CALL NO. 100

CONTRACT ID. 261138

BALLARD COUNTY

FED/STATE PROJECT NUMBER NHPPBRO601204

DESCRIPTION US 51

WORK TYPE BRIDGE REPLACEMENT

PRIMARY COMPLETION DATE 12/31/2028

LETTING DATE: December 10,2026

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME December 10,2026. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 0%

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

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SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 01

CONTRACT ID - 261138

NHPPBRO601204

COUNTY - BALLARD

PCN - DE00400512638
NHPPBRO601204

US 51 CONSTRUCT APPROACH ROADWAY TO NEW BRIDGE OVER THE OHIO RIVER @ CAIRO, ILLINOIS, A DISTANCE OF 0.97 MILES.BRIDGE REPLACEMENT SYP NO. 01-01140.20.

GEOGRAPHIC COORDINATES LATITUDE 37:00:00.00 LONGITUDE 89:08:46.00

ADT

COMPLETION DATE(S):

COMPLETED BY 12/31/2027	SEE SPECIAL NOTE FOR MILESTONE COMPLETION DATES
COMPLETED BY 12/31/2028	APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

INSURANCE

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

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

The state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, agrees that the contracting agency, the

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

BOYCOTT PROVISIONS

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

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

LOBBYING PROHIBITIONS

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

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

FEDERAL CONTRACT NOTES

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

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

CIVIL RIGHTS ACT OF 1964

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

NOTICE TO ALL BIDDERS

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

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

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

SECOND TIER SUBCONTRACTS

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

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

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

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

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

DBE GOAL

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

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

The DBE Participation Plan shall include the following:

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

c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
4. Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

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

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

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

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

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

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

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

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

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

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

PROMPT PAYMENT

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

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a ***signed and notarized*** Affidavit of Subcontractor Payment (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be completed and signed within 7 days of being paid by the Cabinet.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

******* IMPORTANT *******

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

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

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

DEFAULT OR DECERTIFICATION OF THE DBE

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

PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES

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

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

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

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

SECTION 7 is expanded by the following new Article:

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

Pursuant to Title 46CFR Part 381, the Contractor agrees

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

INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION B

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

Phase 1 Special Notes

1. SPECIAL NOTE FOR CONSTRUCTION ACCESS
2. SPECIAL NOTE FOR CONSTRUCTION TRAILER
3. SPECIAL NOTE FOR CPM SCHEDULE
4. SPECIAL NOTE FOR ENGINEERING-RELATED CONSULTING SERVICES
5. SPECIAL NOTE FOR MARITIME COORDINATION
6. SPECIAL NOTE FOR MITIGATION OF IMPACTS TO MIGRATORY BIRDS
7. SPECIAL NOTE FOR CONTRACT COMPLETION AND MILESTONE COMPLETION DATES
8. SPECIAL NOTE FOR PRE-BID CONFERENCE
9. SPECIAL NOTE FOR PROJECT INSPECTION BOAT
10. SPECIAL NOTE FOR REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES
11. SPECIAL NOTE FOR RIGHT OF ENTRY LICENSE AGREEMENT
12. SPECIAL NOTE FOR TREE REMOVAL
13. SPECIAL NOTE FOR WASTE AND BORROW SITES
14. SPECIAL NOTE FOR HIGH-WATER AND FLOOD DAYS
15. SPECIAL NOTE FOR PILE LOAD TEST PROGRAM (NOTE A)
16. SPECIAL NOTE FOR DYNAMIC PILE TESTING (NOTE B)
17. SPECIAL NOTE FOR STATIC AND PSEUDO-STATIC PILE TESTING (NOTE C)
18. SPECIAL NOTE FOR GROUND IMPROVEMENT (NOTE D)
19. SPECIAL NOTE FOR VIBRATION MONITORING (NOTE E)

SPECIAL NOTE FOR CONSTRUCTION ACCESS

Ballard Co., KY and Alexander Co., IL

Item No. 01-1140.20

DESCRIPTION.

Design, provide, maintain, and remove and restore temporary construction access facilities necessary to complete the work shown on the plans and specified herein. This work shall consist of furnishing all labor, materials, equipment, tools, and incidentals necessary to provide access to all work areas throughout the duration of the Contract.

REQUIREMENTS.

Prior to beginning construction activities, the Contractor shall submit a Construction Access Plan to the Engineer for review and approval. The Construction Access Plan shall identify proposed access roads, work pads, staging areas, equipment crossings, material storage areas, use of KYTC acquired mooring anchor site, timber matting locations, haul routes, erosion and sediment control measures associated with access facilities, limits of disturbance, and sequencing of construction access activities within permitted impact areas. The Contractor shall not commence construction access activities until the Construction Access Plan has been approved by the Engineer. Approval of the Construction Access Plan shall not relieve the Contractor of responsibility for providing adequate access to complete the work, complying with permit requirements, avoiding unauthorized impacts, maintaining access to East Cairo Road and US 51 as required by the Contract, or restoring disturbed areas. The Engineer may require modifications to the Construction Access Plan at any time to address safety concerns, maintenance of traffic requirements, environmental compliance, permit requirements, protection of adjacent property, or construction sequencing. Any such modifications shall be made at no additional cost to the Department.

An acquired mooring anchor site is available for Contractor use for construction operations, material staging, equipment access, and related construction activities. The Contractor shall maintain the site in a condition acceptable to the Engineer throughout construction and restore it to a condition acceptable to the Engineer upon completion of the work unless otherwise directed. Any additional access facilities necessary to complete the work shall remain the Contractor’s responsibility.

Access roads and work areas shown on the plans represent those anticipated during design. Any temporary construction access facilities required by the Contractor but not

specifically identified and quantified on the plans, including access roads, work pads, staging areas, and equipment crossings, shall be considered incidental to this item.

Access roads identified and quantified on the plans to remain in place following completion of construction shall be left in a condition acceptable to the Engineer. Any grading, stabilization, drainage improvements, erosion control measures, repairs, surfacing, seeding, or other work necessary to achieve a condition acceptable to the Engineer shall be considered incidental to this item.

Temporary access facilities not identified on the plans to remain shall be removed upon completion of the work, and disturbed areas shall be restored to a condition acceptable to the Engineer in accordance with the project permits and plans.

The Contractor shall maintain vehicular access to East Cairo Road at all times unless otherwise approved in writing by the Engineer. Construction activities shall be coordinated to minimize disruptions to the traveling public, adjacent landowners, and local traffic.

The Contractor shall confine all construction activities to the approved limits of disturbance shown on the plans. The Contractor shall not encroach upon, disturb, or otherwise impact areas designated on the plans as "DO NOT DISTURB."

The Contractor shall not utilize Fort Defiance Park for construction access, staging, equipment or material storage, worker parking, borrow activities, waste disposal, stockpiling, equipment fueling or maintenance, or other construction operations except as specifically shown on the Plans or approved in writing by the Engineer. The Contractor shall maintain unrestricted public access to the park, including unobstructed ingress and egress, throughout the duration of the Contract.

The Contractor shall be responsible for complying with all permit conditions applicable to construction access operations and construction activities. Any permits, approvals, clearances, notifications, permit modifications, mitigation measures, monitoring requirements, or corrective actions required solely as a result of the Contractor's means and methods shall be obtained, implemented, and paid for by the Contractor at no additional cost to the Department.

Timber matting required for construction operations, including protection of wetlands, soft soils, environmentally sensitive areas, or temporary access facilities, shall be included in this item.

The Contractor shall provide and maintain positive drainage for all temporary access facilities and shall implement erosion prevention and sediment control measures necessary to prevent sediment from leaving the limits of disturbance. Any damage to

existing roads, drainage features, utilities, private property, or Department property resulting from construction access operations shall be repaired by the Contractor at no additional cost to the Department.

The Contractor shall not use private property outside the limits of right-of-way, easements, or areas otherwise made available by the Department without first obtaining written permission from the property owner. Copies of such agreements shall be provided to the Engineer prior to use. Any costs, damages, claims, access fees, restoration obligations, or liabilities associated with Contractor-obtained access areas shall be the sole responsibility of the Contractor. The Contractor shall bear sole and full responsibility for obtaining and abiding by any environmental permits required on areas outside of the permit limits made available by the Department.

Where construction access temporarily traverses agricultural property, the Contractor shall restore affected areas to preconstruction conditions or better, including repair of drainage features, removal of construction debris, decompaction of soils as necessary, replacement of topsoil where disturbed, and re-establishment of vegetation, as directed by the Engineer.

The Contractor shall maintain all construction access facilities in a safe and serviceable condition for the duration of their use. All dust control, grading, maintenance, and repairs necessary to accommodate construction traffic shall be considered incidental to this item.

Sheet pile walls or similar are required at the locations shown on the plans and shall remain in place as part of the completed work. The Contractor shall be responsible for the design, detailing, furnishing, and installation of all walls and connections shown conceptionally on the plans. Design calculations and shop drawings shall be prepared, signed, and sealed by a Professional Engineer licensed in the Commonwealth of Kentucky and submitted to the Engineer for review prior to construction. The design shall consider applicable geotechnical conditions, groundwater conditions, hydraulic loading, surcharge loading, construction loading, and all other factors necessary to provide a stable and durable installation. Upon completion of the work, the walls shall remain in place and shall be in a condition acceptable to the Engineer. All costs for the walls shall be included in the lump sum pay item for Construction Access.

Any damage to existing guardrail systems, guardrail end treatments, bridge rail, approach rail, impact attenuators, fencing, delineators, signs, pavement markings, drainage structures, or other roadway appurtenances resulting from construction operations shall be repaired or replaced by the Contractor at no additional cost to the Department. Any temporary removal, modification, relocation, or adjustment of existing guardrail or barrier

systems required for construction operations shall be included in the construction access plan.

The Contractor shall not commence earth-disturbing activities associated with Contractor-generated access roads, staging areas, material storage areas, work pads, haul routes, equipment crossings, or other temporary construction facilities until all required revisions to the SWPPP and erosion and sediment control plans have been completed and all required permit approvals or coverage have been obtained. All costs associated with SWPPP preparation, review, acknowledgements, certifications, revisions, implementation, inspections, maintenance, monitoring, reporting, corrective actions, and compliance with the Illinois NPDES permit shall be considered incidental to this item.

MEASUREMENT.

The Department will measure all work performed as part Construction Access as a lump sum.

PAYMENT.

Payment at the Contract Lump Sum price for Construction Access shall constitute full compensation for all work required by this Special Note.

Bid Code	Description	Unit
24740EC	CONSTRUCTION ACCESS	LS
24740EC	CONSTRUCTION ACCESS (IL)	LS

SPECIAL NOTE FOR CONSTRUCTION TRAILER
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

1.0 DESCRIPTION. A construction trailer shall be provided and maintained for the exclusive use of the Engineer/Project Manager and their staff for the duration of this project. The duration of the project shall be defined as the period between the occupancy date defined in Section 2.3 herein and the later of the completion date in this proposal or the actual completion date when all requirements of the Contract Documents have been fulfilled. All costs associated with Federal, State, and Local regulatory permits and inspections, and setup/removal of the construction trailer shall be the burden of the Contractor. The construction trailer shall be weatherproof, wind-tight, and dust-proof with level and solid floors. The contractor is to retain ownership of this construction trailer and be responsible for its removal upon completion of the project.

2.0 REQUIREMENTS.

2.1 Location. The construction trailer shall be located on a site that is mutually agreed to by the Engineer/Project Manager and the Contractor in a location that is convenient to the site and will not affect progression of work. The trailer shall be no further than a maximum radius of 4 miles from the project. The construction trailer may be a trailer or a permanent building and shall be in accordance with applicable state and local codes and KYOSHA/OSHA requirements.

2.2 Minimum Requirements. The construction trailer shall be a minimum of 720 sq. ft. with an 8 ft. minimum height from the floor to the ceiling. This construction trailer shall have at least two doors. At least one of the doors must be able to be locked from the inside, and the locks shall be keyed the same for all doors. Five key sets to the office shall be furnished by the Contractor. There shall be a minimum of 8 windows that are at least 5 sq. ft. each. Windows shall be equipped with screens and approved locking mechanisms and shall be sliding or hinged. Windows shall also be provided with approved coverings.

The construction trailer shall have a minimum of two offices (120 sq. ft. each) with inside doors and an area large enough to accommodate jobsite meetings for KYTC personnel, Contractor/Sub-Contractor personnel, and Vendors.

2.3 Other Requirements. The construction trailer that is provided for the use of the Engineer/Project Manager shall be fully furnished and ready for occupancy at least two days prior to the start of actual construction. The Contractor shall be responsible for protecting the construction trailer from fire, flooding, and theft throughout the duration of the project. If there is any loss of property to KYTC due to theft, fire, or natural disaster, it shall be the responsibility of the Contractor.

The construction trailer shall have cooling/heating capabilities to maintain a uniform temperature between 68°F and 80°F. The electrical system for the construction trailer shall be 100 amp

minimum with 120/240 volt electrical service. The construction trailer shall be furnished with a minimum of two two-prong receptacles in each office, storage room and meeting area to accommodate all required electrical equipment. The Contractor shall be responsible for regular weekly trash disposal for the construction trailer. The construction trailer shall have sufficient parking to accommodate KYTC personnel regularly assigned to the project location and their agents and visitors with at the minimum a compacted aggregate parking lot. The Contractor shall furnish security lighting for the parking area. The construction trailer bid item shall also include a minimum of one separate, lockable indoor storage building, (minimum 100 sq. ft.) to adequately store equipment (i.e. nuclear density gauge, cylinder molds, concrete testing equipment). This storage building shall have the capacity to secure a nuclear density machine by means of double lock system. This storage area shall have a concrete cylinder tank (minimum 150 gal) that can be maintained at a temperature between 68°F and 80°F. The Contractor shall be responsible for furnishing an internet connection possible of 1.0 Mb connection speed to the entire construction trailer via wi-fi throughout the duration of the project. The Contractor shall furnish a sign for the construction trailer that distinguishes the office as the KYTC Field Office.

2.4 Field Office Equipment and Supplies.

The following equipment shall be provided as part of the trailer.

Description	**Quantity**
Broom and Dust Pan	1
Coat Rack	1
Toilet Facilities	Yes
Drinking Water (Hot and Cold)	Yes
Cleaning Supplies	Yes
Fire Extinguishers	2
First-Aid Kit	1
Blood Borne Pathogen Kit	1
Smoke Detector	1
Calculator (TI-30X II Solar)	2
File Cabinets (minimum 4 drawers with locks)	3
Office Desk	4
Office Chairs	4
Folding Table	2
Folding Chairs	12
Drafting or Large Work Table with chairs	1
Shelving	24 lin. ft.
Carbon Monoxide Detector	1
Refrigerator/Freezer	1
Microwave Oven (1.6 cu ft)	1

Waste Paper Baskets	4
Paper Shredder	1
(Minimum 12 sheet capacity with 5 gallon waste basket)	
Copier	1
Printer	1
Scanner	1

(The Contractor may provide an all-in-one Copier/Printer/Scanner as long as what is provided has the capability to print on plain paper for letter, legal, and 11”x17” sizes and is able to reduce or increase paper size and has an automatic feeder. The paper, toner, and ink cartridges shall be provided by the Contractor.)

The construction trailer and all the Equipment and Supplies shall be the responsibility of the Contractor throughout the duration of the contract, and the Contractor will retain ownership at the conclusion of the project.

3.0 MEASUREMENT. The construction trailer will be measured as a lump sum. The payment schedule is to be mutually agreed upon by both the contractor and KYTC. KYTC will provide a two-week notice minimum to the Contractor of when the construction trailer will be vacated.

4.0 PAYMENT. The construction trailer will be paid for as a lump sum. All cost associated with the Field Office shall be the responsibility of the Contractor.

Bid Code	**Description**	**Unit**
21325ND	CONSTRUCTION TRAILER	LS

SPECIAL NOTE FOR CPM SCHEDULE
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

A. General. The Progress Schedule required for this Project is the CPM schedule. The DBT shall designate a Schedule Representative who shall be responsible for coordinating with the Engineer during the preparation and maintenance of the schedule. The DBT shall submit an interim schedule followed by a baseline schedule, or only a baseline schedule, depending on when the DBT starts work as described below.

B. Interim Schedule. If the DBT starts work within 60 calendar days of execution of the contract, they shall submit an interim schedule. The interim schedule shall be in CPM schedule format. The interim schedule shall include detailed activities for the work to be accomplished during the first 90 calendar days of the Contract, and a summary of activities for the balance of the work. The interim schedule shall have the same Activity ID, Activity Description and format as will be used in the baseline schedule.

C. Baseline Schedule. The DBT shall submit a baseline schedule within 60 calendar days of the execution of the Contract. The baseline schedule shall be in CPM schedule format and as described below. The Engineer will review the baseline schedule and will either “approve,” “approve as noted,”, “revised and resubmit”, or “reject"the schedule within 21 calendar days of receipt. If the Engineer does not provide written notification regarding the disposition of the baseline schedule within 21 calendar days, the submission will be considered rejected.
For baseline schedules that are “approved as noted,” the DBT shall make the necessary revisions and resubmit the revised schedule within 14 calendar days. The Engineer will only reject baseline schedulesthat are not in compliance with Contract requirements.
For baseline schedules that are “rejected,” the Engineer will indicate in writing all portions of the schedule that are not in compliance with the contract requirements. The Project Engineer will conduct a mandatory meeting with the DBT and the DBT’s Schedule Representative within 14 calendar days of the Engineer’s written notice. The purpose of this meeting is to resolve all issues with the baseline schedule. At this meeting, the DBT shall provide clarification and all additional information necessary for the Engineer to “approve” the baseline schedule.

In the event the baseline schedule is not “approved” within 120 calendar days of execution of the Contract, the Engineer may cease work on the Project, and no progress payments shall be made until the baseline schedule is “approved.” Approval of the baseline schedule does not relieve the Contract Documents.The baseline schedule must be “approved” or “approved as noted” by the Engineer prior to the Engineer evaluating any DBT claims associated with time impacts.

1. **Schedule Requirements.** Generate the baseline schedule using Primavera P6 Project Management by Oracle Corporation, Redwood Shores, CA 94065, or an equivalent program approved by the Engineer. The DBT shall provide any necessary training and license needed forKYTC to use the software. Submit the Primavera P6 XER file in the Version required by KYTC.

The DBT shall provide a schedule that shows the various activities of work in sufficientdetail to demonstrate a reasonable and workable plan to complete the Project by the Original Contract Completion Date. Show the order and interdependence of activities and the sequence for accomplishing the work. Describe all activities in sufficient detail so that the Engineer can readily identify the work and measure the progress of each activity. The baseline schedule must reflect the scope of work, required phasing, maintenance of traffic requirements, interim completion dates, the Completion Date, and other Project milestones established in the Contract Documents. Include activities for design processes, design submittal review time for KYTC, mobilization,

submittals, working drawings, shop drawing preparation, submittal review time for KYTC shop drawings, material procurement and fabrication, fabrication inspection, fabrication testing, and the delivery of materials, plant, and equipment, and other similar activities. Design reviews shall be numbered (i.e. 30%, 60%, 90%). All KYTC reviews shall include "KYTC" in their activity description.

The DBT shall be responsible for assuring all work, including all Subcontractor work, is included in the schedule. The DBT shall be responsible for assuring that all work sequences are logical and that the schedule indicates a coordinated plan.

Failure by the DBT to include any element of work required for performance of the Contract shall not excuse the DBT from completing all work within the required time. The Engineer's review of thebaseline schedule will be for compliance with the Specifications and Contract requirements.
Approval by the Engineer shall not relieve the DBT of any of their responsibilities for the accuracy or feasibility of the schedule. Omissions and errors shall be corrected as described in Section F in this note and shall not affect Contract time, the Completion Date, or total Contract payment.

a. Administrative Identifier Information (cover page to written narrative of any schedule submission):
    i. Project Number
    ii. County
    iii. Route Number
    iv. FHWA Number
    v. PID Number
    vi. Contract Signed Date
    vii. Notice to Proceed
    viii. Completion Date
    ix. DB Design Manager and DBT Name
    x. DB Design Manager and DBT Dated Signature
    xi. KYTC's Dated Approval Signature
b. General Settings & Schedule Options
    i. Calculate the critical path as "longest path"
    ii. The schedule may only be calculated using retained logic
    iii. Total float shall be calculated as finish float
    iv. Ignore relationships to and from other projects
    v. Use "Duration" as the activity percent complete type
    vi. Show open ends as non-critical
    vii. Schedule durations are to be contiguous (no suspend or resume dates)
c. Project Activities:
    i. Activity Identification (ID). Assign each activity a unique identification number, which cannot be reused if deleted. Activity IDs shall not include any commas or spaces and the length shall be consistent among all activities, not to exceed 10 characters. Once accepted, the Activity ID shall be used forthe duration of the Project.
    ii. Activity Name. Each activity shall have a unique narrative name (description) consisting of averb or work function (e.g., form, pour, excavate), an object (e.g., slab, footing, underdrain) and a location (e.g. baseline, ramp, station, structure) in that order, which improves readability and adds the ability to group activities by the type of work. Do not use duplicate descriptions, which can be avoided by including phase/stage, location, or other distinguishing

information. Activity Name will not include commas.

iii. Activity Original Duration. Assign a planned duration in working days for each activity. Do not exceed a duration of 20 working days for any construction activity unless approved by the Engineer. Maintenance of traffic, erosion control, and other similar items can be represented as Tasks or Level of Effort activities with durations longer than 20 working days but cannot be on the Longest Path.

iv. Activity Relationships:

1. All activities, except the first activity, shall have a predecessor(s). Allactivities, except the final activity, shall have a successor(s).
2. Use only finish-to-start relationships with no leads or lags to link activities or use start-to-start relationships with lags no greater than the predecessor duration to link activities.
3. Use of finish-to-finish relationship is permitted when both activities are already linked with a start-to-start relationship.
4. Activities shall not have open-ended relationships. Open-ended is defined as when an activity has either no predecessor or no successor, or when an activity's only predecessor relationships are finish-to-finish or only successor relationships are start-to-start.

d. Project Milestones:

i. Start Project:

The DBT shall include as the first milestone in the schedule, a milestone named "Start Project." The date used for this milestone is the date the Contract is executed and signed by KYTC.

ii. End Project Milestone:

The DBT shall include as the last activity in the Project schedule, a milestone named "End Project." The date used for this milestone is considered the Project Completion date.

iii. Start Phase Milestone:

The DBT shall include as the first activity for a Project phase, an activity named "Start Phase X," where "X" identifies the phase of work. The DBT may include additional milestones but, as a minimum, must include all contractual milestones.

iv. End Phase Milestone:

The DBT shall include as the last activity in a Project phase, an activity named "EndPhase X," where "X" identifies the phase of work. The DBT may include additional milestones, but at a minimum contractual milestones.

e. Level of Effort Activities (Hammocks):

Level of Effort (hammock) activities are summary activities used for graphical display only. Use hammocks to show the duration of specified Contract work periods, phasesand road closures. The hammock activity type is allowed to have a start-to-start relationship with the first activity in a series of activities and a finish-to-finish relationship with the last activity in a series of activities.

f. Constraints:

Use constraints sparingly in the schedule. If constraints are used, use only early constraints (start on or before, finish on or before) or late constraints (start on or after, finish on or after). Do not use As Late As Possible, Finish On, Mandatory Finish, Mandatory Start or Start On constraints. Finish on or before shall be used on the End Project Milestone.

g. Calendars
   i. All calendars shall be Project level calendars, not Global or Resource calendars, as classified by Primavera.
   ii. Project calendars cannot inherit holidays and exceptions from a Global calendar.
   iii. At a minimum, calendars should be established for KYTC reviews, standard work week, cure/settlement periods, milestones, and any items with calendar date or temperature restrictions as per the specifications.
   iv. After baseline approval, any changes to activity calendar assignments must be approved by the Engineer.
   v. Accurate calendar assignments shall be made in the baseline schedule to incorporate the potential for seasonal weather conditions such as calendar date or temperature restrictions as per the specifications. Calendar reassignment shall not be made in response to activities drifting into unseasonable time periods.
   vi. Seasonal (winter) and environmental shutdown periods shall be shown using non-working calendars and not shown as activities.
   vii. Seasonal Calendars can only be assigned to an activity according to specification and/or approval by the Engineer.
   viii. Weather and Seasonal Conditions shall be entered into all calendars containing physical work as non-workdays per month as per the Weather and Seasonal Conditions Table. Anticipated Days Lost Due to Weather shall be randomly distributed throughout each calendar containing physical work and should not be tightly grouped or concentrated on particular days within each week.

Weather and Seasonal Conditions Table	
Month	**Anticipated Days Lost Due to Weather**
January	8
February	8
March	7
April	6
May	5
June	5
July	4
August	4
September	5
October	6
November	6
December	6

   ix. All project milestones shall be on a 7 day/week calendar with no non-workdays.
   x. All review periods for KYTC shall be included on a designated calendar of 5 days/week and shall include the holidays defined in Section 101.03 and project specific documents.
   xi. Activity calendars for non-work activities, including but not limited to submittals, procurement, fabrication, cure times, and utility relocations performed by others shall not show any non-workdays.
   xii. Extend calendars to a minimum of one year after the Contract Completion Date.

h. Activity Codes:
   The DBT shall include the following codes for each activity:
   i. Area

ii. Phase
iii. Responsibility for each task such as, DBT, Utilities, and Subcontractors
iv. Work types for each task
v. If work will be completed within a closure area/period
vi. Schedule of Values

i.Cost Loading:

i. Cost Loading Activities: Costs for incremental design preparation will be assigned to the respective design phase submittal activity(s). Costs for installation of the material/equipment (labor, construction equipment, mobilization, and temporary materials) will be assigned to their respective construction activities. Evenly disperse overhead and profit to each activity over the duration of the Project. The total of all cost loaded activities, including costs for material and equipment delivered for installation on the Project,and labor and construction equipment loaded construction activities, shall total to 100 percent of the value of the Contract. Cost loading shall populate "At Completion Total Cost" or "Budgeted Total Cost" as agreed to by the Engineer. Added or revised activities and associated costs shall be in accordance with Section F.

2. **Submission Requirements**. Submit all schedules within the time frames specified. Submit the schedule and information in electronic file format. Submit the following information along with the electronic baseline schedule:
   a. A Written Narrative including the Administrative Identifier Information discussed in Section C.1.a on the first page. A baseline schedule in a bar chart format. For each activity on the chart, indicate the Activity ID, Activity Name, Original Duration, Remaining Duration, Total Float, Early Start Date, Early Finish Date, and Calendar ID. Use arrows to show the relationships among activities.
   b. Two baseline schedules in a bar chart format, on 11 x 17 paper. The first shall show the entire project while identifying the critical path of the Projection the bar chart in red. The second baseline schedule shall only show the longest path. The critical path is defined as: the longest path of activities in the Project that determines the Project Completion Date. The activities that make up the critical path of activities are the "Critical Activities."
   c. A Three Week Look Ahead and a Six Week Look Ahead Schedule in bar chart format. This schedule shall have all the requirements of the baseline schedule in bar chart format exceptthat it shall be limited to those activities that have an early start or early finish within a three-week and a six-week period of the data date.
   d. A Scheduling Statistics Report. Submit a report of baseline schedule statistics, including number of activities, number of activities on the longest path, number of started activities,number of completed activities, number of relationships, percent complete, and number and type of constraints.
   e. A Logic Diagram (if requested by the Engineer). Submit a diagram in PERT chart formatshowing the logic of the baseline schedule.
   f. An Activity ID Sort (if requested by the Engineer). Submit a listing of all activities included in the baseline schedule sortedby ascending Activity Identification Number.
   g. A Total Float Sort (if requested by the Engineer). Submit a listing of all activities included in the baseline schedule sortedby increasing total float and by early start date.
   h. A Detailed Predecessor/Successor Sort (if requested by the Engineer). Submit a listing of all activities included in thebaseline schedule indicating the activities that

immediately precede and immediately succeed that activity in the schedule logic.

i. Earned Value Report (Pay Applications). List all activities having a budget amount and cost. For Monthly Update Schedules, show a compilation oftotal earnings on the Project from the notice to proceed to the most recent monthly progress payment request and the difference between the previous request amount and the current payment request amount. Sort report by Activity ID.

j. A graphical representation of planned work, and in each monthly update, a graphical representation of planned work versus the actual work completed.

3. **Float.** Use of float suppression techniques, such as preferential sequencing (arranging critical path through activities more susceptible to Department caused delay), lags, zero total or free float constraints, extending activity times, or imposing constraint dates other than as required by the Contract, shall be cause for rejection of the Project schedule or its updates.
4. Definitions of Float: Total Float is the length of time along a given network path that an activity(s) can be delayed without delaying the Project completion date. Project Float is the length of time between the End Project Milestone and the Contract Completion Date.
5. Ownership of Float: Float available in the schedule at any time shall not be considered for the exclusive use of either KYTC or the DBT. During the course of Contract execution, any float generated due to the efficiencies of either party is not for the sole use of the party generating the float; rather it is a shared commodity to be reasonably used by either party. A schedule showing work completing in less time than the Contract time, and accepted by KYTC, shall be considered to have Project Float. Project Float shall be a resource available to both KYTC and the DBT.
6. Negative Float: Any extensionof time shall be addressed in accordance with the Section G. Scheduled completion date(s) that extend beyond the Contract (or intermediate milestone) completion date(s) may be used in computations for assessment of liquidated damages. The use of this computation is not to be construed as an order by KYTC to accelerate the Project.

D. Monthly Progress Update Schedule. A monthly update schedule is a schedule in which only progress isupdated from the prior data date to the current data date. Work added and/or excusable delays encountered since the prior data date must be represented as a schedule revision as described in Section F. Omissions and errors shall be corrected as described in Section F in this note and shall not affect the Completion Date, the Contract time, or total Contract payment.

1. Update Requirements. By the tenth (10) day of the current month (or as specified by the Engineer), during the life of the Project, submit an updated schedule and all required information with a data date of the last day of the preceding month (using 5:00 PM as the time on the Data Date). Submit the monthly updated bar chart on paper and a copy of the updated schedule in electronic format in Section C.2. The Engineer will “approve”, “approve as noted”, “revise and resubmit” or “reject” the schedule update within 14 calendar days of receipt of the updated CPM schedule. If the Engineer does not provide written notification regarding the disposition of the monthly update within 14 calendar days, the submission may be considered rejected. If the schedule is rejected, the DBT will resubmit the revised update within 7 calendar days from notification of the rejection. The Engineer may withhold estimates if the updated schedule is not submitted as required by this section. For each updated schedule, identify the actual start and finish dates for all completed activities and the actual start date and remaining duration for all activities in progress. Correct out-of-sequence progress listings generatedby the Scheduling Statistics Report on the critical path. Minor logic revisions to correct out-of- sequence progress to critical or non-critical path activities may be made as part of the monthlyschedule update. Submit proposed significant changes and/or changes to the critical path in accordance with Section F. The Project schedule shall be discussed at each monthly progress meeting. Provide a written narrative with reasons for any

changes listed below.

a. **Written Narrative**. A Written Narrative will be required with the Monthly Update Schedule to detail the reasons for any of the following changes: Any revision that modifies the critical path, change of calendars, change in Logic/Relationships, Durations, Workday vs. Non workday, new activities, change in Activity Name, previously omitted progress, change to previously reported progress and/or Schedule of Values changes.

Submit the following with each updated schedule:

i. CPM Schedule in Bar Chart Format (11 x 17)
ii. Three Week and Six Week Look Ahead CPM Schedule in Bar Chart Format
iii. Logic Diagram (If requested by the Engineer)
iv. Activity ID Sort (If requested by the Engineer)
v. Total Float Sort (If requested by the Engineer)
vi. Detailed Predecessor/Successor Sort (If requested by the Engineer)
vii. Schedule Statistics Report
viii. Electronic files (formatted as described above)
ix. Earned Value Report (used as the Pay Application)

The DBT may submit a statement that there were no changes in the schedule logic, activity durations, or calendars since the previous update in lieu of submission of items iii, iv, v and vi.

E. Revisions. The work may require and/or the DBT may make revisions to the CPM schedule. Addition of new activities or new calendars or changes to existing activities, calendars, or logic constitute a revision. All revisions must be reported in the written narrative form accompanying the monthly update schedule as detailed in Section E.1.a. Any revision that modifies the critical path or impacts an interim milestone date or Project completion date must be represented on a companion schedule submitted with the monthly update schedule. In submitting a revised and an unrevised schedule, the DBT shall compute two finish dates. The first finish date shall be computed without consideration of any impact. The second finish date shall be computed with consideration of all impacts since the prior monthly schedule update. The DBT shall also submit a written narrative stating the reason for the proposed revisions. The Engineer will "approve", "approve as noted", "revise and resubmit" or "reject" proposed revisions within 14 calendar days of receipt of appropriate schedules and narrative. If the Engineer does not provide written notification regarding the disposition of the monthly update within 14 calendar days, the submission will be considered rejected. If the revision is rejected, the DBT will resubmit the revision within 7 calendar days from notification of the rejection.

Any revision that modifies an activity's costs shall be submitted with a written narrative stating the reason for the proposed revision. The Engineer will review and "approve" or "reject" proposed cost revisions.

All approved revisions shall be incorporated into the Monthly Update Schedule.

F. Time Impact Analysis (Delay Not Caused By Contractor)

The work may require and/or the DBT may request an extension of the Completion Date. Perform the following analysis to compute the duration of the time extension. Submit two paper copies and two electronic copies of each analysis performed.

1. Determine Project progress prior to circumstance(s) necessitating the time extension. The previous accepted monthly update, updated to the date of the circumstance alleging to have caused delay, shall be used to display the prior progress of the Project. This schedule is referred to as the Un-impacted Schedule

2. Prepare a fragmentary network (fragnet) depicting the circumstance that is believed to havedelayed the Project.
3. Insert the fragnet into the Un-impacted Schedule, run the schedule calculations and determine the finish date. This schedule is referred to as the Impacted Schedule.
4. Compare the Impacted Schedule finish date with the Un-impacted Schedule finish date in orderto determine the duration of any warranted time extension.

Submit the un-impacted schedule and impacted schedule with the request for time extension. Include a narrative report describing the effects of new activities and relationships to interim milestone(s) and Contract Completion Dates. All approved time extensions shall be incorporated into the monthly update with the fragnet used to determine impacts incorporated into the schedule.

G. Recovery Schedule. If the Monthly Update Schedule or Revised Monthly Update Schedule projects a finish date for the Project more than 14 calendar days later than the current Completion Date, submit a separate recovery schedule showing a plan to finish by the current Contract Completion Date if requested by the Engineer. Include a written narrative report describing the changes made to recover to the current Contract Completion Date. KYTC will withhold Estimates until the Engineer approves the recovery schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the DBT. In the event the Current Completion Date is in dispute, the recovery schedule will need to be submitted once the dispute has been resolved.

H. Weather Delay Schedule. A Weather Delay Schedule indicates the effect of the actual weather experienced in a given period as compared to the anticipated weather included in the baseline schedule as depicted in the Weather and Seasonal Conditions table of Section C.1.g.vii. The Weather Delay schedule is a calculation performed by the software after the anticipated weather days have been removed and the actual weather days have been inserted into the appropriate calendar. Submit the Weather Delay Schedule along with the monthly update of the month following the weather impacted work.

The Weather Delay Schedule will be prepared by making a copy of the previously accepted Monthly Progress Schedule file. This copy will be the Weather Impacted Schedule. For the month that incurred actual weather days, remove the anticipated weather only from calendars associated with the work that was delayed and input the actual weather days experienced into the Weather Impacted Schedule. Schedule the project without changing the data date.

SPECIAL NOTE FOR ENGINEERING-RELATED CONSULTING SERVICES
Ballard Co. KY and Alexander Co. IL
Item No. 01-1140.20

The Contractor will be required to retain a company pre-qualified by the Department in the category of Geotechnical Laboratory Testing to perform services on this project. Additionally, personnel meeting applicable licensure and/or experience requirements will be required to perform other related services including but not necessarily limited to condition surveys, vibration monitoring, and pile testing. Specific requirements for laboratory testing, and other related services are provided elsewhere in the contract documents.

Because of their ongoing involvement with this project as consultants to the Department, Michael Baker International, HDR Inc., HMB Professional Engineers, Civil Design Inc., Terracon Consultants Inc., and KCI Technologies will not be permitted to perform any services as consultants to the Contractor on this project due to the potential for a conflict of interest. Other firms who have previously performed consulting services for the Department on this project may perform services for the Contractor, subject to meeting applicable pre-qualification, experience, and/or other requirements.

SPECIAL NOTE FOR MARITIME COORDINATION
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

1.0 SCOPE AND DESCRIPTION

The scope of this work includes coordinating with the maritime industry including but not necessarily limited to navigation vessels, local maritime operators, the United States Army Corps of Engineers (USACE), and the United States Coast Guard (USCG) regarding marine activities during the load test program. Coordination with the United State Coast Guard is required will take place through the USCG, Marine Safety Unit Paducah (MSUP).

The objective is to facilitate safe travel for vessels traveling through the work zone and foster goodwill among the Department and its consultants, the Contractor, nearby dock facilities/stakeholders, other government agencies, and the maritime industry.

Perform the coordination in this special note in conjunction with marine activities described in the:

- Special Note for Pile Load Test Program (Note A),
- Special Note for Dynamic Pile Testing (Note B),
- Special Note for Static and Pseudo-Static Pile Testing (Note C), and
- any other construction- and/or testing-related activities in the navigation channel or impacting fleeting operations within 250 LF of the test locations.

2.0 REQUIREMENTS

Perform all work on navigable waters in accordance with project specifications and the following:

- The United States Coast Guard (USCG-MSUP) regulates all work on or in navigable waters.
- Be aware that there is significant river traffic on this portion of the Ohio River throughout the year.
- Do not block the present navigational channel to navigation nor block nearby dock facilities and barges rafted and secured in the area, except as permitted below, and in accordance with any of the contract documents.
- Work shall not impede or interfere with nearby dock facilities/stakeholders without written consent of the stakeholder. Communication with mooring and fleeting operations will be the responsibility of the contractor. Costs associated with this coordination will be included in the Lump Sum Pay Item “Furnish Equipment for Pile Test Program”.
- The USCG-MSUP may require an Obstruction permit to be filed if any of the work impedes on the main portion of the channel nearest the Illinois bank.
- Conduct all work so that unimpeded passage through the navigational channel is maintained and so that the present navigable depths do not decrease. Maintain the necessary navigational lights in good condition.

- Mark all temporary structures with lights, reflective material and buoys as prescribed by the USCG-MSUP. Display lights and other signals on any floating plant as required by "Inland Navigational Rules Act of 1980."
- Promptly remove and clear from the river all falsework, or other structures placed in the river or caused by the work of the load test program, to the satisfaction of the Engineer and USCG-MSUP.
- Keep temporary structures free of unreasonable accumulations of drift and debris. Dispose of such materials in an acceptable manner and place.
- Take positive precautions to prevent spark-producing, flame-producing, ignited and other damaging objects from coming into contact with barges or vessels passing through the project area.
- Do not permanently moor any floating plant in the channel span without first obtaining prior approval from the USCG-MSUP. Move any floating plant working temporarily in the channel span for passage of river traffic.
- Ensure that there are no navigation vessels within one half mile of the project area 30 minutes before performing pseudo static tests.
- Provide a certified captain to be on duty while work is actively being performed in the pile load testing area in the river, including temporary or permitted items to keep a radio listening watch on VHF Ch16 and Ch13.
- Communicate with the USACE Olmstead Locks and Dam to understand the currents and timing of activities when the Ohio River becomes the dominant river (i.e., governs flow vs. the Mississippi River). Expect to have a few hours before seeing the effects of a big release (from Olmstead) with elevation and current.

The Department will not allow additional contract time for compliance with this special note. All items contained above and within the additional requirements of the Special Note, including costs associated with maintaining and controlling river traffic, will be included in the Lump Sum Pay Item "Furnish Equipment for Pile Test Program."

3.0 VESSEL COMMUNICATION PLAN

Submit a Vessel Communication Plan in .pdf format for review. The purpose of the communication plan is to assist in providing information regarding vessels and other equipment to be utilized for the load test program and communication with navigation vessel traffic to assist in safe transit through the project area.

The Department will review the plan and may send it to the USCG-MSUP and/or local stakeholders near the project site for review. If applicable, the USCG will coordinate all matters with appropriate state and federal agencies and invite their comments on the proposal to the extent that it affects matters under their jurisdiction. The schedule for this submittal is below.

Table 1. Milestone Schedule

Item	Calendar Days after Submitting First Item in Table 1 of the Special Note for Pile Load Test Program (Note A) [1, 2]
Vessel Communication Plan	30

[1] Allow AT LEAST 20 business days for review by the USCG and other agencies and an additional 10 business days for processing by the Department. The Department is not responsible for review time of other agencies.

[2] For purposes of this Special Note, "business days" relative to Department response include all days except Saturdays, Sundays, Holidays, as defined in Section 101.03 of the Standard Specifications.

As a minimum, include the following sections in the document:

- Document Purpose and Control
- Introduction
  - Name(s) and Description(s) of Contractor Vessel(s)
  - Barges
  - Cranes
  - Other Relevant Construction Equipment
  - Load Test Apparatus
  - Any available photos of vessels, cranes and other relevant equipment
- Positioning
  - Drawings or Sketches to Show Positioning of Barges and Load Test Apparatus along with appropriate narrative. Include the location and dimensions of any temporary construction which may directly or indirectly affect navigation clearances or impede or divert stream flow with written description of the proposed method of furnishing, installing, operating, and maintaining any temporary navigation lights required. Include the proposed crew boat and work vessel docking areas in relationship to the work areas.

- Sequencing
    - Account for maritime traffic heading up or downstream as this will have an impact on the daily schedules.
- Communication [a]
    - Movement of vessels (expected to impact navigation traffic)
    - Pile driving operations, including dynamic pile testing (as related to its impact on navigation traffic)
    - Pseudo-static testing (as related to its impact on navigation traffic) [b]
- Contact list
- Appendix – Notice to Mariners (for the USCG-MSUP)

[a] Include notification if the floating plant or equipment used to execute the load test program temporarily encroaches on the channel. The USCG may determine that there is an impact to navigation and require the Contractor to provide a helper boat to assist vessels through the construction site. Obtain prior approval from the USCG if any operations require blocking the channel to through river traffic. Minimize any temporary reduction to the navigational clearance.

[b] Ensure that there are no traveling commercial navigation vessels within one half mile of the project site 30 minutes before performing pseudo static tests.

The template below may be used as a starting point to develop the document. Items directed to United States Coast Guard will be addressed to the USCG-Marine Safety Unit Paducah.

1. Document Purpose and Control

1.1 Overview

This document has been developed to assist in providing information regarding vessels that will be utilized for Ohio River US-51 Bridge Replacement load test program in Ballard County, Kentucky and communication with vessel traffic to assist in safe transit through the project area and execution of the work from the contractor's marine vessel(s). This details the communication process between USCG, Local Stakeholders, Mariners, and the contractor's marine vessel(s) involved in the delivery of Ohio River load test program.

[Include Drawing and/or Annotated Satellite View of Project Area]

2. Introduction

2.1 Project Objectives

The planned objective of the load test program is to collect data to be used to assist with the engineering and design of the US-51 replacement bridge in accordance with the Special Note for Pile Load Test Program (Note A). The planned activities will use the vessel(s), barges, cranes, etc. listed below. The anticipated duration for this scope is approximately ____ calendar days (dependent on weather and river conditions).

2.2 Primary Vessel – _____

The _____ is a _____ boat owned and operated by _____ in [City], [State].

The _____ has a minimal draft of ____ minimum to maximum working depth of _____.

Facilities aboard the _____ consist of:

- ____
- ____
- ____

2.3 Support Vessel – _____

The _____ is a _____ boat owned and operated by _____ in [City], [State].

The _____ has a minimal draft of _____ minimum to maximum working depth of _____.

Facilities aboard the _____ consist of:

- ____
- ____
- ____

All vessels will keep a radio listening watch on VHF Ch16 and Ch13.

2.4 Barges

2.5 Cranes

2.6 Other Relevant Construction Equipment

2.7 Load Test Apparatus

3. Positioning

[Include Drawings and/or Sketches]

4. Sequencing

5. Communication

The key to a safe and smooth project will be good communication between the contractor's vessel(s), USCG, Stakeholders within the area and with local mariner's Sécurité broadcasts. We have contacted or will contact the USCG, Waterfront Services, ADM/ARTCo, and PTL. A local Notice to Mariners (NTM) will be in place with the USCG and updated as required. The following communication procedure has been established to ensure this:

Daily:

07:00-08:00hrs – The captain or site manager will email a morning update with the project plans for the forthcoming 24 to 48 hours. Work location(s) completion schedules and the forthcoming activities will be detailed.

Should there be any conflict regarding contractor vessel and vessel traffic movements this will be discussed in detail and where required alternative plans will be devised.

Primary contact numbers are included at the end of this document.

We will provide a certified captain to be on duty 24 hours per day/seven days per week to keep a radio listening watch on VHF Ch16 and Ch13.

Moving/Positioning

Prior to making movements that would impact navigation traffic, the captain will make a Sécurité announcement as a safety to navigation broadcast. In addition, NTM and captain's communication will encourage approaching vessels to check in and if required, request two-hour, one-hour, and 30-minute updates to assist with safe movements through the project area.

Prior to performing pseudo-static tests, the captain will make a Sécurité announcement as a safety to navigation broadcast. No navigation vessels will be allowed within one half mile from the project site 30 minutes prior to performing the test until the test has been performed. In addition, NTM, and captain's communication will encourage approaching vessels to check in and if required two-hour, one-hour, and 30-minute updates may be requested. We will notify the USCG seven days before, one day before, and one hour before pseudo-static tests are to be performed and after each test has been completed.

If there are any concerns about the location or change to the days planned activities, we will contact the Department and USCG and send an update email to the stakeholders in the project area.

6. Contact List

Contact List and Phone numbers				
Contractor Team				
Name	*Organization/Title*	*Direct*	*Mobile*	*Email*
	Captain			
	Site Manager			
	Supervisor			
	Project Manager			
Project Daily Communications				
	KYTC Lead Inspector			
	KYTC Section Engineer			
	KYTC TEBM for Project Delivery & Preservation			
	KYTC TEBM for Project Development			
	KYTC Geotechnical Office			
	KYTC District One Public Information Officer			
	USCG-MSUP			
	HDR			
	Terracon			
	Michael Baker International			
	Waterfront Services			
	ADM/ARTCo			
	PTL			
	USACE Olmstead Locks and Dam			
These are examples. The Department may request changes to this list during review.				

4.0 PAYMENT

Payment for the work in this Special Note, including costs associated with maintaining and controlling river traffic, will be included in the Lump Sum Pay Item “Furnish Equipment for Pile Test Program.”

SPECIAL NOTE FOR MITIGATION OF IMPACTS TO MIGRATORY BIRDS
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

Construction activities shall not be permitted within a 150-foot buffer of any migratory bird nest during the nesting season from March 1 to August 31, the work buffer is not required outside of these dates. The buffer zone may be reduced to a minimum of 75-ft pending tests to evaluate the birds' tolerance to certain construction activities. Tests shall be conducted on warm, dry days in the presence of a trained biologist designated by the KYTC. The Biologist shall have authority to specify a new buffer distance as well as shut down construction activities. The Biologist shall record all observations and report them to the KYTC as well as the KDFWR. The buffer requirement may be ended before August 31, if the biologist observes that young birds have fledged from a nest and left the area. The Contractor should note that the most crucial time for the nesting occurs between April and July, during this time there is an increased likelihood that nesting will be present and greater potential for the birds to be disturbed by construction activities. All costs associated with carrying out this mitigation requirement shall be borne by the Contractor and are incidental to the project.

SPECIAL NOTE FOR CONTRACT COMPLETION AND MILESTONE COMPLETION DATES
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

PROJECT MILESTONE COMPLETION DATE. The milestone date of **December 31, 2027** has been established for the load testing program and ground modification verification portions of the project. The milestone date includes submission of the final report for the pile load test program as well as the ground modification verification final report. Liquidated damages in the amount of $4,750.00 will be charged for each day in which the project milestone is not met. Contrary to the KY Standard Specifications for Road and Bridge Construction, liquidated damages will be charged for each calendar day including weekends and holidays.

PROJECT COMPLETION DATE. The project completion date of **December 31, 2028** will apply for all items not included in the **PROJECT MILESTONE** completion items.

SPECIAL NOTE FOR PRE-BID CONFERENCE
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

The Department will conduct a Pre-Bid Conference of the subject project on November 19, 2026 **at 2:00 PM EST/1:00 PM CST at:**

Murray State University
Paducah Campus
4430 Sunset Avenue
Paducah, KY 42001

Phone: (502) 564-3500

Any company that is interested in bidding on the subject project or being part of a joint venture shall be represented at the conference. No individual can represent more than one company. At the conference a roster shall be taken of the representatives present. **Only companies represented at the conference will be eligible to have their bids opened at the date of letting.**

The purpose of the conference is to familiarize all prospective bidders with the contract requirements within the scope of the contract.

Department of Highways officials present at the conference will answer questions concerning the project.

SPECIAL NOTE FOR PROJECT INSPECTION BOAT
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

DESCRIPTION.
Project Inspection Boat shall consist of providing a boat and safety equipment at the site, along with adequate training and docking facilities as specified below. The boat shall be for the exclusive use of, and operated by, the Engineer or his personnel.

PROJECT INSPECTION BOAT.
The boat shall not be less than 18 ft (5.5 m) in length with at least a 72-inch (1.8 m) beam, equipped with an outboard motor of at least 70 horsepower (52 kw), and shall be capable of accommodating at least 6 adult passengers, including the operator. In addition, the Engineer shall at all times retain the right to travel on, or be present on, any of the Contractor's floating plants or equipment. The boat shall be in good condition and meet the approval of the Engineer. The boat and safety equipment shall at all times meet all applicable boating regulations of the United States Coast Guard. The boat shall be equipped with 2 fuel tanks, complete remote control, a spotlight and an adequate whistle or horn. The motor shall be equipped with electric and hand starters, an alternator or generator, and slip clutch propeller protection. These requirements are in addition to all Coast Guard or State requirements. The Contractor shall service, gas, oil and maintain the boat during the life of the contract unless otherwise directed by the Engineer.

TRAINING FOR DEPARTMENT PERSONNEL.
The Contractor shall provide field training by someone proficient in the operation of the boat to ensure that approximately 3 to 5 employees of the Department, or their representative, are competent in the proper operation, safety features and handling on open water and while docking. The required training time is anticipated to be no more than one-half day.

INSURANCE FOR PROJECT INSPECTION BOAT.
The Contractor shall furnish the Engineer with evidence that liability insurance has been obtained, with a minimum coverage of $500,000, and shall hold the Department and its representatives harmless from any and all damage to, or caused by, the boat while being operated by the Engineer. The insurance shall be kept in effect until the project is completed, and the evidence of renewal of the policy as necessary shall be forwarded to the Engineer.

MEASUREMENT.
The Department will measure all work performed as part Project Inspection Boat as a lump sum.

PAYMENT.

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

Bid Code	Description	Unit
24626EC	PROJECT INSPECTION BOAT	LS

SPECIAL NOTE FOR REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES
Alexander Co., IL
Item No. 01-1140.20

Description. This work shall consist of the removal and disposal of regulated substances according to Section 669 of the IDOT Standard Specifications as revised below.

Contract Specific Work Areas. For stationing, the lateral distance is measured from the centerline, and the farthest distance is the offset distance or construction limit, whichever is less.

The Contractor performing the on-site monitoring of regulated substance work and/or on-site monitoring of UST removal shall be pre-qualified in Hazardous Waste by the Department or demonstrate acceptable project experience. Acceptable project experience is defined on BDE 2730 Section 2.A. Acceptable project experience is to be documented on BDE 2730 Section 2.B and 2.C. Acceptable qualifications shall also be demonstrated with project experience in remediation and regulated substances operations for contaminated sites in accordance with applicable federal, State, or local regulatory requirements. Documentation of qualifications shall be provided to the Engineer for evaluation and acceptance using BDE 2730 (Regulated Substances Pre-Construction Plan). Acceptable project documentation shall include, at a minimum, the regulatory identification numbers, project completion dates, and description of the Contractor's role in the projects. The qualified on-site monitoring personnel performing work shall have a minimum of one year of experience in similar activities as those required for the project and shall meet Section 669 of the Standard Specifications for Road and Bridge Construction requirements. The Environmental Firm shall monitor the following contract-specific work areas for soil contamination and workers' protection.

ISGS Site No. 3901V-5 – Vacant Land: 0 to 100 Block of US 51, Cairo, Alexander County, Illinois

- Station 1009+55 to 1012+45, between 140 and 155' Left (LT) to 200' Right (RT) of Ohio River Scenic Byway Centerline (Byway CL): The Engineer has determined that this material from 0 to 5.0 feet bgs in the vicinity of the station and off set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): arsenic.
    - Arsenic was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-VL5-3, from the sample interval of 0 to 5 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.
- Station 1012+45 to 1015+45, between 155 and 100' LT to 200' RT of Byway CL: The Engineer has determined that this material from 0 to 5.0 feet bgs in the vicinity of the station and offset meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): benzo(a)pyrene and manganese.

- Benzo(a)pyrene and Manganese were detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-VL5-4, from the sample interval of 0 to 5 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.

ISGS Site No. 3901V-7 – Vacant Land: 0 to 100 block of US 51, Cairo, Alexander County, Illinois

- Station STA 2031+30 to 2037+45, 130' LT to 130' RT of New Ohio River Bridge Centerline (Bridge CL): The Engineer has determined that this material from 0 to 10.0 feet bgs in the vicinity of the station and offset meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): benzo(a)pyrene and manganese.
  - Benzo(a)pyrene was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil borings 3901V-VL7-1 and 3901V-VL7-2, from the sample interval of 0 to 5 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.
- Station 1001+70 to 1004+85, between 0 and 35' to 100' LT of Byway CL: The Engineer has determined that this material from 0 to 5.0 feet bgs in the vicinity of the station and offset meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant(s) of concern sampling parameter(s): manganese.
- Station 1001+70 to 1004+85, between 0 and 35' to 100' LT of Byway CL: The Engineer has determined that this material from 5.0 to 10.0 feet bgs in the vicinity of the station and offset meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): benzo(a)pyrene and manganese.
  - Benzo(a)pyrene was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-VL7-4, from the sample interval of 5 to 10 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.
- Station 1001+70 to 1004+85, between 0 and 35' to 100' LT of Byway CL: The Engineer has determined this material from 10.0 to 16.0 feet bgs in the vicinity of the station and off

set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant(s) of concern sampling parameter(s): iron.

- Station 1004+85 to 1006+25, between 35 and 70' to 200' LT of Byway CL: The Engineer has determined that this material from 0.0 to 5.0 feet bgs in the vicinity of the station and off set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): arsenic.
    - Arsenic was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-VL7-5, from the sample interval of 0 to 5 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.
- Station 1007+75 to 1009+40, between 110 and 135' to 300' LT of Byway CL: The Engineer has determined that this material from 0.0 to 5.0 feet bgs in the vicinity of the station and off set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant(s) of concern sampling parameter(s): manganese.
- Station 1010+85 to 1012+30, between 145 and 155' to 250' LT of Byway CL: The Engineer has determined that this material from 0.0 to 5.0 feet bgs in the vicinity of the station and off set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): arsenic and lead.
    - Arsenic was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-VL7-9, from the sample interval of 0 to 5 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the IDOT district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.
- Station 1012+30 to 1014+20, Between 145 and 135' to 250' LT of Byway CL: The Engineer has determined that this material from 0.0 to 5.0 feet bgs in the vicinity of the station and off set meets the criteria of and shall be managed in accordance with Article 669.05(a)(1). Contaminant(s) of concern sampling parameter(s): manganese in soil boring 3901V-VL7-10.
- Station 1014+20 to 1015+70, between 135 and 100' to 250' LT of Byway CL: The Engineer has determined that this material from 0.0 to 10.0 feet bgs in the vicinity of the station and offset meets the criteria of and shall be managed in accordance with Article 669.05(a)1)*. Contaminant(s) of concern sampling parameter(s): arsenic.
    - Arsenic was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-VL7-11, from the sample interval of 0 to 10 feet bgs. Based on the department's professional judgment, the material has been reclassified from

669.05(a)(5) to 669.05(a)(1)*, and the IDOT district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.

- **The Engineer has determined that groundwater encountered within the limits of this PESA Site (3901V-7) meets the criteria of and shall be managed in accordance with 669.05(d). Contaminants of concern sampling parameters include: Total and Dissolved Metals.**

ISGS Site No. 3901V-8 – Ohio River: Approximate Ohio River M.M. 979.5 to 981, Cairo, Alexander County, Illinois

- Station 2037+45 to 2041+00, 10' LT to 130' RT of Bridge CL: The Engineer has determined that this material from 0 to 10.0 feet bgs in the vicinity of the station and offset meets the criteria of and shall be managed in accordance with Article 669.05(a)(1)*. Contaminant(s) of concern sampling parameter(s): benzo(a)pyrene.
    - Benzo(a)pyrene was detected at a concentration exceeding the TACO Tier 1 soil remediation objectives for the Construction Worker exposure route in soil boring 3901V-8-OH-2, from the sample interval of 0 to 5 feet bgs. Based on the department's professional judgment, the material has been reclassified from 669.05(a)(5) to 669.05(a)(1)*, and the IDOT district has committed that the material shall be reused onsite to the extent possible. Procedures shall be implemented to protect site workers and observers from hazards encountered during construction activities in locations containing contaminated materials, pursuant to Article 669 of the IDOT Standard Specifications for Road and Bridge Construction manual.

Work Zones

Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply to the following ISGS PESA Sites**: PESA Site 3901V-5 (Vacant Land, as noted in the Special Provisions), PESA Site 3901V-7 (Vacant Land, as noted in the Special Provisions), PESA Site 3901V-8 (Ohio River, as noted in the Special Provisions**)

Additional information on the contract-specific work areas listed above, collected during the regulated substances due diligence process, is available through IDOT's District's Environmental Studies Unit (DESU).

District Commitment

*** Based on discussions with District personnel, IDOT District 9 agrees that most of the material classified as 669.05(a)(1) and 669.05(a)(1)* do not constitute a serious**

environmental concern, and the material shall be reused onsite as embankment or fill in accordance with this special provision. The District has committed to placing approximately 12,254 cubic yards of the 12,754 cubic yards of regulated substances material classified in the July 22, 2026 Preliminary Site Investigation Report (PSI) as 669.05(a)(1) and 669.05(a)(1)* along the roadway as fill or embankment within the project limits. If plans for this project change and material classified as 669.05(a)(1) and 669.05(a)(1)* is to be removed, the regulated substances material referenced in this special provision will need to be managed using Article 109.04 at a non-special waste landfill. The intent of the commitment is not covered by Section 202.

PAYMENT

Any waste generated as a special waste, or a waste not certified as a non-special waste from this project, should be manifested off-site using the IEPA Bureau of Land generator number associated with IDOT right-of-way in the affected County. The IEPA generator number for IDOT right-of-way in Alexander County is 0038995001.

The pay item in this Special Note should be included in the contract plans based upon and estimated 500 cubic yards under

Bid Code	Description	Unit
02183	CONTAMINATED SOIL DISPOSAL	CUYD

This includes the following incidental IDOT items:

- 66900200 NON-SPECIAL WASTE DISPOSAL 500 cubic yards*
- 66901001 REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN 1 Lump
- 66901006 REGULATED SUBSTANCES MONITORING 125 Calendar Days
- 66901003 REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT 1 Lump
- 66900530 SOIL DISPOSAL ANALYSIS 5 Each

Incidental costs may also include:
66900400 SPECIAL WASTE GROUNDWATER DISPOSAL 100,000 Gallons.

SPECIAL NOTE FOR RIGHT OF ENTRY LICENSE AGREEMENT
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

DESCRIPTION.

Before beginning work in any area requiring access to railroad Right-of-Way, the Contractor shall obtain all required right of entry license agreements from Canadian National Railway (CN Rail). The Contractor shall be solely responsible for satisfying all agreement requirements and provide all required insurance.

The example provided by CN Rail below is for reference only. The Contractor shall coordinate directly with CN Rail to finalize and obtain the required right of entry license agreement.

PAYMENT.

All associated costs will be incidental to Bid Code 24740EC – Construction Access, LS.

IMPORTANT NOTICE

CORPORATIONS

License must be signed by the President or a Vice President of the Corporation or Company, or be accompanied by a certified resolution of the Board of Directors authorizing execution by a lesser official.

PARTNERSHIP

License must be signed by all of the partners.

MUNICIPALITIES OR GOVERNMENTAL AGENCIES

License must be accompanied by a certified resolution authorizing the official signing the License to execute on behalf of the Governmental Body. The resolution should not be certified by the same official who executed the License.

EXAMPLE

RIGHT OF ENTRY LICENSE AGREEMENT

Illinois Central Railroad Company (hereinafter called Railroad Company) hereby grants pursuant to this Right of Entry License Agreement (hereinafter called License) to **AMITE SOLAR, 1600 Executive Dr. South, Suite 200, Duluth, GA 30096, Telephone 281-844-6142** (hereinafter called the Licensee) license and permission, at the Licensee's sole cost, risk and expense, to enter the Railroad Company's property in the vicinity of **2.31 Mile South of Magnolia MS, Magnolia , MS, Railroad Milepost 816.4, MCCOMB Subdivision, DOT# 300122H for Access to Clean Up Pipiline ROW at MP 816.4** on, over and near Railroad Company's tracks and right-of-way, as generally shown on Location Exhibit, attached hereto and made a part hereof.

This License does not include the right to perform any utility work in the Railroad Company's right of way. Contact Joe Wojcik at 708-332-4739 to obtain a utility permit/maintenance number for any utility work.

Licensee shall pay to Railroad Company upon execution of this License the sum of **$1000.00** for the privileges granted by this License. The aforesaid sum is not refundable in the event Licensee elects not to enter upon Railroad Company's property or in the event Railroad Company elects to terminate this License for any reason whatsoever.

Licensee shall not enter Railroad Company's premises for the purpose as set forth above without having first given Railroad Company's Engineering Manager or their authorized representative at least five (5) working days advance notice of the date Licensee plans to commence the work.

Railroad Company shall have the right, but not the duty, to require Licensee to furnish detailed plans prior to entry upon the premises and to view and inspect any activity or work on or above Railroad Company's property. If in the sole opinion of the authorized representative of Railroad Company any said activity or work is undesirable for any reason, Railroad Company shall have the right to terminate this License at once.

Railroad Company shall have the right, but not the duty, to restrict Licensee's activity on Railroad Company's property in any way that Railroad Company may, in its sole opinion, deem necessary from time to time and shall also have the right, but not the duty, to require Licensee to adopt and take any safety precautions that Railroad Company may, in its sole opinion, deem necessary from time to time. No work shall be performed, or equipment located within twenty-five feet (25') of the centerline of the nearest railroad track without the expressed permission of Railroad Company's Engineering Manager or their duly authorized representative and then only when either the track has been removed from service or Railroad Company flag protection is provided.

Railroad Company may, at Licensee's sole cost, risk and expense, furnish whatever protective services it considers necessary, including, but not limited to, flag protection, and inspectors.

Licensee shall at all times conduct its work in accordance with any and all "Special Provisions" which may be appended hereto which, by reference hereto, are hereby made a part hereof.

AS A CONSIDERATION AND AS A CONDITION, WITHOUT WHICH THIS LICENSE WOULD NOT HAVE BEEN GRANTED, LICENSEE AGREES TO INDEMNIFY AND SAVE HARMLESS RAILROAD COMPANY, ITS PARENTS, AFFILIATES, AND THEIR DIRECTORS,

EXAMPLE

OFFICERS, EMPLOYEES AND AGENTS AND TO ASSUME ALL LIABILITY FOR DEATH OR INJURY TO ANY PERSONS, INCLUDING, BUT NOT LIMITED TO, OFFICERS, EMPLOYEES, AGENTS, PATRONS AND LICENSEES OF THE PARTIES HERETO, AND FOR ALL LOSS, DAMAGE OR INJURY TO ANY PROPERTY, INCLUDING, BUT NOT LIMITED TO, THAT BELONGING TO THE PARTIES HERETO, TOGETHER WITH ALL EXPENSES, ATTORNEYS' FEES AND COSTS INCURRED OR SUSTAINED BY RAILROAD COMPANY, WHETHER IN DEFENSE OF ANY SUCH CLAIMS, DEMANDS, ACTIONS AND CAUSES OF ACTION OR IN THE ENFORCEMENT OF THE INDEMNIFICATION RIGHTS HEREBY CONFERRED, IN ANY MANNER OR DEGREE CAUSED BY, ATTRIBUTABLE TO OR RESULTING FROM THE EXERCISE OF THE RIGHTS HEREIN GRANTED, OR THE FAILURE OF LICENSEE TO CONFORM TO CONDITIONS OF THIS LICENSE, WORK PERFORMED BY RAILROAD COMPANY FOR LICENSEE UNDER THE TERMS OF THIS LICENSE OR THE CONSTRUCTION, MAINTENANCE, REPAIR, RENEWAL, ALTERATION, CHANGE, RELOCATION, EXISTENCE, PRESENCE, USE, OPERATION OR REMOVAL OF ANY STRUCTURE INCIDENT THERETO, OR FROM ANY ACTIVITY CONDUCTED ON OR OCCURRENCE ORIGINATING ON THE AREA COVERED BY THIS LICENSE, REGARDLESS OF ANY NEGLIGENCE OF RAILROAD COMPANY, ITS OFFICERS, EMPLOYEES AND AGENTS. SAID LICENSEE AGREES ALSO TO RELEASE, INDEMNIFY AND SAVE HARMLESS RAILROAD COMPANY, ITS OFFICERS, EMPLOYEES AND AGENTS FROM ALL LIABILITY TO LICENSEE, ITS OFFICERS, EMPLOYEES, AGENTS OR PATRONS, RESULTING FROM RAILROAD OPERATIONS AT OR NEAR THE AREA IN WHICH LICENSE IS TO BE EXERCISED, WHETHER OR NOT THE DEATH, INJURY OR DAMAGE RESULTING THEREFROM MAY BE DUE TO WHOLE OR IN PART TO THE NEGLIGENCE OF RAILROAD COMPANY, ITS OFFICERS, EMPLOYEES OR AGENTS. AT THE ELECTION OF RAILROAD COMPANY, LICENSEE, UPON NOTICE TO THAT EFFECT, SHALL ASSUME OR JOIN IN THE DEFENSE OF ANY CLAIM BASED UPON ALLEGATIONS PURPORTING TO BRING SAID CLAIM WITHIN THE COVERAGE OF THIS SECTION.

Before commencing work and until this License shall be terminated, Licensee shall provide and maintain the following insurance in form and amount with companies satisfactory to and as approved by Railroad Company.

a. Statutory Workers Compensation and Employer's Liability insurance.

b. Automobile Liability in an amount not less than $1,000,000 dollars combined single limit.

c. Commercial General Liability (occurrence form) in an amount not less than $5,000,000 dollars per occurrence, with an aggregate limit of not less than $10,000,000 dollars. The Policy must name Railroad Company and its Parents as additional insured in the following form:

Illinois Central Railroad Company and its Parents
Attn: Josh Gordon
2151 North Mill St
Jackson, MS 39202
601-914-2655 (Office)
josh.gordon@cn.ca

If the commercial general liability policy required herein contains any exclusions related to doing business or undertaking construction or demolition on, near, or adjacent to railroad facilities; such exclusion must be removed through issuance of endorsement CG 24 17, or a similar endorsement approved by Railroad Company in its sole discretion prior to the commencement of work hereunder.

DRAFT

d. In the event the privileges provided herein to Licensee involve any work that could result in the discharge, spillage, disposal, release or escape of any Hazardous Material or petroleum product onto the Railroad Company's property, Licensee shall purchase and maintain in effect at all times during the term of this License a Contractor's Pollution Liability policy in an amount not less than two million dollars ($2,000,000) combined single limit (and with a deductible not to exceed $50,000) insuring Railroad against any and all damages, costs, liabilities and expenses resulting from on- or off-site bodily injury (including death to any person), on or off-site loss, damage or destruction of property (including that belonging to the parties hereto), and on-or off-site cleanup costs (including expenses incurred in the investigation, removal, remediation, neutralization, or immobilization of contaminated soils, surface water, groundwater or any other contamination) growing out of or incidental to any discharge, spillage, disposal, release, or escape of any Hazardous Material or petroleum product arising therefrom. For purposes of this Agreement , the term "Hazardous Material" shall include, without limit, any flammable explosives, radioactive materials, hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. §§ 9601, et seq.), the Hazardous Material Transportation Act, as amended (49 U.S.C. §§ 1801, et seq.), the Resource Conservation and Recovery Act, as amended (42 U.S.C. §§ 6901 et seq.), the Toxic Substances Control Act, as amended (15 U.S.C. §§ 2601, et seq.), similar laws or ordinances enacted by any state, county or municipality in which the Property is located, or in the regulations adopted and publications promulgated pursuant to any of the above, as such laws or regulations now exist or may exist in the future.

Licensee is required to advise Railroad Company by thirty (30) day advance written notice when any work to be performed under this License may require Pollution Liability Insurance pursuant to the previous paragraph.

Before commencing work, Licensee shall deliver to Railroad Company a certificate of insurance evidencing the foregoing coverage, and upon request, Licensee shall deliver a certified, true and complete copy of the policy or policies at its sole cost and expense. The policies shall provide for not less than thirty (30) days prior written notice to Railroad Company of cancellation of or any material change in, the policies, and shall contain the waiver of right of subrogation.

It is understood and agreed that the foregoing insurance coverage is not intended to, and shall not, relieve Licensee from or serve to limit Licensee's liability under the indemnity provisions of this License or any applicable agreement.

It is further understood and agreed that, so long as this License shall remain in force or until the Licensee's work is complete and Licensee shall have vacated the Railroad Company's property (whichever shall be later), Railroad Company shall have the right, from time to time, to revise the amount or form of insurance coverage provided as circumstances or changing economic conditions may require. Railroad Company shall give Licensee written notice of any such requested change at least thirty (30) days prior to the date of expiration of the then existing policy or policies; and Licensee agrees to, and shall, thereupon provide Railroad Company with certificates reflecting such revised policy or policies thereof.

If a contractor is to be employed by Licensee, then, before any work is commenced hereunder, Licensee shall establish, to the reasonable satisfaction of Railroad Company, that either (i) the contractor has in place insurance policies covering its own work that comply with

the required insurance coverages, limits and terms applicable to Licensee, or (ii) the contractor is fully covered under Licensee's insurance policies.

Railroad Company's exercise or failure to exercise any rights under this License shall not relieve Licensee of any responsibility under this License, including, but not limited to, the obligation to indemnify Railroad Company as herein provided.

Cost and expense for work performed by Railroad Company, as referred to in this License, shall consist of the actual cost of labor, materials, equipment and other plus Railroad Company's standard additives in effect at the time the work is performed.

This License is revocable at the option and discretion of Railroad Company upon notice to Licensee, and shall not be transferred or assigned. Unless sooner revoked by Railroad Company, extended at request of Licensee and granted by Railroad Company in writing, or relinquished by act of Licensee, this License shall terminate on **Friday, May 31, 2024**.

Upon termination of this License, Licensee shall remove all of its property, leaving Railroad Company's premises in a neat and safe condition satisfactory to Railroad Company's Engineering Manager or their authorized representative, failing which Railroad Company may remove said materials from its premises at Licensee's sole cost, risk and expense, or at its option, may deem such property as abandoned and henceforth owned by Railroad Company, with no compensation for Licensee whatsoever.

Illinois Central Railroad Company

By: _____

Print Name: Josh Gordon

Title: Officer Sr of Public Works

ACCEPTED:

AMITE SOLAR

By: _____

Print Name: _____

Title: _____

Date: _____

EXAMPLE

SPECIAL PROVISIONS

RELATIVE TO FLAGGING AND OTHER PROTECTION OF RAILROAD COMPANY TRAFFIC AND FACILITIES DURING CONSTRUCTION ADJACENT AND ABOVE, ON OR ACROSS, THE PROPERTY OF, OR ON, ABOVE AND BENEATH THE TRACKS OF THE CN

The Licensee shall, before entering upon the property of Railroad Company for performance of any work, secure a fully executed right of entry license from Railroad Company's Engineering Manager or their authorized representative for the occupancy and use of Railroad Company's property. Licensee shall confer with Railroad Company relative to requirements for railroad clearances, operation and general safety regulations.

Prior to any entry onto Railroad Company's property, employees and/or contractor(s) of Licensee doing work shall determine by the guidelines hereinafter provided and by the work to be performed the level of safety training to be required.

All employees and/or contractor(s) of Licensee not hired by Railroad Company that will work on CN property are required to have minimum www.contractororientation.com.

a. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or contractor(s) of Licensee hired by Railroad Company which will work on Railroad Company property are required to have minimum CN Safety and Security Awareness training, in addition to undergoing a background check. This training and background check must be obtained through the eRailSafe.com website. If not done before, the contractor must contact e-RailSafe at 855-383-7434 to be issued either a vendor number or issued instructions on obtaining a non –railroad contractor vendor number prior to accessing the noted website. Minimum information required of the Licensee and/or their contractor when contacting e-Rail Safe is Name, Address, Telephone, Contact Person for State Projects, DOT Contract Number, and the AAR/DOT Number. This training is good for a period of two years.

a. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.

b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

All employees and/or contractor(s) of Licensee hired by Railroad Company, whose duties include and who are engaged in the inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communication systems, roadway facilities, or roadway machinery that will work foul of or have the potential to foul a live track are considered Roadway Workers under FRA regulations and CN Policy. They must complete the On-Track Safety Training course approved by Railroad Company and provided by:

R.R. Safety – AMR, LLC
Address: P.O. Box 489
Mercer, WI 54547
Telephone: (920) 517-1677
Email: rrsafetytraining@yahoo.com

This training must be repeated at least once each calendar year.

a. EXCEPTION: Railroad Company has exempted those employees of contractors providing paving services at a road crossing under construction or repair from this requirement.

b. EXCEPTION: Railroad Company has exempted those it classifies as "Delivery Persons" from this training. This will include contractors such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

c. All the employees and/or contractor(s) of Licensee who will operate on-track machinery or those who will provide protection for other employees and/or contractor(s) of Licensee must also be trained on CN US Operating Rules pertaining to their duties. They must take and pass the required examination. This training is good for a period of two years.

d. "Potential to foul a live track" is considered, at a minimum, to be working within twenty-five feet of the track; or as otherwise to be determined by CN Design & Construction Department.

The employees, contractor(s) , and/or agents of the Licensee and/or its contractor shall qualify for, and make available for inspection to Railroad Company's employees or other authorized personnel at all times while on Railroad Company property, a photo identification issued by www.e-railsafe.com, along with at least one other government-issued form of identification. Licensee and/or their contractor shall bear all costs of compliance with the requirements of this Section. Railroad Company reserves the right to bar any of employees or agents of Licensee and/or their contractor from Railroad Company's property at any time for any reason.

Licensee and/or any contractor engaged on their behalf, shall at all times conduct work in a manner satisfactory to the Engineering Manager of Railroad Company, or their authorized representative, and shall exercise care so as to not damage the property of Railroad Company, or that belonging to any other grantees, licensees, permittees or tenants of Railroad Company, or to interfere with railroad operations.

Engineering Manager of Railroad Company, or their authorized representative, will at all times have jurisdiction over the safety of railroad operations., The decision of the Engineering Manager or their authorized representative as to procedures which may affect the safety of railroad operations shall be final, and Licensee and/or their contractor shall be governed by such decision.

All work shall be conducted in such a manner as will assure the safety of Railroad Company. Railroad Company's authorized representative shall have the right, but not the duty, to require certain procedures to be used or to supervise the work on Railroad Company's property.

Should any damage occur to Railroad Company property as a result of the authorized or unauthorized operations of Licensee and/or their contractor and Railroad Company deems it

EXAMPLE

necessary to repair such damage or perform any work for the protection of its property or operations, the Licensee and/or their contractor, as the case may be, shall promptly reimburse Railroad Company for the actual cost of such repairs or work. For the purpose of these Special Provisions, actual cost shall be deemed to include the direct cost of any labor, materials, equipment, or contract expense plus Railroad Company's current standard additives in each instance.

If the work requires the construction of a temporary grade crossing across the track(s) of Railroad Company, Licensee and/or their contractor shall make the necessary arrangements and execute Railroad Company's temporary grade crossing agreement for the construction, protection, maintenance, and later removal of such temporary grade crossing. The cost of such temporary grade crossing construction and later removal shall be prepaid to Railroad Company. Additional costs for repairs, maintenance or protection will be paid within thirty (30) days upon receipt of bill(s) therefore.

Licensee and/or their contractor shall at no time cross Railroad Company's property or tracks with vehicles or equipment of any kind or character, except at such temporary grade crossing as may be constructed as outlined herein, or at any existing and open public grade crossing. Operation over such crossing shall be at the direction and method of Railroad Company's Engineering Manager or their authorized representative.

Railroad Company may, at Licensee's and/or their contractor's sole cost, risk and expense, furnish whatever protective services it considers necessary, including, but not limited to, flagger(s), inspector(s), and stand-by personnel. Flagging protection, inspection services, or standby personnel required by Railroad Company for the safety of railroad operations because of work being conducted by Licensee and/or their contractor, or in connection therewith, will be provided by Railroad Company and the cost of Licensee and shall be prepaid to Railroad Company by Licensee and/or their contractor. Flagging protection, inspection services, or standby personnel, necessary or provided in excess of prepayment amounts will be billed at the proper rates and will be promptly paid by overnight delivery.

In the event Railroad Company is unable to furnish protective services at the desired time or on the desired date(s), or if Licensee's prepayment for such services is exhausted and not replenished by Licensee and/or their contractor, Licensee and/or their contractor shall not perform any work on Railroad Company's property until such time and date(s) that appropriate Railroad Company services can be made available and/or appropriate prepayment is received. It is understood that Railroad Company shall not be liable for any delay or increased costs incurred by Licensee and/or their contractor owing to Railroad Company's inability or failure to have appropriate protective services available at the time or on the date requested.

Licensee and/or their contractor shall request and secure flagging protection by written notice to Railroad Company using CN's "Request for Flagging Services" form. This form must be submitted at least ten (10) working days in advance of proposed performance of any work or access to Railroad Company's property.

Flagging protection will be required during any operation involving direct and potential interference with Railroad Company's tracks or traffic. This may include but is not limited to fouling of railroad operating clearances, reasonable proximity of accidental hazard to railroad traffic, work within twenty-five (25) feet horizontally of the nearest centerline of any railroad track, any work over any railroad track, or in any other condition that Railroad Company deems protective services necessary, which may include work on or off Railroad Company's property more than twenty-five (25) feet from the nearest centerline of any railroad track, such as any equipment extension (including but not limited to a crane boom) that will reach or has the potential to reach within twenty-five (25) feet of any track.

EXAMPLE

Licensee and/or their contractor shall request, prepay, and secure Railroad Company signal facility locates by written notice to Railroad Company along with submission of CN's "Request for Flagging Services" form at least ten (10) working days in advance of proposed performance of any work or access to Railroad Company property. Notice to Railroad Company does not fulfill or satisfy any other notification requirements for utility locates for non-railroad facilities.

Railroad Company may require that prior to digging, trenching, or boring activities on or near Railroad Company property, or beneath any railroad track, an on-site meeting be conducted with Railroad Company's Signal Department representative. No digging, trenching or boring activities shall be conducted in the proximity of any known buried Railroad Company signal cables without Railroad Company's Signal Department representative being present.

The rate of pay for Railroad Company employees will be the prevailing hourly rate for not less than eight (8) hours for the class of labor at regular rates during regularly assigned work hours, and at overtime rates outside of regular hours and in accordance with Labor Agreements or Schedules plus Railroad Company's current standard additives in each instance.

Wage rates are subject to change, at any time, by law or agreement between Railroad Company and employees, and may be retroactive because of negotiations or a ruling by an authorized Governmental Agent. If the wage rates are changed, Licensee and/or their contractor shall pay on the basis of the new rates and/or additives.

No digging, trenching, or boring on Railroad Company property shall be conducted without Railroad Company's written approval of the plans that were furnished to Railroad Company's Engineering Manager at least thirty (30) in advance of the excavation.

The following temporary clearances are the minimum that must be maintained at all times during any operation on or adjacent to Railroad Company property:

Vertical: 22'-0" (7.00 m) above top of highest rail within 12'-0" (3.81 m) of the centerline of any track

Horizontal: 12'-0" (3.81 m) from centerline of the nearest track, measured at right angles thereto

If lesser clearances than the above are required for any part of the work, Licensee and/or their contractor shall secure written authorization from Railroad Company's Engineering Manager for such lesser clearances in advance of the start of that portion of the work.

No materials, supplies, or equipment will be stored within twenty-five (25) feet from the centerline of any railroad track, measured at right angles thereto.

Licensee and/or their contractor will be required upon the completion of the work to remove from within the limits of Railroad Company's property all machinery, equipment, surplus materials, false work, rubbish or temporary buildings, and to leave said property in a condition satisfactory to the Engineering Manager of Railroad Company or their authorized representative.

Nothing in these Special Provisions shall be construed to place any responsibility on Railroad Company for the quality or conduct of the work performed by Licensee and/or their contractor hereunder. Any approval given or supervision exercised by Railroad Company hereunder, or failure of Railroad Company to object to any work done, material used, or method of operation shall not be construed to relieve Licensee and/or their contractor of any obligations pursuant hereto or under the License these Special Provisions are appended to.

Accepted: _____

Print Name: _____

Date: _____

AMITE SOLAR

EXAMPLE

CN Request for Flagging Services and Cable Location

Project Information:	
Please fill in each cell for processing	
Is this a new project?	
List CN Project # (Example SO# 123456, Network# R1234, PSC-132):	
Contractor's Right of Entry (ROE), License, Permit #:	
Date of Agreement for ROE, License or Permit:	
Termination Date of Agreement for ROE, License or Permit (If Applicable):	
Does the scope of work include underground, piledriving, excavation or other activities which would require a Railroad Cable Locate? Note: railroad cables and fibers are not part of any state utility locate programs. If a contractor shows up on site to perform work that requires a cable locate and it was not requested, the flagger will shut down the project	
Does your project require vehicular traffic to be shifted out of its intended lane against the current of traffic at a railroad grade crossing?	
Railroad Subsidiary (listed on your agreement):	
Licensee and/or their contractor shall request, prepay, and secure Railroad Company signal facility locates by written notice to Railroad Company along with submission of CN's "Request for Flagging Services" form at least, 10 business days in advance of proposed performance of any work or access to Railroad Company property. Notice to Railroad Company does not fulfill or satisfy any other notification requirements for utility locates for non-railroad facilities. *You must have an agreement with a CN railroad subsidiary, such as a Right of Entry, Permit, License or Formal Agreement in addition to any necessary flagging before you may enter CN property.*	

Flagging Protection Schedule:	
Requested Dates for Flagger Protection: Dates requested are subject to Flagging Co. availability and any project needing a cable locate will need 10 days minimum advance notice. This should be considered when requesting dates for flagging.	
Estimated Duration (in days) for Flagger:	
Estimated Work Schedule (example Mon. – Sat.)	
Daily Start Time / End Time (example 0700 to 1700 etc.): (Flagger start and end time may vary based on type of protection required)	

Flagging Protection Location:				
Railroad Mile Post (MP):				
Railroad Subdivision:				
Project's Location (Street location/intersection):				
Project - City / State:				
Project Description (example HDD, Jack and Bore, Encroachment, Underground or Overhead Pipeline / Wireline crossing, etc.):				
Location for flagger to report:				
Field Contact Person(s):	1st		Alternate	
Mobile Phone Number(s):	1st		Alternate	
Email Address(s):				

EXAMPLE

CN REQUEST FOR FLAGGING SERVICES AND CABLE LOCATION			
Billing Information:			
Company Name:			
Contact Name:			
E-Mail:			
Billing Address:			
City/State:			
ZIP Code:			
Company Phone:			
Electronic Payment Instructions		**Payment Information**	
Financial Institution	HARRIS TRUST AND SAVINGS BANK 311 WEST MONROE, CHICAGO, IL	Customer Number (if available)	
Account Name	Grand Trunk Western	CN Contact	
Account	274-733-5	Service Requested (Flagging MP, Request Date)	
US ROUTING (ABA)	071 000 288		
Remittance Details	nfcashmanagement@cn.ca	Prepayment Amount	
Please send payment remittance details and copy of this flagging request to nfcashmanagement@cn.ca			

Before Flagging Service is provided:
CN required online training must be completed before Flagging Protection will be scheduled.
Prepayment must be received before Flagging Protection will be scheduled.
There is an 8-hour minimum per day. The base rate for Flagging Protection is $1,300 for 10 hours: this includes 2 overtime hours for flagger to set up/take down protection if needed. Additional overtime hour must be prepaid at the rate of $150.00 per hour. Weekends and Holidays must be prepaid at the overtime rate with a $1,500.00 / 10 hour minimum. (Rates Effective January 1st, 2021.)
If additional days of flagging protection are required, they must be prepaid in advance.
Any prepayment not used can be refunded.
Railroad Cable Location must be prepaid, the cost is $350.00 per locate.

This completed form must be sent with a map, confirmation of electronic prepayment, and proof of insurance to US_Flagging@cn.ca

CN Flagging Department
US Flagging
T: **248-914-9695**
17641 South Ashland Ave.
Homewood, IL 60430
US Flagging@cn.ca

I, _____, agree to pay for flagging and/or cable locate services as requested _____
Print Name Signature

EXAMPLE

Special Note for Tree Removal
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

Project Information

County: Ballard Co, KY and Alexander Co. IL
Item No.: 01-1140.20
Project Description: Grade and Drain, Ground Improvements, and Pile Load Testing on US 51 (New Alignment)

Please be advised that the restricted dates for tree removal for Kentucky and Illinois are below and the contractor will be held to the applicable guidelines for each state.

ILLINOIS: Restricted dates from April 1st through September 30th.
NO CLEARING OF TREES 3 INCHES OR GREATER (DIAMETER BREAST HEIGHT) FROM APRIL 1 THROUGH SEPTEMBER 30. Tree and stump removal will be considered incidental to CLEARING AND GRUBBING bid item.

KENTUCKY: Restricted dates from May 15th through July 31ST.
NO CLEARING OF TREES 3 INCHES OR GREATER (DIAMETER BREAST HEIGHT) FROM MAY 15 THROUGH JULY 31. Tree and stump removal will be considered incidental to CLEARING AND GRUBBING bid item.

If there are any questions regarding this note, contact:

Dave Harmon, Director
Division of Environmental Analysis
200 Mero Street, Frankfort, KY 40601
(502) 564-7250

SPECIAL NOTE FOR WASTE AND BORROW SITES
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

Obtain all required approvals from the U.S. Army Corps of Engineers and other applicable regulatory agencies prior to conducting activities at waste or borrow sites that would impact Waters of the United States, wetlands, streams, or other appropriate regulated resources. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the U.S. Army Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineers or other appropriate regulatory agencies.

Soil within the Kentucky project limits shall not be used in Illinois. Likewise, soil from Illinois shall not be used within the Kentucky project limits. Refer to the Removal and Disposal of Regulated Substances Special Note for additional requirements regarding the handling of Illinois soil.

SPECIAL NOTE FOR HIGH-WATER AND FLOOD DAYS

Ballard Co. KY and Alexander Co. IL
Item No. 01-1140.20

HIGH WATER AND FLOODING

This Special Note defines the requirements related to High-Water and Flood Days for the term of the contract between KYTC and the successful bidder. Any language relating to excusable or compensable delays will only apply to the load testing program bid items. The information in this section will supersede any other definitions that may be contained in State Specifications, State Guidance Manuals, State Design Manuals, or any other definitions of the terms.

The project area lies within the Ohio River floodplain near Cairo, IL, and is subject to annual flooding. The contractor shall review historical river levels by searching publicly available data that is provided by USGS, NOAA and other agencies.

Historical records indicate that the Ohio River typically rises above its banks one or more times per year and inundates the entire floodplain. A "flood event" according to this contract is indicated when the Cairo USGS Gage reads 40 feet, as indicated as "Minor Flooding" per NOAA and is equivalent to NAVD'88 Elevation 310.03.

The Contractor shall develop a workplan enabling access to the Project Site and construction to continue during High-Water events. High-Water shall be defined as events in which the Cairo gage reading is between 33.7 feet and 40 feet. This workplan shall follow the requirements of the Special Note for Construction Access for both states. High-Water and Flood Day shall only be applicable for the months of June through December. High-Water and Flood Day for the term of the contract is defined as the following:

High-Water

The Contractor shall incorporate up to thirty (30) Calendar Days of High-Water events annually into the CPM Schedule. These thirty (30) Calendar Days shall be considered anticipated site conditions and shall not constitute excusable or compensable delay.

Time and costs associated with planning for, preparing for, securing the Work during, and recovering from High-Water events, including demobilization and remobilization activities, shall not be considered excusable or compensable delay.

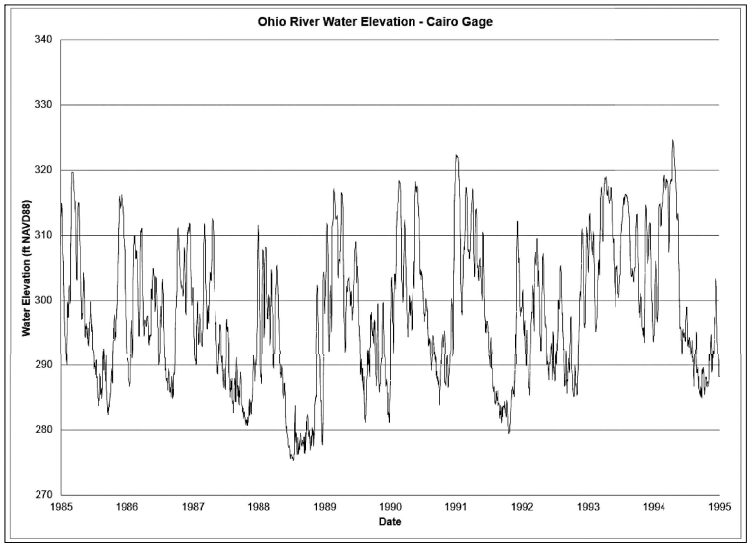
Flood Days

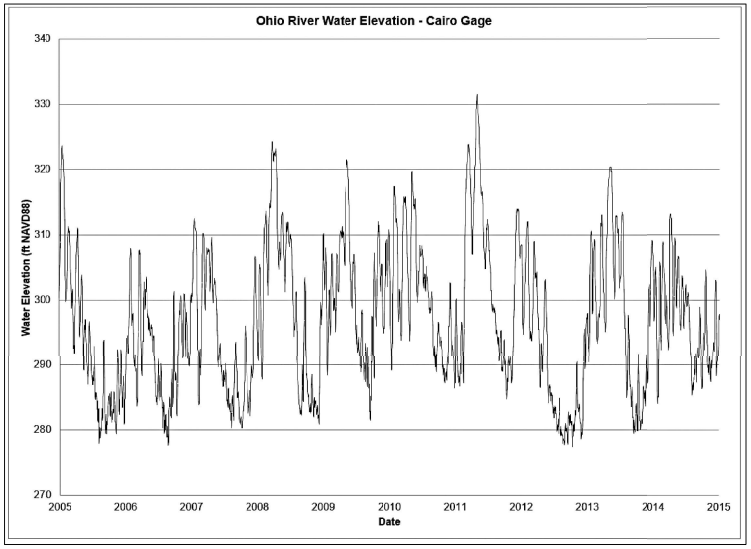
Flood Days shall not be counted toward the thirty (30) Calendar Day High-Water allowance.

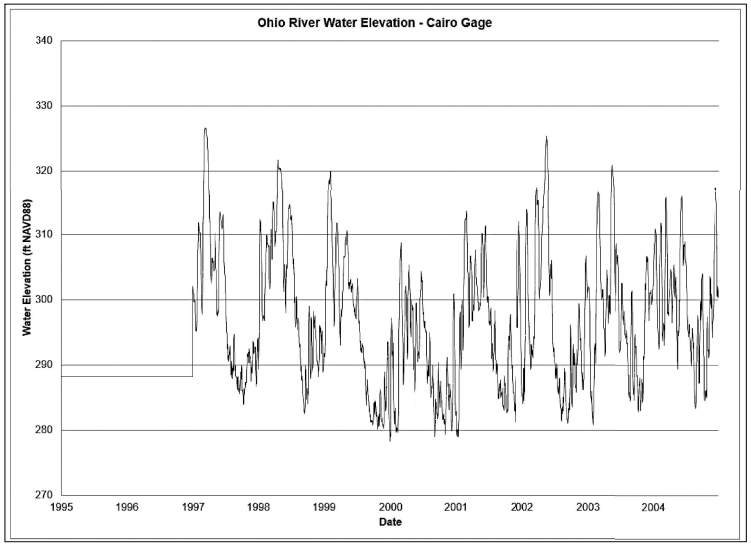
Contrary to Section 105 of KYTC Specifications, flood Day shall be excusable, compensable delays to the extent that includes demobilization, mobilization, and damage which occurs within the Project ROW, such damages could not be avoided or mitigated, and the event directly affects the Contractor's operations. Compensable delays are subject to Extra Work. Any claims for extra work shall be submitted and approved by KYTC.

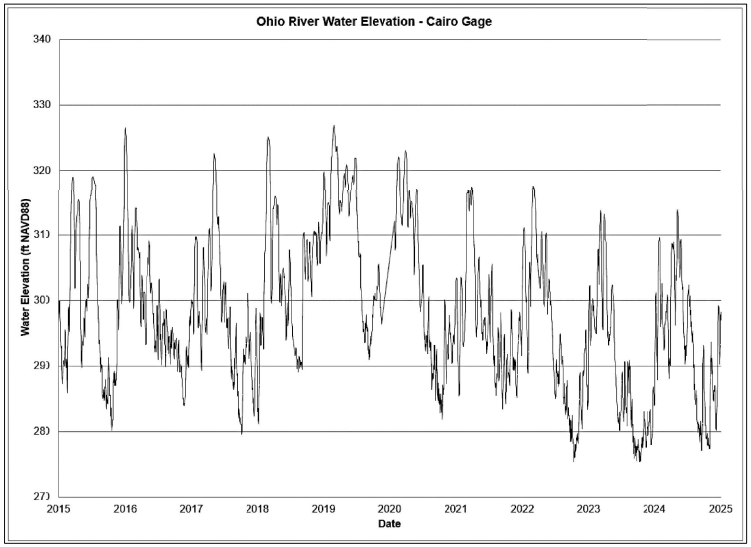
The Contractor shall remain responsible for implementing reasonable measures to protect the Work, Temporary Works, and materials from anticipated flood conditions

De-mobilization and activities required to secure the Work prior to and after the Flood Day events are compensable delays.









WATER LEVEL ELEVATION (FT)
(NAVD 88)

MINIMUM	275.37
MAXIMUM	331.52
AVERAGE	297.24
STANDARD DEVIATION	10.87

FLOOD EVENT ELEVATION (FT)
(NAVD 88)

	HIGH WATER	LOW WATER
MINIMUM	288.27	275.37
MAXIMUM	331.52	293.57
AVERAGE	318.21	281.97
STANDARD DEVIATION	8.39	3.99

MONTHLY WATER SURFACE ELEVATION (FT)
(NAVD 88)

MONTH	ELEVATION	STANDARD DEVIATION
JANUARY	298.73	10.062
FEBRUARUY	301.28	9.703
MARCH	306.59	9.866
APRIL	306.33	9.504
MAY	304.07	10.342
JUNE	298.93	9.039
JULY	295.17	8.106
AUGUST	289.80	6.362
SEPTEMBER	288.08	6.408
OCTOBER	288.41	7.161
NOVEMBER	291.61	7.870
DECEMBER	296.85	9.822

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY
Michael Baker INTERNATIONAL
1650 Lyndon Farm Ct, Ste 101
Louisville, KY
Phone: (502)339-3557
MBAKERINTL.COM

DATE: 02/27/2026
DESIGNED BY: J STITH
DETAILED BY: E TRIMBLE
CHECKED BY

WATER SURFACE ELEVATIONS
CROSSING
OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.00
SHEET NO.:
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: Eric.Trimble DATE PLOTTED: 9/9/2026 10:46:54 AM FILE NAME: ...\Sheets\01_1140_00_SG_HY001.dgn

SPECIAL NOTE FOR PILE LOAD TEST PROGRAM (NOTE A)

BALLARD COUNTY, KENTUCKY/ALEXANDER COUNTY, ILLINOIS ITEM NO. 01-1140.20
US-51 BRIDGE REPLACEMENT PROJECT

1.0 GENERAL SCOPE AND PROGRAM OBJECTIVES

Scope of Work

The scope of the pile load test program includes furnishing and installing all test piles, testing equipment, instrumentation, labor, analyses, and reporting associated with the Design Phase Load Test Program for the US-51 Bridge Replacement Project as outlined in this Special Note, Note A, and the following subordinate Special Notes. Pile materials, fabrication, driving, and dynamic testing are specified in Note B.

- Special Note for Dynamic Pile Testing (Note B)
- Special Note for Static, Axial Pseudo-Static, and Lateral Pseudo-Static Pile Load Testing (Note C)
- Special Note for Ground Improvement Testing (Note D)
- Special Note for Vibration Monitoring (Note E)

Testing shall conform to the applicable ASTM standards, unless otherwise directed by the Engineer. The following sections provide a summary of the load test program, schedule requirements, test pile driving requirements, and Contractor/Department responsibilities.

1.1 Program Objectives

- Evaluate the constructability and foundation performance of Large Diameter Open-End Pipe Piles (LDOEPP) at the East Approach (KY land), West Approach (IL land), and Main Span (River) locations.
- Perform Dynamic Testing, Static Load Testing, and Pseudo-Static Axial (Statnamic) Testing, and Pseudo-Static Lateral (Statnamic) Testing at the East Approach to evaluate constructability, verify design parameters and load distribution, and confirm the required axial resistance.
- Perform Dynamic Testing, Pseudo-Static Axial (Statnamic) Testing, and Pseudo-Static Lateral (Statnamic) Testing at the Main Span to evaluate constructability, verify design parameters, develop load-settlement and load-deflection curves, and confirm the required axial and lateral resistances.
- Evaluate the effect of a constrictor plate on pile performance by testing piles with and without a constrictor plate at the Main Span (River) location and East Approach. Details are described in Section 4.2.
- Perform Dynamic Testing and Pseudo-Static Axial (Statnamic) Testing at the West Approach to evaluate constructability, verify design parameters, and confirm the required axial resistance.
- Develop driving criteria for production piles.

Information obtained from the load testing program will be utilized by the Department to finalize the design of the bridge foundation systems. It is imperative that load testing at the approaches and main span be executed in a consistent, coordinated, and timely manner without delays to the overall US-51 Bridge Replacement Project design and letting schedule. This requirement should be clearly reflected in the contractor's work schedule and progress.

Vibration monitoring on the existing bridge will be required during pile driving, pseudo-static testing, and other vibration-inducing operations as outlined in Note E.

2.0 CONTRACTOR/DEPARTMENT RESPONSIBILITIES

For the purposes of this Special Note, "Department" refers to the Kentucky Department of Highways and/or consultants acting on behalf of the Department of Highways. A representative of the Department may be on hand for any dynamic, static and pseudo-static testing to monitor the contractor that the objectives of the test program are being achieved.

The Contractor is generally responsible for, but not limited to, supplying and driving the test piles, supplying pile driving and testing equipment, instrumentation, and all labor and materials necessary to complete the pile load testing as outlined in these Special Notes. Contractor is responsible for the means and methods of installing the piles, subject to applicable requirements in this Special Note. The Contractor or their independent testing agency are responsible for data collection and analysis. All instrumentation for load tests and data collection shall comply with the appropriate ASTM specifications for calibration requirements. Additionally, to prevent possible delays in the load test program, the Contractor shall have back-up instrumentation in case of damage or other detrimental effects. If the instrumentation is damaged, the Contractor shall recalibrate the devices according to the applicable ASTM specification before use.

The Contractor or their independent testing agency should attempt to correlate results from axial load test methods and lateral load test methods to identify nominal resistance relationships in both axial and lateral resistance at each test area location. These results shall include t-z curves, q-z curves, and p-y curves as applicable.

The Contractor submittals will be made by email and will be simultaneously submitted to the Department. Contact names and email addresses will be provided by the Department to the Contractor prior to the beginning of testing. Detailed experience and qualification requirements for the Contractor or independent testing agency are provided in the Special Note for Dynamic Pile Testing and Special Note for Static and Pseudo-Static Load Testing.

Contractor will be responsible for performing wave equation analyses in accordance with the Special Note for Dynamic Testing for the US-51 Bridge Replacement Project test piles. **Do not mobilize hammer(s) to site until the wave equation analyses and hammer selection has been reviewed and accepted by the Department.**

The project geotechnical reports and technical memorandums are or will be available via the KYTC Division of Construction Procurement Website under “Project Related Information”. The geotechnical reports and technical memorandums are for information only and are not contract documents.

Refer to the available subsurface data within the subsurface data sheets attached to this document.

3.0 SCHEDULE

It is imperative that the US-51 Bridge Replacement Project load tests be performed in a consistent and timely manner without delay to the overall project schedule.

The Contractor shall provide a detailed testing schedule within 30 calendar days after the contract Notice to Begin Work that meets the general schedule requirements listed below. Adjustments may be accepted if the Contractor can demonstrate how adjustments improve testing efficiency and provide data in a timely manner.

Table 1. Milestone Schedule

Item	Test Pile No.	Calendar Days from Notice to Begin (NTB) Work[1,3]
Submit Detailed Test Program Schedule, Testing Firms/Subcontractors, Test Locations, Constrictor Plate Design[2]	PT-1 to PT-7	30
Start of Test Pile Driving	PT-1 to PT-7	150
Completion of All Dynamic, Static, Pseudo-Static, and Lateral Load Tests	PT-1 to PT-7	240
Final Submittal of ALL Test Results including load-settlement response data (e.g. t-z, q-z, and p-y curves)[4]	PT-1 to PT-7	250

[1.] The Department will respond within 10 business days
[2.] Specific submittal requirements for each test are included in the Special Notes for Dynamic Pile Testing and Static and Pseudo-Static Pile Testing.
[3.] For purposes of the Special Note for Pile Load Test Program, Special Note for Dynamic Pile Testing, and Special Note for Static and Pseudo-Static Pile Testing, “business days” relative to Department response times include all days except Saturdays, Sundays, Holidays, as defined in Section 101.03 of the Standard Specifications.

Table 1. Milestone Schedule		
Item	**Test Pile No.**	**Calendar Days from Notice to Begin (NTB) Work[1,3]**
[4.] The Final Submittal of ALL Test Results consolidates and finalizes the progressive submittals required under Notes B and C, incorporating any revisions resulting from Engineer/Department Review.		

4.0 PILE AND TESTING SUMMARY

Perform pile load testing at three areas: the East Approach (KY Land), Main Span (River), and West Approach (IL Land). The Contractor shall provide the actual pile load test locations in a submittal for acceptance by the Department.

While performing the load tests, the Contractor shall provide safety equipment and employ adequate safety procedures. Adequate support for the load test materials, equipment, and ancillary devices shall be provided to prevent them from falling in the event of a release load due to hydraulic failure, test failure, or other cause.

Table 2. Test Area Locations		
Test Area	**Test Pile Nos.**	**[1]Approximate Location**
West Approach (IL Land)	PT-1	STA 2030+75 to STA 2032+00
Main Span (River)	PT-2, PT-3	STA 2055+00 to STA 2057+00
East Approach (KY Land)	PT-4, PT-5, PT-6, PT-7	STA 2065+00 to STA 2067+50
[1.] Confirm with Department that test pile locations do not interfere with proposed bridge piers		

See attached Pile Load Test Program Drawings for test areas.

Table 3. Pile Properties and Testing Assignments

Test Pile No.	Location	Pile Type[1,5,6]	Pile Size (in.)[3]	Nominal Wall (in.)[7]	Order Length (ft)	Qty	Initial Driving Criteria[9]		Extended Driving Criteria[9]		Testing Assignment			
							Estimated Pile Tip Elevation (ft)	Target Nominal Axial Resistance[4] (kip)	Approximate Pile Tip Elevation (ft)	Approximate Nominal Axial Resistance[4] (kip)	Dynamic	Static[8]	Pseudo-Static	
													Axial	Lateral[10]
PT-1	West Approach (IL Land)	LDOEPP	48	1.0	185	1	135	5000	--	--	X		X	
PT-2	Main Span (River)	LDOEPP[2]	72	1.5	175	1	165	7500	150	8500	X		X	X
PT-3	Main Span (River)	LDOEPP	72	1.5	220	1	105	7500	--	--	X		X	
PT-4	East Approach (KY Land)	LDOEPP	48	1.0	190	1	125	5800	--	--	X	X		
PT-5	East Approach (KY Land)	LDOEPP	48	1.0	190	1	125	5800	--	--	X		X	X
PT-6	East Approach (KY Land)	LDOEPP[2]	48	1.0	175	1	155	5500	140	5800	X	X		
PT-7	East Approach (KY Land)	LDOEPP[2]	48	1.0	175	1	155	5500	140	5800	X		X	

Notes:
1. All piles are Large Diameter Open-End Pipe Piles (LDOEPP).
2. Testing including a Constrictor Plate.
3. Pipe pile sizes are based on outside diameter.
4. Target and Approximate Nominal Axial Resistances are based on plugged conditions and are anticipated after setup, not during initial driving.
5. Pile yield stress for US-51 Bridge Replacement Project (pipe piles) is 50 ksi.
6. Steel for pipe piles shall conform to ASTM A252, Grade 3 (F_y = 50 ksi), for welded or seamless steel pipe piles.
7. The wall thickness at any point shall not be more than 12.5% under the specified nominal wall thickness. The nominal thickness of ordered piles shall match this table. Oversized nominal wall thickness is not permitted.
8. Per ASTM D1143, the load test apparatus for static load tests shall be designed to safely apply a test load of at least 120% of the Target Nominal Axial Resistance. The Modified Davisson Method and the 5 Percent Method shall be implemented to evaluate the nominal geotechnical resistance.
9. Pile cutting shoes conforming to AASHTO M-103 or ASTM A-148 may be required.
10. An alternate to perform the lateral load test via ASTM D3966 is presented in Special Note C “Special Note for Static and Pseudo-Static Pile Testing” in Section 3.3

4.1 TEST PILE DRIVING CRITERIA

Dynamic pile testing will be performed on all test piles. Use the following pile driving criteria for test piles:

1. Drive piles until one of the following occurs:
    - The End of Driving (EOD) Resistance of 83% of the Target Nominal Axial Resistance (TNAR) listed in the Initial Driving Criteria in Table 3, above. This assumes a setup factor (SF) of 1.2 (= 100% / 83%). This setup factor may be adjusted based on the actual setup observed as testing proceeds.
    - Driving stress exceeds 45 ksi (90% of yield stress).
    - A set of 0.1 inch/blow or less (i.e. a blow count of 10 blows per inch or greater) is obtained.
2. Perform restrikes at 48 and 96 hours (if necessary) within dynamic pile testing and evaluate as follows:
    - If the Beginning of Restrike (BOR) resistance is within 10% or greater than the Target Nominal Axial Resistance (TNAR), stop driving and perform applicable static or pseudo-static testing or begin extended driving program on applicable piles per Table 3.
    - If driving was terminated based on either the driving stress or set (i.e. blow count) criterion and the BOR is not within 10% of or greater than the TNAR: Contact the Department for direction.
3. If BOR is not within 10% or greater of the TNAR, calculate a new setup factor (SF = BOR/EOD) and continue driving until one of the following occurs:
    - The EOD = TNAR / SF, based on dynamic pile testing.
    - Driving stress exceeds 45 ksi (90% of yield stress).
    - A set of 0.1 inch/blow (i.e. a blow count of 10 blows per inch) is obtained.
4. Perform restrikes at 48 and 96 hours (if necessary) within dynamic pile testing and evaluate as follows:
    - If the Beginning of Restrike (BOR) resistance is within 10% of or greater than the Target Nominal Axial Resistance (TNAR), stop driving and perform applicable static or pseudo-static testing or begin extended driving program on applicable piles per Table 3.
    - If driving was terminated based on either the driving stress or set (i.e. blow count) criterion and the BOR is not within 10% of or greater than the TNAR: Contact the Department for direction.
    - If BOR is not within 10% of or greater than TNAR: Contact the Department for direction.

If equipment failure, malfunction, or other detrimental effect occurs during test pile driving, the Contractor shall notify the Department and provide details of their corrective action prior to redriving test piles.

A flowchart illustrating this test pile driving criteria is provided as an attachment to this Special Note designated as Figure 1.

As stated in the US-51 Bridge Replacement Project Special Note for Dynamic Testing (Note B), the maximum number of blows during restrike testing is 5. **Excessive blows, or other operations adversely affecting the determination of soil setup, may require additional wait/setup time and additional restrike testing at no cost to the Department.**

Upon completion of the initial driving and applicable static, lateral, and/or pseudo-static tests an Extended Pile Driving program will be performed to drive the piles with constrictor plates deeper. The extended driving criteria will be performed using the following criteria:

1. A 96-hour wait period will be observed between the end of the static, pseudo-static, and lateral test and the start of the extended driving.

2. At the beginning of the extended driving, restrike data will be obtained from the initial hammer blows to the pile. For payment purposes, the cost of the restrike dynamic testing is incidental to the initial drive dynamic testing for the extended driving. The Dynamic Testing specialist will ensure that sufficient data is obtained and stored at the start of the driving to obtain this information.
3. If driving stresses greater than 55 ksi (110% of the yield stress) are measured during the driving based upon dynamic pile testing data generated in the field, terminate driving. Otherwise, drive until a blow count of 20 blows/inch or a set of 1/20 inch per blow (at the maximum power/fuel setting for the hammer) is achieved or until directed by the Department to stop.
4. Allow the pile to set up and perform additional dynamic testing at the Beginning of Restrike (BOR) at 96 hours after the end of extended driving.

A flowchart illustrating the extended pile driving program is provided as an attachment to this Special Note designated as Figure 2.

For pipe piles without a constrictor plate, measure the amount of soil/sediment inside the pile during stoppages in pile driving operation. Report the elevations of the soil/sediment during each stoppage in the preliminary and final summary reports as defined in Special Note B.

4.2 CONSTRICTOR PLATE (ARTIFICIAL PLUG)

A constrictor plate will be installed on test piles as indicated in Table 3 to force the piles into a plugged condition. The constrictor plate will be installed within the pipe pile prior to driving at a distance of 35 feet above the pile tip for the 72-inch diameter pipe piles and a distance of 55 feet above the pile tip for the 48-inch diameter pipe piles based on the Estimated Pile Tip Elevation per Initial Driving Criteria in Table 3. The plug will consist of a circular steel plate with a 12-inch diameter annulus in the center to allow soft sediments along the river bottom to pass through (see detail sheet PL-4 attached to this document for a general example). The constrictor plate shall be designed by and/or for the Contractor and by a licensed professional engineer with a minimum of 5 years of structural design experience with piles. Inspection of the constrictor plate will be performed by the Department based on the approved design. The cost of the constrictor plate design is considered incidental to the load test program. Constrictor plates will be designed with sufficient thickness and stiffeners to support the expected loads during pile driving and load testing. Constrictor plate design, including connection details, and locations shall be provided to the Engineer for review and shall be included in the Contractors' initial submission.

5.0 REMOVAL AND SITE RESTORATION

Following completion of the load test program, cut off all test piles, reaction piles, and any other temporary piles or temporary structures used to drive piles or perform the pile testing program at mudline within the river, at a minimum of 3 feet below ground surface for test piles on land, or completely remove them where possible. These materials will become property of the contractor and shall be removed from the site. At each test area, grout interior of all test, reaction, and platform piles to the mudline elevation for test piles in the river and to 3 feet below ground surface elevation for test piles on land. All costs associated with cutting off test piles and removing them from the site are incidental to the applicable "Test Piles – Furnish" bid item. All costs associated with cutting off and grouting reaction piles, and any other temporary piles or temporary structures used to perform the pile testing program and removing these materials from the site are incidental to the applicable static test or pseudo-static test bid item.

6.0 MEASUREMENT AND PAYMENT

General

US-51 Bridge test pile items are summarized in the following sections. Pile Testing items are included in the Special Notes for Dynamic Load Testing and Special Note for Static and Pseudo-Static Load Testing. Vibration monitoring is included in the Special Note for Vibration Monitoring. Any Department directed retesting will be paid under the applicable bid item. Additional testing due to equipment failure is not compensable to the Contractor.

6.1 Furnish Equipment for Pile Test Program

The Contractor's cost to supply and deliver all equipment for pile driving and testing, including mobilization, will be included under this item. Do not mobilize driving hammer(s) to the site until wave equation analyses and hammer selection have been reviewed and accepted by the Department.

6.2 Test Piles — Furnish

Measured per linear foot. Payment includes all material, constrictor plates, driving shoes, cutting, welding, and all splices necessary to achieve the driving criteria including extended driving, except for additional splices per Section 6.4. The Department will pay for the order lengths provided in Table 3 regardless of the quantity of test piles installed. The Contractor may not furnish piling to be used as test piles from the Contractor's surplus of cut-offs and overruns from a previous project. The Department will not pay for pile splices used to make up approved piles for the Contractor's convenience. All costs associated with removal and grouting as defined in Section 5.0 are incidental to the applicable "Test Piles – Furnish" bid item.

6.3 Test Piles — Install

Measured per linear foot from the mudline to final pile tip elevation. Assumed mudline elevations for the Main Span River is approximately 260 feet. However, the Department will pay for installation based on the actual mudline elevations encountered at each individual test pile location. **Bidders are strongly advised to consider that hard driving with very high blow counts will be encountered and to include any associated costs in their bid prices.**

6.4 Splice Test Piles

When cutting and splicing of the test piles is required to accomplish pile testing and directed by the Department, the additional splices will be paid under the applicable Splice Test Piles pay item. The cost for cutting is incidental to the bid price for splices. **All other splices are incidental to the Test Piles — Furnish bid items.**

6.5 Payment

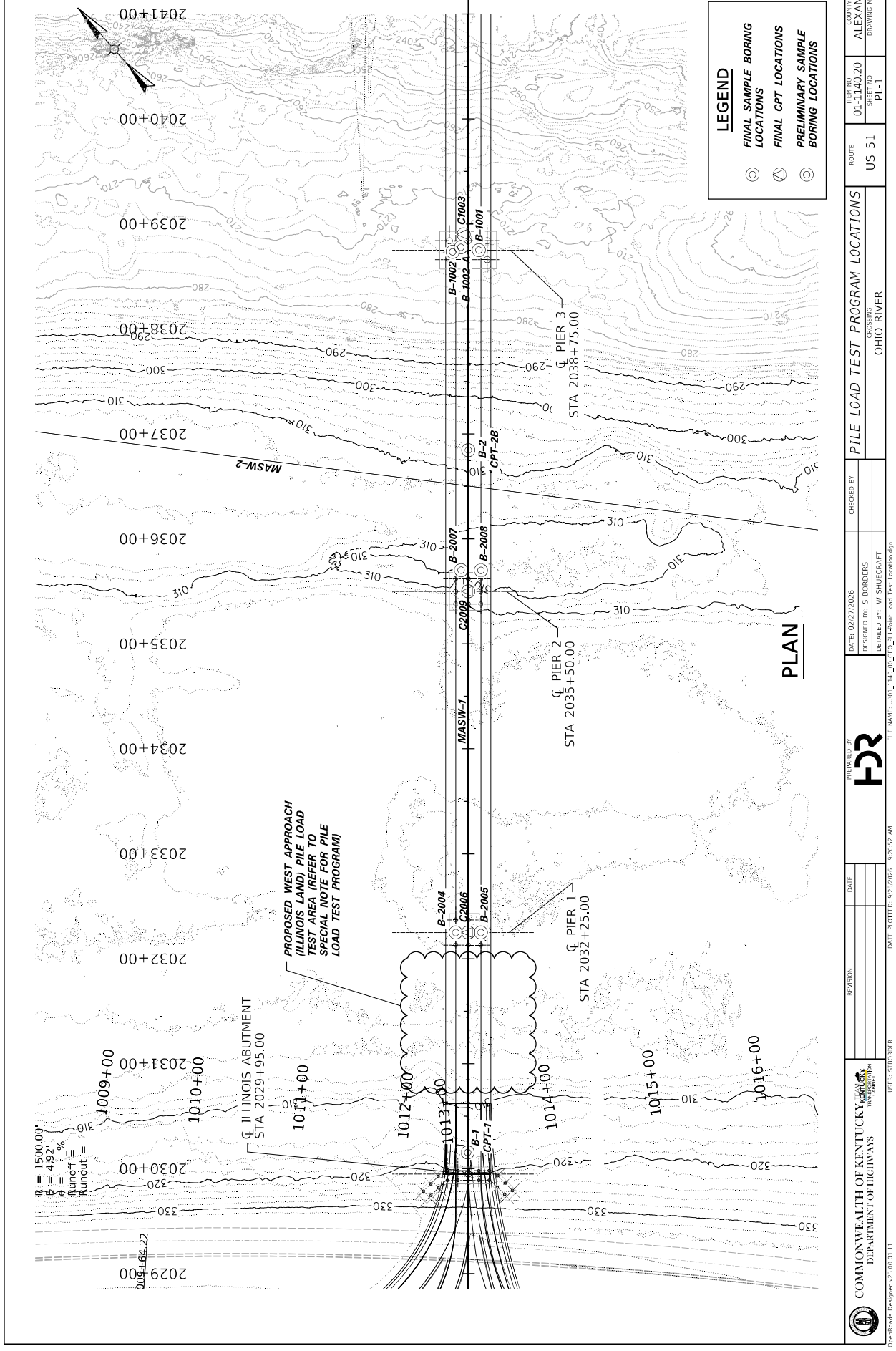
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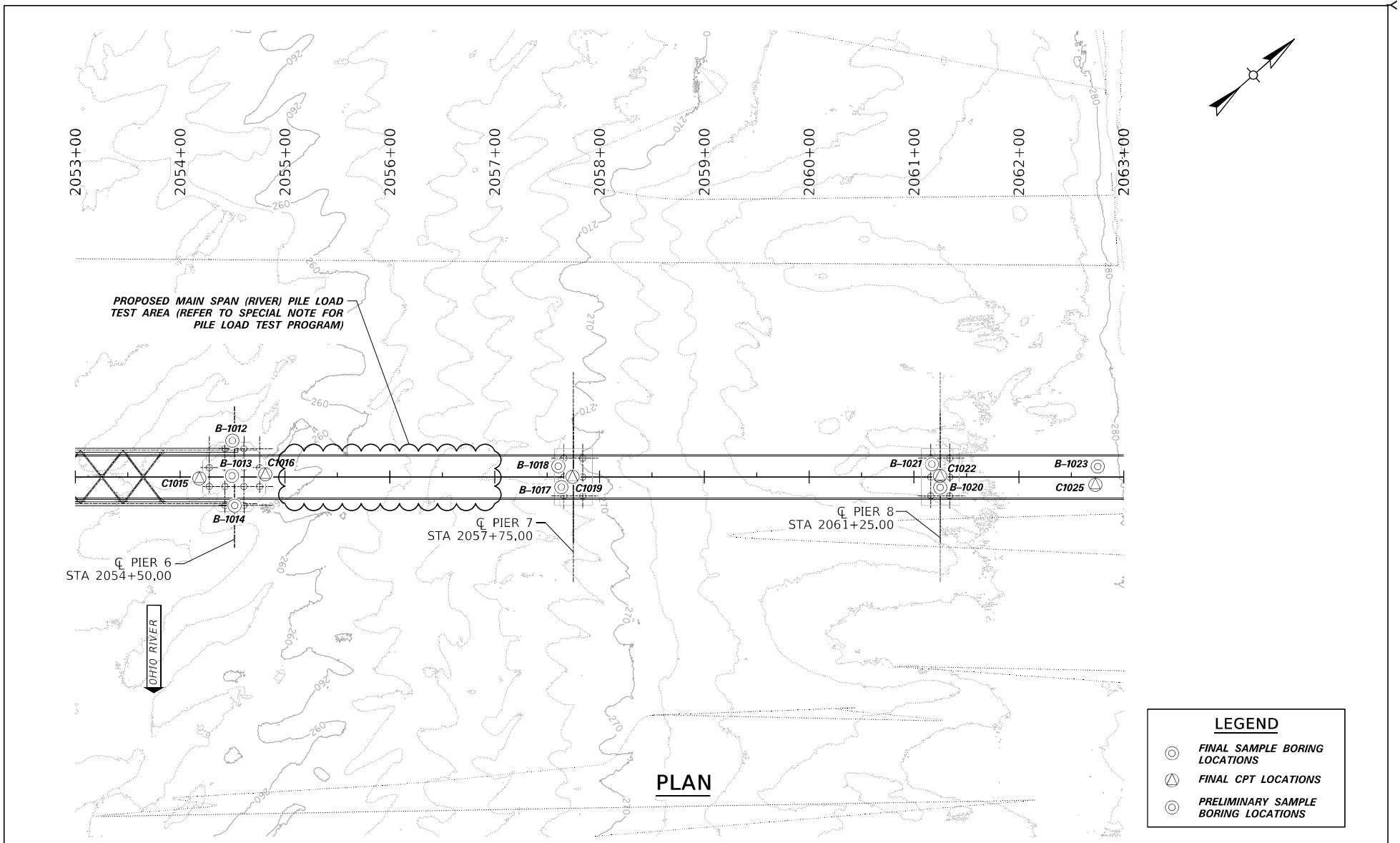
Table 4. Payment Table

Bid Item Code	Pay Item Description	Unit
24548EC	Furnish Equipment for Pile Test Program	LS
08033	Test Piles — Furnish, 48-inch LDOEPP (1.0" wall, with Constrictor Plate)	LF
08033	Test Piles — Furnish, 48-inch LDOEPP (1.0" wall, without Constrictor Plate)	LF
08033	Test Piles — Furnish, 72-inch LDOEPP (1.5" wall, with Constrictor Plate)	LF
08033	Test Piles — Furnish, 72-inch LDOEPP (1.5" wall, without Constrictor Plate)	LF
08033	Test Piles — Install, 48-inch LDOEPP	LF
08033	Test Piles — Install, 72-inch LDOEPP	LF
24552EC	Splice Test Piles, 48-inch LDOEPP	Each
24552EC	Splice Test Piles, 72-inch LDOEPP	Each

Additional pay items for Dynamic Pile Testing are in Note B. Pay items for Static, Pseudo-Static, and Lateral Testing are in Note C. Pay items for Vibration Monitoring are in Note E.

END OF SPECIAL NOTE FOR PILE LOAD TEST PROGRAM
US-51 BRIDGE REPLACEMENT PROJECT


LEGEND
FINAL SAMPLE BORING LOCATIONS
FINAL CPT LOCATIONS
PRELIMINARY SAMPLE BORING LOCATIONS
PLAN
PROPOSED WEST APPROACH (ILLINOIS LAND) PILE LOAD TEST AREA (REFER TO SPECIAL NOTE FOR PILE LOAD TEST PROGRAM)
℄ ILLINOIS ABUTMENT STA 2029+95.00
℄ PIER 1 STA 2032+25.00
℄ PIER 2 STA 2035+50.00
℄ PIER 3 STA 2038+75.00
B-2004
C2006
B-2005
B-1
CPT-1
MASW-1
C2009
B-2007
B-2008
B-2
CPT-2B
MASW-2
B-1002
B-1002-A
C1003
B-1001
PILE LOAD TEST PROGRAM LOCATIONS
CROSSING
OHIO RIVER
ROUTE
US 51
ITEM NO.
01-1140.20
SHEET NO.
PL-1
COUNTY OF
ALEXANDER
DRAWING NUMBER
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
PREPARED BY:
HDR
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY
DATE: 02/27/2026
REVISION
DATE
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USER: S BORDER
DATE PLOTTED: 9/25/2026 9:20:52 AM
OpenRoads Designer v23.00.03.11
US 51 BRIDGE REPLACEMENT



PLAN

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

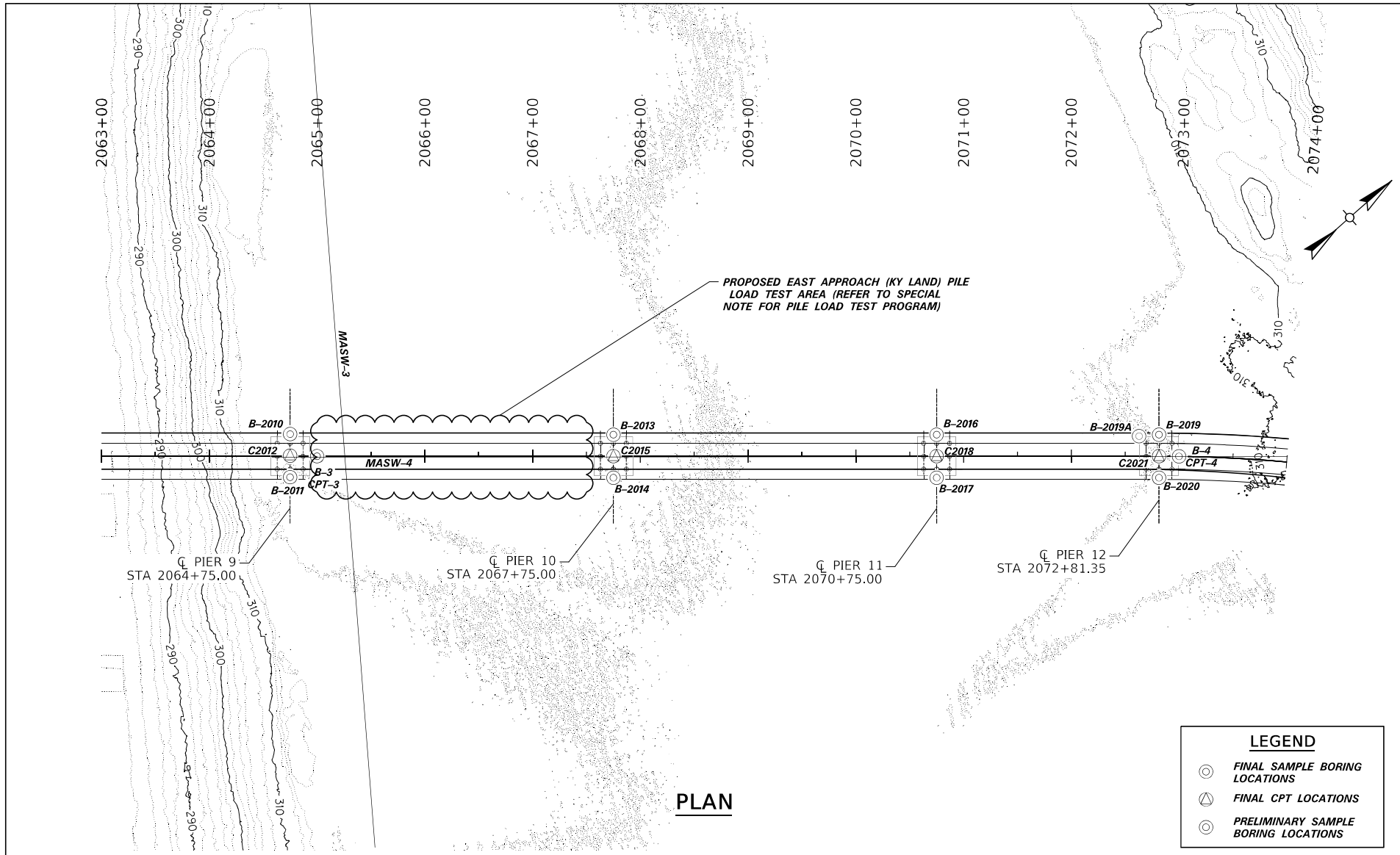
PREPARED BY HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY

PILE LOAD TEST PROGRAM LOCATIONS
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-2
COUNTY OF: BALLARD
DRAWING NUMBER:

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PLAN

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

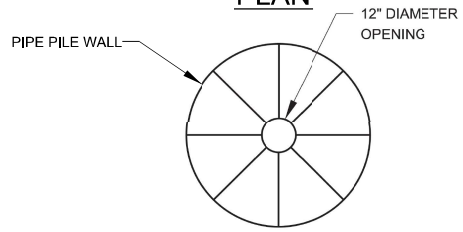
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DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

PILE LOAD TEST PROGRAM LOCATIONS
CROSSING: OHIO RIVER

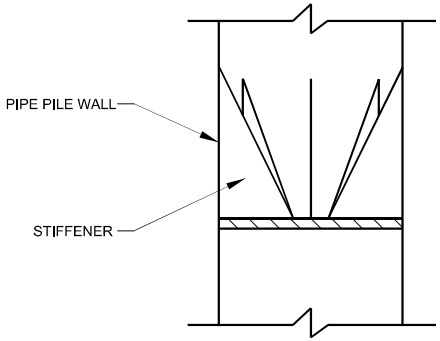
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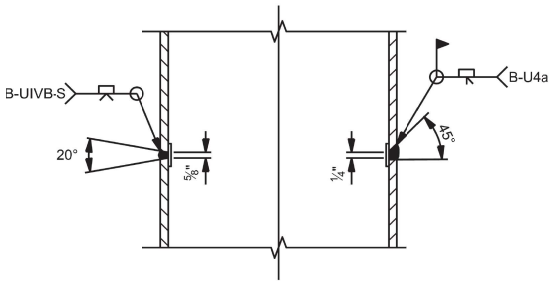
PLAN



PROFILE

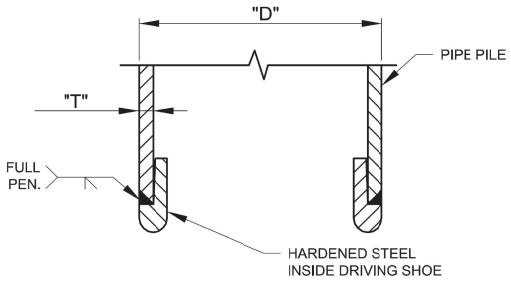


ARTIFICIAL PLUG
EXAMPLE
NOT TO SCALE



SHOP SPLICE FIELD SPLICE

DETAIL 4
PILE SPLICE DETAIL
NOT TO SCALE



DRIVING SHOE DETAIL
NOT TO SCALE

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

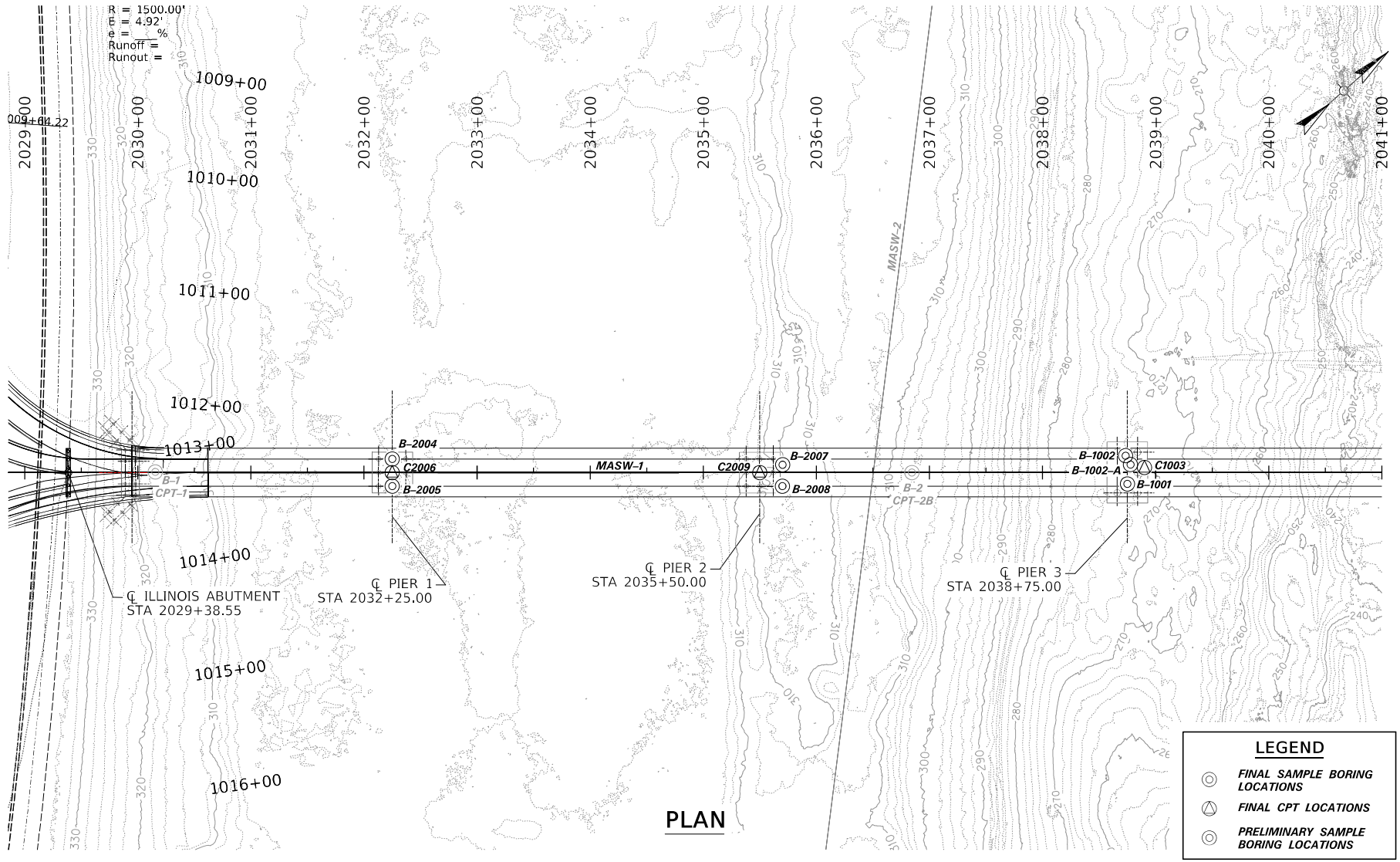
PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

DETAILS
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-4
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: TLYNN DATE PLOTTED: 9/30/2026 11:39:40 AM FILE NAME: ...\01_1140_00_GEO_PL4-Pile Load Test Details.dgn



PLAN

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

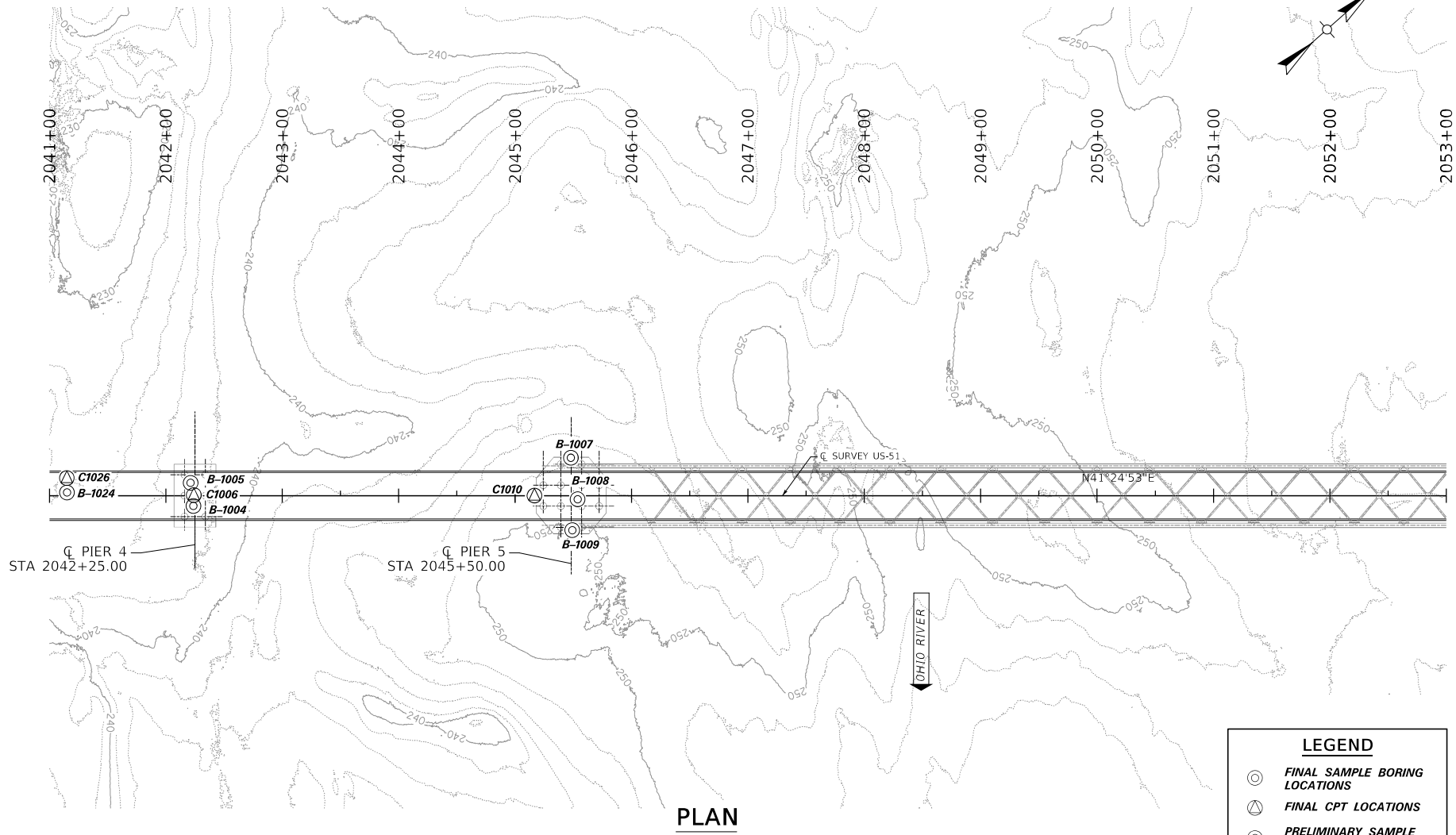
PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

BORING LAYOUT
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-5
COUNTY OF: ALEXANDER
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



PLAN

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

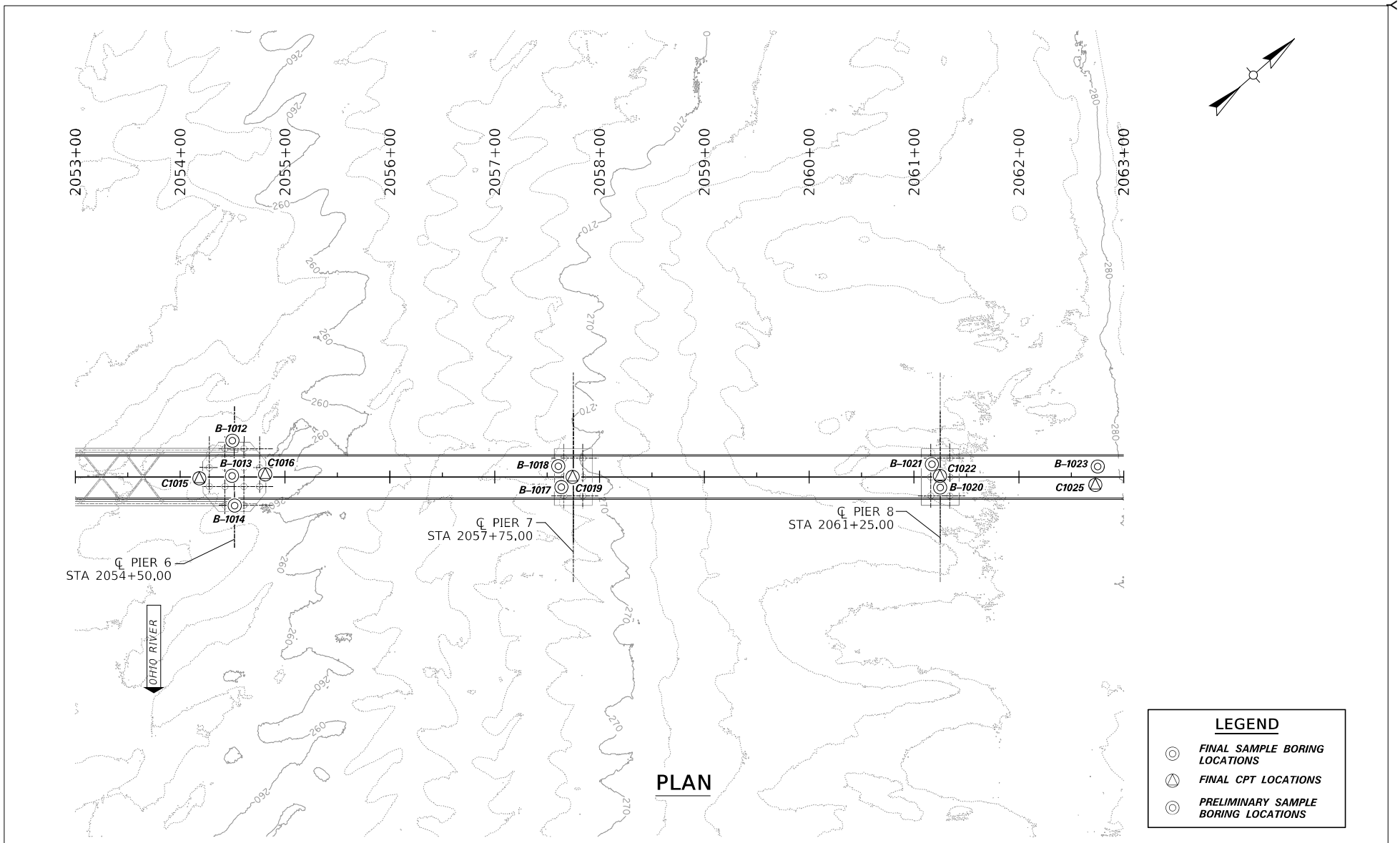
PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

BORING LAYOUT
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-6
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

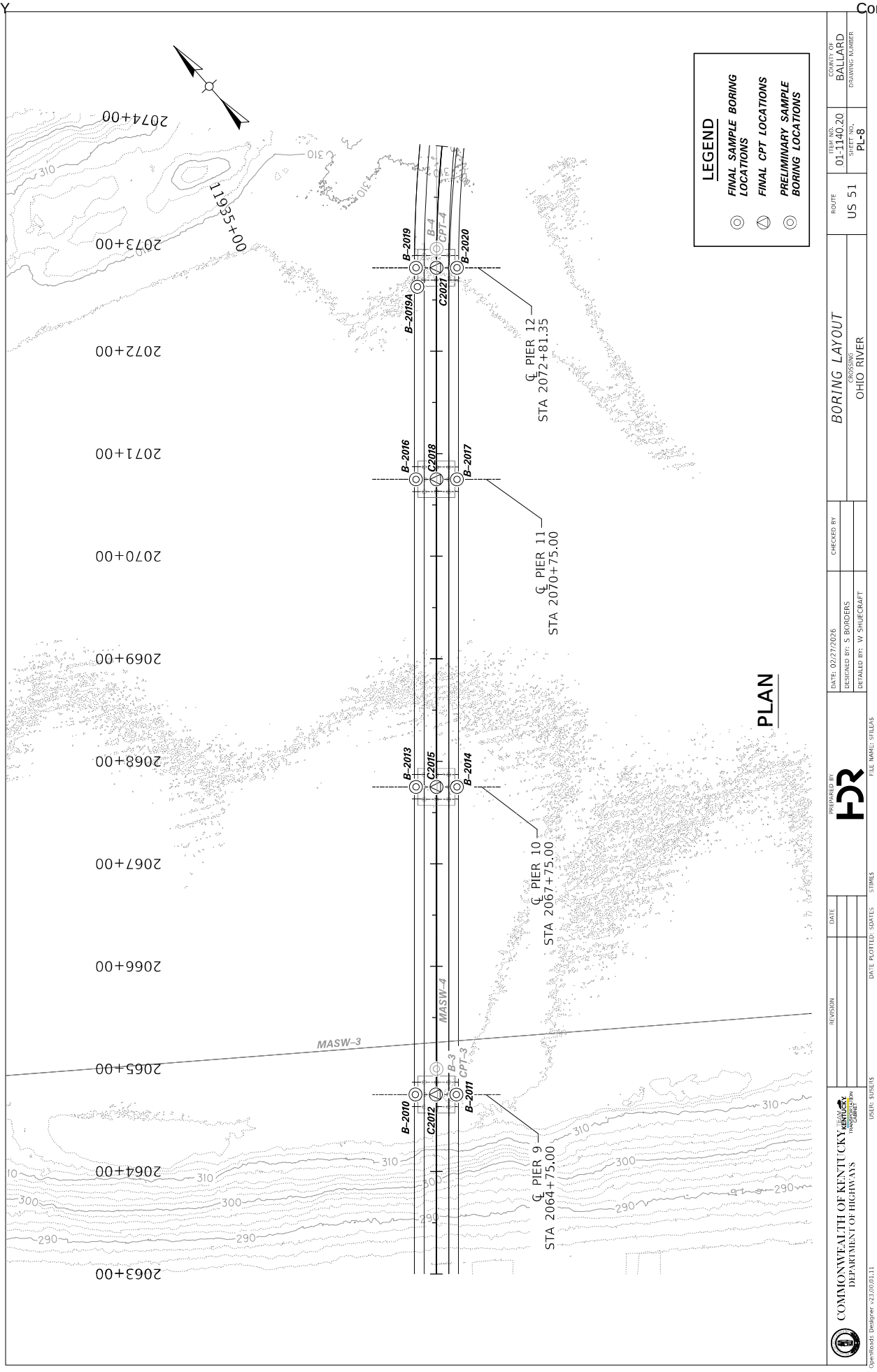
PREPARED BY: HDR

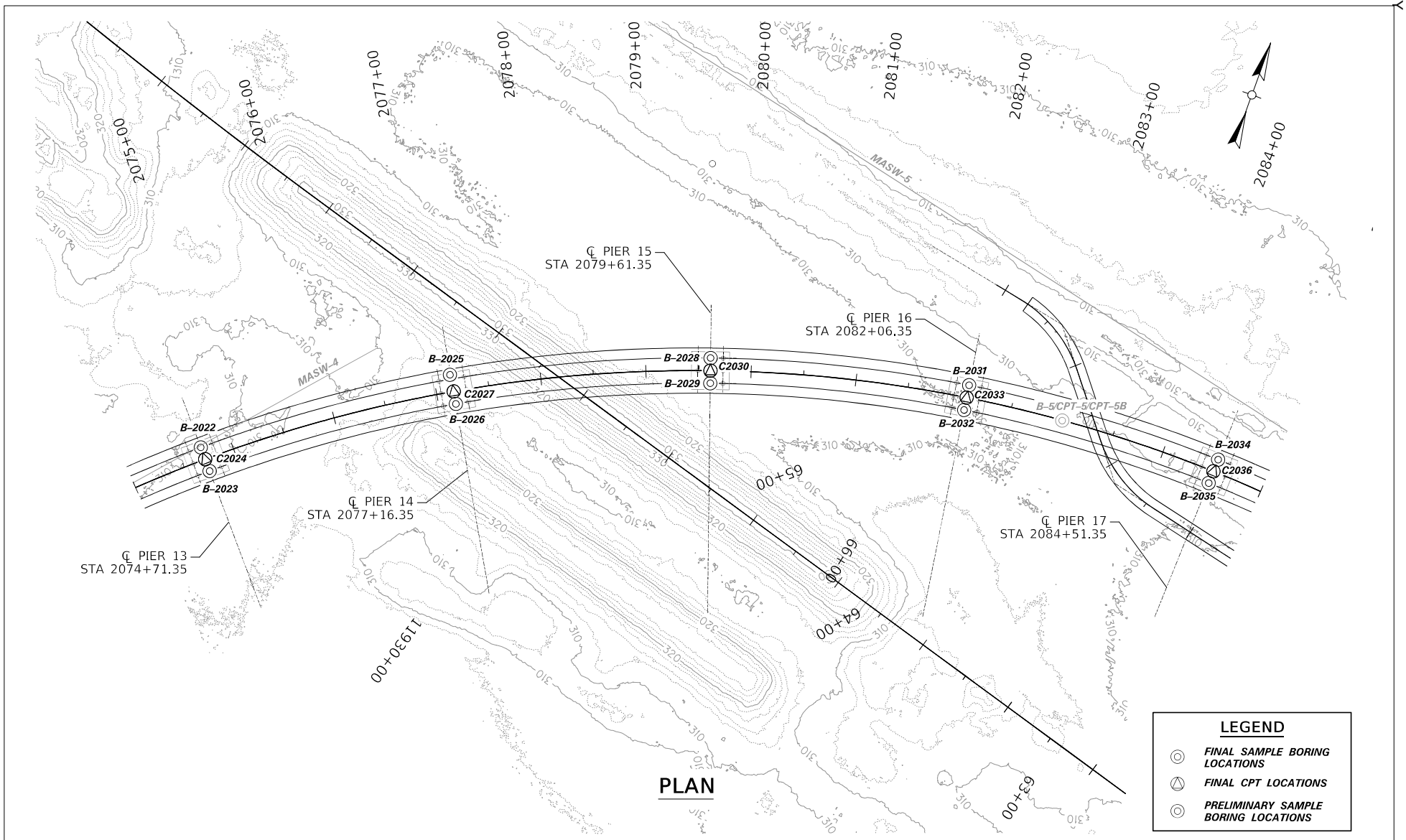
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

BORING LAYOUT
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-7
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILEA$


LEGEND
FINAL SAMPLE BORING LOCATIONS
FINAL CPT LOCATIONS
PRELIMINARY SAMPLE BORING LOCATIONS
PLAN
BORING LAYOUT
CROSSING
OHIO RIVER
ROUTE
US 51
ITEM NO.
01-1140.20
SHEET NO.
PL-8
COUNTY OF
BALLARD
DRAWING NUMBER
PREPARED BY:
HDR
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:
REVISION
DATE
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TRANSPORTATION CABINET
DATE PLOTTED: <DATES>
USER: SUSCHS
FILE NAME: SHEETAS
OpenRoads Designer v23.00.03.11
B-2019
B-4
CPT-4
B-2020
B-2019A
C2027
G PIER 12
STA 2072+81.35
B-2016
C2018
B-2017
G PIER 11
STA 2070+75.00
B-2013
C2015
B-2014
G PIER 10
STA 2067+75.00
MASW-4
MASW-3
B-3
CPT-3
B-2010
C2012
B-2011
G PIER 9
STA 2064+75.00
2074+00
2073+00
2072+00
2071+00
2070+00
2069+00
2068+00
2067+00
2066+00
2065+00
2064+00
2063+00
310
300
290
US 51 BRIDGE REPLACEMENT



PLAN

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

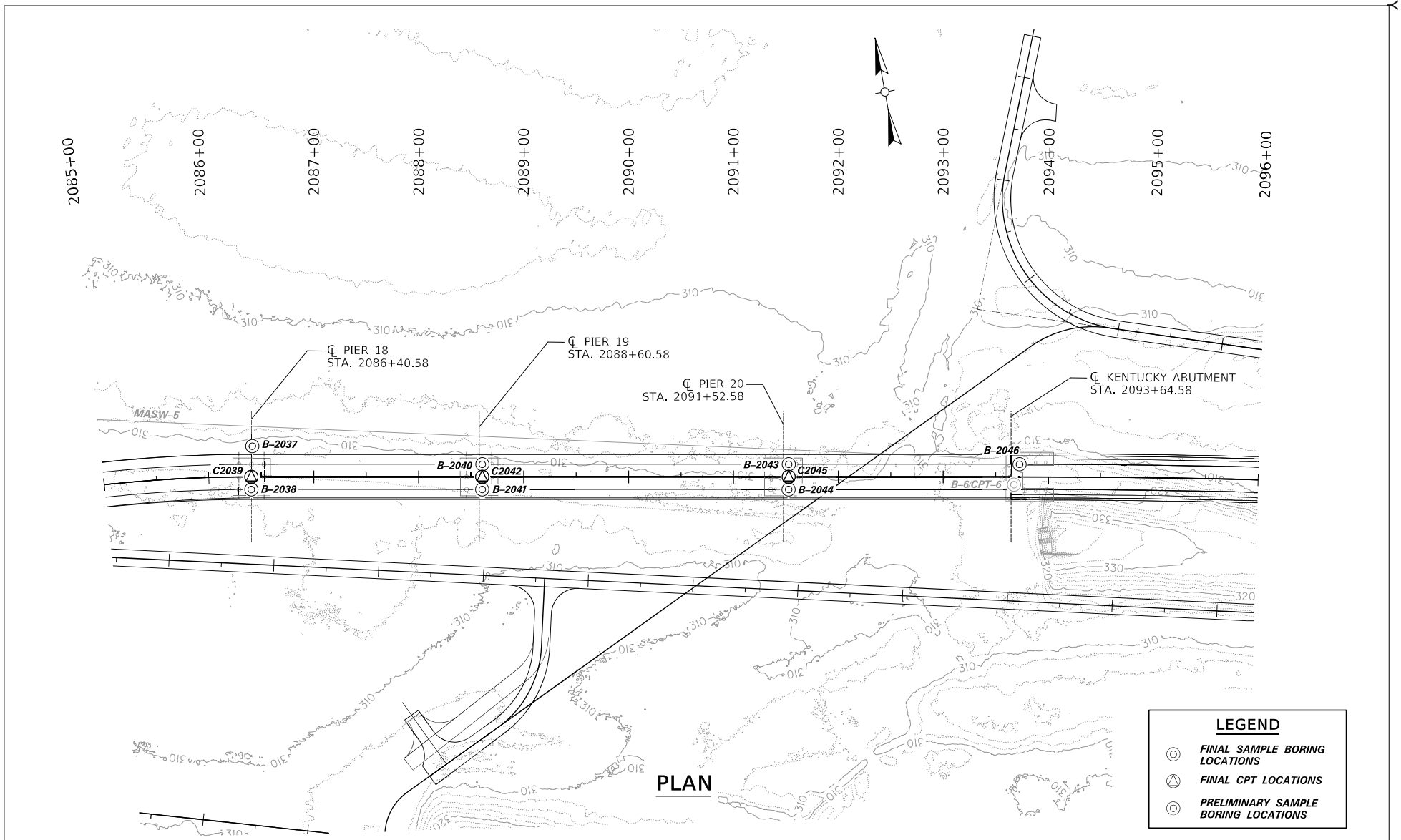
PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

BORING LAYOUT
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-9
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

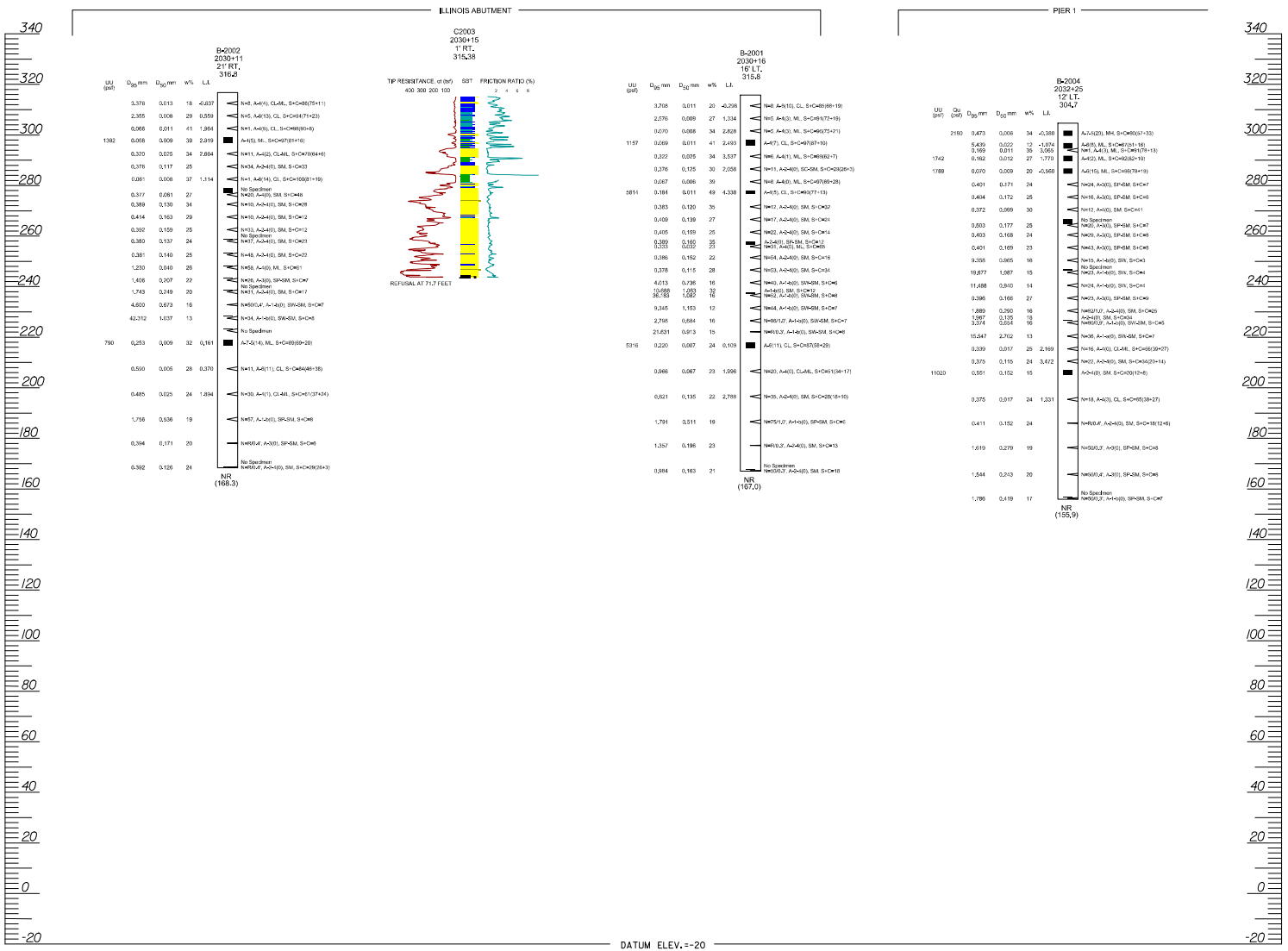
PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

BORING LAYOUT
CROSSING: OHIO RIVER

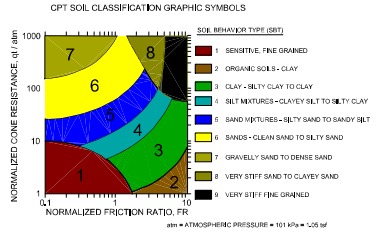
ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-10
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

SEE SHEET NO. S036 FOR CPT DETAILS



DATUM ELEV.=-20

COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS (TRANSPORTATION CABINET)	REVISION	DATE	PREPARED BY HDR	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE US 51	ITEM NO. 01-1140.20	COUNTY OF BALLARD
				DESIGNED BY: S BORDERS		CROSSING OHIO RIVER		SHEET NO. PL-11	DRAWING NUMBER
				DETAILED BY: T LYNN					

US 51 BRIDGE REPLACEMENT

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

PIER 1

PIER 2

B-2005
2032+25
12' RT.
304.7

C2006
2032+25
CL
304.6

C2009
2035+50
CL
311.7

B-2007
2035+70
7' LT.
309.5

B-2008
2035+70
12' RT.
309.2

REFUSAL AT 58.4 FEET

REFUSAL AT 75.0 FEET

NR (156.2)

NR (11.2)

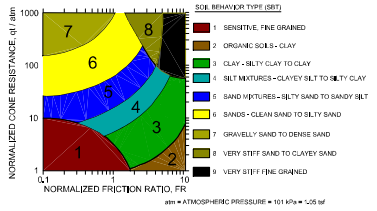
NR (155.6)

DATUM ELEV.=-20

NOTE:

SEE SHEET NO. S036 FOR CPT DETAILS

CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS



US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

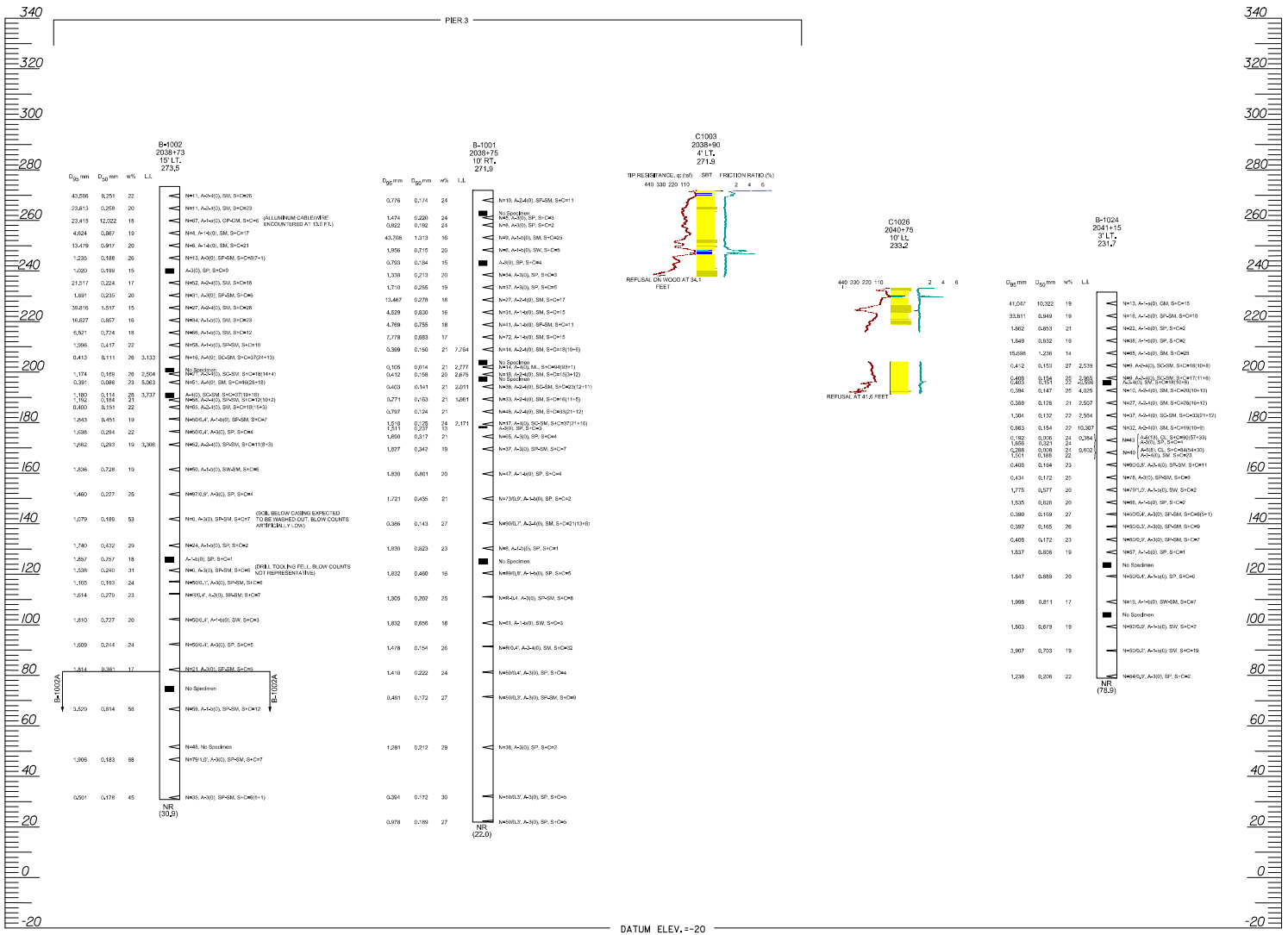
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN

CHECKED BY:

BORING PROFILE
CROSSING: OHIO RIVER

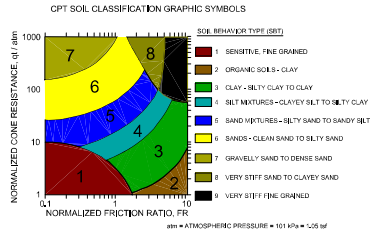
ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-12
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

SEE SHEET NO. S037 FOR CPT DETAILS



US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS (TRANSPORTATION CABINET)	REVISION	DATE	PREPARED BY HDR	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE US 51	ITEM NO. 01-1140.20	COUNTY OF BALLARD
				DESIGNED BY: S BORDERS		CROSSING OHIO RIVER		SHEET NO. PL-13	DRAWING NUMBER
				DETAILED BY: T LYNN					

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

PIER 4

B-1005
2042+21
11' LT.
238.6

C1006
2042+24
CL
238.6

B-1004
2042+24
9' RT.
237.7

PIER 5

C1010
2045+17
CL
244.6

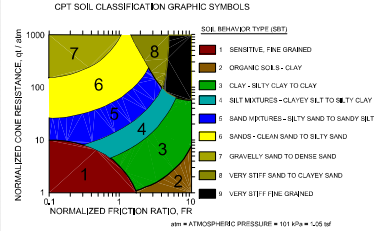
B-1007
2045+48
33' LT.
246.5

DATUM ELEV.=-80

NOTE:

SEE SHEET NO. S037 FOR CPT DETAILS

CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDERS		CROSSING OHIO RIVER	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN				SHEET NO. PL-14	DRAWING NUMBER

US 51 BRIDGE REPLACEMENT

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

PIER 5

B-1009
2045+49
30' RT.
242,6

B-1008
2045+54
3' RT.
243,7

PIER 6

C1015
2054+18
1' RT.
256,0

TIP RESISTANCE, qt (tsf) SBT FRICTION RATIO (%)

REFUSAL AT 75.9 FEET

MATCHLINE "A"

MATCHLINE "A"

NR (-98.3)

NR (-159.0)

DATUM ELEV.=-80

NOTE:

SEE SHEET NO. S037 FOR CPT DETAILS

CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS

NORMALIZED CONE RESISTANCE, qt / atm

NORMALIZED FRICTION RATIO, FR

SOIL BEHAVIOR TYPE (SBT)

1 SENSITIVE, FINE GRAINED
2 ORGANIC SOILS - CLAY
3 CLAY - SILTY CLAY TO CLAY
4 SILT MIXTURES - CLAYEY SILT TO SILTY CLAY
5 SAND MIXTURES - SILTY SAND TO SANDY SILT
6 SANDS - CLEAN SAND TO SILTY SAND
7 GRAVELLY SAND TO DENSE SAND
8 VERY STIFF SAND TO CLAYEY SAND
9 VERY STIFF FINE GRAINED

atm = ATMOSPHERIC PRESSURE = 101 kPa = 1.05 tsf

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY HDR

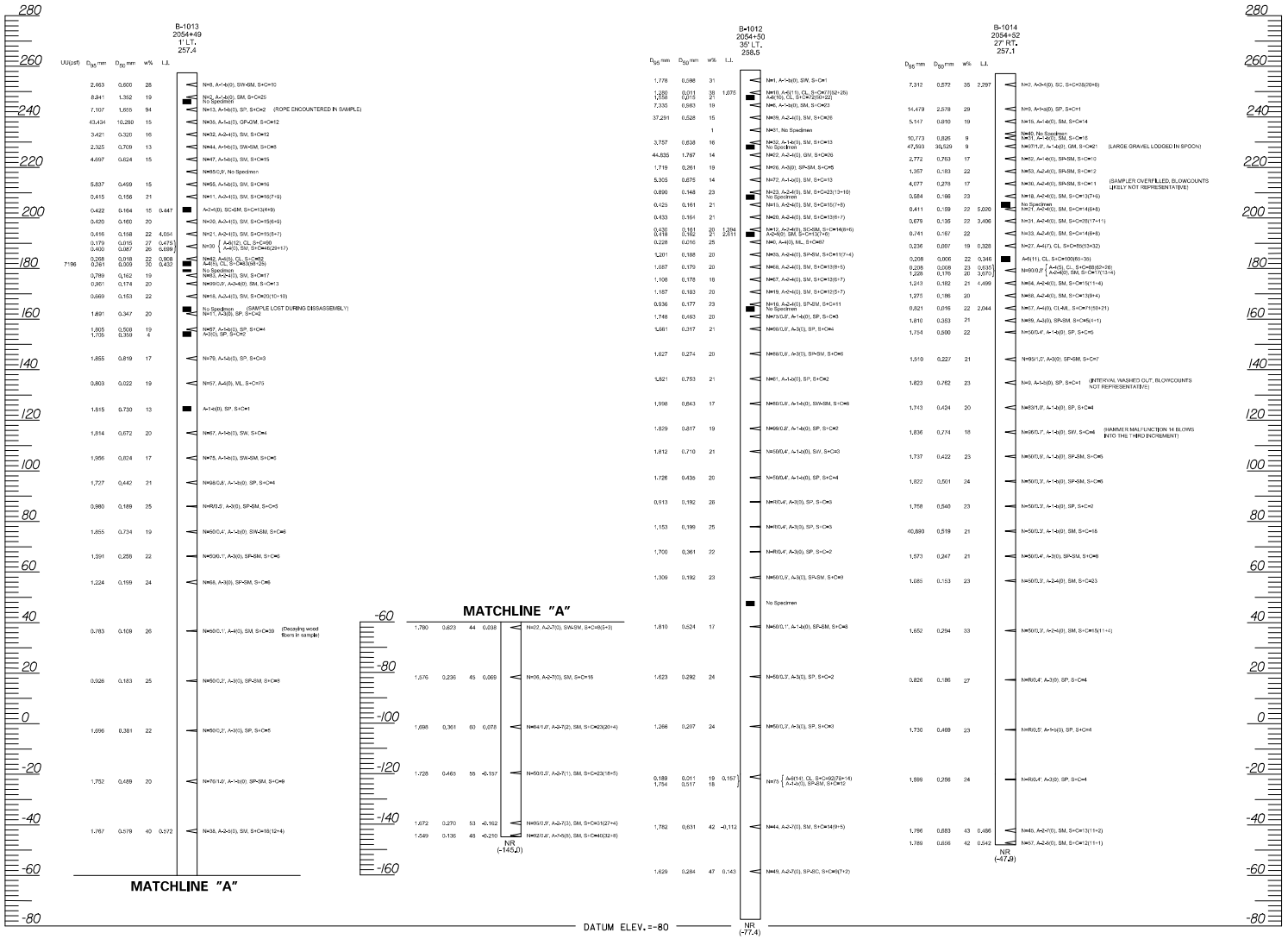
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN
CHECKED BY

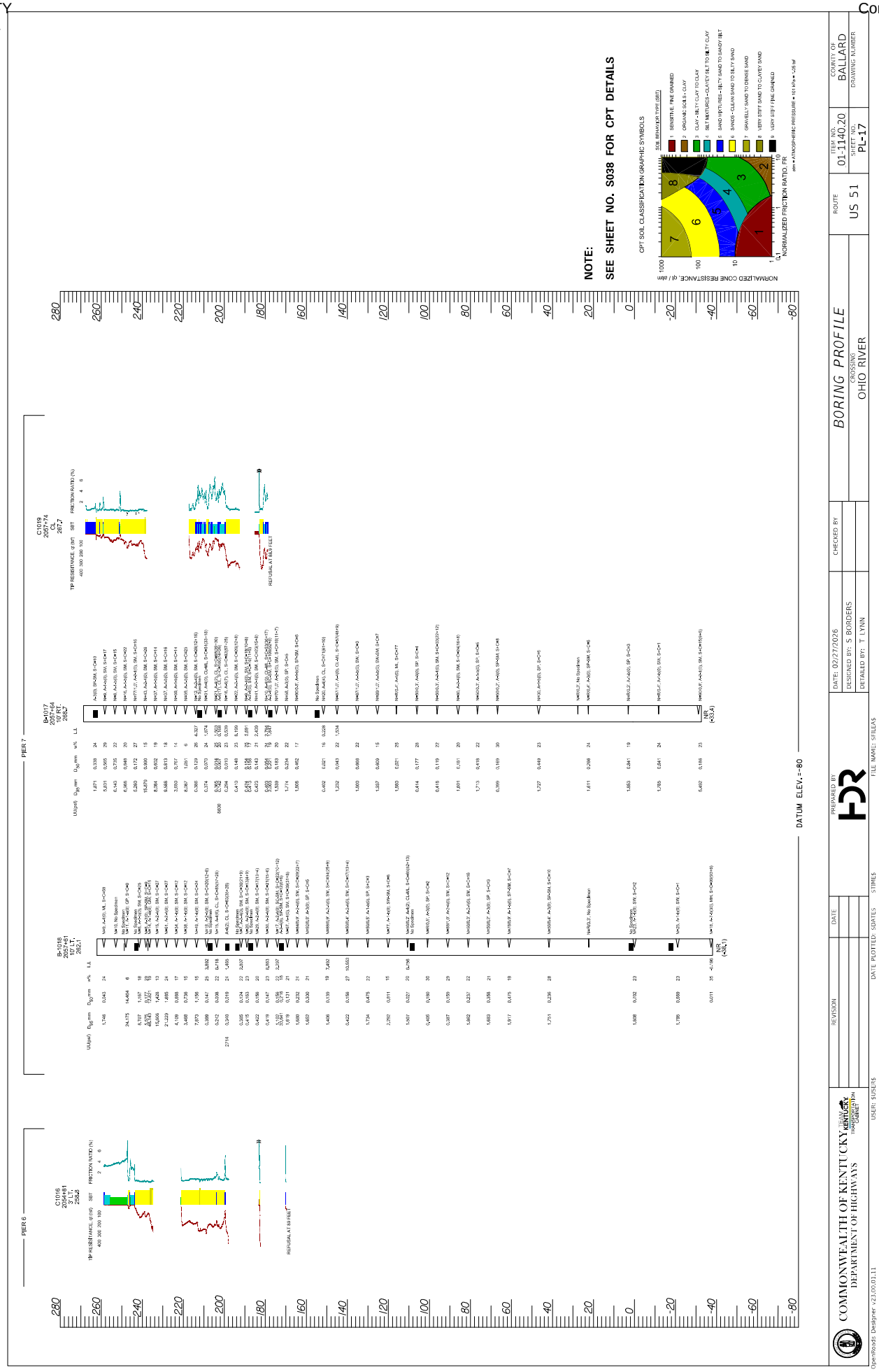
BORING PROFILE
CROSSING: OHIO RIVER

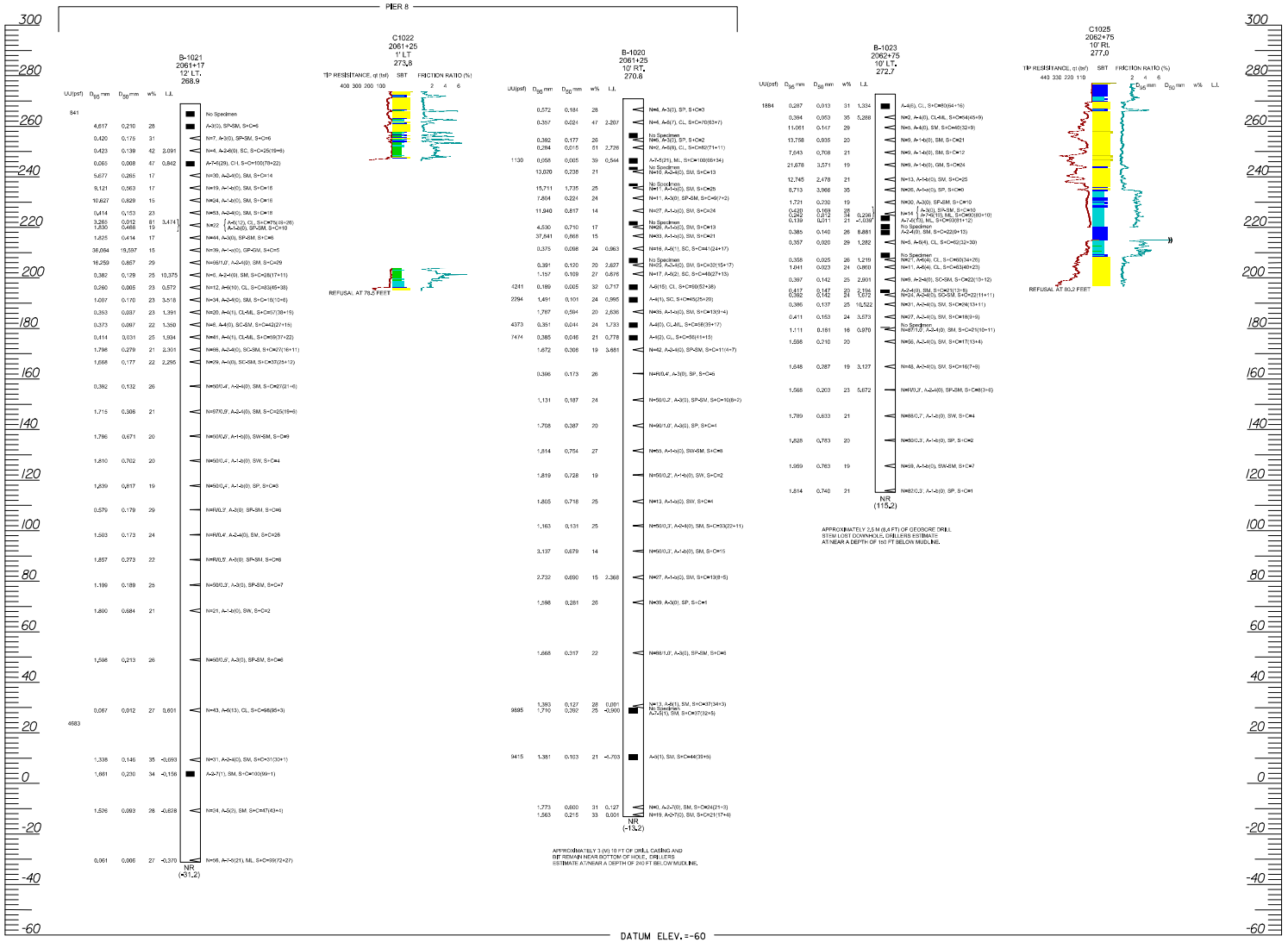
ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-15
COUNTY OF: BALLARD
DRAWING NUMBER

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

PIER 6

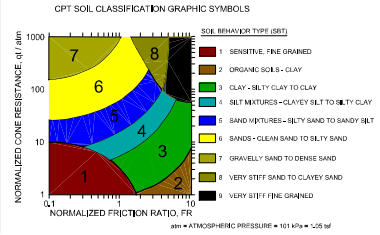

B-1013
2054+49
1' LT.
257.4
B-1012
2054+50
36' LT.
238.5
B-1014
2054+52
27' RT.
257.1
MATCHLINE "A"
MATCHLINE "A"
DATUM ELEV.=-80
NR (-140.0)
NR (-77.4)
NR (-47.9)


PIER 6
PIER 7
DATUM ELEV.=-80
B-1018
2057461
1017.1
282.1
B-1017
2057474
10 RT.
268.7
C1016
2057461
317.1
258.8
C1019
2057774
10 LT.
267.7
TIP RESISTANCE, qt (tsf)
SBT
FRICTION RATIO (%)
REFUSAL AT 89 FEET
NOTE:
SEE SHEET NO. S038 FOR CPT DETAILS
CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS
SOIL BEHAVIOR TYPE (SBT)
1 SENSITIVE, FINE GRAINED
2 ORGANIC SOILS - CLAY
3 CLAY - SILTY CLAY TO CLAY
4 SILT MIXTURES - CLAYEY SILT TO SILTY CLAY
5 SAND MIXTURES - SILTY SAND TO SANDY SILT
6 SANDS - CLEAN SAND TO SILTY SAND
7 GRAVELLY SAND TO DENSE SAND
8 VERY STIFF SAND TO CLAYEY SAND
9 VERY STIFF FINE GRAINED
NORMALIZED CONE RESISTANCE, qt / atm
NORMALIZED FRICTION RATIO, FR
atm = ATMOSPHERIC PRESSURE = 101 kPa = 2.05 tsf
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TRANSPORTATION CABINET
REVISION
DATE
PREPARED BY
HDR
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN
CHECKED BY
BORING PROFILE
CROSSING
OHIO RIVER
ROUTE
US 51
ITEM NO.
01-1140.20
SHEET NO.
PL-17
COUNTY OF
BALLARD
DRAWING NUMBER
OpenRoads Designer +23.00.03.111
USER: SUSCHS
DATE PLOTTED: SDATES
STIMES
FILE NAME: SFILEAS
US 51 BRIDGE REPLACEMENT



NOTE:

SEE SHEET NO. S038 FOR CPT DETAILS

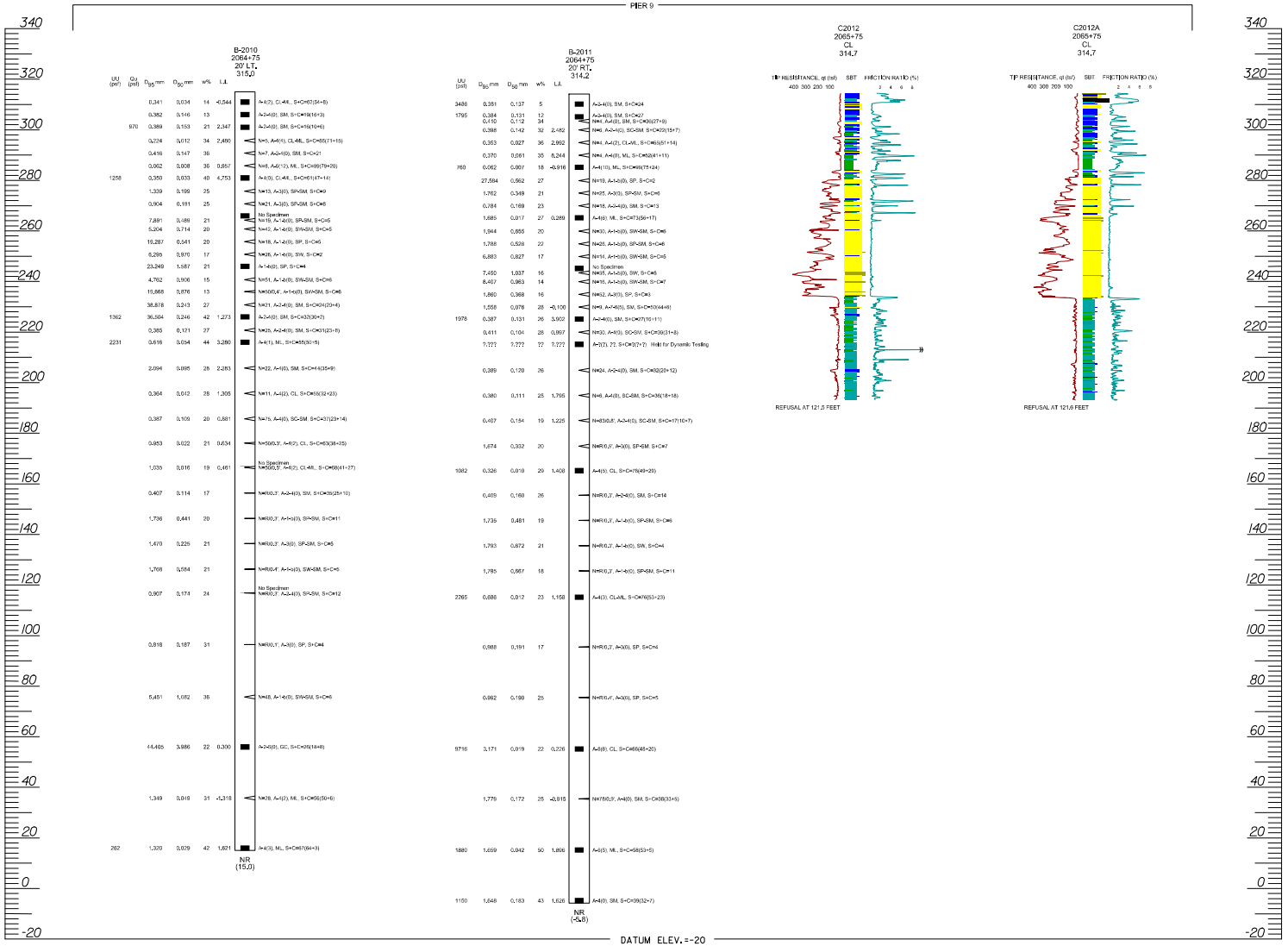


COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDER		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-18	DRAWING NUMBER

US 51 BRIDGE REPLACEMENT

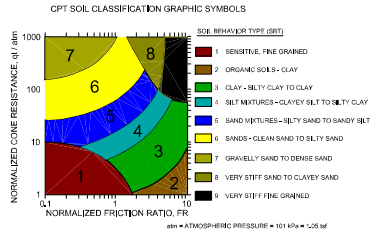
OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATES$ $TIMES$ FILE NAME: $FILES$

PIER 9



NOTE:

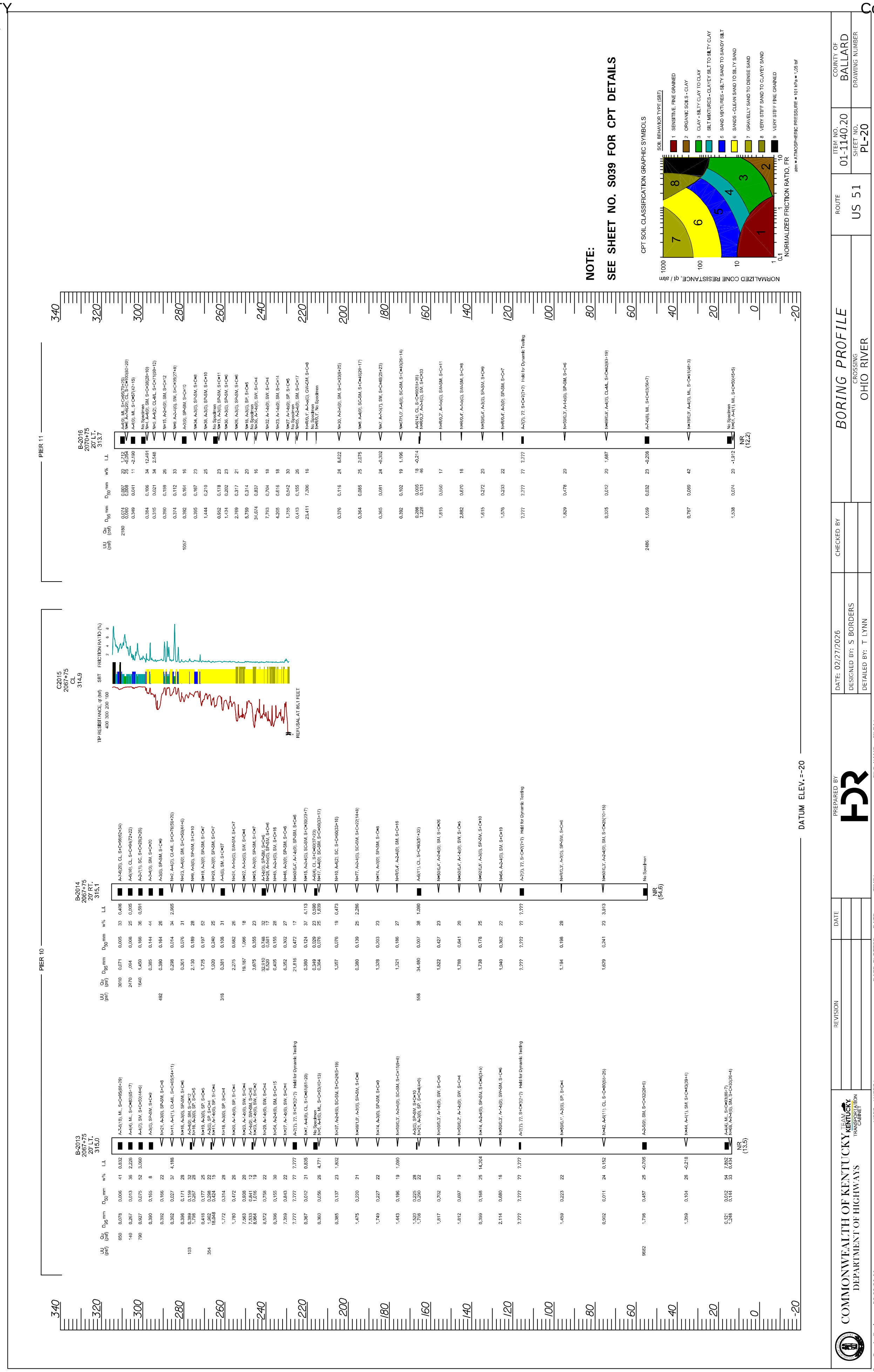
SEE SHEET NO. S039 FOR CPT DETAILS



US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS — KENTUCKY TRANSPORTATION CABINET	REVISION	DATE	PREPARED BY: HDR	DATE: 02/27/2026 DESIGNED BY: S BORDERS DETAILED BY: T LYNN	CHECKED BY	BORING PROFILE CROSSING: OHIO RIVER	ROUTE: US 51	ITEM NO.: 01-1140.20 SHEET NO.: PL-19	COUNTY OF: BALLARD DRAWING NUMBER

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$


NOTE:
SEE SHEET NO. S039 FOR CPT DETAILS
CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS
SOIL BEHAVIOR TYPE (SBT)
1 SENSITIVE, FINE GRAINED
2 ORGANIC SOILS - CLAY
3 CLAY - SILTY CLAY TO CLAY
4 SILT MIXTURES - CLAYEY SILT TO SILTY CLAY
5 SAND MIXTURES - SILTY SAND TO SANDY SILT
6 SANDS - CLEAN SAND TO SILTY SAND
7 GRAVELLY SAND TO DENSE SAND
8 VERY STIFF SAND TO CLAYEY SAND
9 VERY STIFF FINE GRAINED
NORMALIZED CONE RESISTANCE, qt / atm
NORMALIZED FRICTION RATIO, FR
PIER 10
PIER 11
B-2013
2067+75
20' LT.
315.0
B-2014
2067+75
20' RT.
315.1
C2015
2067+75
CL
314.9
B-2016
2070+75
20' LT.
313.7
REFUSAL AT 86.1 FEET
DATUM ELEV.=-20
BORING PROFILE
CROSSING
OHIO RIVER
ROUTE
US 51
ITEM NO.
01-1140.20
SHEET NO.
PL-20
COUNTY OF
BALLARD
DRAWING NUMBER
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN
CHECKED BY
PREPARED BY
FDR
REVISION
DATE
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
OpenRoads Designer v23.00.01.11

PIER 11

PIER 12

B-2017
2070+75
20' RT.
313.7

C2018
2070+75
CL
313.6

B-2019
2072+81
20' LT.
312.4

B-2020
2072+81
20' RT.
312.3

B-2018A
2072+63
19' LT.

B-2019A

R
(63.7)

NR
(10,4)

NR
(10,3)

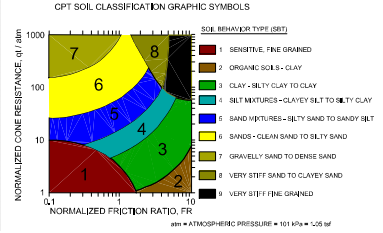
REFUSAL AT 67.9 FEET

DATUM ELEV.=-20

NOTE:

SEE SHEET NO. S039 FOR CPT DETAILS

CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS



COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDERS		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-21	DRAWING NUMBER

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

US 51 BRIDGE REPLACEMENT

PIER 12

PIER 13

C2021
2072+81
CL
312.4

TIP RESISTANCE, qt (tsf) SBT FRICTION RATIO (%)
400 300 200 100 1 2 4 6 8

REFUSAL AT 100.3 FEET

B-2022
2074+71
12' LT.
312.0

UU (psf)	Qu (psf)	D_{85} mm	D_{50} mm	w%	LL	
	510	0.293	0.012	28	-1.100	A-4(6), ML, S=C=87(71+16)
	1600	0.206	0.008	30	0.316	A-7-6(19), CL, S=C=94(73+21)
	780	0.264	0.008	36	0.892	A-6(16), CL, S=C=95(75+20)
						No Specimen N=9, A-2-4(0), SM, S=C=15
		0.417	0.158	34		
		0.382	0.114	40		N=5, A-2-4(0), SM, S=C=34(32+2)
		0.391	0.156	37		N=13, A-2-4(0), SM, S=C=14
		0.402	0.155	31		N=30, A-2-4(0), SM, S=C=16
	9745	0.377	0.129	40		A-2-4(0), SM, S=C=27(24+3)
		1.039	0.066	30		N=14, A-4(0), ML, S=C=62
	2233	0.378	0.088	32	4.529	A-4(0), SM, S=C=45(37+8)
		0.423	0.100	45	17.412	N=15, A-4(0), SM, S=C=41(33+8)
		0.377	0.099	30		N=18, A-5(0), SM, S=C=41(33+8)
		0.397	0.137	38		N=25, A-2-4(0), SM, S=C=34(14+10)
		11.890	1.170	16		No Specimen N=22, A-1-b(0), SW-SM, S=C=7
		11.325	0.608	12		N=33, A-1-b(0), SP, S=C=5
		1.505	0.206	23		N=50, A-3(0), SP-SM, S=C=7
		13.322	0.842	14		N=69, A-1-b(0), SW-SM, S=C=7
		11.731	0.110	35	1.456	A-6(2), SC, S=C=43(38+5)
		1.928	0.181	30	-0.217	N=46, A-2-4(0), SM, S=C=51(45+5)
	2720	1.522	0.058	29	-0.359	A-7-5(0), ML, S=C=53(43+10)
		0.358	0.059	22	1.243	N=7, A-1(0), CL-ML, S=C=52(23+29)
		0.383	0.077	20	-1.726	N=67/0.5', A-4(0), SM, S=C=49(29+20)
		1.398	0.113	24		N=R/1.4', A-4(0), SM, S=C=33(27+12)
				29		
		1.186	0.011	24	1.004	A-6(4), CL, S=C=81(57+24)
		1.830	0.463	22		N=50/0.3', A-1-b(0), SP-SM, S=C=9
		1.828	0.160	19		N=R/0.5', A-2-4(0), SM, S=C=35
		1.733	0.471	22		N=R/1.3', A-1-a(0), SP-SM, S=C=7
		1.417	0.174	28	7.200	N=R/0.9', A-2-4(0), SM, S=C=22(18+4)
		1.993	0.260	25	0.793	A-6(1), SC, S=C=39(29+7)
		0.392	0.168	17		N=50/0.3', A-3(0), SP-SM, S=C=7
		1.238	0.198	30		No Specimen N=61/1.1', A-3(0), SP-SM, S=C=7
		0.165	0.010	20	-0.128	N=R/0.4', A-6(6), CL, S=C=92(75+17)
		1.198	0.076	24	4.029	N=R/1.4', A-4(0), SM, S=C=40(43+7)
	1625	0.190	0.007	27	0.705	A-4(9), CL, S=C=93(65+28)
		1.576	0.192	30		N=50/0.1', A-2-4(0), SM, S=C=29(27+2)
		1.735	0.323	34	0.997	A-2-4(0), SM, S=C=26(19+7)
		1.795	0.281	26	-1.216	N=R/0.4', A-2-4(0), SM, S=C=27(26+1)

NR (11.6)

B-2023
2074+71
12' RT.
310.9

UU (psf)	Qu (psf)	D_{85} mm	D_{50} mm	w%	LL	
		0.265	0.008	46	1.529	A-2-6(2), ML, S=C=66(70+28)
		0.151	0.007	30	0.427	N=6, A-2-4(1), ML, S=C=64(67+15)
	640	0.071	0.007	27	-0.046	A-7-6(34), ML, S=C=66(70+26)
	310	0.393	0.012	37	0.965	A-6(11), ML, S=C=87(72+15)
		0.377	0.113	32		N=6, A-2-4(0), SM, S=C=35
		0.391	0.139	35		N=6, A-2-4(0), SM, S=C=23
		0.378	0.119	30		N=11, A-2-4(0), SM, S=C=32
		0.377	0.124	29		N=13, A-2-4(0), SM, S=C=30
	9462	0.388	0.164	24		A-3(0), SP-SM, S=C=9
		0.385	0.148	27		N=22, A-2-4(0), SM, S=C=16
		0.368	0.097	32		N=21, A-4(0), SM, S=C=41
	7481	0.383	0.135	33		A-2-4(0), SM, S=C=29(23+2)
		0.410	0.123	40		N=30, A-2-4(0), SM, S=C=31(22+9)
		0.387	0.145	27		N=16, A-2-4(0), SM, S=C=20
		0.403	0.135	30		N=24, A-2-4(0), SM, S=C=26
		8.641	0.992	14		No Specimen N=28, A-1-b(0), SW-SM, S=C=3
		20.469	0.567	19		N=33, A-1-a(0), SP-SM, S=C=7
		7.019	0.255	18		N=45, A-3(0), SP-SM, S=C=8
		13.379	1.069	16		N=49, A-1-a(0), SW-SM, S=C=9
		0.814	0.079	44	2.282	A-4(1), SM, S=C=49(43+6)
		1.363	0.049	33	0.080	N=24, A-7-5(6), ML, S=C=65(45+10)
	4739	0.884	0.024	27	-0.909	A-7-5(11), ML, S=C=87(63+7)
		0.380	0.117	21		N=14, A-2-4(0), SM, S=C=33(20+13)
		0.372	0.065	18	0.703	N=60/0.3', A-4(0), CL-ML, S=C=61(31+20)
		1.441	0.210	20		N=62/0.5', A-2-4(0), SP-SM, S=C=11
		1.340	0.208	33		A-3(0), SP-SM, S=C=8
		10.945	0.188	27		N=61/0.4', A-2-4(0), SM, S=C=19
		5.727	0.461	19		No Specimen N=60/0.3', A-1-a(0), SP-SM, S=C=10
		2.027	0.857	16		N=60/0.3', A-1-a(0), SW-SM, S=C=7
		0.414	0.167	24		N=R/0.5', A-2-4(0), SP-SM, S=C=11
		0.562	0.168	26		N=61/0.4', A-2-4(0), SP-SM, S=C=12
		1.801	0.247	21		No Specimen N=11, A-2-4(0), SM, S=C=16(9+7)
		0.391	0.164	24		A-3(0), SP-SM, S=C=13
		0.422	0.168	34		N=61/0.3', A-2-4(0), SP-SM, S=C=11
		0.127	0.012	8	-1.121	N=R/0.4', A-6(11), CL, S=C=63(65+8)
		0.073	0.007	10	-0.644	N=50/0.4', A-5(9), CL, S=C=65(68+27)
	2960	0.073	0.006	27	1.103	A-4(6), CL, S=C=95(66+29)
		1.494	0.152	30	-1.137	N=30, A-2-4(0), SM, S=C=34(30+4)
	282	1.660	0.178	26	0.491	A-2-6(1), SC, S=C=33(28+5)

NR (5.9)

C2024
2074+71
CL
311.7

TIP RESISTANCE, qt (tsf) SBT FRICTION RATIO (%)
400 300 200 100 1 2 4 6 8

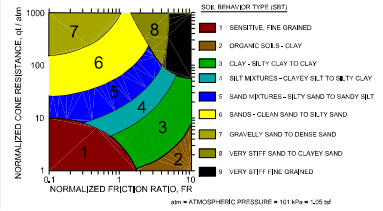
REFUSAL AT 83.8 FEET

DATUM ELEV.=-20

NOTE:

SEE SHEET NO. S040 FOR CPT DETAILS

CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS



atm = ATMOSPHERIC PRESSURE = 101 kPa = 1.05 tsf

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

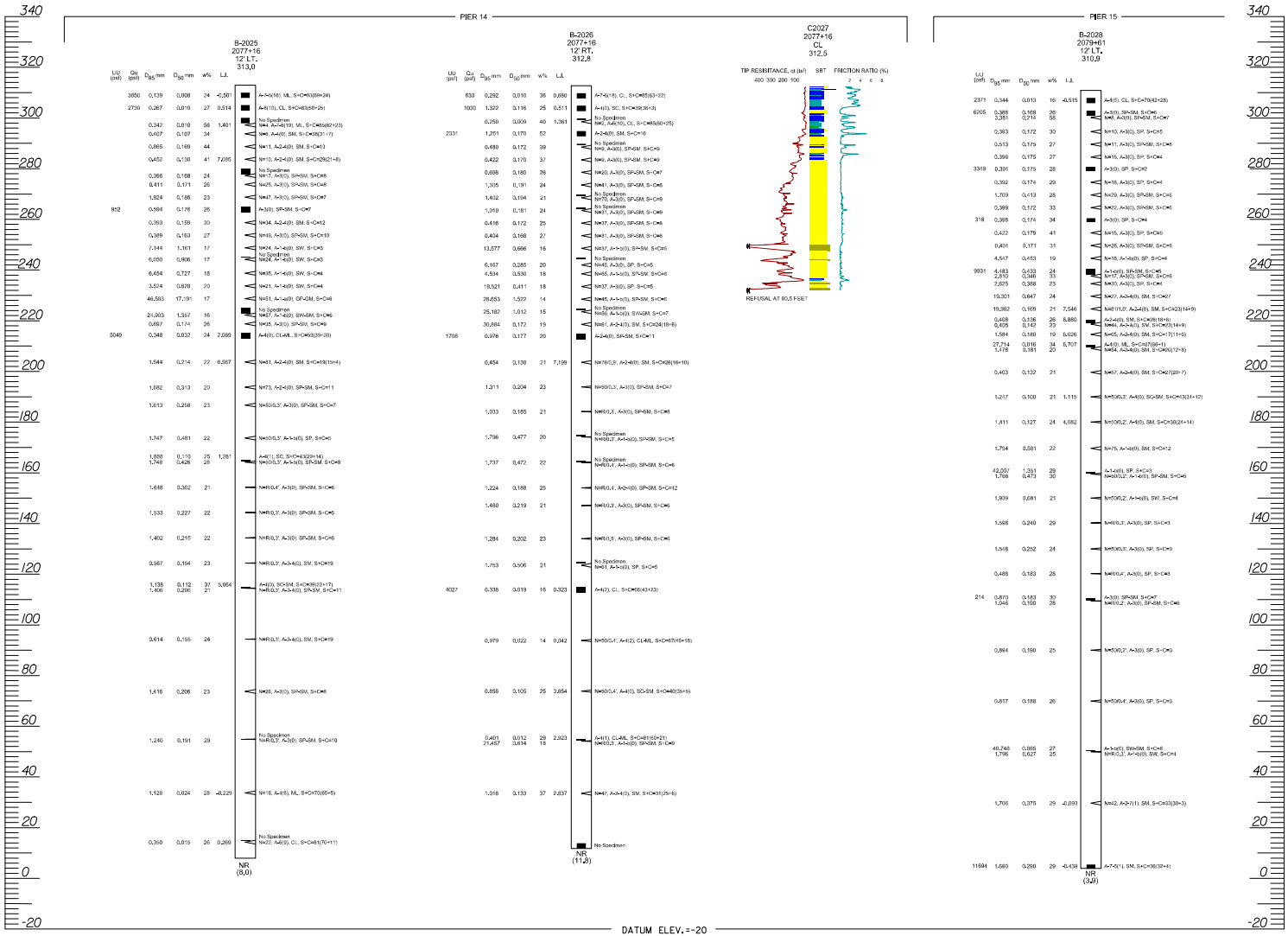
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN

CHECKED BY:

BORING PROFILE
CROSSING: OHIO RIVER

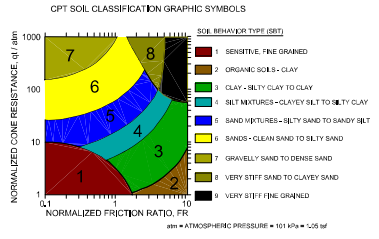
ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-22
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

SEE SHEET NO. S040 FOR CPT DETAILS



US 51 BRIDGE REPLACEMENT

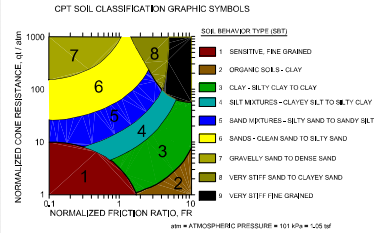
COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS (KENTUCKY TRANSPORTATION CABINET)	REVISION	DATE	PREPARED BY HDR	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE US 51	ITEM NO. 01-1140.20	COUNTY OF BALLARD
				DESIGNED BY: S BORDERS		CROSSING OHIO RIVER		SHEET NO. PL-23	DRAWING NUMBER
				DETAILED BY: T LYNN					

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

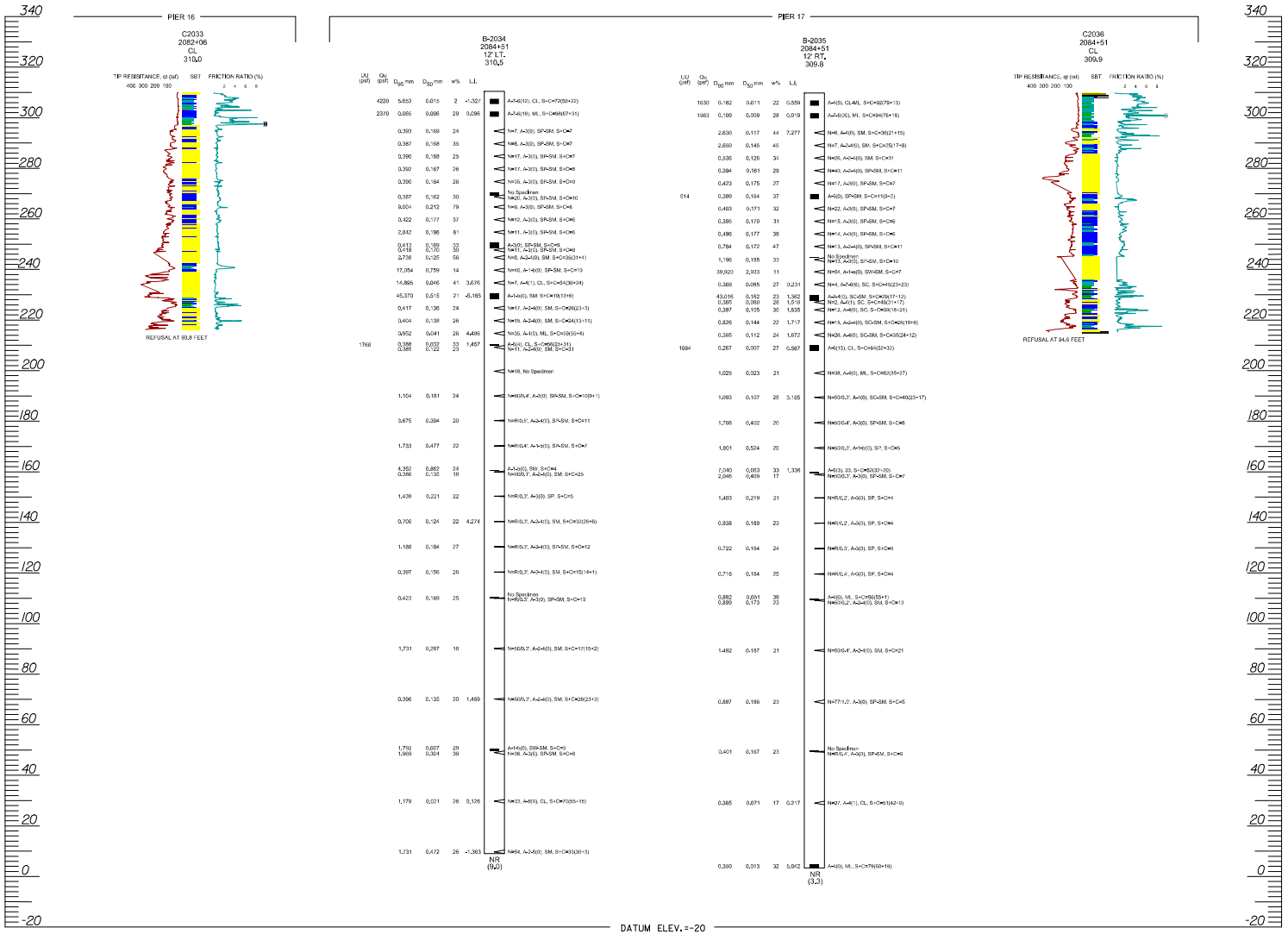
SEE SHEET NO. S040 FOR CPT DETAILS



COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS (KENTUCKY TRANSPORTATION CABINET)	REVISION	DATE	PREPARED BY HDR	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE US 51	ITEM NO. 01-1140.20	COUNTY OF BALLARD
				DESIGNED BY: S BORDERS		CROSSING OHIO RIVER		SHEET NO. PL-24	DRAWING NUMBER
				DETAILED BY: T LYNN					

US 51 BRIDGE REPLACEMENT

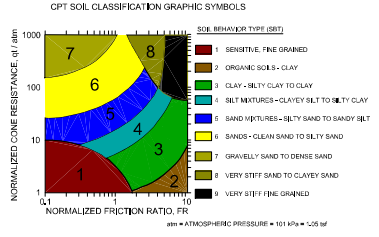
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NOTE:

SEE SHEET NO. S041 FOR CPT DETAILS

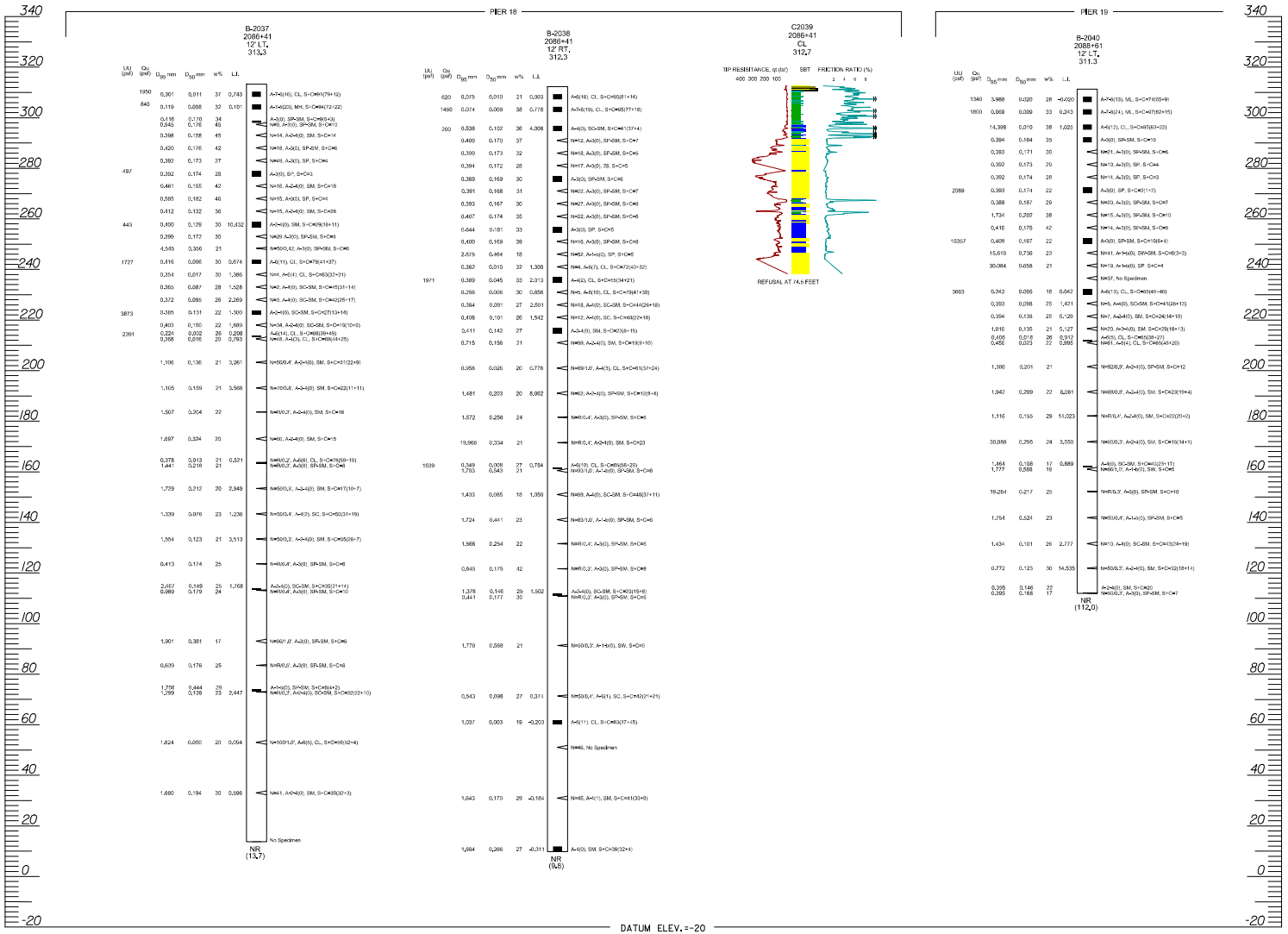
CPT SOIL CLASSIFICATION GRAPHIC SYMBOLS



US 51 BRIDGE REPLACEMENT

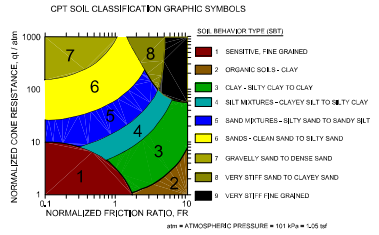
COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS (KENTUCKY TRANSPORTATION CABINET)	REVISION	DATE	PREPARED BY HDR	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE US 51	ITEM NO. 01-1140.20	COUNTY OF BALLARD
				DESIGNED BY: S BORDERS		CROSSING OHIO RIVER		SHEET NO. PL-25	DRAWING NUMBER
				DETAILED BY: T LYNN					

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

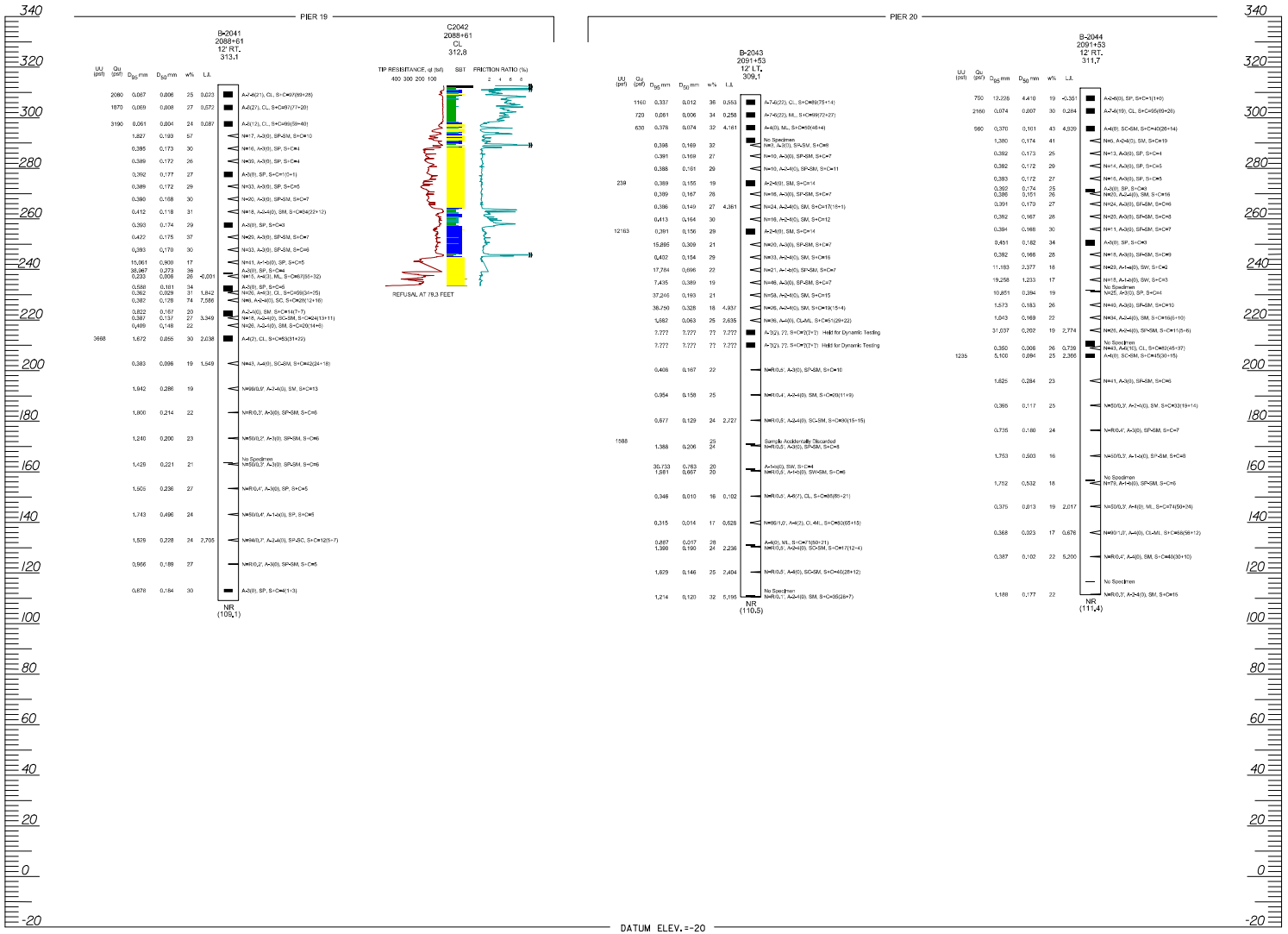
SEE SHEET NO. S041 FOR CPT DETAILS



COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	*BORING PROFILE*	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDERS		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-26	DRAWING NUMBER

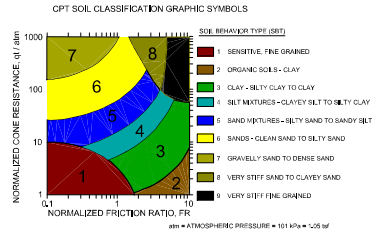
US 51 BRIDGE REPLACEMENT

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

SEE SHEET NO. S041 FOR CPT DETAILS

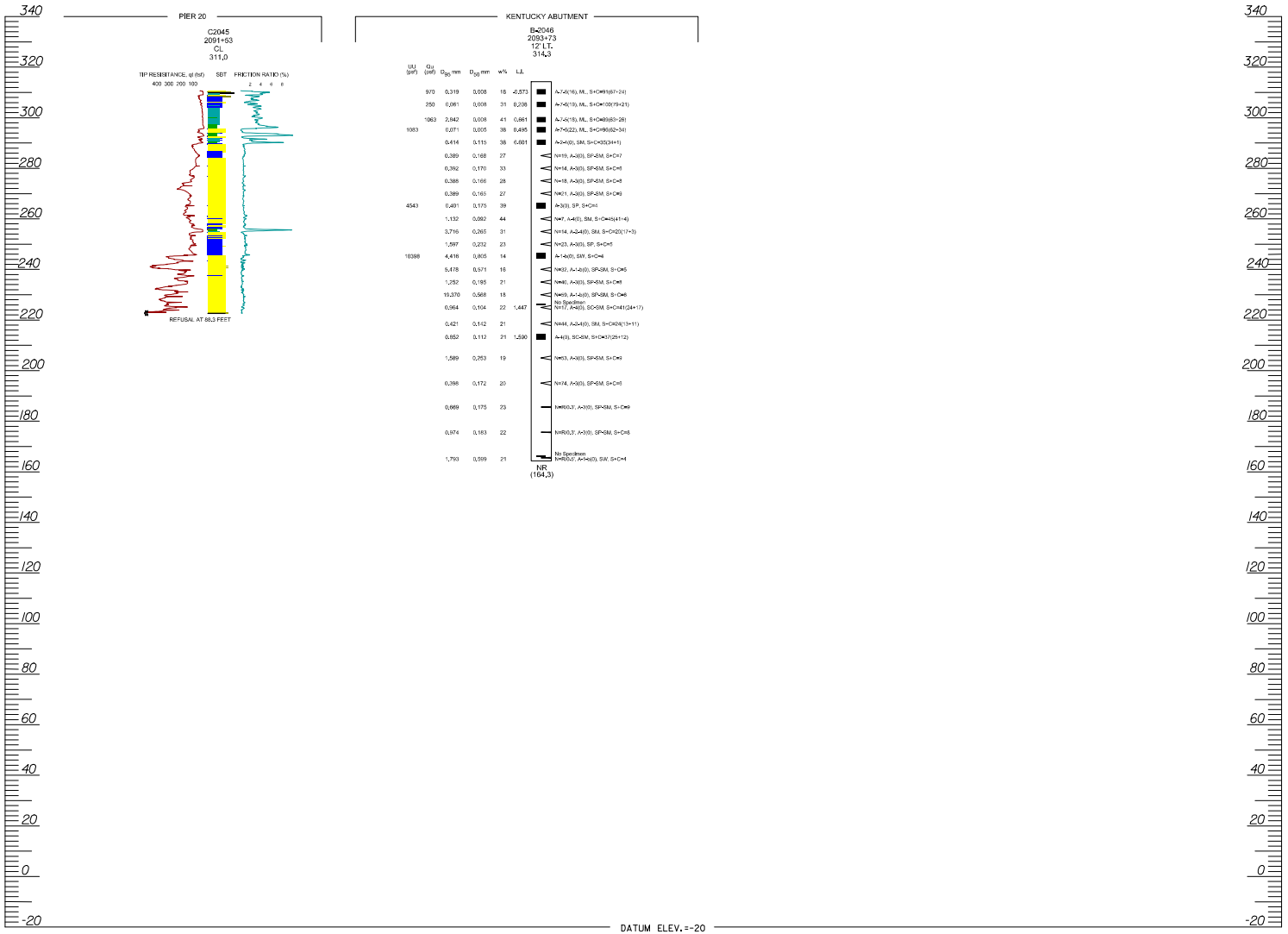


US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY, DEPARTMENT OF HIGHWAYS — KENTUCKY TRANSPORTATION CABINET

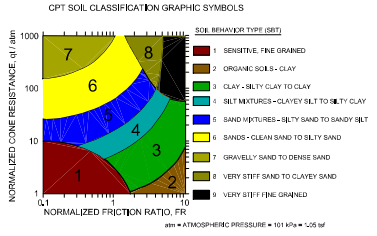
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		HDR	DESIGNED BY: S BORDERS		CROSSING: OHIO RIVER	US 51	01-1140.20	BALLARD
			DETAILED BY: T LYNN				SHEET NO. PL-27	DRAWING NUMBER

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$



NOTE:

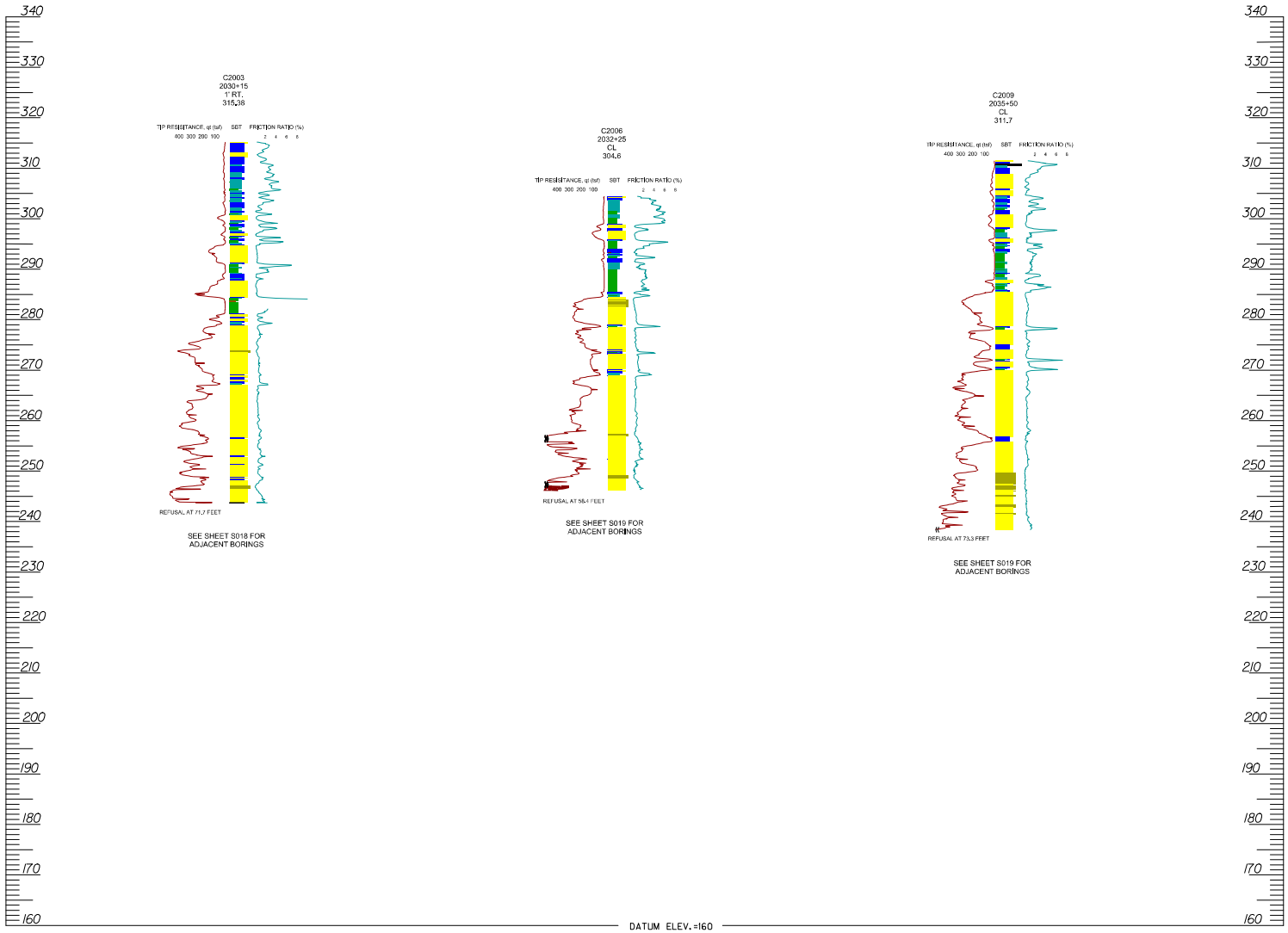
SEE SHEET NO. S042 FOR CPT DETAILS

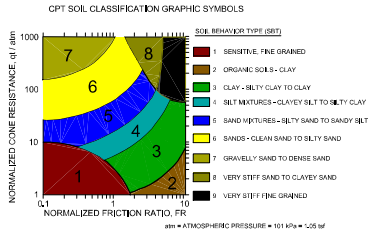


COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO. 01-1140.20	COUNTY OF BALLARD
			HDR	DESIGNED BY: S BORDERS		CROSSING OHIO RIVER	US 51	SHEET NO. PL-28	DRAWING NUMBER
				DETAILED BY: T LYNN					

US 51 BRIDGE REPLACEMENT

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

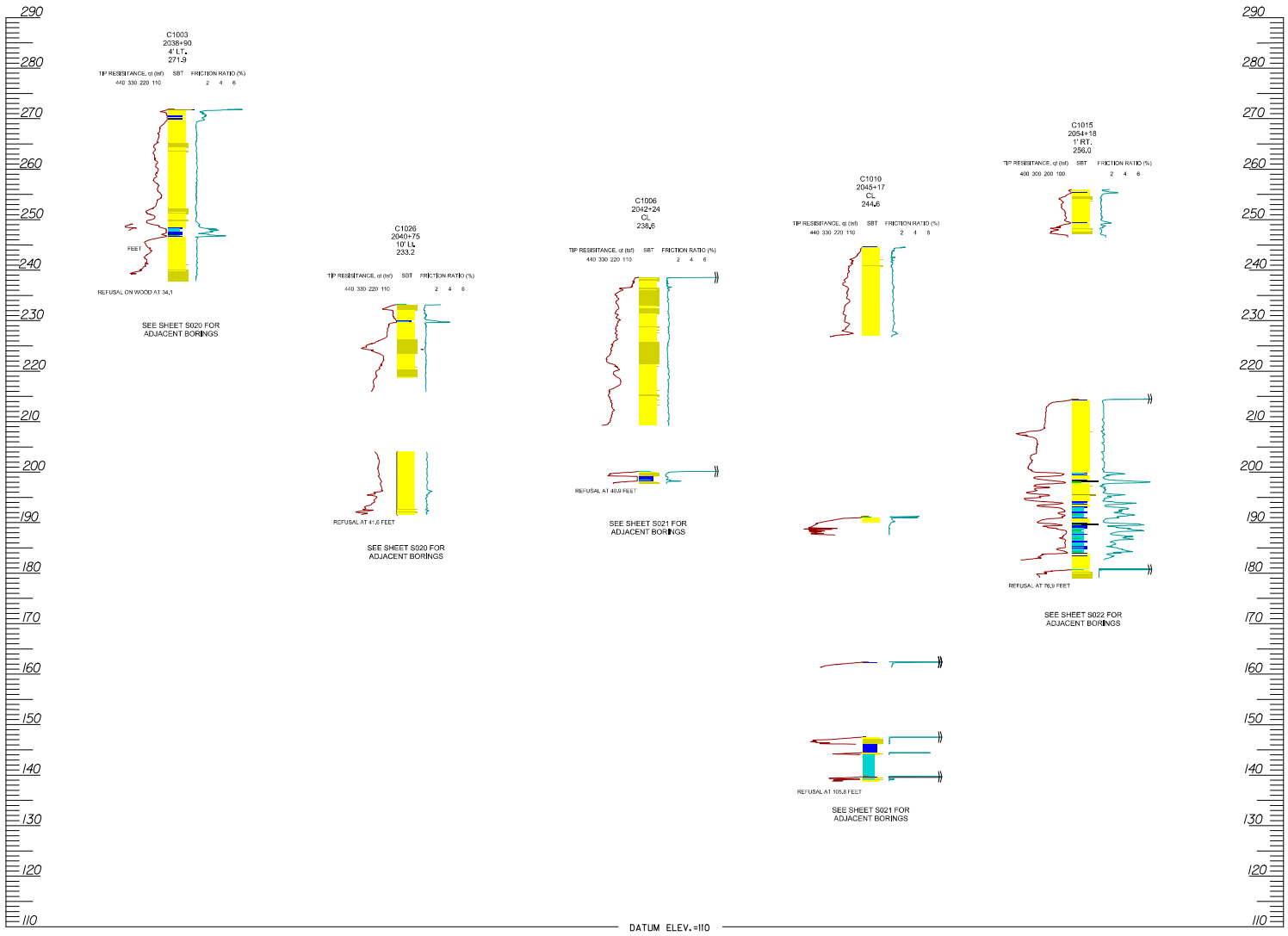
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN
CHECKED BY:

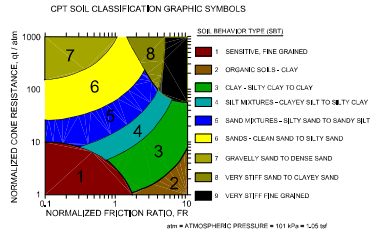
BORING PROFILE
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-29
COUNTY OF: BALLARD
DRAWING NUMBER:

US 51 BRIDGE REPLACEMENT

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$





US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

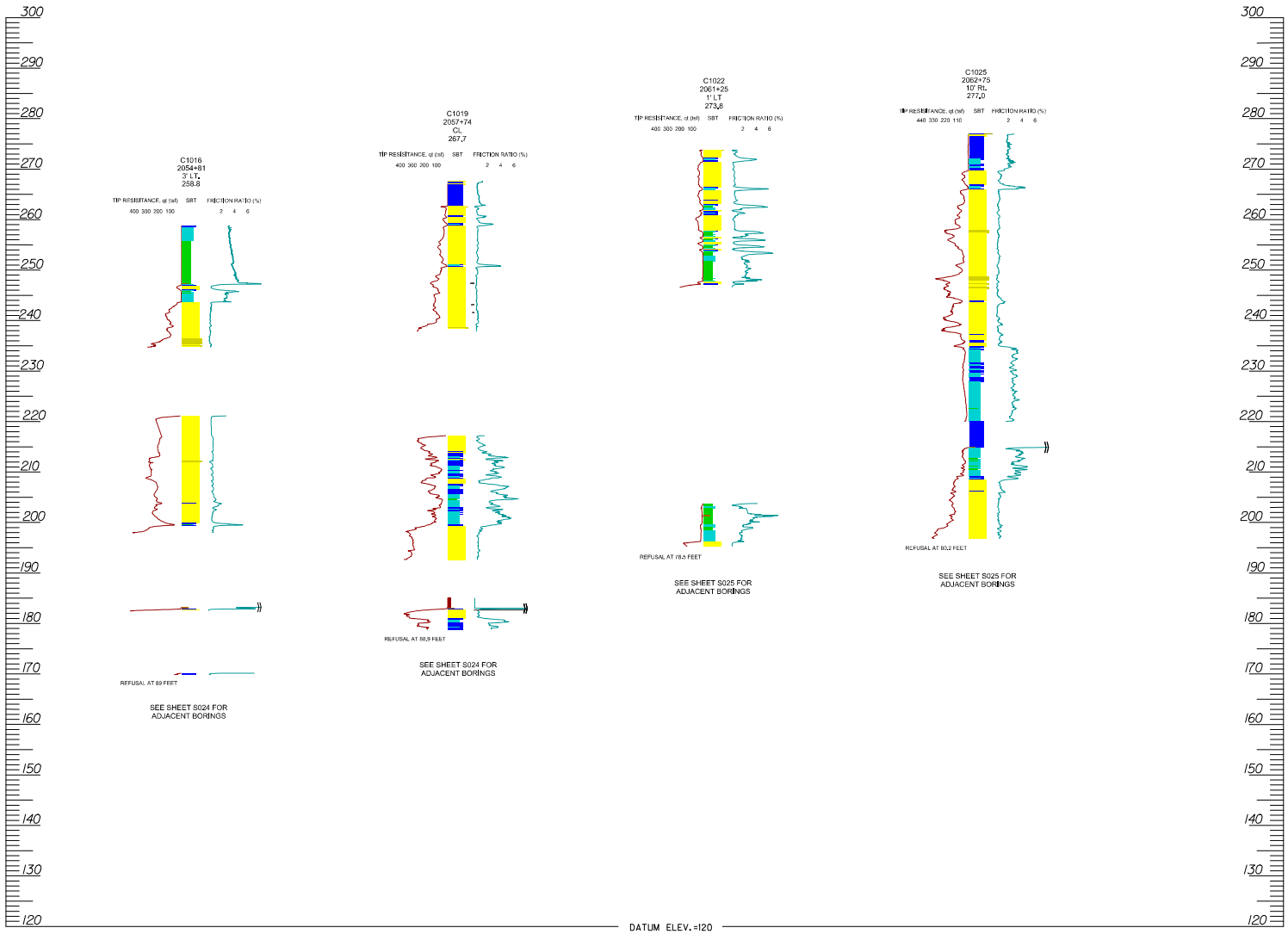
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN
CHECKED BY:

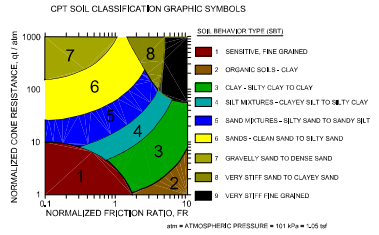
BORING PROFILE

CROSSING: OHIO RIVER

ROUTE	ITEM NO.	COUNTY OF
US 51	01-1140.20	BALLARD
	SHEET NO. PL-30	DRAWING NUMBER

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: SFILE$

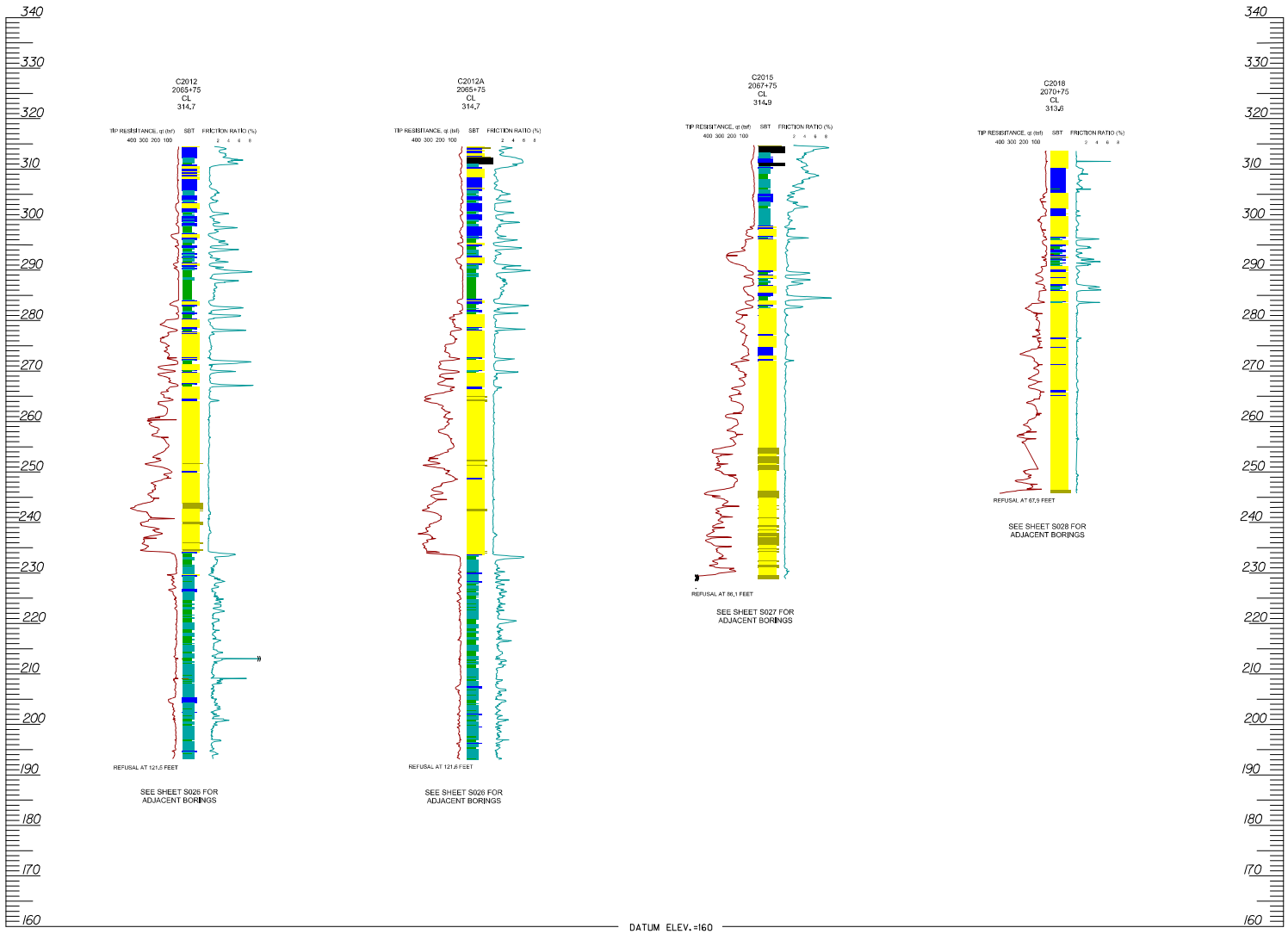


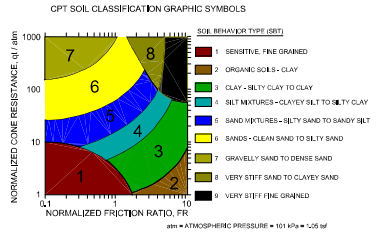


US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDERS		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-31	DRAWING NUMBER

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

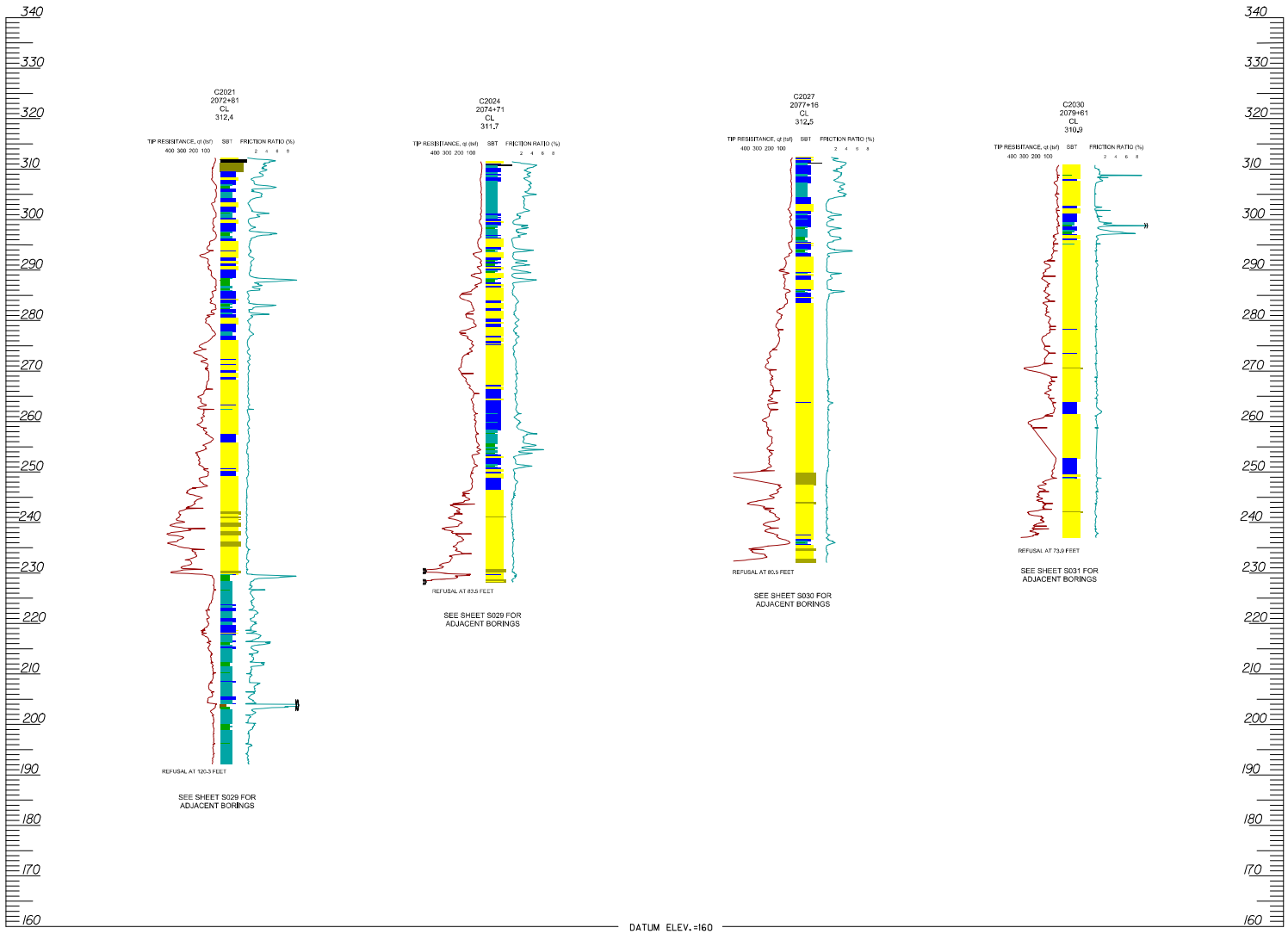


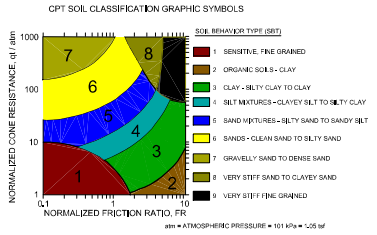


COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDERS		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-32	DRAWING NUMBER

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US 51 BRIDGE REPLACEMENT

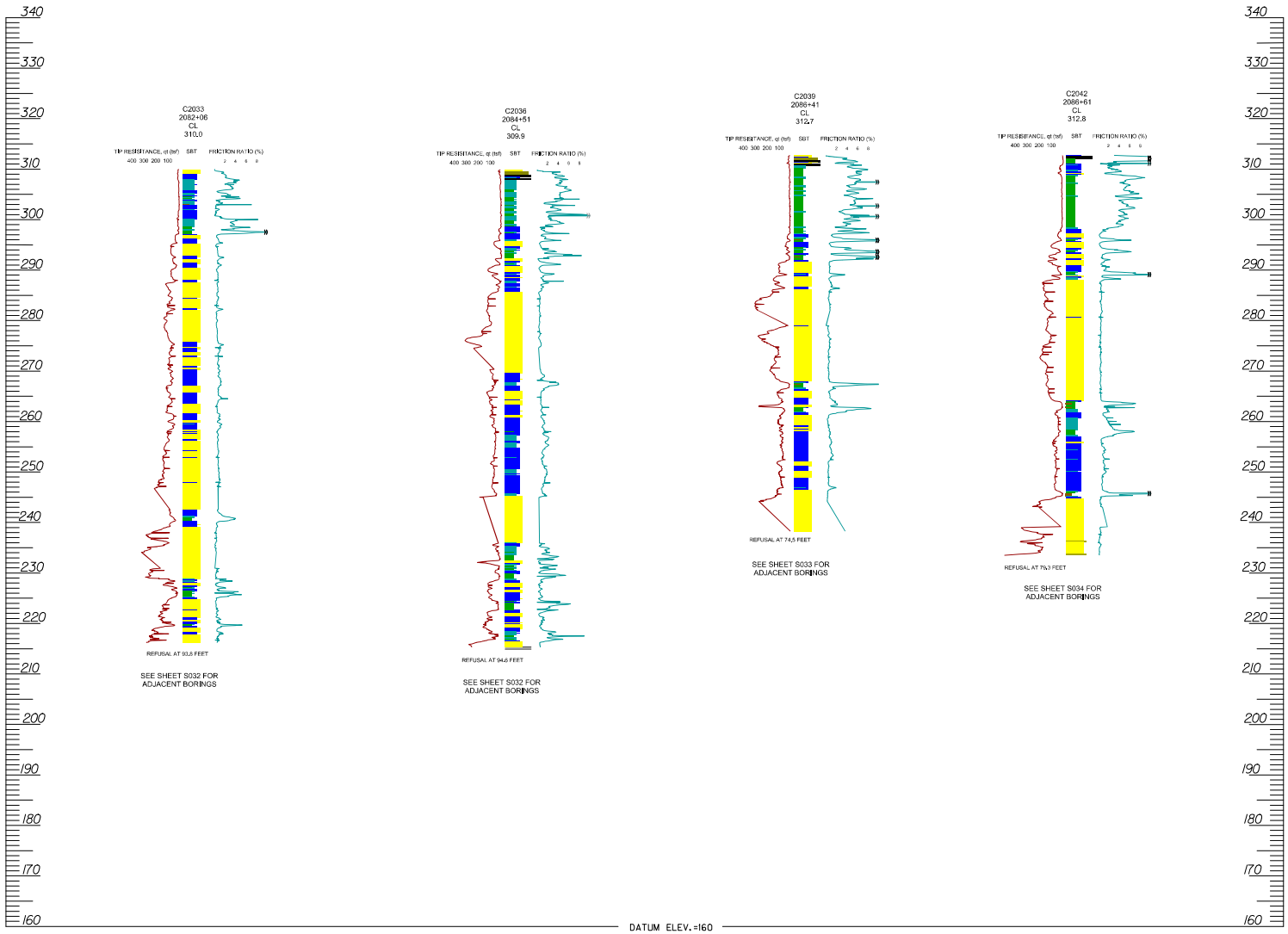


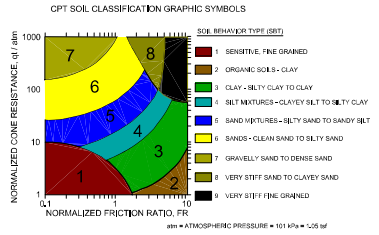


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			HDR	DESIGNED BY: S BORDERS		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-33	DRAWING NUMBER

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US 51 BRIDGE REPLACEMENT

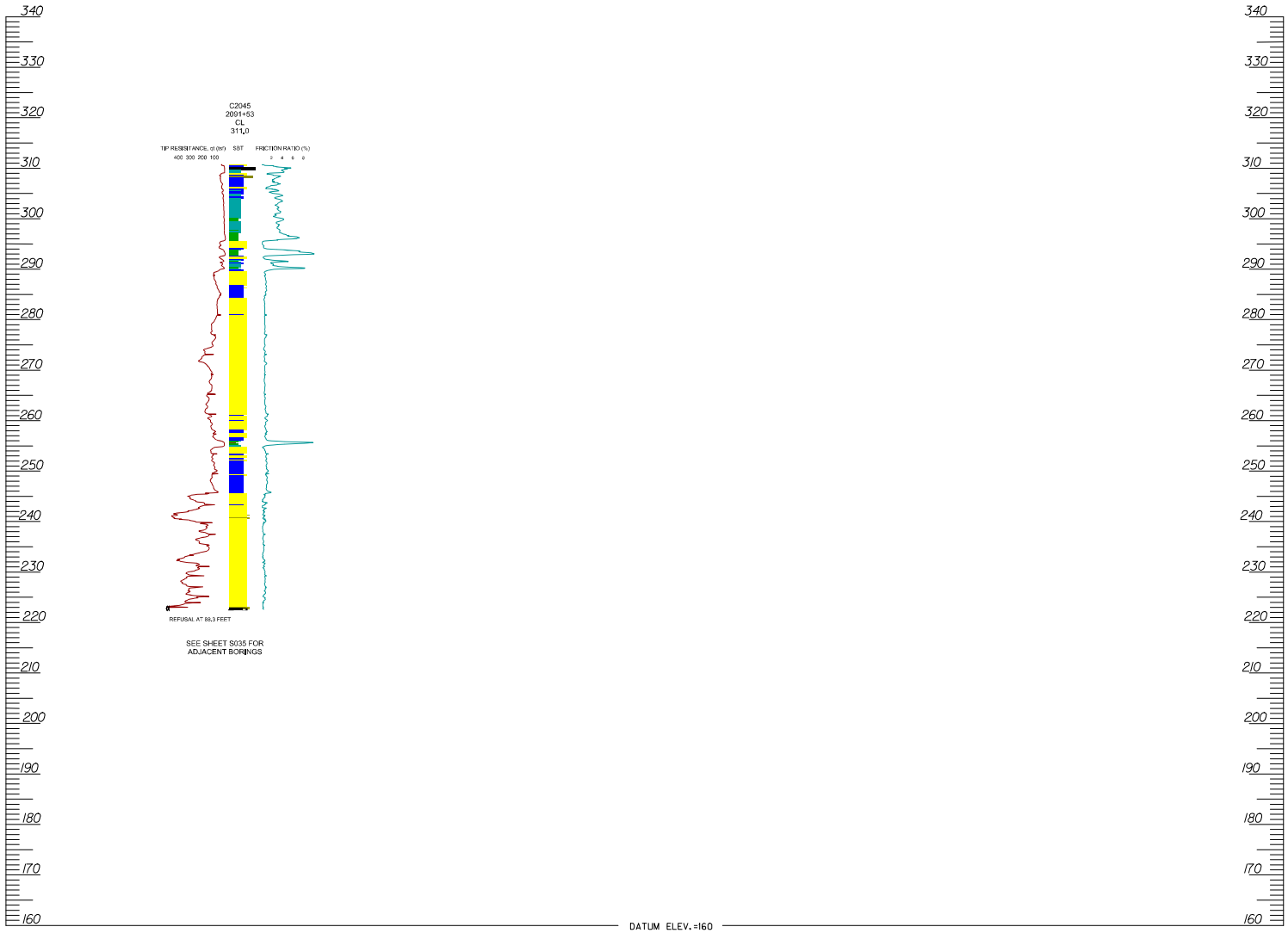


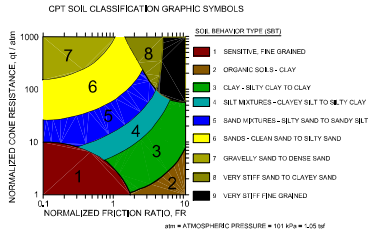


COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY	DATE: 02/27/2026	CHECKED BY	BORING PROFILE	ROUTE	ITEM NO.	COUNTY OF
			HDR	DESIGNED BY: S BORDERS		CROSSING	US 51	01-1140.20	BALLARD
				DETAILED BY: T LYNN		OHIO RIVER		SHEET NO. PL-34	DRAWING NUMBER

US 51 BRIDGE REPLACEMENT

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILEA$





US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: T LYNN

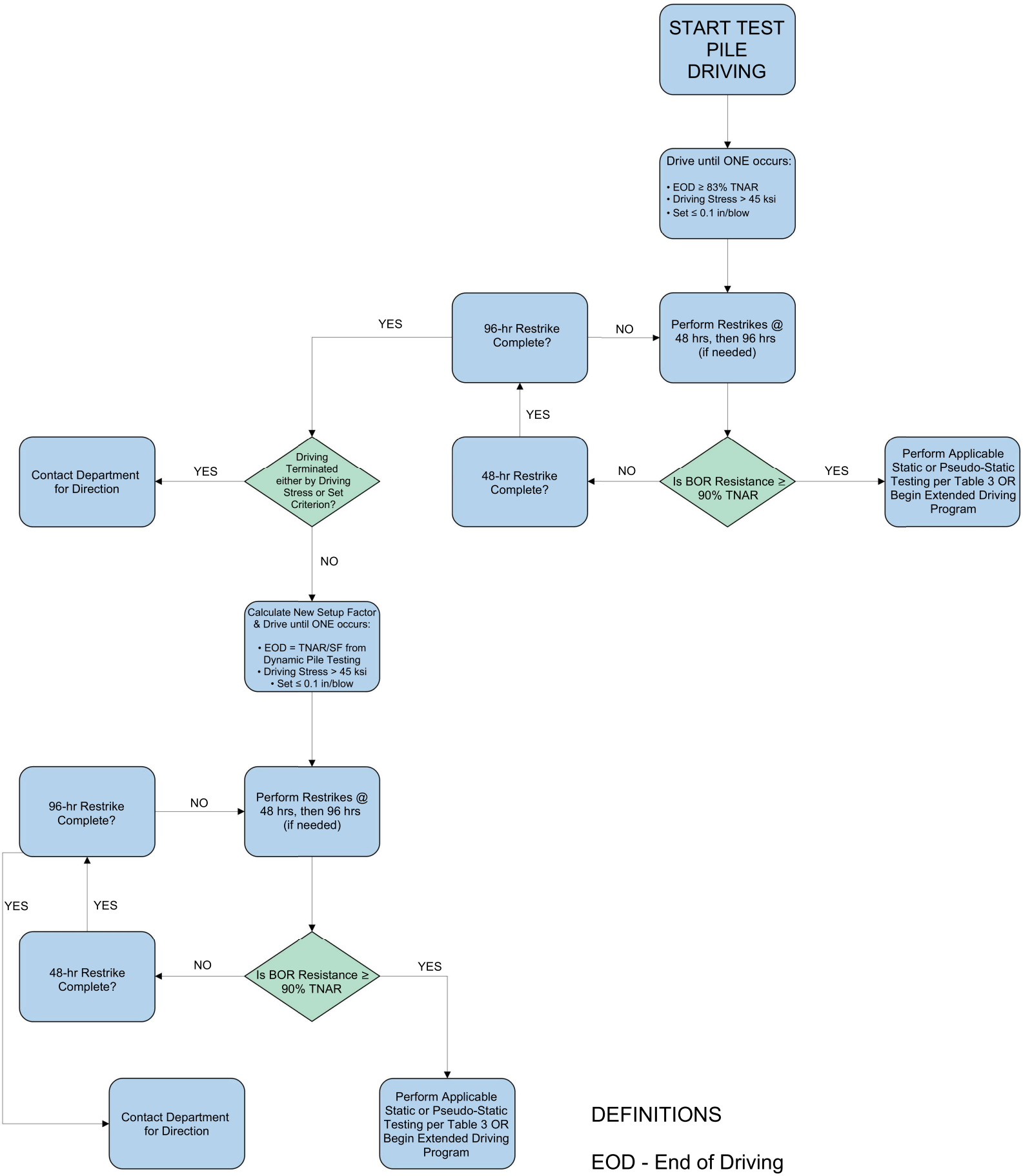
CHECKED BY:

BORING PROFILE
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.: PL-35
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: $USER$ DATE PLOTTED: $DATE$ $TIME$ FILE NAME: $FILE$

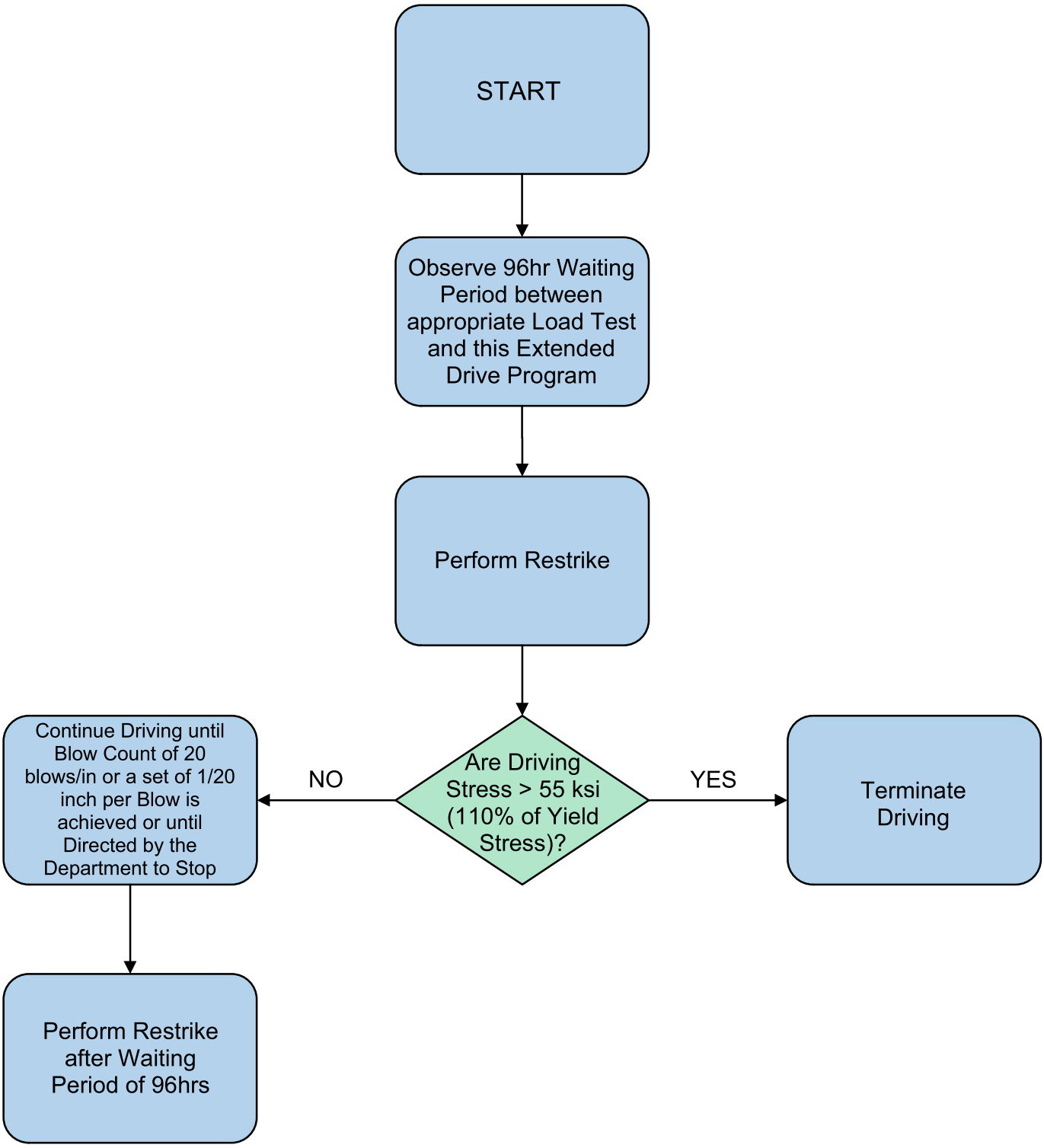
FIGURE 1. TEST PILE DRIVING CRITERIA FLOWCHART



DEFINITIONS

EOD - End of Driving
TNAR - Target Nominal Axial Resistance
SF - Safety Factor
BOR - Beginning of Restrike

FIGURE 2. EXTENDED PILE DRIVING PROGRAM FLOWCHART



SPECIAL NOTE FOR DYNAMIC PILE TESTING (NOTE B)

BALLARD COUNTY, KENTUCKY/ALEXANDER COUNTY, ILLINOIS ITEM NO. 01-1140.20
US-51 BRIDGE REPLACEMENT PROJECT

1.0 GENERAL

Scope of Work

The scope of work includes furnishing all labor, equipment, and analyses associated with dynamic testing of driven piles as specified in this Special Note (Note B) and in general accordance with ASTM D4945, Standard Test Method for High-Strain Dynamic Testing of Deep Foundations. Dynamic testing involves attaching strain transducers and accelerometers to the pile near the pile head during initial driving and at an appropriate location during restrike testing. A cable or wireless transmission connects the sensors near the pile head with the pile driving monitoring hardware located a safe distance from the pile.

The work covered by this Special Note includes continuous driving requirements, wave equation analysis, high-strain dynamic pile testing during initial driving and restrike events, signal matching analysis (CAPWAP or equivalent), and all associated reporting.

General project information is provided in the Special Note for Pile Load Test Program (Note A), Section 1.0.

1.1 Test Locations

Testing will be performed on dedicated test piles prior to construction. Dedicated test piles may be subjected to static or pseudo-static pile load testing as outlined in Note A in addition to dynamic testing. Coordinate dynamic testing with static and pseudo-static testing. Perform dynamic testing at the following locations:

Test Piles

- West Approach (IL Land)
  - One (1) 48-inch diameter pipe pile (PT-1)
- Main Span (River)
  - One (1) 72-inch diameter pipe pile driven with constrictor plate installed (PT-2)
  - One (1) 72-inch diameter pipe pile (PT-3)
- East Approach (KY Land)
  - Two (2) 48-inch diameter pipe piles (PT-4 and PT-5)
  - Two (2) 48-inch diameter pipe pile driven with a constrictor plate installed (PT-6, PT-7)

1.2 Personnel Qualifications

Perform dynamic pile testing utilizing the services of an independent Dynamic Pile Testing Consultant with qualified personnel assigned to this project as described below.

- Pile Driving Monitoring – The individual responsible for field monitoring during pile driving and restrike testing shall be a licensed Professional Engineer with a minimum of five (5) years of dynamic pile testing and analysis experience or shall have achieved Advanced or better certification under the High-Strain Dynamic Pile Testing Examination or Certification process of the Pile Driving Contractors Association (PDCA) or Foundation QA. If the experience requirement mentioned above is not met, a list of projects would need to be provided for review and approval.
- Wave Equation and Signal Matching Analysis – The individual responsible for performing wave equation analyses and signal matching (CAPWAP) analyses shall be a licensed Professional Engineer with a minimum of ten (10) years of dynamic pile testing and analysis experience or shall have achieved Master or better certification under the High-Strain Dynamic Pile Testing Examination or Certification process of the PDCA or Foundation QA. If the experience requirement mentioned above is not met, a list of projects would need to be provided for review and approval.

1.3 Equipment

Supply equipment such as sensors, cables or wireless transmitters, and data acquisition hardware conforming to ASTM D4945 and furnished by the Dynamic Pile Testing Consultant. Submit the product name and manufacturer of the following hardware and software components for acceptance by the Department in Submittal Number 2:

- Pile Driving Modeling – Wave Equation Software
- Pile Driving Monitoring – Hardware and Software
- Pile Driving Analysis – Signal Matching Software

If requested by the Department submit additional information including technical specifications. Additionally, refer to Special Note for Pile Load Test Program (Note A) for requirements regarding instrumentation or equipment calibration requirements as well as redundant instrumentation or equipment if the hardware is damaged or becomes damaged.

1.4 Submittals and General Testing and Analysis Requirements

Submittals and reports shall be provided in accordance with the schedule below. The Department will respond to the Contractor regarding acceptability of submittals within 10 business days.

Table 1. Schedule of Dynamic Pile Testing Submittals

Submittal No.	Submittal Item	Calendar Days	Event
1	Proposed independent Dynamic Pile Testing Consultant, and a listing of assigned personnel and their experience and qualifications.	30 After	Notice to Begin Work
2	Details of hardware and software components, method of testing, methods or procedures to measure soil/sediment in pipe piles without a constrictor plate, and materials to be used. Include sensor calibration documentation. Include method for correlating signal matching and static/pseudo-static results. Include pile hammer warm-up procedure for restrike tests.	45 Before	Start of Pile Driving / Monitoring
3	Completed Pile and Driving Equipment Data Form (FHWA Figure 1, attached) and the results of wave equation analyses.	30 Before	Start of Pile Driving / Monitoring
4	Preliminary report(s) as defined in Section 3.1 of this Special Note.	1 (24 hrs.) After	Completion of Each Field Test (EOD/BOR)
5	Summary Report(s) as defined in Section 3.2 of this Special Note.	10 After	Completion of All Field Tests per Pile

Note: Provide all submittals in .pdf format

Additionally, regarding the signal matching methods, please note that the simplified automatic signal matching program, iCAP, shall not be used as it cannot accurately model non-uniform piles, such as large diameter open-end pipe piles due to internal plug movements.

Table 2. General Testing and Analysis Requirements	
Item	**Requirements**
Wave Equation Analysis	Minimum of one per dedicated test pile and sufficient additional analyses as needed to define performance for all combinations of piles, driving systems, and subsurface conditions anticipated
End of Initial Driving Test Frequency	Perform on all dedicated test piles during initial driving and during extended driving program, as defined. For pipe piles without a constrictor plate, measure the amount of soil/sediment inside the pile during stoppages in pile driving operation. Report the elevations of the soil/sediment during each stoppage in the summary reports.
Beginning of Restrike Test Frequency	Restrike will be performed on dedicated test piles after the initial driving and after the extended driving program, as defined.
Time Interval between End of Initial Driving and Restrike Tests	Perform restrike tests on dedicated test piles at 48 and 96 hours after initial driving. Following completion of static, pseudo-static, and lateral testing perform the extended driving program (as defined in the Special Note for Pile Load Test Program for dedicated test piles), after a waiting period of 96 hours. During the initial blows of the extended driving obtain restrike data on the pile. Perform an additional restrike test 96 hours after the extended driving is complete.
Pile Driving Analyses using Signal Matching Techniques	For each End of Initial Driving Test and each Restrike Test
Perform testing and analyses in accordance with this table and ASTM D4945, *High-Strain Dynamic Testing of Piles*	

2.0 TESTING AND ANALYSES

2.1 Preconstruction Wave Equation Analyses

At least 30 calendar days before beginning pile driving, submit the completed Pile and Driving Equipment Data Form (FHWA Figure 1, attached to this Special Note) and preconstruction wave equation analyses performed by the Dynamic Pile Testing Consultant in accordance with Table 2 in this Special Note and a summary report including the input parameters and output of the results. The required resistance and driving criteria are outlined in the Special Note for Pile Load Testing Program (Note A) Table 3.

The purpose of the wave equation analyses is to assess the ability of all proposed driving systems to install piles per the outlined driving criteria. The pile hammers for the 72-inch diameter piles and 48-inch diameter piles shall be selected based on the criteria described in Section 2.2.

2.2 Hammer Acceptance Criteria

Hammers selected shall have the following characteristics:

- Initial Driving
    - Produce 0.5 to 0.1 inches of set (2 to 10 blows per inch) when verifying the target nominal axial resistance at the end of initial driving and the target nominal axial resistance on restrike, and
    - Produce driving stresses not exceeding 90% of the yield stress of the steel (0.90 F_y) based on wave equation analysis.
- Be capable of varying the stroke to control driving stresses. The results of wave equation analyses may be used to assess the need for varying the stroke or energy levels.

When the Extended Driving Program is implemented on dedicated piles, the hammer shall also be capable of:

- Producing a set of 1/20 inch per blow (20 blows per inch) when verifying the approximate nominal axial resistance at the end of extended driving, and

- Producing driving stresses not exceeding 110% of the yield stress of the steel (55 ksi) during extended driving, based on wave equation analysis.
    - Note: This limit exceeds the AASHTO LRFD limit of 0.90 F_y. This deviation is accepted because these are sacrificial test piles that will not be incorporated into the permanent structure.

During actual pile driving, the Extended Driving Criteria given above, will apply to the 48-, and 72-inch diameter piles that include a constrictor plate. The extended driving will include driving the piles in a plugged condition and significant additional effort and time will be required. Wave equation analysis will be performed as outlined in this Special Note.

Do not mobilize hammer(s) to site until the wave equation analyses and hammer selection have been reviewed and accepted by the Department.

2.3 WEAP Deliverables

The Wave Equation Summary Report shall include:

- Drivability graph relating pile resistance, blow count, and driving stresses to depth.
- Bearing graph relating pile resistance to pile driving resistance, indicating blow count versus resistance and stroke for diesel hammers. If a hydraulic hammer is used, the bearing graph should indicate the energy level analyzed to demonstrate the control of driving stresses.
- Constant resistance analysis (inspector's chart) to assist the Department in determining the required driving resistance at other field-observed strokes or energy levels.
- Discussion and interpretation of the results.

2.4 Hammer Approval

Approval of the proposed pile driving system will be based upon the wave equation analyses indicating that the proposed system can meet the driving criteria outlined in Section 4.1 of the Special Note for Pile Load Test Program (Note A).

If any changes or modifications are made to the approved pile driving system, additional wave equation analyses will be required.

2.5 High-Strain Dynamic Testing — Field Procedures

2.5.1 Perform dynamic pile testing at the locations and frequency required in accordance with Table 2, Section 1.1 in this Special Note, and in accordance with ASTM D4945.

2.5.2 Engage an independent Dynamic Pile Testing Consultant with qualified personnel per Section 1.2 of this Special Note. Prior to testing, the Department will review and approve the proposed independent dynamic pile testing consultant, the experience and qualifications of assigned personnel, details of the method of testing, a list of equipment, and the method of analysis test results.

2.5.3 Perform all field testing and measurements in the presence of the Department or authorized representative.

2.5.4 Remote dynamic pile testing where data is collected in the field and sent to the office of the Dynamic Pile Testing Consultant will not be allowed on this project. The testing consultant is required to have at least one person meeting the requirements for "Pile Driving Monitoring" as defined in Section 1.2 in the field during all dynamic pile testing. However, wireless technology that eliminates cables between the test pile and the data acquisition equipment is acceptable.

2.6 Monitoring During Driving

During pile driving, instrument the piles and monitor them with testing equipment satisfying the requirements of Section 1.3 of this Special Note. Prior to lifting the pile to be dynamically tested into place, provide a

minimum of 3 feet of clearance to the gage locations on the pile for pile preparation, then drill and prepare holes for sensor attachment. Attach sensors a minimum of two diameters below the pile head.

- Install strain transducers and accelerometers near the head of each pile being tested and use a compatible measuring and recording system to record the data during driving.
- A minimum of four sets of transducers/accelerometers (arranged at a 90-degree spacing around the pile) should be installed for piles 48 inches or larger in diameter.
- Appropriately position and fix the equipment required to be attached to the pile to the satisfaction of the Department.
- Use the testing equipment to monitor pile stresses during driving to prevent pile damage and ensure pile integrity and resistance.
    - Initial Driving – do not exceed a driving stress of 45 ksi during dynamic pile testing (90% of the yield stress)
    - Extended Driving Program – Suspend driving and notify the Engineer if repeated blows exceed driving stresses of 55 ksi (110% of the yield stress) or pile damage is indicated during dynamic pile testing. If damage occurs to the pile that creates a safety concern, terminate driving, and have the test engineer document the encountered pile damage in their test report.

2.7 Pile Head Preparation

Preparation of the pile head for the application of dynamic test load may involve, where appropriate, trimming the head, cleaning, and building up the pile using materials that, at the time of testing, safely withstand the impact stresses. Provide an impact surface that is flat and at right angles to the pile axis.

2.8 Dynamic Measurement and Analysis

Monitor pile driving when pile driving begins unless otherwise approved by the Department. Record and process the data immediately in the field by the pile driving monitoring equipment and software. Unless monitoring indicates that additional driving will damage the pile, continue pile driving and monitoring until the driving criteria outlined in Section 4.1 of the Special Note for Pile Load Test Program (Note A) is satisfied. Cease pile driving operations immediately if dynamic measurements indicate poor hammer alignment or visual indications of poor hammer alignment (i.e. pile top bending or buckling) are identified while driving. Make any required adjustments to the fuel and/or power setting of the hammer if necessary to verify the resistance within the specified range of blow counts or to meet other applicable testing objectives. When the level of the sensors is within 1 foot of any obstruction endangering the survival of sensors or cables, halt driving and remove sensors from the pile. If additional driving is required, remove the obstruction or splice the pile and reattach the sensors near the head of the next pile segment prior to resuming driving. For each pile tested, perform pile driving analysis using signal matching techniques for up to 3 selected blows between the end of driving (EOD) and beginning of restrike (BOR) to determine the relative capacities from end bearing and skin friction along the length of the pile. Evaluation of pile capacity and pile structural integrity shall be performed in accordance with ASTM D4945. The Contractor will correlate the signal matching analyses with the results of the Static and Pseudo-Static tests. Submittal Number 2 shall include the plan to perform this correlation.

- Perform beginning of restrike tests at the frequency indicated in Table 2 of this Special Note with the time interval between end of initial driving and beginning of restrike in accordance with Table 2 of this Special Note. During restrike, instrument and monitor the pile in a manner similar to that used during initial driving. For each restrike test, perform pile driving analysis using signal matching techniques for selected blows from the beginning of restrike to determine the relative capacities from end bearing and skin friction along the length of the pile.
- Perform restrike tests with a warmed-up hammer (if applicable) by striking the pile a maximum of 5 blows unless testing equipment indicates overstressing or damage to the pile. Hammer warm-up procedure will be provided in Submittal Number 2. If hammer warm-up is not required, the hammer

operation should at least be checked and confirmed by a qualified operator. If overstressing or damage to the pile is indicated, immediately discontinue driving and notify the Department. If the contractor overdrives the pile during restrike testing, additional wait/setup time may be required by the Department. If initial restrike testing indicates a pile resistance below the specified resistance, additional driving may be required as directed by the Department.

- Department may request use of pile driving monitoring equipment and software on additional piles if inconclusive results are obtained or unusual driving conditions are encountered.
- Evaluate pile resistance and integrity based on ASTM D 4945, “Standard Test Method for High-Strain Dynamic Testing of Deep Foundations”.
- Immediately provide the Department with tabular records of the dynamic pile testing field measurements obtained at the end of initial driving and at the beginning of restrike.

3.0 DYNAMIC PILE TEST REPORTS

3.1 Preliminary Dynamic Pile Test Reports

Submit a preliminary test report for each pile tested (for both EOD and BOR events) within 24 hours of each field test for review by the Department. In the reports, include narrative, tabular, and graphical presentation of the dynamic test results versus depth of the pile tested. Include the following as a minimum:

- Maximum force applied to the pile head.
- Maximum pile head velocity.
- Maximum energy imparted to the pile.
- Assumed soil damping factor and wave speed.
- Signal match quality
- Static resistance estimate.
- Maximum compressive and tensile forces in the pile.
- Pile integrity assessment.
- Blows per inch.
- Stroke length or energy.

Provide data files of the results for independent analyses by the Department.

3.2 Summary Reports

Submit a summary report, including signal matching results, for each dedicated test pile within 10 calendar days after completion of all field tests on that pile. Include the results of hammer performance, pile driving stresses, and pile resistance during initial driving and restrike for all events. Include the following for both End of Drive (EOD) and Beginning of Restrike (BOR) tests:

- Pile number and location.
- Date of testing and date of pile installation.
- Pile identification number and location.
- All information given in preliminary reports as follows:
    - Length of pile below the ground surface or mudline and depth of water.
    - Total length of pile, including projection above the surface at time of test.
    - Length of pile from instrumentation position to tip.
- Hammer type, stroke length, transferred energy, and other relevant details.
- Blows selected for signal matching analysis.
- Signal match quality

- Setup Ratio from EOD and BOR tests.
- Maximum compressive and tensile stresses, stroke, and resistance versus penetration depth.
- Temporary compression.
- Pile integrity and location of damage, if any.
- Force/velocity versus time trace.
- Force/velocity match curve.
- Resistance distribution along the pile.
- Detailed graphical and tabular results from blows analyzed using signal matching techniques and software for evaluation of signal match quality.
- Correlation of the signal matching analyses with the result of the Static and Pseudo-Static tests.
- Narrative describing the data, results, and their interpretation, such as recommended unit side and unit tip resistance values.

4.0 INCIDENTAL EQUIPMENT

Prior to the beginning of dynamic testing, provide one electronic device to aid in recording pile hammer blows, stroke, and energy such as an “Saximeter-Q” or approved equivalent meeting the specifications in the Appendix to this Special Note. This device will immediately become property of the Department for use on this project.

Provide field training by someone proficient in the use of the device to ensure that approximately 3 to 5 employees of the Department are competent in the use of the device. This training may be performed by a representative of the independent Dynamic Pile Testing Consultant or a manufacturer’s representative. The required training time is anticipated to be no more than one day.

The cost of furnishing this device and providing the training is incidental to the contract price for the “Dynamic Pile Testing” items and no separate payment will be made.

5.0 MEASUREMENT AND PAYMENT

5.1 General

Dynamic pile testing on dedicated test piles will be measured per each. Payment for each restrike test performed will be separate from payment for each test performed during initial driving.

The cost of any restrike dynamic testing performed immediately prior to driving piles deeper (i.e., at the start of extended driving) is incidental to the initial drive dynamic testing for the extended driving.

Payment for each test will include pile driving monitoring and pile driving analysis (including wave equation and signal matching work) performed. Payment includes all material, equipment, tools, labor, reporting, and any other incidental work necessary to complete this item.

Table 3. Payment Table

Bid Item Code	Pay Item Description	Unit
23233EC	Dynamic Pile Testing — On Water — Initial	Each
23233EC	Dynamic Pile Testing — On Water — Restrike	Each
23233EC	Dynamic Pile Testing — On Land — Initial	Each
23233EC	Dynamic Pile Testing — On Land — Restrike	Each

APPENDIX A PILE AND DRIVING EQUIPMENT DATA FORM

Contract No.:_____ Structure Name and/or No.:_____

Project:_____

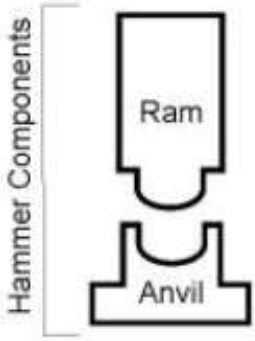
_____

Pile Driving Contractor or Subcontractor:_____

County:_____

_____

(Piles driven by)



Hammer

Manufacturer:_____ Model No.:_____

Hammer Type:_____ Serial No.:_____

Manufacturers Maximum Rated Energy:_____(ft-lbs)

Stroke at Maximum Rated Energy:_____(ft)

Range in Operating Energy:_____to_____(ft-lbs)

Range in Operating Stroke:_____to_____(ft)

Ram Weight:_____(kips)

Modifications:_____

_____

_____



Striker Plate

Weight:_____(kips) Diameter:_____(in)

Thickness:_____(in)



Hammer Cushion

Material #1	Material #2 (Composite Cushion)
Name:_____	Name:_____
Area:_____(in^2)	Area:_____(in^2)
Thickness/Plate:_____(in)	Thickness/Plate:_____(in)
No. of Plates:_____	No. of Plates:_____

Total Thickness of Hammer Cushion:_____(in)



Helmet

Weight:_____(kips)

Insert (If Any)

Weight:_____(kips)

Total Weight of Helmet and Insert:_____(kips)



Pile Cushion

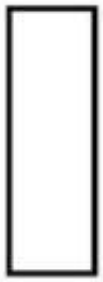
Material:_____

Area:_____(in^2) Thickness/Sheet:_____(in^2)

No. of Sheets:_____

Total Thickness of Pile Cushion:_____(in)

Maximum Thickness Accommodated by Helmet :_____(in)



Pile

Pile Type:_____

Wall Thickness:_____(in) Taper:_____

Cross Sectional Area:_____(in^2) Weight/ft:_____

Ordered Length:_____(ft)

Factored Resistance:_____(kips)

Nominal Resistance:_____(kips)

Description of Splice:_____

_____

Driving Shoe/Closure Plate Description:_____

_____

Submitted By:_____ Date:_____

Telephone No.:_____ Email:_____

APPENDIX B — SAXIMETER-Q SPECIFICATIONS

The electronic pile driving monitoring device shall meet or exceed the following specifications:

Physical:

Size:	Approximately 272 mm x 212 mm x 60 mm (10.7 in x 8.3 in x 2.4 in)
Weight:	Approximately 2.04 kg (5.29 lb.)
Temperature Range:	-20°C to 40°C (-4°F to 104°F) operating
Power:	Built-in rechargeable battery with 10-hour minimum duration
Display:	Sunlight readable VGA color display, resolution of 640 x 480 pixels
Screen size:	21.3 cm (8.4 in)

Electronic:

Minimum of 128 GB drive

Intel® Atom™ E3825 at 1.33 GHz

8.00 GB Installed RAM

64-bit operating system, x64-based processor

Windows 10® Operating System

USB port for data retrieval/external device connection

Functional:

Maximum Blow Detection Rate: 150 bpm

Data Save Formats: Text (tab-seperated), Customizable non-editable proprietary file format – requires the Sax-Viewer Software for viewing/printing, Excel 2007-365 (*.xlsx) format (optional)

Operates in English, SI, or metric units

Full one year warranty

Technical manual included

END OF SPECIAL NOTE FOR DYNAMIC PILE TESTING

US-51 BRIDGE REPLACEMENT PROJECT

SPECIAL NOTE FOR STATIC AND PSEUDO-STATIC PILE TESTING (NOTE C)

BALLARD COUNTY, KENTUCKY/ALEXANDER COUNTY, ILLINOIS ITEM NO. 01-1140.20
US-51 BRIDGE REPLACEMENT PROJECT

SECTION 1.0: STATIC AXIAL PILE TESTING

1.1 GENERAL

Scope of Work

The scope of work includes furnishing all materials, reaction piles, labor, equipment, and instrumentation associated with static axial pile testing of driven piles as specified in this Special Note (Note C) and in general accordance with ASTM D1143, *Standard Test Methods for Deep Foundations Under Static Axial Compressive Load*. Static axial pile testing involves axially loading the pile using hydraulic jacks and reaction piles to provide information used to assess the magnitude and distribution of side shear resistance along the pile, the amount of end bearing developed at the pile toe, and the long-term load-movement behavior.

1.1.1 TEST LOCATIONS

Testing will be performed on test piles prior to construction for design purposes. Test piles will be subject to dynamic testing during initial driving and restrike testing as specified in the Special Note for Dynamic Pile Testing (Note B). Coordinate static testing with dynamic testing; reaction piles may be evaluated via dynamic pile testing to verify required reaction capacity. Perform static pile testing at the following locations. A total of two (2) tests will be performed.

- East Approach (KY Land)
  - Two (2) 48-inch diameter pipe piles (PT-4, PT-6)

1.1.2 PERSONNEL QUALIFICATIONS

Perform static pile testing utilizing the qualified personnel as described below.

- A qualified professional engineer with five years of structural design experience, and experience on a minimum of two large, deep foundation static axial compressive load test reaction systems, will design all loading apparatus, loaded members, and support frames.
- A qualified and licensed professional engineer, with at least five years of geotechnical engineering experience, and experience on a minimum of three instrumented pile load tests, will design the required instrumentation and instrumentation protection and supervise the instrumentation installation.
- Load test data collection and reduction will be performed by the Contractor's subconsultant.

1.1.3 SUBMITTALS AND GENERAL TESTING REQUIREMENTS

See Table 1. The Department will respond to the Contractor regarding acceptability of submittals within 10 business days.

Table 1. Schedule of Static Pile Testing Submittals

Submittal No.	Submittal Item	Calendar Days Before/After Event	Event
1	Detailed testing firm and testing personnel information.	30 After	Notice to Begin Work
2	Details of equipment, constrictor plate, reaction frame setup and calculations, telltale installation details, strain gage specifications, calibration documentation for all load and deflection measuring devices, strain gage protection and attachment details, load cell and jack calibrations, safety plan, and test schedule.	45 Before	Start of Test Pile Driving
3	Test and reaction pile installation logs.	7 Before	Start of Pile Load Test
4	Pile load test report.	7 After	End of Pile Load Test

Note: Provide all submittals in .pdf format

Contractor will submit a safety plan as part of Submittal 2, detailing the steps that will be taken to ensure the safety of personnel, existing structures, and the general public during the load tests. Consideration should be made to the use of gages and load application equipment that allows testing personnel to be stationed a safe distance from the load test apparatus.

1.2 TESTING APPARATUS

1.2.1 Equipment & Test Pile Setup

Supply all equipment necessary for the performance of the load test. All instrumentation for load tests and data collection shall comply with the appropriate ASTM specifications for calibration requirements as stated within Section 2.0 in the Special Note for Pile Load Test Program (Note A). Required equipment may include, but not necessarily limited to:

- Hydraulic Jack(s)
- Load Cell(s)
- Bearing Plates
- Hemispherical Bearing
- Test and Reaction Beams
- Cribbing
- Reference Beams
- Displacement Indicators, Wireline & Mirror
- Strain Gages
- Telltales
- Survey Equipment
- Compatible Readout Devices for Instrumentation

The safety of the testing apparatus, components, and personnel is the responsibility of the Contractor. Contractor will provide a safety plan as mentioned in Submittal 2.

Provide apparatus for applying compressive loads to the test pile similar to that shown in Figure 1 and the example provided in the attached drawings. Design of apparatus shall be performed by a professional engineer meeting the requirements outlined in Section 1.1.2 of this Special Note. The piles will be loaded to the maximum load of 5800 Kips. The reaction system design engineer will be responsible for proposing an AASHTO design code (or another code allowed by the Department) and associated load factor(s) to apply to the maximum test loads based on the code. The design

and construction of the reaction system will be included in the applicable unit bid item for Static Pile Testing.

Provide apparatus for measuring movement of the test and reaction piles similar to the test typical setup shown in Figure 2. Loading and measuring apparatus to conform to ASTM D1143 with the following additions:

- Use a minimum of four displacement indicators at the pile head.
- Installation of strain gages as outlined in Section 1.2.2 of this Special Note.
- Installation of telltales within the piles as outlined in Section 1.2.3 of this Special Note.
- Survey measurements of all reaction piles to measure uplift deflection.

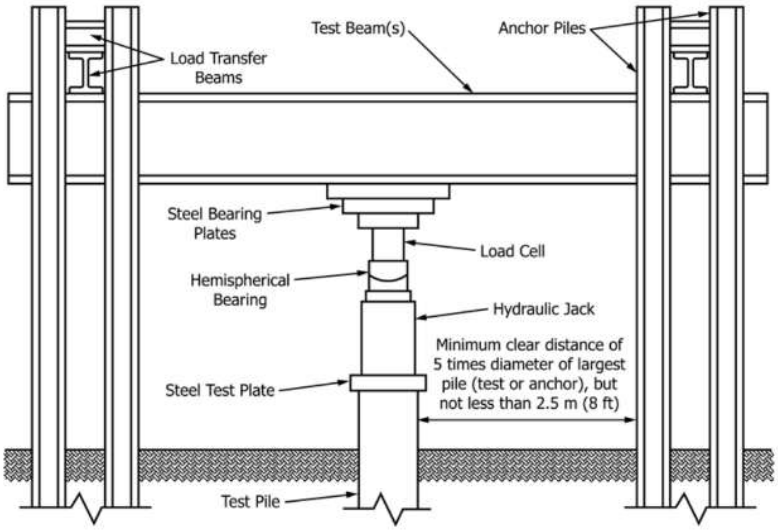


Figure 1. Schematic of Reaction Frame Setup (From ASTM D1143)

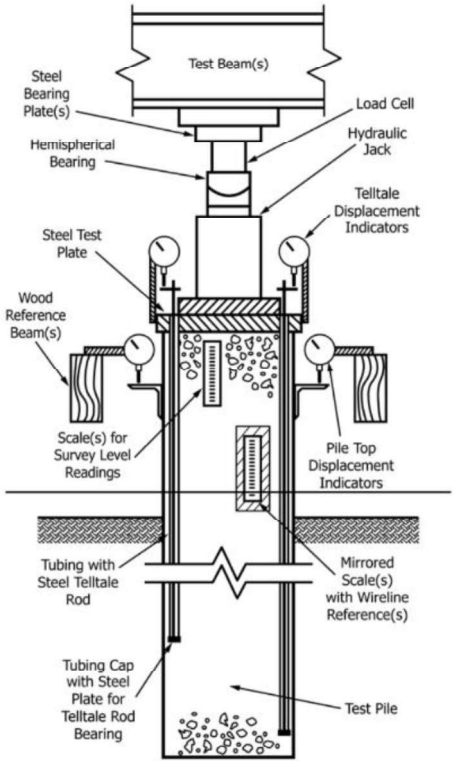


Figure 2. Schematic of Apparatus for Measuring Axial Pile Movements (From ASTM D1143)

1.2.2 Strain Gages

Install strain gages along the test piles prior to driving to obtain shaft versus toe resistance distribution data. Include strain gage details in Submittal 2. Install sets of strain gages at 90-degree spacing around the pile at ten equally spaced depths, or spaced based on subsurface stratigraphy as directed by the Engineer, between the pile toe and pile head. Weld strain gages to the steel pile. Protect strain gages and cabling to prevent damage during handling and pile driving. Gages will consist of arc-weldable vibrating wire strain gages with a minimum of 3000 micro-strain range and 1 micro-strain resolution. Provide the selected strain gage manufacturer/model, gage and equipment calibrations/manuals, gage/cable protection details for approval as part of Submittal 2. Obtain readings of the strain gages at the following times:

- Before and after installation of gage and cable protection
- Immediately before beginning of pile driving
- Immediately after completion of pile driving
- Before and after each restrike test
- Immediately before start of pile load test
- At each load increment during the pile load test

Strain gage readout devices should be provided by the Contractor. Strain gages and protection will be inspected by the Department prior to lifting the pile. All strain gages will be tested and in working condition immediately prior to driving. The Contractor may decide to install additional gages to account for any incidental or installation related damage.

1.2.3 Telltale Rods

Install three rods oriented at 120-degree spacing around the pipe piles and equidistant from the pile axis. Terminate all telltales near the pile bottom. The telltales will be unstrained within steel pipe. Provide telltale rods that have a rounded tip that bear on a clean steel plate affixed to the pile or that are threaded into a nut affixed to the pile. See Figure 3 for a typical telltale installation and ASTM D1143 for further details. Include telltale installation details in Submittal 2.

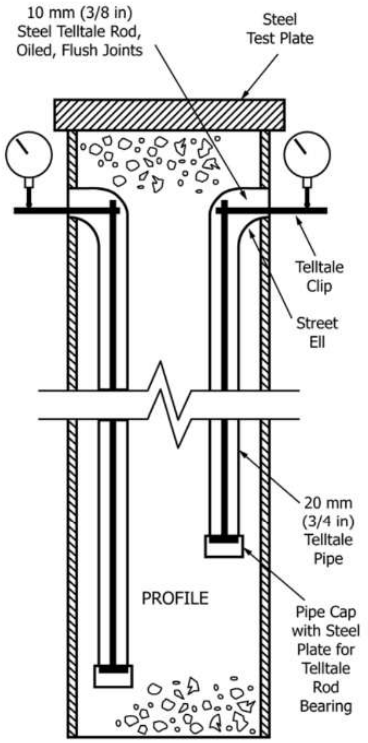


Figure 3. Typical Installation of Telltales for Pipe Piles (From ASTM D1143)

1.2.4 Site Protection

Always provide adequate protection for the pile supports and reference beam from wind, direct sunlight, frost action, and other disturbances which may influence the load test results. It may be necessary to provide heat and to construct a suitable test enclosure of fiber board, polyethylene, and canvas, or other materials acceptable to the Department. Provide adequate lighting for the duration of the test.

1.3 TESTING PROCEDURE

1.3.1 Waiting Period

Observe a minimum waiting period of seven days between installing the last pile in the load test system and starting the test to account for soil set-up. Concurrently, a waiting period of 96 hours between the restrike test and the beginning of the static test will be observed. Completion of the load test system and measurement apparatus setup may be performed during this period. The final restrike test will be performed as soon as practical following the static pile load test and removal of the test apparatus, during the initial portion of the extended driving test. Contractor will provide notification of the start of the static test to the Department at least 72 hours prior to beginning the test.

1.3.2 Load Testing Procedure

Load the test pile as outlined in the following sections. The test loads are provided in Table 3 of the Special Note for Pile Load Test Program (Note A). Record readings of the displacement gages, wireline scale, telltale rods, and strain gages before and after the application of each load increment or decrement. Survey the reference beams and reaction frame before applying any test load, at the proposed design load, at the maximum test load, and after removal of all loads. Intermediate readings of the reference beams and reaction frame are recommended to provide additional quality assurance and detect potential failure of the load reaction system. Data collection will be performed by the Contractor's subconsultant. A representative of the Department may be present during each test.

1.3.3 Load Test Sequence

Apply the test loads in increments of 10% of the Target Test Load (Target Nominal Axial Resistance of 5800 kips, shown in Table 3 in the Special Note for Pile Load Test Program, Note A). Maintain each load increment until the rate of axial movement is less than 0.01 inches per hour, with a minimum time of 30 minutes, and a maximum time of 2 hours. After the axial movement exceeds 0.01 inches per hour within the specified time of 2 hours, and if the element has not reached the test load of 5800 kips, apply the additional test load in increments of 5% of the Target Test Load of 5800 kips and hold each load step for at least 10 minutes, but no longer than 1 hr.

If geotechnical failure occurs, after the load step is held for 10 minutes if practical, remove the load in decrements of 25% of the maximum test load keeping the load constant for a time interval of 10 minutes using the same time interval for all unloading decrements. If geotechnical failure does not occur after reaching the Target Test Load of 5800 kips, or if the test is halted for any reason (other than safety or structure failure of the load reaction system), hold the final load for 8 hours and then remove the load in decrements of 25% of the maximum test load keeping the load constant for a time interval of 10 min., using the same time interval for all unloading decrements. A longer time interval of 30 minutes shall be implemented for the final zero load to assess rebound behavior.

1.4 STATIC PILE TEST REPORTS

1.4.1 Pile Installation Report

Submit a pile installation report for each test and reaction pile for review by the Department. In the report include, at a minimum, the following information:

- Include a description of the test setup, installation of instruments, test schedule and general narrative regarding test details.
- Identification and location of test and reaction piles
- Target Nominal Resistance

- Type, material, and dimensions of test and reaction piles
- Location of test pile splices, details, and methods
- Driving records for test and reaction piles
- Strain gage locations, calibration procedure and results, and pre- and post- driving readings
- Telltale locations
- Initial dynamic testing reports

1.4.2 Load Test Result Report

The load test result report provided by the Contractor's subconsultant will include, at a minimum, the following information:

- Temperature and weather conditions during tests
- Brief description of load application apparatus
- Description of and diagram showing instrumentation used to measure pile movement including location of indicators, scales, and other reference points with respect to pile top
- Description of and diagram showing special instrumentation such as telltale rods or strain gages including location of such with reference to pile top
- Tabulation of all time, load (jack and load cell), and movement (dial gages, strain gages, and telltales) readings
- Details of all protective covers used to protect strain gages, cables, and telltales. Details to include cover dimensions and thicknesses and method of attaching to pile
- Identification and location sketch of all gages, scales, and reference points
- Load and deflection plots, detailed analysis and interpretation.
  - The load test and results shall incorporate the Modified Davisson method as well as the 5 Percent Method to confirm maximum nominal geotechnical resistance was achieved.
  - Plots of the recommended t-z and q-z curves shall also be provided.
- Description and explanation of adjustments made to instrumentation or field data, or both
- Notation of any unusual occurrences during testing,
- Suitable photographs showing the test instrumentation and set-up

Further review of the load test data, results, and report will be performed by the Department and/or its consultants.

1.5 MEASUREMENT

1.5.1 Static Pile Testing

Static pile testing will be measured per each test. Payment for the above-described work includes all labor, equipment, reaction piles, reaction frame, jacks, and instrumentation and any other incidental work necessary to complete this item. This item will include everything necessary to assemble, install and remove the load test apparatus. Data collection and reduction will be performed by the Contractor's subconsultant.

1.6 PAYMENT

Payment will be made under:

Table 2. Payment Table

Bid Item Code	Pay Item Description	Unit
08040	Loading Tests – Static – 48-inch Pipe	Each

SECTION 2.0: PSEUDO-STATIC AXIAL PILE LOAD TESTING

2.1 GENERAL

Scope of Work

The scope of work includes furnishing all materials, equipment and labor necessary for conducting the Pseudo-Static Axial Load Tests and reporting the results as specified in this Special Note and in general accordance with ASTM D7383, *Axial Compressive Force Pulse (Rapid) Testing of Deep Foundations.* Supply all material and labor as hereinafter specified and include prior to, during and after the load test.

2.1.1 Test Locations

Testing will be performed on test piles prior to construction for design purposes. Coordinate pseudo-static testing with the dynamic testing as outlined in the Special Note for Pile Load Test Program. Perform pseudo-static pile testing at the following locations:

- West Approach (IL Land)
  - One (1) 48-inch diameter pipe pile (PT-1)
- Main Span (River)
  - One (1) 72-inch diameter pipe pile driven with constrictor plate installed (PT-2)
  - One (1) 72-inch diameter pipe pile (PT-3)
- East Approach (KY Land)
  - One (1) 48-inch diameter pipe pile (PT-5)
  - One (1) 48-inch diameter pipe pile driven with constrictor plate installed (PT-7)

2.1.2 Personnel Qualifications

Employ a qualified licensed Professional Engineer experienced in the conducting and reporting of a pseudo-static load test to design, set-up, perform and prepare a report of the pseudo-static load test. Submit qualifications of the testing personnel to the Department for review and approval in Submittal 1. The testing personnel shall have successfully completed no less than three pseudo-static load tests on piles of similar dimensions and capacities in the past five years.

2.1.3 Equipment

Contractor's testing firm to supply all equipment necessary for the performance and monitoring of the load test. Contractor will supply equipment and labor required for the installation, support, and removal of the load test apparatus as required by the testing firm. Required equipment for installation and removal may include, but not necessarily limited to:

- A crane or other lifting equipment capable of lifting the pseudo-static components, operator and labor for unloading pseudo-static trucks during mobilization and demobilization, and for assembling and disassembling the pseudo-static load test.
- Power source adequate for electronic equipment as required in the approved working plans (minimum of 5000 watts).
- Clam shell bucket or loader and concrete bucket for gravel.
- Containment equipment for gravel.

Contractor's testing firm to design and supply instrumentation to provide soil response curves along the pile length and at the pile tip. Instrumentation, calibration and installation details and instrumentation protection details will be provided in Submittal 2 for Department review and acceptance. Instrumentation will include a minimum of strain gages at ten depths along the pile. Strain gages will be installed in sets of 4 spaced at 90-degree spacing around the pile. For pseudo-static load testing, the instrumentation shall include force transducers, displacement transducers, and accelerometers to measure and record data over the short duration of the pseudo-static test. All instrumentation for load tests and data collection shall comply with the appropriate ASTM specifications for calibration requirements as stated within Section 2.0 in the Special Note for Pile Load Test Program (Note A). Other equipment for conditioning, recording, and displaying data will also be required per ASTM standard requirements.

2.1.4 Submittals

See Table 1. The Department will respond to the Contractor regarding acceptability of submittals within 10 business days.

Table 1. Schedule of Pseudo-Static Pile Testing Submittals

Submittal No.	Submittal Item	Calendar Days	Event
1	Details of the testing firm and testing personnel information.	30 After	Notice to Begin Work
2	Details of equipment, personnel, instrumentation, notification plan, safety plan, and procedures.	45 Before	Start of Test Pile Driving
3	Preliminary data report. See Section 2.2 Testing and Reporting	4 After	End of Each Pile Load Test
4	Final data report. See Section 2.2 Testing and Reporting	7 After	End of Each Pile Load Test

Note: Provide all submittals in .pdf format

Submittal 2 will include a plan, to be reviewed by the District 1 Public Information Officer, to notify the general public of the tests and provide traffic control/closure on the existing bridge during the tests. Notifications to organizations such as the U.S. Coast Guard, U.S. Army Corps of Engineers – Navigation Branch, and local authorities may also be required as directed by the Engineer.

Contractor will submit a safety plan as part of Submittal 2, detailing the steps that will be taken to ensure the safety of personnel, existing structures, and the general public during the load tests. Consideration should be made to the use of the gages and load application equipment that allows testing personnel to be stationed at a safe distance from the load test apparatus.

2.2 Testing and Reporting

Observe a minimum waiting period of seven days between installing the last pile in the load test system and starting the test to account for soil set-up. Concurrently, a waiting period of 96 hours between the final restrike test and the beginning of the pseudo-static test will be observed. Completion of the setup of the load test system and set up of measurement apparatus may be performed during this period. The Contractor will provide notification of pseudo-static test to the Department at least 72 hours prior to beginning the test. The target nominal resistances are provided in Table 3 of the Special Note for Pile Load Test Program (Note A).

The Contractor's testing firm is to acquire the test data during testing and summarize the pseudo-static data in a report submitted to the Department. All required electronic equipment for the recording, processing and storage of the pseudo-static test data will be operated by the testing personnel. Install sufficient instrumentation on the test piles to determine the distribution of the toe and side resistance along the pile length and determine the load versus displacement relationships along the side of the pile and at the tip of the pile.

Submit a report providing all data readings and plots of the readings, as well as a determination of the toe and side resistance of the pile to the Department for review. Submit an initial data report containing the load-movement curves and test data to the Department to allow for evaluation of the test results. At a minimum, include the following in the final report of the Pseudo-Static Load Testing:

- As-installed location of the test pile.
- Installation records of the test pile showing locations of the instrumentation.
- Summary of the load test procedure and data collected during load testing.
- Details of instrumentation covers or plates including dimensions, thickness, and method of attachment used to protect the instrumentation.
- Analysis and plots of toe resistance and side resistance distribution along the pile. This may be in the form of t-z and q-z curves.
- Data files for independent analysis.

2.3 MEASUREMENT

Measure the “Pseudo-Static Axial Load Testing” by the actual number of test(s) completed and accepted, and include materials, labor and equipment necessary for the pseudo-static load testing of the pile(s). This item will include everything necessary to assemble, install and remove the load test apparatus, conduct and report results of the load test.

2.4 PAYMENT

Payment will be made under:

Table 2. Payment Table

Bid Item Code	Pay Item Description	Unit
24549EC	Pseudo-Static Load Test – Axial – 48-inch Pipe	Each
24549EC	Pseudo-Static Load Test – Axial – 72-inch Pipe	Each

SECTION 3.0: PSEUDO-STATIC LATERAL PILE LOAD TESTING

3.1 GENERAL

Scope of Work

The scope of work includes furnishing all materials, equipment and labor necessary for conducting the Pseudo-Static Lateral Load Tests and reporting the results. Supply all material and labor as hereinafter specified and include prior to, during and after the load test.

3.1.1 Test Locations

Testing will be performed on test piles prior to Phase II of bridge construction for validation and final design purposes. The test pile will be subjected to dynamic and pseudo-static axial testing prior to the pseudo-static lateral testing. Coordinate pseudo-static lateral testing with the dynamic and pseudo-static axial testing as outlined in the Special Note for Pile Load Test Program (Note A). Perform pseudo-static lateral pile testing at the following location and to the maximum test load provided outlined below:

- Main Span (River)
  - One (1) 72-inch diameter pipe pile driven with constrictor plate installed (PT-2)
- East Approach (KY Land)
  - One (1) 48-inch diameter pipe pile (PT-5)
- Lateral testing will be performed on same pile as dynamic and axial pseudo-static testing.
- Lateral pile load test will be performed to a maximum lateral load of 1,000 kips for the 72-inch diameter pipe pile.
- Lateral pile load test will be performed to a maximum lateral load of 700 kips for the 48-inch diameter pipe pile.
- For either the Pseudo-Static Lateral Load Test (ASTM D7383) or the alternate ASTM D3966 lateral load test, a minimum of four load increments shall be applied up to the specified maximum lateral test load. The magnitude of the load increments and hold periods shall be proposed by the Contractor or the Contractor's testing firm and submitted as part of Submittal 2.

3.1.2 Personnel Qualifications

Employ a qualified registered Professional Engineer experienced in the conducting and reporting of pseudo-static load test to design, setup, perform and prepare a report of the pseudo-static load test. Submit qualifications of the testing personnel to the Department for review and approval. The testing personnel shall have successfully completed no less than three pseudo-static lateral load tests on piles of similar dimensions and capacities in the past five years.

3.1.3 Equipment

Contractor’s testing firm will supply all equipment necessary for the performance and monitoring of the load test. Contractor will supply the necessary instrumentation to provide the pile deflection profile including resistance type strain gages, accelerometers, and inclinometer(s)/lateral motion sensors. Contractor will supply equipment and labor required for the installation and removal of the load test apparatus as required by the testing firm. Required equipment for installation and removal may include, but not necessarily limited to:

- A crane or other lifting equipment capable of lifting the pseudo-static components, operator and labor for unloading pseudo-static trucks during mobilization and demobilization, and for assembling and disassembling the pseudo-static load test.
- Power source adequate for electronic equipment as required in the approved working plans (minimum of 5000 watts).
- Clam shell bucket or loader and concrete bucket for gravel.
- Containment equipment for gravel.

Contractor’s testing firm will supply instrumentation (inclinometer(s)/lateral motion sensors, strain gages, accelerometers) to provide pile deflection along the pile length to allow the design team to develop p-y

curves for the use in final pile design. Instrumentation will include a minimum of strain gages at ten depths along the pile and one inclinometer/lateral motion sensor string. Strain gages will be installed in sets of 4 spaced at 90-degree spacing around the pile. For pseudo-static load testing, the instrumentation shall include force transducers, displacement transducers, and accelerometers to measure and record data over the short duration of the pseudo-static test. Other equipment for conditioning, recording, and displaying data will also be required per ASTM standard requirements. All instrumentation for load tests and data collection shall comply with the appropriate ASTM specifications for calibration requirements as stated within Section 2.0 in the Special Note for Pile Load Test Program (Note A). Instrumentation and instrumentation protection details will be provided in Submittal 2.

3.1.4 Submittals

See Table 1. The Department will respond to the Contractor regarding acceptability of submittals within 10 business days.

Table 1. Schedule of Pseudo-Static Pile Testing Submittals

Submittal No.	Submittal Item	Calendar Days	Event
1	Details of the testing firm and testing personnel information.	30 After	Notice to Begin Work
2	Details of equipment, test setup, notification plan, safety plan, load increments, and procedures.	45 Before	Start of Test Pile Driving
3	Preliminary data report. See Section 3.2 Testing and Reporting	4 After	End of Each Pile Load Test
4	Final data report. See Section 3.2 Testing and Reporting	7 After	End of Each Pile Load Test

Note: Provide all submittals in .pdf format

Submittal 2 will include a plan, to be reviewed by the District 1 Public Information Officer, to notify the general public of the tests and provide traffic control/closure on the existing bridge during the tests. Notifications to organizations such as the U.S. Coast Guard, U.S. Army Corps of Engineers – Navigation Branch, and local authorities may also be required as directed by the Engineer.

Contractor will submit a safety plan as part of Submittal 2, detailing the steps that will be taken to ensure the safety of personnel, existing structures, and the general public during the load tests. Consideration should be made to the use of the gages and load application equipment that allows testing personnel to be stationed at a safe distance from the load test apparatus.

3.2 Testing and Reporting

Observe a minimum waiting period of 96 hours between the previous testing (axial pseudo-static and dynamic testing) and the beginning of the lateral test. Completion of the setup of the load test system and set up of measurement apparatus may be performed during this period. The Contractor will provide notification of pseudo-static test to the Department at least 72 hours prior to beginning the test.

The Contractor’s testing firm is to acquire the test data during testing and summarize the lateral pseudo-static data in a report submitted to the Department. All required electronic equipment for the recording, processing and storage of the lateral pseudo-static test data will be operated by the testing personnel.

Submit a report providing all data readings and plots of the readings to the Department for review. Submit an initial data report containing the load-movement curves and test data to the Department to allow for evaluation of the test results. At a minimum, include the following in a final report of the Pseudo-Static Lateral Load Testing:

- As-installed location of the test pile.
- Installation records of the test pile showing locations of the instrumentation.
- Summary of instrumentation calibration and installation details.

- Details of instrumentation covers or plates including dimensions, thickness, and method of attachment used to protect the instrumentation.
- Summary of the load test procedure and data collected during load testing. Recommended p-y curves shall also be provided.
- Data files for independent analysis.

3.3 Alternate Lateral Load Testing Option (ASTM D3966)

In lieu of the Pseudo-Static Lateral Load Test specified herein, the Contractor may elect to perform a static lateral load test in general accordance with ASTM D3966, Standard Test Methods for Deep Foundations Under Lateral Load. The Contractor shall indicate the proposed testing method in Submittal 2 and provide complete details of the proposed test setup, loading equipment, reaction system, instrumentation, loading sequence, and data acquisition procedures.

The alternate ASTM D3966 lateral load test shall satisfy the following requirements:

- The test pile locations and maximum test loads specified in this note shall remain unchanged.
- The test pile shall be subjected to the same maximum lateral test loads specified herein:
  - 1,000 kips for the 72-inch diameter pipe pile.
  - 700 kips for the 48-inch diameter pipe pile.
- The loading apparatus and reaction system shall be designed by a Professional Engineer licensed in the Commonwealth of Kentucky and shall safely resist all applied test loads and associated surcharge effects.
- Loading increments, hold periods, unloading sequence, and acceptance criteria shall be submitted to the Department for review as part of Submittal 2.
- The test shall be conducted using maintained load procedures in accordance with ASTM D3966 unless otherwise approved by the Engineer.

A conceptual lateral load test setup is provided below in Figure 4.

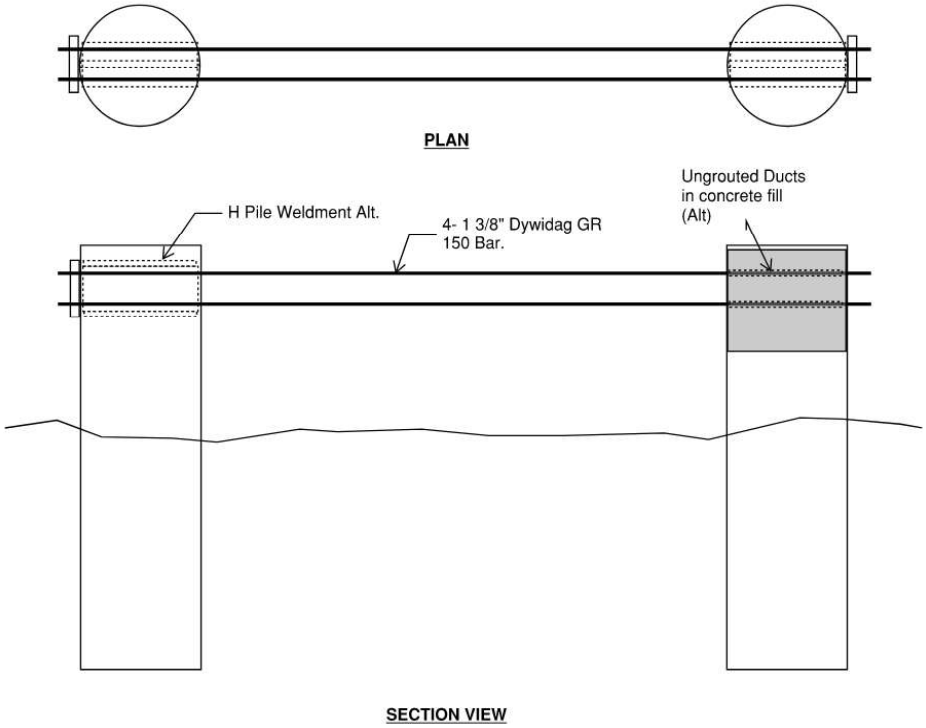


Figure 4. Lateral Load Test Alternative Schematic

3.3.1 Instrumentation Requirements

The alternate ASTM D3966 test shall provide sufficient instrumentation to characterize pile behavior and allow development of p-y curves for final foundation design. At a minimum, provide:

- Force measurement devices with accuracy meeting ASTM D3966 requirements.
- Lateral displacement measurement at the pile head using a minimum of two independent displacement transducers referenced to an independent support system.
- One inclinometer or lateral motion sensor string extending over the length necessary to define pile curvature and deflection.
- Strain gages at a minimum of ten depths along the pile.
- Strain gages installed in sets of four equally spaced at 90 degrees around the pile circumference.
- Any additional instrumentation necessary to determine pile deflection, rotation, bending moment distribution, shear distribution, and soil response.

Instrumentation calibration records shall be provided to the Department prior to testing.

3.3.2 Reporting Requirements

In addition to the reporting requirements specified herein, the final report for ASTM D3966 testing shall include:

- Load versus lateral deflection plots.
- Load versus pile head rotation plots, if measured.
- Deflected shape of the pile at each significant load increment.
- Bending moment, shear, and soil reaction profiles derived from instrumentation data.
- Electronic data files containing all raw and processed measurements.
- Interpretation of results sufficient for development of p-y curves and final foundation design.

3.4 MEASUREMENT

Measure the “Pseudo-Static Lateral Load Test” by the actual number of test(s) completed and accepted, and include materials, labor and equipment necessary for the pseudo-static lateral load testing of the pile(s). These items will include everything necessary to assemble, install and remove the load test apparatus, conduct and report results of the load test.

3.5 PAYMENT

Payment will be made under:

Table 2. Payment Table

Bid Item Code	Pay Item Description	Unit
24549EC	Pseudo-Static Load Test – Lateral – 72-inch Pipe	Each
24549EC	Pseudo-Static Load Test – Lateral – 48-inch Pipe	Each

SPECIAL NOTE FOR GROUND IMPROVEMENT (NOTE D)

(STA 2093+00 to STA 2094+35)

BALLARD COUNTY, KENTUCKY/ALEXANDER COUNTY, ILLINOIS ITEM NO. 01-1140.20

US-51 BRIDGE REPLACEMENT PROJECT

SECTION 1.0: COLUMN SUPPORTED EMBANKMENT

1.1. General

Scope of Work

Provide and construct a Column Supported Embankment (CSE) at locations shown in the plans. The system shall consist of columns and a load transfer platform (LTP) to support embankment loads and reduce liquefaction induced vertical and horizontal displacements. The column specifications shall be in accordance with **Section 2.0: Ground Improvement.**

1.2. Materials

Furnish material according to plan requirements conforming to KYTC Standard Specifications.

1.2.1. Load Transfer Platform

The load transfer platform (LTP) shall consist of well-graded granular material meeting the material gradation shown in Section 805 of the KYTC Standard Specifications for Dense Graded Aggregate (DGA).

1.2.2. Concrete Pile Caps

Concrete pile caps are required to be placed below the LTP on top of each column. Pile cap dimensions are indicated below:

- Width: 2.5 ft
- Length: 2.5 ft
- Thickness: 2.0 ft

Concrete for pile caps shall be Class B concrete per Section 601.03.03 in the KYTC Standard Specifications.

1.2.3. Geosynthetic Reinforcement

Furnish geosynthetic reinforcement in accordance with plan requirements and based on the minimum strengths below (using ASTM D 6637). Geogrid shall be either High-Density Polyethylene (HDPE) or High Tenacity Polyester (PET) and shall have apertures greater than ¼ inch (6.35 mm).

Table 1-1. Geosynthetic Reinforcement Requirements

Property	Requirement	
	Machine Direction (MD)	Cross Machine Direction (XMD)
Tensile Strength at 5% Strain	800 lbf/ft	1,350 lbf/ft
Ultimate Tensile Strength	1,300 lbf/ft	1,990 lbf/ft
Flexural Stiffness	750,000 mg-cm	

The guidance presented in KYTC Guidelines for Submittal and Evaluation of Geogrids for Reinforced Soil Applications, dated 10-29-2025, shall be followed. This guidance is located within the Special Notes and Guidance SharePoint via the KYTC Structural Design website and may be found at the following link: https://transportation.ky.gov/StructuralDesign/Special%20Notes%20and%20Guidance/Guidance%20on%20Geogrid%20Reinforcement%20Submittal%20and%20Evaluation.pdf

In general, the allowable strength of the geosynthetic (T_a) must be equal to or greater than the required strength (T_g). Allowable tensile strength T_a of the geosynthetic shall be determined using a reduction factor

approach to account for creep rupture strength and degradation mechanisms of the reinforcement. The specific values for the reduction factors shall be those established by the AASHTO Product Evaluation and Audit Solutions (AASHTO PEAS) and in accordance with Section 11.10.6.4.3b in the 9th Edition of the AASHTO LRFD Bridge Design Specifications (LRFD). If AASHTO PEAS reduction factors are not available for the manufacturer and type of geosynthetic proposed by the Contractor, then the values used shall be those recommended by the geosynthetic manufacturer, supported by laboratory testing and accepted by the Engineer. In addition to the long-term allowable strength requirement, there is a serviceability requirement. For serviceability, geosynthetic must have a creep limited strength at a strain of 5% according to ASTM D 5262 that is equal to or greater than the required strength.

At least 30 days prior to the beginning of CSE construction, submit certifications stating that geosynthetic reinforcement meets design requirements for ultimate strength, creep, durability, installation damage, and coefficient of interaction for sliding in accordance with the design submittal.

1.3. Construction Requirements

1.3.1. Site Preparation

1. Organics, soft clay, or other unsuitable materials encountered within 5 ft. of the ground surface shall be removed or otherwise treated to prevent problems with column construction near the ground surface. Prior to construction of the LTP, the Contractor shall prepare subgrade and remove any deleterious materials. The foundation soil shall be observed and accepted by the Engineer prior to placement of the LTP and embankment materials.

1.3.2. Pile Caps

1. Pile caps are anticipated to be constructed above existing ground surface and centered upon each column. Construct all falsework and forms according to Sections 601.03.11 and 601.03.12 of the KYTC Standard Specifications.
2. Place concrete to the requirements with Section 601.03.09 of the KYTC Standard Specifications.

1.3.3. Load Transfer Platform Placement

1. Do not place LTP until columns have achieved sufficient strength as defined in Section 2.0: Ground Improvement.
2. The LTP shall have a minimum thickness of 2 ft. with Fabric-Geotextile Class 1 (Separation) along the sides and top of the LTP.
3. The LTP well-graded granular fill materials shall be placed in horizontal layers not exceeding 10 in. in uncompacted thickness for heavy compaction equipment. For zones where compaction is accomplished with hand-operated compaction equipment, fill shall be placed in horizontal layers not exceeding 6 in. in uncompacted thickness.
4. Compact LTP to the requirements within Section 302.03.04 of the KYTC Standard Specifications.

1.3.4. Geosynthetic Reinforcement Placement and QA/QC Requirements

1. Prior to placement of geosynthetic reinforcement, inspect each roll to very that it is undamaged and does not have deleterious materials on the surface.
2. The reinforcement shall be placed at intervals of 6 inches beginning at the top of pile cap. Avoid large piles of fill material from occurring to prevent local geosynthetic failures. No changes to the geosynthetic reinforcement layout, including, but not limited to length, reinforcement type (e.g. strength), direction of reinforcement, minimum overlap, or elevation shall be made without the explicit written acceptance of the Engineer.
3. During back dumping and spreading, do not allow construction equipment to operate directly on geosynthetic reinforcement. Spread the material in the direction of the fabric overlap.
4. To avoid damage to the geosynthetic reinforcement, dump the material for the LTP behind the leading edge of the LTP layer, then blade into place. A minimum fill thickness of 6 in. is required for operation of vehicles over the reinforcement.

5. Turning of vehicles should be kept to a minimum to prevent tracks or tires from displacing the fill and/or the geosynthetic reinforcement. Repair any damage caused during placement or by vehicles.
6. If large wrinkles develop during spreading operations of geosynthetic fabric, fold and flatten the wrinkles in the direction of the spreading. Avoid large folds which reduce the geosynthetic fabric overlap width.
7. Minimum overlap of adjacent rolls of reinforcement shall be per the manufacturers' requirements or 1 ft., whichever is greater.
8. Geosynthetic reinforcement shall be stored at temperatures above -20 degrees Fahrenheit (-29 degrees Celsius) and less than 140 degrees Fahrenheit (60 degrees Celsius).
9. Geosynthetic reinforcement shall not be left directly exposed to sunlight or ultra-violet (UV) light for a period longer than recommended by the manufacturer or one month whichever is shorter.
10. For the Advanced Letting, a minimum of 24 inches of non-erodible granular embankment shall be placed over the upper layer of Class 1 (Separation) Fabric for UV light protection.

1.4. Measurement

1.4.1. Load Transfer Platform

The Department will measure the quantity in tons based on the design quantity identified as DGA.

1.4.2. Geosynthetic Reinforcement

The Department will measure the quantity in square yards. The Department will not measure fabric when the Contract indicates the fabric is incidental to the work or when the specification for another item requires incidental installation of geosynthetic reinforcement. The Department will not measure material in laps or seams. The Department will not measure for payment the repair or replacement of damaged fabric or replacement of fabric not covered within 14 days.

1.4.3. Pile Cap Concrete

The Department will measure the quantity in cubic yards based on the design quantity of concrete for the pile caps. The Department will not measure forming, including permanent steel forms, for payment and will consider it incidental to this item of work.

1.5. Payment

Table 1-2. Payment Table

Bid Item Code	Pay Item Description	Unit
00001	Dense Graded Aggregate	Ton
02603	Fabric-Geotextile Class 1	SY
02555	Concrete, Class B	CY

SECTION 2.0: GROUND IMPROVEMENT

2.1. Displacement Rigid Inclusions

This section defines the requirements for displacement rigid inclusions that support the CSE described in Section 1.0. For this Special Note, displacement rigid inclusions are considered the column element within the column-supported embankment system. The columns, or displacement rigid inclusions, will hereafter be referred to as, “rigid inclusions”. The intent for this ground improvement technique is to mitigate soils susceptible to liquefaction and to limit the magnitude of liquefaction induced seismic hazards, such as vertical deformations, horizontal displacements (i.e. lateral spreading), and global stability.

For this work, a pre-production verification and validation test program (hereafter referred to as, “verification test program”) shall be performed to confirm construction techniques, quality of the rigid inclusions post installation, and other features that ensure the product is constructed according to design. The confirmation of required soil improvement will be evaluated by using subsurface data from SCPTs and SPTs obtained before and after pre-production rigid inclusion construction in liquefaction susceptibility analyses. Multiple established methods will be implemented in liquefaction screening, identification, and evaluation. Details regarding the verification test program are discussed in Section 2.3.3.

The Contractor is responsible for furnishing all materials, products, accessories, tools, equipment, services, transportation, labor, supervision, and manufacturing techniques required for the mix design, installation, and testing of ground improvement for the project, without damage to existing nearby structures.

2.1.1. Pre-Production and Production Rigid Inclusions Layout

The properties of the proposed rigid inclusions layout at the Kentucky abutment as well as the layout alternatives for the pre-production verification test program are provided below.

- For pre-production verification testing, the diameter of the pre-production rigid inclusions shall be 18 in. and shall be grouped into three separate grid patterns (see Appendix A for details):
    - 4 ft. center-to-center
    - 5 ft. center-to-center
    - 6 ft. center-to-center
- For production rigid inclusions, a minimum diameter of 18 in. constructed on a 5 ft. center-to-center grid pattern is proposed; however, based on the results of the verification test program, this layout may change to confirm liquefaction susceptibility of soils is mitigated.

The required depths of excavation and approximate tip elevations for pre-production and production rigid inclusions are shown below.

Table 2-1. Rigid Inclusion Excavation Depths and Tip Elevations

Rigid Inclusion Type	Length (ft.)	Tip Elevation (ft.)
Pre-Production (Test) Rigid Inclusions	80	235
Production Rigid Inclusions	75	226

The Contractor may propose alternatives to the rigid inclusion design; however, the proposed alternatives must be submitted to the Engineer for acceptance.

2.1.2. Contractor Qualifications and Experience

At least 30 calendar days after the Notice to Begin Work, the Contractor shall furnish a list of proposed subcontractors and material suppliers. The Contractor shall submit the following to the Engineer for acceptance:

1. A list of personnel to be used on the project that includes documentation of each individual’s experience, to be complete enough for the Engineer to determine whether each individual satisfies the required minimum qualifications. Identify the Rigid Inclusion Contractor, Project Manager, drill rig operators, and Project Site Supervisor to be assigned to the project.

2. Evidence that the designated Project Manager supervising the work has a minimum of five years' experience with rigid inclusion projects of similar size and scope. A Consultant or manufacturer representative cannot be the Project Manager. If the minimum experience requirement is not met, submit a list of similar projects for review and acceptance.
3. Evidence that the Rigid Inclusion Contractor designated Project Site Supervisor (superintendent, foreman, or crew chief) has a minimum of 3 years of experience in the supervision of rigid inclusions under similar project and subsurface conditions.
4. Evidence that the Rigid Inclusion Contractor drill rig operators each have a minimum of 1 year of experience installing rigid inclusions, with a minimum of 50 successfully installed rigid inclusions.
5. Field personnel performing the rigid inclusion integrity testing shall have a minimum of two years' experience in Thermal Integrity Profiling (TIP) and Sonic Echo-Impulse Response Testing, also known as Pile Integrity Testing (PIT). For the evaluation and interpretation of integrity test results, the individual must be a licensed Professional Engineer in Kentucky having evaluated results for a minimum of 5 projects for the test methods mentioned herein.

The Engineer will accept or reject the Contactor's personnel within 14 calendar days following the submission of the report of names and verifiable resume information. Do not begin rigid inclusion construction until the Engineer has provided a written letter of acceptance. In the event the Rigid Inclusion Contractor elects to substitute personnel, submit verifiable resume information to the Engineer prior to that individual's performance of rigid inclusion construction. The Engineer will accept or reject the Contractor's proposed substitute within 14 calendar days. The Engineer will take action pursuant to the latest edition of the KYTC Standard Specifications in order to be assured that all personnel have sufficient and requisite skills and experience to perform properly the work assigned to them. The Engineer may suspend the work if the Contractor uses unacceptable personnel. If work is suspended for use of unacceptable personnel, no adjustment in contract costs or contract time attributed to the suspension will be made.

2.1.3. Ground Improvement Preconstruction Meeting

A Preconstruction Meeting will be scheduled by the Contractor and held no later than 14 calendar days before beginning pre-production rigid inclusion construction. If the Contractor fails to provide the required submissions before the Preconstruction Meeting, the Engineer may order the meeting suspended until they are furnished. The Department representatives designated by the Engineer, prime Contractor(s), Rigid Inclusion Contractor, Inspectors, and Integrity Testing Firm shall participate in the meeting in person, via conference call, or via video conference. The Preconstruction Meeting will be conducted to clarify the construction requirements, to coordinate the construction schedule activities and identify contractual relationships and delineation of responsibilities among the Prime Contractor and various subcontractors.

At least 14 calendar days before the meeting, submit the rigid inclusion construction sequence and schedule to the Engineer. Prepare the schedule according to KYTC Standard Specifications Section 108.02. See Section 2.6 for additional information regarding the notice to begin work for the production rigid inclusions.

2.1.4. Installation Plan

Submit a written Installation Plan to the Engineer for acceptance at least 14 calendar days prior to the Preconstruction Meeting. The Installation Plan shall include details of the equipment, proposed methods, materials sources, and procedures to follow when excavating the hole, placing the grout or concrete, and monitoring the grout or concrete placement.

At a minimum, include the following information in the Installation Plan:

1. Sizes and specifications of all proposed equipment, including drill rigs, augers, and other drilling tools, cranes, pumps for grout or concrete, mixing equipment, automated monitoring equipment, and similar equipment to be utilized in construction, including details of procedures for calibrating equipment as required. Refer to Section 2.5 within this Special Note for more information regarding Equipment.
2. A step-by-step description of the rigid inclusion installation procedures.
3. A rigid inclusion layout plan with a numbering scheme for identifying each individual rigid inclusion.

4. A plan of the sequence proposed for the rigid inclusion installation.
5. Target drilling and grouting or concrete parameters (along with acceptable ranges) for rigid inclusions installation, including auger rotation speed, drilling penetration rates, torque, and applied crowd pressures, grout or concrete pressures, and grout or concrete volume factors.
6. Details of methods of placement of reinforcing steel, including support for reinforcing cages or steel members at the top of the rigid inclusion and methods for centering the steel within the grout or concrete column, and the duration of reinforcement support.
7. Mix designs for all grout or concrete to be used on the project. Refer to Section 2.2.1 for the minimum required information for a mix design submission.
8. A description of the automated monitoring equipment proposed to measure and record auger rotation speed, auger penetration rates, auger depths, and crowd pressures during installation.
9. A description of the automated monitoring equipment proposed to measure, and record grout or concrete pressures and incremental volumes placed during the grouting or concreting phase, with the minimum components as follows:
    a. A flow meter installed in the grout or concrete line near the crane/drill measuring grout or concrete volume pumped. The inline flow meter must have been calibrated by an independent third party within 12 months of the rigid inclusion construction date.
    b. A display unit mounted in the cab, providing immediate feedback to the crane/drill operator, verifying minimum grout or concrete volume per depth increment.
    c. A depth sensor recording the rigid inclusion depth and confirming the length of the rigid inclusion.
10. Procedures for protecting adjacent structures, on or off the right-of-way, that may be adversely affected by foundation construction operations.
11. Contingency plans for equipment failures during drilling or grouting or concrete placement operations.
12. Other installation details required in the plans or requested by the Engineer.

2.2. Materials

Furnish material according to plan requirements conforming to KYTC Standard Specifications.

Table 2-2. Material Specifications

Material	KYTC Standard Specification Section / Applicable Specification
Reinforcing Steel[1]	811
Concrete, Class A Modified	601
Portland Cement	801
Fluidifier, for grout	ASTM C937
Chemical admixture	802
Micro-Silica	844
Air cooled blast furnace slag, for grout	801
Fly ash, or natural pozzolan	844
Slag cement	844
Mineral filler, for grout	804
Water	803

[1] Refer to Reinforced Rigid Inclusion Detail Sheet for reinforcement details.

2.2.1. Grout or Concrete Mix Design

Submit the grout or concrete mix design to the Engineer for acceptance at least 14 calendar days prior to the Preconstruction meeting.

Rigid inclusions are constructed using cementitious grout or Class A Modified concrete. The minimum twenty-eight-day compressive strength is 4,000 psi for both grout tested using 3-in by 6-in cylindrical specimens and concrete using 4-in by 8-in cylinders, respectively.

The required slump flow is 28 ± 2 in for concrete. The required efflux time for grout is 10 to 20 seconds, tested according to the modifications described in ASTM C939. For grout mixes, the maximum shrinkage is 0.15 % in the vertical direction.

Provide a mix that is capable of maintaining the solids in suspension, pumpable, and will fill any voids in the foundation soils. Design the grout or concrete mix so that the mix will remain fluid during placement of reinforcing steel within the rigid inclusions.

The addition of water at the project site should only be permitted through the accepted Installation Plan or with prior acceptance by the Engineer. Do not exceed the maximum water- cementitious material ratio of the accepted mix design.

Batch all grout or concrete to be delivered to the project site in accordance with Item 601.02 of the Standard Specifications.

Provide electronic batch tickets in accordance with Item 601.03.02.F of the Standard Specifications.

Include the following information with the grout or concrete mix design submission:

- Strength development versus time curves including three-, seven-, fourteen-, and twenty-eight-day breaks.
- Slump loss versus time relationship for concrete over a 2-hour period. For extended placement times, submit slump loss versus time relationship for a defined period such that the project requirements comply.
- Range of acceptable fluid consistency for a period of at least 2 hours expressed as efflux time per standard volume for grout. For extended placement times submit slump loss versus time relationship for a defined period such that the project requirements comply.
- Viscosity loss (as measured by efflux time) versus time curves for grout.

2.2.2. Sampling and Testing of Grout or Concrete

For sampling and testing of grout or concrete for rigid inclusions, conform to the requirements of Section 601.03.02 of the Standard Specifications, except as modified herein.

Obtain samples for testing at the outlet orifice of the auger of the drilling machine, after the grout or concrete mix has been pumped through the lines and the auger, prior to commencing with drilling. If samples cannot be obtained at this location, obtain samples from the discharge location into the pump hopper.

For initial curing, provide initial curing storage between 60 °F and 80 °F for a minimum of 48 hours. Record the temperature using high-low thermometers in the initial curing environment. Within 72 hours of casting, deliver cylinders to District 1 Materials with required documentation.

1. Temperature. Check the grout or concrete temperature on samples of every truck at the project site prior to discharging into the pump hopper. Test temperature according to ASTM C1064. Record the test results, identifying the batch number and time of delivery and time of discharge of the tested grout or concrete. Ensure that the temperature of the grout or concrete does not exceed 95 °F until incorporated into the work.
2. Workability. Check the workability of grout through flow cone efflux time or of concrete through slump flow testing on samples of every truck at the project site, prior to discharging into the pump hopper, to ensure grout or concrete workability over time.

a. When reinforcing steel is used, also check flow cone or slump tests on samples at the time of the reinforcing steel placement. Record the test results, identifying the batch number, time of delivery, and time of discharge of the tested grout or concrete, and the time of reinforcing steel placement. If the flow cone or slump flow results of the grout or concrete mix as delivered are not acceptable, adjust the mix accordingly.

b. Maintain workability for a period of at least 2 hours, but in no case less than the time required to complete a rigid inclusion and place the reinforcement.

c. Test fluid consistency of grout through the flow cone according to ASTM C939, except that the outlet of the discharge tube shall have 0.75 in inside diameter. Test the slump flow of concrete according to ASTM C1611.

3. Shrinkage. Test shrinkage of grout according to ASTM C1090. Keep samples for shrinkage testing in a 100% humidity room at a temperature of 68 °F to 74 °F, unless a retarding admixture is added to extend the holding time; in this case store samples in accordance with ASTM C1090 Section 8, Conditioning, at a temperature range according to the grout mix design parameters. Mark each sample with identification.

4. Compressive Strength. Test for strength a minimum, one set of at least six cured specimens for each 50 cubic yards of grout or concrete placed. Mark each sample with identification.

    a. For concrete, prepare 4-in diameter by 8-in high cylinder samples for strength testing according to ASTM C31 and ASTM C1758. Cure and test samples according to ASTM C39.

    b. For grout, prepare 3-in diameter by 6-in high or 2-in diameter by 4-in-high cylinder samples for strength testing according to ASTM C31. Cure and test samples according to ASTM C39.

        i. Grout specimens for strength can also be prepared in 2-in cubes and tested according to ASTM C109. The minimum twenty-eight-day compressive strength is 4,000 psi for grout tested using cube specimens.

2.3. Testing Plan

As part of the Installation Plan, submit a Testing Plan acceptable to the Engineer, including the proposed locations of pre-production test rigid inclusions, integrity tests, and Seismic Cone Penetration Tests (SCPT) for verification of soil improvement testing. The Engineer may select new locations for verification testing to further evaluate rigid inclusions. The proposed layouts (4 ft. center-to-center, 5 ft. center-to-center, and 6 ft. center-to-center) for verification testing are shown in Appendix A.

2.3.1. Pre-Production Rigid Inclusion Program to Develop Acceptance Criteria

Follow all production rigid inclusion construction, monitoring, and inspection requirements for installation of pre-production test rigid inclusions. Pre-production rigid inclusion groups may be constructed within the limits of the test area shown within the Proposed Pre- and Post-Installation Verification Test Layout in Appendix A. In addition to performing post-installation integrity testing, use the installation of the pre-production test rigid inclusions to:

1. Establish target drilling penetration rates based on the subsurface site conditions.
2. Establish pressure and volume relationships during placement of grout or concrete. The grout or concrete volume factors shall be calculated for the test rigid inclusions, as mentioned in Section 2.6.3 of this Special Note. These target pressure and volume factors shall be used for the installation of the production rigid inclusions.
3. Record values of torque and downward thrust (or crowd) vs. depth in each hole for the pre-production rigid inclusions to establish torque and downward thrust (or crowd) values for production rigid inclusions.
4. Establish mix design parameters such as grout flow, necessary admixtures, etc.

5. Establish a work plan/sequencing of rigid inclusion installation based on the various subsurface conditions on site to optimize lateral displacement of soils without affecting the rigid inclusions integrity.

Use all the parameters listed above that are established during installation and testing of the pre-production test rigid inclusions to install the production rigid inclusions.

Installation records for the pre-production rigid inclusions, having the requirements mentioned in Section 2.7 of this Special Note, shall be submitted to the Engineer at least 7 calendar days after the completion of the Test Rigid Inclusion Program.

2.3.2. Integrity Testing

Perform post-installation integrity tests on all pre-production test rigid inclusions. Three (3) pre-production rigid inclusions shall include the reinforcement as shown in the Reinforced Rigid Inclusion Detail Sheet in Appendix A. For the remaining pre-production rigid inclusions that do not require reinforcement, the Contractor may propose means to attach the wiring necessary for the integrity testing.

For production rigid inclusions, integrity testing shall be performed on a minimum of 20% of the reinforced rigid inclusions and on a minimum of 20% of the unreinforced rigid inclusions.

Acceptable integrity test methods are:

1. Thermal Integrity Profiling (TIP) in accordance with ASTM D7949, “Standard Test Methods for Thermal Integrity Profiling of Concrete Deep Foundations,” Method B.
2. Sonic Echo-Impulse Response Testing, also known as Pile Integrity Testing (PIT), in accordance with ASTM D5882, “Standard Test Method for Low Strain Impact Integrity Testing of Deep Foundations”.

Engage an independent Integrity Testing Firm, acceptable to the Engineer, to perform integrity tests and to report the results, with interpretations, to the Contractor and the Engineer. Follow the installation procedures of the corresponding ASTM specification and the Integrity Test Firm for the installation of integrity testing instrumentation and equipment.

For production rigid inclusions, identify the rigid inclusions that will include integrity testing. Fabricate and keep on-hand one spare set of reinforcing steel of the appropriate size and configuration, with wire cables secured thereto, so that the Engineer may direct the relocation of an integrity test installation in order to investigate any rigid inclusion that has installation records out of specification or that otherwise appears abnormal. If not used for a relocated integrity test, install this spare in the last rigid inclusion to be constructed of the appropriate size and configuration.

The Engineer will determine acceptance of each production rigid inclusion based on the installation criteria developed from the results of the preproduction program (See section 2.3.1) and will provide a response to the Contractor within three (3) working days after receiving the test results.

2.3.3. Verification Testing

Pre- and post-installation Seismic Cone Penetration Test (SCPT) soundings will be performed at three (3) rigid inclusion layouts to determine the column spacing that provides sufficient ground improvement. The verification tests will be performed by Terracon Consultants, Inc. on behalf of the Department, and the Contractor shall coordinate with Terracon Consultants, Inc. to schedule the verification tests. Contact information for Terracon Consultants, Inc. is provided below:

Terracon Consultants, Inc.
5111 Commerce Crossing Drive, Suite 120
Louisville, KY 40229
Attn: Ken Zur, P.E.
Phone: (502) 365-9715
Email: ken.zur@terracon.com

Provide at least 30 calendar days' notice via email of the projected date of the beginning of the verification testing. Additionally, provide at least 7 calendar days' notice via email prior to the date the Contractor anticipates Terracon may mobilize to the site. Copy the Engineer on all communication with Terracon.

Each SCPT sounding shall extend to a depth of 85 feet. If refusal occurs prior to the termination depth, the sounding locations should be drilled and temporarily cased to the refusal depth. Beginning at the sounding refusal depth, drilling equipment shall be used to collect samples continuously using Standard Penetration Test (SPT) methods to a depth of 85 feet. The general locations of the SCPT soundings/SPT Borings are shown at the locations indicated on the "Proposed Pre- and Post-Verification Test Layout" sheet in Appendix A.

Pre-Installation SCPT soundings and SPT borings are to be performed prior to the installation of the pre-production rigid inclusions. Post-installation soil investigation methods are to be performed a minimum of 28-days after the rigid inclusions have been constructed such that the soil improvements in between columns may be evaluated.

The minimum distance between the pre-production rigid inclusion groups shall be a distance such that the effects of construction activities and installation do not influence the results of the verification testing at each respective pre-production rigid inclusion group.

The Department's consultant shall perform SCPT soundings in accordance with ASTM D 5778-20 "Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils", ASTM D 7400 "Standard Test Methods for Downhole Seismic Test" and SPT borings in accordance with ASTM D 1586 "Standard Test Method for Standard Penetration Testing and Split-Barrel Sampling of Soils".

Results of the pre- and post-installation SCPT soundings and SPT Borings shall be sent to the Engineer within 7 days of completion of the Verification Testing.

2.4. Submittals

Table 2-3. Schedule for Rigid Inclusion Submittals

Submittal No.	Submittal Item	Calendar Days Before/After Event	Event
1	Submit the Proposed Rigid Inclusion Contractor, Inspectors, Integrity Testing Consultant and a listing of assigned personnel and their experience and qualifications for each subcontractor and material supplier.	30 After	Notice to Begin Work
2	Details of the rigid inclusion construction sequence and schedule, submission of the Installation Plan (including the Testing Plan for verification tests), and details of the grout or concrete mix design to the Engineer for acceptance.	14 Before	Preconstruction Meeting
3	Pre-Production rigid inclusion installation records and integrity testing results.	7 After	End of Pre-Production Rigid Inclusion Construction
4	Results of the Pre- and Post-Installation SCPT Soundings/SPT Borings[2]	7 After	Completion of Verification Testing
5	Production rigid inclusion installation records	1 (24 hrs.) After	Production Rigid Inclusion Construction
6	Submit as-built drawings to the Department	30 After	End of Production Rigid Inclusion Construction

Note:
[1] Provide all submittals in .pdf format
[2] The Engineer will provide a notice to begin work for the production rigid inclusions after 14 working days from the time of receipt of the results of the pre- and post-installation SCPT Soundings/SPT Borings.

2.5. Column (Displacement Rigid Inclusion) Construction Equipment

Equipment for column installation and equipment for fill and geosynthetic placement shall not cause excessive loads or settlement to the soft ground between columns. The equipment required for column installation is outlined below.

- Drilling Rig
    - Utilize a rig that has adequate torque capacity and crowd power to install columns without excessive flighting of the soil during drilling. Excessive flighting occurs when the auger is rotated too much in proportion to the penetration into the soil, such that so much soil is flighted towards the surface that the auger flights do not maintain adequate soil to provide lateral support for the hole. Utilize a piling rig capable of penetrating the ground without drawing surrounding soils laterally into the auger hole (i.e. mining).
- Displacement Auger
    - Utilize an auger intended for installing a drilled displacement rigid inclusion. The drilling tool installing this type of rigid inclusion typically contains a soil displacement body (an enlarged-diameter section designed to facilitate lateral soil movement), a helical, partial-flight auger segment that directs the soil toward the displacement body. The configuration of the displacement body varies depending on the inclusion type but is generally cylindrical and may incorporate one or more helices. Utilize an auger long enough to install a column to a depth at least 20% greater than the depth of the columns shown on the plans.
- Auger Plug
    - Close the outlet orifice of the auger with a suitable plug while the auger is advanced into the ground. Remove this plug by the application of grout or concrete pressure, or with a central reinforcing bar.
    - The Contractor may use compressed air, instead of an auger plug, provided that a test column using this method is successfully installed, integrity tested, and verification load-tested and the column meets the required performance. The use of compressed air is not permitted if soil is susceptible to mining, such as relatively clean sands.
- Grout or Concrete Mixing Equipment
    - Use grout or concrete mixing equipment capable of combining components of the grout or concrete into a thoroughly mixed and uniform mass, free from balls or lumps of cementitious material and capable of discharging the concrete with a satisfactory degree of uniformity.
    - Use a screen with a mesh opening no larger than 3/4 in. for grout, or 4 in. for concrete, between the delivery point from a ready-mix truck and the pump, to remove large particles which might clog the pumping equipment.
- Pumping Equipment
    - Use positive displacement grout or concrete pumping equipment suitable to the column size being constructed such that a smooth, continuous delivery of grout or concrete can be maintained while limiting pressure variations felt by the column due to the pump strokes. It is important that the pump does not deliver an excessive grout or concrete volume with each stroke, which would cause the operator to have difficulty controlling the grouting or concreting operation. Use a pump that delivers a volume per stroke that corresponds to around 4 in. of column length or less.
    - Before beginning column construction, verify the volume of grout or concrete displacement per piston stroke. Provide the Engineer with the value of the volume of grout or concrete delivered by each stroke of the pump. Demonstrate to the Engineer that the actual volume delivered by each stroke of the pump is within 3% of the target value. Recalibrate the volume per stroke if the Engineer suspects that the grout or concrete delivery performance has changed.

- Automatic Measurement and Recording Equipment
    - Calibrate all measuring and recording equipment at the beginning of the project, as discussed in Section 2.1.4, to demonstrate that the values indicated by the measuring and recording equipment are within 3% of the target values. Perform calibrations according to the equipment manufacturer's specifications. Recalibrate all measuring and recording equipment, if the drilling and grouting or concreting performance has changed.
    - Provide real time evaluation and verify that the target rate of penetration is maintained during the construction of each column using automated measuring and recording equipment.
    - At minimum, make and record the following automatic measurements during the drilling operation:
        - Auger rotation
        - Penetration Rate
        - Torque delivered to the auger
        - Crowd force (downward thrust on auger)
    - Plot all measurements against the depth of the auger injection point. Automatic measurements shall be implemented by a rotational position indicator on the auger head system and an electronic position indicator on the crane line or boom holding the auger. Position torque and thrust load cells on the auger head system.
    - At minimum, make and record the following automatic measurements during the grouting or concreting operation:
        - Volume of grout or concrete
        - Maximum and minimum grout or concrete pressure
        - Auger rotation (if rotated)
        - Depth of injection point
    - Plot all measurements against the depth of the auger injection point. Take measurements with electronic flowmeters and electronic pressure transducers placed in the grout or concrete pressure line, an electronic position indicator on the crane line or boom holding the auger, and a rotational position indicator on the auger system.

2.6. Installation

Prior to installation of the production rigid inclusions, the Engineer must accept all submittals from the verification test program. The Engineer will review the results of the verification test program and will determine if any modifications are required to the production rigid inclusions within 14 working days from the time of receipt of the verification test program results. A notice to begin work for the production rigid inclusions will be provided to the Contractor with the acceptance of the Department.

2.6.1.Drilling

Prior to the beginning of rigid inclusion construction, remove all oil, rust inhibitors, residual drilling slurries, and similar foreign materials from holding tanks/hoppers, stirring devices, pumps and lines, and all other equipment in contact with the grout or concrete before use.

Maintain the hollow stem of the auger in a clean condition throughout the construction operation. The leads shall be clearly marked every 1 ft. along its length so that such marks are visible to the unaided eye from the ground.

After confirming that the rigid inclusion location is clear of the existing underground utilities, advance the auger into the ground at a continuous rate of rotation that prevents mining or excessive flighting of soil. Begin drilling only after a sufficient supply of grout or concrete is present on the project site to complete the rigid inclusion.

If non-augerable material, such as rocks, boulders, or any other unforeseen obstructions, is encountered before the planned depth is achieved and causes auger refusal, stop the rotation of the auger and immediately advise the Engineer. Non-augerable material, or auger refusal, is defined as material which causes the rate of penetration to be reduced to less than one foot per minute, assuming a minimum applied

torque of 10,000 ft-lbf and use of equipment that is appropriate for the project. Complete rigid inclusions encountering auger refusal to the depth of the refusal and add additional rigid inclusions, as determined by the Engineer.

Withdraw the auger from the ground in such a way that does not result in an open unsupported borehole or inflow of water into the rigid inclusion borehole.

The Contractor should control and dispose of all waste materials produced as a result of the mixing, pumping, and placement of the grout or concrete materials in accordance with project requirements. The Contractor should designate areas for containing and processing the spoils with acceptance from the Department.

2.6.2. Grout or Concrete Mixing and Delivery

Mix and deliver the grout or concrete per 601.03 of the KYTC Standard Specifications.

2.6.3. Placement of Grout or Concrete

Do not place grout or concrete if its temperature falls below 40 °F or exceeds 100 °F, unless accepted procedures for cold or hot weather placement are followed. Maintain grout or concrete mix temperature for a period of up to 2 hours.

Begin the placement of grout or concrete within 5 minutes after the auger has achieved the planned depth. As grout or concrete pumping begins, lift the auger a maximum height of 1 ft. to facilitate the removal of the auger plug and to initiate the flow of grout or concrete. After lifting the auger to remove the plug, re-insert the tip of the auger to at least the original depth.

If the auger plug does not come out or the plug comes out prematurely and the line fills with soil, abandon and re-drill the rigid inclusion. If the rigid inclusion needs to be abandoned, reverse the direction of rotation and withdraw the auger while leaving soil behind to keep the hole from collapsing.

After correcting the problem, re-drill the rigid inclusion at the location accepted by the Engineer. Alternatively, with the acceptance of the Engineer, re-drill the rigid inclusion in the same location; either re-drill the rigid inclusion deeper or drill additional rigid inclusions to compensate for the soil disturbance.

Pump the grout or concrete through the hollow-stem auger maintaining the minimum required positive pressure established in the accepted Installation Plan, as the auger is slowly withdrawn, to completely fill the augered hole and to prevent hole collapse or inflow of water into the hole. During withdrawal of the auger, either stop rotation or continue rotation of the auger in the same direction as during drilling, but at greatly reduced speed. Withdraw the auger at a steady rate to prevent a locked-in auger, necking of the rigid inclusion, or a substantially reduced rigid inclusion section, and at a rate consistent with the grout or concrete pump discharge. Supply the grout or concrete to the rigid inclusion at a rate during auger withdrawal that ensures a continuous monolithic rigid inclusion of at least the full specified cross-section is formed and is free from soil inclusions or any grout or concrete segregation.

Measure grout or concrete pressure at the pump outlet and at the crane/drill rig. Include these records in the electronic measurements for the installation. Measure and record the volume of grout or concrete placed as a function of depth at intervals not exceeding 2 ft., using automated monitoring equipment. Use a mechanical counter as a back-up to the electronic measurement to monitor the volume of the grout or concrete placed per piston stroke.

Establish the magnitude of minimum oversupply (grout or concrete volume factors) appropriate for the site conditions during the pre-production testing program. Typically, the minimum volume of grout or concrete pumped into each rigid inclusion from a depth of 5 ft. to the tip of the rigid inclusion is the theoretical volume of the augered hole plus 15% to 20%; however, this is dependent on the subsurface conditions. Inadequate grout or concrete volume pumped over a depth interval of 5 ft. or greater is a basis for rejection of the rigid inclusion.

Grout or concrete volume pumped into rigid inclusions greater than the theoretical volume of the augered hole plus 50% are acceptable only if integrity and proof load tests indicate that the rigid inclusion meets the performance requirements and if pre-production rigid inclusions showed similar grout or concrete takes.

The grout/concrete volume factor of the rigid inclusion shall be within 7.5% of the target volume factor established in the Installation Plan and as modified by the results of the pre-production test program. Production rigid inclusions installed outside of this range shall be considered unacceptable rigid inclusions.

If grout or concrete vents to the surface before the cutting head of the auger reaches a depth of 10 ft. or less, this is a basis for rejection of the rigid inclusion. This is a sign that the auger has not remained charged with soil, and it is no longer possible for the operator to maintain excess positive pressure at the tip. Record the point at which grout or concrete first appears at the surface.

If grouting or concreting is interrupted for any reason, or pressure drop is observed, re-drill the rigid inclusion by drilling to at least 5 ft. below the tip of the auger when the interruption or pressure drop occurred and then resume grouting or concreting.

If placement of grout or concrete is interrupted for more than 60 minutes, or if total time for placement of grout or concrete exceeds 2 hours, re-drill the entire rigid inclusion. With the acceptance of the Engineer, re-drill the rigid inclusion in the same location if the grout or concrete is still fluid enough for the drill rig to penetrate. Otherwise, abandon and re-drill the rigid inclusion in a new location as accepted by the Engineer. Revise the Installation Plan to reflect the changes and submit these to the Engineer for acceptance prior to re-drilling the rigid inclusion.

Notify the Engineer immediately and suspend work if the grout or concrete level for any rigid inclusion drops more than 2 in. within 24 hours after installation.

2.6.4. Rigid Inclusion Top Finishing, Protection, and Cut-Off

Immediately upon completion of placement of the fluid grout or concrete, remove all excess grout or concrete and spoil from the vicinity of the top of the excavation and place metal sleeves of the proper diameter within the top of the excavation, extending both above and below the ground surface by at least 1 ft. to keep surface spoil from entering the grout or concrete column before it sets. Remove the metal sleeves once the grout or concrete has set without disturbing the natural soil surrounding the top of the rigid inclusion.

Immediately upon placement of the metal sleeves and before the grout or concrete begins its initial set, remove all loose soil, debris, or contaminated grout or concrete from the top 3 ft. of the grout or concrete column using the tools and methods contained in the accepted Installation Plan. Finish the top of the rigid inclusion as necessary by placing additional grout or concrete of the same mix as was placed through the auger.

Cut off the top of rigid inclusion and square them with the rigid inclusion axis at the elevations indicated on the plans, by removing fresh grout or concrete from the top of the rigid inclusion or by cutting off hardened grout or concrete down to the final cutoff point at any time after initial set of the grout or concrete has occurred.

2.6.5. Reinforcing Steel Placement

Reinforcing steel is required in rigid inclusions identified within “Zone 1” on the Rigid Inclusion Layout Sheet in Appendix A. Place the reinforcing steel after removing any contamination from the rigid inclusion top and while the grout or concrete mix is still fluid, but no later than half an hour after removing the auger. If the soil profile within the length of the rigid inclusion contains one-third or more dry to moist sand, place the reinforcing steel no later than 10 minutes after removing the auger, so that the sandy soils will not dewater the grout or concrete prior to placement.

The reinforcing steel shall be free of oil, soil, excessive rust, or other deleterious materials. For reinforcing steel, install plastic or cementitious spacers in conformance with Section 811 of the Standard Specifications. Metallic spacers are not permitted. Centering guides made of steel, such as a wire “basket” or “football” tied at the base of single-rod reinforcement may be used. Include centralizer types and spacing within the Installation Plan. For rebar cages, the longitudinal bars and lateral reinforcement shall be completely assembled and placed as a unit. For spiral reinforcement, it shall be tied to the longitudinal bars at a spacing not to exceed 1 ft. unless otherwise shown on the plans. The reinforcing steel shall not be spliced except at locations that are shown on the plans, and the reinforcing steel shall be free of any permanent distortion, such as bars bent by improper pickup.

Lower the reinforcing steel into the grout or concrete by gravity or by pushing gently by hand to the required depth. Do not vibrate, drive, or otherwise guide the reinforcing steel into position by mechanical means.

Hold the reinforcing steel in position at the ground surface within the fluid grout or concrete column by supports appropriate for the reinforcement used. Keep the supports in place until the grout or concrete reaches its initial set, or 24 hours, whichever is longer.

2.6.5.1. Splices

Lengths of reinforcing bars to be spliced shall be secured in proper alignment and in a manner to avoid eccentricity or angle between the axes of the two lengths to be spliced. Splices and threaded joints (mechanical couplers) shall meet the requirements of Section 602.03.06 of the KYTC Standard Specifications. If multiple bars are used, bar splices shall be staggered at least 1 foot.

2.6.6.Adjacent Rigid Inclusions

To ensure that no interconnection between rigid inclusions can occur and that the integrity of an existing rigid inclusion will not be compromised by drilling a new rigid inclusion, do not install adjacent rigid inclusions within six diameters, center-to-center, of each other until it can be demonstrated that the grout or concrete in the existing rigid inclusion has attained its initial set, with a minimum of 24 hours set time.

2.7. Installation Records

Submit a report containing a copy of the installation records of each production rigid inclusion constructed to the Engineer no later than 24 hours after the completion of the rigid inclusion. Include the data collected by automated measuring and recording equipment in numerical or graphical form. Indicate the names of the project, prime Contractor, Rigid Inclusion Contractor, and designated Project Site Supervisor in the report. Have the reports compiled and signed by the designated Project Site Supervisor.

Provide all necessary equipment and labor needed to obtain measurements for completing the Installation Records.

Include the following information in the report for each rigid inclusion installed:

1. Rigid inclusion location, number, and diameter
2. Ground surface elevation (reference grade for rigid inclusion length)
3. Rigid inclusion tip (bottom) depth and elevation
4. Rigid inclusion top (top of grout or concrete) elevation
5. Rigid Inclusion length
6. Auger diameter
7. Theoretical volume of the augered hole, (augered hole theoretical diameter = diameter of auger)
8. Flow cone efflux time and volume of grout placed, or slump and volume of concrete placed
9. Actual volume of grout or concrete placed
10. Weather conditions, including air temperature, at time of grout or concrete placement
11. Details of the placed reinforcing steel (number, size, depth, and grade)
12. Depth and elevation to which reinforcing steel was placed
13. Date and time of beginning of drilling
14. Date and time of completion of drilling
15. Date and time grout or concrete was mixed
16. Date and time ready-mix grout or concrete truck arrived at project site, and copies of all grout or concrete batch tickets used for the rigid inclusion construction. The Department shall also be provided copies of the mix design and batch weights of ready-mix grout or concrete.

17. Date and time of beginning of grout or concrete pumping
18. Date and time of completion of grout or concrete pumping
19. Date and time of completion of placement of reinforcing steel
20. All readings made by the automated measuring and recording equipment, to include as a minimum:
    a. Identification of all grout or concrete samples taken from the rigid inclusion
    b. Average torque and crowd force (downward thrust on auger) measurements for every 2 ft. increment, or less, of rigid inclusion advancement during the drilling process.
    c. Auger rotation versus depth for every 2 ft. increment, or less, of rigid inclusion advancement during the drilling process, and during placement of grout or concrete (if auger is rotated during this placement)
    d. Volume of grout or concrete placed versus depth of outlet orifice of the auger for every 2 ft. increment, or less, of rigid inclusion placed
    e. Average maximum and minimum pump stroke pressures at ground level for every 2 ft. increment, or less, of rigid inclusion placed
    f. Average maximum and minimum pump stroke pressure at or near the auger head for every 2 ft. increment, or less, of rigid inclusion placed
21. Any unusual occurrences affecting rigid inclusion performance
22. For subject rigid inclusions that have installation records out of specification or that otherwise appear abnormal, perform integrity tests to determine if they should be accepted or rejected.

2.8. Construction Tolerances

Position the center of the top of each rigid inclusion within 3 in. of the plan location for the top of the rigid inclusion in the horizontal plane.

Position the top of each rigid inclusion no more than 1 in. below or 3 in. above the plan elevation for the top of the rigid inclusion.

Do not allow the longitudinal alignment of the rigid inclusion, from rigid inclusion top to tip, to vary from the planned alignment by more than 2.0% of its length (from vertical for vertical rigid inclusions).

Provide a minimum grout or concrete cover of 3 in. over all longitudinal reinforcing steel. Maintain the top of the reinforcing steel no more than 6 in. above and no more than 3 in. below the plan elevation. If the reinforcing steel is not maintained within tolerances, make corrections and do not construct additional rigid inclusions until the method of reinforcing steel support has been accepted.

Perform all corrections required to construct the supported elements at the plan location.

2.9. Rejected Rigid Inclusions

Replace rejected rigid inclusions in a manner acceptable to the Engineer and at no cost to the Department. Rejected rigid inclusions are defined as rigid inclusions that fail for any reason, including by not limited to the following:

1. Rigid inclusions not conforming to the tolerances in Section 2.8
2. Rigid inclusions with reduced cross sections
3. Inadequate grout or concrete volume pumped over a depth interval of 5 ft. or greater
4. Grout or concrete venting to the surface before the cutting head of the auger reaches a depth of 10 ft. or less
5. Contaminated grout or concrete
6. Lack of grout or concrete consolidation (honeycombed)

7. Deficient grout or concrete compressive strength
8. Rigid inclusions with reinforcement, anchor devices or other components cast or placed into the fluid grout or concrete out of position
9. Rigid inclusions with more than 2 in. drop in concrete or grout level within 24 hours after installation. After notifying the Engineer and suspending work, review the accepted Installation Plan in conjunction with the Engineer, to determine if revisions are deemed necessary
10. Rigid inclusions failing integrity testing

2.10. Measurement

The Department will measure rigid inclusions by the number of feet, measured along the axis of the rigid inclusion from the installed tip elevation to the plan top elevation for all rigid inclusions completed and accepted. The Department will not measure the length of reinforcing steel projecting from the top of the rigid inclusions for payment.

The Department will not pay for extra length of rigid inclusions when they are installed to a greater depth than the plan tip elevation and not accepted by the Engineer. In this case, over-excavated rigid inclusions will be measured and paid for in accordance with the number of feet, measured along the axis of the rigid inclusion from the plan tip elevation to the plan top elevation.

2.11. Payment

Payment is full compensation for performing all required work described above including excavation, drilling, mix design, furnishing, mixing, pumping, and placing of grout or concrete; sampling and testing of grout or concrete; furnishing and placing reinforcing steel; rigid inclusion top finishing; disposing of all spoil from auger operation and all excess grout or concrete displaced from the auger hole; making and reporting installation records; furnishing all equipment necessary to complete the work; and any incidentals required to complete the installation of production rigid inclusions or pre-production test rigid inclusions accepted by the Engineer.

The Department will pay for final rigid inclusion elevations different from those shown on the plans and additional or replacement rigid inclusions, accepted by the Engineer, at the contract unit price bid per linear foot for rigid inclusions according to Section 109.02 of the KYTC Standard Specifications.

The Department will not make separate payments for corrections required to construct the supported elements.

Perform all required integrity testing prior to acceptance of rigid inclusions. Payment for integrity testing is included with the contract unit price of the corresponding pay item and shall include all labor, equipment, materials, and installation necessary to complete the work.

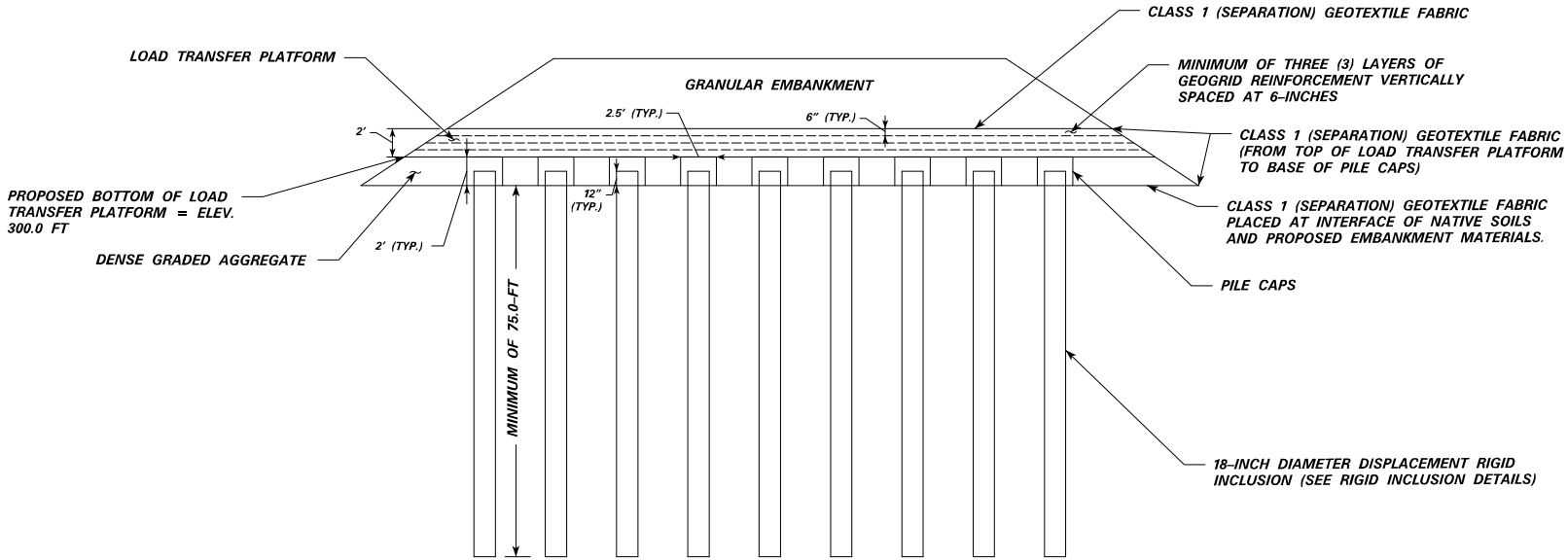
The Department will pay for accepted quantities at the contract unit price as follows:

Table 2-4. Payment Table

Bid Item Code	Pay Item Description	Unit
26250ED	Cont Flight Auger Pile (Pre-Production Rigid Inclusions)	LF
26251ED	Cont Flight Auger Pile – Integrity Test (Pre-Production Rigid Inclusions, Integrity Testing)	Each
26250ED	Cont Flight Auger Pile (Production Rigid Inclusions)	LF
26251ED	Cont Flight Auger Pile – Integrity Test (Production Rigid Inclusions, Integrity Testing)	Each

APPENDIX A

EXAMPLE SECTION VIEW OF PROPOSED COLUMN-SUPPORTED EMBANKMENT



NOTES:
CLASS 1 (SEPARATION) GEOTEXTILE FABRIC SHALL BE PLACED ALONG THE TOP OF THE LOAD TRANSFER PLATFORM.

CLASS 1 (SEPARATION) FABRIC SHALL BE PLACED AT THE OUTER SLOPE INTERFACES BETWEEN DGA AND EXISTING SOILS OR PROPOSED FILL. THIS WILL EXTEND FROM THE TOP OF THE LOAD TRANSFER PLATFORM TO THE BASE OF PILE CAPS (ELEV. 301'-303').

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

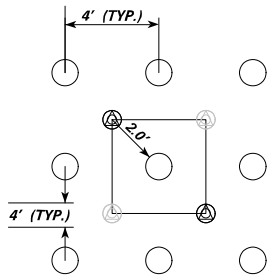
COLUMN-SUPPORTED EMBANKMENT SYSTEM
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.:
COUNTY OF: BALLARD
DRAWING NUMBER:

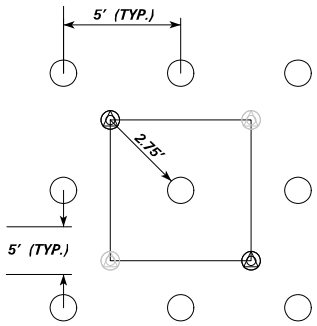
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PROPOSED PRE- AND POST-INSTALLATION VERIFICATION TEST LAYOUT

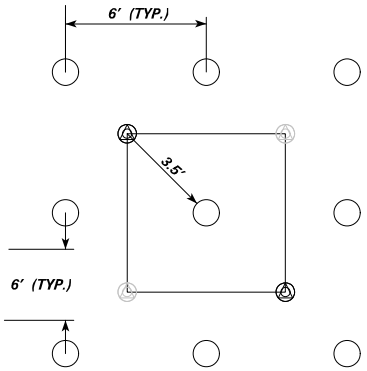
4-FT CENTER TO CENTER SPACING LAYOUT



5-FT CENTER TO CENTER SPACING LAYOUT



6-FT CENTER TO CENTER SPACING LAYOUT



LEGEND

- PRE-INSTALLATION UNDISTURBED SAMPLE BORING
- PRE-INSTALLATION SCPT SOUNDING
- POST-INSTALLATION UNDISTURBED SAMPLE BORING
- POST-INSTALLATION SCPT SOUNDING

NOTES:

A MINIMUM OF ONE (1) PRE-PRODUCTION RIGID INCLUSION WITHIN TEST AREA (TOTAL OF THREE (3) PRE-CONSTRUCTION RIGID INCLUSIONS) SHALL INCLUDE REINFORCEMENT IN ACCORDANCE WITH THE REINFORCED RIGID INCLUSIONS DETAIL SHEET.

PRE-INSTALLATION SOIL INVESTIGATION METHODS ARE TO BE PERFORMED PRIOR TO THE INSTALLATION OF THE PROPOSED GROUND IMPROVEMENT TECHNIQUE. POST-INSTALLATION SOIL INVESTIGATION METHODS ARE TO BE PERFORMED A MINIMUM OF 28-DAYS AFTER THE GROUND IMPROVEMENTS HAVE BEEN CONSTRUCTED SUCH THAT SOIL IMPROVEMENTS IN BETWEEN COLUMNS MAY BE EVALUATED.

THE MINIMUM DISTANCE BETWEEN THE VERIFICATION TEST AREAS SHALL BE A DISTANCE SUCH THAT THE EFFECTS OF CONSTRUCTION ACTIVITIES AND INSTALLATION DOES NOT INLUENCE THE RESULTS OF THE VERIFICATION TESTING AT EACH RESPECTIVE GROUND IMPROVEMENT TEST AREA. THE DISTANCES BETWEEN EACH VERIFICATION TEST AREA SHALL BE PROVIDED IN THE INSTALLATION PLAN.

DESIRED LENGTH OF TEST RIGID INCLUSIONS EQUAL TO 80 FT.

US 51 BRIDGE

PROPOSED VERIFICATION TEST LAYOUT FOR DISPLACEMENT RIGID INCLUSIONS

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

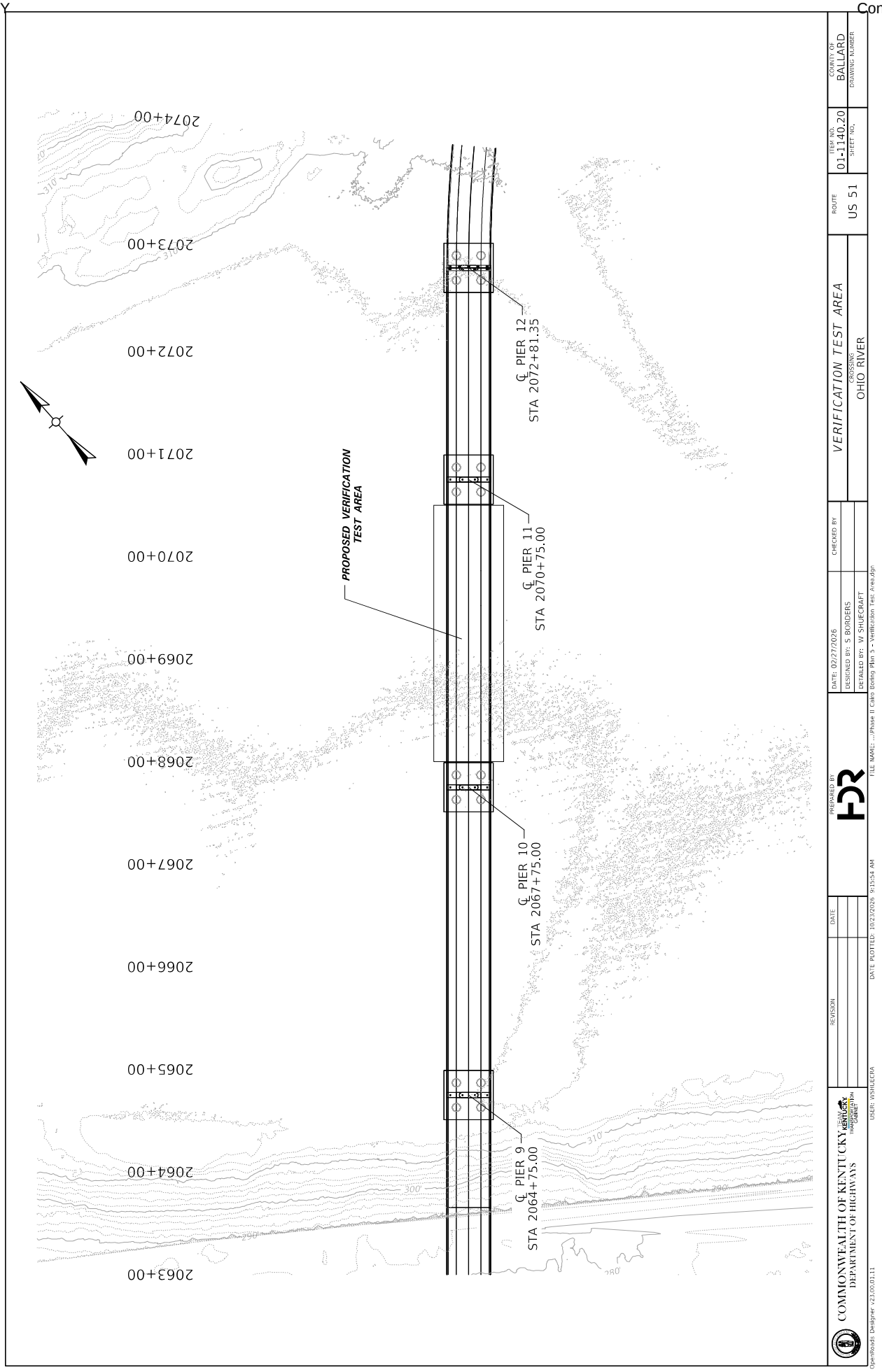
PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

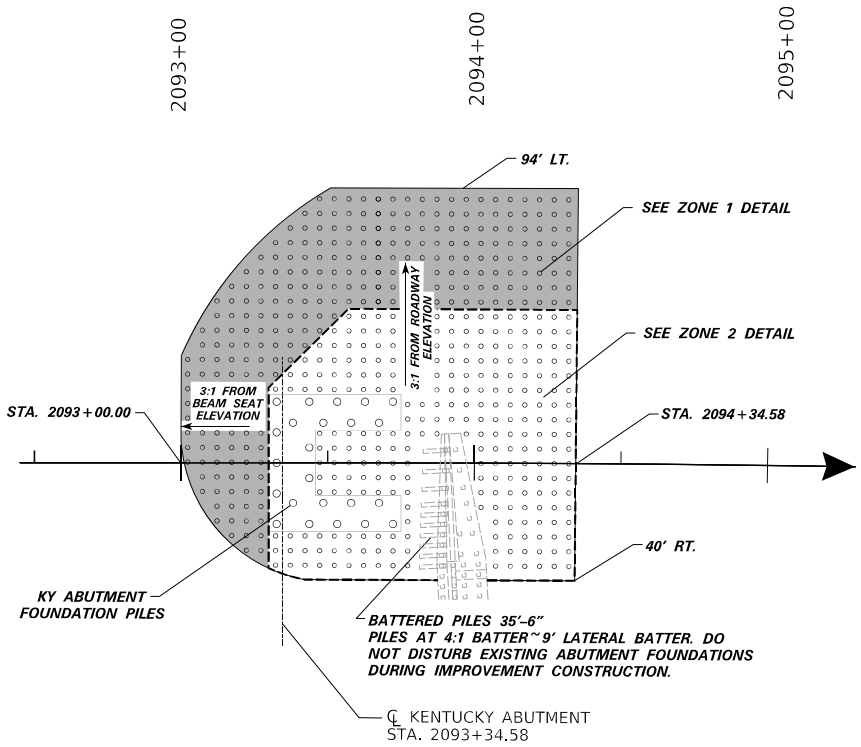
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CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.:
COUNTY OF: BALLARD
DRAWING NUMBER:

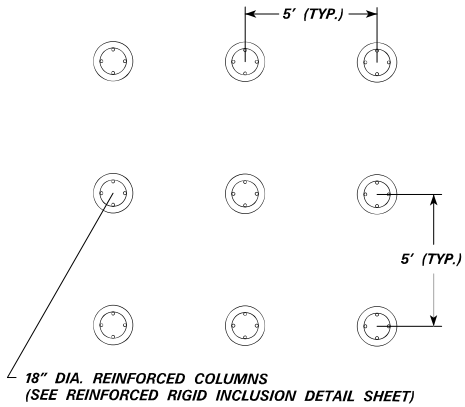
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2074+00
2073+00
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2069+00
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2066+00
2065+00
2064+00
2063+00
PROPOSED VERIFICATION TEST AREA
℄ PIER 12
STA 2072+81.35
℄ PIER 11
STA 2070+75.00
℄ PIER 10
STA 2067+75.00
℄ PIER 9
STA 2064+75.00
VERIFICATION TEST AREA
CROSSING
OHIO RIVER
ROUTE
US 51
ITEM NO.
01-1140.20
SHEET NO.
COUNTY OF
BALLARD
DRAWING NUMBER
CHECKED BY
DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
PREPARED BY:
HDR
REVISION
DATE
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TRANSPORTATION CABINET
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US 51 BRIDGE REPLACEMENT

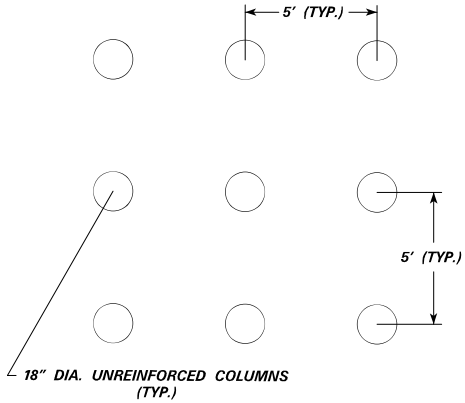
LAYOUT OF DISPLACEMENT RIGID INCLUSIONS AT THE KENTUCKY ABUTMENT



US 51 BRIDGE
KENTUCKY END BENT



ZONE 1 DETAIL



ZONE 2 DETAIL

US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

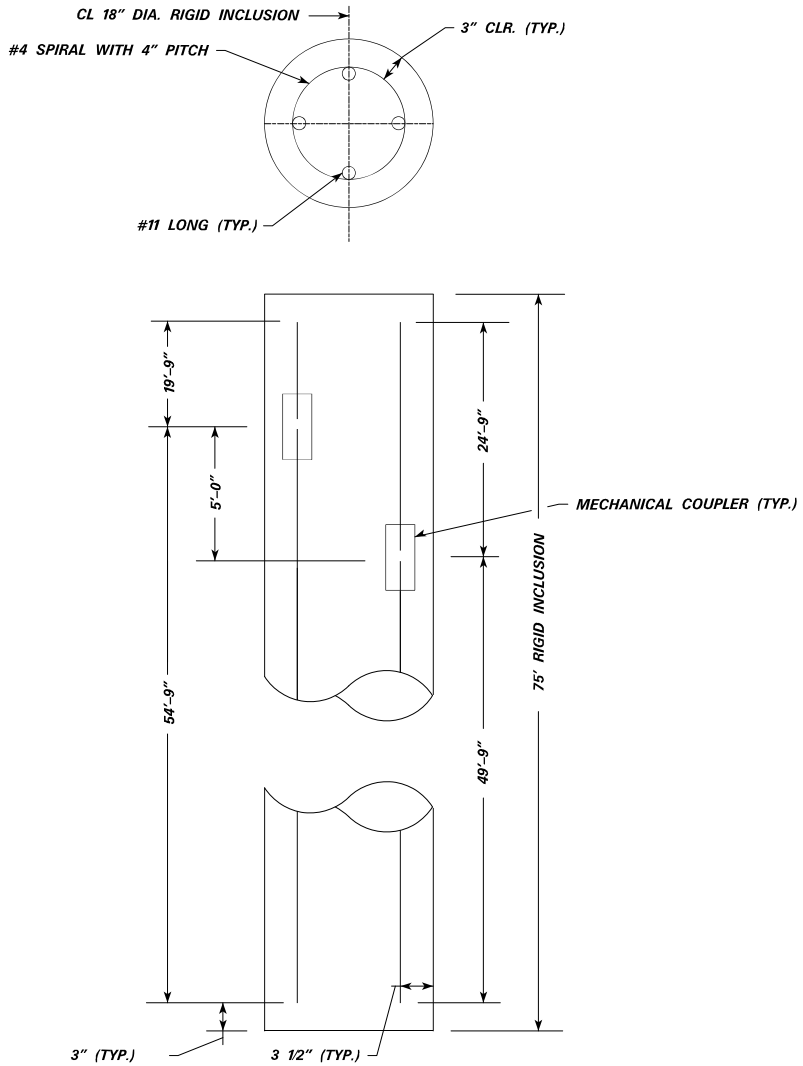
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DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

RIGID INCLUSION LAYOUT
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.:
COUNTY OF: BALLARD
DRAWING NUMBER:

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REINFORCED RIGID INCLUSION DETAIL SHEET



US 51 BRIDGE REPLACEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
KENTUCKY TRANSPORTATION CABINET

REVISION	DATE

PREPARED BY: HDR

DATE: 02/27/2026
DESIGNED BY: S BORDERS
DETAILED BY: W SHUECRAFT
CHECKED BY:

REINFORCED RIGID INCLUSION DETAILS
CROSSING: OHIO RIVER

ROUTE: US 51
ITEM NO.: 01-1140.20
SHEET NO.:
COUNTY OF: BALLARD
DRAWING NUMBER:

OpenRoads Designer v23.00.01.11 USER: TLYNN DATE PLOTTED: 10/22/2026 3:28:47 PM FILE NAME: ...\01_1140_00_GEO_KY_Special Notes.dgn

SPECIAL NOTE FOR VIBRATION MONITORING (NOTE E)

BALLARD COUNTY, KENTUCKY/ALEXANDER COUNTY, ILLINOIS ITEM NO. 01-1140.20
US-51 BRIDGE REPLACEMENT PROJECT

Vibration-producing activities (such as pile driving, pseudo-static testing, vibratory compaction, operation of heavy construction equipment, and other vibration-inducing operations) will be required during the construction and testing activities related to the Design Phase Load Test Program for the US-51 Bridge Replacement Project until the construction and testing equipment associated with the Pile Load Test Program has been demobilized from the project site. The Contractor is advised of the existing bridge structure located close to the proposed work and that construction activities shall be conducted so as to preclude damage to same. The Contractor shall be responsible for any damage caused by his activities.

Within 60 days after receiving a Notice To Begin Work, the Contractor shall provide a written plan to the Engineer, which shall include, but not be limited to the following: vibration monitoring plan (including the format for reporting the vibration readings), anticipated vibration levels at the existing bridge, condition survey format, and communications activities. A copy of all reports required by this Special Note (Note E) shall be provided to the Engineer within 14 days after completing the Pile Load Test Program field activities.

1.0 CONDITION SURVEY

A Pre-Construction Condition Survey (PCS) shall be conducted by the Contractor on the existing bridge at the following locations prior to the commencement of any vibration-producing activity.

1.1. West Approach End Bent

1.2. West Approach Piers I-4, I-5, and Pier A

1.3. River Piers D and E

1.4. East Approach Land Piers K-1 and K-2

1.5. Land Pier K-20

1.6. East Approach End Bent

A plan view of the existing bridge is attached to this Special Note (Note E). The survey will include documentation of the river piers (Piers D and E) as viewed from the waterline, the west approach piers (I-4, I-5, and Pier A), the east approach piers (K-1 , K-2, and K-20), and of the west and east approach end bents as viewed from the adjacent ground surface. It will detail (by engineering sketches, video, photographs, and/or notes) any existing structural or cosmetic damage. The survey will be conducted by a licensed Professional Engineer with at least 4 years of experience in pre-construction condition surveys, and who has conducted a minimum of 4 pre-construction survey projects on transportation facilities.

A Pre-Construction Condition Survey report shall be issued that will summarize the pre-construction condition of the structure(s) and will identify areas of concern, including potential personnel hazards (falling debris) and structural elements that may require support or repair such as, but not limited to, existing visible cracks.

Crack displacement monitoring gages will be installed as appropriate across any significant existing cracks as defined by the PCS engineer to help verify any additional structure distress if it should develop. The appropriate location, number, and type of gages will be established by the Contractor and shall be submitted to the Department for approval prior to installation. The gages will be read prior to vibration-producing activities, as well as during these activities. Data shall be obtained on a weekly basis as long as vibration-producing activities are conducted. A report shall be submitted which summarizes the data on a weekly basis. The Department shall be alerted if any significant movement as defined by the PCS engineer is detected by the monitoring gages.

A Post-Construction Condition Survey shall be conducted within 10 calendar days after the field activities for the Pile Load Test Program have been completed. The survey will follow the same procedures, and the report will have the same format, as the Pre-Construction Survey.

2.0 VIBRATION CONTROLS

The Contractor shall employ a qualified vibration specialist to establish a safe vibration level for each location described in Section 1.0 of this Special Note (Note E). The Contractor's vibration-monitoring personnel shall include a qualified Vibration Instrumentation Engineer who is a licensed Professional Engineer, and who has at least 4 years of experience in the installation and use of vibration-monitoring instrumentation and in interpreting instrumentation data for ground vibrations caused by heavy construction, and who has conducted a minimum of 8 vibration monitoring projects for ground vibrations caused by heavy construction. This specialist shall also supervise the Contractor's vibration-monitoring program. During all vibration-producing activities, the Contractor shall monitor vibration levels at each location described in Section 1.0 of this Special Note (Note E) and shall not exceed the safe level established in the Contractor's Vibration Monitoring Plan to preclude damage to these structures. A Vibration Monitoring Plan which shows planned location of the vibration monitors, vibration monitoring equipment to be used, safe vibration levels (which may be established from a baseline monitoring program), and expected schedule for monitoring shall be submitted to the Department for approval. The Vibration Monitoring Plan shall also include a general plan of action for responding to exceedances of the Response Values defined in this Special Note (Note E).

The vibration monitoring equipment shall be capable of continuously recording the peak particle velocity (PPV) and providing a permanent record of the entire vibration event. The vibration monitoring equipment shall have the following minimum features:

2.1. Seismic range: 0.01 to 4 inches per second with an accuracy of +5 percent of the measured peak particle velocity or better at frequencies between 10 Hertz and 100 Hertz, and with a resolution of 0.01 inches per second or less.

2.2. Frequency response (+3 dB points): 2 to 200 Hertz.

2.3. Three channels for simultaneous time-domain monitoring of vibration velocities in digital format on three perpendicular axes.

2.4. Two power sources: internal rechargeable battery and charger and backup power source.

2.5. Capable of internal, dynamic calibration.

2.6. Capability to transfer data from memory to permanent digital storage. Instruments must be capable of transmitting vibration data readings to the Contractor within 15 minutes of obtaining the readings. Provide computer software to perform analysis and produce reports of continuous monitoring.

2.7. Capability to automatically transmit notifications of Threshold and Limiting Value exceedances to both the Contractor and the Department upon occurrence.

2.8. Continuous monitoring mode must be capable of recording single-component peak particle velocities, and frequency of peaks with an interval of one minute or less.

A report shall be submitted which summarizes the data collected on a weekly basis. Copies of all vibration records and associated construction activity (e.g., pile driving) data shall be provided to the Engineer in a format approved by the Engineer in a final report to be submitted within 14 calendar days of completing the Pile Load Test Program field activities .

The Contractor's Vibration Instrumentation Engineer shall interpret the data collected, including making correlations between seismograph data and specific construction activities. The data shall be evaluated to determine whether the measured vibrations can be reasonably attributed to construction activities.

Unless otherwise provided for in the Vibration Monitoring Plan, the Response Values for vibration shall include a Threshold Value of 0.4 inches per second and a Limiting Value of 0.5 inches per second. The actions associated with these Response Values are defined below. Plans for such actions are referred to herein as plans of action, and actual actions to be implemented are referred to herein as response actions. These Response Values apply only to activities associated with the Design Phase Load Test Program and are not applicable to the installation of production foundation elements for the US-51 Bridge Replacement Project. Response Values applicable to bridge replacement construction will be reevaluated and

established in the contract documents for that work. Response Values are subject to adjustment by the Engineer as indicated by prevailing conditions or circumstances.

If a Threshold Value is reached, the Contractor shall:

1. Immediately notify the Engineer.
2. Meet with the Engineer to discuss the need for response action(s).
3. If directed by the Engineer during the above meeting that a response action is needed, submit within 24 hours a detailed specific plan of action based as appropriate on the generalized plan of action submitted previously as part of the vibration-monitoring plan specified in Article 2.0 of this document.
4. If directed by the Engineer, implement response action(s) within 24 hours of submitting a detailed specific plan of action, so that the Limiting Value is not exceeded.

If a Limiting Value is reached, the Contractor shall:

1. Immediately notify the Engineer and suspend all vibration producing activities in the affected area, with the exception of those actions necessary to avoid exceeding the Limiting Value and protect existing structures.
2. Meet with the Engineer to discuss the need for response action(s).
3. If directed by the Engineer during the above meeting that a response action is needed, submit within 24 hours a detailed specific plan of action based as appropriate on the generalized plan of action submitted previously as part of the vibration-monitoring plan specified in Article 2.0 of this document.
4. If directed by the Engineer, implement response action(s) within 24 hours of submitting a detailed specific plan of action, so that the Limiting Value is not exceeded.

3.0 COMMUNICATIONS

The Contractor shall maintain a log of any complaints and make this available to the Engineer on request. The Department shall be notified by the Contractor at least two (2) weeks prior to commencement of any vibration-producing activity that might affect adjacent structures.

4.0 MEASUREMENT

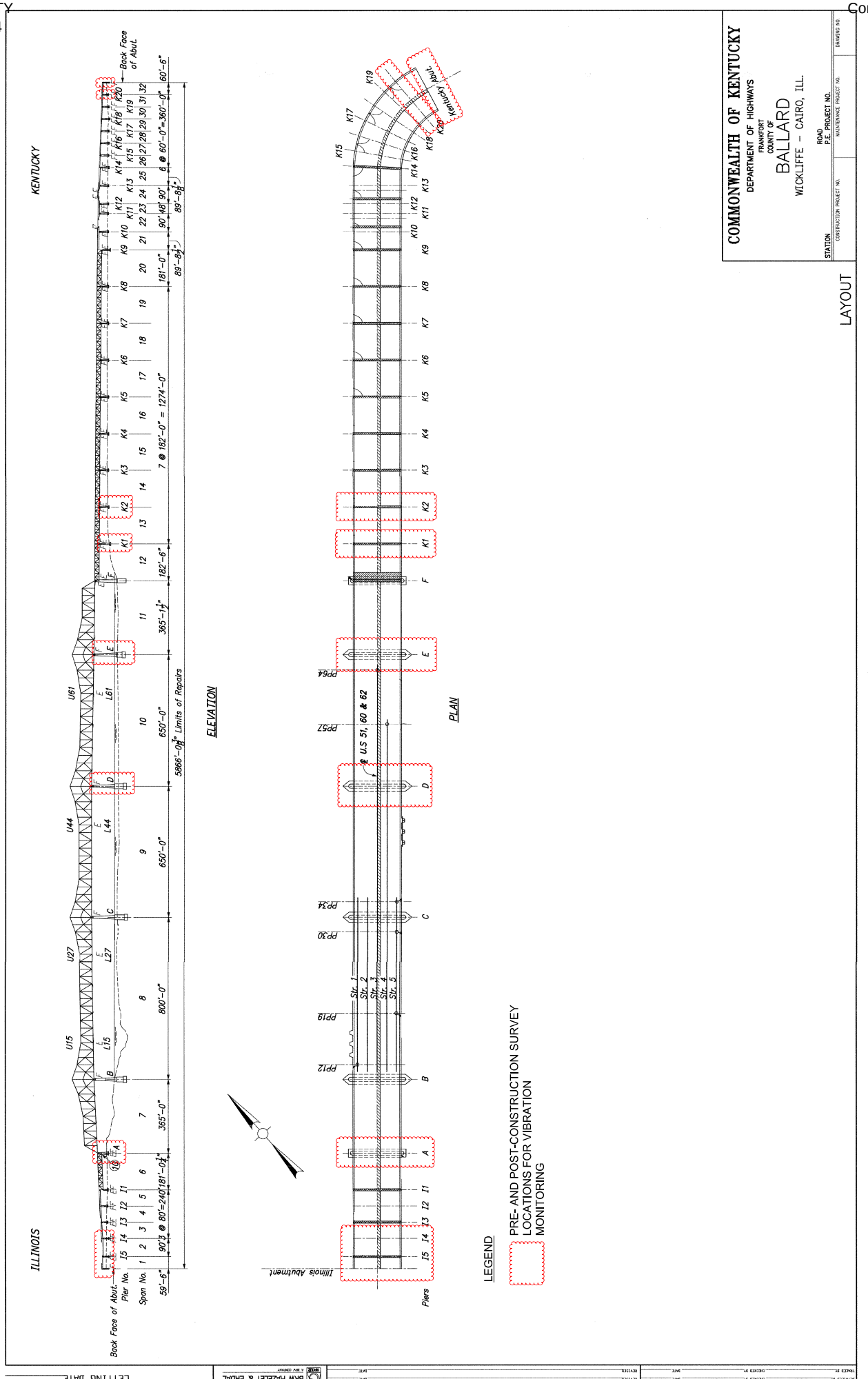
Payment for Vibration Monitoring is for all work described in this special note including but not necessarily limited to surveys, instrumentation, monitoring, and reports.

5.0 PAY ITEMS

Payment will be made under:

Table 1. Payment Table

Bid Item Code	Pay Item Description	Unit
24550EC	Vibration Monitoring	LS


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BALLARD
WICKLIFFE – CAIRO, ILL.
STATION
ROAD
P.E. PROJECT NO.
CONSTRUCTION PROJECT NO.
MAINTENANCE PROJECT NO.
DRAWING NO.
LAYOUT
KENTUCKY
ILLINOIS
ELEVATION
PLAN
Back Face of Abut.
Pier No.
Span No.
Limits of Repairs
Illinois Abutment
Kentucky Abut.
Piers
@ U.S. 51, 60 & 62
Str. 1
Str. 2
Str. 3
Str. 4
Str. 5
LEGEND
PRE- AND POST-CONSTRUCTION SURVEY
LOCATIONS FOR VIBRATION
MONITORING
PLANS PREPARED AND SUBMITTED BY
BRW HAZELET & ERDAL
UPDATE DATE
LETTING DATE

SPECIAL NOTE FOR RECYCLED ASPHALT PAVEMENT (RAP) STOCKPILE MANAGEMENT

I. GENERAL

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

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

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

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

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

II. APPROVAL PROCESS

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

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

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

IIA. RAP Quality Management Plan

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

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

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

IIB. RAP Stockpile Placement

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

IIC. Stockpile Identification Signs

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

IID. Standard Approval Procedure

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

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

• Submit request for approval at beginning of the paving season as part of the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment.

• If requesting approval after paving season begins, submit memo, including stockpile portion of the inspection list for Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment, to Division of Materials.

• Reports of the tests prescribed above using the Stockpile <INSERT NAME> document.

• A drawing of the plant site showing the location of the stockpile to be approved *and all other stockpiles on the premises*

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

Kentucky Transportation Cabinet
Division of Materials
ATTN: Asphalt Branch Manager
1227 Wilkinson Boulevard
Frankfort, Kentucky 40601

Robert.Semones@ky.gov

IIE. Tests and inspections by the Department

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

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

III. RAP STOCKPILE TIERED MANAGEMENT AND EFFECTIVE BINDER CONTENT

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

Table 1. Tiered Testing Requirements

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

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

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

Tier 1

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

Tier 2

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

Tier 3

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

IV. MAXIMUM PERCENTAGE OF RAP ALLOWED

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

Limits according to range in gradation and bitumen content

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

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

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

NOTE: These allowances notwithstanding, the Contractor is required to maintain the mixture within the Mixture Control Tolerances of Kentucky Method 443.
The percentage allowable in mix designs shall be limited to meet the design criteria for viscosity established in the Standard Specifications.

V. GENERAL STOCKPILE REQUIREMENTS AND REPLENISHMENT

V.A. Single Pavement Source

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

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

V.B. Heterogeneous or contaminated material

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

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

• Material contaminated with foreign matter such as liquids, soil, concrete, or debris

• Plant waste, especially waste containing abnormal concentrations of bitumen, drum build-up, or material from spills or plant clean-up operations

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

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

VI. REPLENISHMENT OF STOCKPILES

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

VI.A. Procedure and approval criteria

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

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

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

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

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

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

VII. CONTINUAL REPLENISHMENT WITHOUT RE-APPROVAL

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

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

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

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

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

VIII. DEPLETION OF STOCKPILE AND EXPIRATION OF APPROVAL

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

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

IX. RECORDS

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

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

X. RELOCATION OF STOCKPILE

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

June 18, 2025

Kentucky Transportation Cabinet
Division of Highway Design

TRAFFIC MANAGEMENT PLAN

County: Ballard, KY / Alexander, IL Item No.: 1-1140.01

Federal Project No.: NHPPBR0601204

Project Description:

US 51 Bridge Replacement – Advanced Letting – Phase 1 – Construct approach embankments to new bridge over the Ohio River at Cairo, Illinois and conduct a load test program.

Roadway Classification: ☐ Urban ☒ Rural

☐ Local ☐ Collector ☐ Arterial ☐ Interstate

ADT (current) 6,050 AM Peak Current N/A PM Peak Current N/A % Trucks 35

Project Designation: ☒ Significant ☐ Other: _____

Traffic Control Plan Design:

Taper and Diversion Design Speeds 45 MPH

Minimum Lane Width 11' Minimum Shoulder Width 0'-2'

Minimum Bridge Width Match exist.

Minimum Radius Match exist. Maximum Grade Match exist.

Minimum Taper Length 495' Minimum Intersection Level of Service N/A

Existing Traffic Queue Lengths 0 Projected Traffic Queue Lengths 0

Comments:

Traffic will be maintained along existing US 51 with a temporary lane shift in Kentucky and temporary lane closures for the north and southbound lanes in Illinois.

Kentucky Transportation Cabinet
Division of Highway Design
TRAFFIC MANAGEMENT PLAN

Item No. 1-1140.01

Discussion:

1) Public Information Plan	
a) Prepare with assistance from ☒ KYTC or ☐ _____	
b) Identify Trip Generators N/A	f) Railroad Involvement Referenced
c) Identify Types of Road Users N/A	g) Address Pedestrians, Bikes Mass Transit N/A
d) Public Information Message Referenced	h) Address Timing, Frequency, Updates, Effectiveness of Plan Referenced
e) Public Information Strategies to be used Referenced	i) Police & Other Emergency Services Referenced

Kentucky Transportation Cabinet
Division of Highway Design
TRAFFIC MANAGEMENT PLAN

Item No. 1-1140.01

2) Temporary Traffic Control Plan (For Each Phase of Construction)
Phase I

Exposure Control Measures		**Positive Protection Measures**	
a) Is Road Closure Allowed Type:	No	a) Address Drop Off Protection Criteria	N/A
b) Detour Conditions	N/A	b) Temporary Barrier Requirements	Referenced
c) Working Hour Restrictions	N/A	c) Evaluation of Existing Guardrail Conditions	Referenced
d) Holiday or Special Event Work Restrictions	N/A	d) Address Temporary Drainage	Referenced
e) Evaluation of Intersection LOS	N/A	**Uniformed Law Enforcement Officers**	N/A
f) Evaluation of Queue Lengths	N/A	**Payment for Traffic Control***	
g) Evaluation of User Costs and Incentives/Disincentives	N/A	a) Method of Project Bidding	Referenced
h) Address Pedestrians, Bikes, Mass Transit	N/A	b) Special Notes	Referenced
Work Vehicles and Equipment	Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction	

Comments:

KY: While maintaining 2 lanes of traffic, reduce lane widths to 11' minimum and shift traffic to the south side of existing US 51. Construct guardrail and embankment along the north side of existing US 51 from sta. 2096+82 to the end of the project. Construct embankment for approach left sta. 2096+70 and access road without changing or impacting existing access.

IL: Shift traffic to the inside lane along US 51/ US 60/ US 62 and close the outside lane. Construct embankment along southwest side of existing US 51/US 60/US 62, construct embankment for the construction access road on the north side of existing US 51/US 60/US 62.

Kentucky Transportation Cabinet
Division of Highway Design
TRAFFIC MANAGEMENT PLAN

Item No. 1-1140.01

2) Temporary Traffic Control Plan (For Each Phase of Construction) Phase 2

Exposure Control Measures		**Positive Protection Measures**	
a) Is Road Closure Allowed Type:	No	a) Address Drop Off Protection Criteria	N/A
b) Detour Conditions	N/A	b) Temporary Barrier Requirements	Referenced
c) Working Hour Restrictions	N/A	c) Evaluation of Existing Guardrail Conditions	Referenced
d) Holiday or Special Event Work Restrictions	N/A	d) Address Temporary Drainage	Referenced
e) Evaluation of Intersection LOS	N/A	**Uniformed Law Enforcement Officers**	N/A
f) Evaluation of Queue Lengths	N/A	**Payment for Traffic Control***	
g) Evaluation of User Costs and Incentives/Disincentives	N/A	a) Method of Project Bidding	Referenced
h) Address Pedestrians, Bikes, Mass Transit	N/A	b) Special Notes	Referenced
Work Vehicles and Equipment	Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction	

Comments:

KY: Construct remaining embankment tie-in locations under traffic for approach left sta. 2096+70 and access road while maintaining access to all properties and E. Cairo Road.

IL: Construct guardrail along southwest side of existing US 51/US 60/US 62.

Kentucky Transportation Cabinet
Division of Highway Design
TRAFFIC MANAGEMENT PLAN

Item No. 1-1140.01

2) Temporary Traffic Control Plan (For Each Phase of Construction) Phase 3

Exposure Control Measures		**Positive Protection Measures**	
a) Is Road Closure Allowed Type:	No	a) Address Drop Off Protection Criteria	N/A
b) Detour Conditions	N/A	b) Temporary Barrier Requirements	Referenced
c) Working Hour Restrictions	N/A	c) Evaluation of Existing Guardrail Conditions	Referenced
d) Holiday or Special Event Work Restrictions	N/A	d) Address Temporary Drainage	Referenced
e) Evaluation of Intersection LOS	N/A	**Uniformed Law Enforcement Officers**	N/A
f) Evaluation of Queue Lengths	N/A	**Payment for Traffic Control***	
g) Evaluation of User Costs and Incentives/Disincentives	N/A	a) Method of Project Bidding	Referenced
h) Address Pedestrians, Bikes, Mass Transit	N/A	b) Special Notes	Referenced
Work Vehicles and Equipment	Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction	

Comments:

KY: Shift traffic to the newly constructed approach lt. sta. 2096+70 and construct remaining embankment along existing E. Cairo Road adjacent to mainline and near the existing bridge abutment.

Kentucky Transportation Cabinet
Division of Highway Design
TRAFFIC MANAGEMENT PLAN

Item No. 1-1140.01

APPROVAL:

PE 10/9/26
Project Manager — Date

Justin Turner 10-19-26
Project Delivery and Preservation Manager — Date

For Eng. Support 10-19-26
Engineering Support Manager — Date

Thava M Overstreet 10/28/2026
FHWA Representative — Date

Revisions to the TMP require review/approval by the signatories.

SPECIAL NOTE FOR CONTRACT COMPLETION AND MILESTONE COMPLETION DATES
Ballard Co., KY and Alexander Co., IL
Item No. 01-1140.20

PROJECT MILESTONE COMPLETION DATE. The milestone date of **December 31, 2027** has been established for the load testing program and ground modification verification portions of the project. The milestone date includes submission of the final report for the pile load test program as well as the ground modification verification final report. Liquidated damages in the amount of $4,750.00 will be charged for each day in which the project milestone is not met. Contrary to the KY Standard Specifications for Road and Bridge Construction, liquidated damages will be charged for each calendar day including weekends and holidays.

PROJECT COMPLETION DATE. The project completion date of **December 31, 2028** will apply for all items not included in the **PROJECT MILESTONE** completion items.

TEAM KENTUCKY TRANSPORTATION CABINET

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

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

RIGHT OF WAY CERTIFICATION

☒ Original	☐ Re-Certification	RIGHT OF WAY CERTIFICATION

ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
1-1140.01	Ballard	12F0 FD52 004 8580701R	NHPPBR 0601 (204)

PROJECT DESCRIPTION

Cairo Bridge 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 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	5	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired			
Signed Deed	5		
Condemnation	0		
Signed ROE			

Notes/ Comments (Text is limited. Use additional sheet if necessary.)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	
Signature		Signature	Digitally signed by Francie Westlie Date: 2026.10.28 10:31:24 -05'00'
Date		Date	

Right of Way Director		FHWA	
Printed Name		Printed Name	
Signature	Digitally signed by Kelly Divine Date: 2026.10.28 10:37:16 -05'00'	Signature	
Date		Date	

Illinois Department of Transportation

Memorandum

To:	File
From:	Nancy Heil
Subject:	***IDOT ROW Certification**
Date:	September 23, 2026

Route FAP Route 14 (US Route 51 / US Route 62)
County Alexander
Job No. R-99-007-20
Parcel 9008120 - Chandler

New KY/IL Bridge at Cairo
Item No. 1-1140.01
Fed Project No. NHPPBRO601204
KY State Project No. FD52-0051-004-007-008

As part of the joint project between Illinois and Kentucky, this memo is certification that Condition #1 has been met – all necessary right of way has been acquired.

The total number of parcels required for this Phase I-Initial Construction project was 1 and it has been acquired.

Certified: Nancy Heil

Nancy Heil
Land Acquisition Engineer
District 9/IDOT

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
Description:	**CONSTRUCT NEW STRUCTURE OVER THE OHIO RIVER AT CAIRO, ILLINOIS (KENTUCKY'S SHARE)(004B00021N)**		
Mile Point:	**7.327 To 8.297**		

GENERAL UTILITY NOTES

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

2. 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.

3. Utility coordination efforts determined that no significant utility relocation work is required to complete the project on the Kentucky side. 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.

4. 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 on the Kentucky side. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
Description:	**CONSTRUCT NEW STRUCTURE OVER THE OHIO RIVER AT CAIRO, ILLINOIS (KENTUCKY'S SHARE)(004B00021N)**		
Mile Point:	**7.327 To 8.297**		

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.

- **<u>This note is for the Kentucky side ONLY</u>**

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
Description:	**CONSTRUCT NEW STRUCTURE OVER THE OHIO RIVER AT CAIRO, ILLINOIS (KENTUCKY'S SHARE)(004B00021N)**		
Mile Point:	**7.327 To 8.297**		

DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT

Utility Company	Facility Type
AT&T	AT&T KY - Communication - Ballard
Only in ICRR Right of Way, should be no impact.	
Jackson Purchase Energy Corp	Electric - Ballard
Not aware of any facilities in the area, should be no impact.	

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

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
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Mile Point:	**7.327 To 8.297**		

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

Utility Company	Facility Type	Completion Date
Illinois Central Railroad Company	Railroad-Ballard	Undetermined
Flagging		

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
Description:	**CONSTRUCT NEW STRUCTURE OVER THE OHIO RIVER AT CAIRO, ILLINOIS (KENTUCKY'S SHARE)(004B00021N)**		
Mile Point:	**7.327 To 8.297**		

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

Utility Company	Facility Type	Start Date	Completion Date
Illinois Central Railroad Company	Railroad-Ballard	Undetermined	Undetermined
Flagging			

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
Description:	**CONSTRUCT NEW STRUCTURE OVER THE OHIO RIVER AT CAIRO, ILLINOIS (KENTUCKY'S SHARE)(004B00021N)**		
Mile Point:	**7.327 To 8.297**		

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

Not Applicable

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
Description:	**CONSTRUCT NEW STRUCTURE OVER THE OHIO RIVER AT CAIRO, ILLINOIS (KENTUCKY'S SHARE)(004B00021N)**		
Mile Point:	**7.327 To 8.297**		

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

Rail Involved

See Special Notes For Railroad Involvement

UTILITIES AND RAIL CERTIFICATION NOTE

Project:	**1-1140.00**	**Ballard County**	**US 51**
Funding Source:	**NHPPBR0601204**	**FD52 004 8580701U**	
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Mile Point:	**7.327 To 8.297**		

AREA FACILITY OWNER CONTACT LIST

1. AT&T-AT&T KY - Communication
   Alan Shelby - Phone: (270) 444-5048 Email: as7168@att.com

2. Illinois Central Railroad Company - Railroad
   Josh Gordon - Phone: (601) 914-2658 Email: Preston.Gordon@CN.ca

3. Jackson Purchase Energy Corp - Electric
   Ward Morgan - Phone: (270) 442-7321 Email: ward.morgan@JPEnergy.com

Form Revised 10/01/2025

SPECIAL NOTES FOR
PROTECTION OF RAILROAD INTEREST

Illinois Central Railroad Company

I. AUTHORITY OF RAILROAD ENGINEER AND STATE ENGINEER:

A. *The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks.*

B. *The authorized representative of the State, hereinafter referred to as the Engineer, shall have authority over all other matters as prescribed herein and in the Project Specifications.*

II. NOTICE OF STARTING WORK:

A. *The Contractor shall not commence any work on Railroad rights of way until he has complied with the following conditions:*

1. Given the Railroad written notice, with copy to the Engineer who has been designated to be in charge of the work, **at least ten (10) days in advance** of the date he proposes to begin work on Railroad rights of way. **If flagging service is required, such notice shall be submitted at least thirty (30) days in advance** of the date scheduled to commence work. The Railroad's Contact information is on the Summary Sheet.

2. Obtain written authorization from the Railroad to begin work on Railroad rights of way, such authorization to include an outline of specific conditions with which he must comply and execution of the Railroad's standard right of entry agreement.

3. Obtain written approval from the Railroad of Railroad Protective Insurance Liability coverage as required by paragraph 14 herein.

4. Furnish a schedule for all work within the Railroad rights of way as required by paragraph 7, B, 1.

B. *The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who*

are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

III. INTERFERENCE WITH RAILROAD OPERATIONS:

A. The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights of way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service (watchman) shall be deferred by the Contractor until the flagging protection required by the Railroad is available at the job site.

B. Whenever work within Railroad rights of way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.

C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Engineer, such provisions are insufficient, either may require or provide such provisions, as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the State.

IV. TRACK CLEARANCES

A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. However, before undertaking any work within Railroad rights of way, or before placing any obstruction over any track, the Contractor shall:

1. Notify the Railroad's representative **at least 72 hours in advance** of the work.

2. Receive assurance from the Railroad's flagging representative that arrangements have been made for flagging service as necessary.

3. Receive permission from the Railroad's representative to proceed with the work.

4. Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

V. CONSTRUCTION PROCEDURES

A. General:

1. Construction work on Railroad property shall be:

   a) Subject to the inspection and approval of the Railroad.

   b) In accord with the Railroad's written outline of specific conditions.

   c) In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.

   d) In accord with all Special Notes, Summaries, and Addendums.

2. The Railroad requires a submission of construction procedure that meets the requirements of these Special Notes and attachments. The Railroad's **submittal review period is thirty (30) days. Resubmissions will be reviewed within 2 weeks.**

B. Excavation and shoring:

1. The sub grade of an operated track shall be **maintained with edge of berm at least 10'0" from centerline of track and not more than 18 inches below top of rail, and a 1 vertical to 1.5 horizontal slope from that point outwards.** Contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained.

2. The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles, or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall first be approved by the Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.

3. The Contractor shall submit a detailed procedure for the installing of sheeting/shoring adjacent to Railroad Tracks.

4. Shoring protection shall be provided when excavating adjacent to an active track or railroad facility or as determined by the Railroad. Shoring will be provided in accordance with AREMA *Manual for Railway Engineering* Chapter 8, part 28; except as noted below.

5. Shoring may not be required if all of the following conditions are satisfied:

   a. Excavation does not encroach upon a 1½ horizontal: 1 vertical theoretical slope line starting 1'-0" below top of rail and at 12'-0" minimum from centerline of the track (live load influence zone).

   b. Track is on level ground or in a cut section and on stable soil.

   c. Excavation does not adversely impact the stability of a Railroad facility (i.e. signal bungalow, drainage facility, undergrade bridge, building, etc.)

   d. Shoring is not required by any governing construction code.

6. When the track is on an embankment, excavating the toe of the embankment without shoring may affect the stability of the embankment. Therefore, excavation of the embankment toe without shoring will not be permitted.

7. Trench boxes are prohibited for use on Railroad property within the theoretical live load influence zone.

8. The required protection is the cofferdam type that completely encloses the excavation. Where dictated by conditions, partial cofferdams with opened sides away from the track may be used. Cofferdams shall be constructed using steel piling, or when approved by the engineer, steel soldier piles with timber lagging. Wales and struts shall be provided and designed as needed. The following shall be considered when designing cofferdams:

   a. Shoring shall be designed to resist a vertical lice load surcharge of 1,880 lbs. per square foot, in addition to active earth pressure. The surcharge shall be assumed to act on a continuous strip, 8'6" wide. Lateral pressures due to surcharge shall be computed using the strip load formula shown in AREMA *Manual for Railway Engineering*, Chapter 8, Part 20.

   b. Allowable stresses in materials shall be in accordance with AREMA *Manual for Railway Engineering,* Chapter 7, 8, and 15.

   c. A construction procedure for temporary shoring shall be shown on the drawing.

   d. All shoring systems on or adjacent to Railroad right-of-way shall be equipped with railings or other approved fall protection.

e. A minimum horizontal clearance of 10’-0” from centerline of the track to face of nearest point of shoring shall be maintained provided a 12’-0” roadbed is maintained with a temporary walkway and handrail system.

9. The Contractor shall submit the following drawings and calculations (all shall be signed/sealed by a Professional Engineer) for the Railroad’s review and approval.

a. Six (6) sets of detailed drawings of the shoring systems showing sizes of all structural members, details of connections, and distances from centerline of track to face of shoring. Drawing shall show a section showing height of shoring and track elevation in relation to bottom of excavation.

b. Six (6) sets of calculations of the shoring design. The drawings and calculations shall be prepared by a Licensed Professional Engineer and shall bear the Engineer’s seal and signature. Shoring plans shall be approved by the Railroad’s construction engineering and inspection representative.

c. For sheeting and shoring within 18’-0” of the centerline of the track, the live load influence zone, and in slopes, the Contractor shall use interlocked steel sheeting (sheet pile).

d. Sheet pile installed in slopes or within 18’-0” of the centerline shall <u>not</u> be removed.

e. Sheet pile shall be cut off a minimum of 3’-0” below the finished grade, ditch line invert, or as directed by the Engineer. The ground shall be backfilled and compacted immediately after sheet pile is cut off.

f. A procedure for cutting off the sheet pile and restoring the embankment shall be submitted to the Engineer for review and acceptance.

C. Demolition Procedure:

1. Railroad tracks and other railroad property, including signals, structures, and other facilities, must be protected from damage during the procedure. No crane or equipment may be set on the rails or track structure and no material may be dropped on Railroad property.

2. The Contractor is required to submit a plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.

3. Crane rating sheets showing cranes to be adequate for **150% of the actual weight of the pick.** A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted.

4. Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing and/or proposed structure showing complete and sufficient details with supporting data for the demolition or erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. If possible, field measurements shall be taken with a Railroad representative present.

5. A data sheet must be submitted listing the types, size, and arrangements of all rigging and connection equipment. The safe working load capacity of all rigging and connecting equipment shall be 150% above the calculated weight of the pick.

6. A complete procedure is to be submitted, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.

7. All erection or demolition plans, procedures, data sheets, etc. submitted must be prepared, signed and sealed by a Registered Professional Engineer.

8. The Railroad's representative must be present at the site during the entire demolition and erection procedure period.

9. All procedures, plans and calculations shall first be approved by the Engineer and the Railroad Engineer, but such approval does not relieve the Contractor from liability.

10. Loads shall not be supported while any trains are passing if that piece of equipment has the capacity to foul a 50' envelope in the event of an equipment failure.

11. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.

12. Existing, obsolete, bridge piers shall be removed to a minimum of 3'-0" below the finished grade, final ditch line invert, or as directed by the Engineer.

13. A minimum quantity of 25 tons of Railroad approved track ballast may be required to be furnished and stockpiled on site by the Contractor, or as directed by the Engineer.

14. On-track or ground debris shields such as crane mats are prohibited.

15. Overhead Demolition Debris Shield – Shall be installed prior to the demolition of a bridge deck or other relevant portions of the superstructure.

    a. The demolition debris shield shall be erected from the underside of the bridge over the track area to catch all falling debris.

    b. The Contractor shall include the demolition debris shield installation/removal means and methods as part of the proposed Controlled Demolition procedure submission.

    c. The demolition debris shield shall provide 23'-0" minimum vertical clearance if the existing clearance is less than 23'-0" as approved by the Railroad. Horizontal clearance to the centerline of the track should not be reduced unless approved by the Engineer.

    d. The vertical clearance ATR (above top of rail) is measured from the top of rail to the lowest point on the overhead shielding system measured within a distance of 8'-0" out from each side of the track centerline.

    e. The demolition debris shield design and supporting calculations, all signed/sealed by a Professional Engineer, shall be submitted for review and acceptance.

    f. The demolition debris shield shall have a **minimum** design load of 50 pounds per square foot **plus** the weight of the equipment, debris, personnel, and other loads to be carried.

    g. The Contractor shall include the proposed bridge deck removal procedure in its demolition means and methods and shall verify that the size and quantity of the demolition debris generated by the procedure does not exceed the shield design loads.

h. The contractor shall clean the demolition debris shield daily or more frequently as dictated either by the approved design parameters or as directed by the Engineer.

16. Vertical Demolition Shield – This type of shield may be required for substructure removals in close proximity to track and other facilities, as determined by the Engineer.

a. Prior to commencing the demolition activity, the Contractor shall install a ballast protection system consisting of geotextile to keep the railroad ballast from becoming fouled with construction or demolition debris and fines. The geotextile ballast protection system shall be installed and maintained by the Contractor for the project duration in accordance with the attached plan, or with additional measures as directed by the Engineer.

b. The Contractor shall submit detailed plans, with detailed calculations, prepared and submitted by a Professional Engineer of the protection shield and ballast protection systems for approval prior to the start of demolition.

c. Blasting will not be permitted to demolish a structure over or within Railroad right-of-way.

17. The Controlled Demolition procedure must be approved by the Railroad Engineer prior to undertaking work on the project.

18. The Contractor shall provide timely communication to the Railroad Engineer when scheduling the demolition related work so that the Engineer may be present during the entire demolition procedure.

19. At any time during demolition activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer’s satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

D. *Erection Procedure:*

The Contractor shall submit a detailed procedure for performing erection on/about Railroad property.

1. The Contractor shall submit six (6) copies of the detailed procedure for erection of the proposed structures over or adjacent to the tracks or right-of-way. This procedure shall include a plan showing the locations of cranes, horizontally and vertically, operating radii, with staging locations shown, including beam placement on ground or truck unloading staging plan. Plan should also include the location of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions should be shown. No crane or equipment may be set on the rails or track structure.

2. Also included with this submittal the following information:

    a. As-Built Bridge Seat Elevations - All as-built bridge seats and top of rail elevations shall be furnished to the Engineer for review and verification at least 30 days in advance of construction or erection, to ensure that minimum vertical clearances as approved in the plans will be achieved.

    b. Computations showing weight of picks must be submitted. Computations shall be made from plans of the structure beams being erected and those plans or sections thereof shall also be included in the submittal; the weight shall include the weight of concrete or other materials including lifting rigging.

    c. Crane rating sheets showing cranes to be adequate for 150% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted. Safety factors that may have been “built in” to the crane charts are not to be considered when determining the 150% Factor of Safety.

    d. A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets for specialized equipment. All specific components proposed for use shall be clearly identified and highlighted in the submitted documents. The safe working load capacity of the connecting equipment shall be 150% above the calculated weight of the pick.

    e. A complete written procedure is to be included that describes the sequence of events, indicating the order of lifts and any repositioning or rehitching of the crane or cranes.

f. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical sub tasks (i.e., performing aerial splices, installing temporary bracing, etc.) shall be furnished so that the potential impact(s) to Railroad operations may be assessed and eliminated or minimized.

g. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.

h. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail will be required to be installed in a track where a temporary bent is located within twelve (12) feet from the centerline of that track.

3. The proposed Erection procedure must be approved by the Engineer prior to undertaking work on the project.

4. The Contractor shall provide timely communication to the Engineer when scheduling the erection related work so that the Engineer may be present during the entire erection procedure.

5. At any time during construction activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

E. Blasting:

1. The Contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosive on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:

a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.

b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.

c) No blasting shall be done without the presence of an authorized representative of the Railroad. **At least 10 days advance notice** to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2B above) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.

d) Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his actions result in delay of trains, the Contractor shall bear the entire cost thereof.

e) Explosives shall not be stored on Railroad Property.

f) At any time during the blasting activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions, or other circumstance which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer’s satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

2. The Railroad representative will:

a) Determine the approximate location of trains and advise the Contractor the approximate amount of time available for the blasting operation and clean-up.

b) Have the authority to order discontinuance of blasting if, in his opinion, blasting is too hazardous or is not in accord with these Special Notes.

F. Track Monitoring:

The Contractor shall submit for Railroad review and approval, a detailed track monitoring program to detect both horizontal and vertaical movement of the track and roadbed, a minimum of 30-days in advance of start of work.

1. For the installation of temporary or permanent shoring systems, including but not limited to soldier piles and lagging, and interlocked steel sheeting on or adjacent to the Railroad's right-of-way, the contractor may be required to submit a detailed track monitoring program for the Railroad's approval prior to performing any work near the Railroad's right-of-way.

2. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. The Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.

3. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Engineer for analysis.

4. If any movement has occurred as determined by the Engineer, the Railroad will be immediately notified. The Railroad, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, have the excavated area immediately backfilled and/or determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including monitoring of corrective action of the contractor will be at project expense.

G. Maintenance of Railroad Facilities:

1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either (1) silt fence; (2) hay or straw barrier; (3) berm or temporary ditches; (4) sediment basin; (5) aggregate checks; and (6) channel lining. The Contractor will promptly repair eroded areas with Railroad rights of way and to repair any other damage to the property of the Railroad or its tenants at the Contractor's expense.

2. All maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

H. Storage of Materials and Equipment:

1. Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights of way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment. In no instance shall material be stored closer than 25-feet to the nearest rail.

2. All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

I. Cleanup:

1. Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights of way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

VI. DAMAGES:

A. The Contractor shall assume all liability for any and all damages to his work, employees, equipment and materials caused by Railroad traffic.

B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

VII. FLAGGING SERVICES:

A. When Required:

1. Flagging services will not be provided until the contractor's insurance has been reviewed & approved by the Railroad.

2. Under the terms of the agreement between the Department and the Railroad, the **Railroad has sole authority to determine the need for flagging** required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are likely to be, working on the Railroad's rights of way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging. If any element (workers, equipment, tools, scaffolding, etc.) may exist or fall within 25-feet of the edge of track, a flagman is necessary.

3. Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three- (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required until the project has been completed.

B. Scheduling and Notification:

1. Not later than the time that approval is initially requested to begin work on Railroad rights of way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad rights of way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.

2. **The Cabinet's Engineer will be responsible for procuring flagmen, however, it is the Contractor's responsibility to notify the Engineer when they are needed.** The Contractor will be required to give the Engineer **at least 10 working days of advance written notice** of intent to begin work within Railroad rights of way. If it is necessary for the Railroad to advertise a flagging job for bid, it **may take up to 90-days to obtain service**. Once begun, when work is suspended at any time for any reason, the Contractor will be required to give the Engineer **at least 3 working days of notice** before resuming work on Railroad rights of way. Such notice shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen is present at the job site. It **may take up to 30 days to obtain flagging initially** from the Railroad. When flagging begins the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it **may take up to 10 days to again obtain flagging services** from the Railroad. Due to labor agreements, it is necessary to give **5 working days notice before flagging service may be discontinued** and responsibility for payment stopped.

3. If, after the flagman is assigned to the project site, emergencies arise which require the flagman's presence elsewhere, and then the Contractor shall delay work on Railroad rights of way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.

4. When demobilizing, the Contractor shall contact the Engineer, who will in turn contact the flagman to avoid unnecessary flagging charges. This communication shall be documented.

C. Payment:

1. **The Cabinet will be responsible for paying the Railroad directly for any and all costs of flagging, which may be required to accomplish the construction.**

2. The estimated cost of flagging is listed on the Summary Sheet. The charge to the Cabinet by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees, or it's contractor, who are available for flagging service at the time the service is required.

3. Railroad work involved in preparing and handling bills will also be charged

to the Cabinet. Charges to the Cabinet by the Railroad shall be in accordance with applicable provisions of 23 CRF 140, Subpart I and 23 CRF 646, Subpart B. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way.

D. Verification:

1. The Department will review and sign the Railroad flagman's time sheet, attesting that the flagman was present during the time recorded. Flagman may be removed by Railroad if form is not signed. If flagman is removed, the Contractor will not be allowed to re-enter the Railroad rights of way until the issue is resolved. Any complaints concerning flagman or flagmen must be resolved in a timely manner. If need for flagman or flagmen is questioned, please contact the Railroad's Representative listed on the Project Summary Sheet. All verbal complaints must be confirmed in writing by the Contractor within 5 working days with copy to the Highway Engineer. All written correspondence should be addressed to the Railroad's Representative listed on the Project Summary Sheet.

2. The Railroad flagman assigned to the project will be responsible for notifying the Project Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Project Engineer will document such notification in the project records. When requested, the Project Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

VIII. HAUL ACROSS RAILROAD:

A. Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the State has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor will be required to bear all costs incidental, including flagging, to such crossings whether services are performed by his own forces or by Railroad personnel.

B. *No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for is installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the Contractor, is first obtained from the Railroad Engineer.* ***The approval process for an agreement normally takes 90-days.***

IX. WORK FOR THE BENEFIT OF THE CONTRACTOR:

A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the State and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the State and/or the Railroad.

B. Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

X. COOPERATION AND DELAYS:

A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.

B. *Train schedules cannot be provided to the Contractor. It is the Contractor's responsibility to contact the Railroad in order to arrange "Track Time." This "Track Time" will be an agreed upon prearranged time period that the Railroad will, without undue burden, schedule no train traffic to facilitate the Contractor's work on or near Railroad right-of-way. Due to track operations, there is no guarantee for track time. This track time must be arranged* ***at least 7 days prior to the date of need.***

C. No charge or claims of the Contractor against either the Department or the Railroad will be allowed for hindrance or delay on account of railroad traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of Railroad traffic or for any delays due to compliance with these Special Notes.

D. The Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.

E. The Railroad does not assume any responsibility for work performed by others in connection with the Project. No claims of the Contractor against the Railroad for any inconvenience, delay, or additional cost incurred by the Contractor on account of operations by others.

XI. TRAINMAN'S WALKWAYS:

*A. Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each day. If there is any excavation near the walkway, a handrail, with **15'-0" minimum clearance from centerline of track,** shall be placed.*

XII. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHTS OF WAY:

A. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots cinched with straps which fit snugly about the ankle are adequate. Safety boots are required.

*B. No one is allowed within **50' of the centerline of the track** without specific authorization from the flagman.*

C. All persons working near track when train is passing are to look out for dragging bands, chains and protruding or shifting cargo.

D. No one is allowed to cross tracks without specific authorization from the flagman.

*E. All welders and cutting torches working within **25' of track must stop when train is passing.***

F. No steel tape or chain will be allowed to cross or touch rails without permission.

XIII. GUIDELINES FOR EQUIPMENT ON RAILROAD RIGHTS OF WAY:

*A. No crane or boom equipment will be allowed to set up to work or park within **boom distance plus 15' of centerline of track** without specific permission from railroad official and flagman.*

B. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.

C. All employees will stay with their machines when crane or boom equipment is pointed toward track.

D. All cranes and boom equipment under load will stop work while a train is passing (including pile driving).

E. Swinging loads must be secured to prevent movement while train is passing.

F. No loads will be suspended above a moving train.

*G. No equipment will be allowed within **50' of centerline of track** without specific authorization of the flagman.*

H. Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.

*I. No equipment or load movement **within 50' or above a standing train or other equipment** without specific authorization of the flagman.*

*J. All operating equipment within **50' of track must halt operations when a train is passing**. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.*

K. All equipment, loads and cables are prohibited from touching rails.

L. While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.

M. No equipment or materials will be parked or stored on Railroad's property unless specific permission is granted from the Railroad Engineer.

N. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it can not be moved by unauthorized persons.

O. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

XIV. INSURANCE:

A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Contractor will be required to carry insurance of the following kinds:

1. Commercial General Liability coverage at their sole cost and expense with limits of not less than **$5,000,000** in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name the Railroad as an additional insured. Contractor shall provide the Railroad with a complete waiver of subrogation, and remove any exclusion for coverage of work occurring within 50' of a railroad track pursuant to Endorsement CG 24.17.

2. Statutory Worker's Compensation and Employers Liability Insurance with

limits of not less than **$1,000,000**, which insurance must contain a waiver of subrogation against the Railroad and its affiliates.

3. Commercial automobile liability insurance with limits of not less than **$1,000,000** combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name the Railroad as an additional insured.

4. Railroad protective liability insurance with limits of not less than **$5,000,000** combined single limite for bodily injury and/or property damage per occurrence and an aggregate annual limit of **$10,000,000**, which insurance shall satisfy the following additional requirements:

   a. The Railroad Protective Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Insurance – Insurance Services Office (ISO) Form CG 00 35.

   b. The Railroad must be the named insured on the Railroad Protective Insurance Policy

   c. Name and Address of the Contractor must be shown on the Declarations page.

   d. Description of operations must appear on the Declarations page and must match the Project description, including project or contract identification numbers.

   e. Authorized endorsements must include the Pollution Exclusion Amendment – CG 28 31, unless using form CG 00 35 version 96 and later.

   f. Authorized endorsements may include:

      (i). Broad form Nuclear Exclusion – IL 00 21
      (ii). 30-day Advance Notices of Non-renewal or cancellation
      (iii). Required State Cancellation Endorsement
      (iv). Quick Reference or Index – CL/IL 240

   g. Authorized endorsements may not include:

      (i). A Pollution Exclusion Endorsement except CG 28 31
      (ii). A Punitive or Exemplary Damages Exclusion
      (iii). A “Common Policy Conditions” Endorsement
      (iv). And endorsement that is not named in Section 4 (e) or (f) above.
      (v). Poloicies that contain any type of deductible

5. All insurance companies must be A. M. Best rated A- and Class VII or better.

6. Such additional or different insurance as the Railroad may require.

B. Additional Terms:

1. Contractor must submit the original Railroad Protective Liability policy, Certificates of Insurance, and all notices and correspondence regarding the insurance policy to the contact listed on the Project Summary Sheet.

2. The Contractor may not begin work on the Project until it has received the Railroad's written approval or the required insurance.

C. Insurance policies shall follow the requirements of 23 CRF 646, Subpart A.

D. Evidence of insurance as required above shall be furnished to the address shown on the attached Summary Sheet for review by the Department and transmittal to the Railroad.

E. *If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the Prime Contractor shall be provided by or in behalf of the subcontractor to cover his operations. Endorsements to the Prime Contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.*

F. All insurance herein before specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the rights of way of the Railroad as evidenced by the formal acceptance by the Department. Insuring Companies may cancel insurance by permission of the Department and Railroad or on ***thirty (30) days written notice*** *to the Department and Railroad Insurance Contacts as listed on the Project Summary Sheet.*

XV. FAILURE TO COMPLY:

A. *These Special Notes are supplemental and amendatory to the Kentucky Department of Highways' Standard Specifications for Road and Bridge Construction, Edition of 2008, and amendments thereof, and where in conflict therewith, these Special Notes shall govern.*

B. *In the event the Contractor violates or fails to comply with any of the requirements of these Special Notes:*

1. The Railroad Engineer may require that the Contractor vacate Railroad property.

2. The Engineer may withhold all monies due the Contractor on monthly statements.

3. Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

XVI. PAYMENT FOR COST OF COMPLIANCE:

A. *No separate payment will be made for any extra cost incurred on account of compliance with these Special Notes. All such cost shall be included in prices bid for other items of the work as specified in the payment items.*

XVII. CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

A. *Prior to entry onto Railroad right of way, the contractor will be required to enter into a Right of Entry Agreement with the railroad. The Contractor is responsible for garnering this agreement and executing any terms and conditions stated therein, including any and all fees associated with this agreement. An example agreement is provided in the bid package. When the contract is awarded, the Contractor shall sign the form and return it to the Cabinet with the contract before a work order is issued.*

Kentucky Transportation Cabinet
Division of Right of Way & Utilities

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Page 1 of 2

SUMMARY FOR KYTC PROJECTS THAT INVOLVE A RAILROAD

Date: 10/29/2026 *(enter using mm/dd/yyyy format)*

This project actively involves the below listed railroad company. This Project Summary provides an abbreviated listing of project specific railroad data. The detailed needs of the specified railroad company are included in the Special Notes for Protection of Railroad Interest in the proposal package. By submitting a bid, the contractor attests that they have dutifully considered and accepted the provisions as defined in both documents.

GENERAL ROAD PROJECT INFORMATION *(This section must be provided by KYTC)*

County: Ballard
Federal Number: NHPP BR 0601 204
State Number: FD52 004 85807 01U
Route: US 51
Project Description: US 51 Ohio River Bridge Replacement

Item Number: 1 - 1140.00 **Highway Milepost:**

GENERAL RAIL INFORMATION *(The below sections must be provided by Railroad Company)*

Rail Company Name: Illinois Central Railroad Company

DOT# (if applicable): 299076J **Railroad Milepost:** 366.17

Freight: Train Count (6am to 6pm): 7 **Train Count (6pm to 6am):** 7 **Train Count (24 hr total):** 14 **Max Speed:** 70mph

Passenger: Train Cnt. (6am to 6pm): 1 **Train Cnt. (6pm to 6am):** 1 **Train Cnt. (24 hr total):** 2 **Max Speed:** 70mph

(This information is necessary to acquire the necessary insurances when working with Railroad Right of Way)

INSURANCE REQUIREMENTS

The named insured, description of the work and designation of the job site to be shown on the Policy are as follows:

(a) Named Insured: Illinois Central Railroad Company
(b) The project description should be as indicated in the General Road Project Information section.
(c) The designation of the jobsite is the route, Milepost, and AAR-DOT# listed above.

FLAGGING INFORMATION

Flagging Estimate: Flagging is not anticipated but if required, KYTC will be responsible for paying all flagging costs.

Hourly Rate: $2,900.00 per day based on a 8 hour day effective as of the date of this document.

Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 ½ times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 ½ times the normal rate.

Forecasted Rate Increases:
Rates will increase to $ per based on a hour day effective *(enter using M/d/yyyy format)*.

RAILROAD CONTACTS

(*to be provided by Railroad Company)*

General Railroad Contact:

Josh Gordon, Manager Public Works
2151 N. Mill Street Jackson, MS 39202
(Phone) (601) 914 2658
(Email) Josh.Gordon@cn.ca

Regional Representative (Roadmaster):

To be provided by RR upon insurance approval

(Phone)
(Email)

Insurance contact:

Josh Gordon, Manager Public Works
2151 N. Mill Street Jackson, MS 39202
(Phone) (601) 914 2658
(Email) Josh.Gordon@cn.ca

(Phone)
(Email)

Railroad Designer Contact:

Contractor ☐

Josh Gordon, Manager Public Works
2151 N. Mill Street Jackson, MS 39202
(Phone) (601) 914 2658
(Email) Josh.Gordon@cn.ca

Railroad Construction Contact:

Contractor ✠

Matt Donnelly
Public Projects Manager
Crouch Engineering

(Phone) 615-932-8144
(Email)
MDonnelly@CrouchEngineering.com

KENTUCKY TRANSPORTATION CABINET CONTACTS (*to be provided by KYTC)*

KYTC Railroad Coordinator:

Allen Rust, PE
Div. of Right of Way & Utilities
Kentucky Transportation Cabinet
200 Mero Street, 5th Floor East
Frankfort, Kentucky 40622
(Phone) 502-782-4950
(Email) allen.rust@ky.gov

KYTC Construction Procurement Director:

Rachel Mills, Director
Div. of Construction Procurement
Kentucky Transportation Cabinet
200 Mero Street, 3rd Floor West
Frankfort, Kentucky 40622
(Phone) 502-782-5152
(Email) Rachel.Mills@ky.gov

KYTC Construction Director:

Matt Simpson, Director
Div. of Construction
Kentucky Transportation Cabinet
200 Mero Street, 3rd Floor West
Frankfort, Kentucky 40622
(Phone) 502-564-4780
(Email) Matt.Simpson@ky.gov

The project specific information provided herein is valid as of the date indicated. However, the specific information may be subject to change due to the normal business operations of all parties. The terms and conditions defined here, and in the bid proposal in its entirety, are inclusive and constant.

DEPARTMENT OF THE ARMY PERMIT

Permittee: Kentucky Transportation Cabinet (KYTC) and Illinois Department of Transportation (IDOT)

Permit Number: LRL-2020-00054

Issuing Office: U.S. Army Engineer District, Louisville

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: KYTC and IDOT propose to permanently discharge fill material into 18.81 acres of jurisdictional wetlands and 100 linear feet (1.377 acres) of the Ohio River in association with the construction of a 1.94-mile transportation infrastructure project. The project entails construction of a new bridge and roadway connecting the Minor Slough bridge at Mile Point (MP) 6.7 to the U.S. 51/U.S. 60/U.S. 62 intersection at MP 8.3 in Illinois. The proposed bridge would be located approximately 980 feet upstream of the existing structure and would include six in-water piers, five in Kentucky and one in Illinois. The roadway would consist of two 12-foot travel lanes with 8-foot outside shoulders and would be designed for a 55-mile-per-hour speed. Permanent wetland impacts would result from construction of the bridge piers, approach roadway, embankments, and associated highway right-of-way, including impacts to Wetlands 4, 6, and 7. Temporary impacts would include up to 1.35 acres of wetlands and 170 linear feet (approximately 1.54 acres) of the Ohio River for temporary access roads, an earthen ramp, metal trestles, cofferdams, and a load-test area; all temporary construction features would be removed upon completion of construction, and are included within the permanent fill impact area.

Project Location: Ohio River between Wickliffe, Kentucky and Cairo, Illinois. (Latitude: 36.994797 N and Longitude: 89.149484 W).

Permit Conditions:

General Conditions:

1. The time limit for completing the authorized activity ends on **October 31, 2031** . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification for this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

Special Condition 1: All work authorized by this permit shall be performed in strict compliance with the attached plans entitled "US 51 Bridge Replacement Project Over the Ohio River," dated September 2025, which are a part of this permit. Any modification to these plans affecting the authorized work shall be approved by the U.S. Army Corps of Engineers, Louisville District (USACE) prior to implementation.

Special Condition 2: The Permittees shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, drawings and attachments shall be available at the project site during the construction phase of this project. A description of the authorized work, as provided in the DA permit shall be displayed at the project site during construction.

Special Condition 3: The Permittees shall comply with all conditions of the Section 401 Water Quality Certification No. 2026-059-7 issued by the Kentucky Division of Water on April 14, 2026, and the Section 401 Water Quality Certification No. C-0355-25 issued by the Illinois Environmental Protection Agency on January 23, 2026, which are incorporated herein by reference.

Special Condition 4: This Department of the Army permit does not authorize you to take an endangered species, in particular the Indiana Bat (Myotis sodalis), and/or Gray Bat (Myotis grisescens). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service Biological Opinions (BOs) "Federal Highway Administration Kentucky Division's 2020 Programmatic Consultation on the Effects of Transportation Projects in Kentucky on the Indiana Bat and Gray Bat, (April 17, 2020)" and the "2015 Biological Opinion: Kentucky Field Office's participation in Conservation Memoranda of Agreement for the Indiana bat and/or Northern Long-eared Bat (Attachment) contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BOs. Your authorization under this Department of the Army permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BOs, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BOs, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Department of the Army permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BOs, and with the ESA.

Special Condition 5: The Permittees shall comply with the stipulations in the enclosed June 27, 2025, U.S. Fish and Wildlife Service concurrence letter. To mitigate for the loss of 26.70 acre(s) of Indiana bat (Myotis sodalis) and Gray bat (Myotis grisescens) forested habitat, the Permittees shall submit the appropriate contribution to the Imperiled Bat Conservation Fund (IBCF) in accordance with the processes outlined in the enclosed BOs and concurrence letter. If changes to the amount or timeframe for tree removal are to occur, the Permittees shall email the Corps' project manager and the KFO at KentuckyES@fws.gov to determine if re-initiation of Section 7 consultation is required or a revision to the IBCF contribution is necessary. If a change to the project is necessary, no tree removal shall occur until additional coordination with the Corps and KFO is completed.

Special Condition 6: The Permittees shall provide to the Corps written proof of purchase, in the form of a receipt of payment, of 7.9 wetland AMUs from the West Kentucky Wetwoods Mitigation Bank (MVM-2009-498-RSA) .The permittees must provide to the Corps proof of credit purchase prior to the discharge of fill material into "waters of the U.S." If the appropriate number and/or type of credits are not available at the subject mitigation bank, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.

Special Condition 7: The Permittees shall provide receipt of payment from Kentucky Department of Fish and Wildlife Resources (KDFWR) Stream and Wetland Mitigation Program (FILO) for the purchase 67.8 wetland AMUs in Jackson Purchase Service Area. Credits must be purchased prior to the discharge of fill material into "waters of the United States". Please note that the cost per credit is determined by KDFWR, in accordance with the requirements set forth in 33 CFR 332.8 and may increase or

decrease. Inquiries regarding credit purchase may be made directly to KDFWR by calling Ms. Tricia Orme at (502) 892-4421, by email at: tricia.orme@ky.gov, or in writing at: Kentucky Department of Fish and Wildlife Resources, Division of Fisheries, #1 Sportsman's Lane, Frankfort, Kentucky, 40601. If the appropriate number and/or type of credits are not available from the FILO program, in the subject service area, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.

Special Condition 8: The Permittees shall provide to the Corps written proof of purchase, in the form of a receipt of payment, of 300 stream AMUs from the KYTC-Cotton Riley Mitigation Bank, LRN-2009-00287 within the Jackson Purchase Service Area. If the appropriate number or type of credits are not available from this mitigation bank, the permittees shall purchase 360 stream AMUs from the KDFWR FILO Program. **The permittees must provide to the Corps proof of credit purchase prior to the discharge of fill material into "waters of the U.S." ILF credits shall not be purchased unless the KYTC- Cotton Riley Mitigation Bank does not have the appropriate number or type of credits available.** If the appropriate number and/or type of credits are not available at the subject mitigation bank or ILF Program, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.

Special Condition 9: The Permittees shall provide to the Corps written proof of purchase, in the form of a receipt of payment, of 14.9 wetland AMUs from either the E.T. Simonds Wetland Mitigation Bank (MVS-2018-00535) or the Sugar Camp Creek Wetland Bank (MVS-2006-01061). The permittees must provide to the Corps proof of credit purchase prior to the discharge of fill material into "waters of the U.S." If the appropriate number and/or type of credits are not available at the subject mitigation bank, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.

Special Condition 10: The Permittees shall advise USACE in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

Special Condition 11: The authorized work is required to be conducted within the Ohio River; therefore, notification shall be submitted to the Corps two weeks prior to the work start date. The permittees shall submit the enclosed "Notice to Navigation Interests (NTNI) Data Form" along with appropriate information to the contact listed on the form.

Special Condition 12: The Permittees shall comply with all conditions of the Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408) permission letters (Reference 408-MVM-2025-0014) dated February 24, 2026, issued by the Memphis District U.S. Army Corps of Engineers, which are incorporated herein by reference.

Special Condition 13: The Permittees shall use only clean fill material for this project. The fill material shall be free from items such as trash, construction debris, metal and plastic products, and concrete block with exposed reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.

Special Condition 14: The Permittees shall fully implement all stipulations in the Memorandum of Agreement between the Permittees, the Kentucky State Historic Preservation Officer and the FHWA dated January 05, 2018, which is incorporated herein by reference.

Special Condition 15: In the event 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 a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

Special Condition 16: This permit does not authorize the interference with any existing or proposed Federal project, and the Permittees will not be entitled to compensation for damage or injury to the authorized structure or work which may be caused from existing or future operations undertaken by the United States in the public interest.

Special Condition 17: The authorized structure and associated activity shall not cause undue interference with navigation. Use of the permitted activity shall not interfere with the public's right to free navigation on all navigable waters of the United States.

Special Condition 18: Prior to any work or discharge of dredged and/or fill material into the Ohio River, a navigable water of the United States, the Permittees shall obtain a bridge permit from the United States Coast Guard (USCG) and provide this office with a digital copy within five (5) calendar days of receipt. The point of contact for the Eighth Coast Guard District is below:

Mr. Eric Washburn
USCG Bridge Administrator
Western Rivers
1222 Spruce Street
St. Louis, MO 63103-2832
Eric.Washburn@uscg.mil

Special Condition 19: The Permittees shall install and maintain, at their expense, any safety lights and signals prescribed by the USCG, Eighth District, through regulations or otherwise, on your authorized facilities. The USCG may be reached at the following telephone number (502) 779-5422 and address:

Commanding Officer
USCG Sector Ohio Valley (SOHV)
Romano L. Mazzoli Federal Building, Room 4090
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202-2230

Special Condition 20: The Permittees shall comply with any safety zones announced in weekly Local Notices to Mariners to temporarily limit access to authorized persons, vehicles, or vessels in the Ohio River, as determined and required by the USCG, Eighth District.

Special Condition 21: Within thirty (30) calendar days of completion, all final as-built drawings of the bridge required by the conditions of the Section 408 Federal Navigation Channel Coordination shall be submitted to the following address: U.S. Army Corps of Engineers, Technical Support Branch, Operations Division, c/o Mr. Shawn Kenney, PE, Chief, 220 West Main Street, KY, 40202, or by email at shawn.m.kenney@usace.army.mil.

Special Condition 22: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, South Branch, c/o Crystal Byrd, Project Manager, 220 West Main Street, Louisville, KY, 40202, or by email at Crystal.D.Byrd@usace.army.mil. The Permittees shall reference the following permit number, LRL-2020-00054, on all submittals.

Special Condition 23: The Permittees shall comply with applicable Federal Emergency Management Agency (FEMA) floodplain management requirements.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

   ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

   (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

   ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

   a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

andrew logsdon — Kentucky Transportation Cabinet — 10/14/26

(CO-PERMITTEE) *(DATE)*

Carrie Nelsen — Illinois Department of Transportation — 10/14/2026

(CO-PERMITTEE) *(DATE)*

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

10/15/2026

(DATE)

John R. Moran
Colonel, U.S. Army
District Commander

BY: Matt Dennis
Acting Chief, Regulatory Division
Louisville District

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE) *(DATE)*

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT
220 WEST MAIN STREET
LOUISVILLE KY 40202

October 14, 2026

Regulatory Division
South Branch
ID No. LRL-2020-00054

Andrew Logsdon
Kentucky Transportation Cabinet (KYTC)
200 Mero Street
Frankfort, KY 40622

Carri Nelson
Illinois Department of Transportation (IDOT)
2300 S. Dirksen Parkway
Springfield, IL 62764

Dear Mr. Logsdon and Ms. Nelson:

Enclosed is an unsigned Department of the Army permit relating to your proposal to discharge fill material into 18.81 acres of jurisdictional wetlands and 100 linear feet (1.377 acres) of the Ohio River in association with the construction of a 1.94-mile transportation infrastructure project. The project entails construction of a new bridge and roadway that would connect the Minor Slough bridge at Mile Point (MP) 6.7 to the U.S. 51/U.S. 60/U.S. 62 intersection at MP 8.3 (KYTC Item No. 1-1140.00 and IDOT PMA Sequence No. 22657). Also enclosed is the associated Section 408 permission. This permit will not be valid until properly signed by you and the issuing officer. The date the permit is validated by the District Engineer, or his representative, will be the effective date of the permit. Attached to the permit is a copy of the plans, as submitted.

Please note this authorization applies only to the placement of fill material. The United States Coast Guard is responsible for the authorization of the structure.

Upon receipt of the signed permit forms, the District Engineer or his representative will validate the permit and return the original form to you. Please be aware that no work can occur in jurisdictional waters until you receive the validated permit signed by the District Engineer, or his representative.

For your information, a permit applicant may appeal an initial proffered permit. Should you wish to initiate the appeals process regarding the terms and conditions of this permit, you must write a letter to the District Engineer explaining your objections to the permit. The enclosed Notification of Applicant Options (NAO) outlines the initial appeals process and options available to you. The objection letter must be received by the District Engineer within 60 days of the date of the NAO. Please be aware that no work can occur in jurisdictional waters until the appeals process is completed.

If you have any questions concerning this matter, please contact the District Regulatory Office at the above address, ATTN: CELRL-RDS or contact Ms. Crystal Byrd directly at 606-784-9709 or Crystal.D.Byrd@usace.army.mil.

Sincerely,

Eric Reusch
Chief, Regulatory Division
Louisville District

Enclosures:

1. Unsigned DA Permit (ENG 1721)
2. Memphis District 408-MVM-2025-0014 Section 408 Permission
3. Kentucky 401 Water Quality Certification
4. Illinois 401 Water Quality Certification
5. US 51 KYTC 1-1140.00 Plans
6. Notice to Navigation Interests Form
7. Federal Highway Administration Kentucky Division's 2020 Programmatic Consultation on the Effects of Transportation Projects in Kentucky on the Indiana Bat and Gray Bat
8. 2015 Biological Opinion: Kentucky Field Office's participation in Conservation Memoranda of Agreement for the Indiana bat and/or Northern Long-eared Bat
9. June 27, 2025, U.S. Fish and Wildlife Service concurrence letter
10. National Historic Preservation Act Section 106 MOA
11. ENG FORM 6287 NAO

DEPARTMENT OF THE ARMY PERMIT

Permittee: Kentucky Transportation Cabinet (KYTC) and Illinois Department of Transportation (IDOT)

Permit Number: LRL-2020-00054

Issuing Office: U.S. Army Engineer District, Louisville

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: KYTC and IDOT propose to permanently discharge fill material into 18.81 acres of jurisdictional wetlands and 100 linear feet (1.377 acres) of the Ohio River in association with the construction of a 1.94-mile transportation infrastructure project. The project entails construction of a new bridge and roadway connecting the Minor Slough bridge at Mile Point (MP) 6.7 to the U.S. 51/U.S. 60/U.S. 62 intersection at MP 8.3 in Illinois. The proposed bridge would be located approximately 980 feet upstream of the existing structure and would include six in-water piers, five in Kentucky and one in Illinois. The roadway would consist of two 12-foot travel lanes with 8-foot outside shoulders and would be designed for a 55-mile-per-hour speed. Permanent wetland impacts would result from construction of the bridge piers, approach roadway, embankments, and associated highway right-of-way, including impacts to Wetlands 4, 6, and 7. Temporary impacts would include up to 1.35 acres of wetlands and 170 linear feet (approximately 1.54 acres) of the Ohio River for temporary access roads, an earthen ramp, metal trestles, cofferdams, and a load-test area; all temporary construction features would be removed upon completion of construction, and are included within the permanent fill impact area.

Project Location: Ohio River between Wickliffe, Kentucky and Cairo, Illinois. (Latitude: 36.994797 N and Longitude: 89.149484 W).

Permit Conditions:

General Conditions:

1. The time limit for completing the authorized activity ends on **October 31, 2031** . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification for this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

Special Condition 1: All work authorized by this permit shall be performed in strict compliance with the attached plans entitled "US 51 Bridge Replacement Project Over the Ohio River," dated September 2025, which are a part of this permit. Any modification to these plans affecting the authorized work shall be approved by the U.S. Army Corps of Engineers, Louisville District (USACE) prior to implementation.

Special Condition 2: The Permittees shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, drawings and attachments shall be available at the project site during the construction phase of this project. A description of the authorized work, as provided in the DA permit shall be displayed at the project site during construction.

Special Condition 3: The Permittees shall comply with all conditions of the Section 401 Water Quality Certification No. 2026-059-7 issued by the Kentucky Division of Water on April 14, 2026, and the Section 401 Water Quality Certification No. C-0355-25 issued by the Illinois Environmental Protection Agency on January 23, 2026, which are incorporated herein by reference.

Special Condition 4: This Department of the Army permit does not authorize you to take an endangered species, in particular the Indiana Bat (Myotis sodalis), and/or Gray Bat (Myotis grisescens). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service Biological Opinions (BOs) "Federal Highway Administration Kentucky Division's 2020 Programmatic Consultation on the Effects of Transportation Projects in Kentucky on the Indiana Bat and Gray Bat, (April 17, 2020)" and the "2015 Biological Opinion: Kentucky Field Office's participation in Conservation Memoranda of Agreement for the Indiana bat and/or Northern Long-eared Bat (Attachment) contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BOs. Your authorization under this Department of the Army permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BOs, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BOs, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Department of the Army permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BOs, and with the ESA.

Special Condition 5: The Permittees shall comply with the stipulations in the enclosed June 27, 2025, U.S. Fish and Wildlife Service concurrence letter. To mitigate for the loss of 26.70 acre(s) of Indiana bat (Myotis sodalis) and Gray bat (Myotis grisescens) forested habitat, the Permittees shall submit the appropriate contribution to the Imperiled Bat Conservation Fund (IBCF) in accordance with the processes outlined in the enclosed BOs and concurrence letter. If changes to the amount or timeframe for tree removal are to occur, the Permittees shall email the Corps' project manager and the KFO at KentuckyES@fws.gov to determine if re-initiation of Section 7 consultation is required or a revision to the IBCF contribution is necessary. If a change to the project is necessary, no tree removal shall occur until additional coordination with the Corps and KFO is completed.

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USCG Sector Ohio Valley (SOHV)
Romano L. Mazzoli Federal Building, Room 4090
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202-2230

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Special Condition 21: Within thirty (30) calendar days of completion, all final as-built drawings of the bridge required by the conditions of the Section 408 Federal Navigation Channel Coordination shall be submitted to the following address: U.S. Army Corps of Engineers, Technical Support Branch, Operations Division, c/o Mr. Shawn Kenney, PE, Chief, 220 West Main Street, KY, 40202, or by email at shawn.m.kenney@usace.army.mil.

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Special Condition 23: The Permittees shall comply with applicable Federal Emergency Management Agency (FEMA) floodplain management requirements.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

   ( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

   (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

   ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

   a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

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   c. This permit does not authorize any injury to the property or rights of others.

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b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

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Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

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Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

andrew logsdon — Kentucky Transportation Cabinet — 10/14/26
(CO-PERMITTEE) *(DATE)*

Carrie Nelsen — Illinois Department of Transportation — 10/14/2026
(CO-PERMITTEE) *(DATE)*

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

_____ _____
John R. Moran *(DATE)*
Colonel, U.S. Army
District Commander

_____
BY: Eric Reusch
Chief, Regulatory Division
Louisville District

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____
(TRANSFEREE) *(DATE)*

U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT

NOTICE TO NAVIGATION INTERESTS *(NTNI)* **DATA**

For use of this form, see 33 CFR Section 325 and ER 405-1-12; the proponent agency is CELRL-RD.

NOTE: UPON COMPLETION OF THIS FORM, PLEASE FORWARD VIA EMAIL TO: sherry.m.marion@usace.army.mil

REGULATORY DIVISION

1. PERMIT NUMBER	2. LOCATION
3. CONTRACTOR'S NAME	
4a. PERSONS RESPONSIBLE *(Last, First MI)*	b. TELEPHONE NUMBER
5. OPERATION DESCRIPTION	
6. EQUIPMENT TYPE / MATERIAL	
7a. STARTING DATE *(YYYYMMDD)*	b. ESTIMATED COMPLETION DATE *(YYYYMMDD)*

8. DAYS OF THE WEEK THE WORK WILL BE IN PROGRESS (*select - X all that apply*)

☐ MONDAY ☐ TUESDAY ☐ WEDNESDAY ☐ THURSDAY ☐ FRIDAY ☐ SATURDAY ☐ SUNDAY

9a. DAILY WORKING HOURS *(0001-2400 hours)* FROM	b. DAILY WORKING HOURS *(0001-2400 hours)* TO
10. MARINE CHANNELS MONITORED	

11a. COMPLETED BY NAME (*Last, First MI*)	b. DATE *(YYYYMMDD)*	c. COMPLETED BY SIGNATURE *(if CAC signing locks form)*

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

June 27, 2025

Danny Peake
Division of Environmental Analysis
Kentucky Transportation Cabinet
200 Mero Street
Frankfort, Kentucky 40601

Re: FWS 2023-0099081; KYTC No. 1-1140; Biological Assessment for the Replacement of the US 51 Bridge Over the Ohio River Between Wickliffe, Kentucky and Cairo, Illinois in Ballard County, KY and Alexander County, IL.

Dear Danny Peake:

The U.S. Fish and Wildlife Service's (Service) Kentucky Field Office (KFO) and Illinois Field Office (ILFO) have reviewed the above-referenced project information and request for concurrence received on April 29, 2025. The KFO, as the lead Service office for this Endangered Species Act (ESA) consultation, offers the following comments in accordance with ESA of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq*.).

Project Description
According to the information provided, the proposed action is the replacement of the US 51 bridge over the Ohio River between Wickliffe, KY and Cairo, IL. The entire project is approximately 1.94 miles long and can be viewed in Exhibit 1 of Appendix A of the biological assessment (BA). The new bridge will be approximately 980 feet upstream of the existing bridge. The bridge will include six piers within the normal flow channel of the Ohio River, five in Kentucky and one in Illinois. The project will include two 12-foot lanes with 8-foot outside shoulders. The existing bridge will be removed after the new bridge is constructed. That activity is not covered by this BA and is considered an independent action apart from the new bridge construction. A separate BA will be produced for that work, along with an associated mussel survey.

Federally Listed Species
The Kentucky Transportation Cabinet (KYTC) determined that the proposed action has the potential to affect the Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), pallid sturgeon (*Scaphirhynchus albus*), clubshell (*Pleurobema clava*), fanshell (*Cyprogenia stegaria*), fat pocketbook (*Potamilus capax*), longsolid (*Fusconaia subrotunda),* orangefoot pimpleback (*Plethobasus cooperiansus*), pink mucket (*Lampsilis abrupta*), rabbitsfoot (*Quadrula cylindrica cylindrica*), ring pink (*Obovaria retusa*), and rough pigtoe (*Epioblasma obliquata*). Comments regarding these species are provided below.

Gray Bat

Field assessments conducted by HMB biologists concluded that no caves or karst features suitable for summer or winter gray bat roosting would be affected by the proposed action. Additionally, no existing bridges or culverts were found to have evidence of roosting bats. The KFO does not have any records of known gray bat hibernacula or non-forested roosting habitat within the action area or its immediate vicinity. As a result, no effects to hibernating or roosting gray bats or their hibernacula or roosting habitat are anticipated from the proposed action.

The KYTC utilized the processes identified in the Federal Highway Administration Kentucky Division's (FHWA) 2020 Programmatic Consultation on the effects of transportation projects on the gray bat to evaluate potential adverse effects on foraging and commuting habitat for the species. The KFO agrees with this ESA compliance process and KYTC's findings that impacts to gray bat foraging and commuting habitat would be insignificant. Therefore, we concur with the determination that the proposed action "may affect, is not likely to adversely affect" the gray bat.

This referenced programmatic consultation's action area included the entire state of Kentucky plus an additional 20-mile buffer of the state line. Impacts occurring in Illinois, as part of the project, occur within the 20-mile buffer and are also being covered by the 2020 Programmatic Consultation.

Indiana Bat

According to the information provided, no impacts to suitable winter habitat for this species would occur in association with the proposed action, and no existing bridges or culverts were found to have evidence of roosting bats. In addition, the KFO does not have any records of known Indiana bat hibernacula or non-forested roosting habitat within the action area or its immediate vicinity.

The proposed action requires removal of 26.70 acres of forested habitat (16.85 acres in KY; 9.85 acres in IL) that is suitable as summer maternity roosting habitat by the Indiana bat. The KYTC believes that this species is reasonably certain to utilize this forested habitat and has determined that the action "may affect, is likely to adversely affect" the Indiana bat. The KYTC proposes to account for potential adverse effects to the Indiana bat and its habitat through the processes identified in the FHWA's 2020 Programmatic Consultation and the accompanying biological opinion on the effects of transportation projects on the Indiana bat. The Service concurs with the effects determination for the Indiana bat and agrees with the proposed ESA compliance process.

This referenced programmatic consultation's action area included the entire state of Kentucky plus an additional 20-mile buffer of the state line. Those impacts that are part of the action and within the Illinois portion of the project are within this 20-mile buffer; therefore, are also covered by the 2020 Programmatic Consultation. KYTC will address the loss of 16.85 acres of suitable maternity roosting habitat in accordance with the conservation measures outlined in the programmatic consultation. However, IDOT has chosen to address the loss of 9.85 acres of suitable maternity roosting habitat through replacement of habitat. Specifics of this conservation measure are to be determined in coordination with the Service's ILFO.

Pallid Sturgeon

One small area near one of the proposed piers on the Illinois side of the river was determined to have substrate dominated by gravel, which can be considered suitable spawning habitat for the species. It is unlikely that pallid sturgeon would utilize the action area for spawning due to slow flows and the rarity of the pallid sturgeon in the Ohio River due to several locks and dams; however, the species cannot be discounted. To minimize potential impacts to the species by construction near this pier, KYTC has committed to restricting any river bottom disturbing work within this specific gravel bed area during the spawning season (April 15 - June 30). This measure would allow for potential larval recruitment of pallid sturgeon and avoid impacts to the species. Based on the information available to us and implementation of the conservation measure, we concur that the proposed action "may affect but is not likely to adversely affect" the pallid sturgeon.

Federally Listed Mussels

A Service approved mussel survey was conducted within the action area by Mainstream Commercial Divers, Inc. between August 18 through September 19, 2024. The survey resulted in the capture of 149 live mussels representing 15 species, none of which were federally listed, which suggests probable absence of federally listed mussels from the project corridor.

Based upon the results of the presence/absence survey, the Service concurs with KYTC's determination that the proposed project "may affect but is not likely to adversely affect" the federally listed mussels previously listed.

Conclusion

In view of these findings, we believe that the requirements of section 7 of the Endangered Species Act have been fulfilled for this project. Your obligations under section 7 must be reconsidered, however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities, which were not considered during this consultation, or (3) new species are listed, or critical habitat designated.

If you have any questions regarding the information that we have provided, please contact Phil DeGarmo at (502) 229-8830 or Phil_DeGarmo@fws.gov.

Sincerely,

JOSHUA LILLPOP

Digitally signed by JOSHUA LILLPOP
Date: 2025.06.27 16:25:03 -04'00'

Joshua Lillpop
Acting Field Supervisor

cc: Andrew Logsdon, KYTC, Frankfort
Anna Lopez, ILFO, Moline

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, MEMPHIS DISTRICT
167 NORTH MAIN STREET B-202
MEMPHIS, TN 38103-1894

February 24, 2026

Ms. Carrie Nelsen
Illinois Department of Transportation
2300 S. Dirksen Parkway
Springfield, IL 62764

Dear Ms. Nelsen:

The U.S. Army Corps of Engineers (USACE), Memphis District has completed its review of Illinois Department of Transportation's request to modify the Cache-Cairo Revetment on the right descending bank of the Ohio River below Cairo, IL. The Cache-Cairo Revetment is maintained by the USACE Memphis District. This evaluation was performed in accordance with Engineer Circular (EC) 1165-2-220. Authorization to complete this review is pursuant to Section 14 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 408 (Section 408).

Based on this evaluation, the Memphis District is granting permission to construct bridge piers within the limits of the revetment as specified in your request and subject to compliance with the terms and conditions identified below and attached.

a. At least ten (10) business days prior to performing any work, notify USACE the start date of construction, point of contact for construction activities, and provide the final contract construction documents to USACE.

b. All penetrations of the revetment shall be reinforced/ repaired with rock per the submitted plans.

c. Standard Section 408 Terms and Conditions apply. (Attached)

d. Granting Section 408 permission does not necessarily constitute final approval for the project. You must acquire any necessary real estate instruments and obtain any required regulatory permits prior to final approval.

If you have any questions regarding your Section 408 permission decision, please contact Tanya Wells, Section 408 Coordinator, at (901) 544-0897 or email at tanya.l.wells @usace.army.mil. Please refer to File ID. 408-MVM-2025-0014.

Sincerely,

D. Shane Callahan, P.E., PMP
Chief, Engineering and Construction Division

Enclosure
Terms and Conditions

Terms and Conditions

LIMITS OF THE AUTHORIZATION

1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.
2. The time limit for completing the work authorized ends on February 28, 2031. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.
4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

INDEMNIFICATION AND HOLD HARMLESS

5. The United States will in no case be liable for:
    a. any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or
    b. damage claims associated with any future modification, suspension, or revocation of this permission.
6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents,

servants, or employees, or others who may be on your premises or project work areas or the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, **indemnify,** and **hold harmless** the United States and USACE from any and all such claims, subject to any limitations in law.

7. Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

REEVALUATION OF PERMISSION

8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.
9. This office, at its sole discretion, may reevaluate its decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluations include, but are not limited to, the following:
   a. you fail to comply with the terms and conditions of this permission;
   b. the information provided in support of your application for permission proves to have been inaccurate or incomplete; or
   c. significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest.

CONDUCT OF WORK UNDER THIS PERMISSION

10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.
11. Work/usage allowed under this permission must proceed in a manner that avoids interference with the inspection, operation, and maintenance of the federal project.
12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.
13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purposes, to make inspections, to operate and/or to make any other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.
14. You must provide copies of pertinent design, construction, and/or usage submittals/documents. USACE may request that survey and photographic

documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.

15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.
16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.
17. Once permission is granted, you must notify the USACE District at least ten (10) days before work/usage is started so that post permission oversight can be performed by USACE.
18. You must schedule a final inspection with the USACE within ten (10) days after completion of the work/usage.
19. You must submit a copy of "as-built" drawings within thirty (30) days of completion of work showing the new work as it relates to identifiable features of the federal project.

Andy Beshear
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
300 Sower Boulevard
Frankfort, Kentucky 40601
Phone: (502) 564-2150
Fax: 502-564-4245

Rebecca W. Goodman
SECRETARY

Anthony R. Hatton
COMMISSIONER

April 14, 2026

Danny Peake
Kentucky Transportation Cabinet (KYTC)
200 Mero St
Frankfort, KY 40622

Re: §401 Water Quality Certification
US 51 Ohio River Bridge
WQC No: WQC2026-059-7
AI No.: 79942; Activity ID: APE20260001
KYTC Item No.: 1-1140.00
USACE ID No.: LRL-2020-0054
Ohio River
Ballard County, Kentucky

Dear Mr. Peake:

Pursuant to Section 401 of the Clean Water Act (CWA) and 40 CFR 121.7(c), the Commonwealth of Kentucky certifies it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 303, 304, 306, and 307 of the CWA, will not be violated by the above referenced project provided that the attached conditions are met. This certification authorizes the activity under any required federal license or permit.

Other permits from the Division of Water may be required for this activity. Projects that disturb one acre or more of land or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land require a Kentucky Pollution Discharge Elimination System (KPDES) Stormwater Permit; contact the Surface Water Permits Branch (502-564-3410 or SWPBSupport@ky.gov). A Groundwater Protection Plan is required if activities listed in Section 2(2) of 401 KAR 5:037 are conducted. A Water Withdrawal Application is required for activities proposing raw water withdrawals of 10,000 gallons per day or more; contact the Watershed Management Branch (502-564-3410).

All future correspondence on this project must reference AI No. **79942**. **The attached document is your official Water Quality Certification; please read it carefully**. Please contact Bryan Killian by phone at 502-782-4695 or email at bryan.killian@ky.gov if you have any questions.

Sincerely,

Samantha Vogeler

Samantha Vogeler, Supervisor
Water Quality Certification Section
Kentucky Division of Water

SV:BK
Attachment

cc: Emma Priger, KYTC: Frankfort (via email: emma.priger@ky.gov)
Andrew Logsdon, KYTC: Frankfort (via email: Andrew.Logsdon@ky.gov)
Dave Harmon, KYTC: Frankfort (via email: Dave.Harmon@ky.gov)
Crystal Byrd, USACE: Louisville District (via email: Crystal.D.Byrd@usace.army.mil)
USFWS, Kentucky Field Office: Frankfort (via email: kentuckyes@fws.gov)
Michael Leathers, HMB: (via email: mleathers@hmbpe.com)
Madeline Traylor, Paducah Regional Office (via email: madeline.traylor@ky.gov)

KTC Water Quality Certification

US 51 Ohio River Bridge - Ballard Co

Facility Requirements

Permit Number: WQC2026-059-7

Activity ID No.:APE20260001

ACTV0000000001 (AI 79942 - US 51 Ohio River Bridge - Ballard Co) KYTC Item No.: 1-1140.00:

Submittal/Action Requirements:

Condition No.	Condition
S-1	Prior to any construction activity, the Kentucky Transportation Cabinet (KYTC) shall submit to the Water Quality Section Project Manager a copy of the receipt of purchase of 300 stream and 64.4 wetland Adjusted Mitigation Units (AMUs) from an approved mitigation bank OR purchase of 360 stream and 77 wetland AMUs from an approved Kentucky in-lieu fee (ILF) program fund. Credits must be purchased prior to impacts. Mitigation banks and ILF programs are considered approved as defined in the April 10, 2008 Final Rule, 40 CFR Part 230: Compensatory Mitigation for Losses of Aquatic Resources. This condition is necessary to allow impacts to occur. Compensatory mitigation is the method to approve impacts and entire losses of a water resource. The Division can approve impacts and loss based on the confidence that the resource will be replaced and not result in a net loss of aquatic resources. Compensatory mitigation is the method of compliance for the Commonwealth's water quality standards. [33 CFR 332, 40 CFR 230, 401 KAR 10:031 Section 2(1)(a)]
S-2	KYTC shall notify the Water Quality Certification Project Manager or Supervisor of the scheduled start of construction activities at least two weeks before the start of construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
S-3	KYTC shall notify the Water Quality Certification Project Manager or Supervisor of substantial completion of construction no later than two weeks post-construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
S-4	KYTC shall submit as-built drawings within 90 days after substantial completion of construction to the Water Quality Certification Section Project Manager or Supervisor. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]

KTC Water Quality Certification
US 51 Ohio River Bridge - Ballard Co
Facility Requirements
Permit Number: WQC2026-059-7
Activity ID No.:APE20260001

ACTV0000000001 (AI 79942 - US 51 Ohio River Bridge - Ballard Co) KYTC Item No.: 1-1140.00:

Narrative Requirements:

Condition No.	Condition
T-1	The work approved by this certification shall be limited to 36.994797, -89.149484: - Replacement of the existing US 51 bridge over the Ohio River between Wickliffe, Ballard County, Kentucky, and Cairo, Alexander County, Illinois - Construction of a 60-foot-wide temporary metal trestle with one hundred fifty, 30 in. diameter metal piers driven into the bed of the river to aid in the construction of the bridge - After the bridge is constructed, the trestle will be removed completely - Coffer dams, extending 5' beyond the footers, will be placed during construction and subsequently removed - 100 linear feet of permanent impacts to the Ohio River, a perennial stream, for bridge piers - 16.1 acres of permanent impacts to jurisdictional wetlands for piers and embankment - 100 linear feet of temporary impacts to the Ohio River, a perennial stream, for coffer dams, trestle, and load test area This condition is necessary to confirm activities approved by this certification. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]
T-2	All work performed under this certification shall adhere to the design and specifications set forth in the following document(s): - Application for Permit to Construct Across or Along a Stream and/or Water Quality Certification received on 1/28/2026 - Pre-file Meeting Request received on 1/28/2026 - Certification Request received on 3/17/2026 - US 51 401 404 Permit Application.pdf - DOW feedback on 401(a)(2) review 2.3.26.pdf - NOD_1_US_51_Ohio_River_Bridge_Resubmittal.pdf This condition is necessary to confirm activities approved by this certification. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]
T-3	KYTC is responsible for preventing degradation of waters of the Commonwealth from soil erosion. An erosion and sediment control plan must be designed, implemented, and maintained in effective operating condition at all times during construction. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]

KTC Water Quality Certification
US 51 Ohio River Bridge - Ballard Co
Facility Requirements
Permit Number: WQC2026-059-7
Activity ID No.:APE20260001

ACTV0000000001 (AI 79942 - US 51 Ohio River Bridge - Ballard Co) KYTC Item No.: 1-1140.00:

Narrative Requirements:

Condition No.	Condition
T-4	Heavy equipment (e.g. bulldozers, backhoes, draglines, etc.), if required for this project, should not be used or operated within the stream channel. In those instances where such instream work is unavoidable, then it shall be performed in such a manner and duration as to minimize re-suspension of sediments and disturbance to the channel, banks, or riparian vegetation. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-5	Erosion and sediment 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. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-6	Remove all sediment and erosion control measures after re-vegetation has become well-established. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-7	Any fill or riprap shall be of a composition that shall not cause violations of water quality standards by adversely affecting the biological, chemical, or physical properties of waters of the Commonwealth. If riprap is used, it shall be of a weight and size that bank stress or slump conditions shall not occur. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-8	Sediment and erosion control measures (e.g., check-dams, silt fencing, or hay bales) shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, placement shall not be conducted in such a manner that may cause instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control measures shall be removed and the natural grade restored prior to withdrawal from the site. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-9	Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse. This condition is necessary to prevent water pollution as prohibited by statute. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-10	To the maximum extent practicable, all in-stream work under this certification shall be performed during low flow. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]

KTC Water Quality Certification
US 51 Ohio River Bridge - Ballard Co
Facility Requirements
Permit Number: WQC2026-059-7
Activity ID No.:APE20260001

ACTV0000000001 (AI 79942 - US 51 Ohio River Bridge - Ballard Co) KYTC Item No.: 1-1140.00:

Narrative Requirements:

Condition No.	Condition
T-11	Removal of existing riparian vegetation shall be restricted to the minimum necessary for project construction. This condition is necessary to minimize negative effects to the environment, protect the use of the stream, and protect aquatic resources. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-12	Should stream pollution, wetland impairment, and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling 800/564-2380. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-13	This Water Quality Certification expires on April 13, 2031. This condition is necessary for the issuance of the certification. [KRS 224.10-100, KRS 224.16-050(2), KRS 224.70-110]
T-14	Other permits from the Division of Water may be required for this activity. If this activity occurs within a floodplain, a Permit to Construct Across or Along a Stream may be required. Please contact the Floodplain Management Section Supervisor (502-564-3410) for more information prior to construction. If the project will disturb one acre or more of land, or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land, a Kentucky Pollution Discharge Elimination System (KPDES) Stormwater Permit shall be required. Please contact the Surface Water Permits Branch (502-564-3410 or SWPBSupport@ky.gov) for more information. A Groundwater Protection Plan is required if any of the activities listed in Section 2(2) of 401 KAR 5:037 are conducted. A Water Withdrawal Application is required for any activities proposing raw water withdrawals of 10,000 gallons per day or more. For technical assistance contact the Watershed Management Branch at 502-564-3410 or visit eec.ky.gov. This condition is necessary for confirm authorized impacts, the appropriate responsible party, monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [KRS 224.10-100, KRS 224.16-050(2), KRS 224.70-110]

KTC Water Quality Certification
US 51 Ohio River Bridge - Ballard Co
Facility Requirements
Permit Number: WQC2026-059-7
Activity ID No.:APE20260001

ACTV0000000001 (AI 79942 - US 51 Ohio River Bridge - Ballard Co) KYTC Item No.: 1-1140.00:

Narrative Requirements:

Condition No.	Condition
T-15	If there is a transfer or conveyance of the project site during the issued WQC term for the approved activity, KYTC shall submit written notice to the Water Quality Certification Section Project Manager or Supervisor of the transfer or conveyance of the project site or any part of the project site at least 60 days prior to the transfer or conveyance of the project site. The notification shall include the WQC number; the Agency Interest (AI) No.; the name, mailing address, email address, and telephone number of the current owner; the name, mailing address, email address, and telephone number of the prospective transferee; the proposed effective date of transfer/conveyance; and a copy of the documentation evidencing the transfer/conveyance. Failure to comply with this condition does not negate the validity or enforceability of this certification. This condition is necessary for confirm authorized impacts, the appropriate responsible party, monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]

Illinois Environmental Protection Agency
2520 West Iles Avenue • P.O. Box 19276 • Springfield, Illinois • 62794-9276 • 217-782-3397

JB Pritzker, Governor **James Jennings**, Acting Director

JAN 23 2026

U.S. Army Corps of Engineers
Louisville District, Regulatory Branch
6855 State Road 66
Newburgh, IN 47630

Subject: Clean Water Act Section 401 Water Quality Certification
RE: US 51 Ohio river Bridge Replacement (Cairo, IL to Witliffe, KY), Alexander County
Illinois EPA Log No.: C-0355-25 / Federal Agency Permit No.: LRL-2020-0054
Bureau of Water ID#: W0678110004

Sir or Madam:

The Illinois Environmental Protection Agency (Agency) received a request for water quality certification subject to Section 401 of the federal Clean Water Act from Kentucky Transportation Cabinet (KYTC) / Illinois Department of Transportation (IDOT), District 9 (Proponent) on Tuesday, October 21, 2025, concerning the subject project. This request was submitted pursuant to a Department of the Army, Corps of Engineers permit request subject to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344). This project activity will result in the permanent loss of 0.23 acre of jurisdictional stream from the placement of structural fills as part of a proposed bridge construction and the permanent loss of 2.70 acres of jurisdictional wetlands from dredging, tree removal and the placement of structural fill for the construction of the proposed bridge and its associated roadway. The activity will result in the placement of approximately 4,675 cubic yards of structural fill in Waters of the U.S. for the proposed bridge construction to replace existing US 51 bridge over Ohio River to connect Cairo, IL to Wickliffe, KY and address safety and reliability issues caused by the narrow lane widths, lack of shoulders and tight curve of the existing bridge and its approaches. This activity is described in the application material titled:

"IEPA Cover Letter US 51.pdf" and "US 51 401 404 Permit Application.pdf" submitted electronically on Oct. 22, 2025, and "AJD letter_LRL-2020-00054 - portfolio.pdf" submitted electronically on Nov. 3, 2025.

Based on our review of the application material and finalization of this Agency's public participation process, it is the judgment of this office that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act and will comply with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, provided the

project is carefully planned, supervised and is performed in compliance with conditions specified in this water quality certification.

This Agency hereby issues certification under Section 401 of the Clean Water Act (PL 95-217), subject to the conditions identified below. This certification becomes effective when the Department of the Army, Corps of Engineers includes the following conditions no. 1 through no. 11 as conditions of the requested permit pursuant to Section 404 of PL-95-217. These conditions are directed at the effect on water quality of the construction procedures involved in the above described project and are not an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These conditions do not supplant any permit responsibilities of the applicant toward the Agency.

Any modifications to the proposed activity that is not described in the application material or covered by conditions below and 1) would not meet all the conditions of this certification or 2) may cause a new or an additional pollutant loading to waters of the State of Illinois are not approved.

Water Quality Condition No. 1. General.
The Proponent shall provide adequate planning and supervision for construction methods, processes, and cleanup procedures necessary to prevent water pollution and control erosion. The discharge and associated activity shall not cause:

a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C, Water Pollution Rules and Regulations;
b. water pollution defined and prohibited by the Illinois Environmental Protection Act;
c. interference with water use practices near public recreation areas or water supply intakes; or
d. violation of applicable provisions of the Illinois Environmental Protection Act.

Water Quality Condition No. 2. Wetland Mitigation Plan.
The wetland mitigation plan to compensate for the permanent loss of 2.71 acres of wetlands, consisting of purchase of a total of 14.905 acres from the E.T. Simonds Wetland Mitigation Bank and IDOT's Sugar Camp Creek Wetland Bank as detailed on supplemental information dated September 15, 2025, that was provided with the Joint Application shall be implemented. Modifications to the wetland mitigation plan must be submitted to the Agency for approval. The Proponent shall submit annual reports by July 1 of each calendar year on the status of the mitigation. The first annual report shall include a hydric soils determination that represents the soils at the completion of initial construction for the wetland mitigation site(s). The Proponent shall monitor the mitigation for 5 years after the completion of initial construction. A final report shall be submitted within 90 days after completion of a 5-year monitoring period. Each annual report and the final report shall include the following: IEPA Log No., date of completion of initial construction, representative photographs, floristic quality index, updated topographic maps, description of work in the past year, the performance standards for the mitigation as stated in the mitigation plan, and

the activities remaining to complete the mitigation plan. For wetland mitigation sites containing non-hydric soils at the time of initial construction, the final report shall include a hydric soils determination that represents the soils at the end of the 5-year monitoring period. For wetland mitigation provided by purchase of wetland mitigation banking credits, in lieu of the above monitoring and reporting, the Proponent shall submit written proof from the wetland mitigation bank that the wetland credits have been purchased within thirty (30) days of said purchase. The subject reports and proof of purchase of mitigation credits shall be submitted to:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Permit Section
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

Water Quality Condition No. 3. Stabilization Materials Prohibitions.
Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/streambanks, or 3) placed in waters of the State.

Water Quality Condition No. 4. Spill Response Plan.
The Proponent shall ensure that a spill avoidance and response plan has been developed and implemented for management of accidental releases of petroleum products to the aquatic environment during construction and for emergency notification of applicable downstream water supply operators and the Illinois EPA. Absorbent pads, containment booms and skimmers shall be available to facilitate the cleanup of petroleum spills. If floating hydrocarbon (oil and gas) products are observed, the proponent or their designee will be responsible for directing that work be halted so that appropriate corrective measures are taken in accordance with the plan prior to resuming work. For the purposes of this certification, "petroleum" means crude oil, refined petroleum, intermediates, fractions or constituents of petroleum, oil sheens, lubricants, and any other form of oil or petroleum.

Water Quality Condition No. 5. NPDES Stormwater Construction Permit.
The Proponent shall be responsible for obtaining an NPDES Storm Water Permit required by the federal Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form and application at https://www2.illinois.gov/epa/topics/forms/water-permits/storm-water/Pages/construction.aspx.

Water Quality Condition No. 6. Construction within Waterway.
All construction within the waterway shall be conducted during zero or low flow conditions or otherwise provide appropriate bypass measures (i.e. flumes, culverts, etc.) to minimize sedimentation and maintain normal stream flow during construction. Construction activities shall be conducted in a manner to minimize resuspension of materials in the water column. Techniques such as careful equipment use, construction during favorable weather conditions that minimize turbulence and transport of suspended contaminants and other methods such as turbidity curtains should be used as necessary to minimize re-suspension of sediment material. Turbidity curtains shall be used in accordance with the current version of the "Illinois Urban Manual" https://illinoisurbanmanual.org/ Practice Standard for Floating Silt Curtain (no. 917).

Water Quality Condition No. 7. Temporary Structures and Work.
Temporary work pads, cofferdams, access roads and other temporary fills are approved provided that such activities are constructed with clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities. Temporary fills within streams, creeks or rivers shall utilize adequate bypass measures (i.e. dam and pump, flumes, culverts, etc.) to minimize sedimentation and erosion and to maintain normal stream flow during construction.

Water Quality Condition No. 8. Hydraulic Machinery.
All hydraulic machinery utilized for the permitted activity and used in or immediately adjacent to waters of the State shall utilize biodegradable or bio-based hydraulic fluids to minimize pollution in the case of broken or leaking hydraulic equipment. More information about environmentally acceptable alternatives are available at:
https://www3.epa.gov/npdes/pubs/vgp_environmentally_acceptable_lubricants.pdf

Water Quality Condition No. 9. Discharged Material Quality.
Any spoil material excavated, dredged or otherwise produced must not be returned to the water body but must be deposited in a self-contained area in compliance with all state statutes. Except as specifically allowed by other conditions of this final determination, any backfilling must be done with uncontaminated material that is predominantly sand or larger size material, with no more than 20% passing a #230 U. S. sieve and placed in a manner to prevent violation of applicable water quality standards.

Water Quality Condition No. 10. Construction Site Dewatering.
Dewatering of a construction site is authorized provided the dewatering activity is limited to the immediate work area within a cofferdam or otherwise isolated from waters of the State, and the work site is free from sources of contamination including those of natural origin. Dewatering

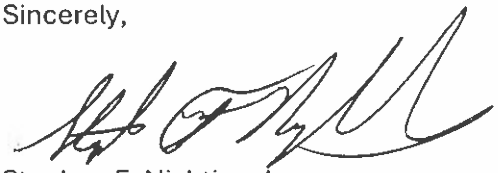
activities shall incorporate Best Management Practices in accordance with the current edition of the "Illinois Urban Manual" https://illinoisurbanmanual.org/ Practice Standard for Dewatering (no. 813) or as otherwise appropriate to ensure that return flows from the dewatering activity are free of unnatural turbidity and floating debris and meet applicable water quality standards. Dewatering or discharge of flush water from construction of drilled piers or boreholes is not authorized and must be conducted in accordance with an NPDES permit issued by the Illinois EPA.

Water Quality Condition No. 11. Erosion and Sedimentation Control Measures.
The Proponent shall implement all necessary sedimentation and erosion control measures consistent with the current edition of the "Illinois Urban Manual" found at https://illinoisurbanmanual.org/. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins, silt fencing and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. All areas affected by construction shall be seeded and stabilized as soon after construction as possible.

This Section 401 water quality certification does not obviate the permittee's responsibility to obtain other required federal, state, or local authorizations, nor does it grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention, abatement, and control of water pollution.

If you have any questions about this final determination, please contact Oyetunde Tinuoye of my staff at either 217/782-0610 or Oyetunde.Tinuoye@illinois.gov.

Sincerely,



Stephen F. Nightingale.
Manager, Industrial Unit, Permit Section
Division of Water Pollution Control

CC: Applicant
USEPA
Consultant
IDNR
FOS
BOW_File

Kentucky Transportation Cabinet

Highway Districts 1

And

_____(2), Construction

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

Groundwater protection plan

For Highway Construction Activities

For

US 51 Bridge Replacement over the Ohio River Wickliffe, Kentucky to Cairo, Illinois

KYTC Item No. 1-1140.00

KyTC BMP Plan for Project Construction ID (CID) 181019

Project information

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

1. Owner – **Kentucky Transportation Cabinet, District 10** (1)

2. Resident Engineer: (2)

3. Contractor name: (2)
   Address: (2)

   Phone number: (2)
   Contact: (2)
   Contractors agent responsible for compliance with the KPDES permit requirements (3):

4. Project Control Number (2)

5. Route (Address) **US 51** (1)

6. Latitude/Longitude (project mid-point) **36.994797N, 89.149484W** (1)

7. County (project mid-point) **BALLARD COUNTY** (1)

8. Project start date (date work will begin): **1/18/2027** (2)

9. Projected completion date: **12/31/2028** (2)

A. Site description:

1. Nature of Construction Activity (from letting project description) (1)
   PHASE I OF THE US 51 BRIDGE REPLACEMENT PROJECT

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

3. Projected volume of material to be moved (1)
   259,392 CUBIC YDS.

4. Estimate of total project area (acres) (1)
   29.4 ACRES

5. Estimate of area to be disturbed (acres) (1)
   12.3 ACRES

6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information. (1)

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

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

9. Receiving water name (1)
   Ohio River.

10. TMDLs and Pollutants of Concern in Receiving Waters: (1 DEA)

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

12. Potential sources of pollutants:

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

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and

designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

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

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

3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:

   - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
   - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
   - Clearing and Grubbing – The following BMP's will be considered and used where appropriate.
     - Leaving areas undisturbed when possible.
     - Silt basins to provide silt volume for large areas.
     - Silt Traps Type A for small areas.
     - Silt Traps Type C in front of existing and drop inlets which are to be saved
     - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
     - Brush and/or other barriers to slow and/or divert runoff.

KyTC BMP Plan for Project Construction ID (CID) 181019

- Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
- Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- Non-standard or innovative methods.

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

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

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

➢ BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: (1)

C. Other Control Measures

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

2. Waste Materials

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

3. Hazardous Waste

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

4. Spill Prevention

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

- **Good Housekeeping:**

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

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label

- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

➢ **Hazardous Products:**

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

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

The following product-specific practices will be followed onsite:

➢ **Petroleum Products:**

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

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

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

➢ **Fertilizers:**

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm

water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

- **Paints:**

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

- **Concrete Truck Washout:**

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

- **Spill Control Practices**

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

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean-up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. (1)

E. Maintenance

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

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

- Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. (1)

F. Inspections

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

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have received KyTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary

mulch no later than 14 days from the last construction activity in that area.

- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 70 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

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

- Water from water line flushings.
- Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

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

H. Groundwater Protection Plan (3)

KyTC BMP Plan for Project Construction ID (CID) 181019

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

- Contractors statement: (3)

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

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

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

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

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

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

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

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

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

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

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

(a) General information about this project is covered in the Project information;
(b) Activities that require a groundwater protection plan have been identified above;

KyTC BMP Plan for Project Construction ID (CID) 181019

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

KyTC BMP Plan for Project Construction ID (CID) 181019

Contractor and Resident Engineer Plan certification

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

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

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

Resident Engineer and Contractor Certification:

(2) Resident Engineer signature

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

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

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

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

KyTC BMP Plan for Project Construction ID (CID) 181019

Sub-Contractor Certification

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

Subcontractor

Name:
Address:
Address:

Phone:

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

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

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

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

Andy Beshear
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
300 Sower Boulevard
Frankfort, Kentucky 40601
Phone: (502) 564-2150
Fax: 502-564-4245

John S. Lyons
SECRETARY

Amanda W. LeFevre
COMMISSIONER

September 29, 2026

Dustin Turner
KYTC District 1
5501 Kentucky Dam Rd
Paducah, KY 42003

Re: KYR10 Coverage Acknowledgment
KPDES No.: KYR10V156
Phase I of the US 51 Bridge Replacement Project Over the Ohio River (KYTC Item No. 1-1140)
Permit Type: Construction Stormwater
AI ID: 79942
Ballard County, Kentucky

Dear Dustin Turner:

The discharges associated with the Notice of Intent you submitted have been approved for coverage under the "Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Storm Water Discharges Associated with Construction Activities (KYR100000)" master general permit. Your coverage becomes effective on the date of this letter. This coverage automatically terminates two years from the effective date of your coverage unless an extension is requested prior to the termination date, or the Division of Water revokes coverage, whichever comes first. During this period of coverage all discharges shall comply with the conditions of the KYR100000 master general permit. This permit and links to the eNOI (and permit coverage extension) and eNOT forms can be found on our website:
https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYR10PermitPage.pdf.

Any person aggrieved by the issuance of a permit final decision may demand a hearing pursuant to KRS 224.10-420(2) within thirty (30) days from the date of the issuance of this letter. Any demand for a hearing on the permit shall be filed in accordance with the procedures specified in KRS 224.10-420, 224.10-440, 224.10-470, and the regulations promulgated thereto. The request for hearing should be submitted in writing to the Energy and Environment Cabinet, Office of Administrative Hearings, 211 Sower Boulevard, Frankfort, Kentucky 40601 and the Commonwealth of Kentucky, Energy and Environment Cabinet, Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601. For your record keeping purposes, it is recommended that these requests be sent by certified mail. The written request must conform to the appropriate statutes referenced above.

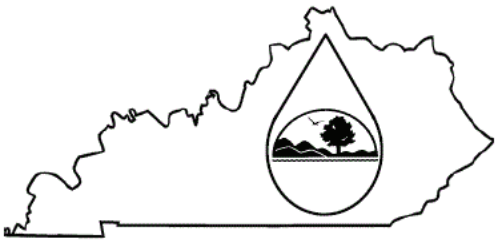
Any questions concerning the general permit and its requirements should be directed to me at 502-782-4213 or email me at sam.burns@ky.gov

Construction Site GPS Coordinates: 36.994797, -89.149484
Receiving Water: Ohio River

Sincerely,

Sam Burns
Surface Water Permits Branch
Division of Water

cc: Michael Leathers, eNOI Preparer
Madeline Traylor, Paducah Regional Office



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

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

Click here for Instructions

Click here to obtain information and a copy of the KPDES General Permit.

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

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

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

COVERAGE:
Applicants shall complete and submit the eNOI-SWCA a minimum of seven (7) days before the proposed date for commencement of construction activities. Applicants shall receive written notification from the Division of Water before being authorized to discharge under the terms of the KYR10 General Permit.

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

SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)

Company Name:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
KYTC	Austin	MI	Hart

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
5501 Kentucky Dam Road	Paducah	Kentucky	42003-____

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
Austin.Hart@ky.gov	270-898-2431	Phone

Additional Facility Operator information(Co-Permittee) required ?(*)
Select ...

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)	Status of Owner/Operator(*)	SIC Code(*)
Phase I of the US 51 Bridge Replacement Project Over the Ohi	State Government	1611 Highway and St...

Company Name:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
KYTC	Austin	MI	Hart

Site Physical Address:(*)

US 51

City:(*)	State:(*)	Zip:(*)
Wickliffe	Kentucky	42087-___

County:(*)	Latitude(decimal degrees)(*)DMS to DD Converter	Longitude(decimal degrees)(*)
Ballard	36.994797	-89.149484

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)

Phase I would include a shaft/pile foundation load test program, ground improvements verification test, and embankment construc

Was the pre-development land used for agriculture ?(*)	Will there be demolition of any structure built or renovated before January 1, 1980 ?(*)
Yes	No

Select the type of construction site (check all that apply)(*)

- [ ] Single-Family Residential
- [ ] Multi-Family Residential
- [ ] Commercial
- [ ] Industrial
- [ ] Institutional
- [x] Highway or Road
- [ ] Utility
- [ ] Other

- [x] a. For single projects provide the following information(✓)

Total Number of Acres in Project:(*)	Total Number of Acres Disturbed:(*)
29.4	12.3
Anticipated Start Date:(*)	**Anticipated Completion Date:(*)**
01/18/2027	12/31/2028

- [ ] b. For common plans of development provide the following information(✓)

SECTION IV -- INFORMATION IS ALWAYS REQUIRED FOR ONSITE POINT OF DISCHARGE AND RECEIVING WATER

Discharge Point(s):(*)

+ Add | Export Excel | Import Excel

Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	X
Yes	36.999212	-89.128260	Ohio River	× Delete

1 5 items per page 1 - 1 of 1 items

SECTION V -- Section V MUST BE COMPLETED IF WITHIN A MS4 AREA

Name of MS4:

Select ...

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

Will the project require construction activities in a water body, floodplain or the riparian zone?:(*)	Yes
If Yes, describe scope of activity: (✓)	Fill for the roadway.
Is a Clean Water Act 404 permit required?:(*)	Yes
Is a Clean Water Act 401 Water Quality Certification required?:(*)	Yes

SECTION VII -- NOI PREPARER INFORMATION ☐ same as FACILITY OPERATOR INFORMATION

Company Name:	First Name:(*)	M.I.:	Last Name:(*)
HMB Professional Engineers, LLC	Michael	MI	Leathers

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
mleathers@hmbpe.com	Frankfort	Kentucky	40601-___

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
mleathers@hmbpe.com	502-695-9800	859-806-2278

SECTION VIII -- ATTACHMENTS

Facility Location Map:(*)	Select files...
Supplemental Information:	Select files...

SECTION IX -- CERTIFICATION

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

Signature:(*)	Title:(*)
Austin P. Hart	KYTC D-1 Transportation Engineer Branch Manage

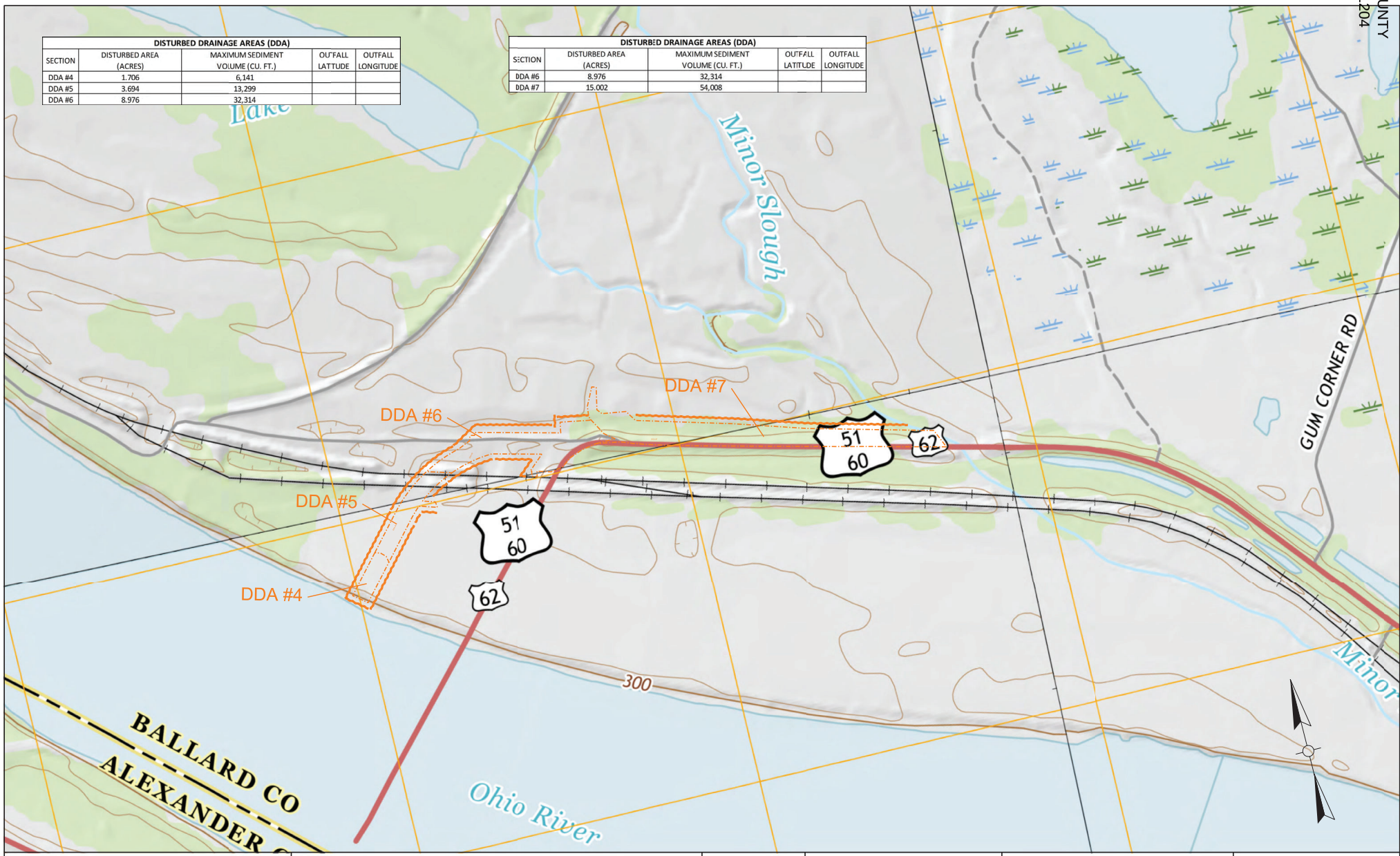
First Name:(*)	M.I.:	Last Name:(*)
Austin	P	Hart

eMail Address:(*)	Business Phone:(*)	Alternate Phone:	Signature Date:(*)
Austin.Hart@ky.gov	270-898-2431	Phone	09/15/20...

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

DISTURBED DRAINAGE AREAS (DDA)				
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU. FT.)	OUTFALL LATTUDE	OUTFALL LONGITUDE
DDA #4	1.706	6,141		
DDA #5	3.694	13,299		
DDA #6	8.976	32,314		

DISTURBED DRAINAGE AREAS (DDA)				
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU. FT.)	OUTFALL LATITUDE	OUTFALL LONGITUDE
DDA #6	8.976	32,314		
DDA #7	15.002	54,008		



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

FACILITY LOCATION MAP

HORIZONTAL SCALE
SCALE: 1"=100'

0' 100' 200' 400'

KENTUCKY ONLY

ITEM NO. 1-1140.01
COUNTY OF BALLARD
SHEET NO.

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
	Water Resources		
3	Section 401 Water Quality Certification from KDOW will be acquired prior to construction.	KYTC	Completed
4	Section 401 Water Quality Certification from IEPA will be acquired prior to construction.	IDOT	Completed
5	Section 404 permit from USACE will be acquired prior to construction.	KYTC	Completed
6	Section 408 permit from USACE will be acquired prior to construction.	KYTC	Completed
7	A National Pollutant Discharge Elimination System (NPDES) permit from IEPA will be issued following contractor's acceptance.	IDOT / Contractor	Ongoing
8	A National Pollutant Discharge Elimination System (NPDES) permit from KDOW will be acquired prior to construction.	KYTC	Completed
9	A Stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction.	KYTC/IDOT	Ongoing
	Water Resources: Streams and Wetlands		
14	Best Management Practices will be used as required in Section 213 with KYTC Standard Specification using a site-specific Erosion Control Plan that will be developed prior to onsite activities to ensure continuous erosion control throughout the construction and post construction period.	Contractor	Ongoing
15	A Wetland Impact Evaluation (WIE) will be required to comply with the Illinois Interagency Wetlands Policy Act and will be performed prior to permitting and will encompass the wetlands delineated in the August 2020 assessment.	IDOT	Completed
16	Additional coordination with USDA NRCS will be required due to impacts to the Ramsey Parcel on the Kentucky approach which is protected under a Floodplain Easement. Approval from the local USDA NRCS office will be required for the temporary easement proposed. This coordination will occur during the Right of Way acquisition phase of the project and prior to an offer being rendered to the owner of the parcel.	KYTC	Ongoing
	Threatened and Endangered Species and Species of Special Concern		
17-c	Presence/absence surveys will be completed prior to construction for migratory birds (bald eagle, osprey) that have potential to occur in the project corridor.	KYTC	Ongoing
18	Following presence /absence surveys, a Biological Assessment will be completed to fulfill the Section 7 requirement of the Endangered Species Act, the Bald and Golden Eagle Protection Act, and the Illinois Endangered Species Protection Act. If listed species occur in the project impact area, mitigation will be required.	KYTC	Completed
19	If an Illinois state-listed species is found in Illinois, consultation with IDNR for compliance with the Illinois Endangered Species Protection Act is required, and if IDNR determines that an impact will require an Incidental Take Authorization (ITA), then a Conservation Plan will be required. The ITA process, which has a public involvement component and takes approximately 6 months, must be completed prior to construction letting. This survey will occur in Phase II of the Design and after the finalization of the Right of Way Plan.	IDOT	Completed
	Vegetation		
21	Tree clearing in Kentucky will take place between July 31st and May 15th, unless otherwise permitted, and will follow the guidance of the 2020 KYTC-FHWA Programmatic Bat Program.	Contractor	Ongoing
22	Tree clearing in Illinois will take place between November 1st and March 31st and follow D&E-18 policy.	Contractor	Ongoing
	Archaeology		
24	In the event archaeological deposits and materials are encountered during the proposed undertaking, the KHC Site Protection and Archaeology Program Administrator shall be notified. KYTC's District 1 Environmental coordinator and Division of Environmental Analysis should also be notified immediately.	Contractor	Ongoing
25	If human skeletal material is discovered, construction activities should cease and the KYTC, the local coroner, and local law enforcement agency must be notified, as described in KRS 72.020.	Contractor	Ongoing
	Public involvement/Socio-economic		
30	The project team will continue to engage with the Citizen's Advisory Group.	KYTC/IDOT	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
31	The project team will continue to engage with the Miami Tribe of Oklahoma (The Tribe) and provide updates regarding archaeological activities. If any human remains or Native American cultural items or archaeological evidence is discovered during any phase of this project, the project team will provide The Tribe with the location of discovery.	KYTC/IDOT	Ongoing
33	Members of the Citizen's Advisory Group stated that communication with the community during construction, regarding lane or short-term bridge closures in particular, will be essential. Notification will be provided to the communities through coordinated communication coming from the KYTC District 1 office, in Paducah, KY, and the IDOT District 9 office, in Carbondale, IL.	KYTC/IDOT	Ongoing
37	The project team will work to reduce closure periods on East Holloway Landing Road. If any unavoidable closures are required, durations will be limited and notification will be provided to residents.	Contractor	Ongoing
	General		
38	For activities that occur in areas that have not been environmentally cleared by KYTC, the contractor is responsible for obtaining property rights, obtaining environmental clearance and paying for approvals to utilize these areas. The contractor must submit all approvals and permits along with location information to Construction staff who must submit this information to the District Environmental Coordinator before conducting work in the consent and release area.	Contractor	Ongoing
39	Parcel 1 on the KY side has expressed concerns with the project impacting drainage across their entrance. The project will ensure drainage is maintained or improved.	KYTC	Ongoing
42	As part of the negotiated agreement with Chandler Waggener Trust, the following commitment has been made by the Department on the above Route and Section and Parcel No. 9008120:		Ongoing
42-a	1.Levee: Any damage to the levee resulting directly from construction activities will be addressed appropriately by the KYTC. Should any unforeseen issues arise due to this construction project, KYTC will take responsibility for restoring the levee and mitigating any resulting effects in accordance with article 107.12 of the KYTC Standard Specifications for Road and Bridge Construction which is made part of every construction contract. See Attached section 107.12.	Contractor	Ongoing
42-b	2.Culvert: The culvert extension will be designed to maintain its current hydraulic function and ensure flow consistent with existing conditions. Additionally, should any damage occur to the culvert as a direct result of construction, KYTC will take full responsibility for addressing and correcting the issue in accordance with article 107.12 of the KYTC Standard Specifications for Road and Bridge Construction which is made part of every construction contract.	Contractor / KYTC	Ongoing
44	At no point during construction shall the entrance to Fort Defiance Road be blocked or have access restricted.	Contractor	Ongoing
	FAA Filing (TMP)		
FAA-1	Flags and red lights are required on the crane.	Contractor	Ongoing
FAA-2	FAA's Determination shall expire on 12/4/2027. A file extension will be required November 2027.	Contractor	Ongoing
FAA-3	File a 7460-2 form in 2028.	KYTC	Ongoing
	Section 401 Water Quality Certification from IEPA		
45-a	Water Quality Condition No. 1. General. The Proponent shall provide adequate planning and supervision for construction methods, processes, and cleanup procedures necessary to prevent water pollution and control erosion. The discharge and associated activity shall not cause: a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C, Water Pollution Rules and Regulations; b. water pollution defined and prohibited by the Illinois Environmental Protection Act; c. interference with water use practices near public recreation areas or water supply intakes; or d. violation of applicable provisions of the Illinois Environmental Protection Act.	Contractor	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
45-c	Water Quality Condition No. 3. Stabilization Materials Prohibitions. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/streambanks, or 3) placed in waters of the State.	Contractor	Ongoing
45-d	Water Quality Condition No. 4. Spill Response Plan. The Proponent shall ensure that a spill avoidance and response plan has been developed and implemented for management of accidental releases of petroleum products to the aquatic environment during construction and for emergency notification of applicable downstream water supply operators and the Illinois EPA. Absorbent pads, containment booms and skimmers shall be available to facilitate the cleanup of petroleum spills. If floating hydrocarbon (oil and gas) products are observed, the proponent or their designee will be responsible for directing that work be halted so that appropriate corrective measures are taken in accordance with the plan prior to resuming work. For the purposes of this certification, "petroleum" means crude oil, refined petroleum, intermediates, fractions or constituents of petroleum, oil sheens, lubricants, and any other form of oil or petroleum.	Contractor	Ongoing
45-e	Water Quality Condition No. 5. NPDES Stormwater Construction Permit. The Proponent shall be responsible for obtaining an NPDES Storm Water Permit required by the federal Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form and application at https://www2.illinois.gov/epa/topics/forms/water-permits/stormwater/Pages/construction.aspx.	IDOT	Ongoing
45-f	Water Quality Condition No. 6. Construction within Waterway. All construction within the waterway shall be conducted during zero or low flow conditions or otherwise provide appropriate bypass measures (i.e. flumes, culverts, etc.) to minimize sedimentation and maintain normal stream flow during construction. Construction activities shall be conducted in a manner to minimize resuspension of materials in the water column. Techniques such as careful equipment use, construction during favorable weather conditions that minimize turbulence and transport of suspended contaminants and other methods such as turbidity curtains should be used as necessary to minimize re-suspension of sediment material. Turbidity curtains shall be used in accordance with the current version of the "Illinois Urban Manual" https://illinoisurbanmanual.org/ Practice Standard for Floating Silt Curtain (no. 917).	Contractor	Ongoing
45-g	Water Quality Condition No. 7. Temporary Structures and Work. Temporary work pads, cofferdams, access roads and other temporary fills are approved provided that such activities are constructed with clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used tor temporary facilities. Temporary fills within streams, creeks or rivers shall utilize adequate bypass measures (i.e. dam and pump, flumes, culverts, etc.) to minimize sedimentation and erosion and to maintain normal stream flow during construction.	Contractor	Ongoing
45-h	Water Quality Condition No. 8. Hydraulic Machinery. All hydraulic machinery utilized for the permitted activity and used in or immediately adjacent to waters of the State shall utilize biodegradable or bio-based hydraulic fluids to minimize pollution in the case of broken or leaking hydraulic equipment. More information about environmentally acceptable alternatives are available at: https://www3.epa.gov/npdes/pubs/vgp_environmentally_acceptable_lubricants.pdf	Contractor	Ongoing
45-i	Water Quality Condition No. 9. Discharged Material Quality. Any spoil material excavated, dredged or otherwise produced must not be returned to the water body but must be deposited in a self-contained area in compliance with all state statutes. Except as specifically allowed by other conditions of this final determination, any backfilling must be done with uncontaminated material that is predominantly sand or larger size material, with no more than 20% passing a #230 U.S. sieve and placed in a manner to prevent violation of applicable water quality standards.	Contractor	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
45-j	Water Quality Condition No. 10. Construction Site Dewatering. Dewatering of a construction site is authorized provided the dewatering activity is limited to the immediate work area within a cofferdam or otherwise isolated from waters of the State, and the work site is free from sources of contamination including those of natural origin. Dewatering activities shall incorporate Best Management Practices in accordance with the current edition of the "Illinois Urban Manual" https://illinoisurbanmanual.org/ Practice Standard for Dewatering (no.813) or as otherwise appropriate to ensure that return flows from the dewatering activity are free of unnatural turbidity and floating debris and meet applicable water quality standards. Dewatering or discharge of flush water from construction of drilled piers or boreholes is not authorized and must be conducted in accordance with an NPDES permit issued by the Illinois EPA.	Contractor	Ongoing
45-k	Water Quality Condition No. 11. Erosion and Sedimentation Control Measures. The Proponent shall implement all necessary sedimentation and erosion control measures consistent with the current edition of the "Illinois Urban Manual" found at https://illinoisurbanmanual.org/. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins, silt fencing and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. All areas affected by construction shall be seeded and stabilized as soon after construction as possible.	Contractor	Ongoing
	Section 401 Water Quality Certification from KY DOW		
S-1	Prior to any construction activity, the Kentucky Transportation Cabinet (KYTC) shall submit to the Water Quality Section Project Manager a copy of the receipt of purchase of 300 stream and 64.4 wetland Adjusted Mitigation Units (AMUs) from an approved mitigation bank OR purchase of 360 stream and 77 wetland AMUs from an approved Kentucky in-lieu fee (ILF) program fund. Credits must be purchased prior to impacts. Mitigation banks and ILF programs are considered approved as defined in the April 10, 2008 Final Rule, 40 CFR Part 230: Compensatory Mitigation for Losses of Aquatic Resources. This condition is necessary to allow impacts to occur. Compensatory mitigation is the method to approve impacts and entire losses of a water resource. The Division can approve impacts and loss based on the confidence that the resource will be replaced and not result in a net loss of aquatic resources. Compensatory mitigation is the method of compliance for the Commonwealth's water quality standards. [33 CFR 332, 40 CFR 230, 401 KAR 10:031 Section 2(1)(a)]	KYTC	Ongoing
S-2	KYTC shall notify the Water Quality Certification Project Manager or Supervisor of the scheduled start of construction activities at least two weeks before the start of construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	KYTC	Ongoing
S-3	KYTC shall notify the Water Quality Certification Project Manager or Supervisor of substantial completion of construction no later than two weeks post-construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	KYTC	Ongoing
S-4	KYTC shall submit as-built drawings within 90 days after substantial completion of construction to the Water Quality Certification Section Project Manager or Supervisor. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor / KYTC	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
T-1	The work approved by this certification shall be limited to 36.994797, -89.149484: - Replacement of the existing US 51 bridge over the Ohio River between Wickliffe, Ballard County, Kentucky, and Cairo, Alexander County, Illinois - Construction of a 60-foot-wide temporary metal trestle with one hundred fifty, 30 in. diameter metal piers driven into the bed of the river to aid in the construction of the bridge - After the bridge is constructed, the trestle will be removed completely - Coffer dams, extending 5' beyond the footers, will be placed during construction and subsequently removed - 100 linear feet of permanent impacts to the Ohio River, a perennial stream, for bridge piers - 16.1 acres of permanent impacts to jurisdictional wetlands for piers and embankment - 100 linear feet of temporary impacts to the Ohio River, a perennial stream, for coffer dams, trestle, and load test area This condition is necessary to confirm activities approved by this certification. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]	Contractor / KYTC	Ongoing
T-2	All work performed under this certification shall adhere to the design and specifications set forth in the following document(s): - Application for Permit to Construct Across or Along a Stream and/or Water Quality Certification received on 1/28/2026 - Pre-file Meeting Request received on 1/28/2026 - Certification Request received on 3/17/2026 - US 51 401 404 Permit Application.pdf - DOW feedback on 401(a)(2) review 2.3.26.pdf - NOD_1_US_51_Ohio_River_Bridge_Resubmittal.pdf This condition is necessary to confirm activities approved by this certification. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]	Contractor / KYTC	Ongoing
T-3	implemented, and maintained in effective operating condition at all times during construction. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-4	Heavy equipment (e.g. bulldozers, backhoes, draglines, etc.), if required for this project, should not be used or operated within the stream channel. In those instances where such instream work is unavoidable, then it shall be performed in such a manner and duration as to minimize re-suspension of sediments and disturbance to the channel, banks, or riparian vegetation. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-5	Erosion and sediment 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. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-6	Remove all sediment and erosion control measures after re-vegetation has become well-established. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-7	Any fill or riprap shall be of a composition that shall not cause violations of water quality standards by adversely affecting the biological, chemical, or physical properties of waters of the Commonwealth. If riprap is used, it shall be of a weight and size that bank stress or slump conditions shall not occur. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
T-8	Sediment and erosion control measures (e.g., check-dams, silt fencing, or hay bales) shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, placement shall not be conducted in such a manner that may cause instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control measures shall be removed and the natural grade restored prior to withdrawal from the site. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-9	Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse. This condition is necessary to prevent water pollution as prohibited by statute. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-10	To the maximum extent practicable, all in-stream work under this certification shall be performed during low flow. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-11	Removal of existing riparian vegetation shall be restricted to the minimum necessary for project construction. This condition is necessary to minimize negative effects to the environment, protect the use of the stream, and protect aquatic resources. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-12	Should stream pollution, wetland impairment, and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling 800/564-2380. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
T-13	This Water Quality Certification expires on April 13, 2031. This condition is necessary for the issuance of the certification. [KRS 224.10-100, KRS 224.16-050(2), KRS 224.70-110]	KYTC	Ongoing
T-15	If there is a transfer or conveyance of the project site during the issued WQC term for the approved activity, KYTC shall submit written notice to the Water Quality Certification Section Project Manager or Supervisor of the transfer or conveyance of the project site or any part of the project site at least 60 days prior to the transfer or conveyance of the project site. The notification shall include the WQC number; the Agency Interest (AI) No.; the name, mailing address, email address, and telephone number of the current owner; the name, mailing address, email address, and telephone number of the prospective transferee; the proposed effective date of transfer/conveyance; and a copy of the documentation evidencing the transfer/conveyance. Failure to comply with this condition does not negate the validity or enforceability of this certification. This condition is necessary for confirm authorized impacts, the appropriate responsible party, monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]	Contractor	Ongoing
	IDNR Office of Water Resources Permit		
S-1	Special Condition: All temporary construction must be removed by the date in the General Conditions (13). That date is December 31, 2032.	Contractor	Ongoing
G-1	General Condition: This permit is granted in accordance with the Rivers, Lakes, and Streams Act "615 ILCS 5."	IDOT	Ongoing
G-2	General Condition: This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.	Contractor	Ongoing
G-3	General Condition: This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit; and does not authorize any injury to private property or invasion of private rights.	Contractor	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
G-4	General Condition: This permit does not relieve the permittee of the responsibility to obtain other federal, state, or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or other state agency to do the work, this permit is not effective until the federal and state approvals are obtained. If construction does not begin within two years of the date of this permit, the permittee must submit the project to EcoCAT (https:/ldnr2.illinois.gov/EcoPublic/) for an updated consultation under the Illinois Endangered Species Protection Act and the Illinois Natural Areas Preservation Act.	IDOT	Ongoing
G-5	General Condition: The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.	Contractor	Ongoing
G-6	General Condition: In public waters, if future need for public navigation or other public interest by the state or federal government necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or the permittee's successors as required by the Department or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.	Contractor	Ongoing
G-7	General Condition: The execution and details of the work authorized shall be subject to the review and approval of the Department. Department personnel shall have the right of access to accomplish this purpose.	Contractor	Ongoing
G-8	General Condition: Starting work on the activity authorized will be considered full acceptance by the permittee of the terms and conditions of the permit.	Contractor	Ongoing
G-9	General Condition: The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.	IDOT	Ongoing
G-10	General Condition: In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.	Contractor	Ongoing
G-11	General Condition: In issuing this permit, the Department does not ensure the adequacy of the design or structural strength of the structure or improvement.	IDOT	Ongoing
G-12	General Condition: Noncompliance with the conditions of this permit will be considered grounds for revocation.	Contractor	Ongoing
G-13	General Condition: If the construction activity permitted is not completed on or before December 31, 2032, this permit shall cease and be null and void.	Contractor	Ongoing
	USACE - 408 Permit / Cache-Cairo Revetment		
408-a	At least ten (10) business days prior to performing any work, notify USACE the start date of construction, point of contact for construction activities, and provide the final contract construction documents to USACE.	KYTC	Ongoing
408-b	All penetrations of the revetment shall be reinforced/ repaired with rock per the submitted plans.	Contractor	Ongoing
408-c	Standard Section 408 Terms and Conditions apply.	KYTC/IDOT/Contractor	Ongoing
408-d	Granting Section 408 permission does not necessarily constitute final approval for the project. You must acquire any necessary real estate instruments and obtain any required regulatory permits prior to final approval.	KYTC/IDOT/Contractor	Ongoing

US 51 BRIDGE REPLACEMENT
ENVIRONMENTAL COMMITMENTS

No.	Commitment Description	Responsibility	Status
	USACE - 404 Permit		
GC-1	The time limit for completing the authorized activity ends on October 31, 2031 . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.	Contractor	Ongoing
GC-2	You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification for this permit from this office, which may require restoration of the area.	Contractor	Ongoing
GC-3	If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.	Contractor	Ongoing
GC-4	If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.	KYTC/IDOT	Ongoing
GC-5	If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.	Contractor	Ongoing
GC-6	You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.	Contractor	Ongoing
SP-1	All work authorized by this permit shall be performed in strict compliance with the attached plans entitled “US 51 Bridge Replacement Project Over the Ohio River,” dated September 2025, which are a part of this permit. Any modification to these plans affecting the authorized work shall be approved by the U.S. Army Corps of Engineers, Louisville District (USACE) prior to implementation.	Contractor	Ongoing
SP-2	The Permittees shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, drawings and attachments shall be available at the project site during the construction phase of this project. A description of the authorized work, as provided in the DA permit shall be displayed at the project site during construction.	KYTC / Contractor	Ongoing
SP-3	The Permittees shall comply with all conditions of the Section 401 Water Quality Certification No. 2026-059-7 issued by the Kentucky Division of Water on April 14, 2026, and the Section 401 Water Quality Certification No. C-0355-25 issued by the Illinois Environmental Protection Agency on January 23, 2026, which are incorporated herein by reference.	KYTC/IDOT/Contractor	Ongoing
SP-4	This Department of the Army permit does not authorize you to take an endangered species, in particular the Indiana Bat (*Myotis sodalis*), and/or Gray Bat (*Myotis grisescens*). In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with “incidental take” provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service Biological Opinions (BOs) “Federal Highway Administration Kentucky Division’s 2020 Programmatic Consultation on the Effects of Transportation Projects in Kentucky on the Indiana Bat and Gray Bat, (April 17, 2020)” and the “2015 Biological Opinion: Kentucky Field Office’s participation in Conservation Memoranda of Agreement for the Indiana bat and/or Northern Long-eared Bat (Attachment) contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” that is also specified in the BOs. Your authorization under this Department of the Army permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BOs, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BOs, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Department of the Army permit. The U.S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BOs, and with the ESA.	Contractor	Ongoing

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No.	Commitment Description	Responsibility	Status
SP-5	The Permittees shall comply with the stipulations in the enclosed June 27, 2025, U.S. Fish and Wildlife Service concurrence letter. To mitigate for the loss of 26.70 acre(s) of Indiana bat (*Myotis sodalis*) and Gray bat (*Myotis grisescens*) forested habitat, the Permittees shall submit the appropriate contribution to the Imperiled Bat Conservation Fund (IBCF) in accordance with the processes outlined in the enclosed BOs and concurrence letter. If changes to the amount or timeframe for tree removal are to occur, the Permittees shall email the Corps' project manager and the KFO at KentuckyES@fws.gov to determine if re-initiation of Section 7 consultation is required or a revision to the IBCF contribution is necessary. If a change to the project is necessary, no tree removal shall occur until additional coordination with the Corps and KFO is completed.	KYTC	Ongoing
SP-6	The Permittees shall provide to the Corps written proof of purchase, in the form of a receipt of payment, of 7.9 wetland AMUs from the West Kentucky Wetwoods Mitigation Bank (MVM-2009-498-RSA) .The permittees must provide to the Corps proof of credit purchase prior to the discharge of fill material into "waters of the U.S." If the appropriate number and/or type of credits are not available at the subject mitigation bank, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.	KYTC	Ongoing
SP-7	The Permittees shall provide receipt of payment from Kentucky Department of Fish and Wildlife Resources (KDFWR) Stream and Wetland Mitigation Program (FILO) for the purchase 67.8 wetland AMUs in Jackson Purchase Service Area. Credits must be purchased prior to the discharge of fill material into "waters of the United States". Please note that the cost per credit is determined by KDFWR, in accordance with the requirements set forth in 33 CFR 332.8 and may increase or decrease. Inquiries regarding credit purchase may be made directly to KDFWR by calling Ms. Tricia Orme at (502) 892-4421, by email at: tricia.orme@ky.gov, or in writing at: Kentucky Department of Fish and Wildlife Resources, Division of Fisheries, #1 Sportsman's Lane, Frankfort, Kentucky, 40601. If the appropriate number and/or type of credits are not available from the FILO program, in the subject service area, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.	KYTC	Ongoing
SP-8	The Permittees shall provide to the Corps written proof of purchase, in the form of a receipt of payment, of 300 stream AMUs from the KYTC-Cotton Riley Mitigation Bank, LRN-2009-00287 within the Jackson Purchase Service Area. If the appropriate number or type of credits are not available from this mitigation bank, the permittees shall purchase 360 stream AMUs from the KDFWR FILO Program. The permittees must provide to the Corps proof of credit purchase prior to the discharge of fill material into "waters of the U.S." ILF credits shall not be purchased unless the KYTC- Cotton Riley Mitigation Bank does not have the appropriate number or type of credits available. If the appropriate number and/or type of credits are not available at the subject mitigation bank or ILF Program, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.	KYTC	Ongoing
SP-9	The Permittees shall provide to the Corps written proof of purchase, in the form of a receipt of payment, of 14.9 wetland AMUs from either the E.T. Simonds Wetland Mitigation Bank (MVS-2018-00535) or the Sugar Camp Creek Wetland Bank (MVS-2006-01061). The permittees must provide to the Corps proof of credit purchase prior to the discharge of fill material into "waters of the U.S." If the appropriate number and/or type of credits are not available at the subject mitigation bank, then a modification to the DA permit will be required to address the compensatory mitigation plan for unavoidable impacts to "waters of the United States" associated with this project.	IDOT	Ongoing
SP-10	The Permittees shall advise USACE in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.	KYTC	Ongoing
SP-11	The authorized work is required to be conducted within the Ohio River; therefore, notification shall be submitted to the Corps two weeks prior to the work start date. The permittees shall submit the enclosed "Notice to Navigation Interests (NTNI) Data Form" along with appropriate information to the contact listed on the form.	KYTC	Ongoing
SP-12	The Permittees shall comply with all conditions of the Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408) permission letters (Reference 408-MVM-2025-0014) dated February 24, 2026, issued by the Memphis District U.S. Army Corps of Engineers.	KYTC/Contractor	Ongoing

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No.	Commitment Description	Responsibility	Status
SP-13	The Permittees shall use only clean fill material for this project. The fill material shall be free from items such as trash, construction debris, metal and plastic products, and concrete block with exposed reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.	Contractor	Ongoing
SP-14	The Permittees shall fully implement all stipulations in the Memorandum of Agreement between the Permittees, the Kentucky State Historic Preservation Officer and the FHWA dated January 05, 2018.	KYTC	Ongoing
SP-15	.In the event 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 a recovery effort or if the site is eligible for listing in the National Register of Historic Places.	Contractor	Ongoing
SP-16	This permit does not authorize the interference with any existing or proposed Federal project, and the Permittees will not be entitled to compensation for damage or injury to the authorized structure or work which may be caused from existing or future operations undertaken by the United States in the public interest.	Contractor	Ongoing
SP-17	The authorized structure and associated activity shall not cause undue interference with navigation. Use of the permitted activity shall not interfere with the public's right to free navigation on all navigable waters of the United States.	Contractor	Ongoing
SP-18	Prior to any work or discharge of dredged and/or fill material into the Ohio River, a navigable water of the United States, the Permittees shall obtain a bridge permit from the United States Coast Guard (USCG) and provide this office with a digital copy within five (5) calendar days of receipt. The point of contact for the Eighth Coast Guard District is below: Mr. Eric Washburn USCG Bridge Administrator Western Rivers 1222 Spruce Street St. Louis, MO 63103-2832 Eric.Washburn@uscg.mil	KYTC	Ongoing
SP-19	The Permittees shall install and maintain, at their expense, any safety lights and signals prescribed by the USCG, Eighth District, through regulations or otherwise, on your authorized facilities. The USCG may be reached at the following telephone number (502) 779-5422 and address: Commanding Officer USCG Sector Ohio Valley (SOHV) Romano L. Mazzoli Federal Building, Room 4090 600 Dr. Martin Luther King, Jr. Place Louisville, Kentucky 40202-2230	Contractor	Ongoing
SP-20	The Permittees shall comply with any safety zones announced in weekly Local Notices to Mariners to temporarily limit access to authorized persons, vehicles, or vessels in the Ohio River, as determined and required by the USCG, Eighth District.	Contractor	Ongoing
SP-21	Within thirty (30) calendar days of completion, all final as-built drawings of the bridge required by the conditions of the Section 408 Federal Navigation Channel Coordination shall be submitted to the following address: U.S. Army Corps of Engineers, Technical Support Branch, Operations Division, c/o Mr. Shawn Kenney, PE, Chief, 220 West Main Street, KY, 40202, or by email at shawn.m.kenney@usace.army.mil.	Contractor	Ongoing
SP-22	All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, South Branch, c/o Crystal Byrd, Project Manager, 220 West Main Street, Louisville, KY, 40202, or by email at Crystal.D.Byrd@usace.army.mil. The Permittees shall reference the following permit number, LRL-2020-00054, on all submittals.	KYTC	Ongoing
SP-23	The Permittees shall comply with applicable Federal Emergency Management Agency (FEMA) floodplain management requirements.	Contractor	Ongoing

Wetlands

Submittal Date: 08/22/2019 **Sequence No:** 22657
District: 9 **Requesting Agency:** DOH **Project No:**
Contract #: **Job No.:**
Counties: Alexander
Route: FAP 2 **Marked:** US 51/60/62
Street: **Section:**
Municipality(ies): Cairo **Project Length:** **km** **miles**
FromTo (At): US 51 over Ohio River
Quadrangle: Cairo **Township-Range-Section:** T.17-18S - R.1W. - Section 3
Anticipated Design Approval: **Cleared for Design Approval:**
Cleared for Letting: **Mitigation:**

Wetland Impacts Evaluation

Submittal Date:	04/08/2025 **Submitted By:**
Does the project have wetland impacts?	Yes **Type:** Both
Briefly describe the measures considered to avoid and minimize adverse impacts to the wetlands:	Every effort was made to avoid the wetland for the borings. The access road butts against the river front on an existing road, and against US 51 to minimize tree removal. Most tree removal will be within the foot print of the new bridge.
Summarize briefly why there are no practicable alternatives to the use of the wetland(s):	Due to the desired placement of piers and the location of the new bridge, wetland impacts couldn't be avoided.
Wetland mitigation is being proposed:	accumulation ☐ **Reviewed**
Submittal Date:	05/14/2025 **Submitted By:**
Does the project have wetland impacts?	Yes **Type:** Both
Briefly describe the measures considered to avoid and minimize adverse impacts to the wetlands:	Alternatives in design and location were considered for the minimization of wetland impacts.
Summarize briefly why there are no practicable alternatives to the use of the wetland(s):	Because the nature and location of this project being the replacement of a bi-state bridge crossing a major river in a low area, the impact to wetlands was unavoidable without replacing the aging structure.
Wetland mitigation is being proposed:	unknown ☐ **Reviewed**

Memo Date:	08/05/2025 **Memo By:** Jake Vancil
Memo:	Total permanent wetland impacts are 2.783 for the total project area including geoborings. Wetland mitigation for the geoborings of 0.073 acres will be done under accumulation. The remainder permanent wetland impacts of 2.71 acres of mitigation will be purchased from Raccoon Creek wetland bank by the district. There are 0.246 acres of temporary wetland impacts that do not require mitigation.
Memo Date:	07/30/2025 **Memo By:** Christa Mahnken
Memo:	Permanent impacts for the whole project outside of the geoborings have been reduced to 2.71 acres and is shown on the WIE tab under 1wp. Wetland mitigation site is still unknown at this time.
Memo Date:	05/22/2025 **Memo By:** Jake Vancil
Memo:	Total permanent wetland impacts are 4.7088 for the total project area. Wetland mitigation for the geoborings of 0.0729 acres will be done under accumulation. The remainder permanent wetland impacts of 4.6359 acres of mitigation will be the responsibility of the district to determine mitigation.
Memo Date:	05/14/2025 **Memo By:** Christa Mahnken
Memo:	The impacts for the project as a whole have been entered under site '1WP' to show distinction from the impacts from the geo borings. Permanent impacts for this project are 4.39 acres. There will be tree removal, and both fill and excavation for the bridge piers within the wetland. Wetland mitigation site is unknown at this time.

Memo Date:	04/10/2025	**Memo By:**	Jake Vancil
Memo:	This WIE is accepted in our office. There will be 0.2459 acres of temporary impact. There will be permanent impact of 0.0729 acres. Mitigation will occur in the form of accumulation of a 2:1 ratio. This project is cleared for construction with respect to wetlands under IWPA.		
Memo Date:	04/08/2025	**Memo By:**	Christa Mahnken
Memo:	Geotech Boring Impacts: A geotech survey must be completed which will require tree removal and minor disturbance within the weltand. The access road to the borings along the river front is an existing road with no tree clearing necessary. Mostly just mowing high grasses. The access road along US 51 will also only require mowing of tall grasses. This will be 0.2459 ac. of temporary impact. Tree removal for temporary impacts will be minimal or not occur at all at these access road locations. The USACE will require replcaement trees be planted to return the site to "pre-drilling conditions." The permanent impact of 0.0729 ac. is due to the actual geotech drilling activity being completed, and tree removal within the foot print of the bridge..		

Wetland Impacts and Mitigation Required

Site No.	Type	T&E	Nature Preserve	Natural Area	Essential Habitat	Size (acres)	Acres of Impact	Ratio	Acres of Compensation
1	Forested	No	No	No	No	45.70	.073		
Basin	05140206	**Quadrangle**	Wyatt			**FQI**	9.2		
Describe the work:	Vegetation Removal								
1wp	Forested	No	No	No	No	45.7	2.710		
Basin	05140206	**Quadrangle**	Wyanet			**FQI**	9.2		
Describe the work:	Vegetation Removal								
1T	Forested	No	No	No	No	45.7	.246		
Basin	05140206	**Quadrangle**	Wyatt			**FQI**	9.2		
Describe the work:	Vegetation Removal								
						Total	3.029		

Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us
JB Pritzker, Governor
Natalie Phelps Finnie, Director

June 12, 2025

Jake Vancil
Illinois Department of Transportation - CO
2300 S. Dirksen Pkwy, Room 330
Springfield, IL 62764

RE: IDOT - 22657 - Update
Project Number(s): 2513737 [2005513]
County: Alexander

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

Additionally, the Department concurs with the commitments and conclusions provided by IDOT, and has determined adverse impacts to the protected resources are unlikely.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Grant Gebhards

Grant Gebhards
Division of Ecosystems and Environment
217-785-5500

Project Overview

Submittal Date: 08/22/2019 **Sequence No:** 22657
District: 9 **Requesting Agency:** DOH **Project Identifier:**
Contract #: **Job No.:**
Counties: Alexander
Route: FAP 2 **Marked:** US 51/60/62
Street: **Section:**
Municipality(ies): Cairo **Project Length:** km miles
FromTo (At): US 51 over Ohio River
Quadrangle: Cairo **Township-Range-Section:** T.17-18S - R.1W. - Section 3
Survey Target Date: **Anticipated Design Appr.:** **Anticipated Processing:** CE
Funding: ☑ Federal ☑ State ☐ TBP ☐ MFT ☐ Local Non-MFT

Consultant:
PTB No.: **Item No.:** **PTB Date:** **Prequal Level:**

Sequence No: 22657

	Biological	Wetlands	Cultural	Special Waste
Entered By	BDE	BDE	BDE	BDE
Cleared for DA			7/18/2023	3/24/2025
Cleared for Letting			7/18/2023	
Resubmittal				
ResubmittalCleared				

Section: **Job No.:**
FromTo (At): US 51 over Ohio River

Notice of Intent	Project Initiation Ltr to FHWA	Public Info Meeting(s)		Notice of Availability		Public Hearing	Draft	ROD/FONSI Approved
		1st	2nd	Draft	Final			

Project Phase Comments:


Levee Rd
500'
Ohio River Scenic Byway
KENTUCKY
ILLINOIS
Ohio River
Cairo Ohio River Bridge
U.S. Hwy 62
Ohio River Scenic Byway
500'
KENTUCKY
ILLINOIS
Point
© 2020 Google
Ohio River Scenic Byway
51
Parking Lot
500'
Fort Defiance Rd
ESR LIMITS
LEVEE ROAD TO FORT DEFIANCE ROAD,
500-FT WEST OF CENTERLINE OF U.S. ROUTE 51,
BANK OF OHIO RIVER

Illinois Department of Transportation

Memorandum

To:	Kirk Brown	Attn: Carrie L. Nelson
From:	Jack A. Elston	By: Shawn Wilcockson
Subject:	Natural Resources Review	Shawn Wilcockson
Date:	August 5, 2025	

Route – FAP 2
Marked - US 51/60/62
Location - T.17-18S - R.1W. - Section 3
County - Alexander
Sequence # - 22657 – Total Project

The proposed project involves replacement of the Ohio River Bridge. The new bridge will be on a new alignment and the demolition of the existing bridge will be set for a later date. Kentucky is the lead agency for this project.

There will not be any new land acquisition. Temporary access to the pier and geo-boring sites will be granted from the park service. There will be in-stream work within the Ohio River. There will be 9.85 acres of tree removal. Land cover in the vicinity of the proposed improvement within Illinois boundaries is primarily forested.

Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location within the Illinois boundary.

A Threatened/Endangered Species and Natural Communities of Special Interest survey was conducted on April 3, 2025, within the project limits on the Illinois side of the project boundary. No species listed as threatened or endangered in Illinois were found during our wetland survey within the project corridor. The wetland (Site 1) had a C value of 2.2, which does not meet the threshold for natural communities of special interest.

A mussel survey was conducted by Mainstream Commercial Divers, Inc. in December 2024. Results of the survey concluded the presence of common mussel species and no record of state-listed threatened or endangered species.

Therefore, we determine no effect to T&E mussel species within the proposed project limits. A copy of the survey can be found within the project folder.

An EcoCAT (2513737) was submitted to IDNR on 5/29/2025 for the preferred alternative with the newest project limits. The response from IDNR indicated they evaluated the resources that may be in the vicinity of the proposed project area. IDNR concluded that adverse effects are unlikely within the proposed project limits. Additionally, Dusty Swedberg with INHS was consulted on the presence/habitat suitability of the Pallid Sturgeon within the proposed project limits. Based on their review, there has been no evidence of Pallid Sturgeon in the Ohio River, likely due to locks and dams that reduce availability of free-flowing water. Therefore, we determine no effect to the species within the proposed project limits. **Therefore, consultation under Part 1075 is terminated**.

This review for compliance with 17 Ill. Adm. Code Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed improvement is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the proposed improvement has not been implemented within two years of the date of this memorandum, or any of the above listed conditions develop, a new review will be necessary.

Review for Illinois Interagency Wetland Policy Act – Part 1090

The National Wetlands Inventory shows wetlands in the vicinity of the project location. A survey for wetlands was completed and submitted on April 3, 2025 by HMB Professional Engineers, LLC within the Environmental Survey Request limits for the proposed improvements. All potential sites were examined and one site was determined to be wetlands. The Wetland Delineation Report and spatial information (ArcGIS shapefile) are saved in the project folder.

WIE Memo 2 response for mitigation - A WIE is submitted to this office on 05/14/2025. It was processed as a programmatic action. Total permanent wetland impacts are 2.783 acres for the total project area. Wetland mitigation for the geo borings of 0.073 acres will be done under accumulation. The remainder permanent wetland impacts of 2.71 acres of mitigation will be purchased from Raccoon Creek wetland bank by the district. There are 0.246 acres of temporary wetland impacts that do not require mitigation.

Therefore, the wetland review under Part 1090 is cleared for construction with respect to wetlands.

Review for Endangered Species Act - Section 7

All coordination regarding the Endangered Species Act under Section 7 with USFWS will be done through Kentucky, as they are the lead on the proposed project.

USFWS TREE Mitigation

- **Coordination with the USFWS has been conducted and it has been determined that 5.85 acres of tree mitigation shall be required based on a 1:1 ratio through District 9's Intergovernmental Agreement with IDNR.**

Tree species suitable for bats shall be planted. The Local Agency may choose to accomplish tree mitigation by the following:

- **Planting trees at a local municipality park(s)**
- **Planting trees on local conservation property (state, federal, other)**
- **Set up an Intergovernmental Agreement with IDNR Division of Forestry to have trees planted on IDNR property**
- **USFWS In Lieu Fee program for Bats**

If using the USFWS range-wide in lieu fee program sponsored by The Conservation Fund, the transportation agency shall send notification to the Program Coordinator, Lauri Lindquist (269-426-8825) via IbatILFCoordinator@conservationfund.org, as well as to the local Service Field Office in order to begin the mitigation process.

Should the project require temporary or permanent lighting, all lighting shall be installed in accordance with Federal Highway Administration Guide for bats which recommends that lighting does not increase illumination above ambient conditions and that incorporates full cut off, downward facing lights directed away from forested areas.

Should the proposed improvement be modified, or new information indicate listed or proposed species may be affected, consultation or additional coordination should be initiated.

JV

Sequence #:22657
Preferred Alternative

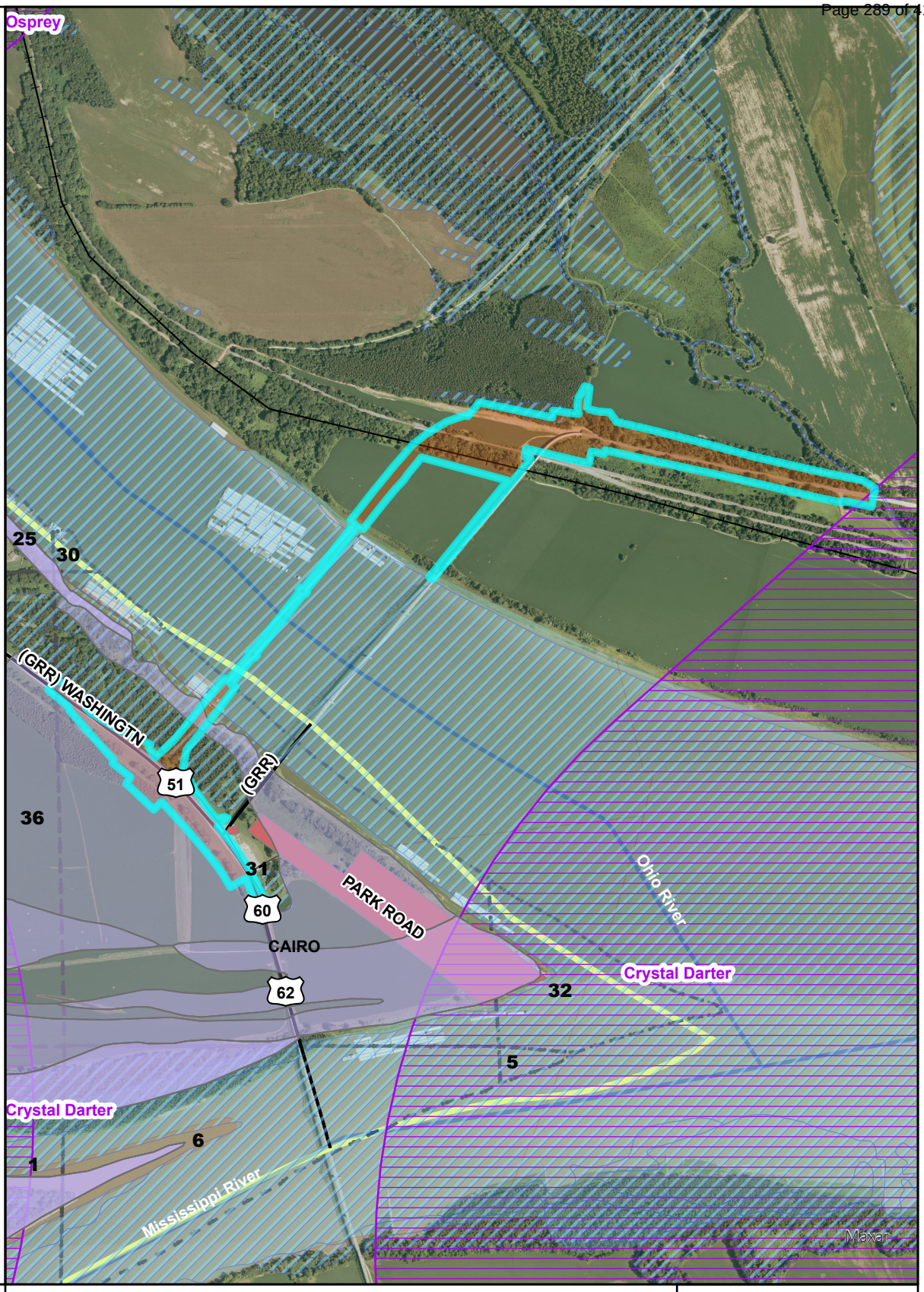
US 51 Bridge
Cairo KYTC

Resource in Vicinity of Project
*T&E
*National Wetlands Inventory
*Hydric Soils

INAI & NP within 1 mile
*none found

No Resource Found
*Nature Preserve
*INAI
*INHS Wetlands
*Roadside Prairie Inventory
*RPBB HPZ
*National Rivers Inventory
*0.5 Mile Bat Hibernacula

County:
Section (PLSS):
Area:
0.13038 square miles
83.44532 acres



Nature Preserve
Hydric Soils
INAI
T&E
0.5 Mile Bat Hibernacula
National Wetlands Inventory
INHS Wetlands
Roadside Prairie Inventory
National Rivers Inventory
RPBB HPZ

Transportation Review for Ecological Compliance
Report of Possible Resource Conflicts

0 0.13 0.25 0.5 0.75 1 Miles

N

Source:
Illinois Natural Heritage Database

Created by: Jake Vancil

Printed 2/20/2025 12:57:24 PM

Illinois Department of Natural Resources
JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

April 10, 2026

SUBJECT: Permit No. DS2026031
Project Title: US 51 Ohio River Bridge Replacement (Cairo, IL to Wicliffe, KY)
Ohio River and Mississippi River, Alexander County
(Approximately 36.99045 °, -89.15411 °)

Attn: Carrie Nelsen
Illinois Department of Transportation
2801 Murphysboro Road
Carbondale, Illinois 62901

Attn: Andrew Logsdon
Kentucky Transportation Cabinet
200 Mero Street
Frankfort, Kentucky 40601

Dear Carrie Nelsen and Andrew Logsdon:

Enclosed is the Illinois Department of Natural Resources, Office of Water Resources Permit No. DS2026031 authorizing the subject project. This approval is based on the determination that the project complies with the rules for Construction in Floodways of Rivers, Lakes, and Streams (17 IAC Ch. I, Sec. 3700), Regulation of Public Waters (17 IAC Ch. I, Sec. 3704), and Floodplain Development Requirements for State Owned Properties (17 IAC Ch. I, Sec. 3710). In addition to the general conditions of the permit, this approval is subject to the following special conditions:

a) All temporary construction must be removed by the date in General Condition (13).

b) Plans must be submitted for review, and any necessary authorization must be obtained from Illinois Department of Natural Resources, Office of Water Resources once additional information is available regarding the demolition of the existing bridge and any related closures of the river or if any additional temporary construction is required in the river and in Illinois.

This permit does not supersede any other federal, state, or local authorizations that may be required for the project.

If any changes of the permitted work are found necessary, revised plans should be submitted promptly to this office for review and approval. Also, this permit expires on the date indicated in Condition (13). If unable to complete the work by that date, the permittee may make a written request for a time extension.

Upon receipt and review of this permit and all its conditions, please properly execute and return the attached acceptance blank within sixty (60) days from the date of the permit. Please feel free to contact Jesse Tinch of my staff at 217/782-4545 if you have any questions concerning this authorization.

Sincerely,

William B. Milner Jr, P.E., CFM
Section Chief, Downstate Regulatory Programs

WBM: JT: EW

Enclosure

cc: USACE, Louisville District (Newburgh Regulatory Office)
Michael Baker International (Brooke Vorbeck)
Michael Baker International (Anna C Klenke)
Illinois Department of Transportation (Ehren Kirby) via email
Illinois Department of Transportation (Neil VanBebber) via email
IDNR, NFIP Coordinator (Erin Conley)

PERMIT NO. DS2026031
DATE: April 10, 2026

State of Illinois
Department of Natural Resources, Office of Water Resources

Permission is hereby granted to:

ILLINOIS DEPARTMENT OF TRANSPORTATION
2801 MURPHYSBORO ROAD
CARBONDALE, ILLINOIS 62901

&

KENTUCKY TRANSPORTATION CABINET
200 MERO STREET
FRANKFORT, KENTUCKY 40601

to construct roadway embankment, a new bridge crossing of the Ohio River, and a temporary trestle within or adjacent to the reach of the Ohio River approximately between river miles 979.7 and 980.7 in Alexander County, Illinois,

in accordance with an application dated September 15, 2025, and the plans and specifications entitled:

UNIT 1 – ELEVATION (One sheet, Plot date 11/25/2025);
SITE PLAN (One sheet, Plot date 8/29/2025);
UNIT 1 – LONG SPANS – PIER DETAILS (One sheet, Plot date 28-MAR-2023);
ILLINOIS TRESTLE LAYOUT (Sheet No. 05, Plot date "$$$$DATE$$$$", Submitted on 9/19/2025);
US 51 BRIDGE REPLACMENT – ILLINOIS (One sheet, undated, submitted 9/19/2025 in a section entitled "Preliminary Roadway Plans" within Appendix E); and
[Cross sections with titles including Stations 997+50.00 through 1028+50.00]
(32 sheets, undated, submitted 9/19/2025 in a section entitled "Preliminary Roadway Plans" within Appendix E).

Examined and Recommended:

William B. Milner Jr, Section Chief
Downstate Regulatory Programs

Approval Recommended:

Rick Pohlman, Acting Director
Office of Water Resources

Approved:

Natalie Finnie, Director
Department of Natural Resources

This PERMIT is subject to the terms and special conditions contained herein

PERMIT NO. DS2026031

THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

1) This permit is granted in accordance with the Rivers, Lakes, and Streams Act "615 ILCS 5."

2) This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.

3) This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit; and does not authorize any injury to private property or invasion of private rights.

4) This permit does not relieve the permittee of the responsibility to obtain other federal, state, or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or other state agency to do the work, this permit is not effective until the federal and state approvals are obtained. If construction does not begin within two years of the date of this permit, the permittee must submit the project to EcoCAT (https://dnr2.illinois.gov/EcoPublic/) for an updated consultation under the Illinois Endangered Species Protection Act and the Illinois Natural Areas Preservation Act.

5) The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.

6) In public waters, if future need for public navigation or other public interest by the state or federal government necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or the permittee's successors as required by the Department or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.

7) The execution and details of the work authorized shall be subject to the review and approval of the Department. Department personnel shall have the right of access to accomplish this purpose.

8) Starting work on the activity authorized will be considered full acceptance by the permittee of the terms and conditions of the permit.

9) The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.

10) In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.

11) In issuing this permit, the Department does not ensure the adequacy of the design or structural strength of the structure or improvement.

12) Noncompliance with the conditions of this permit will be considered grounds for revocation.

13) If the construction activity permitted is not completed on or before December 31, 2032, this permit shall cease and be null and void.

THIS PERMIT IS SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS:

a) All temporary construction must be removed by the date in General Condition (13).

b) Plans must be submitted for review and any necessary authorization must be obtained from Illinois Department of Natural Resources, Office of Water Resources once additional information is available regarding the demolition of the existing bridge and any related closures of the river or if any additional temporary construction is required in the river and in Illinois.

Attention: Central Office BD&E
Environment Section
Room 330

Environmental Survey Request

A. Project Information

☑ Bio ☑ Cultural ☑ Wetlands ☑ Special Waste

Submittal Date: 08/22/2019 **Sequence No:** 22657
District: 9 **Requesting Agency:** DOH **Project No:**
Contract #: **Job No.:**
Counties: Alexander
Route: FAP 2 **Marked:** US 51/60/62
Street: **Section:**
Municipality(ies): Cairo **Project Length:** km miles
FromTo (At): US 51 over Ohio River
Quadrangle: Cairo **Township-Range-Section:** T.17-18S - R.1W. - Section 3
Survey Completion Target Date **Anticipated Design Approval:** **Anticipated NEPA Processing:** CE

B. Reason for Submittal: (Check all that apply) ; includes SW Level 1 Screening Criteriea

Survey Types: B = Biological; C = Cultural; SW = Special Waste

B,C,SW ☐ **Involves Acquisition of additional ROW or temporary or permanent easements.** ha/ acres
SW ☐ **On a state-maintained route, crosses or involves RR ROW (except a single rail rural ROW with no maintenance facilities).**
B,C ☐ **Requires In-Stream work (e.g., drainage structure runaround).** **Stream Name:**
C ☐ **Potential to affect a historic district or historic property.**
C ☐ **Involves replacement or rehabilitation of a bridge/culvert 40 years old or older.**
SW ☐ **Involves acquisition of, excavation (defined in BDE Manual 27-3.01) on, or subsurface utility relocation on State ROW.**

☑ **Other:** Ohio River Bridge replacement with KYTC as the lead agency. KYTC is performing all environmental surveys in coordination with IDOT.

C. Project Description:

Ohio River Bridge replacement. Kentucky is the lead agency and owner of the bridge. NEPA processing will be Categorical Exclusion.

Proposed Work: ☑ Roadway ☑ Bridge ☐ Railroad ☐ Airport ☐ Other

Tree Removal?: Don't Know **Number?:** 0 ha/ acres

Existing Bridge(s) Structure Number: 002-0006 **On Historic Bridge List:** Yes

Historic District Involved? No **Historic Buildings Involved?** Don't Know
Section 4(f) Lands Involved? Don't Know **Section 6(f) Lands Involved?** Don't Know
Wetland delineation performed by: Consultant **End. Species Consultation performed by:** Consultant

D. Funding:

☑ Federal ☑ State ☐ TBP ☐ MFT ☐ Local Non-MFT Other
☑ 404 Permit Required

E.

District Contact: Charles Stein
Telephone #: (618) 351-5210 ext.
Env.Contact: Julie Klamm
Telephone #: 6183515286

Local Contact:
Telephone #:
E-Mail:
Title/Company:

☐ Closed ☐ PSI/RMP Only ☑ ESR Rec'd in CO 01/09/2020 ☑ SW Rec'd 01/09/2020

Sequence No: **22657**

Memo Date:	09/26/2024	**Memo By:**	Jolene Stephens
Memo:	Validation of COV PESA needed. ISGS should only survey portions in project that fall in IL. Desired target date: 03/28/2025		
Memo Date:	01/28/2020	**Memo By:**	Josh Venaas
Memo:	IDOT will complete a PESA on the portions of the project which fall in Illinois. Desired PESA completion date 07/28/2020.		
Memo Date:	08/22/2019	**Memo By:**	Julie Klamm
Memo:	KYTC is the lead agency for this border bridge replacement and will be conducting all environmental surveys and Phase I coordination for both sides of the river. This PMA record has been created to establish a folder for all survey results and reports to be assigned to. There is no IDOT contract number or job number assigned to the project.		

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-AGL-8352-OE

Issued Date: 06/08/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Alexander, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-1	36-59-27.93N	89-9-12.68W	305 Ft	235 Ft	540 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-AGL-8352-OE

Signature Control No: 707451669-708689627 (TMP)
Tim Waychoff
Specialist

Additional Condition(s) or Information for ASN 2026-AGL-8352-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 540 feet above mean sea level.

Location: The structure will be located 5.41 nautical miles southeast of CIR Airport reference point.

Case Description for ASN 2026-AGL-8352-OE

This project is an advanced letting for a load test program that involves temporary construction work with cranes.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

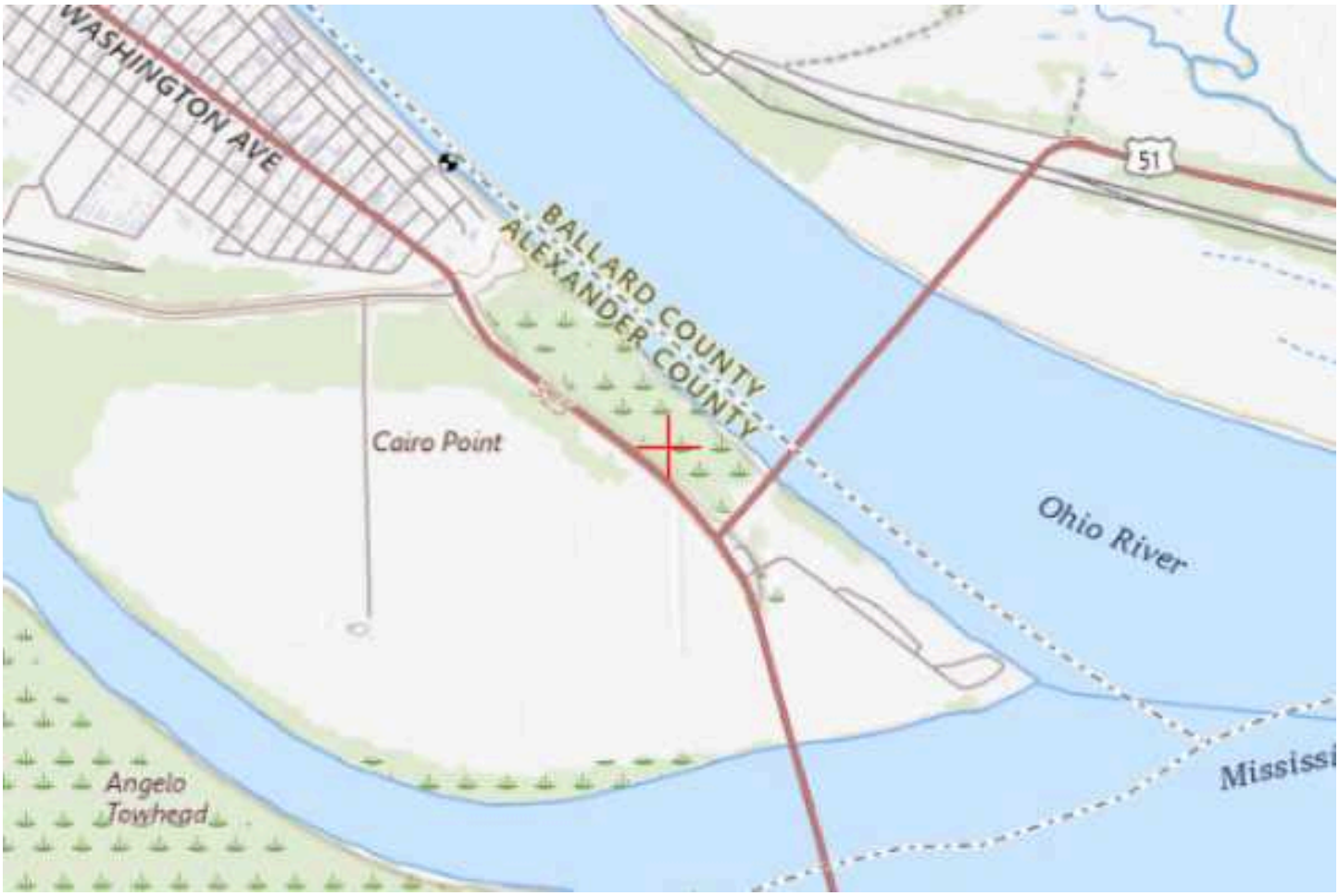
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

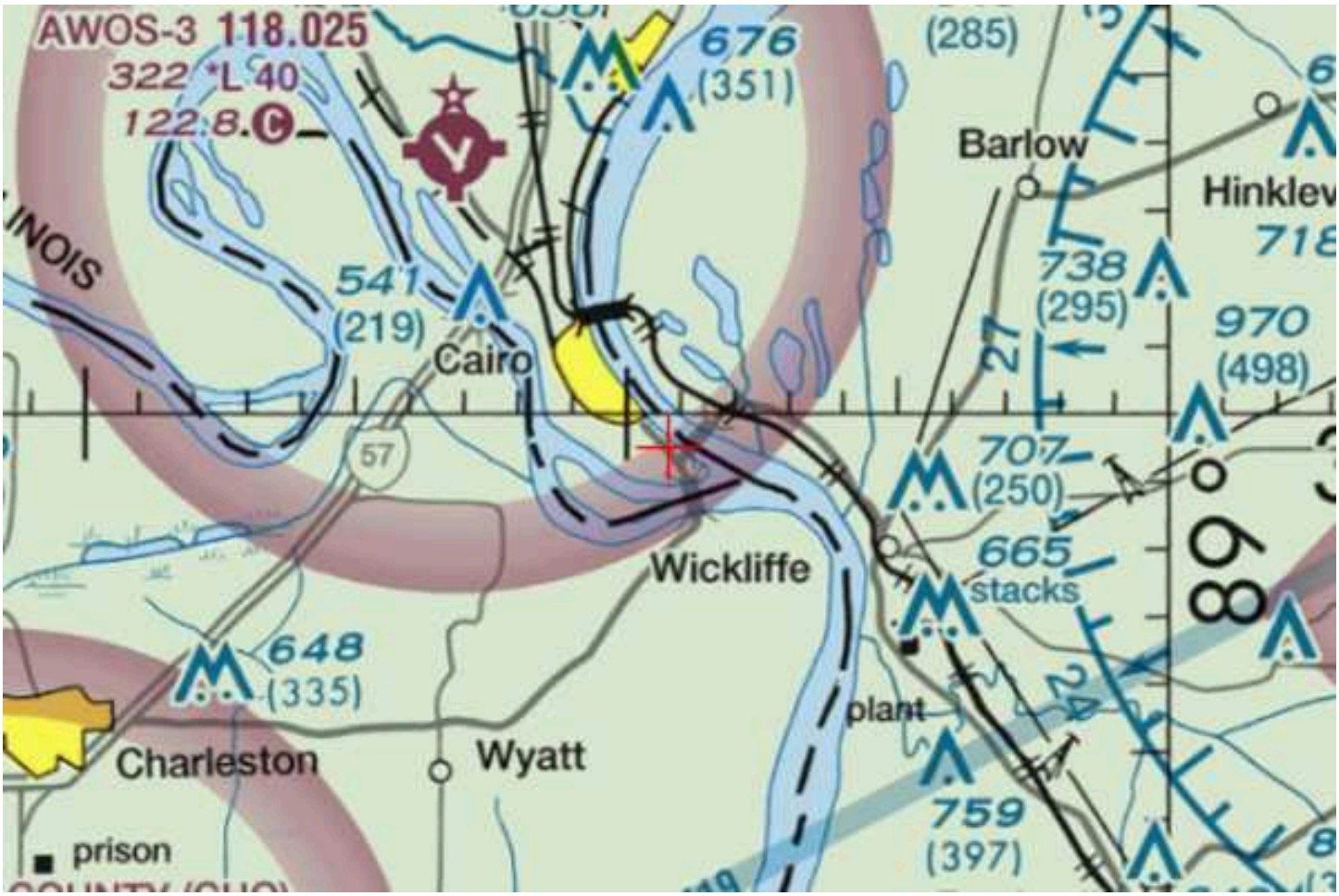
This determination expires on 12/08/2027 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-AGL-8352-OE



Sectional Map for ASN 2026-AGL-8352-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-AGL-8351-OE

Issued Date: 06/08/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Alexander, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-2	36-59-30.79N	89-9-09.84W	312 Ft	235 Ft	547 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

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This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

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If you have any questions, please contact our office at 1-817-222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-AGL-8351-OE

Signature Control No: 707451385-708689629 (TMP)
Tim Waychoff
Specialist

Additional Condition(s) or Information for ASN 2026-AGL-8351-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 547 feet above mean sea level.

Location: The structure will be located 5.39 nautical miles southeast of CIR Airport reference point.

Case Description for ASN 2026-AGL-8351-OE

This project is an advanced letting for a load test program that involves temporary construction work with cranes.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

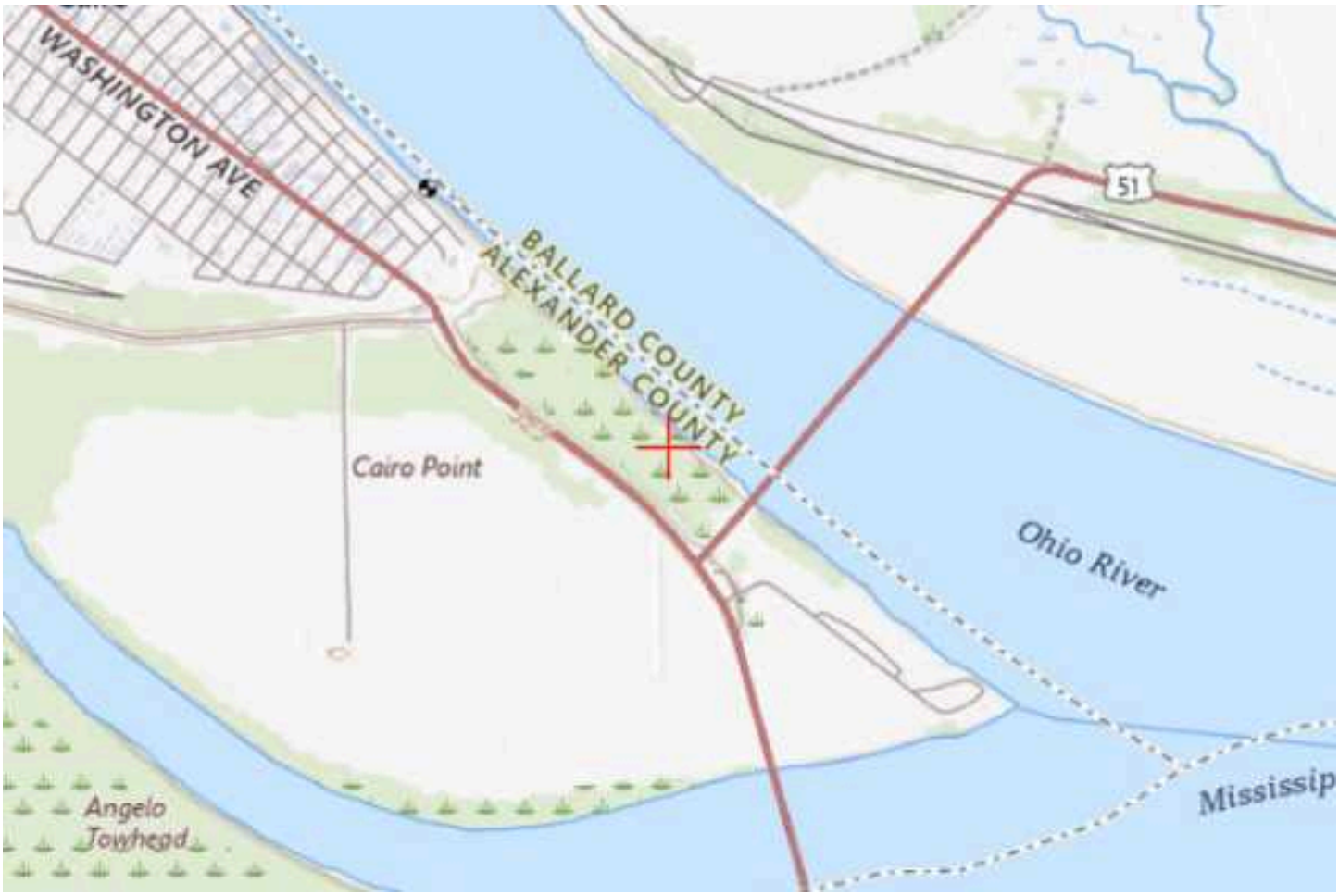
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

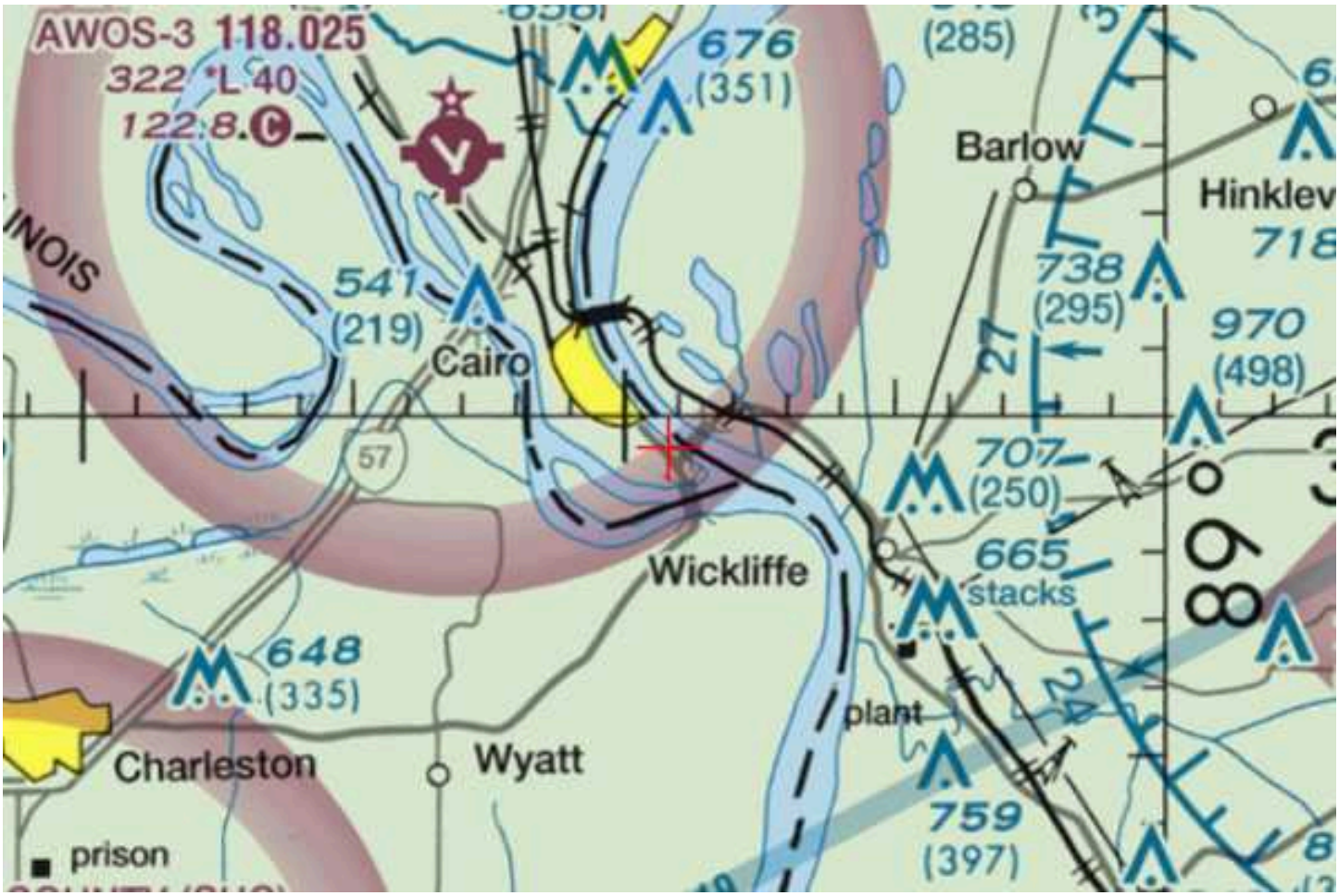
This determination expires on 12/08/2027 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-AGL-8351-OE



Sectional Map for ASN 2026-AGL-8351-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-AGL-8350-OE

Issued Date: 06/08/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Alexander, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-3	36-59-26.95N	89-9-11.01W	305 Ft	235 Ft	540 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-AGL-8350-OE

Signature Control No: 707449787-708689628 (TMP)
Tim Waychoff
Specialist

Additional Condition(s) or Information for ASN 2026-AGL-8350-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 540 feet above mean sea level.

Location: The structure will be located 5.43 nautical miles southeast of CIR Airport reference point.

Case Description for ASN 2026-AGL-8350-OE

This project is an advanced letting for a load test program that involves temporary construction work with cranes.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

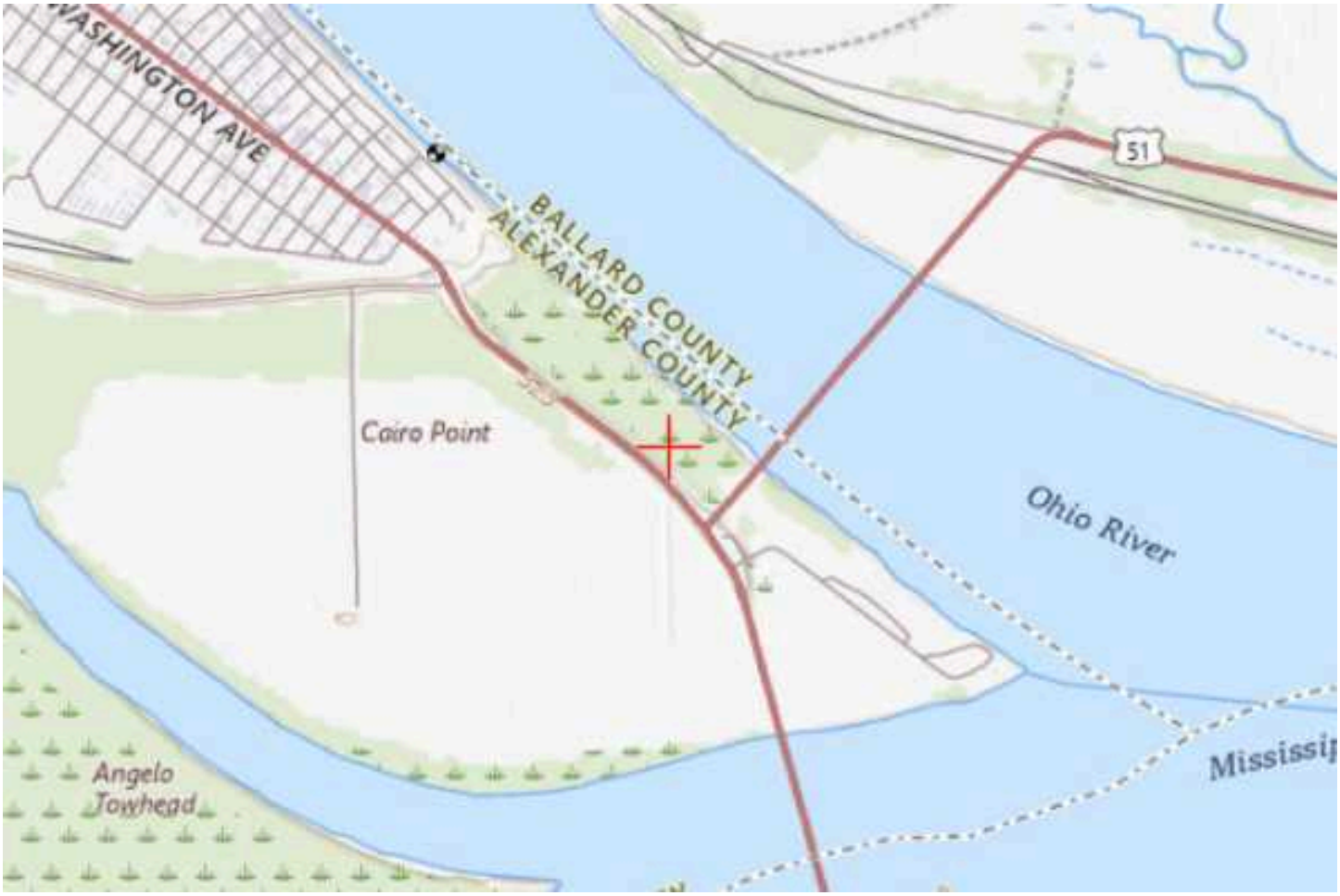
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

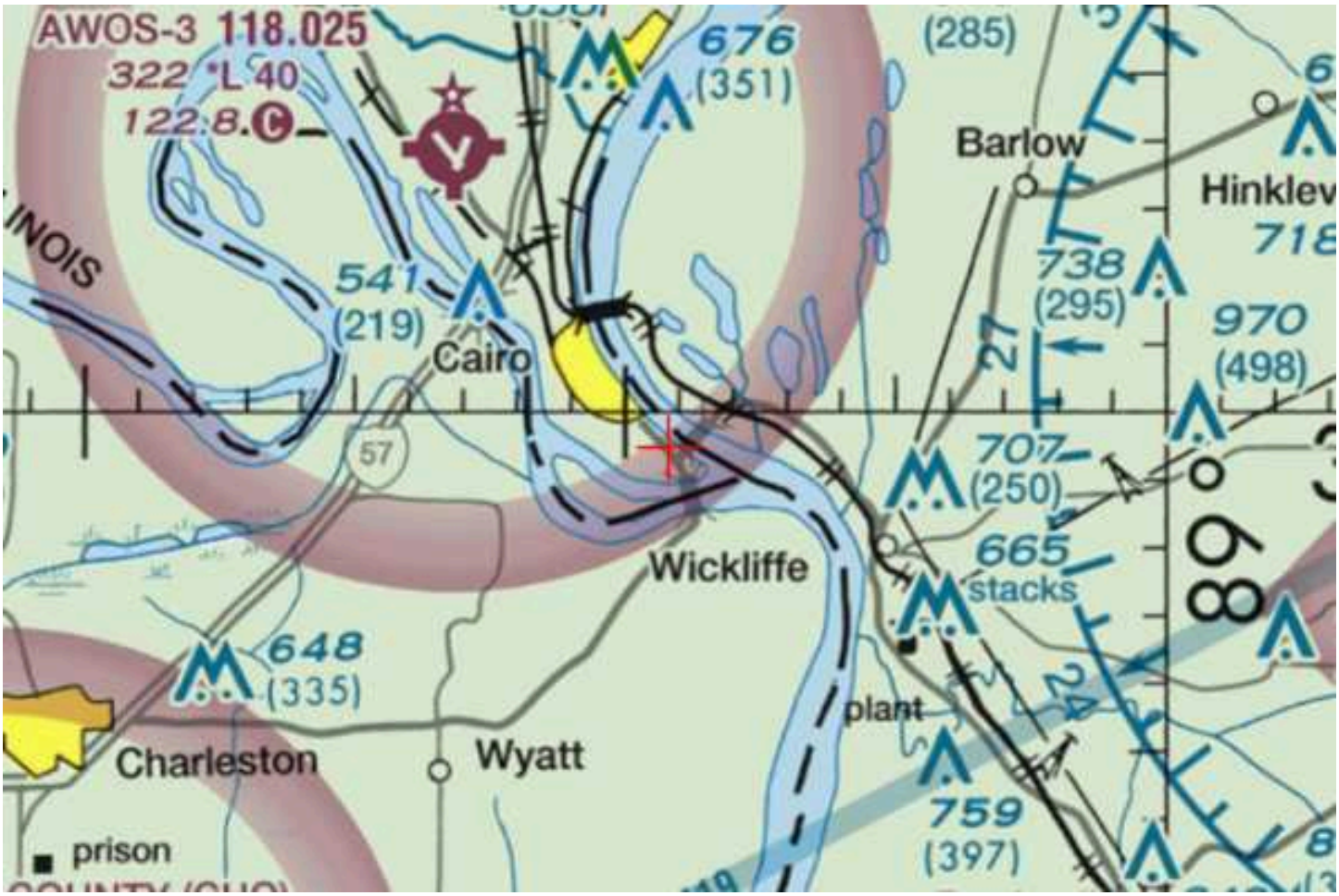
This determination expires on 12/08/2027 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-AGL-8350-OE



Sectional Map for ASN 2026-AGL-8350-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-AGL-8349-OE

Issued Date: 06/08/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Barge Crane Load test program for advanced letting
County, State:	Alexander, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
pt-1	36-59-29.57N	89-9-08.32W	308 Ft	235 Ft	543 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5954, or timothy.m.waychoff@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-AGL-8349-OE

Signature Control No: 707449590-708689626 (TMP)
Tim Waychoff
Specialist

Additional Condition(s) or Information for ASN 2026-AGL-8349-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 543 feet above mean sea level.

Location: The structure will be located 5.42 nautical miles southeast of CIR Airport reference point.

Case Description for ASN 2026-AGL-8349-OE

This project is an advanced letting for a load test program that involves temporary construction work with cranes.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

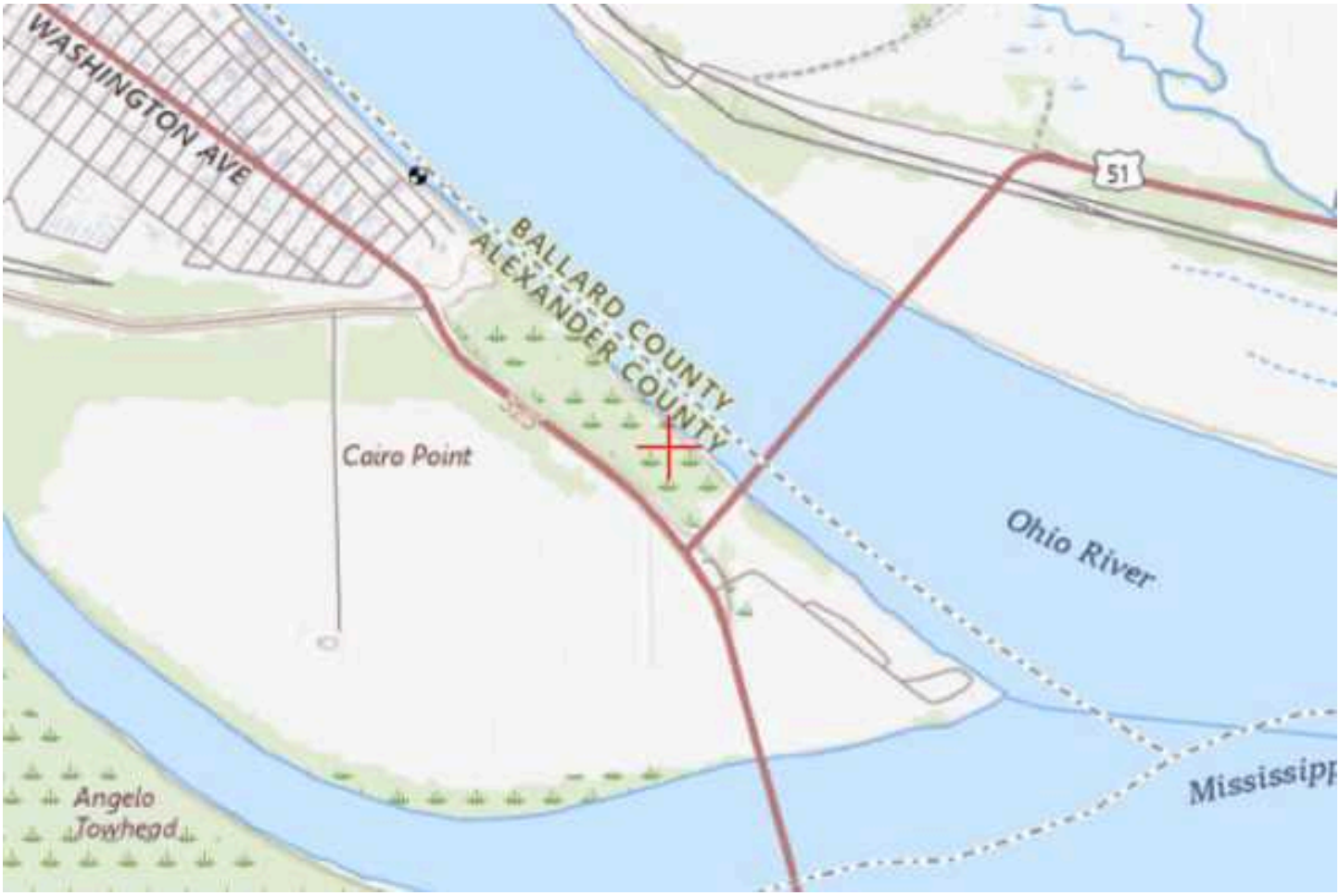
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

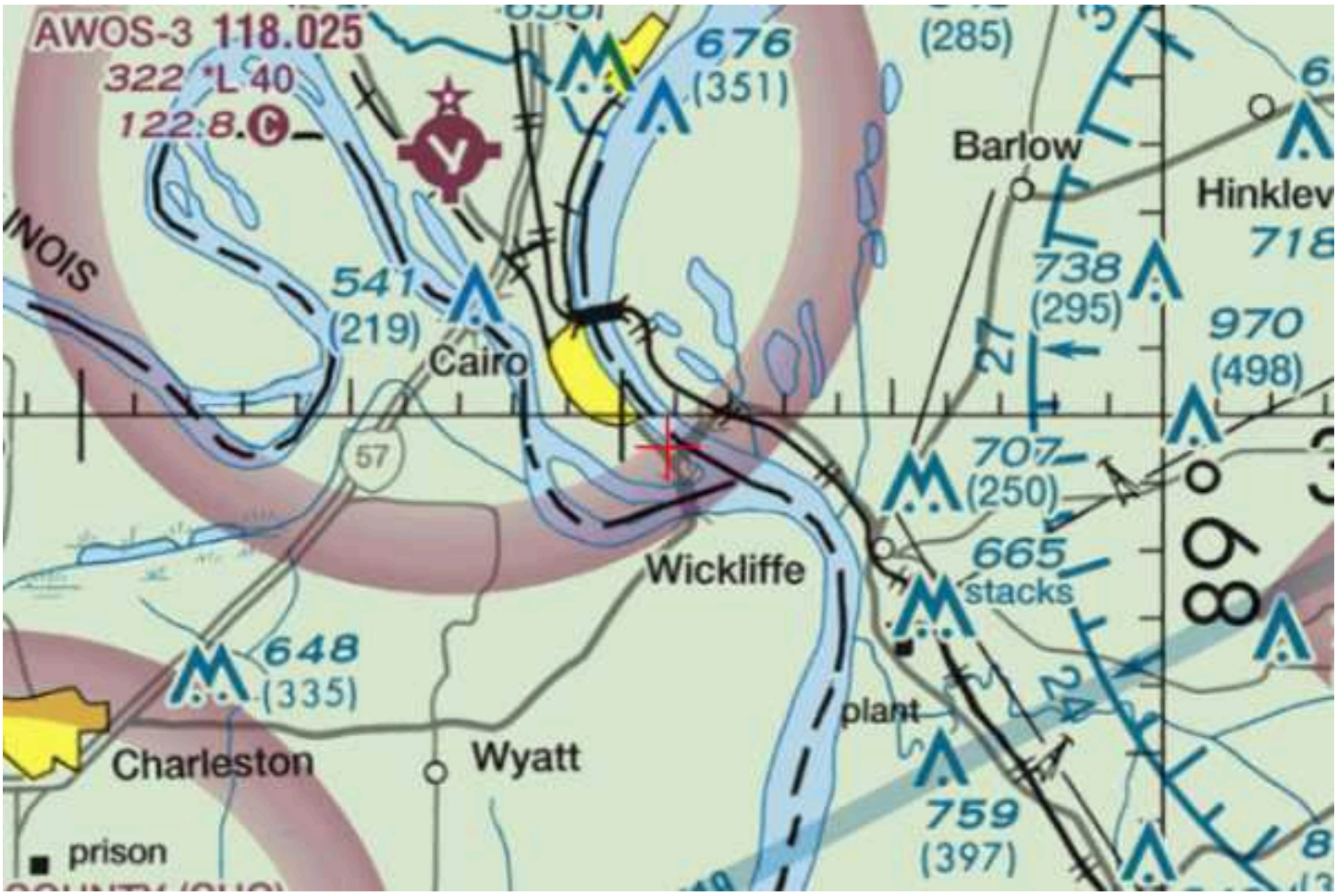
This determination expires on 12/08/2027 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-AGL-8349-OE



Sectional Map for ASN 2026-AGL-8349-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10995-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Barge Crane Load test program for advanced letting
County, State:	Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-5	36-59-44.93N	89-8-55.47W	294 Ft	235 Ft	529 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10995-OE

Signature Control No: 707448830-708278072 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10995-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 529 feet above mean sea level.

Location: The structure will be located 5.32 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

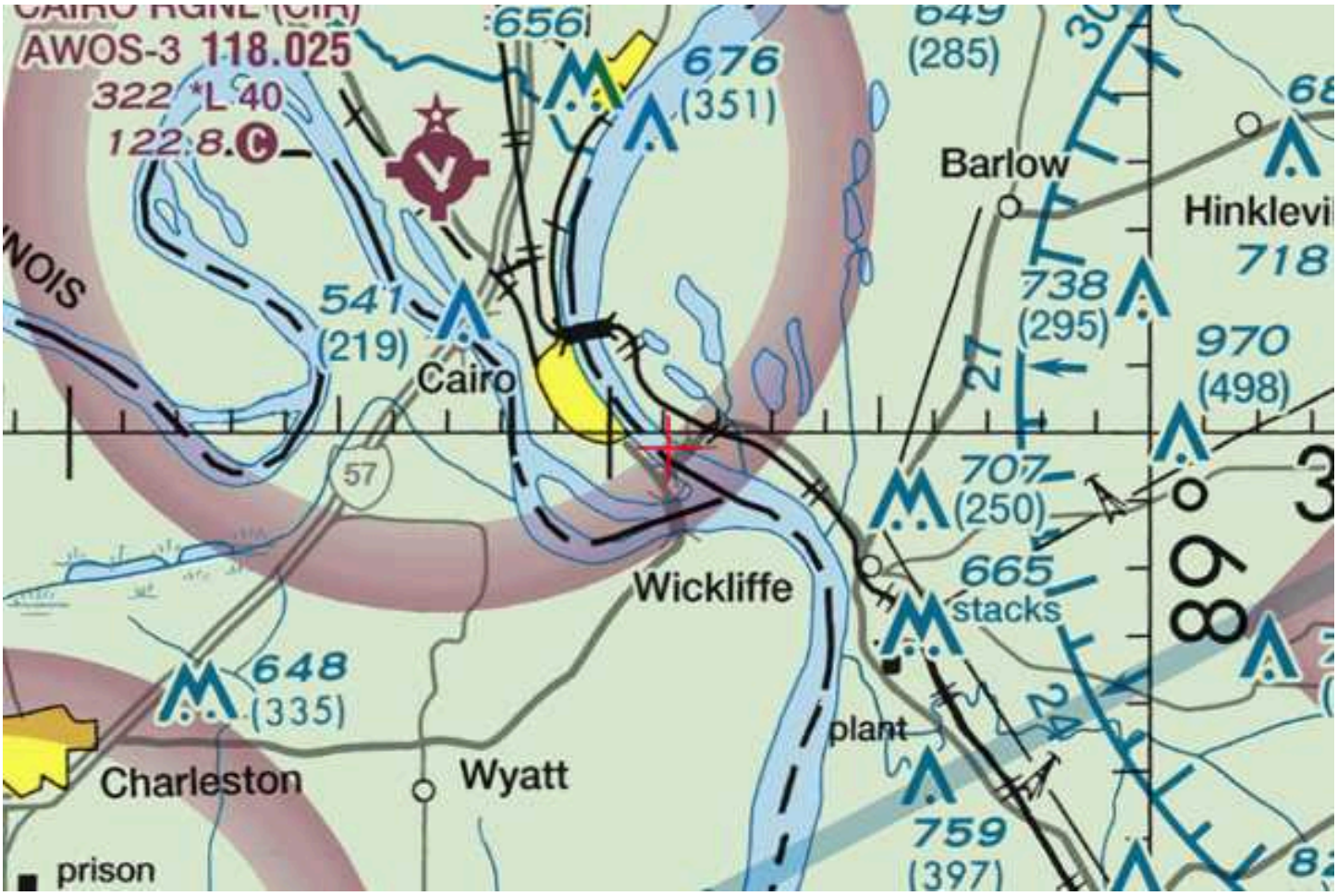
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10995-OE



Sectional Map for ASN 2026-ASO-10995-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10993-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-6	36-59-47.75N	89-8-52.52W	294 Ft	235 Ft	529 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10993-OE

Signature Control No: 707447613-708278073 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10993-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 529 feet above mean sea level.

Location: The structure will be located 5.31 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

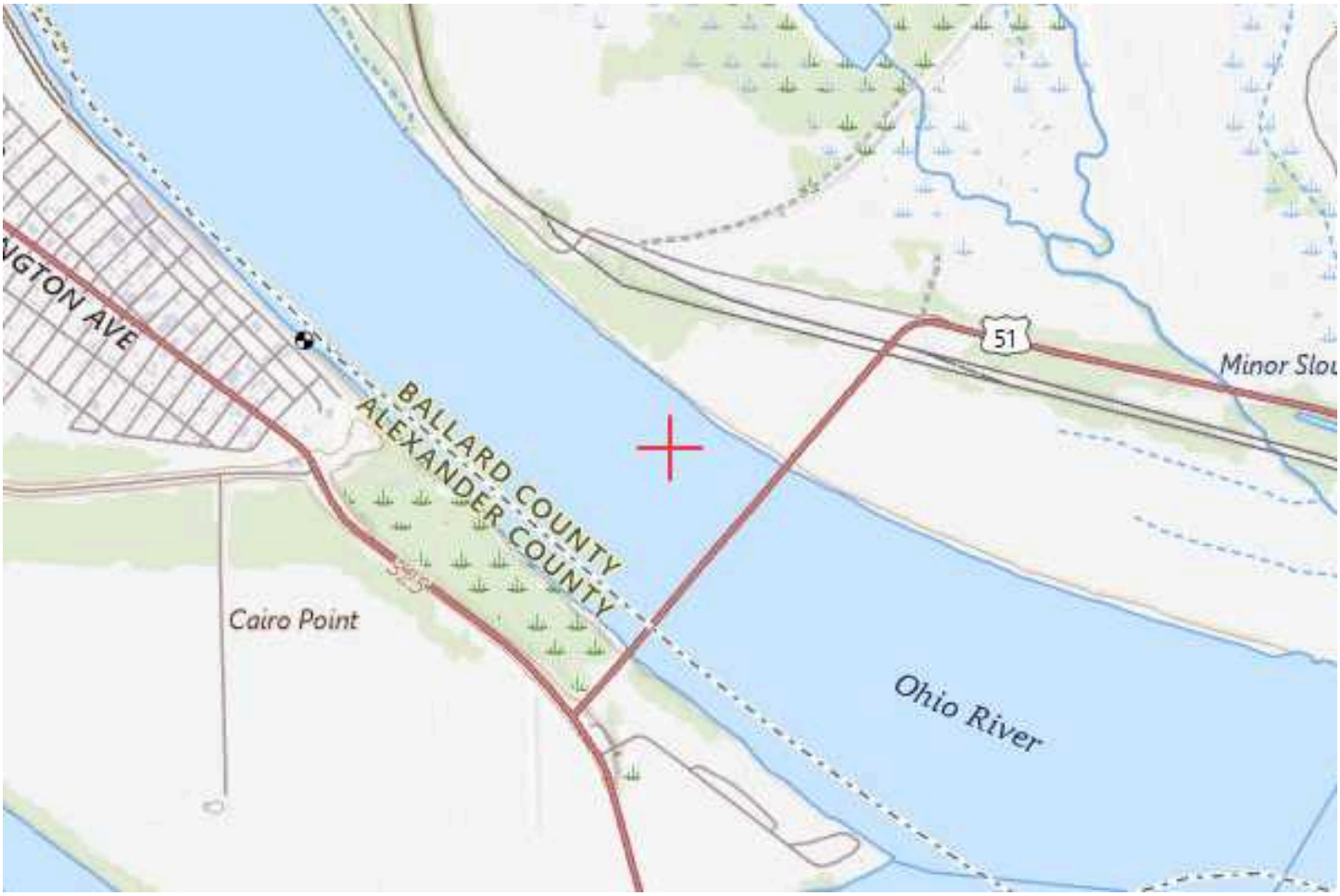
Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

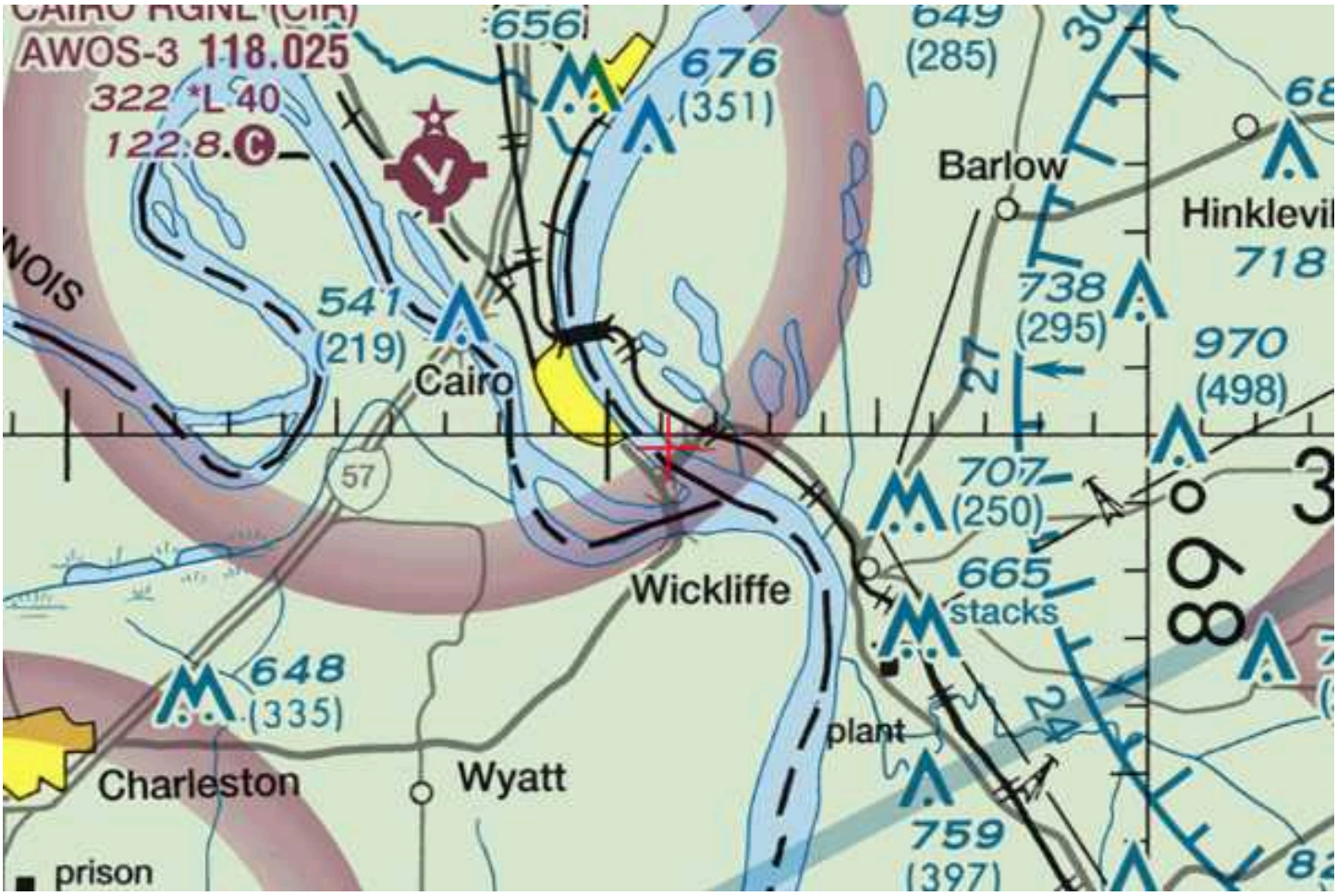
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10993-OE



Sectional Map for ASN 2026-ASO-10993-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10992-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Barge Crane Load test program for advanced letting
County, State:	Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-7	36-59-43.81N	89-8-53.59W	298 Ft	235 Ft	533 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10992-OE

Signature Control No: 707447335-708278071 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10992-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 533 feet above mean sea level.

Location: The structure will be located 5.35 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

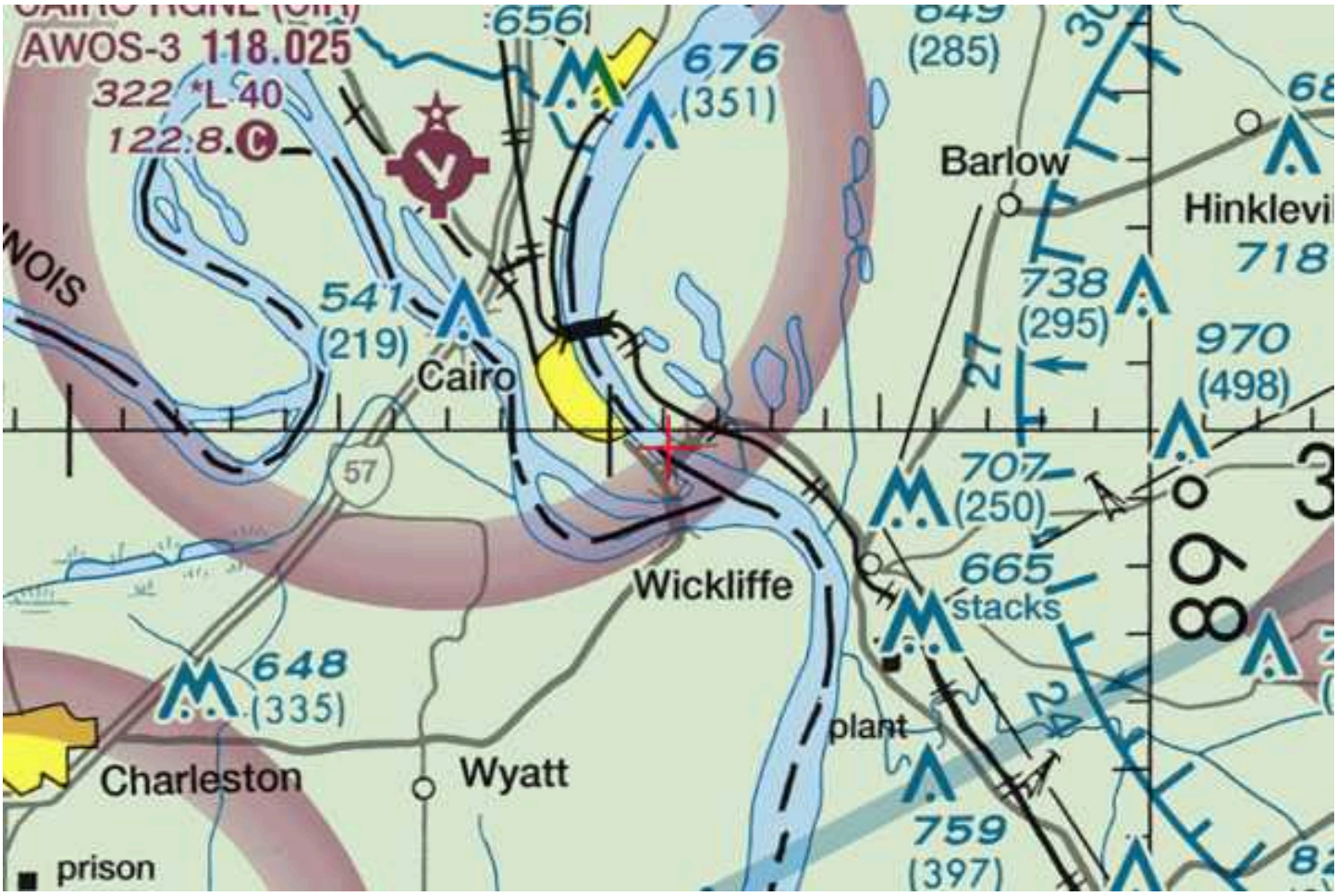
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10992-OE



Sectional Map for ASN 2026-ASO-10992-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10989-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-8	36-59-46.71N	89-8-50.68W	294 Ft	235 Ft	529 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10989-OE

Signature Control No: 707441870-708278069 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10989-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 529 feet above mean sea level.

Location: The structure will be located 5.34 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

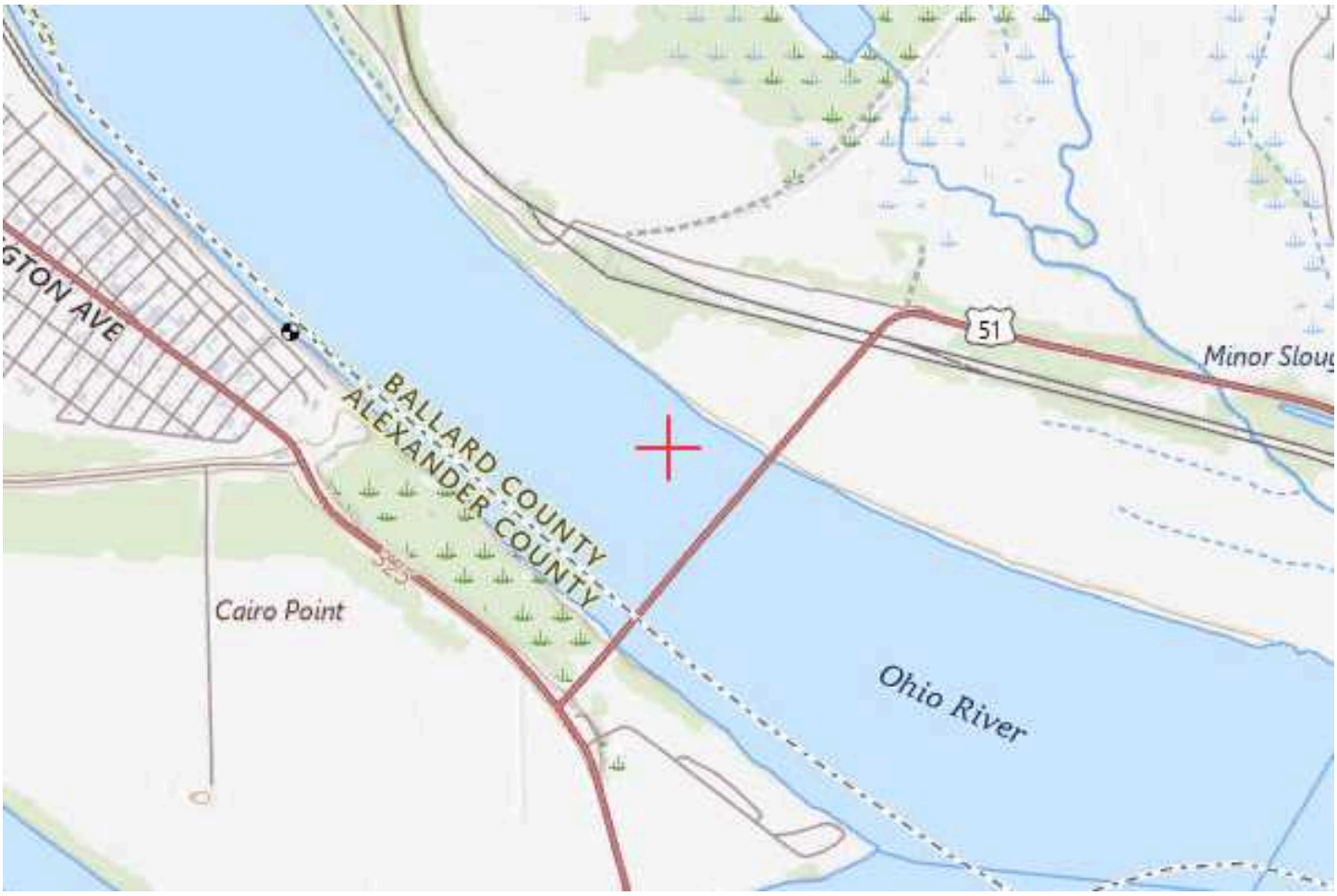
Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

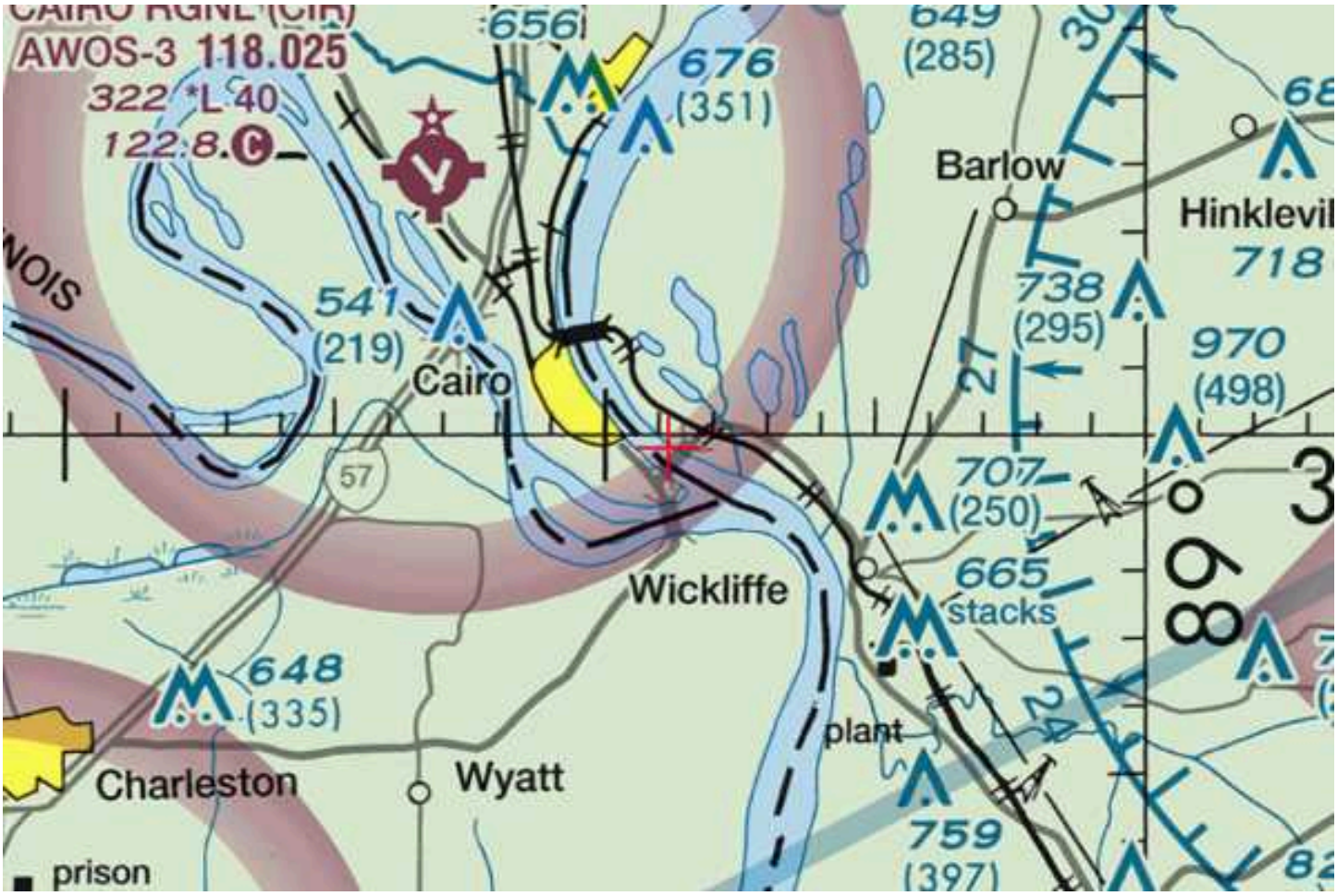
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10989-OE



Sectional Map for ASN 2026-ASO-10989-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10986-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Barge Crane Load test program for advanced letting
County, State:	Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-9	36-59-52.85N	89-8-47.54W	315 Ft	235 Ft	550 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10986-OE

Signature Control No: 707425509-708278068 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10986-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 550 feet above mean sea level.

Location: The structure will be located 5.29 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

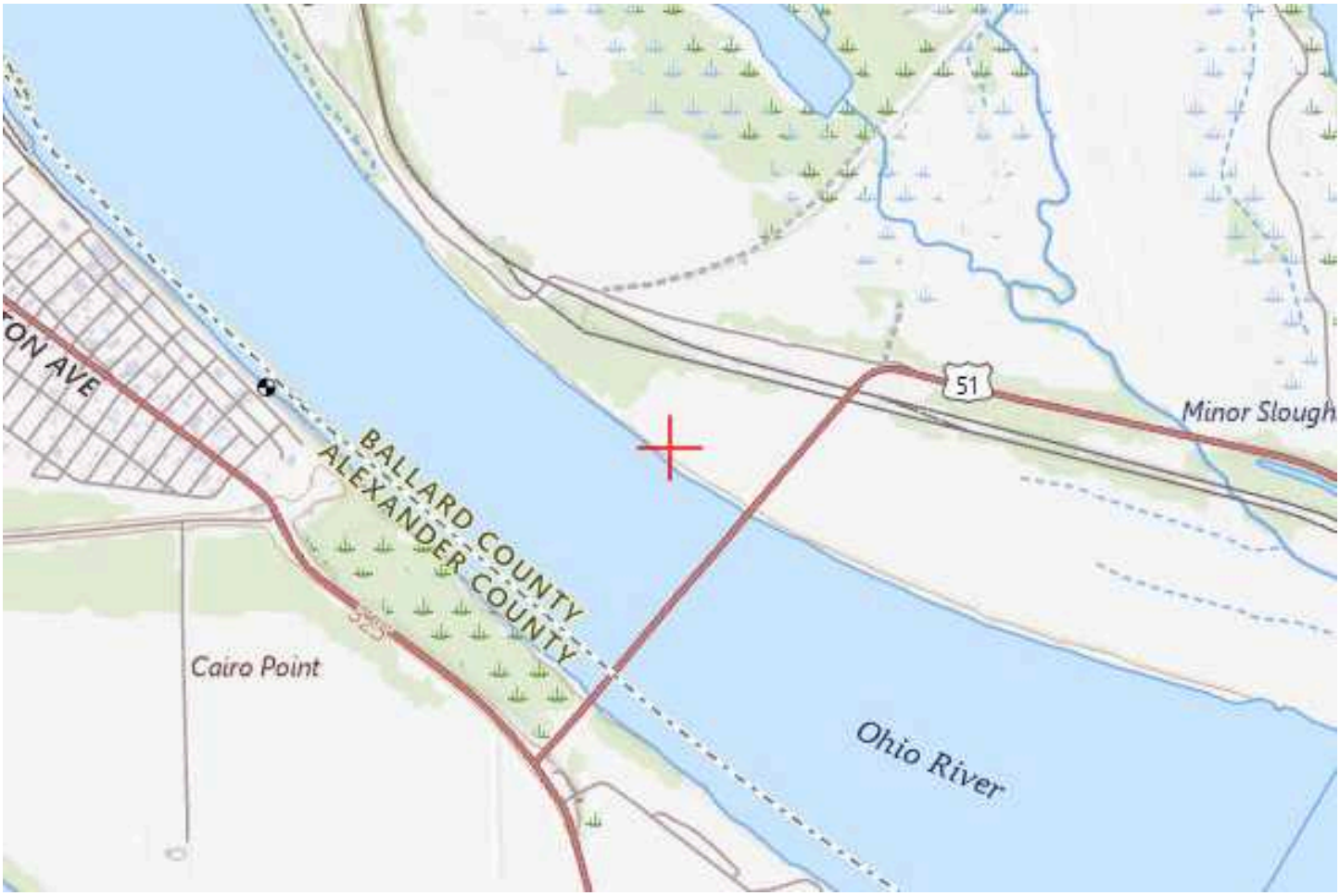
Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

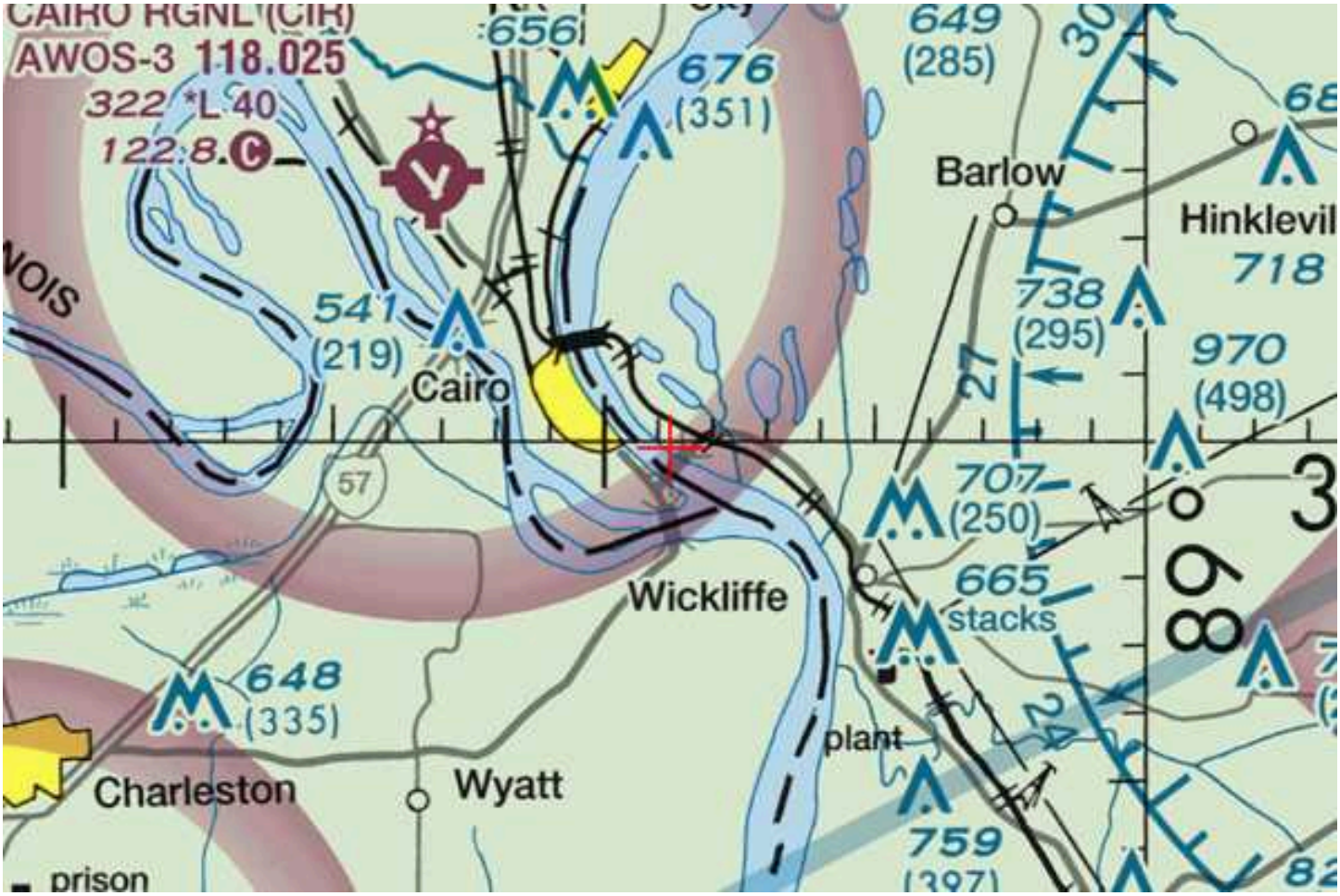
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10986-OE



Sectional Map for ASN 2026-ASO-10986-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10985-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Barge Crane Load test program for advanced letting
County, State:	Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-10	36-59-57.78N	89-8-42.58W	312 Ft	235 Ft	547 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10985-OE

Signature Control No: 707424822-708278074 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10985-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 547 feet above mean sea level.

Location: The structure will be located 5.27 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

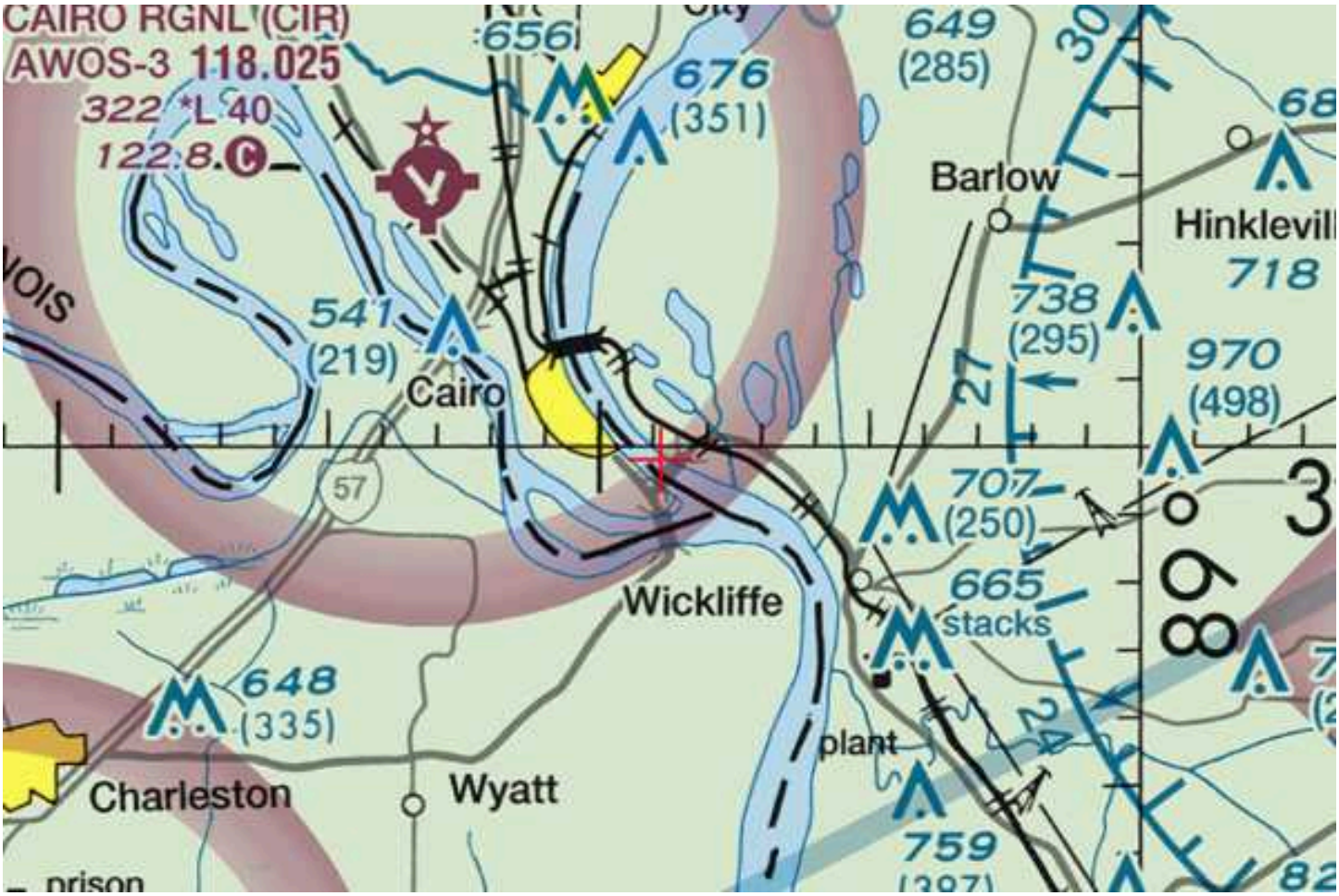
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10985-OE



Sectional Map for ASN 2026-ASO-10985-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10984-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-11	36-59-51.69N	89-8-45.61W	314 Ft	235 Ft	549 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10984-OE

Signature Control No: 707423783-708278075 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10984-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 549 feet above mean sea level.

Location: The structure will be located 5.32 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

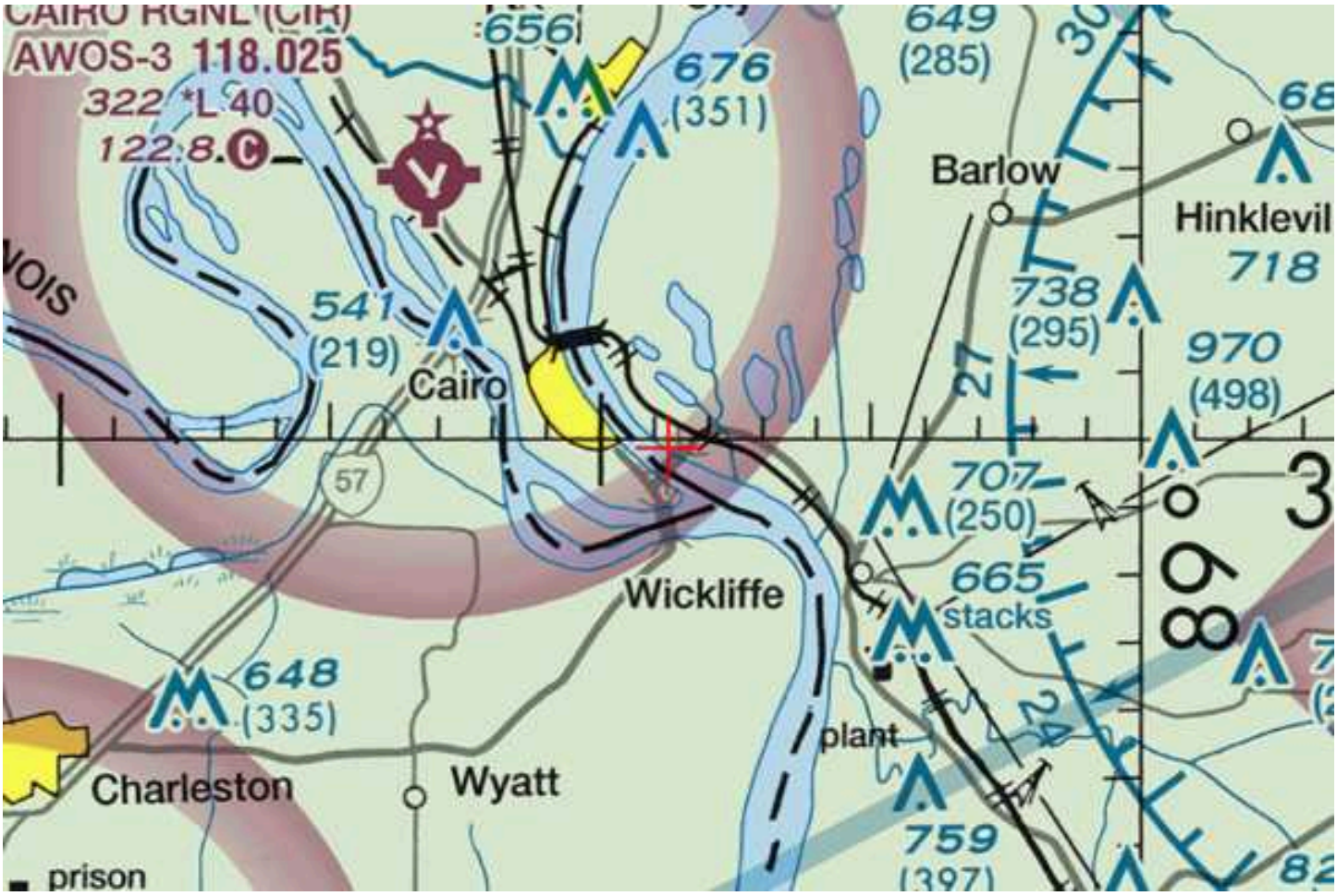
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10984-OE



Sectional Map for ASN 2026-ASO-10984-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2026-ASO-10980-OE

Issued Date: 06/04/2026

KYTC - OFFICE OF HIGHWAY DISTRICT ONE
AUSTIN P. HART, PE
5501 Kentucky Dam Road
Paducah, KY 42003

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Barge Crane Load test program for advanced letting
County, State: Ballard, Kentucky

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
P-12	36-59-56.60N	89-8-40.73W	312 Ft	235 Ft	547 Ft

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination did not include an evaluation of the permanent structure associated with the use of this temporary structure. If the permanent structure will exceed Title 14 of the Code of Federal Regulations, part 77.9, a separate aeronautical study and FAA determination is required.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at 1-817-222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2026-ASO-10980-OE

Signature Control No: 707393145-708278070 (TMP)
Chris Smith
Specialist

Additional Condition(s) or Information for ASN 2026-ASO-10980-OE

Proposal: To construct and/or operate a(n) Barge Crane to a height of 235 feet above ground level, 547 feet above mean sea level.

Location: The structure will be located 5.31 nautical miles southeast of CIR Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 12/04/2027 unless extended, revised, or terminated by the issuing office.

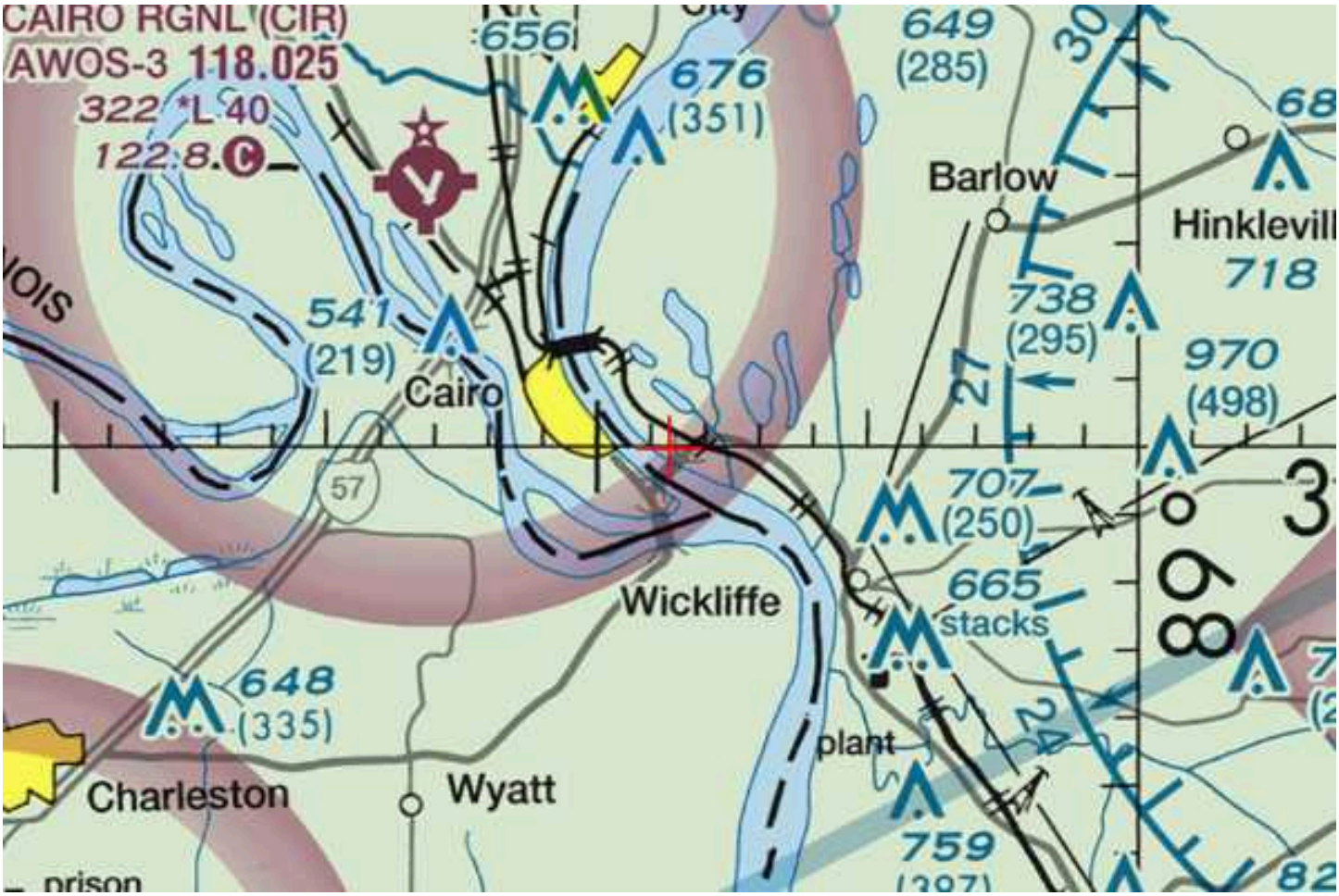
It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

TOPO Map for ASN 2026-ASO-10980-OE



Sectional Map for ASN 2026-ASO-10980-OE



SPECIAL NOTE FOR PRE-BID CONFERENCE
Ballard Co., KY and Alexander Co., IL
Item No. 01-01140.20

The Department will conduct a Pre-Bid Conference of the subject project on November 19, 2026 **at 2:00 PM EST/1:00 PM CST at:**

Murray State University
Paducah Campus
4430 Sunset Avenue
Paducah, KY 42001

Phone: (502) 564-3500

Any company that is interested in bidding on the subject project or being part of a joint venture shall be represented at the conference. No individual can represent more than one company. At the conference a roster shall be taken of the representatives present. **Only companies represented at the conference will be eligible to have their bids opened at the date of letting.**

The purpose of the conference is to familiarize all prospective bidders with the contract requirements within the scope of the contract.

Department of Highways officials present at the conference will answer questions concerning the project.

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2026* and *Standard Drawings, Edition of 2025.*

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

ILLINOIS STANDARD SPECIFICATIONS

For work in Illinois, any reference in the plans or proposal to Standard Specifications shall follow the latest specifications found at https://idot.illinois.gov/doing-business/industry-marketplace/construction-services/standard-specifications.html

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

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

2.3 Power.

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

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

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

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

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

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

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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:

Code	Pay Item	Pay Unit
02671	Portable Changeable Message Sign	Each

Effective June 15, 2012

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 – Revised June 25, 2026

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

I. General
II. Nondiscrimination
III. Davis-Bacon and Related Act Provisions
IV. Contract Work Hours and Safety Standards Act Provisions
V. Subletting or Assigning the Contract
VI. Safety: Accident Prevention
VII. False Statements Concerning Highway Projects
VIII. Implementation of Clean Air Act and Federal Water Pollution Control Act
IX. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
X. Certification Regarding Use of Contract Funds for Lobbying
XI. Use of United States-Flag Vessels

ATTACHMENTS

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

I. GENERAL

1. Historically, contracting agencies using Federal-aid highway funds were required to ensure Form FHWA-1273 was physically incorporated into all contracts and subcontracts. Effective June 10, 2026, this requirement was eliminated [91 FR 25492]. Future use of Form FHWA-1273 is now optional on the part of the contracting agency using Federal-aid highway funds. FHWA continues to make Form FHWA-1273 available as a convenience to contracting agencies. Contracting agencies must continue to ensure compliance with the provisions cited in Form FHWA-1273 in accordance with the provisions regardless of the use of Form FHWA-1273. Accordingly, the contracting agency retains the authority to determine whether the contractor must use Form FHWA-1273 to physically incorporate required contract provisions in each subcontract and in lower tier contracts. Where permitted by the contracting agency, the contractor may choose other ways to include required contract provisions in each subcontract, besides incorporating Form FHWA-1273. Contract provisions in Form FHWA-1273 are not required to be physically included in subcontracts for design services on Federal-aid design-build contracts, or in purchase orders, rental agreements and other agreements for supplies or services.

The applicable provisions 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 or design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents.

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION

The contractor and all subcontractors must comply with the following policies: 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract.

1. Assurances Required:

a. The requirements of 49 CFR Part 26, including any amendments thereto, and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26, including any amendments thereto, in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E, including any amendments thereto, are incorporated by reference. 49 CFR Part 21.

III. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the

classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section IV, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number

of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with 29 CFR part 30, including any amendments thereto.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section III. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the

contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

IV. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $33 as of January 15, 2025 (See 90 FR 1859) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section III paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

V. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1. of this section refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph 1. of this section is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however,

contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VI. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

VIII. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

IX. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

X. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XI. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (40 U.S.C. sections 14501(d) and 14701 and the Appalachian Regional Commission Code as authorized under 40 U.S.C. section 14302)
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 40 U.S.C. 14501 allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

EMPLOYMENT REQUIREMENTS
RELATING TO
NONDISCRIMINATION OF EMPLOYEES
(APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:

    a. withholding payments to the contractor under the contract until the contractor complies; and/or
    b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq*., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq*.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq*.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq*.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

EXECUTIVE BRANCH CODE OF ETHICS

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

a) The date of leaving office or termination of employment; or
b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not to obtain private benefits.

If you have worked for the executive branch of state government within the past year, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

"General Decision Number: IL20260016 07/30/2026

State: Illinois

Construction Types: Heavy and Highway

Counties: Illinois Counties of
Alexander, Clay, Crawford, Edwards,
Effingham, Fayette, Franklin, Gallatin,
Hamilton, Hardin, Jackson, Jasper,
Jefferson, Johnson, Lawrence, Marion,
Massac, Perry, Pope, Pulaski, Randolph,
Richland, Saline, Union, Wabash, Wayne,
White and Williamson

Heavy Construction

Highway Construction

Modification Number Publication Date
0 01/02/2026
1 05/18/2026
2 07/30/2026

CARP0243-007 05/15/2020
Rates Fringes
CARPENTER (CRAWFORD, EFFINGHAM, AND JASPER
COUNTIES).....$ 33.54 27.97
PILEDRIVERMAN (CRAWFORD, EFFINGHAM, AND JASPER
COUNTIES).....$ 33.54 27.97

CARP0634-002 05/01/2021
Rates Fringes
CARPENTER (CLAY, EDWARDS, FAYETTE, LAWRENCE,
MARION, RICHLAND, AND WABASH COUNTIES).....$ 39.02 18.90

CARP0636-001 05/01/2021
Rates Fringes
CARPENTER (HAMILTON, JEFFERSON, WAYNE, AND WHITE
COUNTIES) DIVERS (RECEIVE 1 1/2 TIMES CARPENTER
RATE PLUS FRINGES AND $25 PER DAY FOR EQUIPMENT)....$ 39.02 18.90

CARP0640-005 05/01/2021
Rates Fringes
CARPENTER (ALEXANDER, FRANKLIN, HARDIN, MASSAC,
JACKSON, PERRY, POPE, JOHNSON, GALLATIN, PULASKI,
SALINE, UNION, AND WILLIAMSON COUNTIES) DIVERS
(RECEIVE 1 1/2 TIMES CARPENTER'S RATE PLUS FRINGE
BENEFITS AND $25.00 PER DAY FOR EQUIPMENT).....$ 38.52 18.90

CARP0662-001 05/01/2021
Rates Fringes

CARPENTER (RANDOLPH COUNTY).....$ 41.36 18.90

ELEC0016-002 06/01/2025
Rates Fringes
ELECTRICIAN (WABASH COUNTY).....$ 46.14 21.67

ELEC0051-004 01/01/2024
Rates Fringes
LINE CONSTRUCTION: GROUNDMAN/EQUIPMENT OPERATOR
(ALL CRAWLER TYPE EQUIPMENT LARGER THAN D-4, 15 TON
CRANE OR LARGER) (FAYETTE COUNTY (NORTH OF AVENA,
BEAR GROVE, SEFTON, AND SHARON TWPS))..........$ 52.63 24.35
LINE CONSTRUCTION: GROUNDMAN/TRUCK DRIVER (FAYETTE
COUNTY (NORTH OF AVENA, BEAR GROVE, SEFTON, AND
SHARON TWPS))..........$ 39.92 20.22
LINE CONSTRUCTION: LINEMAN AND SUBSTATION
TECHNICIAN (FAYETTE COUNTY (NORTH OF AVENA, BEAR
GROVE, SEFTON, AND SHARON TWPS))..........$ 58.58 26.29

ELEC0146-004 06/01/2022
Rates Fringes
ELECTRICIAN (EFFINGHAM (BANNER, BISHOP, DOUGLAS,
LIBERTY, LUCAS, MOCCASIN, ST. FRANCIS, SUMMIT, &
TEULOPOLIS TWPS), AND FAYETTE (HURRICANE, S.
HURRICANE, RAMSEY, BOWLING GREEN, CARSON, & LOUDON
TWPS) COUNTIES).....$ 41.00 20.68

ELEC0309-004 09/01/2025
Rates Fringes
ELECTRICIAN (RANDOLPH COUNTY (RED BUD TWP)).....$ 52.41 30.27

ELEC0309-009 01/06/2025
Rates Fringes
LINE CONSTRUCTION: CABLE SPLICER; LINEMAN WELDER
(RANDOLPH COUNTY (RED BUD TOWNSHIP))..........$ 63.79 26.89
LINE CONSTRUCTION: GROUNDMAN (RANDOLPH COUNTY (RED
BUD TOWNSHIP))..........$ 42.10 18.84
LINE CONSTRUCTION: GROUNDMAN EQUIPMENT OPERATOR
(RANDOLPH COUNTY (RED BUD TOWNSHIP))..........$ 56.38 25.23
LINE CONSTRUCTION: GROUNDMAN TRUCK DRIVER (RANDOLPH
COUNTY (RED BUD TOWNSHIP))..........$ 46.03 20.60
LINE CONSTRUCTION: LINEMAN (RANDOLPH COUNTY (RED
BUD TOWNSHIP))..........$ 64.83 29.01

ELEC0702-001 01/01/2025
Rates Fringes
ELECTRICIAN (ALEXANDER, CLAY, EDWARDS, EFFINGHAM
(EXCLUDING BANNER, BISHOP, DOUGLAS, LIBERTY, LUCAS,
MOCCASIN, ST. FRANCIS, SUMMIT AND TEULOPOLIS TWPS),
FAYETTE (EXCLUDING HURRICANE, S. HURRICANE, RAMSEY,
BOWLING GREEN, CARSON AND LOUDON TWPS), FRANKLIN,
GALLATIN, HAMILTON, HARDIN, JACKSON, JEFFERSON,
JOHNSON, MARION, MASSAC, PERRY, POPE, PULASKI,
SALINE, UNION, WAYNE, WHITE, AND WILLIAMSON
COUNTIES).....$ 52.14 29.14

ELEC0702-002 01/06/2025
Rates Fringes

LINE CONSTRUCTION: LINEMAN (ALEXANDER, CLAY, CRAWFORD, EDWARDS, EFFINGHAM, FRANKLIN, FAYETTE (EXCLUDES PORTION NORTH AVENA), GALLATIN, HAMILTON, HARDIN, JACKSON, JASPER, JEFFERSON, JOHNSON, LAWRENCE, MARION, MASSAC, PERRY, POPE, PULASKI, RANDOLPH (EXCEPT RED BUD TWPS), RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, AND WILLIAMSON COUNTIES; CLARK, COLES (SOUTHERN HALF), CUMBERLAND, MOULTRIE (WHITLEY TWP), AND SHELBY (EXCEPT WEST OF HOLLAND, PRAIRIE, RICHLAND, & WINDSOR TWPS) COU.....$ 65.52 27.85

LINE CONSTRUCTION: GROUNDMAN - CLASS A (ALEXANDER, CLAY, CRAWFORD, EDWARDS, EFFINGHAM, FRANKLIN, FAYETTE (EXCLUDES PORTION NORTH AVENA), GALLATIN, HAMILTON, HARDIN, JACKSON, JASPER, JEFFERSON, JOHNSON, LAWRENCE, MARION, MASSAC, PERRY, POPE, PULASKI, RANDOLPH (EXCEPT RED BUD TWPS), RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, AND WILLIAMSON COUNTIES; CLARK, COLES (SOUTHERN HALF), CUMBERLAND, MOULTRIE (WHITLEY TWP), AND SHELBY (EXCEPT WEST OF HOLLAND, PRAIRIE, RICHLAND, & WINDSOR TWPS) COU.....$ 38.18 19.92

LINE CONSTRUCTION: GROUNDMAN - EQUIPMENT OPERATOR CLASS II (ALL OTHER EQUIPMENT) (ALEXANDER, CLAY, CRAWFORD, EDWARDS, EFFINGHAM, FRANKLIN, FAYETTE (EXCLUDES PORTION NORTH AVENA), GALLATIN, HAMILTON, HARDIN, JACKSON, JASPER, JEFFERSON, JOHNSON, LAWRENCE, MARION, MASSAC, PERRY, POPE, PULASKI, RANDOLPH (EXCEPT RED BUD TWPS), RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, AND WILLIAMSON COUNTIES; CLARK, COLES (SOUTHERN HALF), CUMBERLAND, MOULTRIE (WHITLEY TWP), AND SHELBY (EXCEPT WEST OF HOLLAND,.....$ 46.49 22.33

LINE CONSTRUCTION: HEAVY - EQUIPMENT OPERATOR CLASS I (ALL CRAWLER TYPE EQUIPMENT D-4 AND LARGER) (ALEXANDER, CLAY, CRAWFORD, EDWARDS, EFFINGHAM, FRANKLIN, FAYETTE (EXCLUDES PORTION NORTH AVENA), GALLATIN, HAMILTON, HARDIN, JACKSON, JASPER, JEFFERSON, JOHNSON, LAWRENCE, MARION, MASSAC, PERRY, POPE, PULASKI, RANDOLPH (EXCEPT RED BUD TWPS), RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, AND WILLIAMSON COUNTIES; CLARK, COLES (SOUTHERN HALF), CUMBERLAND, MOULTRIE (WHITLEY TWP), AND SHELBY (EXCEPT.....$ 52.13 23.97

ELEC0702-016 09/01/2024
Rates Fringes

ELECTRICAL LOW VOLTAGE WIRING INSTALLER, BUILDING (ALEXANDER, BOND (EASTSIDE), CLAY, CLINTON (EASTSIDE), EDWARDS, EFFINGHAM (SOUTHWESTERN SIDE), FAYETTE (SOUTHSIDE), FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JEFFERSON, JOHNSON, MARION, MASSAC, PULASKI, PERRY, POPE, RANDOLPH (SOUTHEASTERN SIDE), SALINE, UNION, WASHINGTON (SOUTHEASTERN SIDE), WAYNE, WHITE, AND WILLIAMSON COUNTIES) Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page,

school, intercom and sound burglar alarms and low voltage master clock systems.....$ 38.44 19.37

ELEC0725-004 10/01/2025
Rates Fringes
ELECTRICIAN (CRAWFORD, JASPER, LAWRENCE, AND RICHLAND COUNTIES).....$ 45.00 26.70

ENGI0318-001 04/01/2025
Rates Fringes
OPERATOR: POWER EQUIPMENT, CLASS A: ALL OFF ROAD MATERIAL HAULING EQUIPMENT, ALL TERRAIN CRANE, ARTICULATED DUMP, ASPHALT MACHINE SPREADER, ASPHALT PLANT ASSISTANT OPERATOR, ASPHALT PLANT OPERATOR, ASPHALT WIDENER, ASSISTANT OPERATOR ON ROTOMILLS, AUTOGRADER, AUTOMATIC SLIPFORM PAVERS, BACKEND MAN ON ASPHALT MACHINE, BACKHOES, BARREL GRAPPLER DEVICES (ALL), BLACKSMITH, BLADE OPERATORS (ALL), BOAT OPERATORS (ALL) BRIDGES, BOAT PILOTS REQUIRING CERTIFICATION AND/OR LICENSING, DAMS & WATERWAYS, BOILERS, BOOM OR WINCH CAT, BOOM OR WINCH TYPE TRUCKS, BORING MACHINES-HORIZONTAL, CLAMSHELL, ORANGE PEEL OPERATOR, CONCRETE BREAKER, CONCRETE GROOVER, CONCRETE GRINDER, CONCRETE CURB MACHINE, CONCRETE FINISH MACHINE OR SPREADER OPERATOR, CONCRETE MIXER PAVER, CONCRETE PUMP TRUCK, CONCRETE PLANT OPERATOR, CONCRETE WHEEL SAW OPERATORS, CRANES(ALL) TRUCK/TRACK/RUBBER, CRANE (OVERHEAD) OPERATOR, DERRICK GUY OR DERRICK TRUCKS, DITCHING MACHINES (ALL), DOZER OPERATORS, DRAGLINE OR SHOVEL OPERATORS, DREDGE BOOSTER PUMP, DREDGE ENGINEMAN, DREDGE OPERATOR/LEVERMAN, DRILL CAT W/COMPRESSOR MOUNTED, DRILLING OR BORING MACHINE ROTARY-SELF-PROPELLED, ENDLOADERS (ALL) TRACK/RUBBER ELEVATING GRADER, FLEXPLANE, FORKLIFTS/TELE-HANDLERS (ALL), GEOTHERMAL WELL DRILLING, GPS ON MACHINES ALREADY UNDER THE JURISDICTION OF LOCAL 318, GRADALL; GREASERS, HEAVY EQUIPMENT ROBOTICS OPERATOR, HI-LIFT, HOISTS, HOSTING ENGINE, HORIZONTAL DIRECTIONAL DRILL OPERATOR, INCINERATORS (HAZ-MAT ONLY), LASER SCREED, LOCOMOTIVE/OPERATOR, MASTER MECHANIC, MIXERS 21 CU. FT. OR OVER, MOTOR PATROL, PILE DRIVER OPERATOR, PULLS & SCRAPERS, POWER PAC & CONTROLS (PILE DRIVING), PUG MILL, PULVERIZER OR TILLERS, PUSH CATS, QUAD TRAC, ROTOMILLS, ROTATING CAB FORKLIFTS, RUBBER TIRED FARM TRACTOR WITH ATTACHMENTS OVER 1/2 YD., SELF-PROPELLED CHIP SPREADER, SELF-PROPELLED ROLLER W/ATTACHMENTS, SHOT BLASTER/BRIDGE DECK, SHUTTLE BUGGIE, SIDE BOOMS, SKID LOADER (SKID STEERS), SKIMMER SCOOP, SPYDER CRANE, STATIONARY ROCK SLINGER, TRACKHOE AND ALL ATTACHMENTS, TRENCH MACHINE OPEATOR, TUGGERS, ULTRA HIGH PRESSURE WATER JET CUTTING MACHINE, VACUUM, VACUUM BLASTING MACHINE OPERATOR, VAC JET, WELDERS, WELL OR CAISSON DRILLS, WELL POINT PUMPS-2 OR MORE, WOOD CHIPPER W/TRACTOR. (ALEXANDER, FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JOHNSON, MASSAC, POPE, PULASKI, SALINE, UNION, WHITE, AND WILLIAMSON COUNTIES) FOOTNOTE A - HAZARDOUS WASTE PREMIUM: LEVEL (A)-RECEIVE $3.00 ABOVE RATE; LEVEL (B)-RECEIVE $2.00 ABOVE RATE; LEVEL (C)-RECEIVE $1.50 ABOVE RATE; LEVEL (D)-RECEIVE

$1.00 ABOVE RATE.....$ 40.13 32.00
OPERATOR: POWER EQUIPMENT, CLASS B: OILERS
CLASSIFIED AS ASSISTANT OPERATORS, AIR TRACK
DRILL/COMPRESSOR, ALL MACHINES USED TO SWEEP,
CLEAN, BROOM OR REMOVE DEBRIS OR SNOW, ANY TYPE
TRACTOR PULLING ROLLER OR DISC, AUTOMATIC BINS OR
SCALES W/COMPRESSOR OR GENERATOR, BULK CEMENT PLANT
W/SEPARATE COMPRESSOR, CONCRETE CURB MACHINE
REQUIRING ELECTRONICS, CONCRETE PLANT ASSISTANT
OPERATORS, CONCRETE OR PUMP CRETE PUMPS, DECK HAND
ON BOATS, DREDGE ASSISTANT OPERATOR/MATE, POWER
BROOM, SELF-PROPELLED ROLLER/COMPACTOR, STRAW
MULCHER BLOWER, STUMP CUTTER MACHINE, TWO AIR
COMPRESSORS (220 CFM OR OVER), TWO AIR TRACK
DRILLS. AIR COMPRESSOR W/VALVE DRIVING PILING,
ASSISTANT OPERATOR (WHERE REQUIRED REFER TO ARTICLE
VII SECTION 9), ELEVATOR OPERATOR, FORM GRADER, MAN
LIFT (SCISSOR LIFT) WHEN LIFTING MATERIALS,
PILDRIVER ACTIVATING AIR OR HYDRAULIC VALVE
REGARDLESS OF LOCATION, RUBBER-TIRED FARM TYPE
TRACTOR W/BLADE/BULLDOZER/AUGER/HI-LIFT OF 1/2 YARD
OR LESS, SELF-PROPELLED CONCRETE SAW,
SELF-PROPELLED ROBOTICS ROLLER IN USE TWO
CONTINUOUS HOURS OR MORE SHALL BE MANNED BY AN
OPERATING ENGINEER, SELF-PROPELLED VIBRATOR, TRUCK
CRANE ASSISTANT OPERATOR, TWO CONVEYORS.
(ALEXANDER, FRANKLIN, GALLATIN, HAMILTON, HARDIN,
JACKSON, JOHNSON, MASSAC, POPE, PULASKI, SALINE,
UNION, WHITE, AND WILLIAMSON COUNTIES) FOOTNOTE
A - HAZARDOUS WASTE PREMIUM: LEVEL (A)-RECEIVE
$3.00 ABOVE RATE; LEVEL (B)-RECEIVE $2.00 ABOVE
RATE; LEVEL (C)-RECEIVE $1.50 ABOVE RATE; LEVEL
(D)-RECEIVE $1.00 ABOVE RATE.....$ 38.23 32.00
OPERATOR: POWER EQUIPMENT, CLASS C: AIR
COMPRESSOR (220 CFM OR OVER) ONE, AIR TRACK DRILL
ONE, AUTOMATIC BIN, BELT DRAG MACHINE, BULK CEMENT
PLANT W/BUILT-IN COMPRESSOR RUNNING OFF SAME MOTOR
OR ELECTRIC MOTOR, FIREMAN OR SWITCHMAN, MECHANIC
IN PERMANENT SHOPS WITHOUT SEPARATE SIGNED
COLLECTIVE BARGAINING AGREEMENTS (NOV. 1 THROUGH
MARCH 31), MECHANICAL PLASTERER APPLICATOR, PIPE
TRACT JACK, POWER BROOM, SELF-PROPELLED FROM
TAMPER, TRAC-AIR, MIXERS - LESS THAN 21 CU.FT.,
MORTAR MIXER W/SKI OR PUMP, MUD JACKS, ONE WELL
POINT PUMP, WOOD CHIPPER. ONE OPERATING ENGINEER
MAY OPERATE OR MAINTAIN ANY COMBINATION OF THE
FOLLOWING PIECES OF EQUIPMENT, NOT TO EXCEED FOUR
(4), WHICH SHALL BE WITHIN REASONABLE DISTANCE;
SUCH COMBINATION MAY INCLUDE THE EQUIPMENT IN THIS
CLASSIFICATION: AIR COMPRESSOR (UNDER 220 CFM)
FOUR, LIGHT PLANTS, GENERATORS, PUMPS, CONVEYORS,
MOTOR DRIVEN HEATERS (2), WELDING MACHINES, ULMAC
OR EQUAL SPREADER (ALEXANDER, FRANKLIN,
GALLATIN, HAMILTON, HARDIN, JACKSON, JOHNSON,
MASSAC, POPE, PULASKI, SALINE, UNION, WHITE, AND
WILLIAMSON COUNTIES) FOOTNOTE A - HAZARDOUS
WASTE PREMIUM: LEVEL (A)-RECEIVE $3.00 ABOVE RATE;
LEVEL (B)-RECEIVE $2.00 ABOVE RATE; LEVEL
(C)-RECEIVE $1.50 ABOVE RATE; LEVEL (D)-RECEIVE
$1.00 ABOVE RATE.....$ 30.83 32.00
OPERATOR: POWER EQUIPMENT: RIVER Class 1: All Off
Road Material Hauling Equipment, All Terrain Crane,
All Power Boat Operators, Articulated Dump, Asphalt
Machine Spreader, Asphalt Plant Operator, Asphalt
Widener, Autograder, Automatic Slipform Pavers,

Backhoes, Barrel Grappler Devices (All), Blacksmith, Blade Operators (All), Boat Pilots requiring certification and or licensing, Boat Operators (all) Bridges, Dams & Waterways, Boilers, Boom or Winch Cat, Boom or Winch Type Trucks, Boring Machines-Horizontal, Clamshell, Orange Peel Operator, Concrete Breaker, Concrete Curb Machine, Concrete Finish Machine or Spreader Operator, Concrete Mixer Paver, Concrete Pump Truck, Concrete Plant Operator, Concrete Wheel Saw Operators, Cranes(All) Truck/Track/Rubber, Crane (Overhead) Operator, Derrick Guy or Derrick Trucks, Ditching Machines (All), Dozer Operators, Dragline or Shovel Operators, Dredge Booster Pump, Dredge Engineman, Dredge Operator/Leverman, Drill Cat w/Compressor Mounted, Drilling or Boring Machine Rotary-Self-Propelled, Endloaders (All) Track/Rubber Elevating Grader, Flexplane, Forklifts/Tele-Handlers (All), Geothermal Well Drilling, GPS on machines already under the jurisdiction of Local 318, Gradall; Greasers, Heavy Equipment Robotics Operator, Hi-Lift, Hoists, Hosting Engine, Horizontal Directional Drill Operator, Incinerators (Haz-Mat only), Laser Screed, Locomotive/Operator, Master Mechanic, Mixers 21 cu. ft. or over, Motor Patrol, Piledriver operator, Pulls & Scrapers, Power Pac & Controls (PileDriving), Pug mill, Pulverizer or Tillers, Push Cats, Quad Trac, Rotating Cab Forklifts, Rotomills, Rubber Tired Farm Tractor with Attachments over 1/2 yd., Self-Propelled Chip Spreader, Self-Propelled Roller w/Attachments, Shuttle Buggie, Side booms, Skid loader (Skidsteers), Skimmer Scoop, Spyder Cranes, Trackhoe and all attachments, Trench Machine Opeator, Tuggers, Ultra High Pressure Water Jet Cutting Machine, Vacuum, Vacuum Blasting Machine Operator, Vac Jet, Welders, Well or Caisson Drills, Well Point Pumps-2 or more, Wood Chipper w/Tractor. (ALEXANDER, FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JOHNSON, MASSAC, POPE, PULASKI, SALINE, UNION, WHITE, AND WILLIAMSON COUNTIES) Footnote A - Hazardous Waste Premium: Level (A)-receive $3.00 above rate; Level (B)-receive $2.00 above rate; Level (C)-receive $1.50 above rate; Level (D)-receive $1.00 above rate.....$ 40.23 32.00

OPERATOR: POWER EQUIPMENT: RIVER Class 2: Assistant Operators required on All terrain cherry picker w/over 40 ton lifting capacity, Crane, Deckhand on all rivers, lakes, and tributaries, Dinky or standard locomotive, Ditching machine (80 h.p. and over), Dragline, Dredge, Gradall, Guy Derrick, Assitant operators or firman on crane, Piledriver, Shovel, Trenching Machine, Truck Crane. (ALEXANDER, FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JOHNSON, MASSAC, POPE, PULASKI, SALINE, UNION, WHITE, AND WILLIAMSON COUNTIES) Footnote A - Hazardous Waste Premium: Level (A)-receive $3.00 above rate; Level (B)-receive $2.00 above rate; Level (C)-receive $1.50 above rate; Level (D)-receive $1.00 above rate.....$ 36.78 32.00

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POWER EQUIPMENT OPERATOR GROUP 03 AIR COMPRESSORS (ONE), WATER PUMPS, REGARDLESS OF SIZE (ONE), WATER-BLASTERS (ONE), WELDING MACHINE (ONE), MIXERS (ONE BAG), CONVEYOR (ONE), SIPHON OR JET (ONE), LIGHT PLANT (ONE), HEATER (ONE), IMMOBILE TRACK AIR (ONE), AND SELF-PROPELLED WALK BEHIND ROLLERS. FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES.....$ 41.59 39.10

POWER EQUIPMENT OPERATOR GROUP 11 MASTER MECHANIC (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES).....$ 49.20 39.10

POWER EQUIPMENT OPERATOR GROUP 12 LICENSED BOAT PILOT (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES).....$ 50.20 39.10

POWER EQUIPMENT OPERATOR: GROUP 01 CRANES, DRAGLINES, SHOVELS, SKIMMER SCOOPS, CLAMSHELLS OR DERRICK BOATS, PILE DRIVERS, CRANE-TYPE BACKHOES, ASPHALT PLANT OPERATORS, CONCRETE PLANT OPERATORS, DREDGES, ASPHALT SPREADING MACHINES, SCREWS ON ASPHALT SPREADING MACHINES, ALL LOCOMOTIVES, CABLE WAYS OR TOWER MACHINES, HOISTS, HYDRAULIC BACKHOES, DITCHING MACHINES, OR BACKFILLER, CHERRYPICKERS, OVERHEAD CRANES, ROLLER, STEAM OR GAS, CONCRETE PAVERS, EXCAVATOR CONCRETE BREAKERS, CONCRETE PUMPS, BULK CEMENT PLANTS, CEMENT PUMPS, DERRICK-TYPE DRILLS, BOAT OPERATORS, MOTOR GRADERS OR PUSHCATS, SCOOPS OR TOURNAPULLS, BULLDOZERS, ENDLOADERS OR FORK LIFTS, POWER BLADE OR ELEVATING GRADERS, WINCH CATS, BOOM OR WINCH TRUCKS OR BOOM TRACTORS, PIPE WRAPPING OR PAINTING MACHINES, ASPHALT PLANT ENGINEER, JOURNEYMAN LUBRICATING ENGINEER, DRILLS (OTHER THAN DERRICK TYPE), MUD JACKS, OR WELL DRILLING MACHINES, BORING MACHINES OR TRACK JACKS, MIXERS, CONVEYORS (TWO), AIR COMPRESSORS (TWO) WATER PUMPS, REGARDLESS OF SIZE (TWO), WELDING MACHINES (TWO), SIPHONS OR JETS (TWO), WINCH HEAD OR APPARATUSES (TWO), LIGHT PLANTS (TWO), WATERBLASTERS (TWO), ALL TRACTORS, REGARDLESS OF SIZE (STRAIGHT TRACTOR ONLY), FIREMAN ON STATIONARY BOILERS, AUTOMATIC ELEVATORS, FORM GRADING MACHINES, FINISHING MACHINES, POWER SUB-GRADER OR RIBBON MACHINES, LONGITUDINAL FLOATS, DISTRIBUTOR OPERATORS ON TRUCKS, WINCH HEADS OR APPARATUSES (ONE), MOBIL TRACK AIR AND HEATERS (TWO TO FIVE), HEAVY EQUIPMENT GREASER, RELIEF OPERATOR, ASSISTANT MASTER MECHANIC AND HEAVY DUTY MECHANIC, CONCRETE SAWS OF ALL TYPES AND SIZES WITH THEIR ATTACHMENTS, GOB-HOPPERS, EXCAVATORS ALL SIZES, THE REPAIR, GREASING, AND FUELING OF ALL DIESEL HAMMERS, THE OPERATION, SET-UP AND CLEANING OF BIDWELLS, CONCRETE PLACEMENT BOOMS, THE ALTERATIONS, REPAIR OF ALL BARGES, WATER BLASTERS OF ALL SIZES AND THEIR CLUTCHES, MOBILE LIFTS, HYDRAULIC JACKS WHERE USED FOR HOISTING, DIESEL OR GAS POWERED FLASHING SIGNS USED FOR TRAFFIC CONTROL, MICRO PAVERS, LOG SKIDERS, ICEOLATORS USED ON AND OFF OF PIPELINE, CONDOR CRANES, DRILL RIGS OF ALL SIZES, BOW BOATS, SURVEY BOATS, ROSS CARRIERS, BOB-CATS AND ALL THEIR ATTACHMENTS, SKID STEER LOADERS AND ALL THEIR ATTACHMENTS, CRETER CRANE, DIRECT DRIVE ELECTRIC MOTORS THE BOLTING AND UNBOLTING THE ADJUSTING AND SHIMMING, (DEWATERINGJOBS, WHIRLEY CRANE, CONVEYOR BELTS) ETC., BATCH PLANTS (ALL SIZES), ROTO MILLS, CONVEYORS SYSTEMS OF ANY SIZE AND ANY

CONFIGURATION, HYDROSEEDERS AND STRAW-BLOWERS ALL SIZES, OPERATION, REPAIR, SERVICE OF ALL VIBRATORY HAMMERS, ALL POWER PACS AND THEIR CONTROLS REGARDLESS OF LOCATION, CURTAINS OR BRUSH BURNING MACHINES, STUMP CUTTER MACHINES, GROUT MACHINES REGARDLESS OF SIZE, NAIL LAUNCHERS WHEN MOUNTED ON A MACHINE OR SELF-PROPELLED, CON-COVER MACHINES, GOLDHOFER AND SIMILAR S.P.M.T. (SELF-PROPELLED MODULAR TRANSPORTERS) HEAVY TRANSPORT UNITS AND ALL OPERATORS (EXCEPT THOSE LISTED BELOW).
FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES.....$ 47.20 39.10
POWER EQUIPMENT OPERATOR: GROUP 02 ASSISTANT OPERATORS FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES.....$ 46.07 39.10
POWER EQUIPMENT OPERATOR: GROUP 04 FIREMAN ON WHIRLIES AND HEAVY EQUIPMENT OILERS, TRUCK CRANES, DREDGES, MONIGANS, LARGE CRANES - (OVER 65-TON RATED CAPACITY) CONCRETE PLANT OILER, BLACKTOP PLANT OILER AND CRETER CRANE OILER (WHEN REQUIRED), BARGE TENDERS, OILERS ON DRILL RIGS USED FOR CAISSON OR FOR PILE DRIVING. FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES.....$ 41.65 39.10
POWER EQUIPMENT OPERATOR: GROUP 05 OILERS FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES.....$ 41.65 39.10
POWER EQUIPMENT OPERATOR: GROUP 06 OPERATORS ON EQUIPMENT WITH BOOMS, INCLUDING JIBS, 100 FT AND OVER, BUT LESS THAN 150 FT (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES)....$ 49.75 39.10
POWER EQUIPMENT OPERATOR: GROUP 7: Operators on equipment with Booms, including Jibs, 150 ft and over, but less than 200 ft (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES).....$ 45.30 34.95
POWER EQUIPMENT OPERATOR: GROUP 8: Operators on equipment with Boomns, including Jibs, 200 ft and over; Tower Cranes, and Whirley Cranes (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES)....$ 45.60 34.95
POWER EQUIPMENT OPERATOR: GROUP 09 CERTIFIED CRANE OPERATORS, BELOW 17.5 TONS, WHEN REQUESTED BY THE CONTRACTOR OR REQUIRED BY THE OWNER.
(FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES).....$ 48.20 39.10
POWER EQUIPMENT OPERATOR: GROUP 10: Certified crane Operators 17.5 tons and above, when requested by the Contractor or required by the Owner.
(FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES).....$ 46.75 34.95

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POWER EQUIPMENT OPERATORGROUP 1: Cranes, Draglines, Shovels, Skimmer Scoops, Clamshells or Derrick Boats, Pile Drivers, Crane-Type Backhoes, Asphalt Plant Operators, Concrete Plant Operators, Dredges, Asphalt Spreading Machines, Screws on Asphalt Spreading Machines, All Locomotives, Cable Ways or Tower Machines, Hoists, Hydraulic Backhoes, Ditching Machines, or Backfiller, Cherrypickers, overhead Cranes, Roller, Steam or Gas, Concrete Pavers, Excavator Concrete Breakers, Concrete Pumps, Bulk Cement Plants, Cement Pumps, Derrick-Type Drills, Boat Operators, Motor Graders or Pushcats, Scoops or Tournapulls, Bulldozers,

Endloaders or Fork Lifts, Power Blade or Elevating Graders, Winch Cats, Boom or Winch Trucks or Boom Tractors, Pipe Wrapping or Painting Machines, Asphalt Plant Engineer, Journeyman Lubricating Engineer, Drills (other than derrick type), Mud Jacks, or Well Drilling Machines, Boring Machines or Track Jacks, Mixers, Conveyors (two), Air Compressors (two) Water Pumps, regardless of size (two), Welding Machines (two), Siphons or Jets (two), Winch Head or Apparatuses (two), Light Plants (two), Waterblasters (two), all Tractors, regardless of size (straight tractor only), Fireman on Stationary Boilers, Automatic Elevators, Form Grading Machines, Finishing Machines, Power Sub-Grader or Ribbon Machines, Longitudinal Floats, Distributor Operators on Trucks, Winch Heads or Apparatuses (one), Mobil Track air and heaters (two to five), Heavy Equipment Greaser, Relief Operator, Assistant Master Mechanic and Heavy Duty Mechanic, concrete saws of all types and sizes with their attachments, gob-hoppers, excavators all sizes, the repair, greasing, and fueling of all diesel hammers, the operation, set-up and cleaning of bidwells, concrete placement booms, the alterations, repair of all barges, water blasters of all sizes and their clutches, mobile lifts, hydraulic jacks where used for hoisting, diesel or gas powered flashing signs used for traffic control, micro pavers, log skiders, iceolators used on and off of pipeline, condor cranes, drill rigs of all sizes, bow boats, survey boats, ross carriers, bob-cats and all their attachments, skid steer loaders and all their attachments, creter crane, direct drive electric motors the bolting and unbolting the adjusting and shimming, (dewateringjobs, whirley crane, conveyor belts) etc., batch plants (all sizes), roto mills, conveyors systems of any size and any configuration, hydroseeders and straw-blowers all sizes, operation, repair, service of all vibratory hammers, all power pacs and their controls regardless of location, curtains or brush burning machines, stump cutter machines, grout machines regardless of size, Nail Launchers when mounted on a machine or self-propelled, con-cover machines, Goldhofer and similar S.P.M.T. (self-propelled modular transporters) heavy transport units and all Operators (except those listed below). (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES) (INCLUDING BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL SITES & HEAVY CONSTRUCTION EXCEPT DREDGING AND RIVER WORK).....$ 42.45 34.95

POWER EQUIPMENT OPERATOR GROUP 10 CERTIFIED CRANE OPERATORS 17.5 TONS AND ABOVE, WHEN REQUESTED BY THE CONTRACTOR OR REQUIRED BY THE OWNER (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES) INCLUDING BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL SITES & HEAVY CONSTRUCTION EXCEPT DREDGING AND RIVER WORK.....$ 46.75 34.95

POWER EQUIPMENT OPERATOR GROUP 11 MASTER MECHANIC (FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES) INCLUDING BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL SITES & HEAVY CONSTRUCTION EXCEPT DREDGING AND RIVER WORK.....$ 44.45 34.95

POWER EQUIPMENT OPERATOR GROUP 12 LICENSED BOAT

PILOT (FAYETTE, JEFFERSON, MARION, PERRY, AND
RANDOLPH COUNTIES) INCLUDING BUILDING CONSTRUCTION
ON HEAVY INDUSTRIAL SITES & HEAVY CONSTRUCTION
EXCEPT DREDGING AND RIVER WORK.....$ 45.45 34.95
POWER EQUIPMENT OPERATOR: GROUP 02 ASSISTANT
OPERATORS (FAYETTE, JEFFERSON, MARION, PERRY,
AND RANDOLPH COUNTIES) INCLUDING BUILDING
CONSTRUCTION ON HEAVY INDUSTRIAL SITES & HEAVY
CONSTRUCTION EXCEPT DREDGING AND RIVER WORK.....$ 41.32 34.95
POWER EQUIPMENT OPERATOR: GROUP 03 AIR COMPRESSOR
ONE; WATER PUMP REGARDLESS OF SIZE ONE; WELDING
MACHINE ONE; 1-BAG MIXER ONE; CONVEYOR ONE; SIPHON
OR JET; LIGHT PLANT ONE; HEATER ONE; IMMOBILE TRACK
AIR ONE (FAYETTE, JEFFERSON, MARION, PERRY, AND
RANDOLPH COUNTIES) INCLUDING BUILDING CONSTRUCTION
ON HEAVY INDUSTRIAL SITES & HEAVY CONSTRUCTION
EXCEPT DREDGING AND RIVER WORK.....$ 36.84 34.95
POWER EQUIPMENT OPERATOR: GROUP 04 FIREMEN ON
WHIRLIES AND ASPHALT SPREADER OILER; HEAVY
EQUIPMENT OILERS; TRUCK CRANES; MONIGANS; LARGE
OVER 65 TONS CAPACITY; CONCRETE PLANT OILER AND
BLACK TOP PLANT OILER (FAYETTE, JEFFERSON,
MARION, PERRY, AND RANDOLPH COUNTIES) INCLUDING
BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL SITES &
HEAVY CONSTRUCTION EXCEPT DREDGING AND RIVER WORK...$ 43.45 34.95
POWER EQUIPMENT OPERATOR: GROUP 05 OILERS
(FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH
COUNTIES) INCLUDING BUILDING CONSTRUCTION ON HEAVY
INDUSTRIAL SITES & HEAVY CONSTRUCTION EXCEPT
DREDGING AND RIVER WORK.....$ 44.45 34.95
POWER EQUIPMENT OPERATOR: GROUP 06 OPERATORS ON
EQUIPMENT WITH BOOMS, INCLUDING JIBS, 100 FT AND
OVER, BUT LESS THAN 150 FT (FAYETTE, JEFFERSON,
MARION, PERRY, AND RANDOLPH COUNTIES) INCLUDING
BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL SITES &
HEAVY CONSTRUCTION EXCEPT DREDGING AND RIVER WORK...$ 45.00 34.95
POWER EQUIPMENT OPERATOR: GROUP 07 OPERATORS ON
EQUIPMENT WITH BOOMS, INCLUDING JIBS, 150 FT AND
OVER, BUT LESS THAN 200 FT (FAYETTE, JEFFERSON,
MARION, PERRY, AND RANDOLPH COUNTIES) INCLUDING
BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL SITES &
HEAVY CONSTRUCTION EXCEPT DREDGING AND RIVER WORK...$ 45.30 34.95
POWER EQUIPMENT OPERATOR: GROUP 08 OPERATORS ON
EQUIPMENT WITH BOOMNS, INCLUDING JIBS, 200 FT AND
OVER; TOWER CRANES, AND WHIRLEY CRANES (FAYETTE,
JEFFERSON, MARION, PERRY, AND RANDOLPH COUNTIES)
INCLUDING BUILDING CONSTRUCTION ON HEAVY INDUSTRIAL
SITES & HEAVY CONSTRUCTION EXCEPT DREDGING AND
RIVER WORK.....$ 45.60 34.95
POWER EQUIPMENT OPERATOR: GROUP 09 CERTIFIED
CRANE OPERATORS, BELOW 17.5 TONS, WHEN REQUESTED BY
THE CONTRACTOR OR REQUIRED BY THE OWNER.
(FAYETTE, JEFFERSON, MARION, PERRY, AND RANDOLPH
COUNTIES) INCLUDING BUILDING CONSTRUCTION ON HEAVY
INDUSTRIAL SITES & HEAVY CONSTRUCTION EXCEPT
DREDGING AND RIVER WORK.....$ 46.25 34.95

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POWER EQUIPMENT OPERATOR: GROUP 1 POWER CRANES,
DRAGLINES, DERRICKS, SHOVELS, GRADALLS, MECHANICS,
TRACTOR HIGHLIFT, TOURNADOZER, CONCRETE MIXERS WITH
SKIP, TOURNAMIXER, TWO-DRUM MACHINE, ONE-DRUM HOIST
WITH TOWER OR BOOM, CABLEWAYS, TOWER MACHINES,

MOTOR PATROL, BOOM TRACTOR, BOOM OR WINCH TRUCK, WINCH OR HYDRAULIC BOOM TRUCK, TRUCK CRANE, TOURNAPULL, TRACTOR OPERATING SCOOPS, BULLDOZER, PUSH TRACTOR, ASPHALT PLANER, FINISHING MACHINE ON ASPHALT, LARGE ROLLERS ON EARTH, ROLLERS ON ASPHALT MIX, ROSS CARRIER OR SIMILAR MACHINE, GRAVEL PROCESSING MACHINE, ASPHALT PLANT ENGINEER, PAVER OPERATOR, FARM TRACTOR WITH HALF YARD BUCKET AND/OR BACKHOE ATTACHMENTS, DREDGE ENGINEER, OR DREDGE OPERATOR, CENTRAL MIX PLANT ENGINEER, CMI OR SIMILAR TYPE MACHINE, TRUCK OR SKID MOUNTED CONCRETE PUMP, TOWER CRANE, ENGINE OR ROCK CRUSHER PLANT, CONCRETE PLANT ENGINEER, DITCHING MACHINE WITH DUAL ATTACHMENT, TRACTOR MOUNTED LOADERS, CHERRY PICKER, HYDRO CRANE, STANDARD OR DINKEY LOCOMOTIVES, SCOOPMOBILES, EUCLID LOADER, SOIL CEMENT MACHINE, BACK FILLER, ELEVATING MACHINE, POWER BLADE, DRILLING MACHINES INCLUDING WELL TESTING, CAISSONS, SHAFT OR ANY SIMILAR TYPE DRILLING MACHINES, MOTOR DRIVEN PAINT MACHINE, PIPE CLEANING MACHINE, PIPE WRAPPING MACHINE, PIPE BENDING MACHINE, APSCO PAVER, BORING MACHINE, (EQUIPMENT GREASED), BARBER- GREENE LOADERS, FORMLESS PAVER, (WELL POINT SYSTEM), CONCRETE SPREADER, HYDRA AX, SPAN SAW AND SIMILAR TYPES, MARINE SCOOPS, BRUSH MULCHER, BRUSH BURNER, MESH PLACER, TREE MOVER, HELICOPTER CREW (3), PILEDRIVER - SKID OR CRAWLER, STUMP REMOVER, ROOT RAKE, TUG BOAT OPERATOR, REFRIGERATING MACHINE, FREEZING OPERATOR, CHAIR CART-SELF PROPELLED, HYDRA SEEDER, STRAW BLOWER, POWER SUB GRADER, BULL FLOAT, FINISHING MACHINE, SELF-PROPELLED PAVEMENT BREAKER (BACKHOE ATTACHED), LULL (OR SIMILAR TYPE MACHINE), TWO AIR COMPRESSORS, COMPRESSORS HOOKED IN MANIFOLD, OVERHEAD CRANE, CHIP SPREADER, MUD CAT, SULL-AIR FORK LIFTS (EXCEPT WHEN USED FOR LANDSCAPING WORK), SOIL STABILAZER (SEAMAN TILLER, BO MAG, RAGO GATOR AND SIMILAR TYPES OR EQUIPMENT), TUBE FLOAT, SPRAY MACHINE, CURING MACHINE, CONCRETE OR ASPHALT MILLING MACHINE, SNOOPER TRUCK OPERATOR.
 (CLAY, CRAWFORD, EDWARDS, EFFINGHAM, JASPER, LAWRENCE, RICHLAND, WABASH, AND WAYNE COUNTIES).....$ 45.15 26.00
POWER EQUIPMENT OPERATOR: GROUP 2 CONCRETE MIXERS WITHOUT SKIPS, ROCK CRUSHER, DITCHING MACHINE UNDER 6', CURBING MACHINE, ONE DRUM MACHINES WITHOUT TOWER OR BOOM, AIR TUGGER, SELF-PROPELLED CONCRETE SAW, MACHINE- MOUNTED POST HOLE DIGGER, TWO TO FOUR GENERATORS, WATER PUMPS, OR WELDING MACHINES, WITHIN 400 FT, AIR COMPRESSOR 600 CU. FT. AND UNDER, ROLLERS ON AGGREGATE AND SEAL COAT SURFACES, FORK LIFTS (WHEN USED FOR LANDSCAPING WORK, CONCRETE AND BLACKTOP CURB MACHINE, FARM TRACTOR WITH LESS THAN HALF YARD BUCKET, ONE WATER PUMP, OILERS, AIR VALVES OR STEAM VALVES, ONE WELDING MACHINE, TRUCK JACK, MUD JACK, GUNNITE MACHINE, HOUSE ELEVATORS WHEN USED FOR HOISTING MATERIAL, ENGINE TENDERS, WAGON DRILL, FLEX PLANE, CONVEYOR, SIPHONS AND PULSOMETER, SWITCHMAN, FIREMAN ON PAINT POTS, FIREMAN ON ASPHALT PLANTS, DISTRIBUTOR OPERATORS ON TRUCKS, TAMPERS, SELF- PROPELLED POWER BROOM, STRIPING MACHINE (MOTOR DRIVEN), FORM TAMPER, BULK CEMENT PLANT EQUIPMENT GREASER, DECK HANDS, TRUCK CRANE OILER_DRIVER, CEMENT BLIMPS, FORM GRADER, TEMPORARY HEAT, THROTTLE VALVE, FARM TRACTOR, SUPER SUCKER (AND SIMILAR TYPE OF

EQUIPMENT). (CLAY, CRAWFORD, EDWARDS, EFFINGHAM, JASPER, LAWRENCE, RICHLAND, WABASH, AND WAYNE COUNTIES).....$ 30.05 26.00

IRON0022-009 06/01/2025
Rates Fringes
IRONWORKER (CLAY, CRAWFORD, EFFINGHAM COUNTY (REMAINDER), JASPER, LAWRENCE, AND RICHLAND COUNTIES).....$ 38.00 26.39

IRON0046-007 05/01/2024
Rates Fringes
IRONWORKER (EFFINGHAM (EXCLUDING DEXTER & EAST THEREOF) AND FAYETTE (AVENUE & NORTH THEREOF) COUNTIES).....$ 37.60 32.94

IRON0103-005 08/01/2024
Rates Fringes
IRONWORKER (CLAY (LOUISVILLE & SOUTH THEREOF), EDWARDS, FRANKLIN (NORTHEAST CORNER), GALLATIN, HAMILTON, JEFFERSON (EAST OF MT. VERNON), LAWRENCE (SOUTHERN HALF INCLUDING LAWRENCEVILLE), MARION (SOUTHEAST), RICHLAND (SOUTHERN HALF), SALINE (NORTHEASTERN 1/3), WABASH, WAYNE, AND WHITE COUNTIES).....$ 35.34 26.40

IRON0392-002 08/01/2024
Rates Fringes
IRONWORKER (FAYETTE (SOUTHERN HALF BELOW BROWNSTOWN), JACKSON (REMAINDER), JEFFERSON (MOUNT VERNON & AREA WEST THEREOF), MARION, PERRY, AND RANDOLPH COUNTIES).....$ 41.65 31.18

IRON0782-005 08/01/2025
Rates Fringes
IRONWORKER (ALEXANDER, FRANKLIN, GALLATIN, HARDIN, JACKSON (EXCEPT AVA AND ELKVILLE TWPS), JOHNSON, MASSAC, PERRY, POPE, PULASKI, SALINE (EXCEPT VICINITY OF EL DORADO AND AREA NORTHEAST THEREOF), UNION, AND WILLIAMSON COUNTIES).....$ 37.66 32.10

LABO0459-002 08/01/2024
Rates Fringes
LABORERS, GROUP 1 GENERAL LABORER (RANDOLPH COUNTY).$ 34.14 30.59
LABORERS, GROUP 2 ASBESTOS ABATEMENT WORKER AND HAZARDOUS WASTE WORKER; LEAD BASE PAINT WORKER (RANDOLPH COUNTY).....$ 34.64 30.59
LABORERS, GROUP 3 DYNAMITE MAN (RANDOLPH COUNTY)....$ 35.64 30.59

LABO0773-002 04/01/2024
Rates Fringes
LABORER (ALEXANDER, FRANKLIN, GALLATIN, HARDIN, JACKSON, JOHNSON, MASSAC, PERRY, POPE, PULASKI, SALINE, UNION, AND WILLIAMSON COUNTIES).....$ 32.75 27.64

LABO1197-001 04/01/2024
Rates Fringes

LABORER (CLAY, CRAWFORD, EDWARDS, EFFINGHAM,
FAYETTE, HAMILTON, JASPER, JEFFERSON, LAWRENCE,
MARION, RICHLAND, WABASH, WAYNE, AND WHITE
COUNTIES).....$ 32.75 27.64

PAIN0032-006 09/01/2021
Rates Fringes
PAINTER: BRIDGES, DAMS (ALEXANDER, FRANKLIN,
GALLATIN, HARDIN, JACKSON, JOHNSON, PERRY, POPE,
PULASKI, RANDOLPH, SALINE, UNION, AND WILLIAMSON
COUNTIES).....$ 35.51 18.78
PAINTER: JOURNEYMAN (ALEXANDER, FRANKLIN, GALLATIN,
HARDIN, JACKSON, JOHNSON, PERRY, POPE, PULASKI,
RANDOLPH, SALINE, UNION, AND WILLIAMSON COUNTIES)...$ 33.21 18.78

PAIN0058-006 05/01/2017
Rates Fringes
PAINTER: BRIDGE EPOXY OR TOXIC-LEAD-BASED PAINT
WORK-$1.00 PREMIMUM.....$ 32.45 17.12

PAIN0124-002 09/01/2021
Rates Fringes
PAINTER: JOURNEYMAN (CLAY, HAMILTON, JEFFERSON,
MARION, AND WAYNE COUNTIES) EPOXY OR
TOXIC-LEAD-BASED PAINT WORK-$1.00 PREMIMUM
JOURNEYMAN WORK ON BRIDGES, GRAIN ELEVATORS, WATER,
RADIO & TELEVISION TOWERS, STACKS, WASTE WATER
PLANTS, AND WATER TREATMENT PLANTS - $3.10 PREMIUM..$ 26.50 19.01
PAINTER: TAPING (ALL KINDS) (CLAY, HAMILTON,
JEFFERSON, MARION, AND WAYNE COUNTIES) EPOXY OR
TOXIC-LEAD-BASED PAINT WORK-$1.00 PREMIMUM
JOURNEYMAN WORK ON BRIDGES, GRAIN ELEVATORS, WATER,
RADIO & TELEVISION TOWERS, STACKS, WASTE WATER
PLANTS, AND WATER TREATMENT PLANTS - $3.10 PREMIUM..$ 27.30 19.01

PAIN0156-008 04/01/2020
Rates Fringes
PAINTER: BRUSH & ROLLER OF MASTICS, CREOSOTE,
KWINCH KOATE, AND COAL TAR EPOXY (EDWARDS, WABASH,
AND WHITE COUNTIES) FOOTNOTE A: ALL STRUCTURES
OVER 40FT? $0.75/ HOUR ABOVE BASE WAGE ALL
STRUCTURES OVER 75FT? $1.50 HOUR ABOVE BASE WAGE
ALL STRUCTURES OVER 100FT? $2.50/ HOUR ABOVE BASE
WAGE.....$ 28.60 17.63
PAINTER: BRUSH, ROLLER AND PAPERHANGER (EDWARDS,
WABASH, AND WHITE COUNTIES) FOOTNOTE A: ALL
STRUCTURES OVER 40FT? $0.75/ HOUR ABOVE BASE WAGE
ALL STRUCTURES OVER 75FT? $1.50 HOUR ABOVE BASE
WAGE ALL STRUCTURES OVER 100FT? $2.50/ HOUR ABOVE
BASE WAGE.....$ 27.60 17.63
PAINTER: DRYWALL FINISHERS AND PLASTERERS (EDWARDS,
WABASH, AND WHITE COUNTIES) FOOTNOTE A: ALL
STRUCTURES OVER 40FT? $0.75/ HOUR ABOVE BASE WAGE
ALL STRUCTURES OVER 75FT? $1.50 HOUR ABOVE BASE
WAGE ALL STRUCTURES OVER 100FT? $2.50/ HOUR ABOVE
BASE WAGE.....$ 27.85 17.63
PAINTER: SPRAY OF MASTICS, CREOSOTES, KWINCH KOATE,
AND COAL TAR EPOXY (EDWARDS, WABASH, AND WHITE
COUNTIES) FOOTNOTE A: ALL STRUCTURES OVER
40FT? $0.75/ HOUR ABOVE BASE WAGE ALL STRUCTURES
OVER 75FT? $1.50 HOUR ABOVE BASE WAGE ALL

STRUCTURES OVER 100FT? $2.50/ HOUR ABOVE BASE WAGE..$ 29.60 17.63
PAINTER: SPRAY, SANDBLAST, POWER TOOLS, WATERBLAST,
AND STEAM CLEANING (EDWARDS, WABASH, AND WHITE
COUNTIES) FOOTNOTE A: ALL STRUCTURES OVER
40FT? $0.75/ HOUR ABOVE BASE WAGE ALL STRUCTURES
OVER 75FT? $1.50 HOUR ABOVE BASE WAGE ALL
STRUCTURES OVER 100FT? $2.50/ HOUR ABOVE BASE WAGE..$ 28.60 17.63

PAIN0500-004 06/01/2023
Rates Fringes
PAINTER: BRIDGES & DAMS - BLAST & SPRAY (MASSAC
COUNTY) SPRAY, SANDBLASTING AND WATER BLAST
UNITS WITH 3500 PSI RECEIVE A $.50 PER HOUR
PREMIMUM. ALL WORK FORTY FEET AND ABOVE RECEIVE A
$1.00 PER HOUR PREMIMUM.....$ 31.00 15.40
PAINTER: BRIDGES & DAMS - BRUSH & ROLL (MASSAC
COUNTY) SPRAY, SANDBLASTING AND WATER BLAST
UNITS WITH 3500 PSI RECEIVE A $.50 PER HOUR
PREMIMUM. ALL WORK FORTY FEET AND ABOVE RECEIVE A
$1.00 PER HOUR PREMIMUM.....$ 30.00 15.40
PAINTER: INDUSTRIAL - BLAST & SPRAY (MASSAC COUNTY)
SPRAY, SANDBLASTING AND WATER BLAST UNITS WITH
3500 PSI RECEIVE A $.50 PER HOUR PREMIMUM. ALL
WORK FORTY FEET AND ABOVE RECEIVE A $1.00 PER HOUR
PREMIMUM.....$ 26.25 15.40
PAINTER: INDUSTRIAL - BRUSH & ROLL (MASSAC COUNTY)
SPRAY, SANDBLASTING AND WATER BLAST UNITS WITH
3500 PSI RECEIVE A $.50 PER HOUR PREMIMUM. ALL
WORK FORTY FEET AND ABOVE RECEIVE A $1.00 PER HOUR
PREMIMUM.....$ 25.25 15.40

PAIN1705-003 05/01/2017
Rates Fringes
PAINTER: BLASTING, SPRAYING & PRESSURE WASHING
(CRAWFORD, EFFINGHAM, JASPER, LAWRENCE, AND
RICHLAND COUNTIES) EPOXY OR TOXIC-LEAD-BASED
PAINT WORK-$1.00 PREMIMUM BRUSH & ROLLER WORK OVER
30FT ABOVE GROUND OR FLOOR LEVEL - $0.80 PREMIUM
BRUSH & ROLLER WORK OVER 100FT ABOVE GROUND OR
FLOOR LEVEL - $1.80 PREMIUM BLASTING, SPRAYING &
PRESSURE WORK OVER 30FT ABOVE GROUND LEVEL - $2.30
PREMIUM BLASTING, SPRAYING & PRESSURE WORK OVER
100FT ABOVE GROUND LEVEL - $3.30 PREMIUM.....$ 28.30 20.07
PAINTER: BRUSH & ROLLER AND WALL COVERING DRYWALL
PREPARING (CRAWFORD, EFFINGHAM, JASPER, LAWRENCE,
AND RICHLAND COUNTIES) EPOXY OR TOXIC-LEAD-BASED
PAINT WORK-$1.00 PREMIMUM BRUSH & ROLLER WORK OVER
30FT ABOVE GROUND OR FLOOR LEVEL - $0.80 PREMIUM
BRUSH & ROLLER WORK OVER 100FT ABOVE GROUND OR
FLOOR LEVEL - $1.80 PREMIUM BLASTING, SPRAYING &
PRESSURE WORK OVER 30FT ABOVE GROUND LEVEL - $2.30
PREMIUM BLASTING, SPRAYING & PRESSURE WORK OVER
100FT ABOVE GROUND LEVEL - $3.30 PREMIUM.....$ 27.30 20.07

PLAS0143-010 04/01/2017
Rates Fringes
CEMENT MASON/CONCRETE FINISHER (ALEXANDER,
FRANKLIN, GALLATIN, HARDIN, JACKSON, JOHNSON,
MASSAC, PERRY, POPE, PULASKI, RANDOLPH, SALINE,
UNION, AND WILLIAMSON COUNTIES).....$ 29.11 16.09

PLAS0143-011 04/01/2016
Rates Fringes
CEMENT MASON/CONCRETE FINISHER (CLAY, CRAWFORD, EDWARDS, EFFINGHAM, FAYETTE, HAMILTON, JASPER, JEFFERSON, LAWRENCE, MARION, RICHLAND, WABASH, WAYNE, AND WHITE COUNTIES).....$ 29.22 16.31

TEAM0026-006 05/01/2025
Rates Fringes
TRUCK DRIVER, GROUP 1: DRIVERS ON 2 AXLES HAULING LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES; MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO 6,000 LB CAPACITY. (EFFINGHAM AND JASPER COUNTIES)..$ 45.29 25.42
TRUCK DRIVER, GROUP 2: 2 or 3 axles hualing more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vactor Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combiation units. (EFFINGHAM AND JASPER COUNTIES).....$ 45.88 25.42
TRUCK DRIVER, GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons.(EFFINGHAM AND JASPER COUNTIES).....$ 46.15 25.42
TRUCK DRIVER, GROUP 4: LOW BOY AND OIL DISTRIBUTORS. (EFFINGHAM AND JASPER COUNTIES).....$ 46.54 25.42
TRUCK DRIVER, GROUP 5: DRIVERS WHO REQUIRE SPECIAL PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS WASTE WORK. (EFFINGHAM AND JASPER COUNTIES).....$ 47.64 25.42

TEAM0050-004 05/01/2025
Rates Fringes
TRUCK DRIVER, GROUP 1: DRIVERS ON 2 AXLES HAULING LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES; MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO 6,000 LB CAPACITY. (CLAY, FAYETTE, JEFFERSON, MARION, RANDOLPH, AND WAYNE COUNTIES).....$ 45.35 25.72
TRUCK DRIVER, GROUP 2: 2 or 3 axles hualing more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vactor Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combiation units. (CLAY, FAYETTE, JEFFERSON, MARION, RANDOLPH, AND WAYNE COUNTIES).....$ 45.93 25.72
TRUCK DRIVER, GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons. (CLAY, FAYETTE, JEFFERSON, MARION, RANDOLPH, AND WAYNE COUNTIES)....$ 46.25 25.72
TRUCK DRIVER, GROUP 4: LOW BOY AND OIL DISTRIBUTORS. (CLAY, FAYETTE, JEFFERSON, MARION, RANDOLPH, AND WAYNE COUNTIES).....$ 46.60 25.72
TRUCK DRIVER, GROUP 5: DRIVERS WHO REQUIRE SPECIAL

PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS
WASTE WORK. (CLAY, FAYETTE, JEFFERSON, MARION,
RANDOLPH, AND WAYNE COUNTIES).....$ 47.71 25.72

TEAM0135-009 05/01/2025
Rates Fringes
TRUCK DRIVER, GROUP 1: DRIVERS ON 2 AXLE
TRUCKSHAULING LESS THAN 9 TON; AIR COMPRESSOR AND
WELDING MACHINES AND BROOMS, INCLUDING THOSE PULLED
BY SEPARATE UNITS; TRUCK DRIVER HELPERS; WAREHOUSE
EMPLOYEES; MECHANIC HELPERS; GREASERS AND TIREMEN;
FORK LIFTS UP TO 6,000 POUNDS CAPACITY (CRAWFORD,
EDWARDS, LAWRENCE, RICHLAND, AND WABASH COUNTIES)
FOOTNOTE: A. $46.20 PER DAY.....$ 38.55 16.11
TRUCK DRIVER, GROUP 2: 2 OR 3 AXLE TRUCKS HAULING
MORE THAN 9 TON BUT HAULING LESS THAN 16 TON;
A-FRAME WINCH TRUCKS; HYDROLIFT TRUCKS; VACTOR
TRUCKS OR SIMILAR EQUIPMENT WHEN USED FOR
TRANSPORTATION PURPOSES; FORK LIFTS OVER 6,000
POUND CAPACITY; WINCH TRUCKS; 4 AXLE COMBINATION
UNITS; IN THE EVENT THE EMPLOYER DESIRES TO USE
TICKET WRITERS THAT CLASSIFICATION SHALL COME UNDER
GROUP II FOOTNOTE: $46.20 PER DAY IN ADDITIONAL
FRINGE BENEFITS (CRAWFORD, EDWARDS, LAWRENCE,
RICHLAND, AND WABASH COUNTIES).....$ 38.97 16.11
TRUCK DRIVER, GROUP 3: 2, 3, or 4 axle trucks
hauling 16 ton or more; Drivers on water pulls;
Articulated Dump Trucks; Mechanics and working
forepersons; 5 axle or more combination units
(CRAWFORD, EDWARDS, LAWRENCE, RICHLAND, AND WABASH
COUNTIES).....$ 39.18 16.11
TRUCK DRIVER, GROUP 4: LOW BOY; OIL DISTRIBUTORS
(CRAWFORD, EDWARDS, LAWRENCE, RICHLAND, AND WABASH
COUNTIES) FOOTNOTE: A. $46.20 PER DAY.....$ 39.44 16.11
TRUCK DRIVER, GROUP 5: DRIVERS WHO REQUIRE SPECIAL
PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS
WASTE WORK. (CRAWFORD, EDWARDS, LAWRENCE, RICHLAND,
AND WABASH COUNTIES) FOOTNOTE: A. $46.20 PER
DAY .....$ 39.44 16.11

TEAM0347-001 05/01/2025
Rates Fringes
TRUCK DRIVER, GROUP 1: DRIVERS ON 2 AXLES HAULING
LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES
AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE
UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES;
MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP
TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO
AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO
6,000 LB CAPACITY. (GALLATIN COUNTY).....$ 43.28 27.56
TRUCK DRIVER, GROUP 2: 2 or 3 axles hualing more
than 9 tons but hauling less than 16 tons; A-frame
winch trucks; hydrolift trucks; Vactor Trucks or
similar equipment when used for transportation
purposes; Forklift over 6,000 lb.capacity; winch
trucks; and four axle combiation units. (GALLATIN
COUNTY).....$ 43.86 27.56
TRUCK DRIVER, GROUP 3: 2, 3 or 4 Axles hauling 16
tons or more; 5-Axles or more combination units;
drivers on water pulls; articulated dump trucks;
mechanics and working forepersons. (GALLATIN
COUNTY).....$ 44.15 27.56
TRUCK DRIVER, GROUP 4: LOW BOY AND OIL

DISTRIBUTORS. (GALLATIN COUNTY).....$ 44.53 27.56
TRUCK DRIVER, GROUP 5: DRIVERS WHO REQUIRE SPECIAL
PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS
WASTE WORK. (GALLATIN COUNTY).....$ 45.61 27.56

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 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) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than SU, UAVG, SA, or SC denotes that a union rate was

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The SU identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which

the classifications and rates under the SA identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210.

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END OF GENERAL DECISION"

"General Decision Number: KY20260040 05/18/2026

State: Kentucky

Construction Types: Highway

Counties: Kentucky Counties of
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

Modification Number Publication Date
0 01/02/2026
1 05/18/2026

BRIN0004-002 06/01/2024
Rates Fringes
BRICKLAYER (DAVIESS, HANCOCK, HENDERSON, MCLEAN,
UNION, AND WEBSTER COUNTIES).....$ 33.70 16.57
BRICKLAYER (BUTLER, EDMONSON, HOPKINS, MUHLENBERG,
AND OHIO COUNTIES).....$ 33.70 16.57
BRICKLAYER (BALLARD, CALDWELL, CARLISLE,
CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, AND MCCRACKEN COUNTIES).....$ 33.70 16.57

BRTN0004-005 06/01/2024
Rates Fringes
BRICKLAYER (ALLEN, CALLOWAY, CHRISTIAN, LOGAN,
SIMPSON, TODD, TRIGG, AND WARREN COUNTIES).....$ 33.70 16.57

CARP0357-002 04/01/2025
Rates Fringes
PILEDRIVERMAN.....$ 34.39 24.02
DIVER.....$ 51.21 24.02
CARPENTER.....$ 33.89 24.02

ELEC0369-006 05/27/2025
Rates Fringes
ELECTRICIAN (BUTLER, EDMONSON, LOGAN, TODD & WARREN
COUNTIES:).....$ 40.96 22.44

ELEC0429-001 06/01/2024
Rates Fringes
ELECTRICIAN (ALLEN & SIMPSON COUNTIES).....$ 34.92 14.75

ELEC0816-002 06/01/2025
Rates Fringes
ELECTRICIAN (BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (EXCEPT A 5 MILE RADIUS OF CITY HALL IN FULTON), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES) CABLE SPICERS RECEIVE $.25 PER HOUR ADDITIONAL.....$ 36.75 10.29

ELEC1701-003 07/01/2024
Rates Fringes
ELECTRICIAN (DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES) CABLE SPICERS RECEIVE $.25 PER HOUR ADDITIONAL.....$ 37.10 20.03

ELEC1925-002 01/01/2025
Rates Fringes
ELECTRICIAN (FULTON COUNTY (UP TO A 5 MILE RADIUS OF CITY HALL IN FULTON)).....$ 28.60 15.49
CABLE SPLICER (FULTON COUNTY (UP TO A 5 MILE RADIUS OF CITY HALL IN FULTON)).....$ 28.85 15.50

ENGI0181-017 07/01/2025
Rates Fringes
POWER EQUIPMENT OPERATOR 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. - $1.00 ABOVE GROUP 1 RATE EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.....$ 38.37 19.60
POWER EQUIPMENT OPERATOR GROUP 3 ALL OFF ROAD MATERIAL HANDLING EQUIPMENT, INCLUDING ARTICULATING DUMP TRUCKS; GREASER ON GREASE FACILITIES SERVICING HEAVY EQUIPMENT 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. - $1.00 ABOVE GROUP 1 RATE EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.....$ 39.14 19.60
POWER EQUIPMENT OPERATOR 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 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. - $1.00 ABOVE GROUP 1 RATE EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.....$ 38.69 19.60

POWER EQUIPMENT OPERATOR 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 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. - $1.00 ABOVE GROUP 1 RATE EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK....$ 41.55 19.60

IRON0070-005 06/01/2025
Rates Fringes

IRONWORKER: STRUCTURAL; ORNAMENTAL; REINFORCING; PRECAST CONCRETE ERECTORS (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))....$ 36.17 25.80

IRON0103-004 08/01/2024
Rates Fringes

IRONWORKERS: (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 (NORTHEA.....$ 35.34 26.40

IRON0492-003 05/01/2025

Rates Fringes

IRONWORKERS: (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, I.....$ 35.32 16.44

IRON0782-006 08/01/2025

Rates Fringes

IRONWORKERS:: PROJECTS WITH A TOTAL CONTRACT COST OF $20,000,000.00 OR ABOVE (BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES CALDWELL COUNTY (SOUTHWESTERN TWO-THIRDS, INCLUDING THE TOWNSHIPS OF CEDAR BLUFF, CIDER, CLAXTON, COBB, CROWTOWN, DULANEY, FARMERSVILLE, FREDONIA, MCGOWAN, OTTER POND & PRINCETON); CHRISTIAN COUNTY (WESTERN THIRD, EXCLUDING THE TOWNSHIPS OF APEX, CROFTON, KELLY, MANNINGTON, WYNNS, BENNETTSTOWN, CASKY.....$ 37.47 26.49

IRONWORKERS:: ALL OTHER WORK (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, PEM.....$ 35.63 26.49

LABO0189-005 07/01/2025

Rates Fringes

LABORERS: 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 (BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES)....$ 27.77 19.66

LABORERS: 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 (BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES).....$ 27.17 19.66
LABORERS: 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 (BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES).....$ 27.12 19.66
LABORERS: 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 (BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES).....$ 26.87 19.66

LABO0189-006 07/01/2025
Rates Fringes
LABORERS: 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 (ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES).....$ 27.77 19.66
LABORERS: 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 (ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES).....$ 27.17 19.66
LABORERS: 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 (ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES).....$ 27.12 19.66

LABORERS: 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 (ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES).....$ 26.87 19.66

LABO0561-001 07/01/2025
Rates Fringes

LABORERS: 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 (CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES)...$ 29.45 18.77

LABORERS: 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 (CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES).....$ 28.85 18.77

LABORERS: 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 (CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES).....$ 28.80 18.77

LABORERS: 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 (CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES)...$ 28.55 18.77

PAIN0032-002 09/01/2024
Rates Fringes
PAINTERS: BRIDGES (BALLARD COUNTY).....$ 36.77 21.77
PAINTERS: ALL OTHER WORK (BALLARD COUNTY) SPRAY, BLAST, STEAM, HIGH & HAZARDOUS (INCLUDING LEAD ABATEMENT) AND ALL EPOXY - $1.00 PREMIUM.....$ 34.47 21.77

PAIN0118-003 06/01/2014
Rates Fringes
PAINTERS: SPRAY, SANDBLAST, POWER TOOLS, WATERBLAST & STEAM CLEANING (EDMONSON COUNTY).....$ 19.50 11.97
PAINTERS: BRUSH & ROLLER (EDMONSON COUNTY).....$ 18.50 11.97

PAIN0156-006 04/01/2024
Rates Fringes
PAINTERS: BRIDGES (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 4).....$ 35.00 20.30
PAINTERS: BRIDGES (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 3).....$ 31.77 20.30
PAINTERS: BRIDGES (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 1).....$ 30.77 20.30
PAINTERS: ALL OTHER WORK: (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 4).....$ 31.77 20.30
PAINTERS: ALL OTHER WORK: (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 3).....$ 30.62 20.30
PAINTERS: ALL OTHER WORK: (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 2).....$ 30.37 20.30
PAINTERS: ALL OTHER WORK: (DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES) (GROUP 1).....$ 29.62 20.30

PAIN0500-002 06/01/2025
Rates Fringes
PAINTERS: BRIDGES (CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES) WATERBLASTING UNITS WITH 3500 PSI AND ABOVE - $.50 PREMIUM SPRAYPAINTING AND ALL ABRASIVE BLASTING - $1.00 PREMIUM WORK 40 FT. AND ABOVE GROUND LEVEL - $1.00 PREMIUM.....$ 31.50 15.60

PAINTERS: ALL OTHER WORK (CALDWELL, CALLOWAY,
CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES,
HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL,
MCCRACKEN & TRIGG COUNTIES) WATERBLASTING UNITS
WITH 3500 PSI AND ABOVE - $.50 PREMIUM
SPRAYPAINTING AND ALL ABRASIVE BLASTING - $1.00
PREMIUM WORK 40 FT. AND ABOVE GROUND LEVEL - $1.00
PREMIUM.....$ 25.25 15.60

PLUM0184-002 07/01/2025
Rates Fringes
PLUMBER; STEAMFITTER (BALLARD, CALDWELL, CALLOWAY,
CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES,
HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN AND
TRIGG COUNTIES).....$ 44.26 20.28

PLUM0502-004 08/01/2024
Rates Fringes
PLUMBER; STEAMFITTER (ALLEN, BUTLER, EDMONSON,
SIMPSON & WARREN).....$ 41.90 24.89

PLUM0633-002 08/01/2024
Rates Fringes
PLUMBER/PIPEFITTER (DAVIESS, HANCOCK, HENDERSON,
HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD,
UNION & WEBSTER COUNTIES:).....$ 38.41 22.26

TEAM0089-003 04/01/2025
Rates Fringes
TRUCK DRIVERS: ZONE 1: (ALLEN, BUTLER, EDMONSON,
LOGAN, SIMPSON & WARREN COUNTIES) (Group 4).....$ 26.00 27.81
TRUCK DRIVERS: ZONE 1: (ALLEN, BUTLER, EDMONSON,
LOGAN, SIMPSON & WARREN COUNTIES) (Group 3).....$ 26.98 27.81
TRUCK DRIVERS: ZONE 1: (ALLEN, BUTLER, EDMONSON,
LOGAN, SIMPSON & WARREN COUNTIES) (Group 2).....$ 25.90 27.81
TRUCK DRIVERS: ZONE 1: (ALLEN, BUTLER, EDMONSON,
LOGAN, SIMPSON & WARREN COUNTIES) (Group 1).....$ 25.72 27.81

TEAM0215-003 04/01/2025
Rates Fringes
TRUCK DRIVER 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 (DAVIESS, HANCOCK, HENDERSON,
HOPKINS, MCLEAN, MUHLENBERG, OHIO & WEBSTER
COUNTIES).....$ 27.66 27.81
TRUCK DRIVER 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 (DAVIESS,
HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG,
OHIO & WEBSTER COUNTIES).....$ 27.65 27.81
TRUCK DRIVER GROUP 2 TRUCK MECHANIC (DAVIESS,
HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG,
OHIO & WEBSTER COUNTIES).....$ 27.58 27.81
TRUCK DRIVER GROUP 1 GREASER, TIRE CHANGER
(DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN,

MUHLENBERG, OHIO & WEBSTER COUNTIES).....$ 27.35 27.81

TEAM0236-001 04/01/2025
Rates Fringes
TRUCK DRIVER GROUP 5 MIXER ALL TYPES (BALLARD,
CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, MCCRACKEN,TODD & TRIGG COUNTIES)...$ 26.00 27.81
TRUCK DRIVER 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 (BALLARD,
CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, MCCRACKEN,TODD & TRIGG COUNTIES)...$ 25.98 27.81
TRUCK DRIVER 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 (BALLARD, CALDWELL,
CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL,
MCCRACKEN,TODD & TRIGG COUNTIES).....$ 25.90 27.81
TRUCK DRIVER GROUP 2 TRUCK MECHANIC (BALLARD,
CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, MCCRACKEN,TODD & TRIGG COUNTIES)...$ 25.90 27.81
TRUCK DRIVER GROUP 1 GREASER, TIRE CHANGER
(BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN,
CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON,
LYON, MARSHALL, MCCRACKEN,TODD & TRIGG COUNTIES)...$ 25.72 27.81

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave
for Federal Contractors applies to all contracts subject to the
Davis-Bacon Act for which the contract is awarded (and any
solicitation was issued) on or after January 1, 2017. If this
contract is covered by the EO, the contractor must provide
employees with 1 hour of paid sick leave for every 30 hours
they work, up to 56 hours of paid sick leave each year.
Employees must be permitted to use paid sick leave for their
own illness, injury or other health-related needs, including
preventive care; to assist a family member (or person who is
like family to the employee) who is ill, injured, or has other
health-related needs, including preventive care; or for reasons
resulting from, or to assist a family member (or person who is
like family to the employee) who is a victim of, domestic
violence, sexual assault, or stalking. Additional information
on contractor requirements and worker protections under the EO
is available at
https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject
to the Davis-Bacon Act that were awarded on or between January 1,
2015 and January 29, 2022, and that have not been renewed or
extended on or after January 30, 2022. Executive Order 13658 does
not apply to contracts subject only to the Davis-Bacon Related Acts
regardless of when they were awarded. If a contract is subject to
Executive Order 13658, the contractor must pay all covered workers
at least $13.65 per hour (or the applicable wage rate listed on this

wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 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) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA", or "SC" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The "SU" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may

include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

�SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The �SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the �SA identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

 a) a survey underlying a wage determination
 b) an existing published wage determination
 c) an initial WHD letter setting forth a position on a wage determination matter
 d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

 Branch of Wage Surveys
 Wage and Hour Division
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

 Branch of Construction Wage Determinations
 Wage and Hour Division
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

 Wage and Hour Administrator
 U.S. Department of Labor

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 200 Constitution Avenue, N.W.
 Washington, DC 20210
The request should be accompanied by a full statement of the
interested party's position and any information (wage payment
data, project description, area practice material, etc.) that
the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an
interested party may appeal directly to the Administrative
Review Board (formerly the Wage Appeals Board). Write to:
 Administrative Review Board
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210.
================================================================
 END OF GENERAL DECISION
"
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Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

PART IV

BID ITEMS

261138

PROPOSAL BID ITEMS

Report Date 11/6/26

261138

Section: 0001 - KENTUCKY - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	4,280.00	TON		$	
0020	00020		TRAFFIC BOUND BASE	208.00	TON		$	
0030	00078		CRUSHED AGGREGATE SIZE NO 2	2,000.00	TON		$	
0040	00100		ASPHALT SEAL AGGREGATE	2.00	TON		$	
0050	00103		ASPHALT SEAL COAT	1.00	TON		$	
0060	00219		CL4 ASPH BASE 1.00D PG76-22	330.00	TON		$	
0070	00329		CL4 ASPH SURF 0.50B PG76-22	60.00	TON		$	
0080	00356		ASPHALT MATERIAL FOR TACK	1.00	TON		$	
0090	01987		DELINEATOR FOR G/R BI DIRECTIONAL WHITE	28.00	EACH		$	
0100	02159		TEMP DITCH	8,400.00	LF		$	
0110	02160		CLEAN TEMP DITCH	4,200.00	LF		$	
0120	02223		GRANULAR EMBANKMENT	237,758.00	CUYD		$	
0130	02242		WATER	125.00	MGAL		$	
0140	02351		G/R-W BEAM-S FACE TL-3 TL-3	2,725.00	LF		$	
0150	02360		G/R TERMINAL SECTION NO 1	2.00	EACH		$	
0160	02429		RIGHT-OF-WAY MONUMENT TYPE 1	25.00	EACH		$	
0170	02432		WITNESS POST	3.00	EACH		$	
0180	02545		CLEARING AND GRUBBING 22.2 ACRES	1.00	LS		$	
0190	02555		CONCRETE-CLASS B	283.00	CUYD		$	
0200	02562		TEMPORARY SIGNS	500.00	SQFT		$	
0210	02602		FABRIC-GEOTEXTILE CLASS 1	65,225.00	SQYD		$	
0220	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		$	
0230	02692		SETTLEMENT PLATFORM	5.00	EACH		$	
0240	02701		TEMP SILT FENCE	16,800.00	LF		$	
0250	02703		SILT TRAP TYPE A	42.00	EACH		$	
0260	02704		SILT TRAP TYPE B	42.00	EACH		$	
0270	02705		SILT TRAP TYPE C	42.00	EACH		$	
0280	02706		CLEAN SILT TRAP TYPE A	42.00	EACH		$	
0290	02707		CLEAN SILT TRAP TYPE B	42.00	EACH		$	
0300	02708		CLEAN SILT TRAP TYPE C	42.00	EACH		$	
0310	02726		STAKING	1.00	LS		$	
0320	03340		STEEL PIPE-2 1/2 IN	150.00	LF		$	
0330	03343		STEEL PIPE-4 IN	150.00	LF		$	
0340	05952		TEMP MULCH	94,100.00	SQYD		$	
0350	05953		TEMP SEEDING AND PROTECTION	70,600.00	SQYD		$	
0360	05963		INITIAL FERTILIZER	4.40	TON		$	
0370	05964		MAINTENANCE FERTILIZER	4.40	TON		$	
0380	05985		SEEDING AND PROTECTION	141,200.00	SQYD		$	
0390	05992		AGRICULTURAL LIMESTONE	87.50	TON		$	
0400	08033		TEST PILES - FURNISH, 48-INCH LDOEPP	730.00	LF		$	
0410	08033		TEST PILES - FURNISH, 72-INCH LDOEPP	395.00	LF		$	

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PROPOSAL BID ITEMS

Report Date 11/6/26

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	08033		TEST PILES - INSTALL, 48-INCH LDOEPP	730.00	LF		$	
0430	08033		TEST PILES - INSTALL, 72-INCH LDOEPP	395.00	LF		$	
0440	08040		LOADING TESTS - STATIC - 48-INCH PIPE	2.00	EACH		$	
0450	10020NS		FUEL ADJUSTMENT	43,970.00	DOLL	$1.00	$	$43,970.00
0460	20263ED		GEOGRID REINFORCEMENT	5,245.00	SQYD		$	
0470	23233EC		DYNAMIC PILE TESTING - ON LAND - INITIAL	4.00	EACH		$	
0480	23233EC		DYNAMIC PILE TESTING - ON LAND - RESTRIKE	8.00	EACH		$	
0490	23233EC		DYNAMIC PILE TESTING - ON WATER - INITIAL	2.00	EACH		$	
0500	23233EC		DYNAMIC PILE TESTING - ON WATER - RESTRIKE	4.00	EACH		$	
0510	24548EC		FURNISH EQUIPMENT FOR PILE TEST PROGRAM	1.00	LS		$	
0520	24549EC		PSEUDO-STATIC LOAD TEST - AXIAL - 48-INCH PIPE	2.00	EACH		$	
0530	24549EC		PSEUDO-STATIC LOAD TEST - AXIAL - 72-INCH PIPE	2.00	EACH		$	
0540	24549EC		PSEUDO-STATIC LOAD TEST - LATERAL - 48-INCH PIPE	1.00	EACH		$	
0550	24549EC		PSEUDO-STATIC LOAD TEST - LATERAL - 72-INCH PIPE	1.00	EACH		$	
0560	24550EC		VIBRATION MONITORING	1.00	LS		$	
0570	24552EC		SPLICE TEST PILE 48-INCH LDOEPP	8.00	EACH		$	
0580	24552EC		SPLICE TEST PILE 72-INCH LDOEPP	5.00	EACH		$	
0590	24740EC		CONSTRUCTION ACCESS	1.00	LS		$	
0600	26250ED		CONT FLIGHT AUGER PILE (PRE-PRODUCTION RIGID INCLUSIONS)	2,160.00	LF		$	
0610	26250ED		CONT FLIGHT AUGER PILE (PRODUCTION RIGID INCLUSIONS)	42,600.00	LF		$	
0620	26251ED		CONT FLIGHT AUGER PILE - INTEGRITY TEST (PRE-PRODUCTION RIGID INCLUSIONS)	27.00	EACH		$	
0630	26251ED		CONT FLIGHT AUGER PILE - INTEGRITY TEST (PRODUCTION RIGID INCLUSIONS)	114.00	EACH		$	

Section: 0002 - ILLINOIS - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0640	00020		TRAFFIC BOUND BASE (IL)	481.00	TON		$	
0650	00078		CRUSHED AGGREGATE SIZE NO 2 (IL)	2,000.00	TON		$	
0660	00460		CULVERT PIPE-12 IN (IL)	443.00	LF		$	
0670	00468		CULVERT PIPE-36 IN (IL)	132.00	LF		$	

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PROPOSAL BID ITEMS

Report Date 11/6/26

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0680	01200		PIPE CULVERT HEADWALL-12 IN (IL)	4.00	EACH		$	
0690	01212		PIPE CULVERT HEADWALL-36 IN (IL)	1.00	EACH		$	
0700	01310		REMOVE PIPE (IL)	24.00	LF		$	
0710	01982		DELINEATOR FOR G/R MONO DIRECTIONAL WHITE (IL)	21.00	EACH		$	
0720	02159		TEMP DITCH (IL)	1,550.00	LF		$	
0730	02160		CLEAN TEMP DITCH (IL)	775.00	LF		$	
0740	02183		CONTAMINATED SOIL DISPOSAL (IL)	500.00	CUYD		$	
0750	02223		GRANULAR EMBANKMENT (ROCKFILL - IL - UP TO 12" NOMINAL MAX SIZE)	151,658.00	CUYD		$	
0760	02242		WATER (IL)	100.00	MGAL		$	
0770	02351		G/R-W BEAM-S FACE TL-3 TL-3 (IL)	2,050.00	LF		$	
0780	02367		G/R END TREATMENT TYPE 1 (IL)	2.00	EACH		$	
0790	02429		RIGHT-OF-WAY MONUMENT TYPE 1 (METHOD A - IL)	6.00	EACH		$	
0800	02484		CHANNEL LINING CLASS III (IL)	4.00	TON		$	
0810	02545		CLEARING AND GRUBBING 11.8 ACRES	1.00	LS		$	
0820	02603		FABRIC-GEOTEXTILE CLASS 2 (IL)	39,501.00	SQYD		$	
0830	02607		FABRIC-GEOTEXTILE CLASS 2 FOR PIPE (IL)	2,117.00	SQYD		$	
0840	02650		MAINTAIN & CONTROL TRAFFIC (IL)	1.00	LS		$	
0850	02692		SETTLEMENT PLATFORM (IL)	3.00	EACH		$	
0860	02701		TEMP SILT FENCE (IL)	3,100.00	LF		$	
0870	02703		SILT TRAP TYPE A (IL)	15.00	EACH		$	
0880	02704		SILT TRAP TYPE B (IL)	15.00	EACH		$	
0890	02705		SILT TRAP TYPE C (IL)	15.00	EACH		$	
0900	02706		CLEAN SILT TRAP TYPE A (IL)	15.00	EACH		$	
0910	02707		CLEAN SILT TRAP TYPE B (IL)	15.00	EACH		$	
0920	02708		CLEAN SILT TRAP TYPE C (IL)	15.00	EACH		$	
0930	02726		STAKING (IL)	1.00	LS		$	
0940	03340		STEEL PIPE-2 1/2 IN (IL)	75.00	LF		$	

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PROPOSAL BID ITEMS

Report Date 11/6/26

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0950	03343		STEEL PIPE-4 IN (IL)	75.00	LF		$	
0960	05952		TEMP MULCH (MULCH, METHOD 2 - IL)	18,700.00	SQYD		$	
0970	05953		TEMP SEEDING AND PROTECTION (IL)	14,100.00	SQYD		$	
0980	05963		INITIAL FERTILIZER (IL)	0.90	TON		$	
0990	05964		MAINTENANCE FERTILIZER (IL)	0.90	TON		$	
1000	05985		SEEDING AND PROTECTION (SEEDING, CLASS 2 - IL)	28,200.00	SQYD		$	
1010	05992		AGRICULTURAL LIMESTONE (IL)	17.40	TON		$	
1020	08033		TEST PILES - FURNISH, 48-INCH LDOEPP (IL)	185.00	LF		$	
1030	08033		TEST PILES - INSTALL, 48-INCH LDOEPP (IL)	185.00	LF		$	
1040	08100		CONCRETE-CLASS A (IL)	6.10	CUYD		$	
1050	10020NS		FUEL ADJUSTMENT (IL)	26,540.00	DOLL	$1.00	$	$26,540.00
1060	20191ED		OBJECT MARKER TY 3 (IL)	2.00	EACH		$	
1070	23233EC		DYNAMIC PILE TESTING - ON LAND - INITIAL (IL)	1.00	EACH		$	
1080	23233EC		DYNAMIC PILE TESTING - ON LAND - RESTRIKE (IL)	2.00	EACH		$	
1090	24549EC		PSEUDO-STATIC LOAD TEST - AXIAL - 48-INCH PIPE (IL)	1.00	EACH		$	
1100	24552EC		SPLICE TEST PILE , 48-INCH LDOEPP (IL)	2.00	EACH		$	
1110	24583EC		HDPE PIPE LINER (IL)	258.00	LF		$	
1120	24740EC		CONSTRUCTION ACCESS (IL)	1.00	LS		$	

Section: 0003 - BI-STATE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1130	21325ND		CONSTRUCTION TRAILER	1.00	LS		$	
1140	24626EC		PROJECT INSPECTION BOAT	1.00	LS		$	

Section: 0004 - MOBILIZATION & DEMOBIILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1150	02568		MOBILIZATION	1.00	LS		$	
1160	02569		DEMOBILIZATION	1.00	LS		$	

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PROPOSAL BID ITEMS

Report Date 11/6/26