky Transportation Cabinet Project:

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

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

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT

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.
- 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.



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

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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.

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Louisville District

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

12.

Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls

- Navigation. (a) No activity may cause more than a minimal adverse effect on
- authorized facilities in navigable waters of the United States. regulations or otherwise, must be installed and maintained at the permittee's expense on (b) Any safety lights and signals prescribed by the US Coast Guard, through

work within waters of the United States during periods of low-flow or no-flow, or during low tides.

be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform soil and other fills, as well as any work below the ordinary high water mark or high tide line, must must be used and maintained in effective operating condition during construction, and all exposed

- authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, removal or alteration. the United States. No claim shall be made against the United States on account of any such navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to said structure or work shall cause unreasonable obstruction to the free navigation of the States require the removal, relocation, or other alteration, of the structure or work herein remove, relocate, or alter the structural work or obstructions caused thereby, without expense to (c) The permittee understands and agrees that, if future operations by the United
- species that normally migrate through the area, unless the activity's primary purpose is to cycle movements of those species of aquatic life indigenous to the waterbody, including those movement of those aquatic species. culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the impound water. All permanent and temporary crossings of waterbodies shall be suitably 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life
- spawning area are not authorized. through excavation, fill, or downstream smothering by substantial turbidity) of an important avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. Spawning Areas. Activities in spawning areas during spawning seasons must be
- as breeding areas for migratory birds must be avoided to the maximum extent practicable. Migratory Bird Breeding Areas. Activities in waters of the United States that serve
- 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27 unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and Shellfish Beds. No activity may occur in areas of concentrated shellfish populations
- pollutants in toxic amounts (see Section 307 of the Clean Water Act). bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car
- water, adverse effects to the aquatic system due to accelerating the passage of water, and/or intake structures or adjacent bank stabilization. supply intake, except where the activity is for the repair or improvement of public water supply 8. Adverse Effects From Impoundments. If the activity creates an impoundment of 7. Water Supply Intakes. No activity may occur in the proximity of a public water
- and location of open waters if it benefits the aquatic environment (e.g., stream restoration or or manage high flows. The activity may alter the pre-construction course, condition, capacity, passage of normal or high flows, unless the primary purpose of the activity is to impound water constructed to withstand expected high flows. The activity must not restrict or impede the temporary and permanent road crossings, except as provided below. The activity must be each activity, including stream channelization, storm water management activities, and construction course, condition, capacity, and location of open waters must be maintained for restricting its flow must be minimized to the maximum extent practicable. 9. Management of Water Flows. To the maximum extent practicable, the pre-
- approved state or local floodplain management requirements. 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA

appropriate documentation has been submitted. If the appropriate documentation has not been demonstrate compliance with those requirements. The district engineer will verify that the

Federal permittee must provide the district engineer with the appropriate documentation to requirements of the ESA. If pre-construction notification is required for the proposed activity, the that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the

submitted, additional ESA section 7 consultation may be necessary for the activity and the

respective federal agency would be responsible for fulfilling its obligation under section 7 of the

mats, or other measures must be taken to minimize soil disturbance

species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been a species proposed for such designation, as identified under the Federal Endangered Species Act directly or indirectly jeopardize the continued existence of a threatened or endangered species or Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov will not adversely affect the Wild and Scenic River designation or study status. construction notification (see general condition 32). The district engineer will coordinate the PCN River System, or in a river officially designated by Congress as a "study river" for possible Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for authorization. conditions, as well as any activity-specific conditions added by the district engineer to an NWP revegetated, as appropriate completed. Direct effects are the immediate effects on the listed species and critical habitat (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and land management agency responsible for the designated Wild and Scenic River or study river with the Federal agency with direct management responsibility for that river. The permittee shall inclusion in the system while the river is in an official study status, the permittee must submit a prepossible inclusion in the system while the river is in an official study status, unless the appropriate including maintenance to ensure public safety and compliance with applicable NWP general caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such tribal resources, or tribal lands. management responsibility for that river has determined in writing that the proposed NWP activity not begin the NWP activity until notified by the district engineer that the Federal agency with direct the proposed activity will not adversely affect the Wild and Scenic River designation or study Federal agency with direct management responsibility for such river, has determined in writing that The same NWP cannot be used more than once for the same single and complete project. the affected areas returned to pre-construction elevations. The affected areas must be 17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to Removal of Temporary Fills. Temporary fills must be removed in their entirety and 16. <u>Wild and Scenic Rivers</u>. (a) No activity may occur in a component of the National Single and Complete Project. The activity must be a single and complete project.

- (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.
- (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

- adverse effect, and adverse effect. Where the non-Federal applicant has identified historic determinations for the purposes of section 106 of the NHPA: no historic properties affected, no parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect consultation is required when the district engineer determines that the activity has the potential to the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out current procedures for addressing the requirements of Section 106 of the National Historic on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal affected by the proposed activity or include a vicinity map indicating the location of the historic pre-construction notification must state which historic properties might have the potential to be consultation has been completed. the non-Federal applicant shall not begin the activity until notified by the district engineer either properties on which the activity might have the potential to cause effects and notified the Corps cause effects on historic properties. The district engineer will conduct consultation with consulting consultation is not required when the district engineer determines that the activity does not have appropriate identification efforts, which may include background research, consultation, oral 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the properties or the potential for the presence of historic properties. Assistance regarding information Register of Historic Places, including previously unidentified properties. For such activities, the engineer if the NWP activity might have the potential to cause effects to any historic properties that the activity has no potential to cause effects to historic properties or that NHPA section 106 history interviews, sample field investigation, and field survey. Based on the information submitted representative, as appropriate, and the National Register of Historic Places (see 33 CFR listed on, determined to be eligible for listing on, or potentially eligible for listing on the National (c) Non-federal permittees must submit a pre-construction notification to the district
- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

 21. Discovery of Previously Unknown Remains and Artifacts. If you discover any
- previously unknown historic, cultural or archeological remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecologica significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- on what is best for the aquatic environmental on a watershed basis. In cases where riparian quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or compensatory mitigation for wetland losses. mitigation, the district engineer may waive or reduce the requirement to provide wetland areas are determined to be the most appropriate form of minimization or compensatory appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based both wetlands and open waters exist on the project site, the district engineer will determine the maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where but the district engineer may require slightly wider riparian areas to address documented water loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, The width of the required riparian area will address documented water quality or aquatic habitat compensatory mitigation required. Restored riparian areas should consist of native species. cases, the restoration or maintenance/protection of riparian areas may be the only legal protection (e.g. conservation easements) of riparian areas next to open waters. In some waters will normally include a requirement for the restoration or enhancement, maintenance, and (e) Compensatory mitigation plans for NWP activities in or near streams or other open
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f
- cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

 (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the Unitec States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization instead of components of a compensatory mitigation plan.
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

activity does not result in more than minimal degradation of water quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized 26. Coastal Zone Management. In coastal states where an NWP has not previously

- management requirements. measures to ensure that the authorized activity is consistent with state coastal zone must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional zone management consistency concurrence must be obtained, or a presumption of concurrence received a state coastal zone management consistency concurrence, an individual state coastal
- and with any case specific conditions added by the Corps or by the state, Indian Tribe, or Management Act consistency determination. USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone regional conditions that may have been added by the Division Engineer (see $33\ {\sf CFR}\ 330.4(e))$ 27. Regional and Case-By-Case Conditions. The activity must comply with any
- of waters of the United States for the total project cannot exceed 1/3-acre. specified acreage limit. For example, if a road crossing over tidal waters is constructed under and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss Use of Multiple Nationwide Permits. The use of more than one NWP for a single
- conditions, have the transferee sign and date below." nationwide permit and the associated liabilities associated with compliance with its terms and will continue to be binding on the new owner(s) of the property. To validate the transfer of this transferred, the terms and conditions of this nationwide permit, including any special conditions, work authorized by this nationwide permit are still in existence at the time the property is letter, and the letter must contain the following statement and signature: "When the structures or to validate the transfer. A copy of the nationwide permit verification must be attached to the permit verification to the new owner by submitting a letter to the appropriate Corps district office associated with a nationwide permit verification, the permittee may transfer the nationwide 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property

(Transferee)	

- standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance from the Corps must provide a signed certification documenting completion of the authorized Compliance Certification. Each permittee who receives an NWP verification letter
- authorization, including any general, regional, or activity-specific conditions; (a) A statement that the authorized work was done in accordance with the NWP
- the appropriate number and resource type of credits; and include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must (b) A statement that the implementation of any required compensatory mitigation was
- of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later. The completed certification document must be submitted to the district engineer within 30 days (c) The signature of the permittee certifying the completion of the work and mitigation
- or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter 31. Activities Affecting Structures or Works Built by the United States. If an NWP

- a written NWP verification. section 408 permission to altar, occupy, or use the USACE project, and the district engineer issues Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires
- prospective permittee does not provide all of the requested information, then the district engineer additional information necessary to make the PCN complete only once. However, if the information necessary to make the PCN complete. As a general rule, district engineers will request complete within 30 calendar days of the date of receipt and, if the PCN is determined to be The prospective permittee shall not begin the activity until either:

 (1) He or she is notified in writing by the district engineer that the activity may proceed will notify the prospective permittee that the PCN is still incomplete and the PCN review process incomplete, notify the prospective permittee within that 30 day period to request the additional will not commence until all of the requested information has been received by the district engineer notification (PCN) as early as possible. The district engineer must determine if the PCN is NWP, the prospective permittee must notify the district engineer by submitting a pre-construction 32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the
- under the NWP with any special conditions imposed by the district or division engineer; or
- accordance with the procedure set forth in 33 CFR 330.5(d)(2) the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see notification from the Corps that there is "no effect" on listed species or "no potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written PCN and the prospective permittee has not received written notice from the district or division the permittee cannot begin the activity until an individual permit has been obtained. Subsequently the district engineer issues the waiver. If the district or division engineer notifies the permittee in the permittee has received written approval from the Corps. If the proposed activity requires a the Corps pursuant to general condition 20 that the activity might have the potential to cause engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify (2) 45 calendar days have passed from the district engineer's receipt of the complete
- the following information: (b) Contents of Pre-Construction Notification: The PCN must be in writing and include
- (1) Name, address and telephone numbers of the prospective permittee
- (2) Location of the proposed activity;(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to
- authorize the proposed activity;

aquatic sites, and other waters. Sketches should be provided when necessary to show that the the adverse environmental effects of the activity will be no more than minimal and to determine the used to authorize any part of the proposed project or any related activity, including other separate and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in provided results in a quicker decision. Sketches should contain sufficient detail to provide an activity complies with the terms of the NWP. (Sketches usually clarify the project and when sites, and other water for each single and complete crossing of those wetlands, other special projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic need for compensatory mitigation or other mitigation measures. For single and complete linear mitigation measures should be sufficiently detailed to allow the district engineer to determine that and distant crossings for linear projects that require Department of the Army authorization but do measures intended to reduce the adverse environmental effects caused by the proposed activity acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation adverse environmental effects the activity would cause, including the anticipated amount of loss of not require pre-construction notification. The description of the proposed activity and any proposed (4) A description of the proposed activity; the activity's purpose; direct and indirect ALLEN - TODD - WARREN COUNTIES 121GR19D066-STP

detailed engineering plans); illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be (5) The PCN must include a delineation of wetlands, other special aquatic sites, and

- especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; and other waters on the project site, but there may be a delay if the Corps does the delineation the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams,
- and a PCN is required, the prospective permittee must submit a statement describing how the alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. no more than minimal and why compensatory mitigation should not be required. As an mitigation requirement will be satisfied, or explaining why the adverse environmental effects are (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands
- pre-construction notification, Federal permittees must provide documentation demonstrating critical habitat that may be affected by the proposed activity. For any NWP activity that requires compliance with the Endangered Species Act; threatened species that might be affected by the proposed activity or utilize the designated habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or be affected or is in the vicinity of the project, or if the project is located in designated critical (7) For non-federal permittees, if any listed species or designated critical habitat might
- effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic demonstrating compliance with Section 106 of the National Historic Preservation Act indicating the location of the historic property. Federal permittees must provide documentation property might have the potential to be affected by the proposed activity or include a vicinity map (8) For non-federal permittees, if the NWP activity might have the potential to cause
- Wild and Scenic River or the "study river" (see general condition 16); and inclusion in the system while the river is in an official study status, the PCN must identify the River System, or in a river officially designated by Congress as a "study river" for possible (9) For an activity that will occur in a component of the National Wild and Scenic
- a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project. Engineers federally authorized civil works project, the pre-construction notification must include because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408
- established tools and procedures for electronic submittals. may provide electronic files of PCNs and supporting materials if the district engineer has this general condition. A letter containing the required information may also be used. Applicants NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of ENG 4345) may be used, but the completed application form must clearly indicate that it is an (c) Form of PCN Notification: The standard individual permit application form (Form
- conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal. Federal and state agencies conceming the proposed activity's compliance with the terms and (d) Agency Coordination: (1) The district engineer will consider any comments from
- water line or ordinary high water mark. excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United (2) Agency coordination is required for: (i) all NWP activities that require
- copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a (3) When agency coordination is required, the district engineer will immediately

in accordance with the procedures at 33 CFR 330.5. record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proposed activity are no more than minimal. The district engineer will provide no response to the time frame concerning the proposed activity's compliance with the terms and conditions of the adverse environmental effects will be more than minimal. If so contacted by an agency, the district substantive, sites pecific comments. The comments must explain why the agency believes the received to decide whether the NWP 37 authorization should be modified, suspended, or revoked proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of resource agency, except as provided below. The district engineer will indicate in the administrative NWPs, including the need for mitigation to ensure the net adverse environmental effects of the engineer will wait an additional 15 calendar days before making a decision on the pre-construction the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide 37, these agencies will have 10 calendar days from the date the material is transmitted to notify resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP property or economic hardship will occur. The district engineer will consider any comments notification. The district engineer will fully consider agency comments received within the specified

- Stevens Fishery Conservation and Management Act Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnusonengineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish (4) In cases of where the prospective permittee is not a Federal agency, the district
- copies of PCN notifications to expedite agency coordination. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple
- and conditions of an NWP NWPs do not obviate the need to obtain other federal, state, or local permits

District Engineers have authority to determine if an activity complies with the terms

- approvals, or authorizations required by law.
- NWPs do not grant any property rights or exclusive privilege
- (see general condition 31). NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project

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).



January 23, 2019

Mr. Rodney Little, PE Bridging Kentucky Area Team Leader QK4 1046 E. Chestnut Street Louisville, KY 40204

RE: Geotechnical Exploration

Todd County, Kentucky Rattlesnake Road over Buck Fork Creek

Bridge No. 110C00059N

Dear Mr. Little:

1 INTRODUCTION

The abbreviated geotechnical engineering report for this structure has been completed. The project is a part of the Bridging Kentucky Program. The project is to replace the existing bridge at Rattlesnake Road over the Buck Fork Creek in Todd County, Kentucky.

2 GEOLOGY

The structure is in the Honey Grove Geologic Quadrangle (GQ-376). Available geologic mapping indicates the soils at this site consist of Quaternary-aged alluvial deposits overlying the Big Clifty Sandstone Member. The alluvial deposits consist primarily of clay, silt, sand and gravel. The Big Clifty Sandstone Member is comprised of sandstone and minor shale. The sandstone is described as light tan to brown, very fine to medium grained and thin to massively bedded. The shale is described as greenish gray to gray and clayey.

Mapping indicates various faults traveling primarily latitudinally near the site. The faults located beneath the alluvial deposits are concealed. If a fault is discovered during construction, please call this office for guidance.

3 DRILLING AND SAMPLING

One soil test boring and one sounding was completed at this location. Soil samples were obtained throughout the boring. Bedrock was encountered in both borings at depths of 13.8 and 15.2 feet below the ground surface.

The boring "as drilled" latitudes and longitudes in decimal degrees were surveyed as a part of the Bridging Kentucky Program and are available in Table 1. Table 1 provides a summary of the locations, elevations, and depths of the borings drilled for the proposed bridge.

January 23, 2019 Page **2** of **5**

				Top of					
			Surface	Rock/Refusal		Rock/Refusal Begin Core		Botto	m of Hole
Hol	_		Elevation	Depth Elevation		Depth	Elevation	Depth	Elevation
No		Longitude	(ft.) MSL	(ft.)	(ft.) MSL	(ft.)	(ft.) MSL	(ft.)	(ft.) MSL
B-1		-87.263691	469.0	13.8	455.2	13.8	455.2	24.0	445.0
-								_	
S-1	36.955909	-87.26376	469.0	15.2	453.8	N/A	N/A	N/A	N/A

4 LABORATORY TESTING

Due to the poor recovery of the samples obtained, laboratory classification tests were not performed. Visual classification results indicate that the soils classify as CL in accordance with the Unified Soil Classification System (USCS).

5 ENGINEERING ANALYSIS AND FOUNDATION RECOMMENDATIONS

5.1 OPTION 1 COLUMN FOOTINGS ON ROCK

5.1.1 <u>Abutments</u>—Size the footings at service limit state using a presumptive bearing resistance of **20 ksf** on competent unweathered bedrock.

5.2 OPTION 2 PRE-DRILLED PILES

5.2.1 Option 2 End Bents and Piers— Use end bearing steel H-Piles with reinforced pile points driven to bedrock. The approximate point of pile elevation is near 452.0 feet at the eastern and western end bents. We recommend a resistance factor (φc) of 0.5 to determine the maximum nominal resistance of the piles.

A minimum pile length of 10 feet is required below the pile bent/pile cap. Backfill the holes with sand or pea gravel after the pile is placed in the hole. A temporary casing may be required to prevent collapse of the hole. If used, remove the casing as the hole is being backfilled. Drive piles to refusal after backfill operations are complete.

5.2.2 Wave Equation Analysis— Drivability analyses were performed for the piles at this location assuming 12X53 HP-Piles. These analyses indicate that a single acting diesel hammer with rated energies of 10 to 20 foot-kips is recommended to adequately drive the piles without encountering excessive blow counts or overstressing the piles. The use of hammers other than single acting diesel may require different energy ranges.

Drivability analyses were performed assuming continuous driving.

5.3 BOTH OPTIONS

5.3.1 <u>Settlement at End Bents</u>— A settlement analysis was not required due to the relatively small amount of new fill that will be added.

January 23, 2019 Page **3** of **5**

- **5.3.2** <u>Embankment Stability</u> Due to the minimal amount of new fill, no embankment stability analyses were deemed necessary.
- **5.3.3** Concealed Faults Mapping indicates various faults traveling primarily latitudinally near the site. The faults located beneath the alluvial deposits are concealed. If a fault is discovered during construction, please call this office for guidance.

6 STRUCTURE PLAN NOTES

Add the following plan notes as necessary at the appropriate locations in the plans.

6.1 OPTION 1 COLUMN FOOTINGS ON ROCK

- **6.1.1** Based on a review of the existing subsurface conditions and anticipated structural loads, a rock bearing foundation system consisting of spread footings may be used for all bridge substructure elements. A presumptive bearing resistance of **20 ksf** on unweathered bedrock is recommended.
- **6.1.2** Mapping indicates various faults traveling primarily latitudinally near the site. The faults located beneath the alluvial deposits are concealed. If a fault is discovered during construction, please call this office for guidance.
- **6.1.3** Foundation excavations should be properly braced/shored to provide adequate safety to people working in or around the excavations. Bracing should be performed in accordance with applicable federal, state and local guidelines.
- **6.1.4** Temporary shoring, sheeting, cofferdams, and/or dewatering methods may be required to facilitate foundation construction. It should be anticipated that groundwater will be encountered at foundation locations within the floodplain.
- **6.1.5** Rock-bearing spread footings are being provided for substructure elements. Foundation excavations for footings at the structure locations should be level and free of loose, water softened material, etc. Additional rock excavation to achieve suitable bearing conditions may be required depending upon topography and bedrock weathering conditions.
- **6.1.6** Solid rock excavation will be required for installation of the substructure's spread footings. The contractor shall take care during blasting and other excavation methods to avoid over-breakage and damage to the bedrock beneath the footings
- **6.1.7** Bearing elevation of footings may be adjusted at the discretion of the Engineer if competent, unweathered bedrock is found at a higher elevation than specified for the respective substructure element. The top of new spread footings should be fully embedded into unweathered bedrock. At a minimum, one-foot embedment into competent bedrock shall be maintained.
- **6.1.8** Prior to placement of any concrete or reinforcing steel in a foundation excavation, the excavation bottom should be clean and all soft, wet, or loose materials should be

January 23, 2019 Page **4** of **5**

- removed. In no case should concrete be placed upon compressible or water-softened materials.
- 6.1.9 Concrete placement for footings should be placed as soon as practical after completion of the footing excavation. If the bedrock becomes softened at bearing elevation, the softened material should be undercut to unweathered material prior to placement of reinforcing steel and concrete. Seasonal groundwater fluctuations may cause groundwater infiltration into the footing excavation, and a dewatering method may be necessary.
- **6.1.10** Any clay seams or suspect weak materials at or near the bearing elevation will need to be undercut and replaced with mass concrete.
- **6.1.11** Footing excavations in bedrock shall be cut neatly so that no forming or backfilling is necessary in the construction of the portions of the footings located in rock. Concrete shall be placed directly against the cut rock faces. Mass concrete should be placed in the excavation from the top of the footing to the bedrock surface where the footing does not extend to the bedrock surface.

6.2 OPTION 2 PRE-DRILLED PILES

- **6.2.1** A plan note should be included by the designer to address pre-drilling for piles at specified locations to the estimated bearing elevation. Where pre-drilling is necessary for pile installation, holes shall be drilled into solid rock. A minimum pile length of 10 feet is required below the pile bent/pile cap. Backfill the holes with sand or pea gravel after the pile is placed in the hole. A temporary casing may be required to prevent collapse of the hole. If used, remove the casing as the hole is being backfilled. Drive piles to refusal after backfill operations are complete. Include the cost of all materials, labor, and equipment needed to pre-drill, backfill the holes, and drive the piles to refusal in the price per linear foot for "Pre-drilling for Piles".
- **6.2.2** Mapping indicates various faults traveling primarily latitudinally near the site. The faults located beneath the alluvial deposits are concealed. If the fault is discovered during construction, please call this office for guidance.
- **6.2.3** Foundation excavations should be properly braced/shored to provide adequate safety to people working in or around the excavations. Bracing should be performed in accordance with applicable federal, state and local guidelines.
- 6.2.4 Temporary shoring, sheeting, cofferdams, and/or dewatering methods may be required to facilitate foundation construction. It should be anticipated that groundwater will be encountered at foundation locations within the flood plain.
- 6.2.5 A diesel pile driving hammer with a rated energy between 10 foot-kips and 20 foot-kips will be required to drive 12x53 steel H-piles to practical refusal without encountering excessive blow counts or damaging the piles. The Contractor shall submit the proposed pile driving system to the Engineer for approval prior to the installation of the first pile.

January 23, 2019 Page **5** of **5**

Approval of the pile driving system by the Engineer will be subject to satisfactory field performance of the pile driving procedures.

- 6.2.6 For this project, minimum blow requirements may be reached after total penetration becomes ½ inch or less for ten consecutive blows, practical refusal is obtained after the pile is struck an additional ten blows with total penetration of ½ inch or less. Advance the production piling to the driving resistances specified above and to depths determined by test pile(s). Immediately cease driving operations if the pile visibly yields or becomes damaged during driving.
- 6.2.7 If hard driving is encountered because of dense strata or an obstruction, such as a boulder before the pile is advanced to the depth anticipated, the Engineer will determine if more blows than the average driving resistance specified for practical refusal is required to further advance the pile. Drive additional production and test piles if directed by the Engineer.
- **6.2.8** The installation of the pile foundations should conform to current AASHTO LRFD Bridge Design Specifications, and Section 604 of the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction.
- 6.2.9 The Kentucky Transportation Cabinet recommends that protective pile points be used on end bearing piles to allow for embedment into the top of bedrock. Use of reinforced pile points capable of penetrating boulders and hard layers which may be encountered is recommended. Installation of pile points should be in accordance with Section 604 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

The designer should feel free to contact AEI at 270-651-7220 for further recommendations or if any questions arise pertaining to this project.

Sincerely,

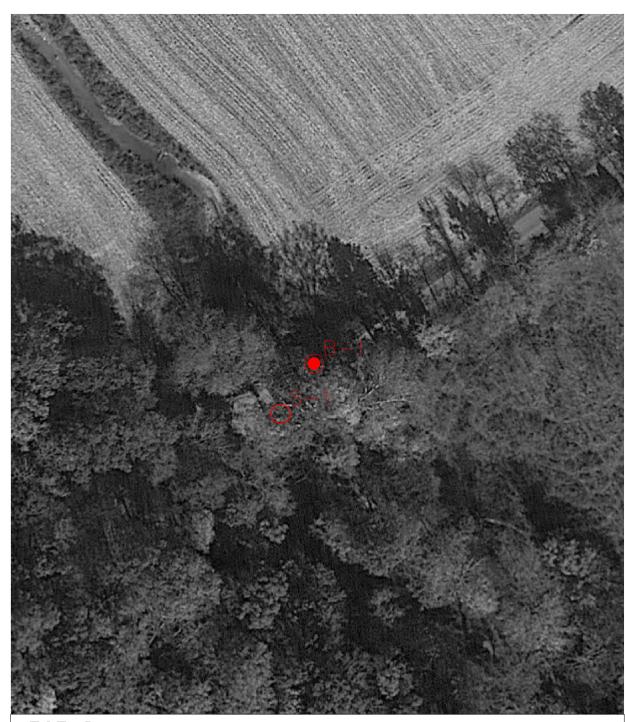
AMERICAN ENGINEERS, INC.

Jacob Cowan, EIT Geotechnical Engineer Dennis Mitchell, PE, PMP

Director of Federal Geotechnical Services

Attachments:

- Boring Layout
- Typed Boring Logs



EGEND

SOIL BORING WITH STANDARD PENETRATION TESTS AND ROCK CORE

O ROCKLINE SOUNDING

GRAPHIC SCALE:								
N	TS		BRIDGING KENTUCKY					
DATE: 01/17/2019			BRIDGE: 110C00059N	PAGE NO.				
DRAWN BY: JC	CKD. BY:	JD	SHEET:	-				
AEI JOB NO.:	218-1	58	RATTLESNAKE ROAD OVER BUCK FORK	FIG. NO.				
FILE NAME:			CREEK	-				

ALLEN - TODD - WARREN COUNTIES

121GR19D066-STP
Drilling Firm: American Engineers (Glasgow)
For: Division of Structural Design
Geotechnical Branch

DRILLER'S SUBSURFACE LOG

Contract ID: 195066 Page 206 of 266

Printed: 1/18/19

Page 1 of 1

Project ID: <u>110C00059N</u> Item Number: <u>3-10009</u> Hole Number <u>B-1</u> Surface Elevation <u>469.0'</u> Total Depth <u>24.0'</u> Location <u>+ 'Lt.</u>							Project Type: <u>Structure</u> Project Manager: _				
			Immediate Water Depth 6.0 (01/08/19) Static Water Depth NA Driller Jim Powers			Start Date <u>01/08/201</u> End Date <u>01/08/201</u> Latitude(83) <u>36.9560</u> Longitude(83) <u>-87.20</u>		Rig_ 56010		Hole Type <u>core and sample</u> Rig_Number <u></u>	
Litholo	ogy		0.101.001.		Sample No.	Depth (ft)	Rec. SPT (ft) Blows		Sample Type		
Elevation	Depth	Description	1	Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Rec (%)	SDI (JS)	Remarks	5
468.3	0.7		Crushed aggregate.	_							-
- 5 - -			Brown, wet, lean clay (soft).		1	4.0-5.5	0.6	2-1-2	SPT	-	<u>5</u>
- 460.0 10 -	9.0	Brown to red	, wet, gravelly lean clay with co	parse sand	2	9.0-10.5	0.8	5-5-5	5 SPT		<u>10</u>
455.2	13.8			(Begin Core)	0/0	1.2	1.2	100			15
15 - - - 20			Dark gray shale.		52 / 52	5.0	5.0	100		20.0	1 <u>5</u>
- - 445.0 <u>25</u>	24.0				28 / 28	4.0	4.0	100		24.0	25
- - - - - 3 <u>0</u>			(Bottom of Hole 24.0')								30
- - <u>35</u> -											3 <u>5</u>
- 4 <u>0</u> - - -											<u>40</u>
- 4 <u>5</u> - -											<u>45</u>

ALLEN - TODD - WARREN COUNTIES

121GR19D066-STP
Drilling Firm: American Engineers (Glasgow)
For: Division of Structural Design
Geotechnical Branch

DRILLER'S SUBSURFACE LOG

Contract ID: 195066 Page 207 of 266

Printed: 1/18/19

Page 1 of 1

Project ID: <u>110C00059N</u> Item Number: <u>3-10009</u>							Project Type: <u>Structure</u> Project Manager: _				
Hole Number <u>S-1</u>			Immediate Water Depth	6.0 (01/08/19)	Start Date Hole Typesounding				<u>ding</u>		
Surface Ele	vation <u>46</u>	9.0'	Static Water Depth		End D	ate <u>01/08/20</u>	<u>19</u>		Rig_Nu	mber	
Total Depth	<u>15.2'</u>		Driller <u>Jim Powers</u>		Latitud	le(83) <u>36.95</u> 5	5909				
Location _+	· 'Lt.				Longit	ude(83) <u>-87.2</u>	<u> 263760</u>				
Litholo	ogy			Overburden	Sample No.	Depth (ft)	Rec. (ft)	SP Blo	PT ws	Sample Type	
Elevation	Depth	Description	า	Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Re (%	ec (b)	SDI (JS)	Remarks
-											-
- - <u>5</u> _											<u>5</u>
- - -			Overburden.								
<u>10</u>											10 -
- - -				(D. 6)							
<u>15</u> 453.8 -	15.2			(Refusal)							<u>15</u>
- - <u>20</u> -			(Bottom of Hole 15.2') (Refusal @ 15.2)								<u>-</u> <u>20</u>
- - <u>-</u> <u>25</u>											- - 2 <u>5</u>
<u>-</u> -											<u></u>
<u>30</u>											<u>30</u> -
- - <u>35</u> -											3 <u>5</u>
- - - 40											- - 40
-											1
<u>45</u> - -											45 - -
- - 50											- 50



Bridge Number: 114B00071N Date: 9/28/2018

Location: Hammet Hill Road over Salt Lick Creek Weather: Partly Cloudy, 78° F

Engineer: D. Mitchell / Clint Ervin Time: 2:15 – 4:15 pm CDT pm CDT

Geotechnical PSA						
Ground line Profile at						
Bridge (Upstream and	Yes					
Downstream)						
Rock in Stream bed,	No					
crossing or Railroad	INO					
Rock Out-Cropping	No					
Rock Probe Depth (Feet)	2.2' to 4.4'					
Sink Holes	No					
Traffic Control	No					
Survey Soundings	Yes					
Additional Geotechnical Investigation Required?	No					

Geotechnical Notes:

Sounding Data

Sounding No.	Refusal Depth (ft.)
1	2.5
2	3.9
3	NR @ 5.0
4	4.4
5	2.9
6	3.3
7	2.5
8	3.5

The ground surface in the vicinity of the bridge is covered with shot rock and otherwise appears to be comprised of alluvium. Soundings were performed both up and downstream so that they were located outside of the limits of the visible shot rock. Soundings were performed in the stream and on the streambank. The bridge appeared to be founded on piers, bearing on a footing founded on bedrock. The sheet piles located between the approaches and the piers were rusting. Rebar was visible in the bridge abutment, northern corner of the eastern abutment.



















Column Foundation







Rusting Sheeting













MATERIAL SUMMARY

CONTRACT ID: 195066 121GR19E	0066-STP	BR00205851964
ONTRACT ID: 195066 121GR19L	0066-STP	BR00205851964

KY 585 ADDRESS DEFICIENCIES OF KY 585 BRIDGE OVER MIDDLE FORK DRAKES CREEK (002B00021N), FROM MP 8.326 TO MP 8.354 BRIDGE SUPERSTRUCTURE REHAB, A DISTANCE OF .03 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0120	03304	BRIDGE OVERLAY APPROACH PAVEMENT	133.00	SQYD
0125	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH
0130	02223	GRANULAR EMBANKMENT	28.00	CUYD
0135	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0140	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0145	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0150	08003	FOUNDATION PREPARATION	1.00	LS
0155	21415ND	EROSION CONTROL	1.00	LS
0160	21741NC	MAINTAIN & CONTROL TRAFFIC	1.00	EACH
0165	02731	REMOVE STRUCTURE	1.00	LS
0170	03299	ARMORED EDGE FOR CONCRETE	52.00	LF
0175	08104	CONCRETE-CLASS AA	161.00	CUYD
0180	08140	MECHANICAL REINF COUPLER #5 EPOXY COATED	478.00	EACH
0185	08151	STEEL REINFORCEMENT-EPOXY COATED	27,436.00	LB
0190	08633	PRECAST PC I BEAM TYPE 3	626.00	LF
0195	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	318.00	LF
0200	22146EN	CONCRETE PATCHING REPAIR	108.00	SQFT
0205	23744EC	EPOXY INJECTION CRACK REPAIR	60.00	LF
0210	24982EC	CONCRETE COATING - Approx. 5800 SF	1.00	LS
0215	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066	121GR19D066-STP	BR00234991963
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KY 3499 ADDRESS DEFICIENCIES OF KY-3499 BRIDGE OVER BAYS FORK (002B00004N), FROM MP 1.412 TO MP 1.422 BRIDGE SUPERSTRUCTURE REHAB, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	03304	BRIDGE OVERLAY APPROACH PAVEMENT	34.00	SQYD
0010	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0015	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0020	08003	FOUNDATION PREPARATION	1.00	LS
0025	21415ND	EROSION CONTROL	1.00	LS
0030	21741NC	MAINTAIN & CONTROL TRAFFIC	1.00	EACH
0035	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0040	02223	GRANULAR EMBANKMENT	28.00	CUYD
0045	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH
0050	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0055	08104	CONCRETE-CLASS AA	40.50	CUYD
0060	08151	STEEL REINFORCEMENT-EPOXY COATED	6,183.00	LB
0065	08100	CONCRETE-CLASS A	3.70	CUYD
0070	08670	PRECAST PC BOX BEAM SB27	156.00	LF
0075	03299	ARMORED EDGE FOR CONCRETE	44.00	LF
0800	24982EC	CONCRETE COATING - Approx. 5800 SF	1.00	LS
0085	02731	REMOVE STRUCTURE	1.00	LS
0090	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	106.00	LF
0095	02231	STRUCTURE GRANULAR BACKFILL	10.00	CUYD
0100	08019	CYCLOPEAN STONE RIP RAP	48.00	TON
0105	23744EC	EPOXY INJECTION CRACK REPAIR	30.00	LF
0110	22146EN	CONCRETE PATCHING REPAIR	20.00	SQFT
0115	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066	121GR19D066-STP	BR11012331966
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ROGER Q MILL ROAD (1233) ADDRESS DEFICIENCIES OF ROGER Q MILL ROAD BRIDGE OVER RED RIVER W FORK BRANCH (110C00061N), FROM MP .028 TO MP .032 BRIDGE REPLACEMENT, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0355	03304	BRIDGE OVERLAY APPROACH PAVEMENT	167.00	SQYD
0360	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH
0365	02223	GRANULAR EMBANKMENT	28.00	CUYD
0370	02351	GUARDRAIL-STEEL W BEAM-S FACE	125.00	LF
0375	02360	GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH
0380	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH
0385	02399	EXTRA LENGTH GUARDRAIL POST	6.00	EACH
0390	02545	CLEARING AND GRUBBING - Less than 1 acre	1.00	LS
0395	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0400	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0405	02726	STAKING	1.00	LS
0410	02731	REMOVE STRUCTURE	1.00	LS
0415	21415ND	EROSION CONTROL	1.00	LS
0420	03299	ARMORED EDGE FOR CONCRETE	46.00	LF
0425	08002	STRUCTURE EXCAV-SOLID ROCK	46.00	CUYD
0430	08003	FOUNDATION PREPARATION	1.00	LS
0435	08019	CYCLOPEAN STONE RIP RAP	75.00	TON
0440	08100	CONCRETE-CLASS A	91.00	CUYD
0445	08104	CONCRETE-CLASS AA	32.00	CUYD
0450	08151	STEEL REINFORCEMENT-EPOXY COATED	18,500.00	LB
0455	24896ED	RAIL SYSTEM TYPE T631	52.00	LF
0460	24982EC	CONCRETE COATING - Approx. 590 SF	1.00	LS
0465	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066	121GR19D066-STP	BR11013331965
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RATTLESNAKE ROAD (1333) ADDRESS DEFICIENCIES OF RATTLESNAKE ROAD BRIDGE OVER BUCK FORK (110C00059N), FROM MP 1.471 TO MP 1.475 BRIDGE REPLACEMENT, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0220	03304	BRIDGE OVERLAY APPROACH PAVEMENT	135.00	SQYD
0225	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	14.00	EACH
0230	02223	GRANULAR EMBANKMENT	30.00	CUYD
0235	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0240	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0245	02371	GUARDRAIL END TREATMENT TYPE 7	3.00	EACH
0250	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0255	02545	CLEARING AND GRUBBING - Less than 1 acre	1.00	LS
0260	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0265	02651	DIVERSIONS (BY-PASS DETOURS)	1.00	LS
0270	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0275	02726	STAKING	1.00	LS
0280	02731	REMOVE STRUCTURE	1.00	LS
0285	21415ND	EROSION CONTROL	1.00	LS
0290	03299	ARMORED EDGE FOR CONCRETE	32.00	LF
0295	08003	FOUNDATION PREPARATION	1.00	LS
0300	08019	CYCLOPEAN STONE RIP RAP	65.00	TON
0305	08033	TEST PILES	36.00	LF
0310	08046	PILES-STEEL HP12X53	52.00	LF
0315	08094	PILE POINTS-12 IN	6.00	EACH
0320	08100	CONCRETE-CLASS A	15.50	CUYD
0325	08104	CONCRETE-CLASS AA	12.60	CUYD
0330	08151	STEEL REINFORCEMENT-EPOXY COATED	3,250.00	LB
0335	08661	PRECAST PC BOX BEAM CB12-48	134.00	LF
0340	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	68.00	LF
0345	24982EC	CONCRETE COATING - Approximately 622 SF	1.00	LS
0350	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 195066	121GR19D066-STP	BR11426321967
JONTRACT ID. 193000	121GK19D000-31F	DK 1 142032 1301

KY 2632 ADDRESS DEFICIENCIES OF HAMMET HILL ROAD BRIDGE OVER SALT LICK CREEK (114B00071N), FROM MP 4.96 TO MP 4.966 BRIDGE REPLACEMENT, A DISTANCE OF .01 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0470	03304	BRIDGE OVERLAY APPROACH PAVEMENT	170.00	SQYD
0475	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	12.00	EACH
0480	02223	GRANULAR EMBANKMENT	28.00	CUYD
0485	02351	GUARDRAIL-STEEL W BEAM-S FACE	100.00	LF
0490	02381	REMOVE GUARDRAIL	262.00	LF
0495	02399	EXTRA LENGTH GUARDRAIL POST	32.00	EACH
0500	02545	CLEARING AND GRUBBING - Less than 1 acre	1.00	LS
0505	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0510	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0515	02726	STAKING	1.00	LS
0520	02731	REMOVE STRUCTURE	1.00	LS
0525	21415ND	EROSION CONTROL	1.00	LS
0530	02355	GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF
0535	03299	ARMORED EDGE FOR CONCRETE	49.70	LF
0540	08002	STRUCTURE EXCAV-SOLID ROCK	166.70	CUYD
0545	08003	FOUNDATION PREPARATION	1.00	LS
0550	08019	CYCLOPEAN STONE RIP RAP	130.00	TON
0555	08100	CONCRETE-CLASS A	175.60	CUYD
0560	08104	CONCRETE-CLASS AA	12.10	CUYD
0565	08150	STEEL REINFORCEMENT	18,466.00	LB
0570	08151	STEEL REINFORCEMENT-EPOXY COATED	1,547.00	LB
0575	08661	PRECAST PC BOX BEAM CB12-48	183.00	LF
0580	08801	GUARDRAIL-STEEL W BEAM-S FACE BR	61.00	LF
0585	24982EC	CONCRETE COATING - Approximately 883 SF	1.00	LS
0590	02569	DEMOBILIZATION	1.00	LS

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

1**I**

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:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- 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.

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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:

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

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

- 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

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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:

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

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
- 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
- Compliance with Governmentwide Suspension and Debarment Requirements
- 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 designbuild 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 nonminority 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 federallyassisted 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 contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section
- **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:
- 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

T h i s p r o v i s i o n i s 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.

* * * * *

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:
- 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 administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- 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.

Revised: January 27, 2017

General Decision Number: KY190040 02/15/2019 KY40

Superseded General Decision Number: KY20180102

State: Kentucky

Construction Type: Highway

Counties: Allen, Ballard, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren and Webster 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 \$10.60 for calendar year 2019 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 \$10.60 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 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). 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.

Modification	Number	Publication	Date
0		01/04/2019	
1		02/01/2019	
2		02/15/2019	

BRIN0004-002 06/01/2017

BALLARD, BUTLER, CALDWELL, CARLISLE, CRITTENDEN, DAVIESS, EDMONSON, FULTON, GRAVES, HANCOCK, HENDERSON, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, MCLEAN, MUHLENBERG, OHIO, UNION, and WEBSTER COUNTIES

	Rates	Fringes
BRICKLAYER Ballard, Caldwell, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon,		
Marshall, and McCracken Counties Butler, Edmonson, Hopkins,	\$ 30.50	15.16
Muhlenberg, and Ohio Counties Daviess, Hancock, Henderson, McLean, Union,	\$ 26.80	12.38
and Webster Counties	\$ 30.00	15.16
BRTN0004-005 06/01/2017		
ALLEN, CALLOWAY, CHRISTIAN, LOG. WARREN COUNTIES	AN, SIMPSON,	TODD, TRIGG, and
	Rates	Fringes
BRICKLAYER	\$ 26.80	12.38
CARP0357-002 04/01/2016		
	Rates	Fringes
CARPENTER		17.03
Diver PILEDRIVERMAN		17.03 17.03
ELEC0369-006 05/30/2018		
BUTLER, EDMONSON, LOGAN, TODD &	WARREN COUN	TIES:
	Rates	Fringes
ELECTRICIAN	\$ 31.66	17.01
ELEC0429-001 06/01/2018		
ALLEN & SIMPSON COUNTIES:		
	Rates	Fringes
ELECTRICIAN	\$ 26.77	12.94
ELEC0816-002 05/28/2018		
BALLARD, CALDWELL, CALLOWAY, CA. FULTON (Except a 5 mile radius		

HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

Rates Fringes

ELECTRICIAN.....\$ 32.87 25.5%+7.05

Cable spicers receive \$.25 per hour additional.

ELEC1701-003 06/01/2018

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:

	Rates	Fringes
ELECTRICIAN	\$ 31.04	15.74

Cable spicers receive \$.25 per hour additional.

ELEC1925-002 01/01/2019

FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):

	Rates	Fringes
CABLE SPLICER	·	12.16 13.74

ENGI0181-017 07/01/2017

1	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 Conrete 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 equals or exceeds 150 ft. - \$1.00 above 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.

IRON0070-005 06/01/2018

BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);
EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden)

Rates Fringes

IRONWORKER

Structural; Ornamental; Reinforcing; Precast

Concrete Erectors......\$ 28.79 22.50

* IRON0103-004 08/01/2018

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey,

Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);

CALDWELL COUNTY (Northeastern third, including the Township of Creswell);

CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);

CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);

MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir)

Rates Fringes

Ironworkers:.....\$ 28.66 22.435

IRON0492-003 05/01/2018

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES
BUTLER COUNTY (Southern third, including the Townships of
Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar
Grove & Woodbury);
CHRISTIAN COUNTY (Eastern two-thirds, including the Townships
of Bennettstown, Casky, Herndon, Hopkinsville, Howell,
Masonville, Pembroke & Thompsonville);
EDMONSON COUNTY (Southern fourth, including the Townships of
Chalybeate & Rocky Hill);
MUHLENBERG COUNTY (Southern eighth, including the Townships of

Rates Fringes

Ironworkers:.....\$ 26.11 14.02

IRON0782-006 05/01/2018

Dunnior, Penrod & Rosewood)

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);

CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);

CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told)

Rates Fringes

Ironworkers:

Projects with a total

contract cost of		
\$20,000,000.00 or above\$	28.79	24.17
All Other Work\$	27.20	22.75

LABO0189-005 07/01/2018

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES

	ŀ	Rates	F'ringes
Laborers:			
GROUP	1\$	23.07	14.21
GROUP	2\$	23.32	14.21
GROUP	3\$	23.37	14.21
GROUP	4\$	23.97	14.21

LABORER 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; Bushammer; 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; Blaster; 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

LABO0189-006 07/01/2018

ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	23.07	14.21
GROUP	2\$	23.32	14.21
GROUP	3\$	23.37	14.21
GROUP	4\$	23.97	14.21

LABORER 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; Bushammer; 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; Blaster; 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

LABO0561-001 07/01/2018

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

Rates Fringes

Laborers:

GROUI	? 1\$	22.71	15.00
GROUI	2 2\$	22.96	15.00
GROUI	2 3\$	23.01	15.00
GROUI	2 4\$	23.61	15.00

LABORER 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; Bushammer; 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; Blaster; 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

PAIN0032-002 09/01/2018

BALLARD COUNTY

F	Rates	Fringes
Painters:		
Bridges\$	33.56	16.13
All Other Work\$	31.86	16.13

Spray, Blast, Steam, High & Hazardous (Including Lead Abatement) and All Epoxy - \$1.00 Premium

PAIN0118-003 06/01/2014

EDMONSON COUNTY:

	Rates	Fringes
Painters:		
Brush & Roller	\$ 18.50	11.97
Spray, Sandblast, Power		
Tools, Waterblast & Steam		
Cleaning	\$ 19.50	11.97

PAIN0156-006 04/01/2015

DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES

	I	Rates	Fringes
Painters:			
BRIDGES			
GROUP	1\$	27.60	12.85
GROUP	2\$	27.85	12.85
GROUP	3\$	28.60	12.85
GROUP	4\$	29.60	12.85
ALL OTH	ER WORK:		
GROUP	1\$	26.45	12.85
GROUP	2\$	26.70	12.85
GROUP	3\$	27.45	12.85
GROUP	4\$	28.45	12.85

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast; Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

PAIN0500-002 06/01/2018

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

	Rates	Fringes
Painters:		
Bridges	\$ 27.75	13.60
All Other Work	\$ 21.50	13.60

Waterblasting units with 3500 PSI and above - \$.50 premium Spraypainting and all abrasive blasting - \$1.00 premium Work 40 ft. and above ground level - \$1.00 premium

PLUM0184-002 07/01/2018

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN and TRIGG COUNTIES

	Rates	Fringes	
Plumber; Steamfitter	\$ 35.06	18.18	_
PLUM0502-004 08/01/2018			

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN

	Rates	Fringes	
Plumber; Steamfitter	\$ 34.62	20.78	
PLUM0633-002 07/01/2017			

110110033 002 07/01/2017

DAVIESS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:

	Rates	Fringes
PLUMBER/PIPEFITTER	.\$ 31.47	16.80
TEAM0089-003 04/01/2018		

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES

	Rates	Fringes
Truck drivers: Zone 1:		
Group 1	\$ 21.00	20.91 20.91 20.91
Group 4		20.91

GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic; Single Axle Dump; Flat Bed; All Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 3 - Mixer All Types

GROUP 4 - Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker; Euclid and

Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle

TEAM0215-003 04/01/2018

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO & WEBSTER COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1	\$ 22.45	20.91
Group 2	\$ 22.68	20.91
Group 3	\$ 22.75	20.91
Group 4	\$ 22.76	20.91

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors; Mixer All Types

GROUP 4: Euclid and other heavy earth moving equipment; Low Boy; Articulator Cat; 5 Axle Vehicle; Winch and A- Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker

TEAM0236-001 04/01/2018

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD & TRIGG COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1	\$ 20.81	20.91
Group 2	\$ 21.00	20.91
Group 3	\$ 21.00	20.91
Group 4	\$ 20.10	20.91
Group 5	\$ 21.08	20.91

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Drivers of Distributors

GROUP 4: Euclid and other heavy earth moving equipment; Low

Boy; Articulator Cat; Five Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier

GROUP 5: Mixer All Types

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing

the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour 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.

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:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
12.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Allen County.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
12.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Todd County.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
12.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Warren 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

195066

PROPOSAL BID ITEMS

Report Date 2/5/19

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Section: 0001 - BRIDGE - 002B00021N

LINE	BID CODE	ALT [DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	01987	_	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH		\$	
0020	02223	(GRANULAR EMBANKMENT	28.00	CUYD		\$	
0030	02355	(GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0040	02399	E	EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0050	02671	F	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH		\$	
0060	02731	F	REMOVE STRUCTURE	1.00	LS		\$	
0070	03299	A	ARMORED EDGE FOR CONCRETE	52.00	LF		\$	
0800	03304	E	BRIDGE OVERLAY APPROACH PAVEMENT	133.00	SQYD		\$	
0090	08003	F	FOUNDATION PREPARATION	1.00	LS		\$	
0100	08104	(CONCRETE-CLASS AA	161.00	CUYD		\$	
0110	08140		MECHANICAL REINF COUPLER #5 EPOXY COATED	478.00	EACH		\$	
0120	08151	9	STEEL REINFORCEMENT-EPOXY COATED	27,436.00	LB		\$	
0130	08633	F	PRECAST PC I BEAM TYPE 3	626.00	LF		\$	
0140	08801	(GUARDRAIL-STEEL W BEAM-S FACE BR	318.00	LF		\$	
0150	21415ND	E	EROSION CONTROL	1.00	LS		\$	
0160	21741NC	P	MAINTAIN & CONTROL TRAFFIC	1.00	EACH		\$	
0170	22146EN	(CONCRETE PATCHING REPAIR	108.00	SQFT		\$	
0180	23744EC	E	EPOXY INJECTION CRACK REPAIR	60.00	LF		\$	
0190	24982EC	1	CONCRETE COATING Approx. 5800 SF	1.00	LS		\$	

Section: 0002 - BRIDGE - 002B00004N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0200	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	24.00	EACH		\$	
0210	02223		GRANULAR EMBANKMENT	28.00	CUYD		\$	
0220	02231		STRUCTURE GRANULAR BACKFILL	10.00	CUYD		\$	
0230	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0240	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0250	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0260	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0270	02731		REMOVE STRUCTURE	1.00	LS		\$	
0280	03299		ARMORED EDGE FOR CONCRETE	44.00	LF		\$	
0290	03304		BRIDGE OVERLAY APPROACH PAVEMENT	34.00	SQYD		\$	
0300	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0310	08019		CYCLOPEAN STONE RIP RAP	48.00	TON		\$	
0320	08100		CONCRETE-CLASS A	3.70	CUYD		\$	
0330	08104		CONCRETE-CLASS AA	40.50	CUYD		\$	
0340	08151		STEEL REINFORCEMENT-EPOXY COATED	6,183.00	LB		\$	
0350	08670		PRECAST PC BOX BEAM SB27	156.00	LF		\$	
0360	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	106.00	LF		\$	
0370	21415ND		EROSION CONTROL	1.00	LS		\$	
0380	21741NC		MAINTAIN & CONTROL TRAFFIC	1.00	EACH		\$	
0390	22146EN		CONCRETE PATCHING REPAIR	20.00	SQFT		\$	

LINE BID CODE

0400 23744EC

0410 24982EC

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\$

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PROPOSAL BID ITEMS

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T DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
EPOXY INJECTION CRACK REPAIR	30.00	LF		\$	
CONCRETE COATING					

1.00

LS

Section: 0003 - BRIDGE - 110C00061N

ALT DESCRIPTION

Approx. 5800 SF

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH		\$	
0430	02223	GRANULAR EMBANKMENT	28.00	CUYD		\$	
0440	02351	GUARDRAIL-STEEL W BEAM-S FACE	125.00	LF		\$	
0450	02360	GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH		\$	
0460	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH		\$	
0470	02399	EXTRA LENGTH GUARDRAIL POST	6.00	EACH		\$	
0480	02545	CLEARING AND GRUBBING Less than 1 acre	1.00	LS		\$	
0490	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0500	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0510	02726	STAKING	1.00	LS		\$	
0520	02731	REMOVE STRUCTURE	1.00	LS		\$	
0530	03299	ARMORED EDGE FOR CONCRETE	46.00	LF		\$	
0540	03304	BRIDGE OVERLAY APPROACH PAVEMENT	167.00	SQYD		\$	
0550	08002	STRUCTURE EXCAV-SOLID ROCK	46.00	CUYD		\$	
0560	08003	FOUNDATION PREPARATION	1.00	LS		\$	
0570	08019	CYCLOPEAN STONE RIP RAP	75.00	TON		\$	
0580	08100	CONCRETE-CLASS A	91.00	CUYD		\$	
0590	08104	CONCRETE-CLASS AA	32.00	CUYD		\$	
0600	08151	STEEL REINFORCEMENT-EPOXY COATED	18,500.00	LB		\$	
0610	21415ND	EROSION CONTROL	1.00	LS		\$	
0620	24896ED	RAIL SYSTEM TYPE T631	52.00	LF		\$	
0630	24982EC	CONCRETE COATING Approx. 590 SF	1.00	LS		\$	

Section: 0004 - BRIDGE - 110C00059N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0640	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	14.00	EACH		\$	
0650	02223		GRANULAR EMBANKMENT	30.00	CUYD		\$	
0660	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0670	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		\$	
0680	02371		GUARDRAIL END TREATMENT TYPE 7	3.00	EACH		\$	
0690	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0700	02545		CLEARING AND GRUBBING Less than 1 acre	1.00	LS		\$	
0710	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0720	02651		DIVERSIONS (BY-PASS DETOURS)	1.00	LS		\$	
0730	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0740	02726		STAKING	1.00	LS		\$	

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PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0750	02731		REMOVE STRUCTURE	1.00	LS		\$	
0760	03299		ARMORED EDGE FOR CONCRETE	32.00	LF		\$	
0770	03304		BRIDGE OVERLAY APPROACH PAVEMENT	135.00	SQYD		\$	
0780	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0790	08019		CYCLOPEAN STONE RIP RAP	65.00	TON		\$	
0800	08033		TEST PILES	36.00	LF		\$	
0810	08046		PILES-STEEL HP12X53	52.00	LF		\$	
0820	08094		PILE POINTS-12 IN	6.00	EACH		\$	
0830	08100		CONCRETE-CLASS A	15.50	CUYD		\$	
0840	08104		CONCRETE-CLASS AA	12.60	CUYD		\$	
0850	08151		STEEL REINFORCEMENT-EPOXY COATED	3,250.00	LB		\$	
0860	08661		PRECAST PC BOX BEAM CB12-48	134.00	LF		\$	
0870	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	68.00	LF		\$	
0880	21415ND		EROSION CONTROL	1.00	LS		\$	
0890	24982EC		CONCRETE COATING Approximately 622 SF	1.00	LS		\$	

Section: 0005 - BRIDGE - 114B00071N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0900	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	12.00	EACH		\$	
0910	02223		GRANULAR EMBANKMENT	28.00	CUYD		\$	
0920	02351		GUARDRAIL-STEEL W BEAM-S FACE	100.00	LF		\$	
0930	02355		GUARDRAIL-STEEL W BEAM-S FACE A	100.00	LF		\$	
0940	02381		REMOVE GUARDRAIL	262.00	LF		\$	
0950	02399		EXTRA LENGTH GUARDRAIL POST	32.00	EACH		\$	
0960	02545		CLEARING AND GRUBBING Less than 1 acre	1.00	LS		\$	
0970	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0980	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0990	02726		STAKING	1.00	LS		\$	
1000	02731		REMOVE STRUCTURE	1.00	LS		\$	
1010	03299		ARMORED EDGE FOR CONCRETE	49.70	LF		\$	
1020	03304		BRIDGE OVERLAY APPROACH PAVEMENT	170.00	SQYD		\$	
1030	08002		STRUCTURE EXCAV-SOLID ROCK	166.70	CUYD		\$	
1040	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1050	08019		CYCLOPEAN STONE RIP RAP	130.00	TON		\$	
1060	08100		CONCRETE-CLASS A	175.60	CUYD		\$	
1070	08104		CONCRETE-CLASS AA	12.10	CUYD		\$	
1080	08150		STEEL REINFORCEMENT	18,466.00	LB		\$	
1090	08151		STEEL REINFORCEMENT-EPOXY COATED	1,547.00	LB		\$	
1100	08661		PRECAST PC BOX BEAM CB12-48	183.00	LF		\$	
1110	08801		GUARDRAIL-STEEL W BEAM-S FACE BR	61.00	LF		\$	
1120	21415ND		EROSION CONTROL	1.00	LS		\$	
1130	24982EC		CONCRETE COATING Approximately 883 SF	1.00	LS		\$	

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Section: 0006 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1140	02569	DEMOBILIZATION	1.00	LS		\$	