



CALL NO. 124

CONTRACT ID. 194211

BOONE COUNTY

FED/STATE PROJECT NUMBER HSIP 5138 (067)

DESCRIPTION US HIGHWAY 42 (US 42)

WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB

PRIMARY COMPLETION DATE 11/15/2019

LETTING DATE: April 26, 2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME April 26, 2019. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 12%

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

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PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 06

CONTRACT ID - 194211
HSIP 5138 (067)
COUNTY - BOONE
PCN - 0600800421901
HSIP 5138 (067)

US HIGHWAY 42 (US 42) (MP 0.000) FROM THE GALLATIN-BOONE COUNTY LINE EXTENDING NORTHEAST TO
KY 338 (MP 5.673), A DISTANCE OF 05.67 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO.
06-09010.00.
GEOGRAPHIC COORDINATES LATITUDE 38:50:37.40 LONGITUDE -84:43:28.20

COMPLETION DATE(S):
COMPLETED BY 11/15/2019 APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

April 30, 2018

FEDERAL CONTRACT NOTES

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

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

CIVIL RIGHTS ACT OF 1964

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

NOTICE TO ALL BIDDERS

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

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

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

SECOND TIER SUBCONTRACTS

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

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

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

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

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

DBE GOAL

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

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

The DBE Participation Plan shall include the following:

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

- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
 - c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- 4 Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- 5 Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

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

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

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

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

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

PROMPT PAYMENT

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

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a signed and notarized affidavit (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. **These documents must be submitted within 10 days of being paid by the Cabinet.**

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

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

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

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

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

DEFAULT OR DECERTIFICATION OF THE DBE

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

1/27/2017

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

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

SECTION 7 is expanded by the following new Article:

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

Pursuant to Title 46CFR Part 381, the Contractor agrees

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

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

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

ASPHALT MIXTURE

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

DGA BASE

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION A

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

SPECIAL NOTES APPLICABLE TO PROJECT GENERAL NOTES AND DESCRIPTION OF WORK

The Bid Items for this Highway Safety Improvement Project are located on the Plan and Profile sheets, Curve Section Sheets, Pipe Sheets, and as summarized in the Summary Sheets.

CAUTION

The information in this proposal and shown on the plans and summary sheets, and the type of work listed herein are approximate only and are not to be taken as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

STATIONING

The contractor is advised that the planned locations of work were established from a beginning station number which is STA 0+00 at the Gallatin/Boone County line. Milepoints were established from a beginning Milepoint which is MP 0.000 at the Gallatin/Boone County line. The existing mile marker signs may not correspond to the proposed work locations

ON-SITE INSPECTION

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

RIGHT-OF-WAY LIMITS

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

PROPERTY DAMAGE

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

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CONTROL

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

COORDINATION WITH UTILITY COMPANIES

Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities within the project limits. Do not disturb existing overhead or underground utilities. With the exception of a water meter at Sta. 250+81 (30.5' LT) and a water service line at Sta. 251+00, it is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utilities companies will work concurrently with the Contractor while relocating their facilities. Contractor shall contact property owners if the water service will be disconnected at any point during relocation of the water meter and water service line. The Contractor is not to disturb the utility pole at South Fork Road Sta. 98+21 (35.6' LT).

DESCRIPTION OF WORK

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

Superelevation Improvements. There is one curve where Superelevation Improvements are proposed. The intent of this work is to bring a consistent pavement cross slope through the identified curve. Refer to the Superelevation Improvement Summary for location and approximate quantities. The Contractor will need to utilize Leveling & Wedging and/or Asphalt Base in order to achieve the desired superelevation improvements at the identified curve. For the paving passes where the superelevation improvement will only require adding 1-3 inches of additional pavement depth, Leveling & Wedging PG64-22 will be required. The paving passes where the superelevation improvement will require 3 or more inches of additional pavement depth, Class 3 Asphalt Base 1.00D PG 64-22 will be required. The Engineer will make the final determination as to which bid items will be required, as well as the appropriate lift thicknesses and number of lifts, based on the existing conditions encountered at the time of construction. After placement of the Leveling & Wedging and/or Asphalt Base, an Asphalt Surface course will be placed along the identified curve. As a result

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of these paving operations within the identified curve, the roadside shoulders, fill slopes, and/or ditches will have to be modified to match the final pavement elevations and tie in with the existing ground lines. A representative cross section (Sta 161+73) is given for the curve showing the proposed superelevation improvements and the resulting shoulder and fill slope grading. The bid item "Ditching and Shouldering" is to be used for re-grading the shoulders, fill slopes, and/or ditches.

NOTE: Some field adjustments of the proposed shoulder width, fill slope, ditch, and/or superelevation improvement may be required. The proposed shoulder and roadside grading is intended to occur within Right-of-Way and NOT disturb any sensitive obstructions (i.e. fences, buildings, utility poles, etc.). Superelevation improvements with sensitive obstructions along the roadside shall still require regrading the roadside, but the slopes may have to be constructed steeper than shown on the representative cross section. The desire of the Department is to construct the new fill slopes as flat as possible and no steeper than 3:1. If a fill slope must be constructed steeper than 3:1 to remain within Right-of-Way or not impact a sensitive obstruction, and the existing fill slope is steeper than 3:1, then the new fill slope can be constructed steeper than 3:1, but the new fill slope shall not be constructed steeper than the existing fill slope. If a desired superelevation improvement will result in the new fill slope having to be graded steeper than the existing fill slope in order to remain within Right-of-Way or not impact a sensitive obstruction, then the superelevation rate should be modified (reduced) in order to reduce the final change in pavement edge elevation, thereby reducing the height of the new fill slope grading, and allowing for a flatter new fill slope that will not be steeper than the existing fill slope. Prior to making modifications to the proposed superelevation rate, shoulder width, and/or fill slope, coordinate with and obtain approval from the Engineer.

South Fork Road Realignment. South Fork Road is being realigned to improve the sight distance for vehicles turning onto US 42 from South Fork Road. Refer to the South Fork Road Realignment Plan Sheet and Typical Sections for more information and the construction details of the South Fork Road Realignment. Refer to the Pipe Drainage Summary, Entrance Pipe Summary, Signing Summary, Guardrail Summary, Paving Summary, and General Summary for estimated quantities.

Ditching and Shouldering. The entire length of the project, both sides of the road, is set up for Ditching & Shouldering. Perform Ditching & Shouldering at the locations identified elsewhere in the Proposal, or the locations as directed by the Engineer. The proposed shoulder, ditch, and/or roadside dimensions are detailed on the Typical Sections. The intent is to provide a width of DGA shoulder and flatten the fill slopes and ditch slopes as much as possible, to create a more forgiving roadside. Perform Ditching & Shouldering according to the Special Note for Ditching & Shouldering. For details of the conditions and situations commonly encountered when performing Ditching & Shouldering, refer to the detail sheets titled: DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS.

Immediately prior to completion, clean all existing and new culvert and entrance pipes, and grade ditches to drain. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction.

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The installation of Erosion Control Blanket, Turf Reinforcement Mat and/or Channel Lining Class II should occur after “Ditching and Shouldering” is completed and as directed by the Engineer. Use Erosion Control Blanket, Turf Reinforcement Mat, and/or Channel Lining Class II as directed by the Engineer. Refer to the Ditch Lining Summary for more information. Excavation and/or Embankment required for ditching and shouldering is incidental to the bid item “Ditching and Shouldering”.

Ditching. Perform ditching in accordance with Section 209. The bid item “Ditching” is intended to pay for proposed ditching that extends perpendicular to the roadway at the culvert pipe inlets and/or outlets, as indicated and quantified on the Pipe Drainage Summary. Use Erosion Control Blanket and/or Channel Lining Class II as directed by the Engineer.

18” DGA Shoulder. After Ditching and Shouldering operations are complete, construct an 18” wide, 4” average depth DGA Shoulder along both sides of the road for the project limits (MP 0.000 to MP 5.673). Apply a Double Asphalt Seal Coat to the full width of the 18” wide DGA Shoulder. Refer to the Typical Sections for more information. Refer to the Paving Summary and General Summary for estimated quantities.

Base Failure Repair and Shoulder Failure Repair. There are two locations where Base Failure Repair and one location where Shoulder Failure Repair are proposed. Refer to the Base Failure Repair Summary and the Shoulder Failure Repair Summary for location, estimated quantities, and more information. Refer to the Special Notes for Base Failure Repair and the Special Note for Shoulder Failure Repair for more information.

RT Shoulder / Guardrail Detail – Sta. 142+73 to Sta. 160+91. In this approximate Station range, there is an existing strand of guardrail that is approximately 8 ft from the edge of pavement. It is proposed to perform shoulder milling and trenching on 4’ of this existing earth shoulder and then to pave this 4’ shoulder and install new guardrail so that the face of the new guardrail lines up with the new edge of shoulder pavement. Refer to the Typical Sections, Special Note for Shoulder Milling and Trenching, Guardrail Summary, and Paving Summary for more information.

Embankment Repair. There are two locations where Embankment Repair is proposed. Refer to the Embankment Repair Summary for locations and more information. Refer to the Cross Sections for approximate quantities of Embankment in Place. Refer to the Typical Sections for more information.

Edgeline Rumble Strips. Edgeline Rumble Strips are proposed from MP 0.37 to MP 5.67. Refer to the Paving Summary and General Summary for estimated quantities. Refer to Sepia 05 and Sepia 06 for more information.

Existing Roadway Signs. The contractor is to take care not to damage any existing roadway signs. Any roadway signs that are damaged during construction are to be replaced at the contractor’s expense in accordance with section 105.08 of the standard specifications.

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Remove, Store & Reinstall Signs. A quantity of 11 each of Remove-Store and Reinstall Sign has been included in the contract. 1 Sign has been included for D3-1 "South Fork Rd" for the South Fork Road Realignment. 10 Signs are for signs potentially affected in areas of ditching and shouldering work.

RCBC Extensions. There are 3 locations (MP 1.05-Outlet, MP 2.00-Inlet, MP 2.00-Outlet) where box culverts are being extended. Locations are noted on the Pipe Drainage summary. Other items that are included with RCBC extensions are: Foundation Preparation, Concrete Class A, Steel Reinforcement, and Remove Headwall. Refer to the RCBC Detail Sheets for more information.

Sloped & Mitered Concrete Headwall. Sloped & Mitered Concrete Headwalls shall be constructed as shown on the detail sheets titled: SLOPED & MITERED CONCRETE HEADWALL DETAILS. This headwall is intended to combine the benefits of a pipe headwall with the advantages of safety and adaptability by allowing the headwall to be custom fit to the surrounding embankment without having to warp the embankment. The Pipe Drainage Summary identifies which pipe ends are to receive the Sloped & Mitered Concrete Headwalls. The identified pipe ends shall have the headwall installed and the pipe mitered at a slope that matches the final embankment slopes at each location. If the pipe is on a skew, install the headwall and miter the pipe so that the concrete slope paving of the new headwall is perpendicular to the roadway. In other words the embankment slope should not be warped to fit the skew of the pipe; the headwall should be installed and the pipe should be mitered to match the final embankment slope, so that the roadside fill slope is fairly consistent prior to the pipe, at the pipe, and beyond the pipe. When completed, the edges of the Sloped & Mitered Concrete Headwall should be flush with the surrounding ground line. Payment at the Contract unit price Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary to install the headwall and miter the pipe.

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

Channel Lining. 134 Tons of Channel Lining Class II has been included on the Pipe Drainage Summary for use at the locations indicated on the Detail/Summary. 569 Tons of Channel Lining Class II has been included on the Ditching Summary for use at the locations indicated on the Summary. An additional 100 Tons, for a total quantity of 803 Tons of Channel Lining Class II, has been included in the contract for potential use around drop box inlets, safety box inlets, inlets and outlets of pipes, along areas of regraded ditch line and/or fill slope, and other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Channel Lining throughout this project. The Engineer will make the final determination as to the placement of Channel Lining.

Intermediate Anchor/Collar. There are quantities of Class A Concrete included in the contract to construct an intermediate anchor, or collar, to repair pipe and to securely connect new pipe to an existing pipe. The intermediate anchors shall be constructed as shown on Standard Drawing RDX-060, current edition.

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Erosion Control Blanket. A quantity of 750 square yards of Erosion Control Blanket has be included in the Ditch Lining Summary for potential use along areas of regraded ditch line, inlets and outlets of pipes, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Erosion Control Blanket throughout this project. The Engineer will make the final determination as to the placement of Channel Lining.

Guardrail Replacement. There are locations of existing guardrail within the project that will be removed and replaced with new guardrail. Refer to the Guardrail Summary for the approximate locations for the removal and replacement of guardrail and the proposed end treatments. See the Special Note for Guardrail for more information on this work.

When the plans call for a Type 1 or Type 4 End Treatment, a MASH eligibility letter from FHWA is required for these end terminals. When a MASH tested eligibility letter is not available for the end terminal being utilized, the most recent NCHRP 350 eligibility letter from FHWA for that terminal will apply. Acceptance of the terminal will be at the discretion of the engineer.

Remove – Railroad Rail Above Ground Line by Torch Cutting. Existing railroad rails that protrude above the ground line are present at Sta. 36+00 to Sta. 40+00 LT (Plan Sheet R5 and R7) and Sta. 61+42 to Sta. 62+67 RT (Plan Sheet R9). From Sta. 36+00 to Sta. 40+00 LT there are approximately 16 rails to cut. From Sta. 61+42 to Sta. 62+67 RT there are approximately 26 rails to cut. Contractor shall cut railroad rails by torch cutting rails as close to the existing ground line as possible and at a maximum within 2” of existing ground line. Disposal of the rails will be incidental to bid item “Remove (Railroad Rail Above Ground Line by Torch Cutting).”

From Sta. 61+42 to Sta. 62+67 RT, the 9 railroad rails that are supporting and holding up fence and gabion baskets shall not be cut.



SPECIAL NOTE FOR DITCHING & SHOULDERING

I. DESCRIPTION

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

- (1) Maintaining and Controlling Traffic; (2) Site Preparation; (3) Ditching; (4) Shouldering; (5) Constructing Embankments, Embankment Benching, and/or Excavation; (6) Erosion Control; and (7) Any other work as specified in this Contract.

II. MATERIALS

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

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. DGA.** Furnish Dense Graded Aggregate as per Section 805.
- D. Asphalt Seal Coat.** See the Special Note for Double Asphalt Seal Coat.
- E. Asphalt Seal Aggregate.** See the Special Note for Double Asphalt Seal Coat.
- F. Channel Lining, Class II.** When listed as a bid item, furnish Channel Lining, Class II as per Section 805.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Erosion Control.** See the Special Note for Erosion Control.
- C. Site Preparation.** Be responsible for all site preparation including, but not limited to: staking; clearing, grubbing, and removal of all obstructions or any other items; excavation, embankment benching, compacting embankment in place; temporary pollution and erosion

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control; disposal of excess, waste, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the Engineer.

D. Staking. See the Special Note for Staking.

E. Ditching & Shouldering. Perform Ditching & Shouldering at the approximate locations listed on the Summary Sheets and/or Plan Sheets, or at locations as directed by the Engineer. All work shall be completed according to Section 209, or as specified in the DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS, the Typical Sections, the Plan Sheets, or as directed by the Engineer. Ditching & Shouldering shall consist of any necessary clearing, grubbing, grading, and/or reshaping of the existing shoulder, ditch, and/or roadside to achieve the proposed shoulder, ditch, and/or roadside dimensions detailed on the Typical Sections. Depending on the existing conditions encountered and to achieve the dimensions as detailed in the Typical Sections, Ditching & Shouldering may also include, but is not limited to: embankment benching, excavating and removing excess material, excavation of rock, providing additional earth material suitable for vegetation growth and grading, shaping, and compacting the earth material.

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

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

G. DGA Wedge & Chip Seal. All areas of Ditching & Shouldering have been set up to receive a DGA Wedge & Chip Seal after the ditching and shouldering operations are complete. Construct and compact the DGA as required by Section 302. Place Chip Seal over the entire width of the DGA Wedge. See the Special Note for Double Asphalt Seal Coat for the Chip Seal requirements.

H. Channel Lining. Install Class II Channel Lining along any sections of ditches identified in the Proposal, along any fill or ditch backslopes identified in the Proposal requiring Slope Protection, or any other locations the Engineer directs for slope protection or erosion control.

I. Right-of-Way Limits. The Department has not established exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements

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(i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.

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

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

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

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

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such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

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

- N. Clean Up, Disposal of Waste.** Clean up the project area as work progresses. Dispose of all removed excess material, debris, and other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- O. Final Dressing, Seeding and Protection.** Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation.** Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.
- D. Staking.** See Special Note for Staking.
- E. Ditching & Shouldering.** The Department will measure the bid item DITCHING & SHOULERING according to Section 209.04.
- F. Embankment Benching, Excavation, Additional Embankment Material.** The Department will not measure any embankment benching, excavating and removing excess material, excavation of rock, providing additional earth material suitable for vegetation growth, nor grading, shaping, and compacting the earth material. Any and all required embankment benching, excavation, additional embankment material, and compaction of earth material shall be incidental to the bid item DITCHING & SHOULERING.
- G. DGA.** DGA shall be measured according to Section 302.04.

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- H. Chip Seal.** When specified in the contract, the bid items associated with Chip Seal shall be measured according to the Special Note for Double Asphalt Seal Coat.
- I. Channel Lining, Class II.** When listed as a bid item, Class II Channel Lining shall be measured according to Section 703.04.
- J. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Staking.** See Special Note for Staking.
- D. Ditching & Shouldering.** The Department will make payment for the completed and accepted quantities under the bid item DITCHING & SHOULDERING. The Department will consider payment full compensation for furnishing all labor, materials, equipment, and incidentals necessary to preform Ditching & Shouldering as required by these notes and Section 209, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- E. DGA.** When listed as bid items, the Department will make payment for DGA and Crushed Stone Base according to Section 302.05.
- F. Chip Seal.** When specified in the contract, the Department will make payment for the bid items associated with Chip Seal according to the Special Note for Double Asphalt Seal Coat.
- G. Channel Lining, Class II.** When listed as a bid item, the Department will make payment for Class II Channel Lining according to Section 703.05.

SPECIAL NOTES FOR PIPE REPLACEMENTS / EXTENSIONS

I. DESCRIPTION

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

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

II. MATERIALS

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

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Culvert Pipe.** Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to Standard Drawing RDI-001-09, RDI-002-04, and RDI-035-01. Use flowable fill for pipe backfill. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.
- C. Flowable Fill.** Furnish Flowable Fill as per Section 601.03.03(B).
- D. Erosion Control.** See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation.** Be responsible for all site preparation, including but not limited to saw cutting and removing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of

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obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct drainage features. Perform all site preparation only as approved or directed by the Engineer.

- D. Removing Headwalls, Pipe, and Excavation.** Remove existing headwalls and/or culvert and entrance pipes at the approximate locations noted on the summary. The Engineer will determine that actual locations at the time of construction. Saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. NOTE: Saw cutting the pavement shall be incidental. Obtain the Engineer's approval of trench width prior to saw cutting pavement. Excavate trench and remove pipe as directed or approved by the Engineer without disturbing existing underground utilities.
- E. Constructing Pipe, Headwalls, Drainage Boxes.** Construct culvert and/or entrance pipes, pipe extensions, headwalls, and/or drainage boxes at the locations shown in the proposal or as designated by the Engineer. The contractor will establish, with the approval of the Engineer, the final centerlines, flow lines, and skews to obtain the best fit with the existing and/or proposed ditches and other proposed improvements. (See the Special Note for Staking.) Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.
- F. Pipe Backfill.** Backfill entrance pipes according to Section 701.03.06. Contrary to Section 701.03.06, backfill culvert pipes with flowable fill for the width of the roadway and as shown on the Pipe Replacement Detail. Steel plates will likely be required to maintain traffic while the flowable fill cures. Once the flowable fill has sufficiently cured, place the Asphalt Base in lifts with thicknesses of 3-4 inches, up to the surface of the existing pavement. Seal with Leveling & Wedging. Allow the asphalt base and leveling & wedging to be exposed to traffic for a minimum of 14 days to allow for settlement. During the waiting period, level & wedge any settlement as directed by the Engineer. After the waiting period has been met for the last pipe replacement constructed, the final milling and/or surfacing operations can begin, unless directed otherwise by the Engineer.
- G. Embankments.** Backfill pipe and culvert extensions, and construct shoulder embankments as directed by the Engineer. Provide positive drainage of slopes at all times, during and upon completion of construction. The contractor shall properly bench into the existing slope according to the current Standard Drawings and apply proper compaction according to Section 206.
- H. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and

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design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

- I. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. Working days will not be charged for those days on which work on the controlling item is delayed, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.
- J. Right-of-Way Limits.** The Department has not established exact limits of the Right-of-Way. Unless a consent and release from is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.
- K. Disposal of Waste.** Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).
- L. Final Dressing, Clean Up, Seeding and Protection, and Restoration.** After all work is completed, remove all waste and debris from the job site, clean all existing and new culvert pipe, and clean ditches. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Perform Class A Final dressing on all disturbed areas. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

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

IV. METHOD OF MEASUREMENT

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

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

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

D. Remove Pipe. Removal of existing culvert and entrance pipe shall be measured according to Section 701.04.14. Any excavation necessary to remove existing pipe will NOT be measured for payment, but shall be incidental to the bid item "Remove Pipe".

E. Culvert and Entrance Pipe. The Department will measure the quantity according to Section 701. Any excavation necessary to install culvert or entrance pipe shall be incidental to the corresponding pipe bid items.

F. Excavation, Pipe Backfill, Embankments. The Department will NOT measure for payment excavation of pipe trenches, pipe backfill material, flowable fill, constructing shoulder embankments, and Geotextile Fabric Type IV For Pipe (when required by the Standards), but shall considered these items incidental to the bid items for culvert and entrance pipe.

G. Final Dressing, Clean Up, Seeding and Protection, and Restoration. The Department will NOT measure for payment the operations of Final Dressing, Clean Up, Seeding and Protection, and Restoration. These activities shall be incidental to Erosion Control.

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

V. BASIS OF PAYMENT

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

B. Remove Headwall. The Department will make payment for the completed and accepted quantity of Each existing headwall removed. The Department will NOT make payment for any excavation necessary to remove an existing headwall and will consider this

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incidental to the bid item "Remove Headwall". Payment at the Contract unit price per Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing an existing headwall.

- C. Remove Pipe.** The Department will make payment for the completed and accepted quantities of existing culvert and entrance pipe removed. The Department will NOT make payment for any excavation necessary to remove existing pipe and will consider this incidental to the bid item "Remove Pipe". Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.
- D. Culvert and Entrance Pipe.** The Department will make payment for the completed and accepted quantities of culvert and entrance pipe. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.
- E. Erosion Control.** See Special Note for Erosion Control.

SPECIAL NOTE FOR SHOULDER MILLING/TRENCHING

Trench shoulders as shown on the Typical Section. The Engineer may eliminate locations along the route from shoulder trenching (e.g. road approaches, turn lanes, entrances, etc.). For entrances and road approaches, the Engineer will determine whether to omit the trenching or continue the trenching across the entrance or approach. DO NOT trench across entrances or road approaches without the Engineer's approval. If trenching is achieved by means other than milling, saw cut the pavement 8.75 inches deep to create a smooth edge prior to excavating the shoulder trench. Excavate the material from the shoulder and maintain the proposed cross-slope as shown on the Typical Sections. The intent is to mill, or excavate, the entire trench so that the proposed shoulder slope is retained at the end of the paving operation. Reshape and compact excavated material from the trench on the outside edge of the newly paved shoulder as shown on the Typical Section.

Retain possession of excess materials and/or materials the Engineer deems unsuitable for reuse and waste the materials off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. See Special Provision for Waste and Borrow.

Accept payment at the contract unit price per square yard for SHOULDER MILLING/TRENCHING as full compensation for all labor, materials, equipment, and incidentals for excavating the shoulder trench and reuse and/or disposal of the excavated material.

SPECIAL NOTE

For Tree Removal

Boone County

Perform Low Cost Safety Improvements on US 42 from the Gallatin/Boone County Line to KY-338 Item No. 6-9010

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

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

SPECIAL NOTE FOR SIGNAGE

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

The following signs and sign components shall be fabricated using Type IX sheeting:

- White sign legends on panel signs
- STOP (R1-1) signs
- ALL WAY (R1-3P) signs
- YIELD (R1-2) signs
- DO NOT ENTER (R5-1) signs
- WRONG WAY (R5-1a) signs

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

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

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

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

All other permanent signs shall be fabricated using Type III or Type IV sheeting.

SPECIAL NOTE FOR SIGNING

I. DESCRIPTION

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

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

II. MATERIALS

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

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

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

III. CONSTRUCTION METHODS

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

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

C. Staking. See Special Note for Staking.

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

Fabricate sheet signs from .080 or .125 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209, and to the size and shape specified. Prepare the side of

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the sheet to be used as the sign face to receive the retroreflective background material according to the recommendations of the sheeting and retroreflective material manufacturer(s). Sheeting used as background material for sign faces is to be the color specified and visually in accordance with the standard requirements of ASTM D-4956, and meet the requirements of Section 830 of the Standard Specifications. Contrary to Section 830.02.06, only the types and colors of sheeting as specified in the proposal will be accepted. All retroreflective material shall be fabricated and assembled in accordance with the specifications and/or recommendations of the manufacturer(s).

All hardware for the erection of sheeting signs shall be rust resistant: stainless steel, zinc coated, aluminum, or an Engineer approved material. All beams and posts shall be of sufficient lengths to extend from the top of the sign to the required embedment in the anchor. Splicing of the sign post shall NOT be allowed. For installations in soil, Type I steel posts shall be mounted on either a standard anchor, with soil stabilizer plate, or on a Type D breakaway sign support. Refer to Sheeting Sign Detail Sheet 1 of 2 for installation details for a standard anchor with soil stabilizer plate. When installing a standard anchor with soil stabilizer plate, if solid rock is encountered, the Contractor shall drill a hole to the required depth into the rock, install the anchor into the hole, and backfill the anchor post with concrete, or other method approved by the Engineer. The cost shall be incidental to Type I steel post, and a soil stabilizer plate will not be required. Refer to Standard Drawing RGX-065, current edition, for installation details of Type D breakaway sign supports. Approved manufacturers for Type D breakaway sign supports have been placed on the list of approved materials. For installations on existing concrete, such as a sidewalk, concrete median, etc., Type I steel posts shall be mounted on a Type D surface mount. For Type D surface mounts there are two permissible alternatives: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL or Snap n Safe Model S200s for 2" Sign Post by Designovations Inc. of Stilman Valley, IL. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D surface mount(s). Install the Type D surface mount(s) according to all the applicable requirements of the manufacturer (see shop drawings). All steel post shall meet the requirements of Section 832. All hardware including, but not limited to, sign post anchors, soil stabilizer plates, nuts, bolts, washers, fasteners, fittings, and bracing, or any other incidentals necessary to erect the signs shall be furnished by the Contractor and will be incidental to the work.

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

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

- Red, fluorescent yellow, and fluorescent yellow-green (Type IX Sheeting)
- White and yellow (Type III and/or IV Sheeting).

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

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

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

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

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

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

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for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

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

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

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

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

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

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

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IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site Preparation.** Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.
- C. Signs.** The Department will measure the finished in-place area of signs in Square Feet.
- D. Sign Posts.** The Department will measure the finished in-place length of sign posts in Linear Feet, from the top of the anchor, or top of the sign support, to the top of the sign post. Laps, cutoffs, excess, and waste will NOT be measured for payment.
- E. Type D Breakaway Sign Supports.** The Department will measure Type D sign supports as Each support installed.
- F. Type D Surface Mounts.** The Department will measure Type D Surface Mounts as Each surface mount installed.
- G. Class A Concrete for Signs.** The Department will measure the Class A Concrete used in conjunction with Type D breakaway sign support installations in Cubic Yards. Any concrete that is required as backfill due to hitting rock during a standard installation shall be incidental to the bid item STEEL POST TYPE I, and soil stabilizers will not be required.
- H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection shall be measured according to Section 212.
- I. Erosion Control.** See Special Note for Erosion Control.
- J. Remove Sign.** The Department will consider all signs attached to one or more connected posts as a single sign. The Department will measure as Each sign assembly removed and NOT each individual sign removed.
- K. Items Provided by KYTC.** The Department will NOT measure for payment the installation of signs and/or surface mounts provided by KYTC. These activities shall be incidental to the bid item STEEL POST TYPE I.

V. BASIS OF PAYMENT

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

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- B. Signs.** The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the signs, as required by these notes and the details found elsewhere in the proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- C. Sign Posts.** The Department will make payment for the completed and accepted quantities under the bid item STEEL POST TYPE I. The Department will consider payment full compensation for all work and incidentals necessary to install the sign posts as required by these notes and the details found elsewhere in the proposal.
- D. Type D Breakaway Sign Supports.** The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D breakaway sign supports as required by Standard Drawing RGX-065, current edition.
- E. Type D Surface Mounts.** The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D Surface Mount. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D surface mounts according to all applicable manufacturer requirements.
NOTE: There are two permissible Type D Surface Mount alternatives: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL or Snap n Safe Model S200s for 2" Sign Post by Designovations Inc. of Stilman, Valley, IL.
- F. Class A Concrete for Signs.** The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work and incidentals necessary to install the concrete as required by Standard Drawing RGX-065, current edition.
- G. Remove Sign.** The Department will make payment for the completed and accepted quantities under the bid item REMOVE SIGN. The Department will consider payment full compensation for all work and incidentals necessary to remove the existing signs, posts, anchors, and any other sign material or hardware, from the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- H. Erosion Control.** See Special Note for Erosion Control.

SPECIAL NOTE FOR EROSION CONTROL

I. DESCRIPTION

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

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

II. MATERIALS

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

III. CONSTRUCTION

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

Erosion Control

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Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. All silt control devices shall be sized to retain a volume of 3,600 cubic feet per disturbed contributing acre. Remove sediment from silt traps before they become a maximum of $\frac{1}{2}$ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

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

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

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

The use of Temporary Mulch is encouraged.

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

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right-of-Way) as nearly

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as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. MEASUREMENT

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

V. BASIS OF PAYMENT

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

SPECIAL NOTE FOR STAKING

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

1. Contrary to Section 201, perform items 1-3 usually performed by the Engineer.
2. Using the proposed pavement superelevation rates determine the necessary changes in pavement edge elevation along the curves and the transitions leading into and out of the curve to achieve the proposed superelevation improvements. The intent to provide a consistent superelevation throughout the curves and smooth transitions into and out of the curves. Once the proposed changes in pavement edge elevations are determined and prior to starting paving operations, verify the proposed roadside re-grading along the curve can be constructed so that the new roadside is flush with the new pavement edge elevation and the new toe of slope, or top of cut, will remain within the Right-of-Way and/or not impact a sensitive obstruction. If necessary, and with the approval of the Engineer, reduce the proposed superelevation rate of a curve if the new edge of pavement elevation will cause the new roadside grading to extend beyond the Right-of-Way and/or impact a sensitive obstruction. Alternatively, with the approval of the Engineer and to the extent allowable by the "Ditching & Shouldering and Embankment Benching Details" and/or the Special Note for Ditching & Shouldering, the Contractor may be allowed to make adjustments to the roadside grading so the proposed roadside re-grading will remain within the existing Right-of-Way and/or not impact a sensitive obstruction. After the final proposed changes in pavement edge elevations are determined and before paving operations begin, submit to the Engineer and obtain approval for the number of asphalt lifts, each asphalt lift's thickness, and the asphalt mix type of each lift the contractor plans to use to achieve the superelevation improvement. Ensure positive drainage upon completion of the work.
3. Verify the dimensions, type, and quantities of the culvert pipes, entrance pipes, and/or box culverts as listed and detailed in the proposal, and determine flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the drainage structures with existing and/or proposed ditches, stream channels, swales, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.
4. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location,

Staking Page 2 of 2

advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations. NOTE: The District Traffic Engineer may determine that the proposed signing, including sign types and messages, needs to be adjusted and/or modified from what is shown in the proposal. Therefore, the Contractor shall not order any sign material for a route until the route has been staked and final sign location approval has been given by the District Traffic Engineer.

5. Produce and furnish to the Engineer "As Built" information for the superelevation improvements and the drainage improvements. For superelevation improvements, as built information will consist of a record of the final pavement cross slopes every 50 feet, for each lane of travel along the curves and the transitions into and out of the curves. Elevation data of the curve improvements is not necessary; simply the cross slope percentage every 50 feet. For the drainage improvements, as built information will consist of a final record of the actual types, sizes, and locations of the drainage structures (i.e. box inlets, headwalls, junction boxes, etc.), culvert pipes, and/or box culverts constructed. Final elevation data of the drainage improvements is not necessary.
6. Using paint marks on the pavement, and/or any other means approved by the Engineer, the Contractor shall layout and pre-mark the proposed striping, pavement markings, etc. Adjust as necessary to accommodate the existing site conditions and to provide proper alignment of the proposed thru and turning lanes. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to installing the striping and/or pavement markings.
7. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
8. Perform any and all other staking operations required to control and construct the work.

SPECIAL NOTES FOR COMPLETION DATES & LIQUIDATED DAMAGES

The ultimate fixed completion date for this project will be November 15th 2019. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

Trees and/or bushes that are 5 inches or greater (diameter at breast height) shall not be cut or trimmed between June 1ST and July 31ST. Any trees and/or bushes that are cut or trimmed between June 1ST and July 31ST will NOT receive payment at the contract unit price. Furthermore, failure to adhere to these restrictions shall result in Liquidated Damages in the amount of **\$310** per affected tree as mitigation to the Imperiled Bat Conservation Fund for the loss of habitat. Activities that are a part of this contract that do not involve the initial trimming and/or cutting of trees and/or bushes will be permitted under the ultimate fixed completion date.

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

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

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

COORDINATION OF WORK WITH OTHER CONTRACTS

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

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR DOUBLE ASPHALT SEAL COAT

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply the first course of asphalt seal coat at the rate of 3.2 lbs/sy of asphalt and 30 lbs/sy of size #78 seal coat aggregate. Apply the second course at 2.8 lbs/sy of asphalt and 20 lbs/sy of size #9M seal coat aggregate. The Engineer may adjust the rate of application as conditions warrant. Use caution in applying liquid asphalt material to avoid over spray getting on curbs, gutter, barrier walls, bridges, guardrail, and other roadway appurtenances.

The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to “Asphalt Material for Asphalt Seal Coat”.

1-3215 Double Asphalt Seal Coat
01/02/2012

SPECIAL NOTES FOR SHOULDER FAILURE REPAIR

Repair locations listed in the summary are approximate only. The Engineer will determine the actual shoulder failure repair locations and dimensions at the time of construction. Prior to milling and/or resurfacing, saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Excavate to an approximate depth of 14 inches below the top of the existing shoulder pavement level. Remove and dispose of all materials. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department. Waste all removed materials off the Right of Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

On the same day trench is excavated, backfill the excavated area with 4 inches of DGA, and 9 inches of Class 3 Asphalt Base 1.00D PG64-22 up to the existing shoulder pavement surface. Compact the asphalt base to the proper compaction as required by the Section 403 and seal with Leveling and Wedging. Perform all shoulder failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations. Do not place new asphalt surface over repaired shoulder failures until a minimum of 14 days has elapsed after placement of the final course of asphalt base. After the 14 calendar day waiting period, and/or when the Engineer determines the repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

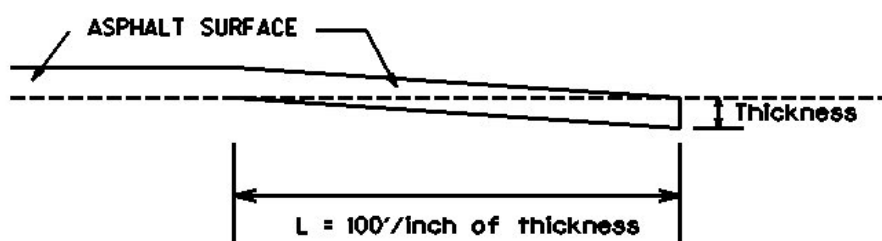
The bidder must draw his or her own conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation of the materials encountered that are not in accord with the classification shown.

Payment at the Contract unit prices per square yard for "Shoulder Failure Repair" and per ton for "Leveling and Wedging" shall be full compensation for all labor, materials, equipment, and incidentals for excavating and disposing of all materials, furnishing and placing DGA and asphalt base backfilling the trench up to the top pavement boundary, sealing the repaired area with Leveling and Wedging, and all other items necessary to complete the work to the satisfaction of the Engineer.

SPECIAL NOTE FOR EDGE KEY

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

EDGE KEY



Thickness = 1.25 Inches

L = 125 LF

L= Length of Edge Key

SPECIAL NOTES FOR GUARDRAIL

I. DESCRIPTION

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

Furnish all equipment, labor, materials, and incidentals for the following work items:

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

II. MATERIALS

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

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

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

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

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

III. CONSTRUCTION METHODS

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

B. Site Preparation. Remove existing guardrail system, including the guardrail end treatments, Bridge End connectors and all other elements of the existing guardrail system as per Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with the existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the existing shoulders to provide proper template or foundation for the guardrail;

Guardrail

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filling voids left as the result of removing existing guardrail and guard posts with dry sand; temporary pollution and erosion control; disposal of excess, waste materials, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the engineer.

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

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

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

- D. Delineators for Guardrail.** Construct Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- E. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- F. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.
- G. Right of Way Limits.** The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

Guardrail
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- H. Clean Up, Disposal of Waste.** Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- I. Final Dressing, Seeding and Protection.** Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- J. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site preparation.** Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to the Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable.
- C. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will measure according to Section 719.04.
- D. Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- E. Clean Up, Disposal of Waste, Final Dressing, and Seeding and Protection.** The Department will NOT measure for payment the operations of: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection will be measured according to Section 212.
- F. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Guardrail, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will make payment according to Section 719.05.
- C. Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- D. Erosion Control.** See the Special Note for Erosion Control.

**SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING**

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

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

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

SPECIAL NOTES FOR BASE FAILURE REPAIR

Repair locations listed on the summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Prior to milling and/or resurfacing, saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Excavate to an approximate depth of 14 inches below the existing pavement surface level. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department. Waste all removed materials off the Right of Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.

On the same day trench is excavated, backfill the excavated area with 4 inches of Crushed Limestone Size No. 23, wrapped on the bottom and sides in Type 3 Geotextile Fabric, and 9 inches of Class 3 Asphalt Base 1.00D PG64-22, in 3 inch maximum courses, up to the existing pavement surface. Compact the asphalt base to the proper compaction as required by Section 403. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 14 calendar days have elapsed after placement of the final course of asphalt base. After the 14 calendar day waiting period, and/or when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw his or her own conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation of the materials encountered that are not in accord with the classification shown.

Accept payment at the Contract unit prices per square yard for Base Failure Repair and per ton for Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement and excavating and disposing of all materials; furnishing and placing crushed limestone stone wrapped in geotextile fabric; furnishing and placing asphalt base up to the pavement boundary; leveling and wedging until the repair areas stabilize; and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions
01/02/2012

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to “Maintain and Control Traffic” as set forth in the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions, unless otherwise provided in these notes. The lump sum bid price to “Maintain and Control Traffic” shall also include, but is not limited to, the following items and operations:

- A. All labor and materials necessary for construction and maintenance of traffic control devices and markings.
- B. All flag persons and traffic control devices such as, but not limited to, flashers, signs, barricades and vertical panels, plastic drums (steel drums will not be permitted), and cones, necessary for the control and protection of vehicular and pedestrian traffic as specified in these notes, the proposal, the Manual on Uniform Traffic Control Devices (MUTCD) current edition, or the Engineer.

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor when no longer needed. Traffic control devices will conform to current MUTCD.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The Contractor shall maintain a two-lane traveled way with a minimum lane width of 10 feet. However, during working hours, alternating one-way traffic may be allowed at the discretion of the Engineer, provided adequate signing and flag persons are in place. When maintaining alternating one-way traffic provide a minimum clear lane width of 10 feet; however, provide for the passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

No lane closures will be allowed on the following dates:

Memorial Day Weekend	Friday, May 24, 2019 – Monday, May 27, 2019
Independence Day Weekend	Wednesday, July 3, 2019 – Sunday, July 7, 2019
Labor Day Weekend	Friday, August 30, 2019 – Monday, September 2, 2019
Thanksgiving Weekend	Thursday, November 28, 2019 – Sunday, December 1, 2019

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

The Contractor shall completely cover any signs, existing, permanent, or temporary, which do not properly apply to the current traffic phasing, and shall maintain the covering until signs are applicable or are removed.

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In general, all traffic control devices shall be placed starting and proceeding in the direction of the flow of traffic, and removed starting and proceeding in the direction opposite the flow of traffic.

LANE AND SHOULDER CLOSURES

Do not leave lane closures in place during non-working hours or prohibited periods, unless otherwise approved by the Engineer. Reduce lane closures to a shoulder closure, or remove as appropriate, when active operations do not require a lane closure. The Engineer will permit shoulder closures during non-working hours; however do not park equipment or store materials on a closed shoulder during non-working hours. Provide a minimum distance of 1 mile between lane closures when closing lanes to traffic in more than one location. No long term lane closures (more than 3 days) will be allowed; therefore, lane closures will not be measured for payment.

TEMPORARY SIGNS

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

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs at locations determined by the Engineer. The Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign within 8 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

BARRICADES

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

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time

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required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

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

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

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that is expected to cross in a lane change situation with an elevation difference greater than 1 ½". Place Warning signs (MUTC W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unsurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

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

Less than 2" – Not protection required. Warning signs should be placed in advance and throughout the drop-off area.

2" to 4" – Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Spacing of devices on tapered sections shall be in accordance with MUTCD, current edition. When work is not active in the drop-off area, wedge the drop-off with DGA or asphalt mixture for leveling and wedging with 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours.

Greater than 4" – Positive separation or wedge with a 3:1 or flatter slope. If there is five feet or more distance between the edge of pavement and drop-off, then drums, panels, or barricades may be used. If the drop-off is greater than 12 inches, positive separation is strongly encouraged. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations. Barricades may be used if the drop-off is greater than 12 inches.

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

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PAVEMENT MARKINGS

If there is to be a deviation from the existing striping, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Place temporary and permanent striping in accordance with Section 112 with following exception for Temporary Striping:

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

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USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

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

Application

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

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

CMS should not be used for:

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

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Messages

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

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

Placement

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

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

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Standard Abbreviations

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

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

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Standard Abbreviations (cont)

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

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NO USE THESE ABBREVIATIONS:

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

Typical Messages

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

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

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




EXISTING
FILL SLOPE or
DITCH FORESLOPE



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

DURABLE PAVEMENT EDGE DETAILS

DRAWING NOT TO SCALE

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

<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #		COUNTY		PROJECT # (STATE)	PROJECT # (FEDERAL)
6-9010		Boone		12FO FD52 008 9023501R	HSIP 5138(067)
PROJECT DESCRIPTION					
Perform low cost safety improvements on US42 from Gallatin/Boone Co line to KY338					
<input type="checkbox"/> No Additional Right of Way Required Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.					
<input checked="" type="checkbox"/> Condition # 1 (Additional Right of Way Required and Cleared) All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.					
<input type="checkbox"/> Condition # 2 (Additional Right of Way Required with Exception) The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract					
<input type="checkbox"/> Condition # 3 (Additional Right of Way Required with Exception) The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.					
Total Number of Parcels on Project		8	EXCEPTION (S) Parcel #		ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired					
Signed Deed		7			
Condemnation		1	5		
Signed ROE		1	5	Signed IOJ on 03-19-19	
Notes/ Comments (Use Additional Sheet if necessary)					
LPA RW Project Manager			Right of Way Supervisor		
Printed Name				Printed Name	
Signature				Signature	
Date				Date	
Right of Way Director			FHWA		
Printed Name		Digitally signed by DM		Printed Name	
Signature		Loy		Signature	
Date		2019.03.20 13:40:59 -04'00'		Date	

No Signature Required
 as per FHWA-KYTC
 Current Stewardship Agreement

UTILITIES AND RAIL CERTIFICATION NOTE

Boone county, HSIP 5138 (067)
FD52 008 0042 000-006
Safety Improvements along US 42 from MP 0.000 – 5.673
Item No. 6-9010.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

Utility coordination efforts determined that no significant utility relocation work is required to complete the project, however there is a minor relocation of a water service line that will need to be completed. 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.

Damage to Utilities

Any intentional or accidental disruption of service due to damage to water, sanitary, or gas mains caused by any of the contractor’s operations without three days advance notice to the utility owner shall be cause for the Cabinet to charge liquidated damages in the amount of five thousand dollars per day (\$5000/day) per occurrence against the contractor until such time as the utility main is restored.

Any intentional or accidental disruption of any individual water, sanitary, or gas service caused by any of the contractor’s operations without three days advance notice to the utility owner shall be cause for the Cabinet to charge liquidated damages in the amount of five hundred dollars per day (\$500/day) per occurrence against the contractor until such time as the utility main is restored.

In the case of a main disruption, liquidated damages shall be charged at the main disruption rate only. Liquidated damages shall not be charged in addition for service disruptions when a main disruption is involved.

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

The following utility facilities are present and are not to be disturbed during construction activities.

- **POWER POLE**
Power Pole located at South Fork Road Sta. 98+21 (35.6’ LT)
- **VARIOUS WATER MAINS**
4”, 6”, 8”, and 12” various water mains located on both left and right sides throughout project limits.
- **OVERHEAD ELECTRIC / TELEPHONE**
Overhead electric/telephone is located on both left and right sides throughout project limits.
The Contractor is fully responsible for protection of all utilities listed above

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

N/A

UTILITIES AND RAIL CERTIFICATION NOTE

Boone county, HSIP 5138 (067)
FD52 008 0042 000-006
Safety Improvements along US 42 from MP 0.000 – 5.673
Item No. 6-9010.00

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

N/A

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

Bullock Pen Water District has facilities that will be relocated by the Cabinet’s contractor as part of the road construction project. The water relocation work includes:

- Adjust water meter at Sta. 250+81 (30.5’ LT).
 - Construct 1” water service line at approx. Sta. 251+00.
- Contractor shall contact property owners if the water service will be disconnected at any point during relocation of water service line.

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

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

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

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.

UTILITIES AND RAIL CERTIFICATION NOTE

Boone county, HSIP 5138 (067)
FD52 008 0042 000-006
Safety Improvements along US 42 from MP 0.000 – 5.673
Item No. 6-9010.00

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

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

AREA UTILITIES CONTACT LIST

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
CONTACT INFORMATION WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING		

N O T I C E

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS KENTUCKY DIVISION OF WATER

NATIONWIDE PERMIT AUTHORIZATION AND GENERAL WATER QUALITY CERTIFICATION

PROJECT: Safety Improvements on US 42 from the Gallatin / Boone County Line to KY 338
Boone County, KY
KYTC Item No. 6-9010

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

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Corps of Engineers. A copy of any request to the Corps of Engineers to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

Safety Improvements on US 42 from the Gallatin / Boone County line to KY 338

**Boone County, KY
KYTC Item No. 6-9010**

SUMMARY OF IMPACTS

- 1. Milepoint 1.05** – Extend an existing box culvert. The additional linear impact to the **intermittent** stream is approximately **12 feet** and the area impact is **0.003 acres**.
- 2. Milepoint 1.59** – Extend an existing culvert. The additional linear impact to the **ephemeral** stream is approximately **2 feet** and the area impact is **0.001 acres**.
- 3. Milepoint 2.00** – Extend an existing culvert. The additional linear impact to the **intermittent** stream is approximately **16 feet** and the area impact is **0.003 acres**.
- 4. Milepoint 3.20** – Replace an existing culvert. The additional linear impact to the **ephemeral** stream is approximately **5 feet** and the area impact is **0.001 acres**.
- 5. Milepoint 4.75** - Replace an existing culvert. The additional linear impact to the **ephemeral** stream is approximately **44 feet** and the area impact is **0.003 acres**.

Terms for Nationwide Permit No. 14 – Linear Transportation Projects

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

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

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

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

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

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

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, “District Engineer’s Decision.” The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).



**US Army Corps
of Engineers®**

Louisville District

2017 Nationwide Permit General Conditions

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

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

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

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>

17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/bf/species/esa> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

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

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

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, and adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

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

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

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

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environmental on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

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

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

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

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

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

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally

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

32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

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

illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate.

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that may be affected by the proposed activity. For any NWP activity that requires pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act.

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. Federal permittees must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of PCN Notification. The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination. (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line or ordinary high water mark.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural

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

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

R. BRUCE SCOTT
COMMISSIONER

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FRANKFORT, KENTUCKY 40601

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

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

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

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

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

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
3. The activity will impact less than 1/2 acre of wetland/marsh.

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4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet and in-stream stormwater detention/retention basins are not covered under this general water quality certification.
5. For complete linear transportation projects, all impacts shall not exceed a cumulative length of 500 linear feet within each Hydrologic Unit Code (HUC) 14.
6. Any crossings must be constructed in a manner that does not impede natural water flow.
7. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
8. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
9. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
10. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
 - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to,

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

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

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

KYTC BMP Plan for Project CID 19-4211



Kentucky Transportation Cabinet

Highway District 6

And

_____ (2), Construction

Kentucky Pollutant Discharge Elimination System

Permit KYR10

Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

**Highway Safety Improvement Project on US-42 in
Boone County**

Project: CID 19-4211

KYTC BMP Plan for Project CID 19-4211

Project information

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

1. Owner – Kentucky Transportation Cabinet, District 6
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-42
6. Latitude/Longitude (project mid-point): 38° 50' 37.36", -84° 43' 28.21"
7. County (project mid-point): Boone
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project CID 19-4211

A. Site description:

1. Nature of Construction Activity (from letting project description): Safety Improvements along US 42 from 0.000 to 5.673
2. Order of major soil disturbing activities: (2) and (3)
3. Projected volume of material to be moved: 4000 CY (Cut) & 4000 CY (Fill)
4. Estimate of total project area (acres): 20.6
5. Estimate of area to be disturbed (acres): 3.5
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7. Data describing existing soil condition: (1) & (2)
8. Data describing existing discharge water quality (if any): (1) & (2)
9. Receiving water name: Little South Fork, Mud Lick Creek
10. TMDLs and Pollutants of Concern in Receiving Waters: *No TDML's were involved on this project.*
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12. Potential sources of pollutants:

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

KYTC BMP Plan for Project CID 19-4211

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.

KYTC BMP Plan for Project CID 19-4211

- 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 pipes and drop inlets which are to be saved
- Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
- Brush and/or other barriers to slow and/or divert runoff.
- Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
- Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes and drop inlets after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probable changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probable changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection

KYTC BMP Plan for Project CID 19-4211

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

C. Other Control Measures

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

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

3. Hazardous Waste

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

4. Spill Prevention

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

- **Good Housekeeping:**

KYTC BMP Plan for Project CID 19-4211

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.

KYTC BMP Plan for Project CID 19-4211

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 contact with a hazardous substance.

KYTC BMP Plan for Project CID 19-4211

- 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. *There are no other local (MS4) requirements that are expected to be necessary for this project.*

E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
 - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. *There are no such BMP's for this project.*

F. Inspections

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

KYTC BMP Plan for Project CID 19-4211

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

G. Non – Storm Water discharges

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

- Water from water line flushings.
- Water from cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).

KYTC BMP Plan for Project CID 19-4211

- Uncontaminated groundwater and rain water (from dewatering during excavation).

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

H. Groundwater Protection Plan (3)

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

- Contractors statement: (3)

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

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

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

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

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

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

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

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

_____ 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.

KYTC BMP Plan for Project CID 19-4211

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

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

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

Contractor and Resident Engineer Plan certification

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 name² signature

(3) Signed _____ title _____, _____
 Typed or printed name¹ _____ 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 CID 19-4211

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.

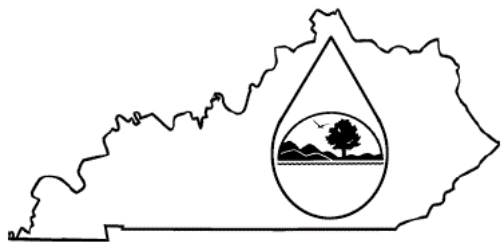
Signed _____ title _____, _____
Typed or printed name¹ signature

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.

CID 19-4211
Boone County
Highway Safety Improvement Project along US-42
from MP 0.000 – 5.673
Item No.: 6-9010

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

eForm Submittal ID: 121742



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

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

[Click here for Instructions
\(Controls/KPDES_FormKYR10_Instructions.htm\)](#)

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

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

Reason for Submittal:(*) Application for New Permit Coverage ▼	Agency Interest ID: Agency Interest ID	Permit Number:(✓) KPDES Permit Number
If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓) 		
ELIGIBILITY: Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.		
EXCLUSIONS: The following are excluded from coverage under this general permit: 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan; 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation; 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.		
SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)		
Company Name:(✓) Kentucky Transportation Cabinet, District 6	First Name:(✓) Bob	M.I.: MI
Last Name:(✓) Yeager		
Mailing Address:(*) 421 Buttermilk Pike	City:(*) Covington	State:(*) Kentucky ▼
Zip:(*) 41017		
eMail Address:(*) Robert.Yeager@ky.gov	Business Phone:(*) 859-341-2700	Alternate Phone: Phone
SECTION II -- GENERAL SITE LOCATION INFORMATION		
Project Name:(*) KYTC Project: CID 194211	Status of Owner/Operator(*) State Government ▼	SIC Code(*) 1611 Highway and Street Const ▼
Company Name:(✓) Company Name	First Name:(✓) First Name	M.I.: MI
Last Name:(✓) Last Name		
Site Physical Address:(*) US 42		
City:(*) Verona	State:(*) Kentucky ▼	Zip:(*) 41092
County:(*) Boone ▼	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal) 38.843712	Longitude(decimal degrees)(*) -84.724503
SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION ?		
Project Description:(*) Highway Safety Improvement Project consisting of Roadside Slope Improvements, Box Culvert Extensions, Pipe Replacement, Shouldering & Ditching, Guardrail, Paving,		
a. For single projects provide the following information		

Total Number of Acres in Project:(√) <div>20.6</div>	Total Number of Acres Disturbed:(√) <div>3.5</div>
Anticipated Start Date:(√) <div></div>	Anticipated Completion Date:(√) <div></div>
b. For common plans of development provide the following information	
Total Number of Acres in Project:(√) <div># Acre(s)</div>	Total Number of Acres Disturbed:(√) <div># Acre(s)</div>
Number of individual lots in development, if applicable:(√) <div># lot(s)</div>	Number of lots in development:(√) <div># lot(s)</div>
Total acreage of lots intended to be developed:(√) <div>Project Acres</div>	Number of acres intended to be disturbed at any one time:(√) <div>Disturbed Acres</div>
Anticipated Start Date:(√) <div></div>	Anticipated Completion Date:(√) <div></div>
List Building Contractor(s) at the time of Application:(*) <div><div>+ Company Name</div><div></div></div>	

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

Discharge Point(s):

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	Delete
1	Yes	38.830058	-84.740702	Little South Fork	Delete
2	Yes	38.830257	-84.739621	Little South Fork	Delete
3	No	38.830962	-84.749050	Little South Fork	Delete
4	No	38.831048	-84.747956	Little South Fork	Delete
5	No	38.831069	-84.746010	Little South Fork	Delete
6	No	38.831071	-84.747359	Little South Fork	Delete
7	No	38.831075	-84.746895	Little South Fork	Delete
8	No	38.831079	-84.746542	Little South Fork	Delete
9	Yes	38.831124	-84.738756	Little South Fork	Delete
10	Yes	38.831765	-84.739029	Little South Fork	Delete

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

Name of MS4:

Date of application/notification to the MS4 for construction site permit coverage:

Date

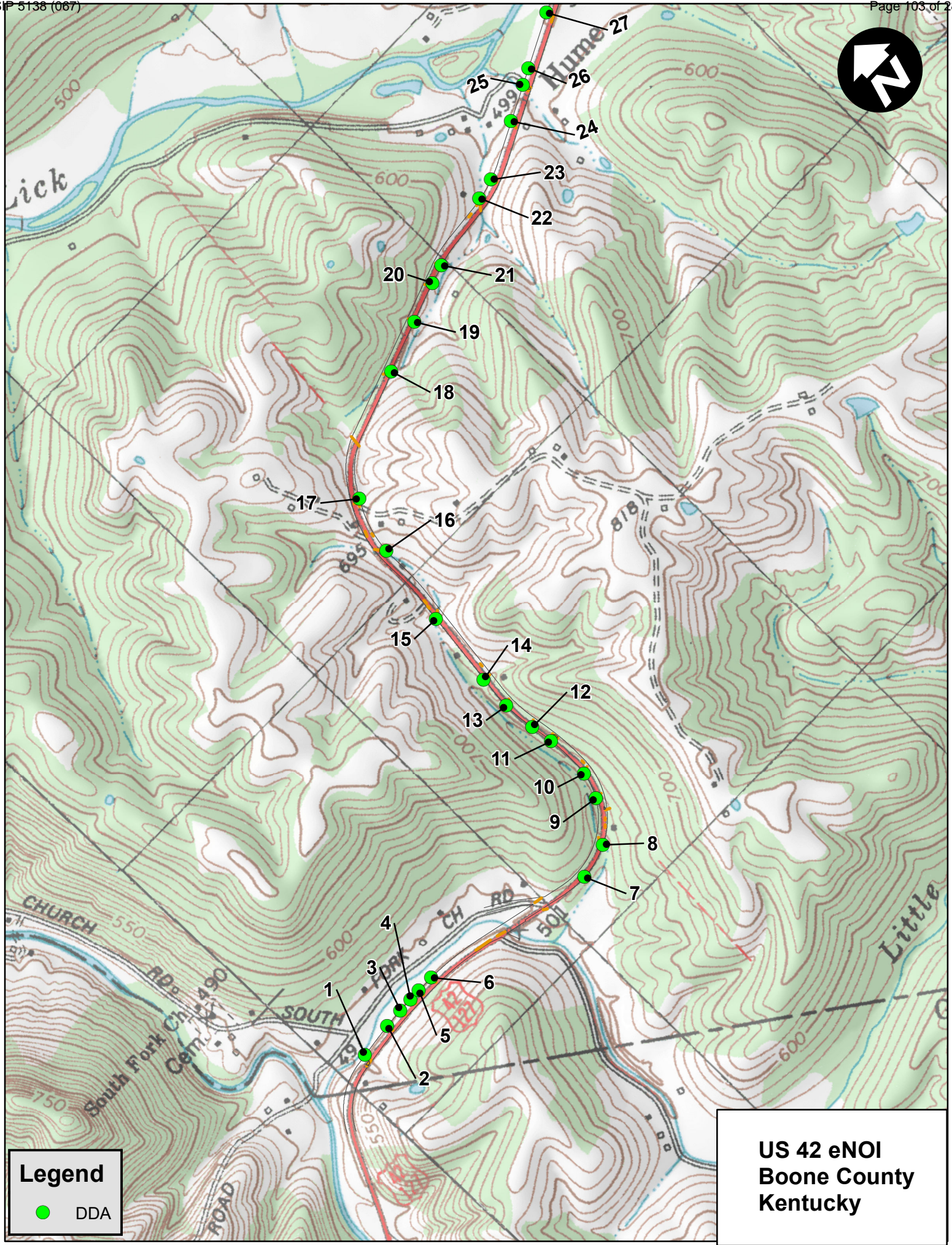
Discharge Point(s):(*)

+ Latitude Longitude

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

Will the project require construction activities in a water body or the riparian zone?: (*)	<div>Yes</div>
If Yes, describe scope of activity: (√)	<div>Culvert Extensions</div>
Is a Clean Water Act 404 permit required?:(*)	<div>Yes</div>

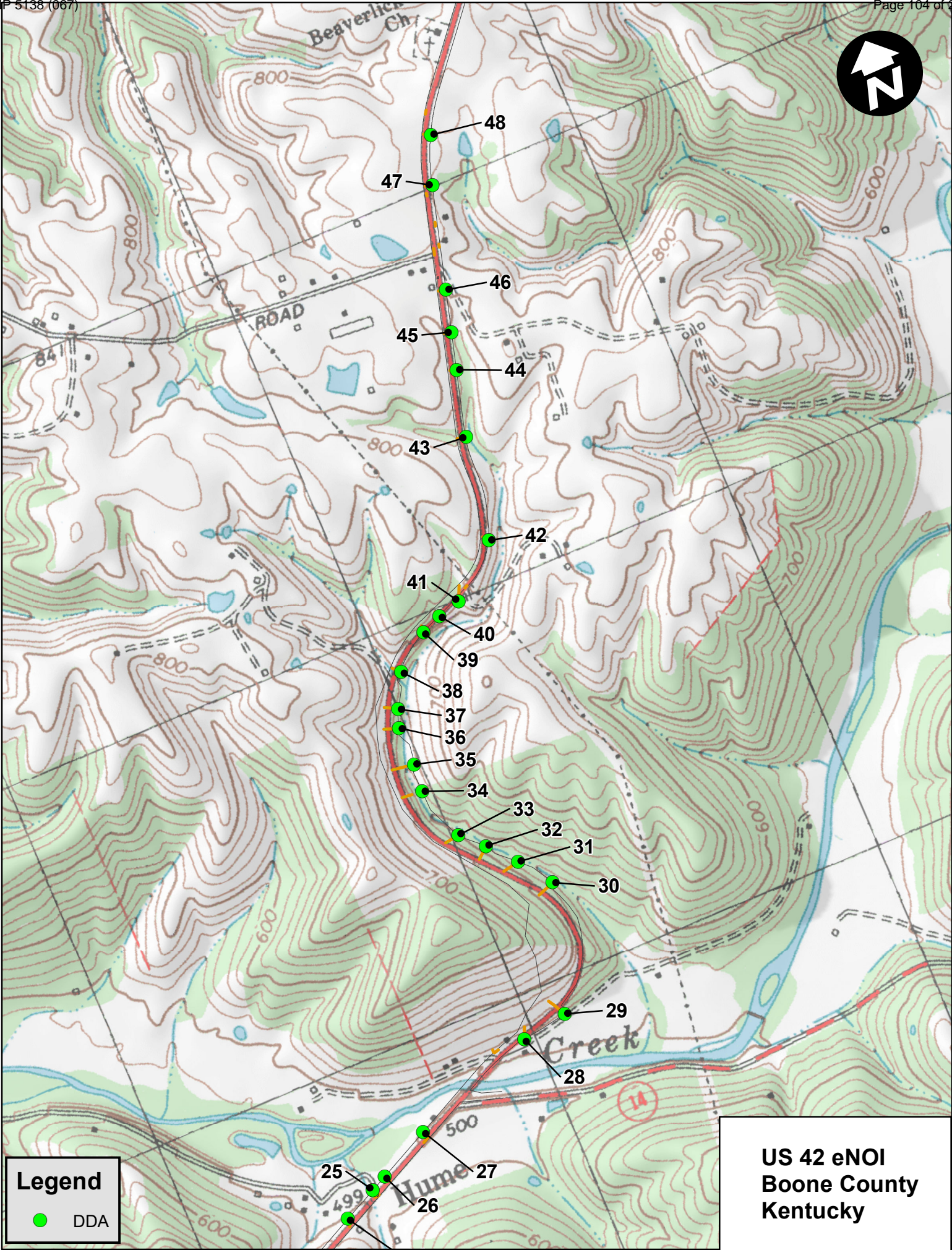
Is a Clean Water Act 401 Water Quality Certification required?:(*)		Yes ▼				
SECTION VII -- NOI PREPARER INFORMATION						
First Name:(*) <div>First Name</div>		M.I.: <div>MI</div>	Last Name:(*) <div>Last Name</div>		Company Name:(*) <div>Company Name</div>	
Mailing Address:(*) <div>Mailing Address</div>		City:(*) <div>City</div>		State:(*) <div>▼</div>		Zip:(*) <div>Zip</div>
eMail Address:(*) <div>eMail Address</div>			Business Phone:(*) <div>Phone</div>		Alternate Phone: <div>Phone</div>	
SECTION VIII -- ATTACHMENTS						
Facility Location Map:(*)			<div>Upload file</div>			
Supplemental Information:			<div>Upload file</div>			
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:(*) <div>Signature</div>				Title:(*) <div>Title</div>		
First Name:(*) <div>First Name</div>		M.I.: <div>MI</div>	Last Name:(*) <div>Last Name</div>			
eMail Address:(*) <div>eMail Address</div>		Business Phone:(*) <div>Phone</div>		Alternate Phone: <div>Phone</div>		Signature Date:(*) <div>Date</div>
<div><div>Click to Save Values for Future Retrieval</div><div>Click to Submit to EEC</div></div>						

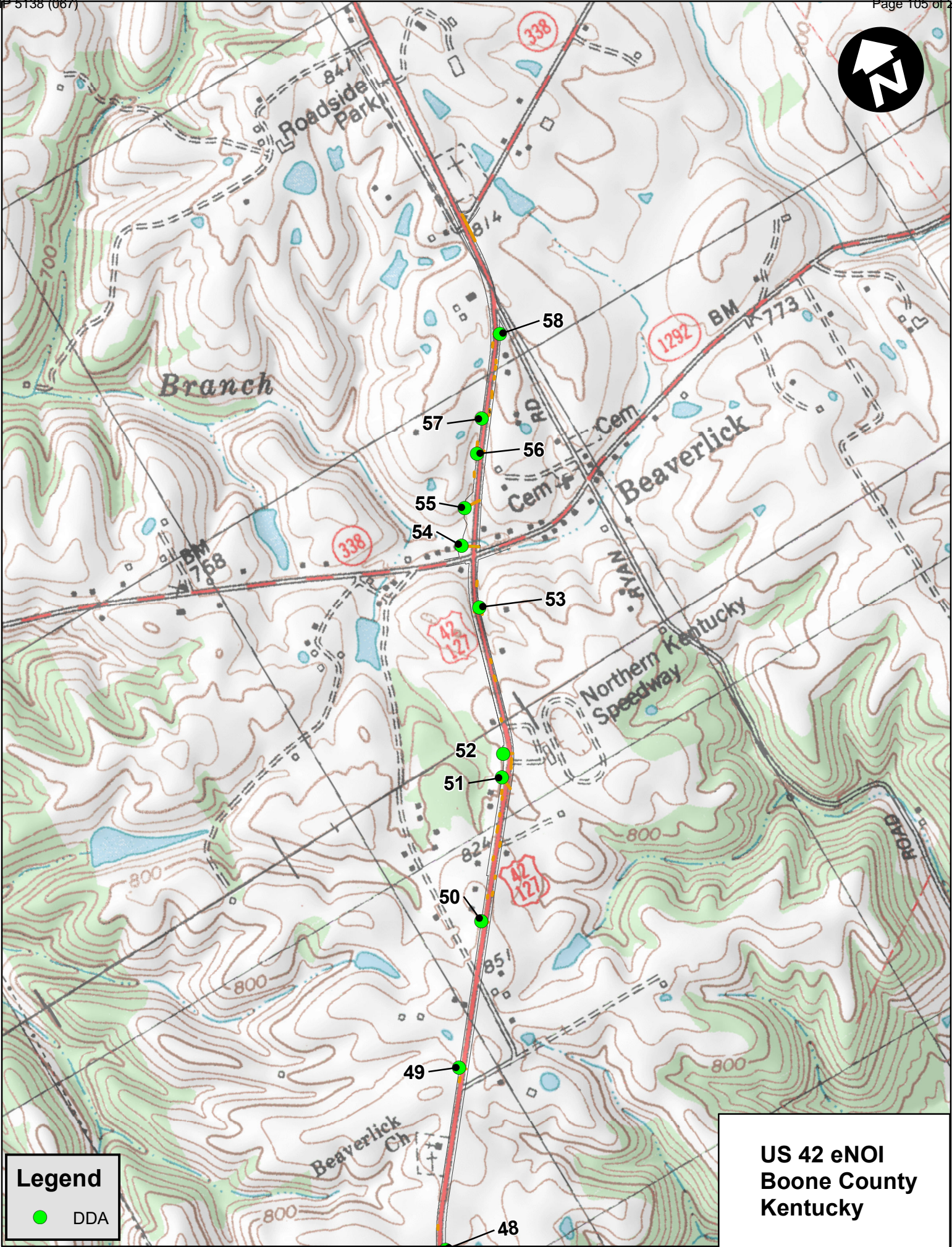


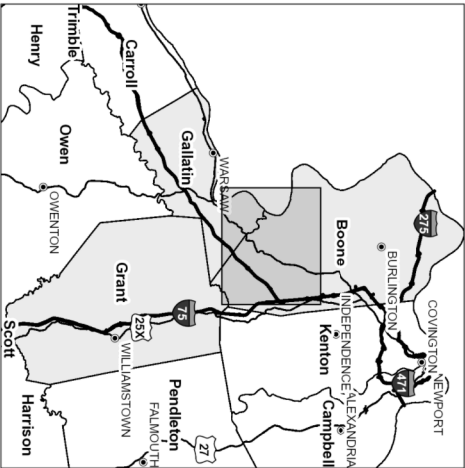
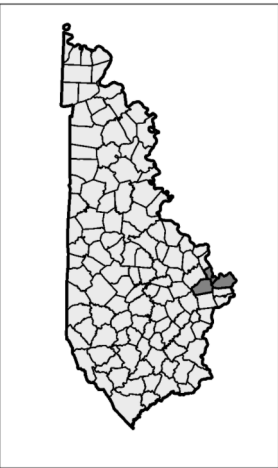
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US 42 eNOI
Boone County
Kentucky

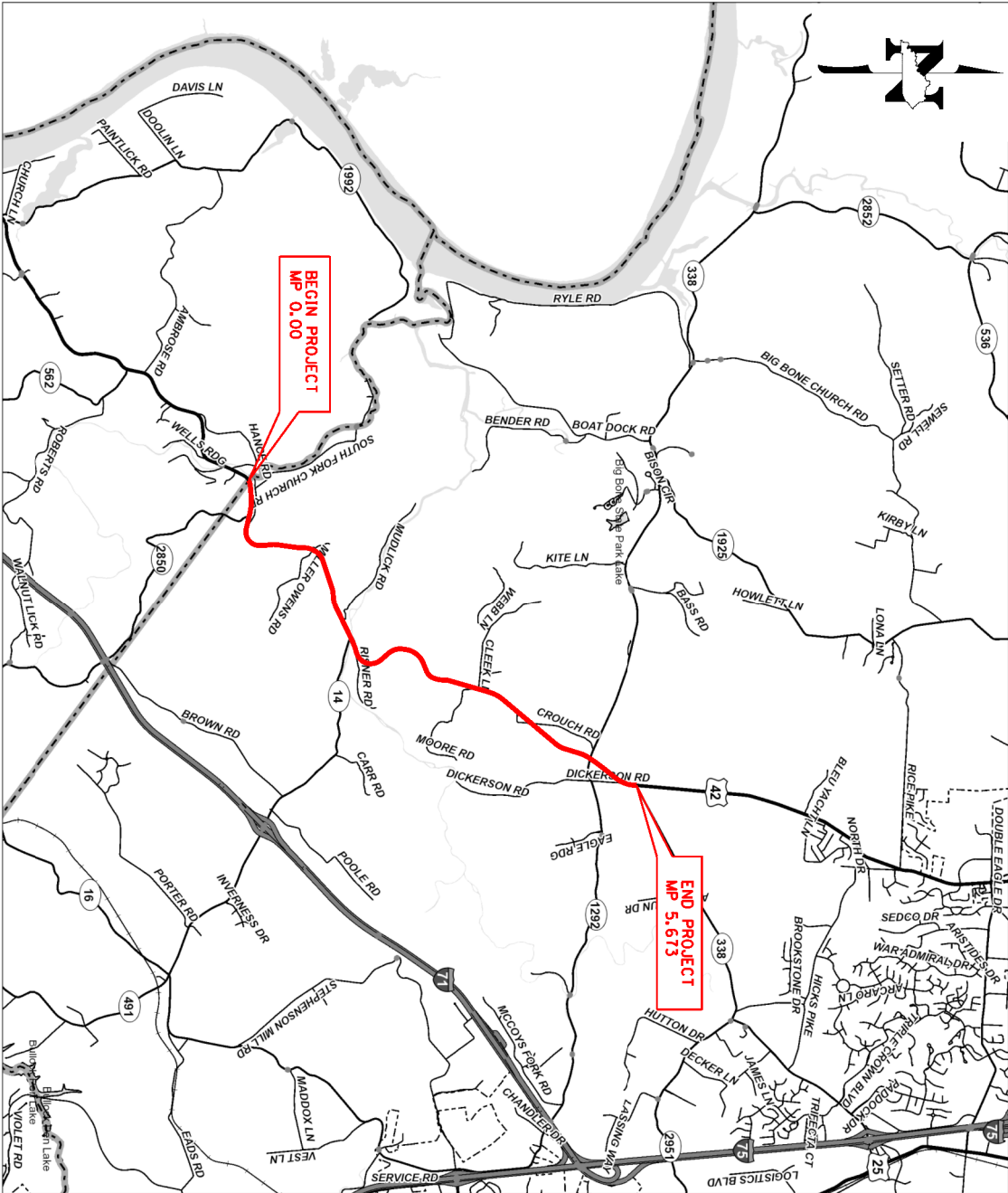






Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

PLANS OF
PROPOSED PROJECT
BOONE COUNTY
US 42



COUNTY OF	ITEM NO.
BOONE	6-9010.00

GENERAL SUMMARY BOONE COUNTY - US 42 SHEET 1 OF 2			
ITEM NUMBER	ITEM	UNIT	QUANTITY
1	DGA	TON	2,977
100	ASPHALT SEAL AGGREGATE	TON	916
103	ASPHALT SEAL COAT	TON	110
190	LEVELING & WEDGING PG64-22	TON	1,217
214	CL3 ASPH BASE 1.00D PG64-22	TON	464
356	ASPHALT MATERIAL FOR TACK	TON	19
440	ENTRANCE PIPE-15 IN	LF	115
441	ENTRANCE PIPE-18 IN	LF	75
443	ENTRANCE PIPE-24 IN	LF	55
462	CULVERT PIPE-18IN	LF	248
464	CULVERT PIPE-24IN	LF	119
468	CULVERT PIPE-36IN	LF	84
1000	PERFORATED PIPE-4 IN	LF	200
1010	NON-PERFORATED PIPE-4 IN	LF	50
1024	PERF PIPE HEADWALL TY2-4 IN	EACH	2
1208	PIPE CULVERT HEADWALL-24IN	EACH	1
1212	PIPE CULVERT HEADWALL-36IN	EACH	2
1310	REMOVE PIPE	LF	346
1451	S & F BOX INLET-OUTLET-24 IN	EACH	1
1490	DROP BOX INLET TYPE 1	EACH	4
1642	JUNCTION BOX-18 IN	EACH	2
1726	SAFETY BOX INLET-18IN SDB-1	EACH	4
1728	SAFETY BOX INLET-18IN DBL SDB-5	EACH	2
1987	DELINEATOR FOR GUARDRAIL B/W	EACH	103
2091	REMOVE PAVEMENT	SQYD	391
2101	CEM CONC ENT PAVEMENT-8 IN	SQYD	48
2159	TEMPORARY DITCH	LF	14,977
2160	CLEAN TEMPORARY DITCH	LF	7,488
2230	EMBANKMENT IN PLACE	CUYD	3,340
2237	DITCHING	LF	125
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	13
2381	REMOVE GUARDRAIL	LF	5,142
2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	7
2483	CHANNEL LINING CLASS II	TON	803
2545	CLEARING AND GRUBBING	LS	1
2562	TEMPORARY SIGNS	SQFT	390
2569	DEMOBILIZATION	LS	1
2575	DITCHING AND SHOULDERING	LF	29,954
2625	REMOVE HEADWALL (MP 1.05 - 8'X7' RCBC - OUTLET)	EACH	1
2625	REMOVE HEADWALL (MP 2.00 - 8'x4' DOUBLE RCBC - INLET)	EACH	1
2625	REMOVE HEADWALL (MP 2.00 - 8'x4' DOUBLE RCBC - OUTLET)	EACH	1
2650	MAINTAIN & CONTROL TRAFFIC	LS	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2
2676	MOBILIZATION FOR MILL & TEXT	LS	1
2677	ASPHALT PAVE MILLING & TEXTURING	TON	3,151
2690	SAFEOLOADING	CUYD	12
<div>1 CARRIED OVER FROM PAVING SUMMARY</div> <div>2 CARRIED OVER FROM PIPE DRAINAGE SUMMARY</div> <div>3 CARRIED OVER FROM GUARDRAIL SUMMARY</div> <div>4 CARRIED OVER FROM DITCH LINING SUMMARY</div> <div>5 CARRIED OVER FROM ENTRANCE PIPE SUMMARY</div> <div>6 CARRIED OVER FROM EMBANKMENT REPAIR SUMMARY</div> <div>7 CARRIED OVER FROM BASE FAILURE REPAIR SUMMARY</div> <div>8 CARRIED OVER FROM SOUTH FORK ROAD REALIGNMENT GENERAL SUMMARY</div> <div>A INCLUDES 100 TON AT THE DISCRETION OF THE ENGINEER</div> <div>B APPROXIMATELY 0.35 ACRES</div> <div>NOTE: ESTIMATE FOR EARTHWORK CALCULATIONS FOR DESIGN ONLY. THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.</div>			

GENERAL SUMMARY BOONE COUNTY - US 42 SHEET 2 OF 2			
ITEM NUMBER	ITEM	UNIT	QUANTITY
2697	EDGE LINE RUMBLE STRIPS (1)	LF	56,000
2701	TEMPORARY SILT FENCE	LF	5,000
2703	SILT TRAP TY A	EACH	5
2704	SILT TRAP TY B	EACH	5
2705	SILT TRAP TY C	EACH	5
2706	CLEAN SILT TRAP TY A	EACH	5
2707	CLEAN SILT TRAP TY B	EACH	5
2708	CLEAN SILT TRAP TY C	EACH	5
2726	STAKING	LS	1
3240	BASE FAILURE REPAIR (1)	SQYD	157
3262	CLEAN PIPE STRUCTURE (2)	EACH	6
4832	WIRE-NO. 12 (E)	LF	120
5950	EROSION CONTROL BLANKET (4)	SQYD	750
5952	TEMPORARY MULCH	SQYD	11,342
5953	TEMP SEEDING AND PROTECTION	SQYD	8,506
5963	INITIAL FERTILIZER	TON	0.5
5964	MAINTENANCE FERTILIZER	TON	0.8
5985	SEEDING AND PROTECTION	SQYD	13,973
5992	AGRICULTURAL LIMESTONE	TON	9
6406	SBM ALUM SHEET SIGNS .080 IN (9)	SQFT	67
6410	STEEL POST TYPE 1 (9)	LF	102
6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	228,675
6514	PAVE STRIPING-PERM PAINT-4 IN (C)	LF	115,779
6568	PAVE MARKING-THERMO STOP BAR-24IN (8)	LF	17
8003	FOUNDATION PREPARATION (MP 1.05) (2)	LS	1
8003	FOUNDATION PREPARATION (MP 2.00) (2)	LS	1
8100	CONCRETE-CLASS A (FOR INTERMEDIATE ANCHOR) (2)	CUYD	5
8100	CONCRETE-CLASS A (FOR RCBC EXTENSIONS) (2)	CUYD	80
8150	STEEL REINFORCEMENT (2)	LB	11,058
10020NS	FUEL ADJUSTMENT	DOLL	6,927
10030NS	ASPHALT ADJUSTMENT	DOLL	17,398
14029	W METER ADJUST (D)	EACH	1
14077	W SERV PE/PLST LONG SIDE 1 IN (D)	EACH	1
20748ED	SHOULDER MILLING/TRENCHING (1)	SQYD	808
21134ND	REMOVE-STORE AND REINSTALL SIGN (9) (F)	EACH	11
21373ND	REMOVE SIGN (9)	EACH	4
21802EN	G/R STEEL W BEAM-S FACE (7 FT POST) (3)	LF	5,475
22906ES403	CL3 ASPH SURF 0.38A PG64-22 (1)	TON	2,750
23274EN11F	TURF REINFORCEMENT MAT 1 (4)	SQYD	690
23497EC	REMOVE CULVERT PIPE HEADWALL (2)	EACH	20
23593EC	SHOULDER FAILURE REPAIR (1)	SQYD	9
24186EC	BORE AND JACK PIPE-36 IN (2)	LF	90
24540	R/W MONUMENT TYPE 3 (G)	EACH	11
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE - 18 IN) (2)	EACH	14
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE - 24 IN) (2)	EACH	4
24631EC	BARCODE SIGN INVENTORY (9)	EACH	12
24894EC	REMOVE (RAILROAD RAIL ABOVE GROUND LINE BY TORCH CUTTING) (10)	EACH	42
(1) CARRIED OVER FROM PAVING SUMMARY			
(2) CARRIED OVER FROM PIPE DRAINAGE SUMMARY			
(3) CARRIED OVER FROM GUARDRAIL SUMMARY			
(4) CARRIED OVER FROM DITCH LINING SUMMARY			
(8) CARRIED OVER FROM SOUTH FORK ROAD REALIGNMENT GENERAL SUMMARY			
(9) CARRIED OVER FROM SIGNING SUMMARY			
(10) CARRIED OVER FROM CUT RAILS SUMMARY			
(C) INCLUDES 1441 FT CARRIED OVER FROM SOUTH FORK ROAD REALIGNMENT GENERAL SUMMARY			
(D) ADJUST WATER METER (STA. 250+81, 30.5' LEFT) AND CONSTURCT WATER SERVICE LINE (APPROX. STA. 251+00)			
(E) WIRE TO BE USED BY WATER COMPANY TO LOCATE AND TRACE SERVICE LINE FOLLOWING CONSTRUCTION.			
(F) INCLUDES 10 SIGNS AT THE DISCRETION OF THE ENGINEER			
(G) INCLUDES 3 R/W MONUMENTS CARRIED OVER FROM SOUTH FORK ROAD REALIGNMENT GENERAL SUMMARY			

SOUTH FORK ROAD REALIGNMENT GENERAL SUMMARY			
ITEM NUMBER	ITEM	UNIT	QUANTITY
1	DGA	TON	415
214	CL3 ASPH BASE 1.00D PG64-22	TON	154
356	ASPHALT MATERIAL FOR TACK	TON	0.8
464	CULVERT PIPE-24IN	LF	63
1208	PIPE CULVERT HEADWALL-24IN	EACH	1
1310	REMOVE PIPE	LF	64
1987	DELINEATOR FOR GUARDRAIL B/W	EACH	2
2091	REMOVE PAVEMENT	SQYD	391
2230	EMBANKMENT IN PLACE	CUYD	713
2381	REMOVE GUARDRAIL	LF	182
2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	1
6406	SBM ALUM SHEET SIGNS .080 IN	SQFT	26
6410	STEEL POST TYPE 1	LF	46
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	1,441
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	17
21134ND	REMOVE-STORE AND REINSTALL SIGN	EACH	1
21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	LF	75
22906ES403	CL3 ASPH SURF 0.38A PG64-22	TON	68
24540	R/W MONUMENT TYPE 3	EACH	3
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE - 24 IN)	EACH	1
24631EC	BARCODE SIGN INVENTORY	EACH	6
<div>① CARRIED OVER FROM PAVING SUMMARY</div> <div>② CARRIED OVER FROM PIPE DRAINAGE SUMMARY</div> <div>③ CARRIED OVER FROM GUARDRAIL SUMMARY</div> <div>④ CARRIED OVER FROM ENTRANCE PIPE SUMMARY</div> <div>⑤ CARRIED OVER FROM SIGNING SUMMARY</div> <div>NOTE: ESTIMATE FOR EARTHWORK CALCULATIONS FOR DESIGN ONLY. THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.</div>			

BOONE COUNTY - US 42 PAVING SUMMARY SHEET 1 OF 2					
PAVING AREAS			PAVING QUANTITIES		
ITEM		TOTAL	ITEM		TOTAL
RESURFACE MAINLINE - STA. 19+53 (MP 0.37) TO STA. 168+96 (MP 3.2)			RESURFACE MAINLINE - STA. 19+53 (MP 0.37) TO STA. 168+96 (MP 3.2)		TON
LEVELING & WEDGING PG64-22			LEVELING & WEDGING PG64-22		1,051
ASPHALT PAVE MILLING & TEXTURING			ASPHALT PAVE MILLING & TEXTURING		3,151
SY					
1.25"	CL3 ASPH SURF 0.38A PG64-22	38,188	CL3 ASPH SURF 0.38A PG64-22		2,626
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		16
18" DGA SHOULDER MAINLINE - STA. 0+00 (MP 0.00) TO STA. 299+53 (MP 5.67)			18" DGA SHOULDER MAINLINE - STA. 0+00 (MP 0.00) TO STA. 299+53 (MP 5.67)		TON
ASPHALT SEAL AGGREGATE			ASPHALT SEAL AGGREGATE		916
ASPHALT SEAL COAT			ASPHALT SEAL COAT		110
4"	DGA BASE	9,984	DGA BASE		2,297
RT SHOULDER / GUARDRAIL MAINLINE - STA. 142+73 (MP 2.70) TO STA. 160+91 (MP 3.04)			RT SHOULDER / GUARDRAIL MAINLINE - STA. 142+73 (MP 2.70) TO STA. 160+91 (MP 3.04)		TON
1.25"	CL3 ASPH SURF 0.38A PG64-22	808	CL3 ASPH SURF 0.38A PG64-22		56
3.5"	CL3 ASPH BASE 1.00D PG64-22	808	CL3 ASPH BASE 1.00D PG64-22		156
4"	DGA BASE	808	DGA BASE		186
SHOULDER MILLING/TRENCHING					
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		0.7
EDGE LINE RUMBLE STRIPS MAINLINE - STA. 19+53 (MP 0.37) TO STA. 299+53 (MP 5.67)					
EDGE LINE RUMBLE STRIPS					
SUPERELEVATION IMPROVEMENT - STA. 162+37 (MP 3.07) ③			SUPERELEVATION IMPROVEMENT - STA. 162+37 (MP 3.07)		TON
LEVELING & WEDGING PG64-22			LEVELING & WEDGING PG64-22		148
CL3 ASPH BASE 1.00D PG64-22			CL3 ASPH BASE 1.00D PG64-22		148
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		1.2
BASE FAILURE REPAIR ④			BASE FAILURE REPAIR		TON
BASE FAILURE REPAIR					
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		0.1
CY					
LEVELING & WEDGING PG64-22			LEVELING & WEDGING PG64-22		17
SHOULDER FAILURE REPAIR ⑤			SHOULDER FAILURE REPAIR		TON
SHOULDER FAILURE REPAIR					
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		0.01
CY					
LEVELING & WEDGING PG64-22			LEVELING & WEDGING PG64-22		1
PIPE / CULVERT REPLACEMENTS ⑥			PIPE / CULVERT REPLACEMENTS		TON
9"	CL3 ASPH BASE 1.00D PG64-22	11	CL3 ASPH BASE 1.00D PG64-22		6
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		0.01
ENTRANCE PIPES ⑦			ENTRANCE PIPES		TON
4"	DGA BASE	48	DGA BASE		11
8"	DGA BASE	144	DGA BASE		68
8"	CEM CONC ENT PAVEMENT	48			
APPROACH - SOUTH FORK ROAD REALIGNMENT			APPROACH - SOUTH FORK ROAD REALIGNMENT		TON
1.25"	CL3 ASPH SURF 0.38A PG64-22	825	CL3 ASPH SURF 0.38A PG64-22		57
3"	CL3 ASPH BASE 1.00D PG64-22	825	CL3 ASPH BASE 1.00D PG64-22		137
8"	DGA BASE	825	DGA BASE		380
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		0.7
REMOVE PAVEMENT					
APPROACH - SOUTH FORK ROAD ENTRANCES			APPROACH - SOUTH FORK ROAD ENTRANCES		TON
1.25"	CL3 ASPH SURF 0.38A PG64-22	150	CL3 ASPH SURF 0.38A PG64-22		11
2"	CL3 ASPH BASE 1.00D PG64-22	150	CL3 ASPH BASE 1.00D PG64-22		17
4"	DGA BASE	150	DGA BASE		35
ASPHALT MATERIAL FOR TACK			ASPHALT MATERIAL FOR TACK		0.1
NOTES: All asphalt mixtures shall be estimated at 110 lbs. per SQ. YD. per inch of depth unless noted otherwise					
③ Carried over from Superelevation Improvement Summary					
④ Carried over from Base Failure Repair Summary					
⑤ Carried over from Shoulder Failure Repair Summary					
⑥ Carried over from Pipe Drainage Summary					
⑦ Carried over from Entrance Pipe Summary					

BOONE COUNTY - US 42 PAVING SUMMARY SHEET 2 OF 2			
PAVING SUMMARY TOTALS			
CODE	ITEM	UNITS	PROJECT TOTAL
1	DGA BASE	TON	2,977
(2) 100	ASPHALT SEAL AGGREGATE	TON	916
(1) 103	ASPHALT SEAL COAT	TON	110
190	LEVELING & WEDGING PG64-22	TON	1,217
214	CL3 ASPH BASE 1.00D PG64-22	TON	464
(8) 356	ALPHALT MATERIAL FOR TACK	TON	19
2091	REMOVE PAVEMENT	SY	391
2101	CEM CONC ENT PAVEMENT-8 IN	SY	48
2677	ASPHALT PAVE MILLING & TEXTURING	TON	3,151
2697	EDGE LINE RUMBLE STRIPS	LF	56,000
3240	BASE FAILURE REPAIR	SY	157
20748ED	SHOULDER MILLING/TRENCHING	SY	808
22906ES403	CL3 ASPH SURF 0.38A PG64-22	TON	2,750
23593EC	SHOULDER FAILURE REPAIR	SY	9
NOTES: All asphalt mixtures shall be estimated at 110 lbs. per SQ. YD. per inch of depth unless noted otherwise (1) First course estimated at 3.2 lbs. per SQ. YD. Second course estimated at 2.8 lbs. per SQ. YD. (2) First course estimated at 30 lbs. per SQ. YD. Second course estimated at 20 lbs. per SQ. YD. (8) Application rate at 0.84 lbs per square yard			

SUPERELEVATION IMPROVEMENT SUMMARY										
BOONE - US 42										
PI STATION	MP	X-SECTION	DIRECTION	RADIUS (FT)	CROSS SLOPE LEFT	CROSS SLOPE RIGHT	DESIRED X-SLOPE e _{max} = 8% (Adv. Speed e)	LEVELING & WEDGING PG64-22 (TONS)	CL3 ASPH BASE 1,00D PG64-22 (TONS)	Comment
162+37	3.08	161+73	RT	1,145	2.89%	-8.00%	7.8%	148	148	Improve Superelevation

NOTE: ASPHALT SURFACE AND MILLING & TEXTURING QUANTITIES ARE INCLUDED IN THE PAVING SUMMARY UNDER RESURFACING FROM STA. 19+53 TO STA. 168+96.

GUARDRAIL SUMMARY
BOONE COUNTY - US 42

STATION	MP TO MP	SIDE OF ROAD	REMOVE GUARDRAIL	DELINEATOR FOR GUARDRAIL BW	G/R STEEL W BEAM-S FACE (7 FT POST)	GUARDRAIL END TREATMENT TYPE 1	GUARDRAIL END TREATMENT TYPE 4A
UNIT TO BID			LF	EACH	LF	EACH	EACH
ITEM CODE			2381	1987	21802EN	2367	2391
17+62 TO 19+38	0.33 - 0.37	LT	169	2	137.5		1
20+50 TO 21+20	0.39 - 0.40	LT	182	2	75		1
20+58 TO 22+46	0.39 - 0.43	RT	182	2	150		1
40+40 TO 45+42	0.77 - 0.86	LT	503	8	412.5	2	
53+65 TO 55+90	1.02 - 1.06	LT	178	2	125	2	
54+46 TO 56+75	1.06 - 1.07	RT	204	2	112.5	2	
66+70 TO 79+50	1.26 - 1.51	RT	674	24	1,187.5	2	
67+24 TO 79+25	1.40 - 1.50	LT	722	22	1,100	2	
115+85 TO 117+10	2.19 - 2.22	LT	115	2	87.5		1
119+71 TO 121+34	2.26 - 2.30	LT	157	3	112.5	1	
120+10 TO 121+89	2.27 - 2.31	RT	178	2	150		1
142+73 TO 160+91	2.70 - 3.05	RT	1689	30	1,700	2	
270+33 TO 271+68	5.12 - 5.15	LT	189	2	125		2
PROJECT TOTALS			5,142	103	5,475	13	7

① USE GUARDRAIL SYSTEM TRANSITION (SEPIA 33) TO TRANSITION FROM EXISTING BRIDGE END TREATMENT TO PROPOSED GUARDRAIL.

BID ITEM	ITEM DESCRIPTION	UNITS	QUANTITY
2381	REMOVE GUARDRAIL	LF	5,142
1987	DELINEATOR FOR GUARDRAIL BW	EACH	103
21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	LF	5,475
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	13
2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	7

DITCH LINING SUMMARY
BOONE COUNTY - US 42

STATION	MP TO MP	LENGTH (FEET)	TYPE	QUANTITY
<i>DITCHING LEFT</i>				
82+95 TO 83+75	1.57 - 1.59	80	CLASS II	31 TON
92+15 TO 93+30	1.75 - 1.77	115	ECB	80 SY
93+30 TO 93+80	1.77 - 1.78	50	CLASS II	14 TON
124+00 TO 130+00	2.35 - 2.46	600	CLASS II	320 TON
167+45 TO 167+70	3.17 - 3.18	25	CLASS II	14 TON
168+57 TO 169+07	3.19 - 3.20	50	ECB	44 SY
169+07 TO 169+32	3.20 - 3.21	25	CLASS II	14 TON
169+32 TO 169+57	3.21 - 3.21	25	ECB	44 SY
176+93 TO 177+18	3.35 - 3.36	25	CLASS II	14 TON
191+30 TO 191+80	3.62 - 3.63	50	ECB	44 SY
193+98 TO 194+98	3.67 - 3.69	100	ECB	88 SY
265+45 TO 265+65	5.03 - 5.03	20	ECB	18 SY
265+65 TO 265+95	5.03 - 5.04	30	CLASS II	17 TON
265+95 TO 266+45	5.04 - 5.05	50	ECB	44 SY

STATION	MP TO MP	LENGTH (FEET)	TYPE	QUANTITY
<i>DITCHING RIGHT</i>				
10+30 TO 10+80	0.20 - 0.20	50	ECB	50 SY
11+80 TO 14+30	0.22 - 0.27	250	ECB	250 SY
17+70 TO 18+35	0.34 - 0.35	65	TRM	65 SY
30+50 TO 31+66	0.58 - 0.60	116	CLASS II	47 TON
32+49 TO 33+13	0.62 - 0.63	64	TRM	29 SY
33+35 TO 34+55	0.63 - 0.65	120	TRM	107 SY
34+55 TO 34+75	0.65 - 0.66	20	CLASS II	11 TON
34+75 TO 37+45	0.66 - 0.71	270	TRM	240 SY
37+70 TO 40+50	0.71 - 0.77	280	TRM	249 SY
48+20 TO 49+45	0.91 - 0.94	125	CLASS II	70 TON
275+30 TO 275+60	5.21 - 5.22	30	CLASS II	17 TON
281+89 TO 282+89	5.34 - 5.36	100	ECB	88 SY

ITEM NUMBER	ITEM	UNIT	QUANTITY
2483	CHANNEL LINING CLASS II	TON	569
5950	EROSION CONTROL BLANKET	SOYD	750
23274EN11F	TURF REINFORCEMENT MAT 1	SOYD	690

[illegible]

BASE FAILURE REPAIR SUMMARY
BOONE COUNTY - US 42

STATION	OFFSET	LENGTH (FT)	WIDTH (FT)	LEVELING & WEDGING PG64-22	BASE FAILURE REPAIR	PERFORATED PIPE 4 IN	NON - PERFORATED PIPE 4 IN	PERF PIPE HEADWALL TY2 - 4 IN
UNIT TO BID				TON	SQYD	LF	LF	EACH
ITEM CODE				190	3240	1000	1010	1024
36+00 TO	37+00	LT	100	4	45	100	25	1
148+80 TO	149+80	LT/RT	100	13	112	100	25	1
PROJECT TOTALS:				17	157	200	50	2

NOTES:

THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ROCK DEPTHS ARE ESTIMATES ONLY AND ROCK SOUNDINGS WILL BE REQUIRED IN THE FIELD.

SHOULDER FAILURE REPAIR SUMMARY
BOONE COUNTY - US 42

STATION	OFFSET	LENGTH (FT)	WIDTH (FT)	LEVELING & WEDGING PG64-22	SHOULDER FAILURE REPAIR	
UNIT TO BID				TON	SQYD	
ITEM CODE				190	23593EC	
10+43 TO	10+63	RT	20	4	1	9
PROJECT TOTALS:					1	9

NOTES:

THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ROCK DEPTHS ARE ESTIMATES ONLY AND ROCK SOUNDINGS WILL BE REQUIRED IN THE FIELD.

EMBANKMENT REPAIR SUMMARY				
BOONE COUNTY - US 42				
STATION			OFFSET	EMBANKMENT IN PLACE
UNIT TO BID				CUYD
ITEM CODE				2230
36+00	TO	40+00	LT	376 (1)
266+00	TO	266+30	RT	87
PROJECT TOTALS				463
NOTES:				
THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ROCK DEPTHS ARE ESTIMATES ONLY AND ROCK SOUNDINGS WILL BE REQUIRED IN THE FIELD.				
(1) EXISTING RAILROAD RAILS PRESENT AT THIS LOCATION.				

NOTE:
THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

SIGNING SUMMARY BOONE COUNTY - US 42					
STATION	MUTCD CODE	SIGN LOCATION		SIGN SIZE	COMMENTS
		SIDE OF ROAD	FACING TRAFFIC TRAVELING	HORIZ. X VERT.	
25+00	M2-1	LT	SB	21" X 15"	Proposed - KY 2850 (M1-5) (Relocated due to South Fork Rd Realignment) ①
	M1-5			36" X 24"	
84+50	W1-4	RT	NB	36" X 36"	Remove Existing Sign Sta. 81+52 Proposed Sign Sta. 84+50
	W13-1P			18" X 18"	
144+75	W1-2	RT	NB	36" X 36"	Remove Existing Sign Sta. 142+24 Proposed Sign Sta. 144+75
	W13-1P			18" X 18"	
248+00	W1-2	RT	NB	36" X 36"	Remove Existing Sign Sta. 237+87 Proposed Sign Sta. 248+00
257+50	W1-2	LT	SB	36" X 36"	Remove Existing Sign Sta. 261+43 Proposed Sign Sta. 257+50
SOUTH FORK ROAD					
99+55	D3-1	RT	EB	--	Proposed (South Fork Rd Realignment) Remove, Store, and Reinstall D3-1 (South Fork Rd) ①
	R1-1			36" X 36"	
99+75	R5-2	LT	WB	24" X 24"	Proposed (South Fork Rd Realignment) ①
	R5-2A			24" X 30"	

① THESE PROPOSED SIGNS ARE SHOWN ON PLAN SHEET - SOUTH FORK ROAD REALIGNMENT CONSTRUCTION SHEET

NOTE: IF ANY ONE SIGN DIMENSION IS GREATER THAN 36 IN., 0.125 IN. SIGN THICKNESS IS TO BE USED.

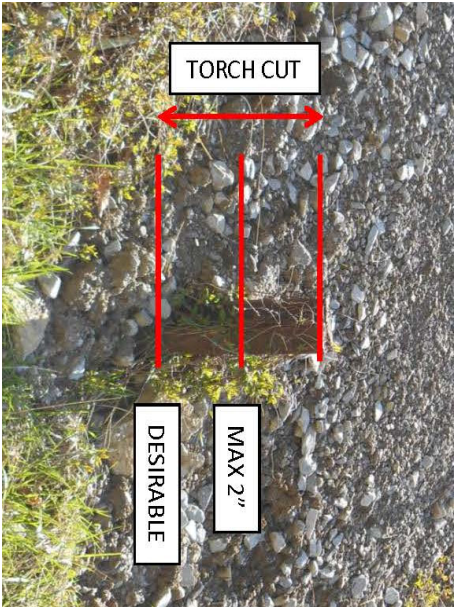
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
6406	SBM ALUM SHEET SIGNS .080 IN	SQFT	67
6410	STEEL POST TYPE	LF	102
21134ND	REMOVE-STORE AND REINSTALL SIGN	EACH	1
21373ND	REMOVE SIGN	EACH	4
24631EC	BARCODE SIGN INVENTORY	EACH	12

CUT RAILS SUMMARY
BOONE COUNTY - US 42

STATION	OFFSET	REMOVE
UNIT TO BID		EACH
ITEM CODE		24894EC(1)
36+00 TO 40+00	LT	16
61+42 TO 62+67	RT	26 (2)

PROJECT TOTALS: 42

(1) BID ITEM 24894EC - REMOVE (RAILROAD RAIL ABOVE ANY GROUND LINE BY TORCH CUTTING) INVOLVES CONTRACTOR CUTTING RAILS AS CLOSE TO EXISTING GROUND LINE AS POSSIBLE AND MAXIMUM OF 2" ABOVE EXISTING GROUND LINE.



(2) THERE ARE 9 RAILROAD RAILS SUPPORTING AND HOLDING UP FENCE AND GABION BASKETS AND SHALL NOT BE CUT AT THIS LOCATION.

NOTE:

THESE NUMBERS ARE FOR ESTIMATE PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.



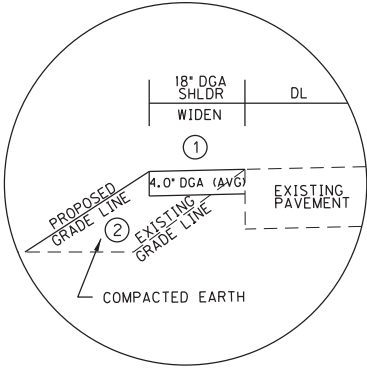
STA. 36+00 TO STA. 40+00 LT (APPROX. 16 RAILS)



STA. 61+42 TO STA. 62+67 RT (APPROX. 26 RAILS)

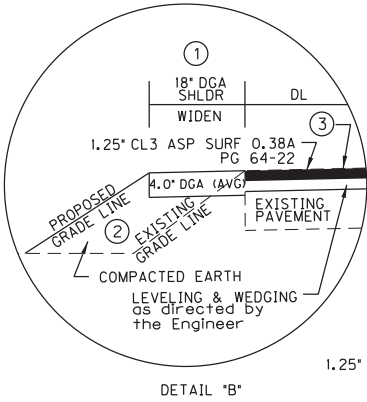
COUNTY OF	ITEM NO.
BOONE	6-9010.00

TYPICAL SECTIONS

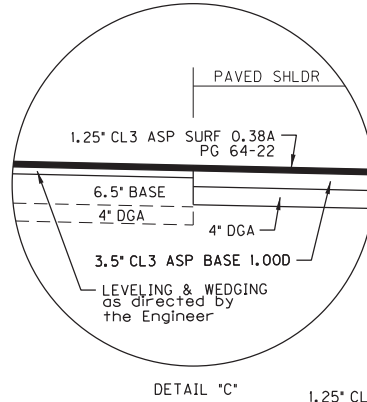


DETAIL "A"

SHOULDER 4.0" DEPTH DGA

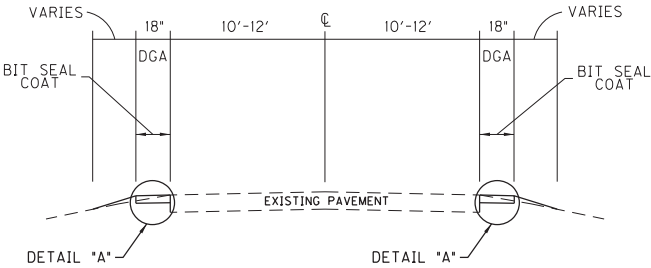


DETAIL "B"



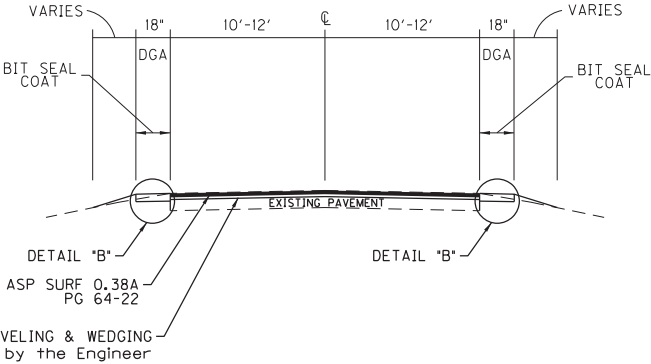
DETAIL "C"

1.25" CL 3 ASP SURF 0.38A PG 64-22
LEVELING & WEDGING as directed by the Engineer



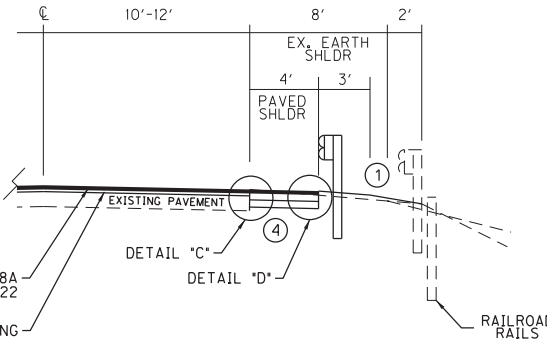
US 42

STA. 0+00 (MP 0.00) TO STA. 19+53 (MP 0.37)
STA. 168+96 (MP 3.20) TO STA. 299+53 (MP 5.67)



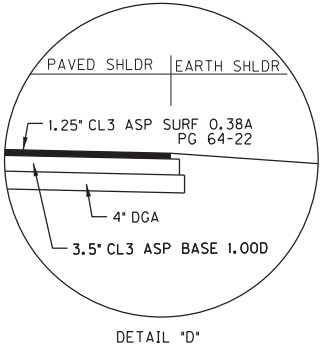
US 42

STA. 19+53 (MP 0.37) TO STA. 168+96 (MP 3.20)



US 42

STA. 142+73 TO STA. 160+91 RT
RT SHOULDER / GUARDRAIL DETAIL



DETAIL "D"

- ① BIT SEAL COAT SHALL COVER THE LIMITS OF THE DGA SHOULDER.
- BIT SEAL COAT**
FIRST COURSE:
ASPHALT CURING SEAL
(APPLY AT A RATE OF 3.2 LBS/SQ. YD.)
ASPHALT SEAL AGGREGATE
(APPLY AT A RATE OF 30 LBS/SQ. YD.)
SECOND COURSE:
ASPHALT CURING SEAL
(APPLY AT A RATE OF 2.8 LBS/SQ. YD.)
ASPHALT SEAL AGGREGATE
(APPLY AT A RATE OF 20 LBS/SQ. YD.)
NOTE: ASPHALT MATERIAL FOR TACK AS DIRECTED BY ENGINEER (INCIDENTAL)
BIT SEAL COAT SHALL COVER THE LIMITS OF THE DGA SHOULDER AND SIDE SLOPES
- ② COMPACTED EMBANKMENT (INCIDENTAL TO DITCHING & SHOULDERING). CONTRACTOR SHALL PROPERLY BENCH INTO EXISTING SLOPE AND APPLY PROPER COMPACTION. COMPACT MATERIAL ACCORDING TO STANDARD SPECIFICATIONS (SECT. 206). FINAL PAYMENT WILL BE PAID AS LF OF DITCHING & SHOULDERING AND INCLUDE ALL WORK NECESSARY TO PERFORM WORK. SHOULDER EMBANKMENT MATERIAL SHALL BE SUITABLE FOR VEGETATION GROWTH. LOCATIONS THAT ARE LIMITED DUE TO R/W, UTILITY POLES, TREES, FENCES, OR OTHER SENSITIVE OBSTRUCTIONS MAY REQUIRE EMBANKMENT BUT ONLY OUT TO THE EDGE OF R/W OR SENSITIVE OBSTRUCTIONS. (SLOPE MAY BE STEEPER THAN 3:1)
- ③ ASPHALT MILLING AND TEXTURING 1.5 INCHES (AVERAGE)
- ④ SHOULDER MILLING/TRENCHING - 4 FEET OF EXISTING EARTH SHOULDER.

NOT TO SCALE

US 42
TYPICAL SECTIONS

BASE FAILURE REPAIR DETAILS

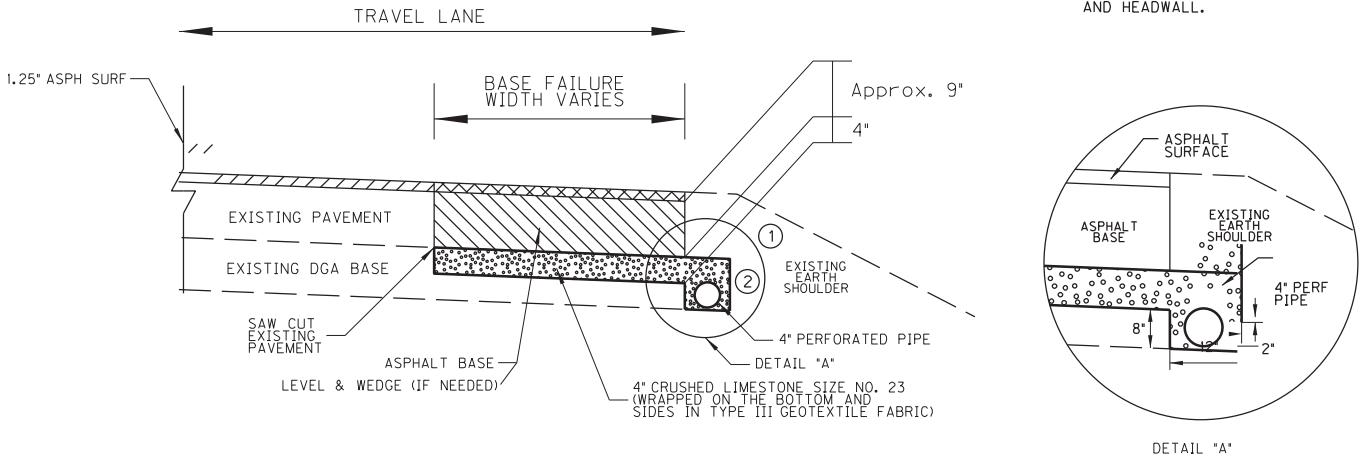
US 42

STA. 36 + 00 TO STA. 37 + 00 (LT)
STA. 148 + 80 TO STA. 149 + 80 (LT&RT)

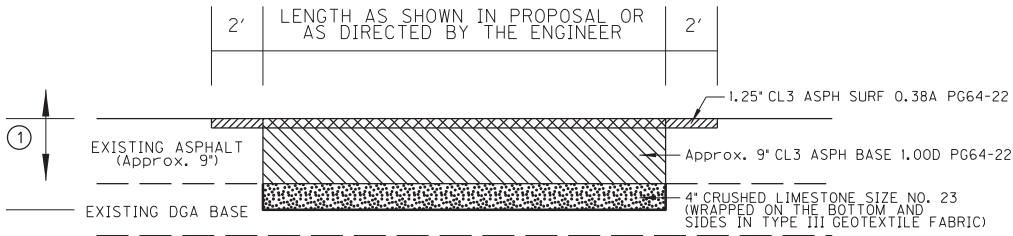
COUNTY OF	ITEM NO.
BOONE	6-9010.00

- ① DEPTH OF EXCAVATION AND REPAIR LIMITS AS DIRECTED BY THE ENGINEER.
- ② CONSTRUCT 4" PERFORATED PIPE AND HEADWALL TO DRAIN 4" CRUSHED LIMESTONE SIZE NO. 23. 4" CRUSHED LIMESTONE SIZE NO. 23 IS WRAPPED ON BOTTOM AND SIDES WITH TYPE III GEOTEXTILE FABRIC. CONSTRUCT PIPE AND HEADWALL TO PROVIDE POSITIVE DRAINAGE. EXCAVATION AND BACKFILL FOR PERFORATED PIPE AND HEADWALL IS INCIDENTAL TO PERFORATED PIPE AND HEADWALL.

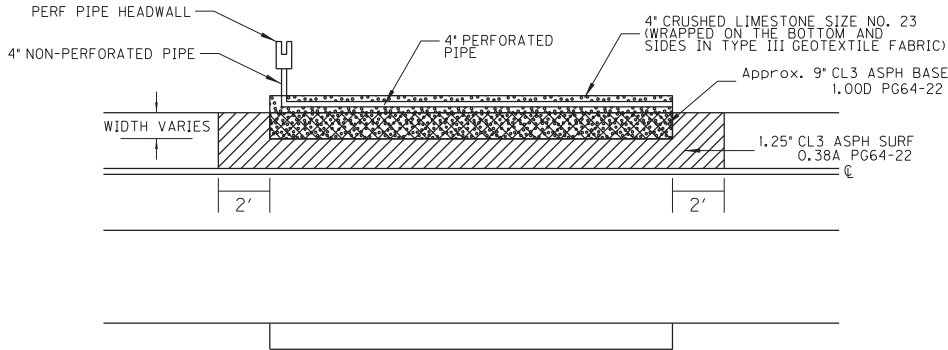
BASE FAILURE CROSS SECTION DETAIL



BASE FAILURE PROFILE DETAIL



BASE FAILURE TOP VIEW DETAIL



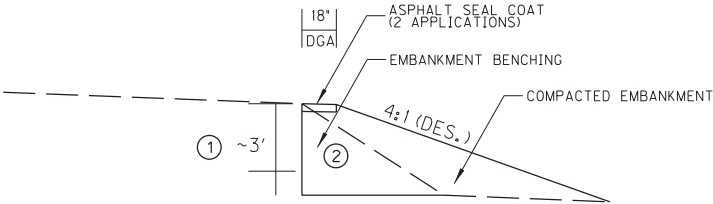
NOT TO SCALE

US 42
BASE FAILURE REPAIR DETAIL

EMBANKMENT REPAIR DETAIL

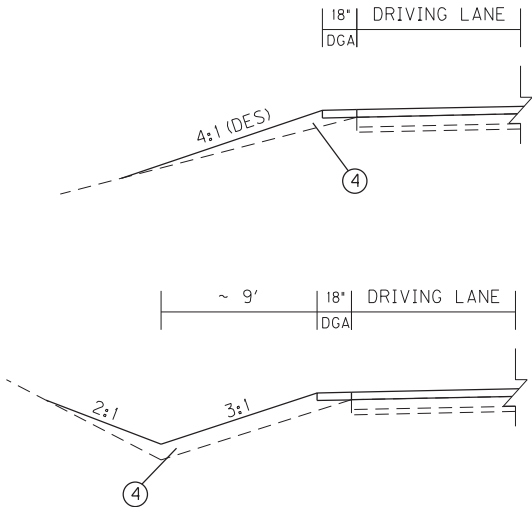
COUNTY OF	ITEM NO.
BOONE	6-9010.00

US 42
STA. 36+00 TO STA. 40+00 (LT) ③
STA. 266+00 TO STA. 266+30 (RT)



- ① DEPTH OF EXCAVATION, EMBANKMENT BENCH, AND REPAIR LIMITS AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL PROPERLY BENCH INTO EXISTING SLOPE AND APPLY PROPER COMPACTION. COMPACT MATERIAL ACCORDING TO STANDARD SPECIFICATIONS (SECT. 206). FINAL PAYMENT WILL BE PAID AS EMBANKMENT IN PLACE.
- ② EMBANKMENT BENCH QUANTITY IS INCLUDED IN EMBANKMENT IN PLACE QUANTITY.
- ③ NOTE: RAILS ARE PRESENT AT THIS LOCATION AND WILL IMPACT EMBANKMENT CONSTRUCTION. RAILS MAY BE BELOW THE EXISTING GROUNDLINE. CUT RAILS TO EXISTING GROUNDLINE AND AT A MAXIMUM 2" INCHES ABOVE THE PROPOSED GROUNDLINE. DISPOSAL OF THE RAILS WILL BE INCIDENTAL TO BID ITEM REMOVE (RAILROAD RAIL ABOVE GROUND LINE BY TORCH CUTTING).

DITCHING & SHOULDERING DETAILS



- ④ COMPACTED EMBANKMENT (INCIDENTAL TO DITCHING & SHOULDERING). CONTRACTOR SHALL PROPERLY BENCH INTO EXISTING SLOPE AND APPLY PROPER COMPACTION. COMPACT MATERIAL ACCORDING TO STANDARD SPECIFICATIONS (SECT. 206). FINAL PAYMENT WILL BE PAID AS LF OF DITCHING & SHOULDERING AND INCLUDE ALL WORK NECESSARY TO PERFORM WORK. SHOULDER EMBANKMENT MATERIAL SHALL BE SUITABLE FOR VEGETATION GROWTH. LOCATIONS THAT ARE LIMITED DUE TO R/W, UTILITY POLES, TREES, FENCES, OR OTHER SENSITIVE OBSTRUCTIONS MAY REQUIRE EMBANKMENT BUT ONLY OUT TO THE EDGE OF R/W OR SENSITIVE OBSTRUCTION(S). (SLOPE MAY BE STEEPER THAN 3:1)

NOT TO SCALE

US 42
EMBANKMENT REPAIR DETAIL
DITCHING AND SHOULDERING DETAILS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

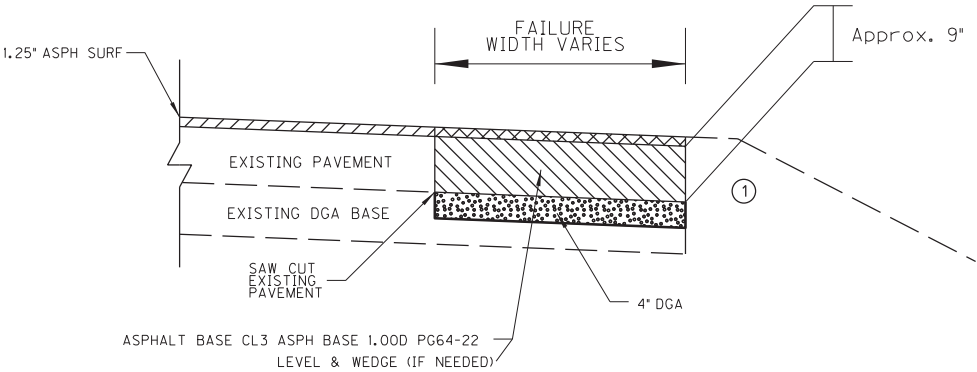
PAVED SHOULDER REPAIR DETAIL

US 42

STA. 10 + 43 TO STA. 10 + 63 (RT)

① DEPTH OF EXCAVATION AND REPAIR
LIMITS AS DIRECTED BY THE
ENGINEER.

PAVED SHOULDER FAILURE CROSS SECTION DETAIL



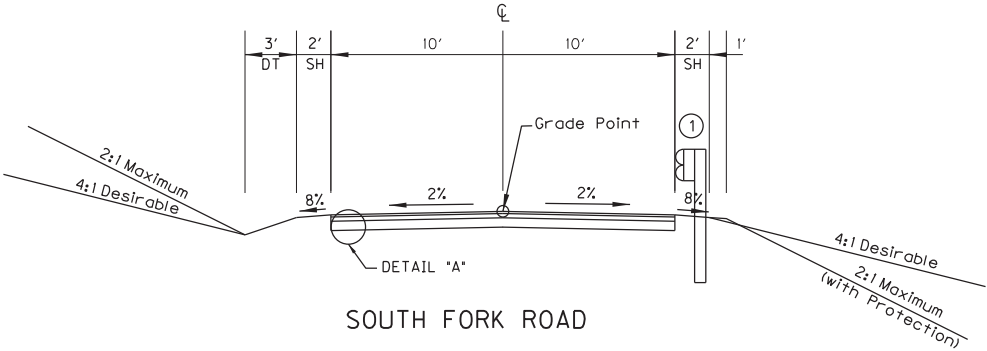
NOT TO SCALE

US 42
PAVED SHOULDER REPAIR DETAIL

COUNTY OF	ITEM NO.
BOONE	6-9010.00

TYPICAL SECTIONS

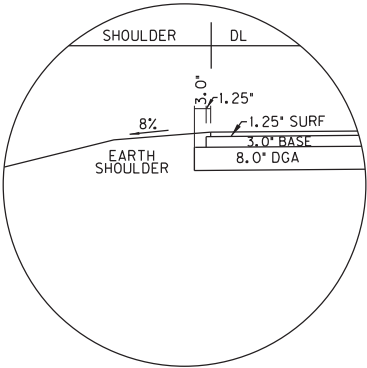
① WIDEN SHOULDER 1' FOR GUARDRAIL



SOUTH FORK ROAD

ASPHALT

- 1.25" DEPTH CLASS 3 ASPHALT SURFACE 0.38A PG64-22
- 3.0" DEPTH CLASS 3 ASPHALT BASE 1.00D PG64-22
- 8" COMPACTED DGA



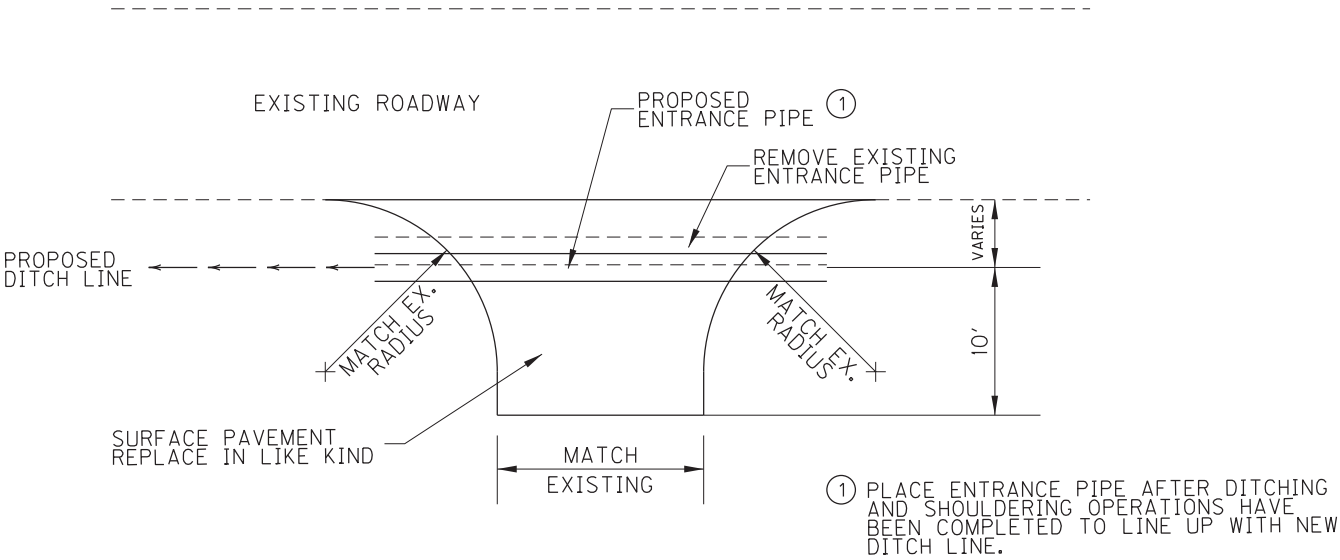
DETAIL "A"

NOT TO SCALE

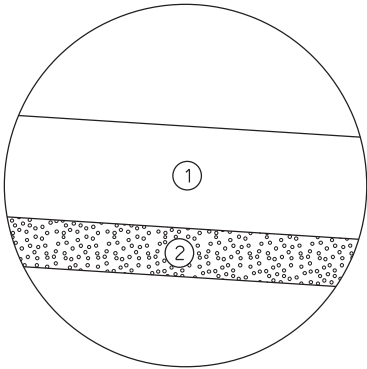
SOUTH FORK ROAD
TYPICAL SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

ENTRANCE TYPICAL SECTIONS

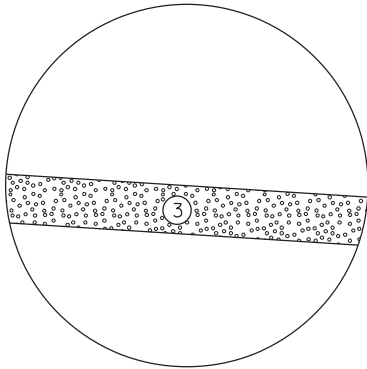


ENTRANCE DETAIL



CONCRETE ENTRANCE

- ① 8.00" CEM CONC ENT PAVEMENT
- ② 4.00" DGA



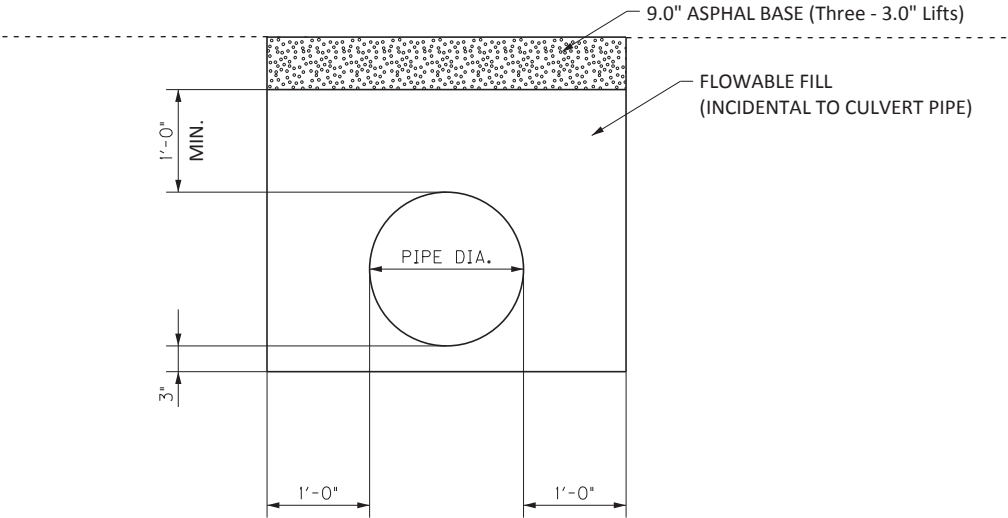
GRAVEL ENTRANCE

- ③ 4.00" DGA

NOT TO SCALE

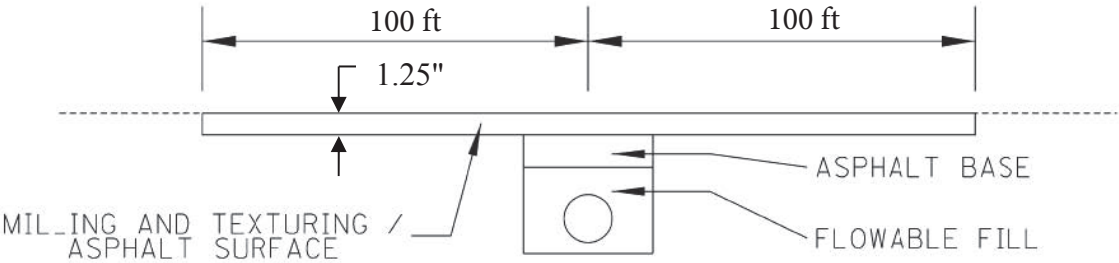
ENTRANCE
TYPICAL SECTIONS

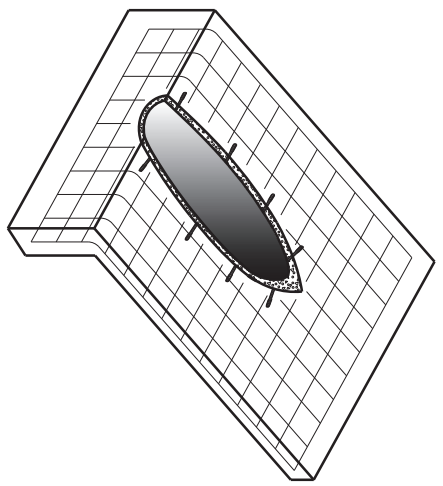
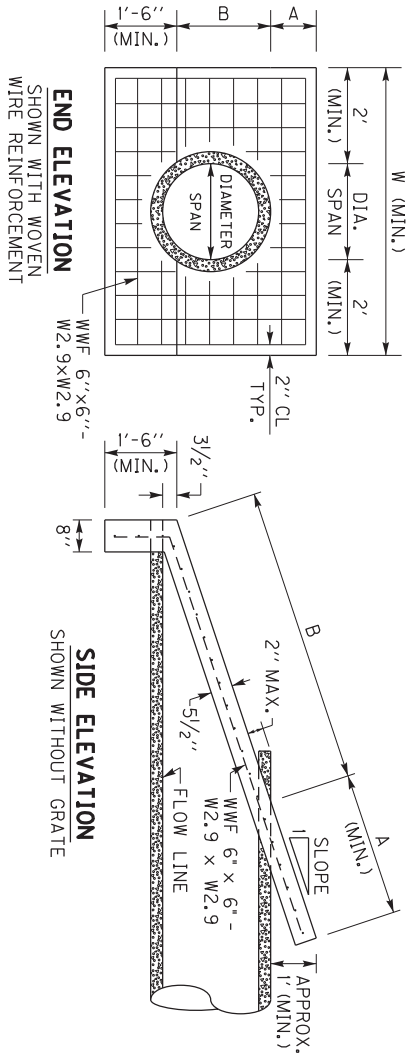
PIPE REPLACEMENT DETAIL



CULVERT PIPE REPLACEMENTS - INITAL BACKFILL

Culvert Pipe Replacements shall be constructed according to the Inital Backfill Detail shown above, or as directed by the Engineer. Allow the asphalt base to be exposed to traffic a minimum of 14 days to allow for settlement. After the 14 day waiting period, mill and inlay 1.25 inches of asphalt surface according to the detail below.





ISOMETRIC VIEW
SHOWN WITH WOVEN
WIRE REINFORCEMENT
AND WEDGE ANCHORS

DIMENSIONS AND CONCRETE QUANTITIES

PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
15"	3'	3'-7 1/2"	5'-3"	0.74	4'	4'-8 3/4"	5'-3"	0.93	6'	6'-11 3/4"	5'-3"	1.29	NO
18"	3'	4'-5 3/4"	5'-6"	0.85	4'	5'-10"	5'-6"	1.05	6'	8'-7 1/4"	5'-6"	1.48	NO
24"	3'	6'-2 1/2"	6'-0"	1.05	4'	8'-1"	6'-0"	1.32	6'	11'-11"	6'-0"	1.87	SEE ⑦
30"	3'	7'-10 3/4"	6'-6"	1.43	4'	10'-3 3/4"	6'-6"	1.80	6'	15'-2 1/2"	6'-6"	2.28	SEE ⑦

NOTE: CONCRETE QUANTITIES ARE LISTED FOR INFORMATIONAL PURPOSES ONLY.

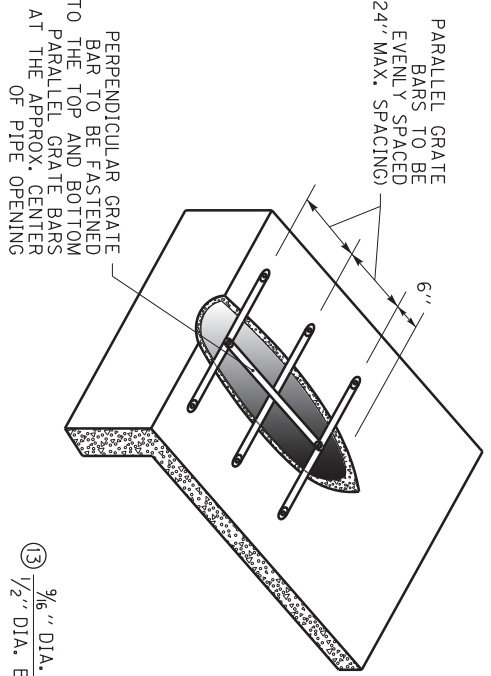
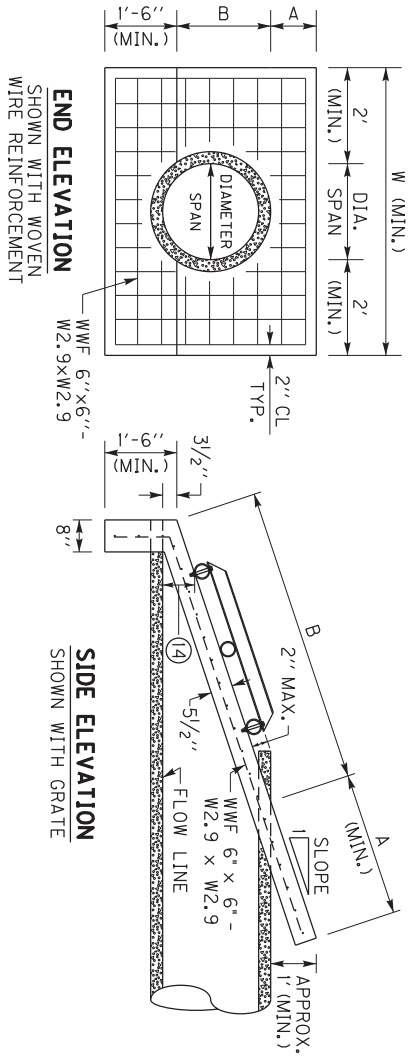
~ NOTES ~

- BID ITEM AND UNIT TO BID: 24575ES610 HEADWALL (SLOPED & MITERED CONCRETE-FOR 1" INCH PIPE) - EACH
- THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
- THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING. HAND FINISHING AND/OR CUTTING MAY BE NECESSARY.
- THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. NOTE: THE HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
- WOVEN WIRE REINFORCEMENT (WWF 6"x6" - W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
- CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL.
- AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7" LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.
- THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE: -24" DIAMETER PIPE ON GREATER THAN 30° SKEW -30" DIAMETER PIPE ON GREATER THAN 15° SKEW -PIPE WITH GREATER THAN 30" DIAMETER. -ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER SEE SHEET 2 FOR GRATE DETAILS
- ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.

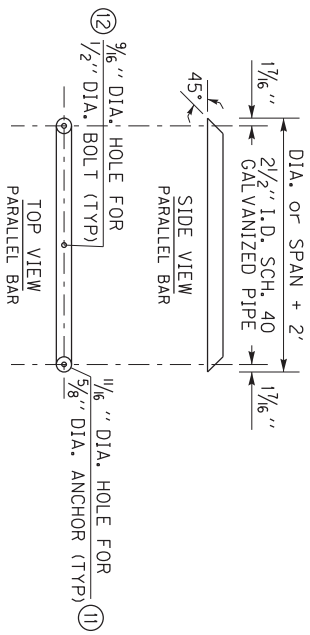
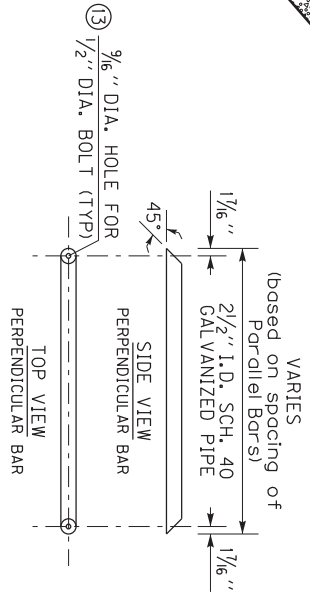
NOT TO SCALE

KENTUCKY
DEPARTMENT OF HIGHWAYS
SLOPED & MITERED CONCRETE HEADWALL (SHEET 1 OF 2)

SEE SHEET 2 FOR
DIMENSIONS OF
HEADWALLS FOR PIPE
OVER 30" DIAMETER



ISOMETRIC VIEW
SHOWING HEADWALL
WITH GRATE



PIPE FOR GRATE DETAILS
SEE NOTE 6 TO DETERMINE
IF GRATE IS REQUIRED

DIMENSIONS AND CONCRETE QUANTITIES

PIPE SIZE	3:1 SLOPE			4:1 SLOPE			6:1 SLOPE			GRATE REQUIRED
	A	B	W	A	B	W	A	B	W	
36"	3'	9'-7 1/2"	7'-0"	4'	12'-6 1/2"	7'-0"	6'	18'-6"	7'-0"	YES
42"	3'	11'-4"	7'-6"	4'	14'-9 1/4"	7'-6"	6'	21'-9 1/2"	7'-6"	YES

NOTE: CONCRETE QUANTITIES ARE LISTED FOR INFORMATIONAL PURPOSES ONLY.

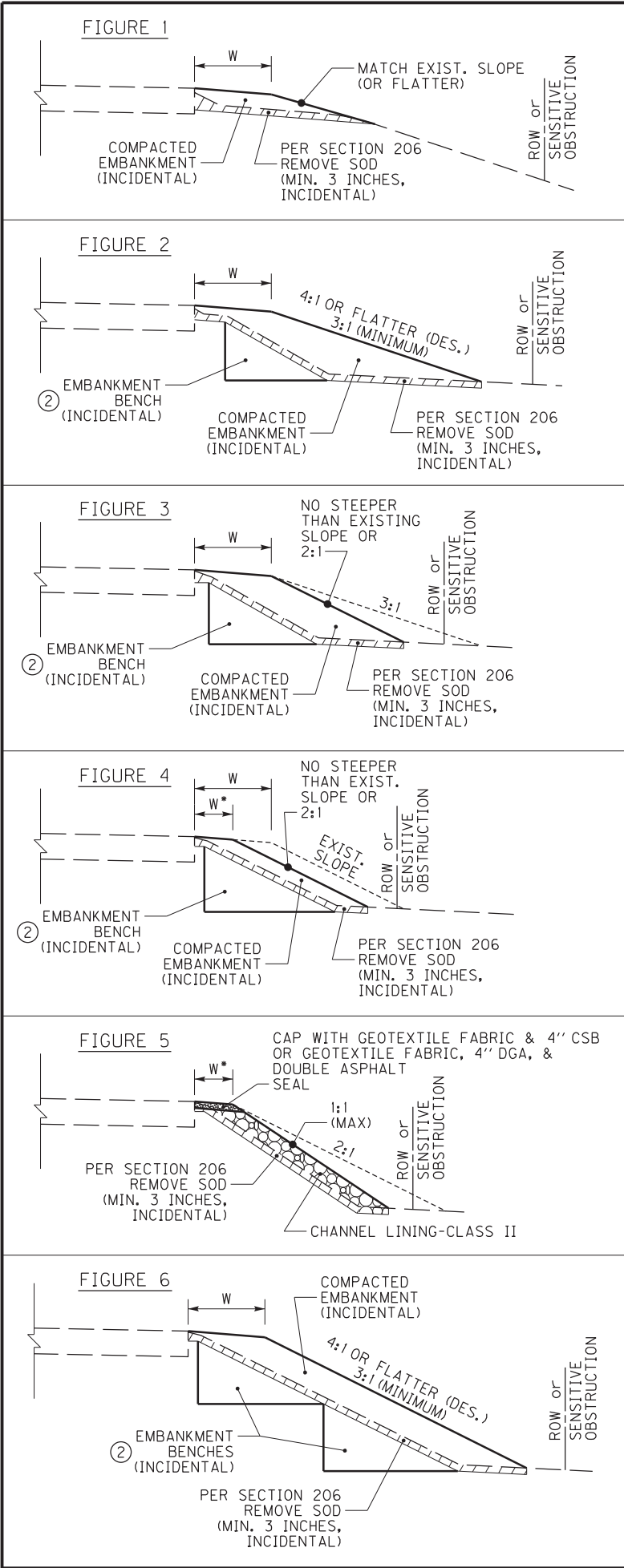
~ NOTES ~

- BID ITEM AND UNIT TO BID: 24575ES610 HEADWALL (SLOPED & MITERED CONCRETE-FOR — INCH PIPE) - EACH SEE SHEET 1 FOR NOTES 1 THRU 5
- THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
 - 24" DIAMETER PIPE ON GREATER THAN 30° SKEW
 - 30" DIAMETER PIPE ON GREATER THAN 15° SKEW
 - PIPE WITH GREATER THAN 30" DIAMETER.
 - ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
- ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
- THE PIPE USED TO CONSTRUCT THE GRATE SHALL BE STEEL, SCHEDULE 40, CONFORMING TO ASTM A53, AND GALVANIZED IN ACCORDANCE WITH AASHTO M 111 AFTER FABRICATION.
- ANY RAW METAL EXPOSED BY FIELD CUTTING AND/OR DRILLING SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND.
- FASTEN PARALLEL BARS TO HEADWALL WITH 5/8" DIA. x 4 1/2" LENGTH STEEL WEDGE ANCHORS, MINIMUM EMBEDMENT = 2 3/4" HOLE SIZE AND DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE
- CENTER BOLT HOLE SHALL ONLY BE DRILLED IN THE TOP AND BOTTOM PARALLEL BARS.
- FASTEN THE PERPENDICULAR BAR TO THE TOP AND BOTTOM PARALLEL BARS WITH 1/2" DIA. x 4" LENGTH HEX HEAD BOLTS, HEX HEAD NUTS, & FLAT WASHERS.
- THE BOTTOM PARALLEL BAR IS TO BE PLACED SO THAT IT IS APPROX. 6" ABOVE THE FLOWLINE OF THE PIPE.

KENTUCKY
DEPARTMENT OF HIGHWAYS
SLOPED & MITERED CONCRETE HEADWALL (SHEET 2 OF 2)

SEE SHEET 1 FOR
DIMENSIONS OF
HEADWALLS FOR PIPE
30" DIAMETER & LESS

NOT TO SCALE



- ~ NOTES ~
- BID ITEM AND UNIT TO BID:
2575 - DITCHING & SHOULDERING - LF
1. THE BID ITEM 'DITCHING & SHOULDERING' SHALL CONSIST OF ANY AND ALL NECESSARY CLEARING & GRUBBING, GRADING, AND/OR RESHAPING OF THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. FINAL PAYMENT WILL BE BASED ON THE ACTUAL LINEAR FEET OF DITCHING AND SHOULDERING PERFORMED, AND WILL INCLUDE ALL WORK AND INCIDENTALS NECESSARY TO PERFORM THE DITCHING AND SHOULDERING ACCORDING TO THESE DETAILS, NOTES, AND ANY OTHER INFORMATION FOUND ELSEWHERE IN THE PROPOSAL OR STANDARD SPECIFICATIONS. IN THE CASE OF A DISCREPANCY, REFER TO SECTION 105.05 OF THE STANDARD SPECIFICATIONS. DEPENDING ON THE EXISTING CONDITIONS ENCOUNTERED, DITCHING AND SHOULDERING MAY ALSO INCLUDE, BUT IS NOT LIMITED TO:
- PROVIDING ADDITIONAL EARTH MATERIAL AND GRADING, SHAPING, AND COMPACTING THE EARTH MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS. COMPACT MATERIAL ACCORDING TO SECTION 206 OF THE STANDARD SPECIFICATIONS.
 - NOTE: ADDITIONAL EARTH MATERIAL PROVIDED SHALL BE SUITABLE FOR VEGETATION GROWTH.
 - EXCAVATING AND REMOVING EXCESS MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS
 - EMBANKMENT BENCHING
- ② EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'DITCHING AND SHOULDERING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'DITCHING AND SHOULDERING':
- THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
 - THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
 - MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK.
3. AS SHOWN IN FIGURE 1, IN SOME SITUATIONS, MINOR SHOULDERING, WITH MINIMAL ADDITIONAL EARTH MATERIAL, MAY BE ALL THAT IS REQUIRED TO RESHAPE THE EARTH SHOULDER TO THE PROPOSED WIDTH AND BRING IT FLUSH WITH THE EDGE OF PAVEMENT.
4. AS SHOWN IN FIGURE 2, MOST SITUATIONS WILL REQUIRE ADDITIONAL EARTH MATERIAL TO ACHIEVE THE PROPOSED EARTH SHOULDER WIDTH. IT IS DESIRED THAT THE RESULTING FILL SLOPE BE INSTALLED AS FLAT AS POSSIBLE AND REMAIN WITHIN THE RIGHT-OF-WAY AND/OR AVOID SENSITIVE OBSTRUCTIONS.
5. AS SHOWN IN FIGURE 3, IF A 3:1 FILL SLOPE WILL RESULT IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR IMPACT A SENSITIVE OBSTRUCTION, THEN THE FILL SLOPE MAY BE INSTALLED STEEPER THAN 3:1, BUT NO STEEPER THAN THE EXISTING FILL SLOPE, OR A 2:1, WHICHEVER IS FLATTER.
6. AS SHOWN IN FIGURE 4, IF MATCHING THE EXISTING FILL SLOPE OR INSTALLING A 2:1 FILL SLOPE (WHICHEVER IS FLATTER) STILL RESULTS IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE RESULTING TOE OF SLOPE WILL REMAIN WITHIN THE RIGHT-OF-WAY AND/OR NOT IMPACT THE SENSITIVE OBSTRUCTION.
7. AS SHOWN IN FIGURE 5, IF THE EXISTING FILL SLOPE IS STEEPER THAN 2:1 AND THERE IS NOT ENOUGH SPACE TO INSTALL A 2:1 FILL SLOPE WITHOUT EXTENDING BEYOND THE RIGHT-OF-WAY AND/OR IMPACTING A SENSITIVE OBSTRUCTION, THEN CLASS II CHANNEL LINING MAY BE INSTALLED ALONG THE STEEP EXISTING SLOPE IN ORDER TO ESTABLISH A WIDTH OF AGGREGATE SHOULDER. THESE LOCATIONS WILL BE NOTED ELSEWHERE IN THE PROPOSAL AS SLOPE PROTECTION. THE CHANNEL LINING IS TO BE CAPPED WITH GEOTEXTILE FABRIC TYPE IV AND 4" OF CRUSHED STONE BASE, OR 4" OF DGA WITH DOUBLE ASPHALT SEAL COAT.
8. AS SHOWN IN FIGURE 6, AS THE HEIGHT OF THE FILL INCREASES, MULTIPLE EMBANKMENT BENCHES MAY BE REQUIRED.
- SEE SHEET 2 FOR
NOTES 9 THRU 13

NOT TO SCALE

FIGURE 7

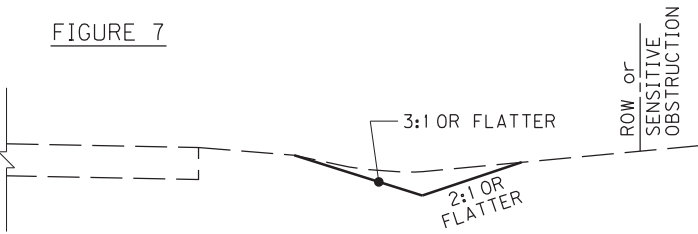


FIGURE 8

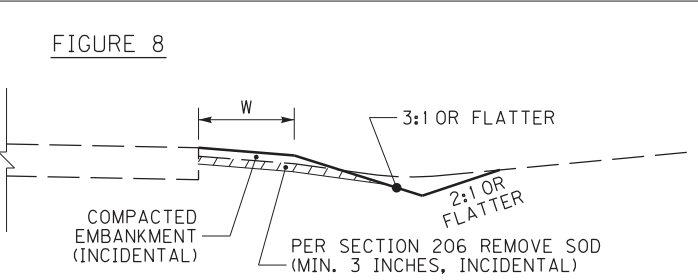


FIGURE 9

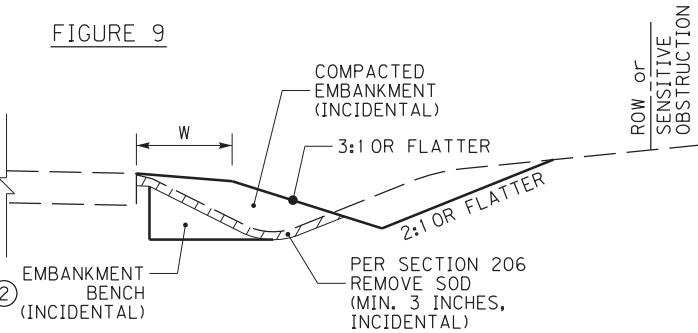


FIGURE 10

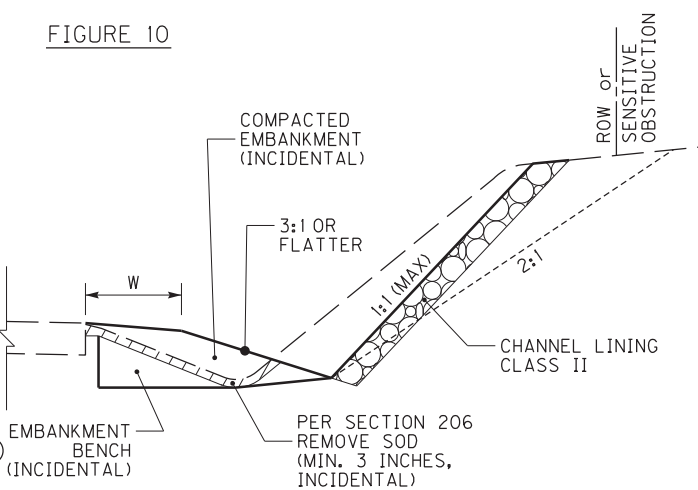
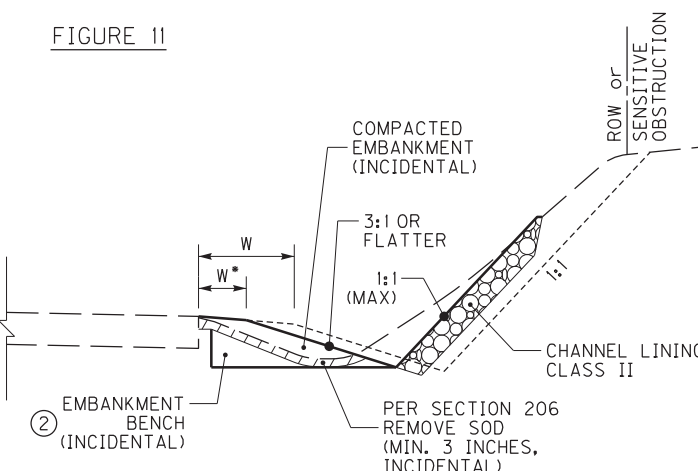


FIGURE 11



- ~ NOTES ~
- BID ITEM AND UNIT TO BID:
2575 - DITCHING & SHOULDERING - LF
1. THE BID ITEM 'DITCHING & SHOULDERING' SHALL CONSIST OF ANY AND ALL NECESSARY CLEARING & GRUBBING, GRADING, AND/OR RESHAPING OF THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. FINAL PAYMENT WILL BE BASED ON THE ACTUAL LINEAR FEET OF DITCHING AND SHOULDERING PERFORMED, AND WILL INCLUDE ALL WORK AND INCIDENTALS NECESSARY TO PERFORM THE DITCHING AND SHOULDERING ACCORDING TO THESE DETAILS, NOTES, AND ANY OTHER INFORMATION FOUND ELSEWHERE IN THE PROPOSAL OR STANDARD SPECIFICATIONS. IN THE CASE OF A DISCREPANCY, REFER TO SECTION 105.05 OF THE STANDARD SPECIFICATIONS. DEPENDING ON THE EXISTING CONDITIONS ENCOUNTERED, DITCHING AND SHOULDERING MAY ALSO INCLUDE, BUT IS NOT LIMITED TO:
- PROVIDING ADDITIONAL EARTH MATERIAL AND GRADING, SHAPING, AND COMPACTING THE EARTH MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS. COMPACT MATERIAL ACCORDING TO SECTION 206 OF THE STANDARD SPECIFICATIONS.
 - NOTE: ADDITIONAL EARTH MATERIAL PROVIDED SHALL BE SUITABLE FOR VEGETATION GROWTH.
 - EXCAVATING AND REMOVING EXCESS MATERIAL TO ACHIEVE THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS
 - EMBANKMENT BENCHING
- ② EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'DITCHING AND SHOULDERING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'DITCHING AND SHOULDERING':
- THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
 - THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
 - MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK.
- SEE SHEET 1 FOR NOTES 3. THRU 8.
9. AS SHOWN IN FIGURE 7, IN SOME SITUATIONS, ALL THAT MAY BE REQUIRED IS TO CLEAN OUT THE EXISTING DITCH AND RESHAPE IT TO THE PROPOSED DIMENSIONS. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE RE-USED ELSEWHERE ON THE PROJECT, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR THE INTENDED RE-USE.
10. AS SHOWN IN FIGURE 8, IN SOME SITUATIONS, THE DITCH AND SHOULDER MAY ONLY NEED MINOR REGRADING AND/OR RESHAPING. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE USED TO RESHAPE THE EARTH SHOULDER, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR SHOULDERING. IF THE MATERIAL IS NOT SUITABLE, ADDITIONAL EARTH MATERIAL MAY BE REQUIRED.
11. AS SHOWN IN FIGURE 9, IN MOST SITUATIONS, REGRADING AND RESHAPING THE ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS WILL RESULT IN MOVING THE DITCH FURTHER AWAY FROM THE ROADWAY. IT IS DESIRED THAT DITCH FORESLOPES BE 3:1 OR FLATTER AND DITCH BACKSLOPES BE 2:1 OR FLATTER.
12. AS SHOWN IN FIGURE 10, IF INSTALLING A 2:1 DITCH BACKSLOPE WILL RESULT IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR IMPACTING A SENSITIVE OBSTRUCTION, THEN THE DITCH BACK SLOPE MAY BE INSTALLED STEEPER THAN 2:1, UP TO 1:1 MAXIMUM. IN THIS SITUATION, THE DITCH BACKSLOPE SHALL HAVE CLASS II CHANNEL LINING INSTALLED FOR SLOPE PROTECTION.
13. AS SHOWN IN FIGURE 11, IF USING A 1:1 DITCH BACKSLOPE STILL RESULTS IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE STEEP DITCH BACKSLOPE CAN BE INSTALLED WITHIN THE RIGHT-OF-WAY AND/OR TO AVOID A SENSITIVE OBSTRUCTION.

[illegible]

NOTE: STATION NUMBERS ARE GIVEN FOR NOTED DIRECTION OF TRAVEL ONLY.
DIRECTLY OPPOSITE THOSE FOR WHICH STATION NUMBERS ARE GIVEN.
BY TRAVELING COUNTY, FINAL LOCATION OF MILEPOST MARKERS SHALL BE REPEATED
ON THIS ITEM

90 WEST MAIN STREET
TAMARAC, MI 48062
562-587-6624
270-307-7456

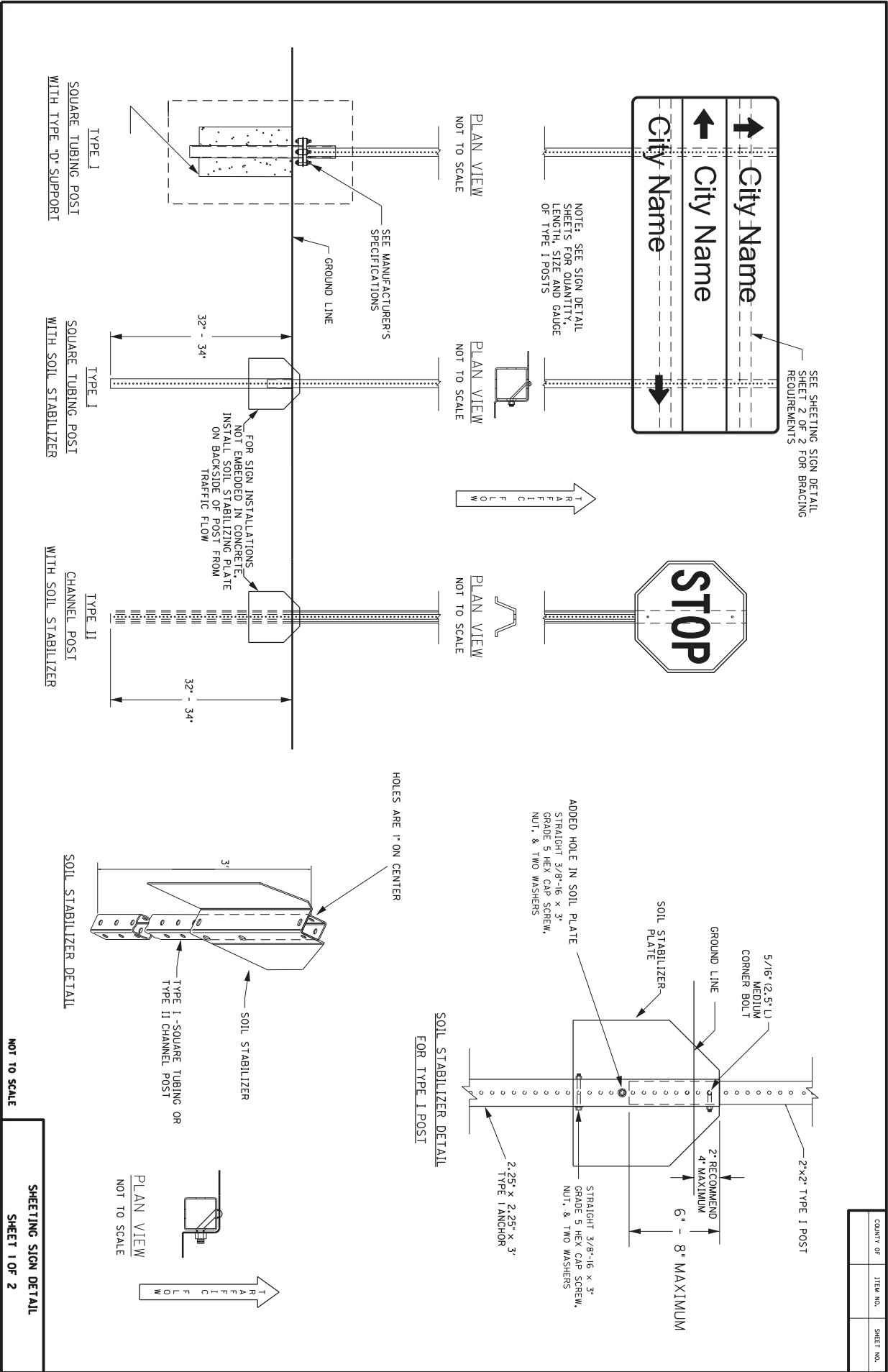
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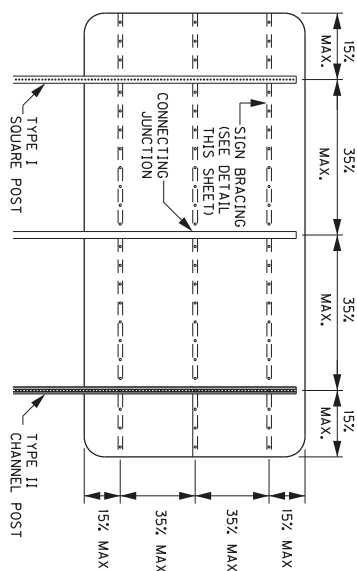
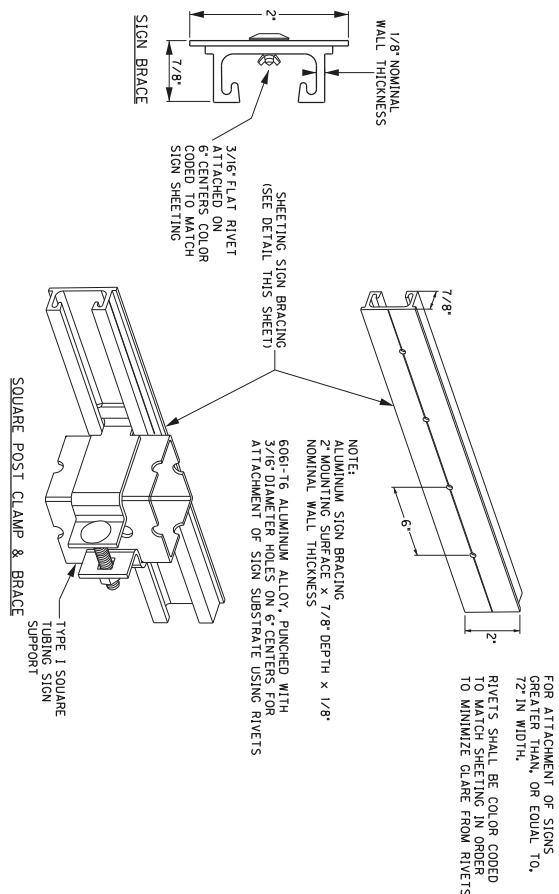
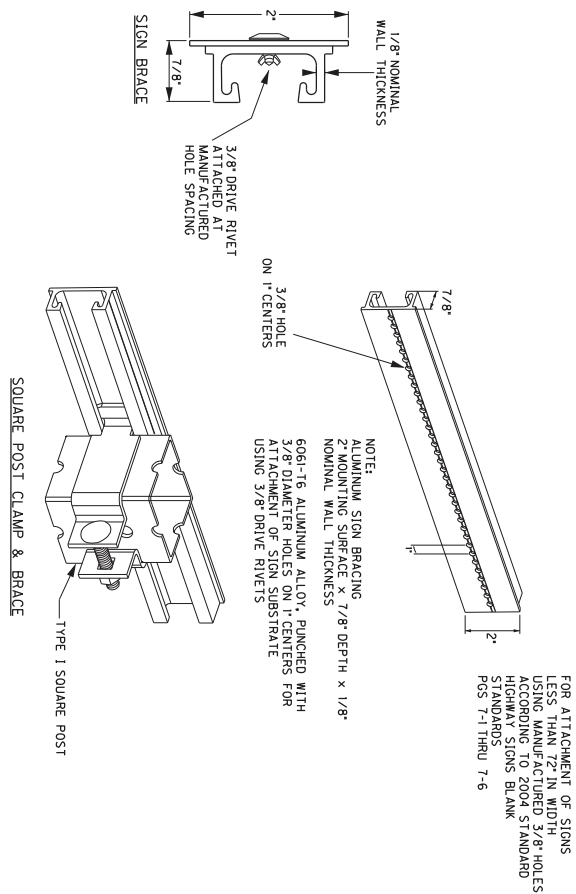
⑤ ATTACHMENT OF SECONDARY SIGN TO MAJOR SIGN IS TO BE MADE WITH TWO (2) 3" x 3" ANGLES OF SUFFICIENT LENGTH TO EXTEND FROM THE LOWER EDGE OF THE SECONDARY SIGN TO AT LEAST THREE FEET UP THE BACK OF THE MAJOR SIGN. A MINIMUM OF ONE POST CLIP PER FOOT SHALL BE USED IN ATTACHING EXTENSIONS TO EACH ANGLE.

NOTE: SHOULD A SIGN BE LOCATED AT A POINT WHERE GUARDRAIL IS CALLED FOR OR EXISTING, ALL SIGN SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL AND LATERAL OFFSET SHALL BE MEASURED FROM THE GUARDRAIL.

Diagram illustrating the placement of a sign relative to the pavement and shoulder. The sign is placed 3 feet from the shoulder, which is 30 degrees from the pavement edge. The sign is labeled "FACE OF SIGN OR MILE MARKER (ANGLE 30° AWAY FROM TRAFFIC)". The pavement is labeled "PAVEMENT" and the shoulder is labeled "SHOULDER". An arrow indicates "TRAFFIC" direction.

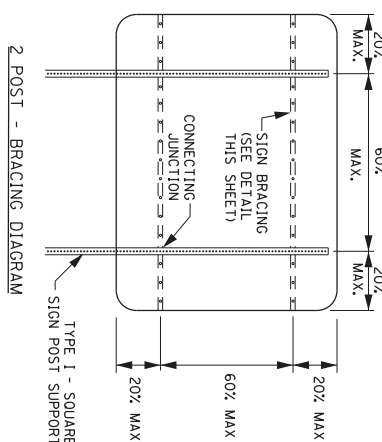
SIGNING POSITIONING DETAIL SHEET





3 POST - BRACING DIAGRAM

2. BRACING SHOULD NOT BE
SPICED WITHIN 6' OF A BRACE
TO POST JUNCTION.



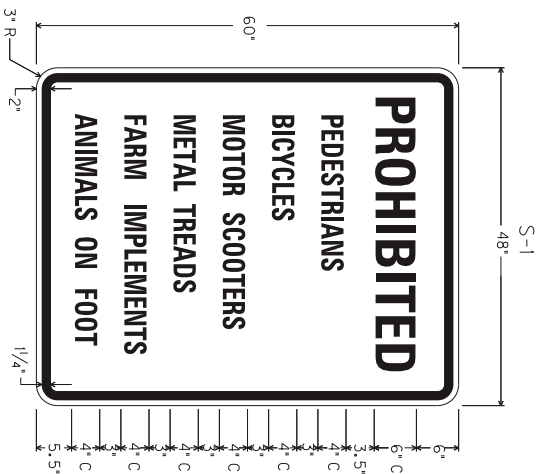
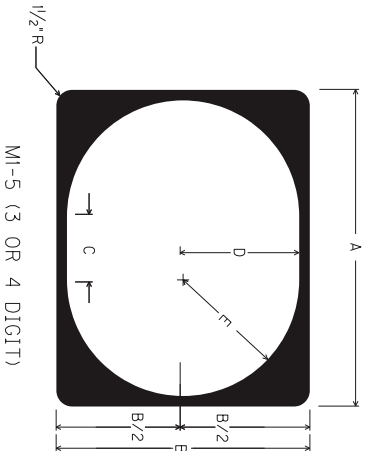
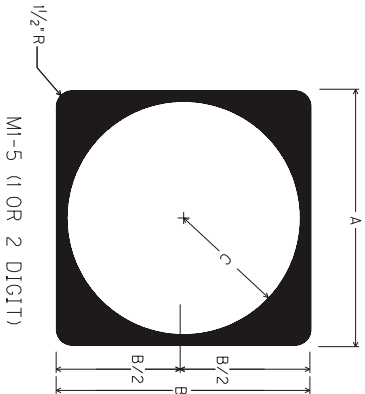
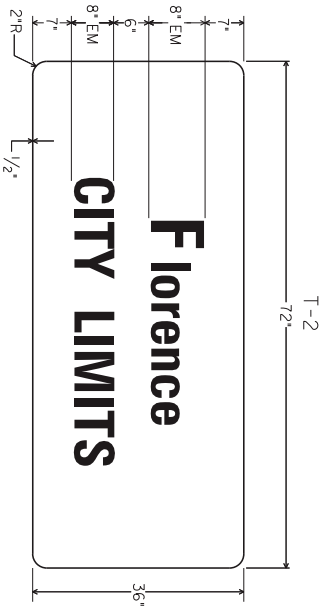
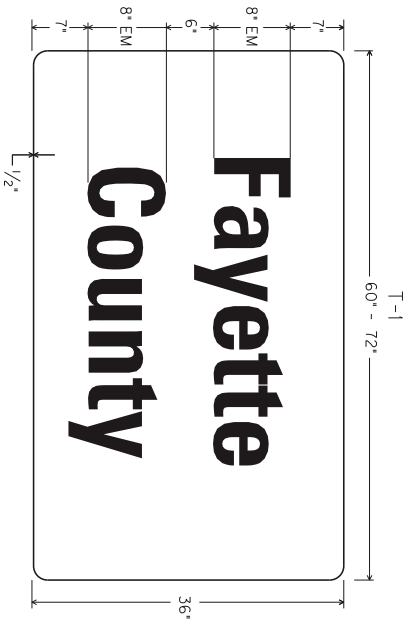
NOTE:
USE OF SIGN BRACING NOT SHOWN ON THIS SHEET MAY BE PERMITTED
BY PROJECT ENGINEER AND/OR DISTRICT TRAFFIC ENGINEER.

NOT TO SCALE

SHEETING SIGN DETAIL

SHEET 2 OF 2

COUNTY OF	ITEM NO.	SHEET NO.



A	B	C	FONT
CONVENTIONAL	24"	11"	12D
EXPRESSWAY/ FREEWAY	36"	17"	18D

A	B	C	D	E	FONT
					3 DIGIT 4 DIGIT
CONVENTIONAL	30"	24"	6"	11"	12D 12B
EXPRESSWAY/ FREEWAY	45"	36"	9"	16.5" 16.5"	18D 18B

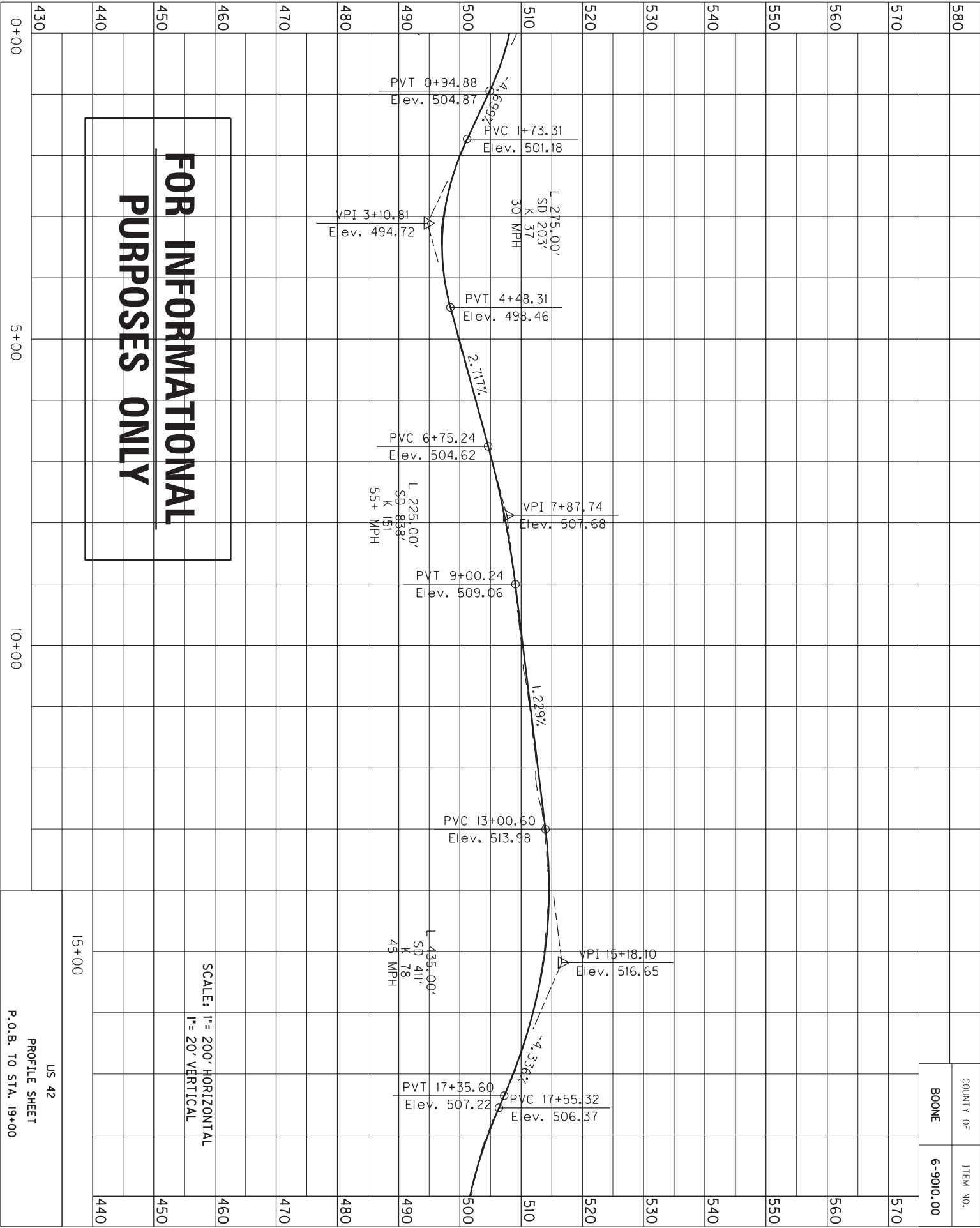
NOTE: FOR ROUTE MARKERS, IF NECESSARY,
ADJUSTMENTS TO THE DIGIT LAYOUT AND/OR FONT
TYPE MAY BE MADE TO ENSURE VISUAL ACUITY

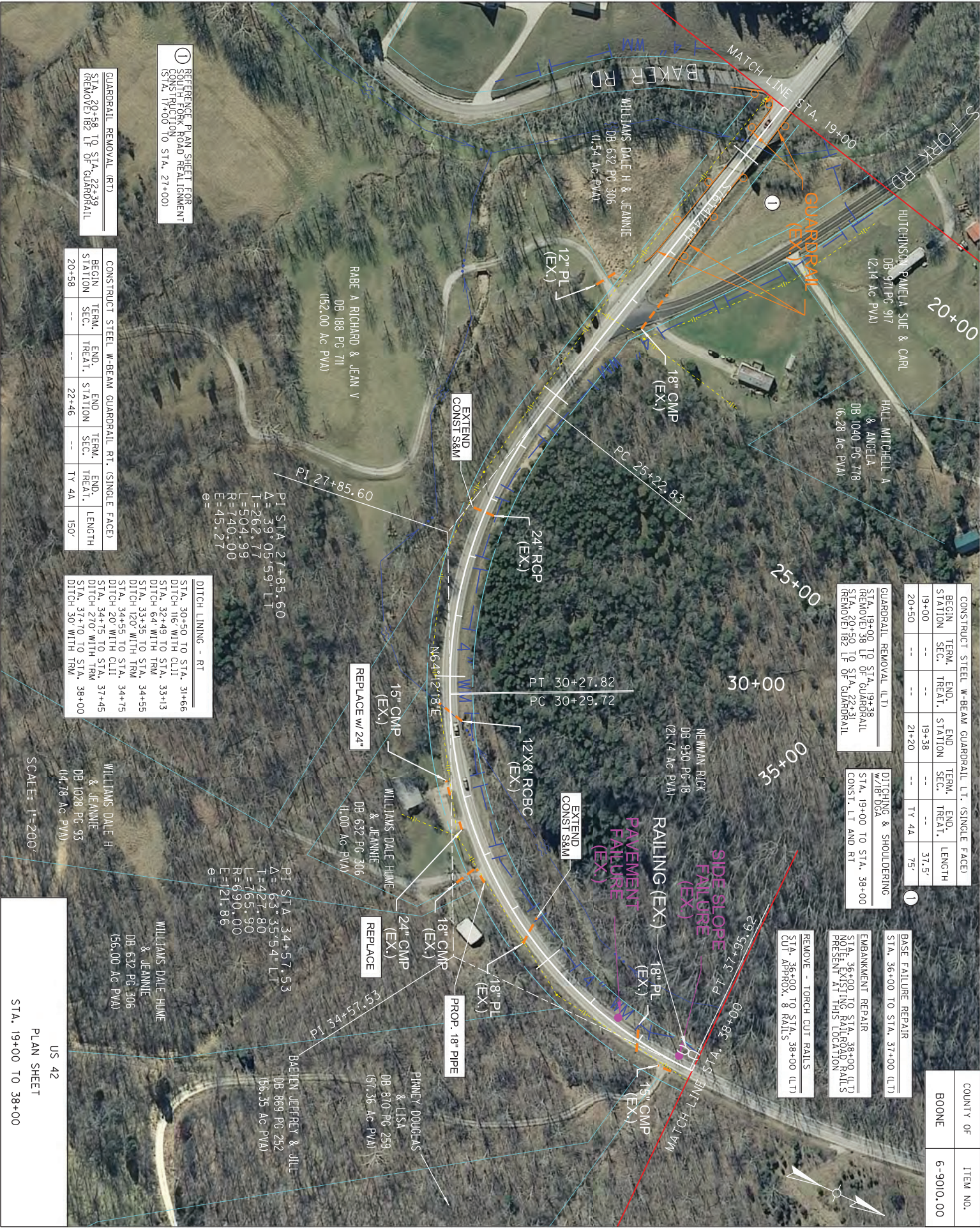
NOTE: EXPRESSWAY/FREEWAY DEFINED
AS A DIVIDED HIGHWAY WITH PARTIAL
OR FULL CONTROL OF ACCESS

NOT TO SCALE

TYPICAL SIGNS







① REFERENCE PLAN SHEET FOR SOUTH FORK ROAD REALIGNMENT (SHEET 11+00 TO STA. 27+00)

GUARDRAIL REMOVAL (RT)
STA. 20+58 TO STA. 22+39
(REMOVE) 182 LF OF GUARDRAIL

CONSTRUCT	TERM.	END.	END.	TERM.	END.	LENGTH
STATION	SEC.	STATION	TREAT.	STATION	TREAT.	
20+58	--	--	--	22+46	--	150'

DITCH LINING - RT
STA. 30+50 TO STA. 31+66 DITCH 16" WITH CUI
STA. 32+18 TO STA. 33+13 DITCH 36" WITH TRM
STA. 34+55 TO STA. 34+55 DITCH 36" WITH TRM
STA. 35+55 TO STA. 34+75 DITCH 20" WITH CUI
STA. 34+75 TO STA. 37+45 DITCH 27" WITH TRM
STA. 37+45 TO STA. 38+00 DITCH 30" WITH TRM

CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)						
BEGIN STATION	TERM. SEC.	END. STATION	END. TREAT.	LENGTH		
19+00	--	19+38	--	37.5'		
20+50	--	21+20	--	75'		

①

GUARDRAIL REMOVAL (LT)			
STA. 19+00 TO STA. 19+38 (REMOVE) 38 LF OF GUARDRAIL	STA. 29+50 TO STA. 22+31 (REMOVE) 182 LF OF GUARDRAIL		

DITCHING & SHOULDERING W/18" DGA			
STA. 19+00 TO STA. 38+00 CONST. LT AND RT			

BASE FAILURE REPAIR	
STA. 36+00 TO STA. 37+00 (LT)	

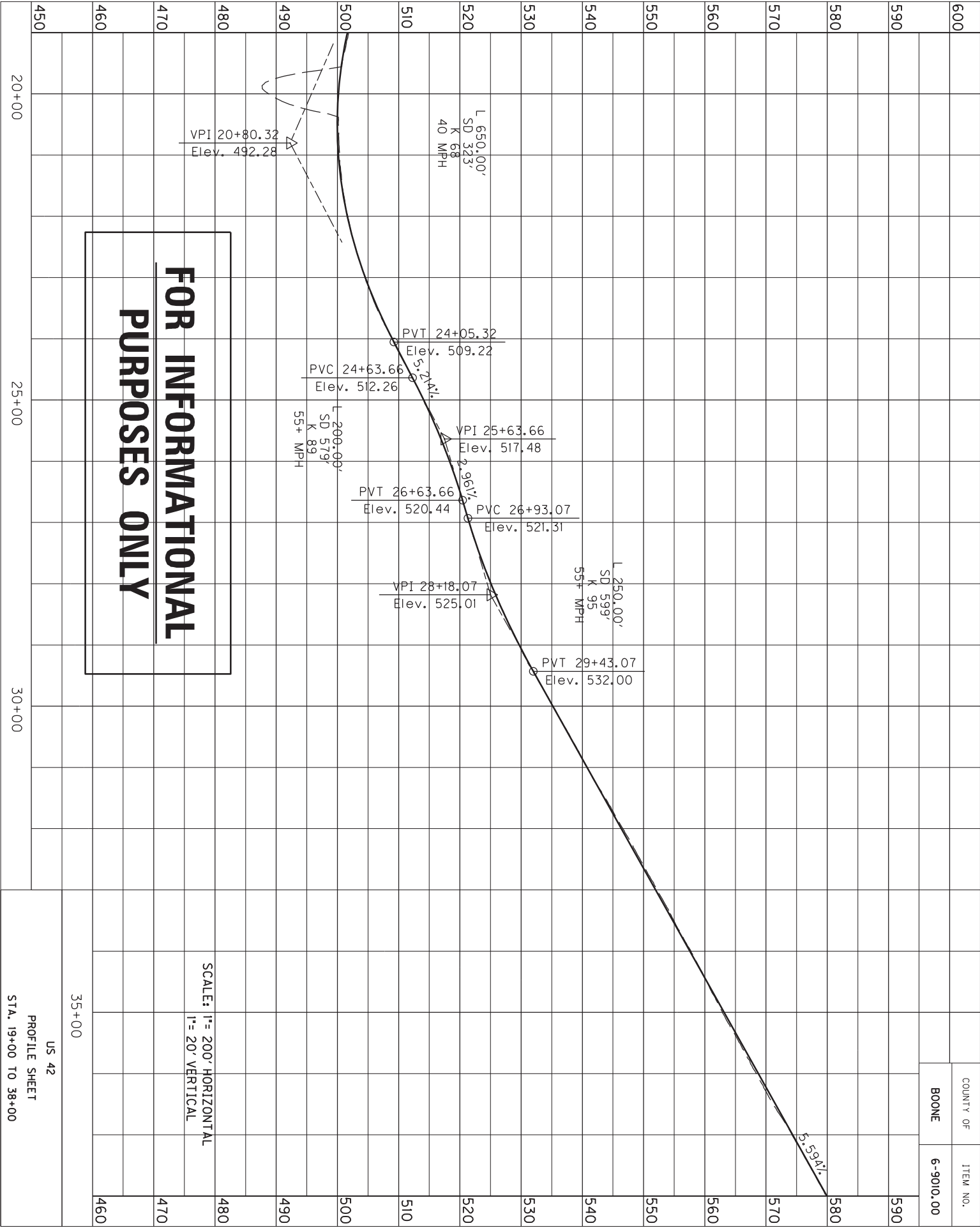
EMBANKMENT REPAIR	
STA. 36+00 TO STA. 38+00 (LT)	
NOTE: EXISTING RAILROAD RAILS PRESENT AT THIS LOCATION	

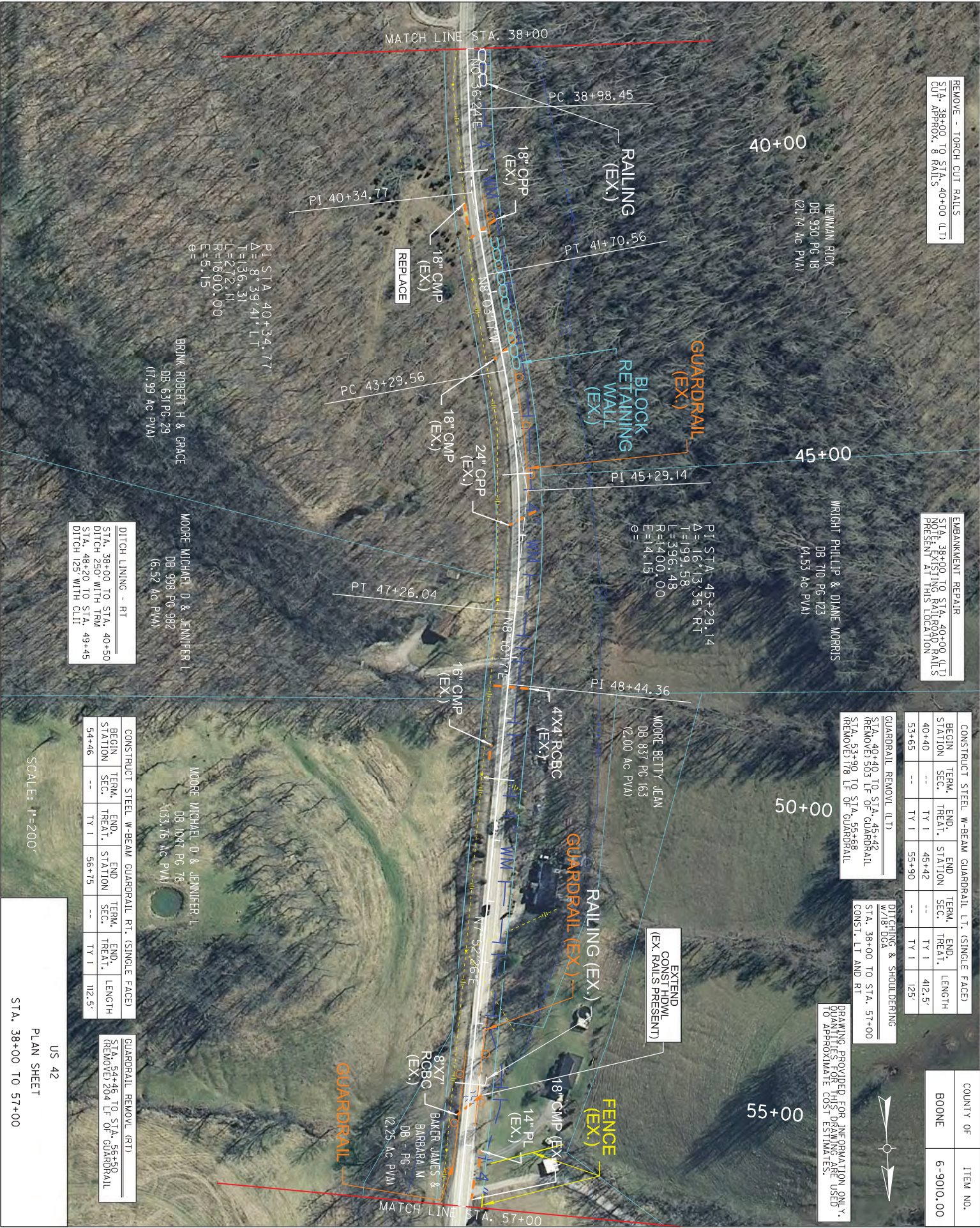
REMOVE - TORCH CUT RAILS	
STA. 36+00 TO STA. 38+00 (LT)	
CUT APPROX. 8 RAILS	

COUNTY OF	ITEM NO.
BOONE	6-9010.00

US 42
PLAN SHEET
STA. 19+00 TO 38+00

SCALE: 1"=200'





REMOVE - TORCH CUT RAILS
STA. 38+00 TO STA. 40+00 (L.T.)
CUT APPROX. 8 RAILS

EMBANKMENT REPAIR
STA. 38+00 TO STA. 40+00 (L.T.)
NOTE: EXISTING RAILROAD RAILS
PRESENT AT THIS LOCATION

CONSTRUCT STEEL W-BEAM GUARDRAIL L.T. (SINGLE FACE)					COUNTY OF			ITEM NO.		
BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH	BOONE					
40+40	--	45+42	--	412.5'						
53+65	TY 1	55+90	TY 1	125'						

STA. 40+40 TO STA. 45+42
(REMOVE) 503 LF OF GUARDRAIL
STA. 53+90 TO STA. 55+68
(REMOVE) 178 LF OF GUARDRAIL

DITCHING & SHOULDERING
w/18" DCA
STA. 38+00 TO STA. 57+00
CONST. LT AND RT

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.



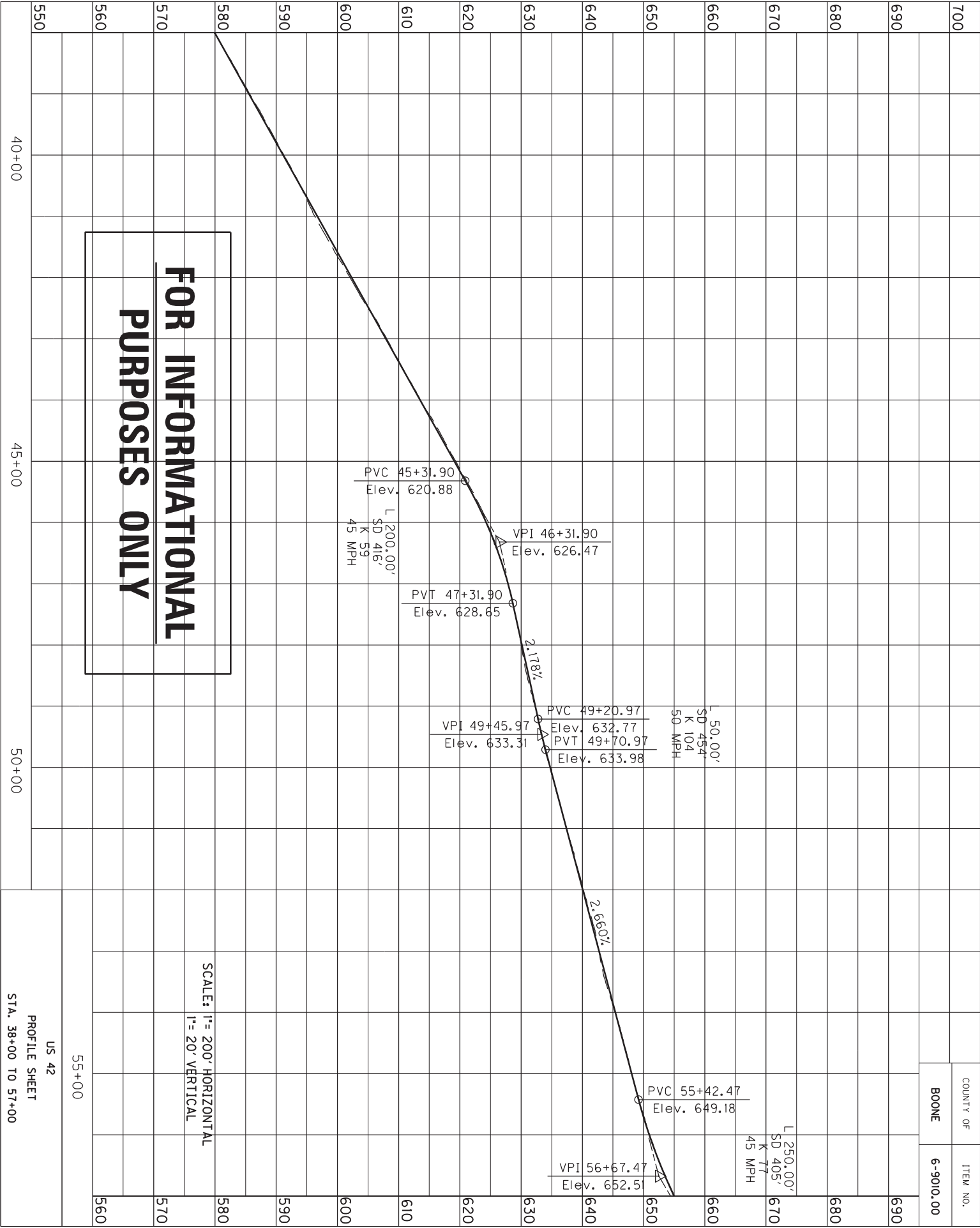
DITCH LINING - RT
STA. 38+00 TO STA. 40+50
DITCH 250' WITH TRM
STA. 48+20 TO STA. 49+45
DITCH 125' WITH CLII

BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH
54+46	TY 1	56+75	TY 1	112.5'

GUARDRAIL REMOVE (RT)
STA. 54+46 TO STA. 56+50
(REMOVE) 204 LF OF GUARDRAIL

SCALE: 1"=200'

US 42
PLAN SHEET
STA. 38+00 TO 57+00





DITCHING & SHOULDERING w/18" DGA			
STA.	57+00 TO STA. 76+00	CONST.	LT AND RT

CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)			
BEGIN STATION	TERM. SEC.	END. STATION	END. TREAT.
67+24	--	76+00	--

GUARDRAIL REMOVAL (LT)			
STA.	67+24 TO STA. 74+37	REMOVE	722 LF OF GUARDRAIL

COUNTY OF	ITEM NO.
BOONE	6-9010.00

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES.
DO NOT USE FOR CONSTRUCTION.

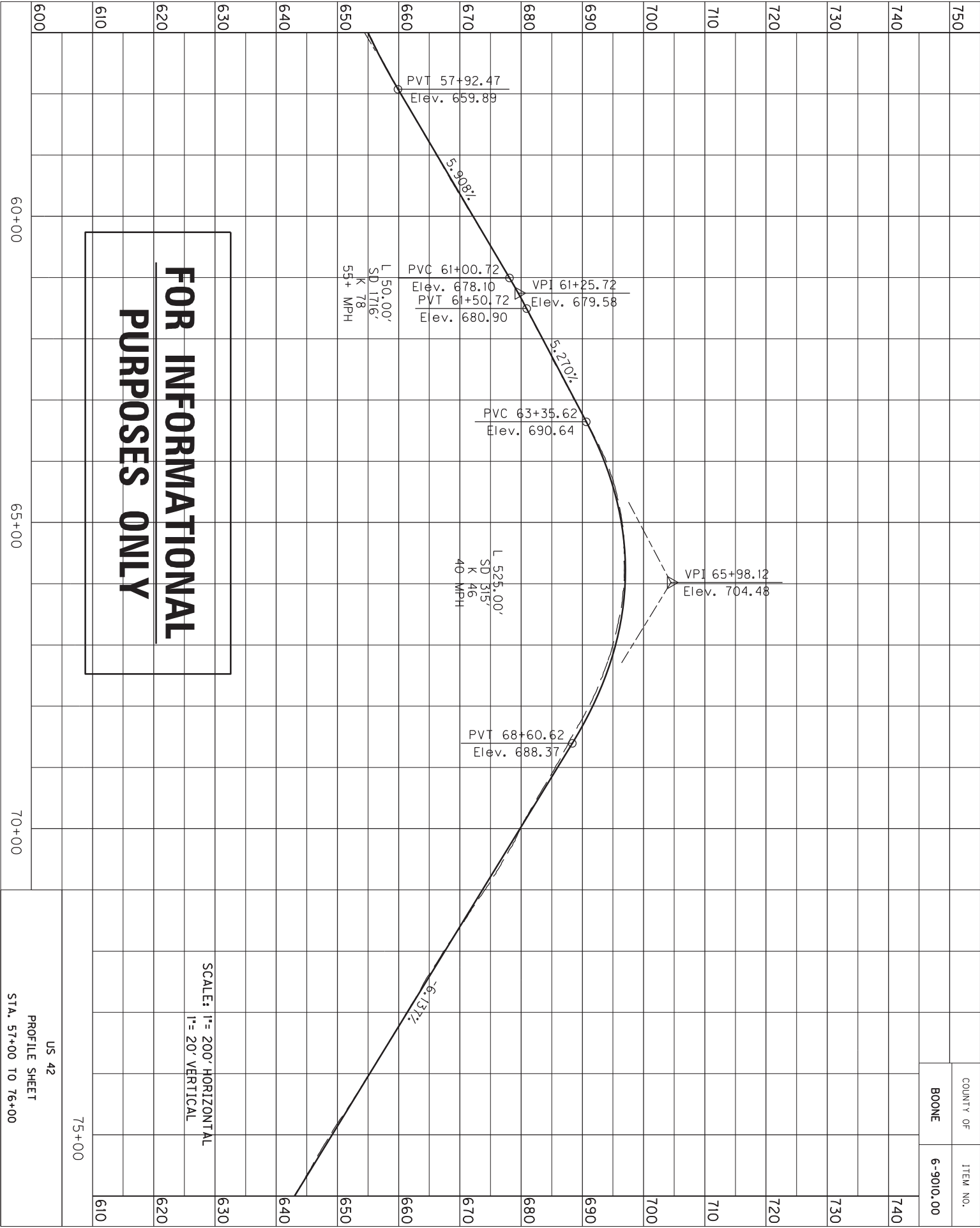
REMOVE - TORCH CUT RAILS			
STA.	61+42 TO STA. 62+67 (RT)	CUT	APPROX. 26 RAILS

CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)			
BEGIN STATION	TERM. SEC.	END. STATION	END. TREAT.
66+70	--	76+00	--

GUARDRAIL REMOVAL (RT)			
STA.	66+70 TO STA. 73+43	REMOVE	674 LF OF GUARDRAIL

SCALE: 1"=200'

US 42
PLAN SHEET
STA. 57+00 TO 76+00





CONSTRUCT STEEL W-BEAM GUARDRAIL, LT. (SINGLE FACE)				
BEGIN STATION	TERM. TREAT.	END STATION	TERM. TREAT.	LENGTH
76+00	--	79+25	--	275'

DITCH LINING - LT		
STA. 82+95 TO STA. 83+75	DITCH 80" WITH CL1	
STA. 92+15 TO STA. 93+30	DITCH 115" WITH ECB	
STA. 93+30 TO STA. 93+80	DITCH 50" WITH CL1	

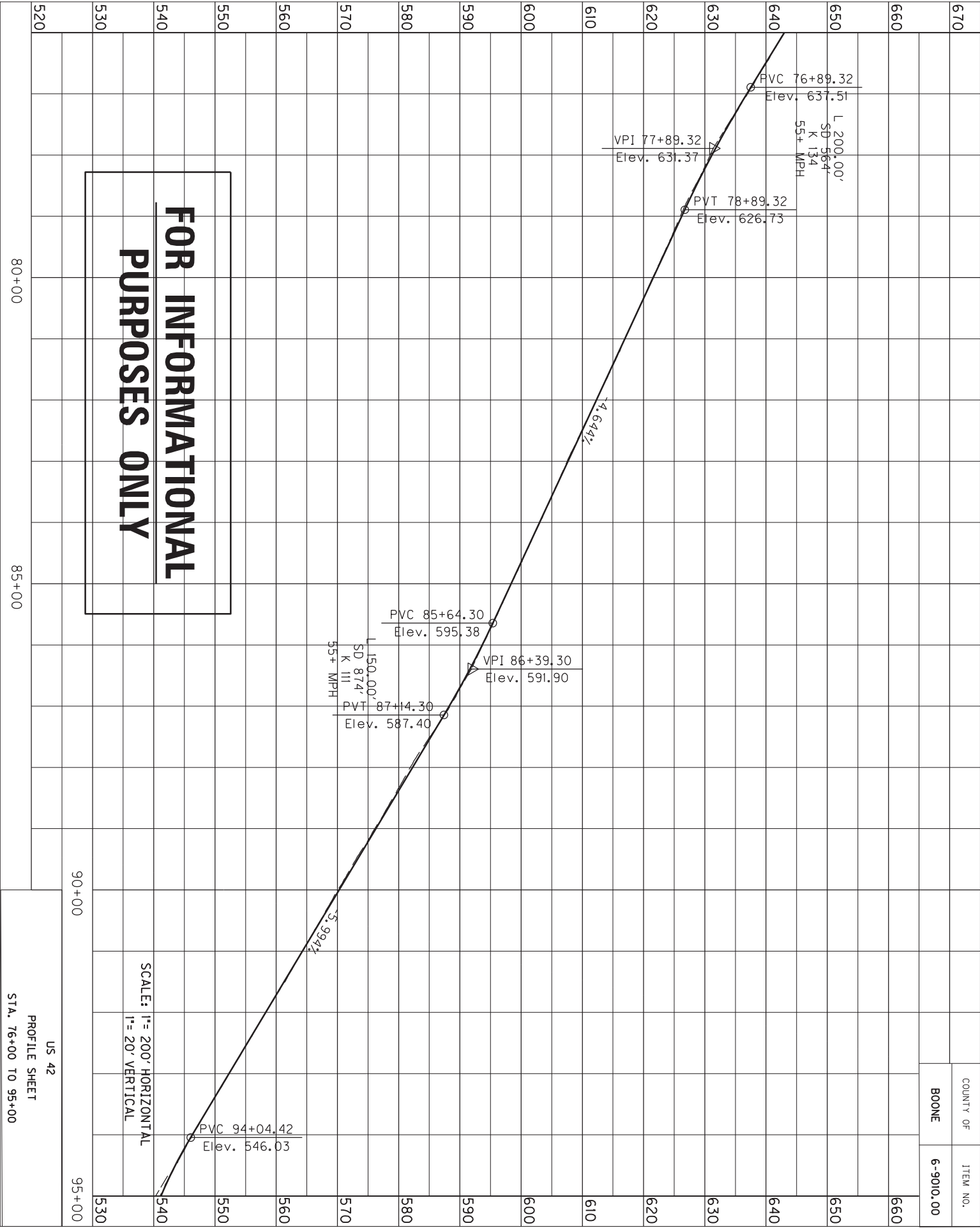
COUNTY OF	ITEM NO.
BOONE	6-9010.00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.

CONSTRUCT STEEL W-BEAM GUARDRAIL, RT. (SINGLE FACE)				
BEGIN STATION	TERM. TREAT.	END STATION	TERM. TREAT.	LENGTH
76+00	--	79+50	--	312.5'

SCALE: 1"=200'

US 42
PLAN SHEET
STA. 76+00 TO 95+00

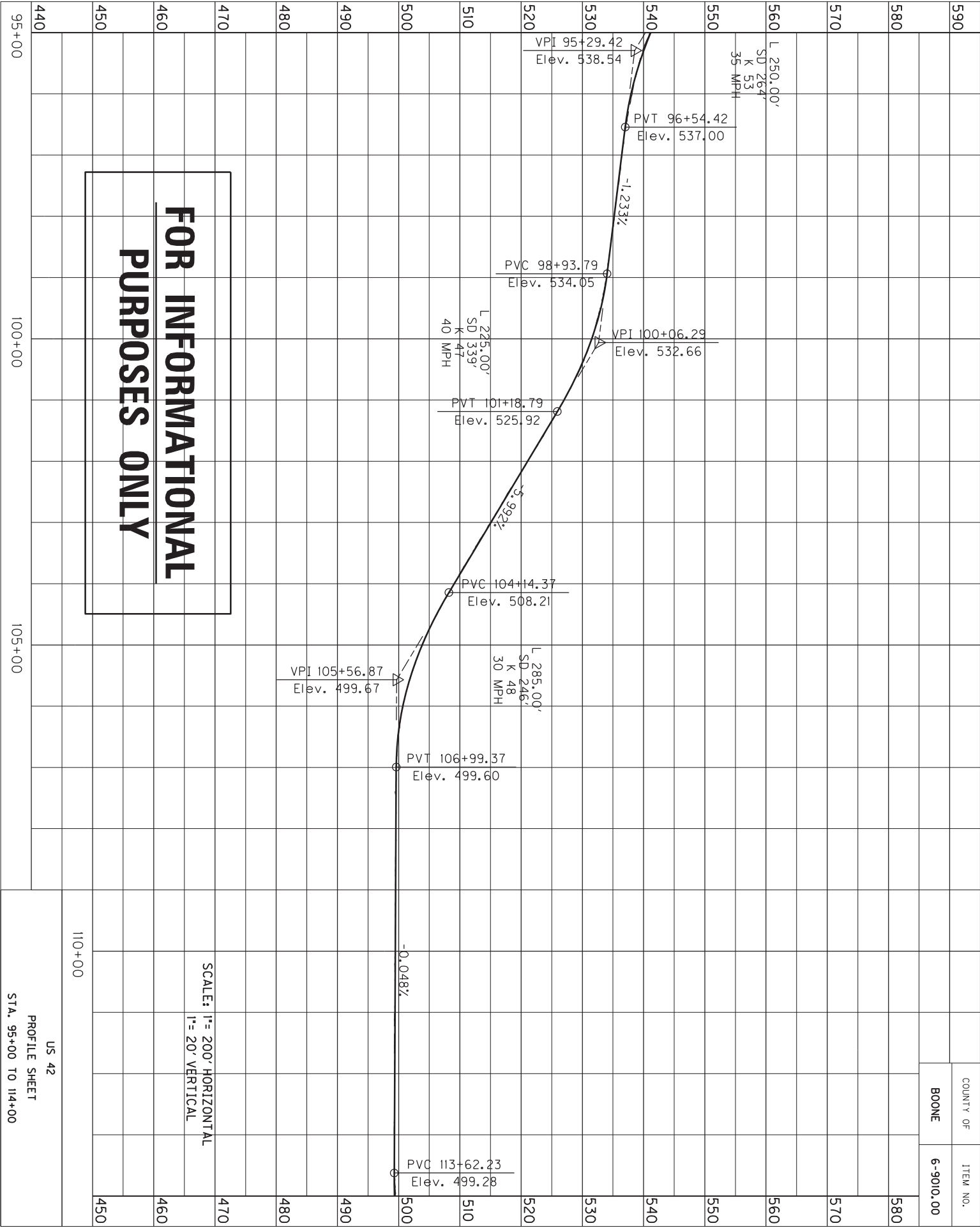


**FOR INFORMATIONAL
PURPOSES ONLY**

COUNTY OF	ITEM NO.
BOONE	6-9010.00

US 42
PROFILE SHEET
STA. 76+00 TO 95+00







GUARDRAIL REMOVAL (LT)	
BEGIN STATION	115+95
END STATION	117+10
TERM. TREAT.	TY 4A
LENGTH	115.15

CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)	
BEGIN STATION	115+85
END STATION	117+10
TERM. TREAT.	TY 4A
LENGTH	125.25

PLANING PROVIDED FOR INFORMATION ONLY.
DO NOT USE FOR CONSTRUCTION OR TO APPROXIMATE COST ESTIMATES.

BOLTIE PROPERTIES GROUP OF KY LLC
DB 982 PG 485
(26.89 AC PVA)

DITCH Lining - LT	
BEGIN STATION	124+00
END STATION	130+00
TERM. TREAT.	TY 1
LENGTH	56.00

PI STA 120+65.82
 $\Delta = 8.59$
 $T = 157.40$
 $L = 314.14$
 $R = 2000.00$
 $E = 6.18$
 $\theta = 1.10$

BOLTIE PROPERTIES GROUP OF KY LLC
DB 983 PG 380
(10.16 AC PVA)

BOLTIE PROPERTIES GROUP OF KY LLC
DB 983 PG 383
(15.27 AC PVA)

FENCE (EX)
GUARDRAIL (EX)

MOUNTAIN BALLPARK
BOL-DANIEL LLC
DB 1020 PG 653
(43.35 AC PVA)

BOL-DANIEL
DB 408 PG 231
(1.45 AC PVA)

CLEAN PIPE
STRUCTURE

BOL-DANIEL
DB 405 PG 113
(14.70 AC PVA)

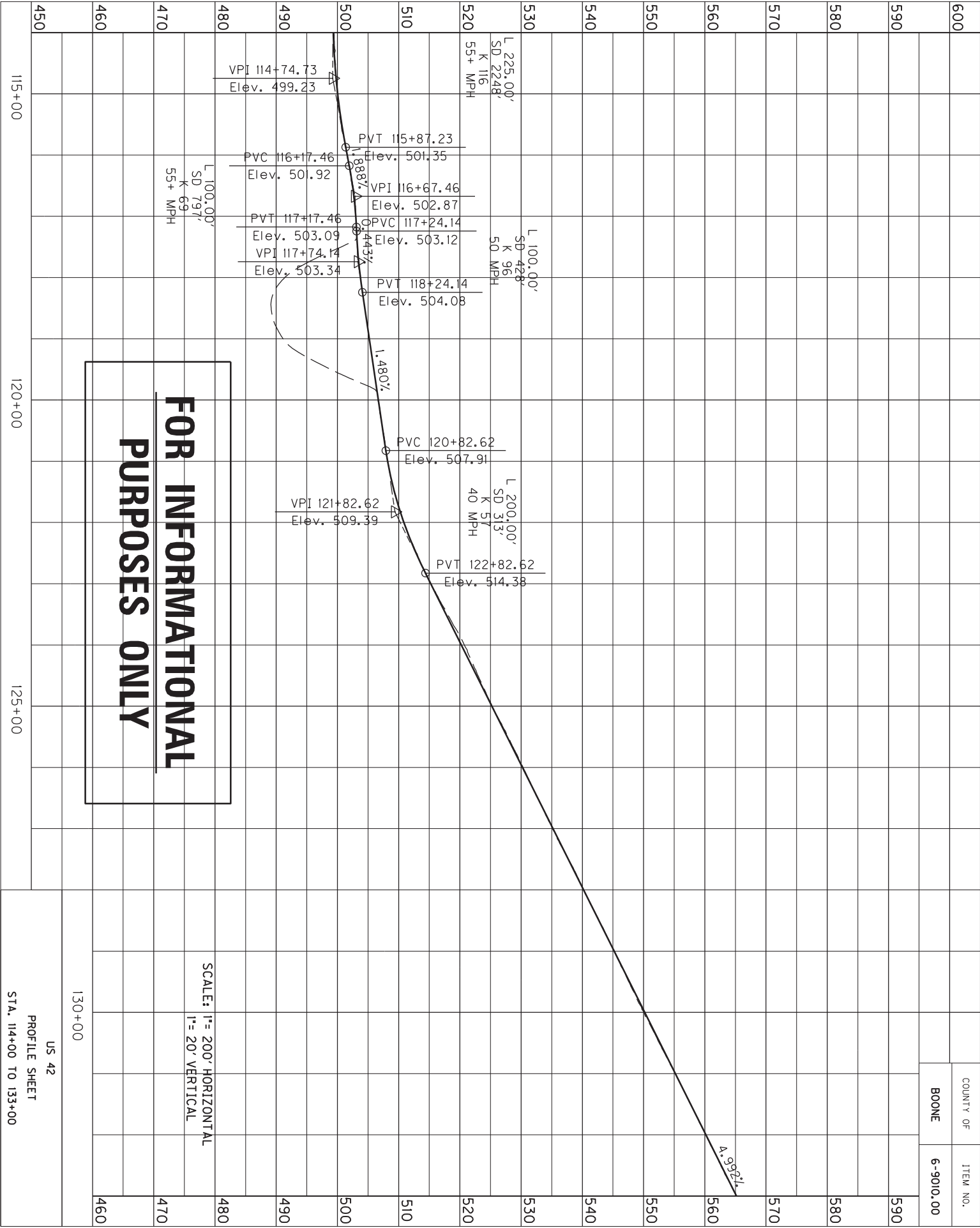
MUD LICK FARM LLC
DB 1002 PG 665
(4.24 AC PVA)

PI STA 137+35.06
 $\Delta = 113.54$
 $T = 1175.97$
 $L = 1520.90$
 $R = 765.00$
 $E = 637.90$
 $\theta = 1.10$

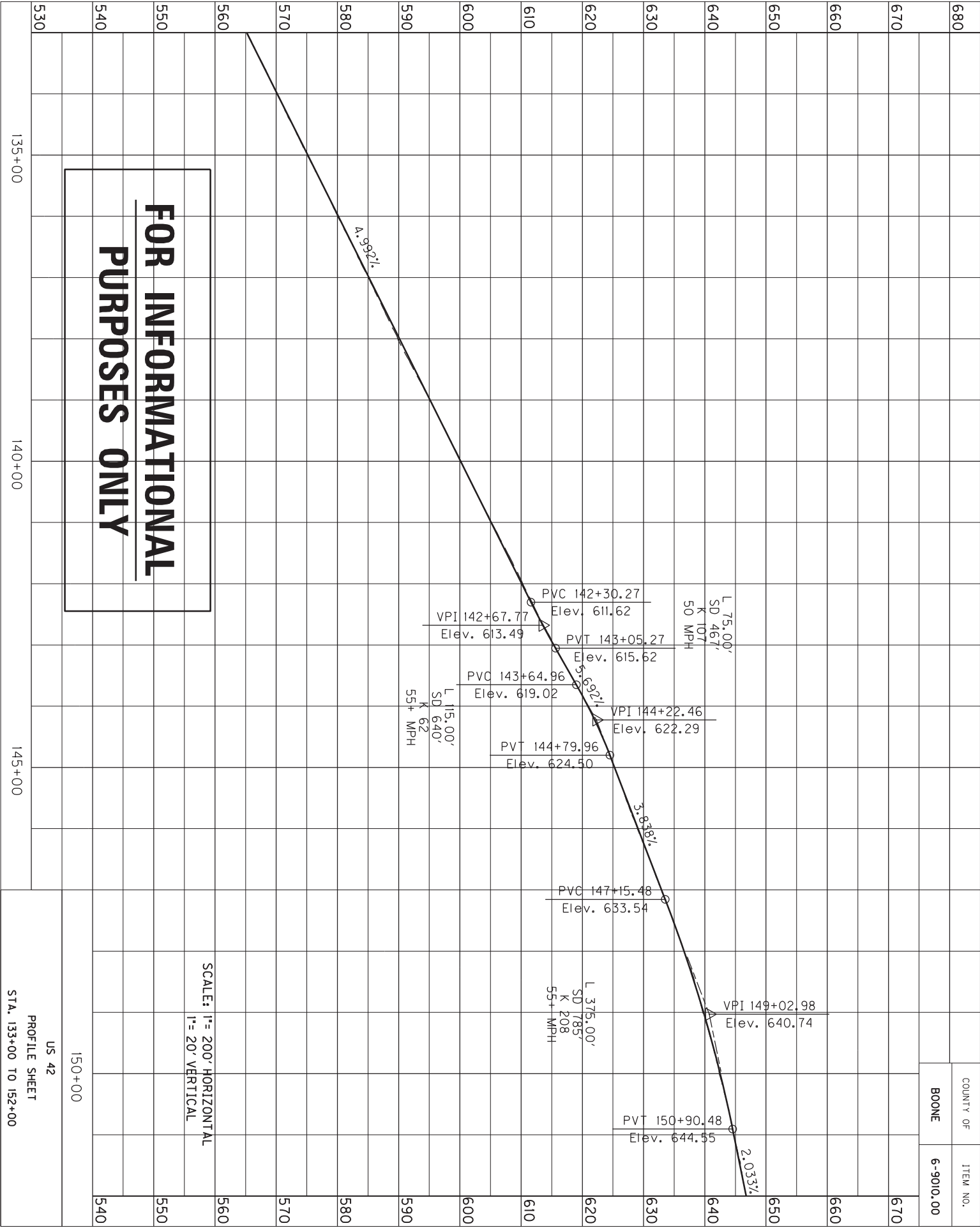
CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)	
BEGIN STATION	120+10
END STATION	121+89
TERM. TREAT.	TY 4A
LENGTH	179.00

SCALE: 1"=200'

US 42
PLAN SHEET
STA. 114+00 TO 133+00









DITCH LINING - LT

STA. 167+45 TO STA. 167+70
DITCH 25' WITH CUT
STA. 168+57 TO STA. 169+07
DITCH 50' WITH EGB
STA. 169+07 TO STA. 169+32
DITCH 25' WITH CUT
STA. 169+32 TO STA. 169+57
DITCH 25' WITH EGB

DITCHING & SHOULDERING

STA. 152+00 TO STA. 171+00
CONST. LT AND RT

SUPERELEVATION IMPROVEMENT

STA. 153+79 TO STA. 169+74
ADJUST SUPERELEVATION
LT AND RT

0 MADDEN MARTIN P &
WHITE BENDONE H
DB 1000 PG 704
153.14 AC PVA

COUNTY OF	ITEM NO.
BOONE	6-9010.00

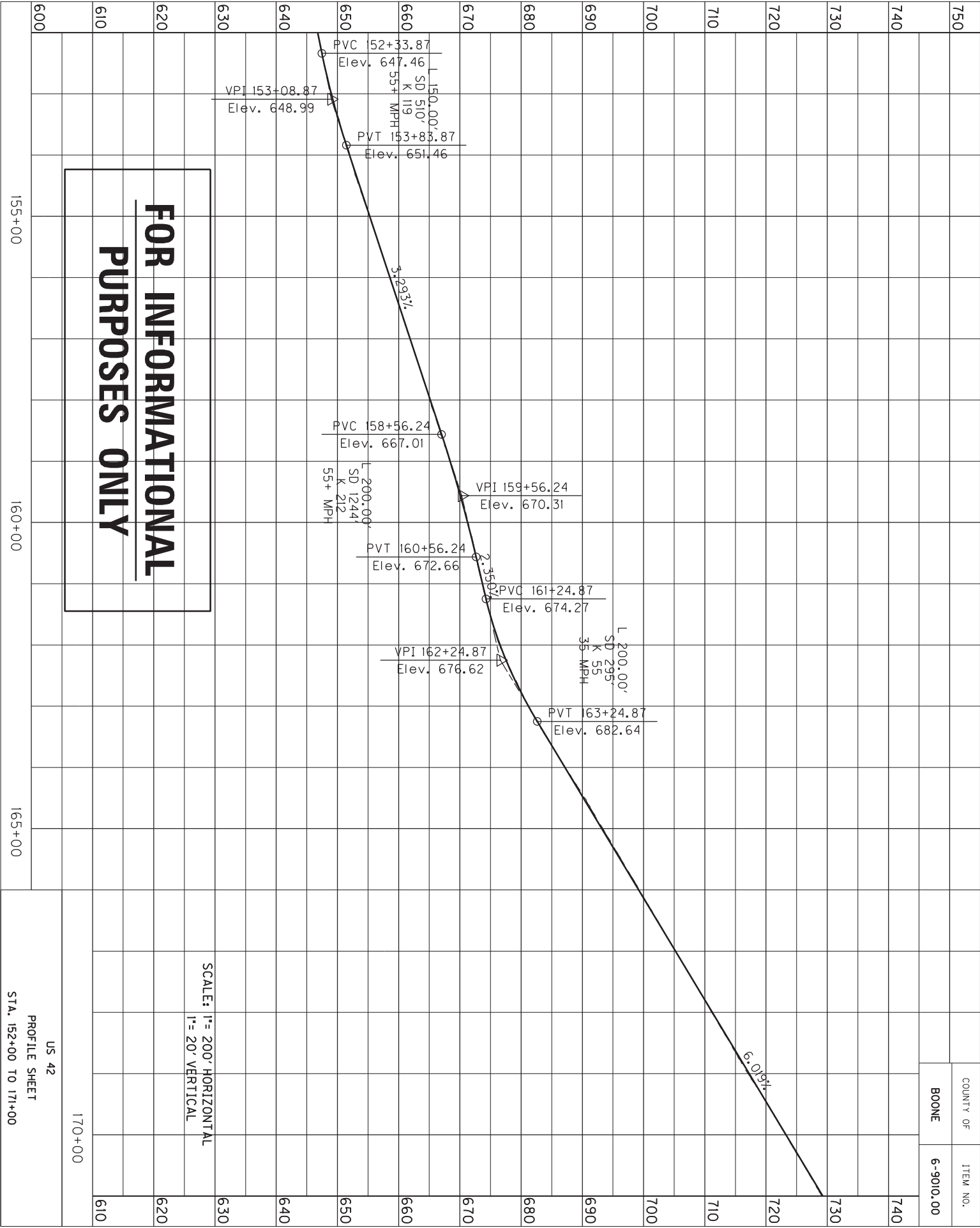
CONSTRUCT STEEL W-BEAM GUARDRAIL RT. (SINGLE FACE)					
BEGIN STATION	TERM. SEC.	END STATION	TERM. SEC.	LENGTH	
152+00	--	160+91	--	825'	

GUARDRAIL REMOVAL (RT)	
STA. 152+00 TO STA. 160+91	REMOVE 876 LF OF GUARDRAIL

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.

US 42
PLAN SHEET
STA. 152+00 TO 171+00

SCALE: 1"=200'





DITCH Lining - LT
STA. 176+93 TO STA. 177+18
DITCH 25' WITH CLIP

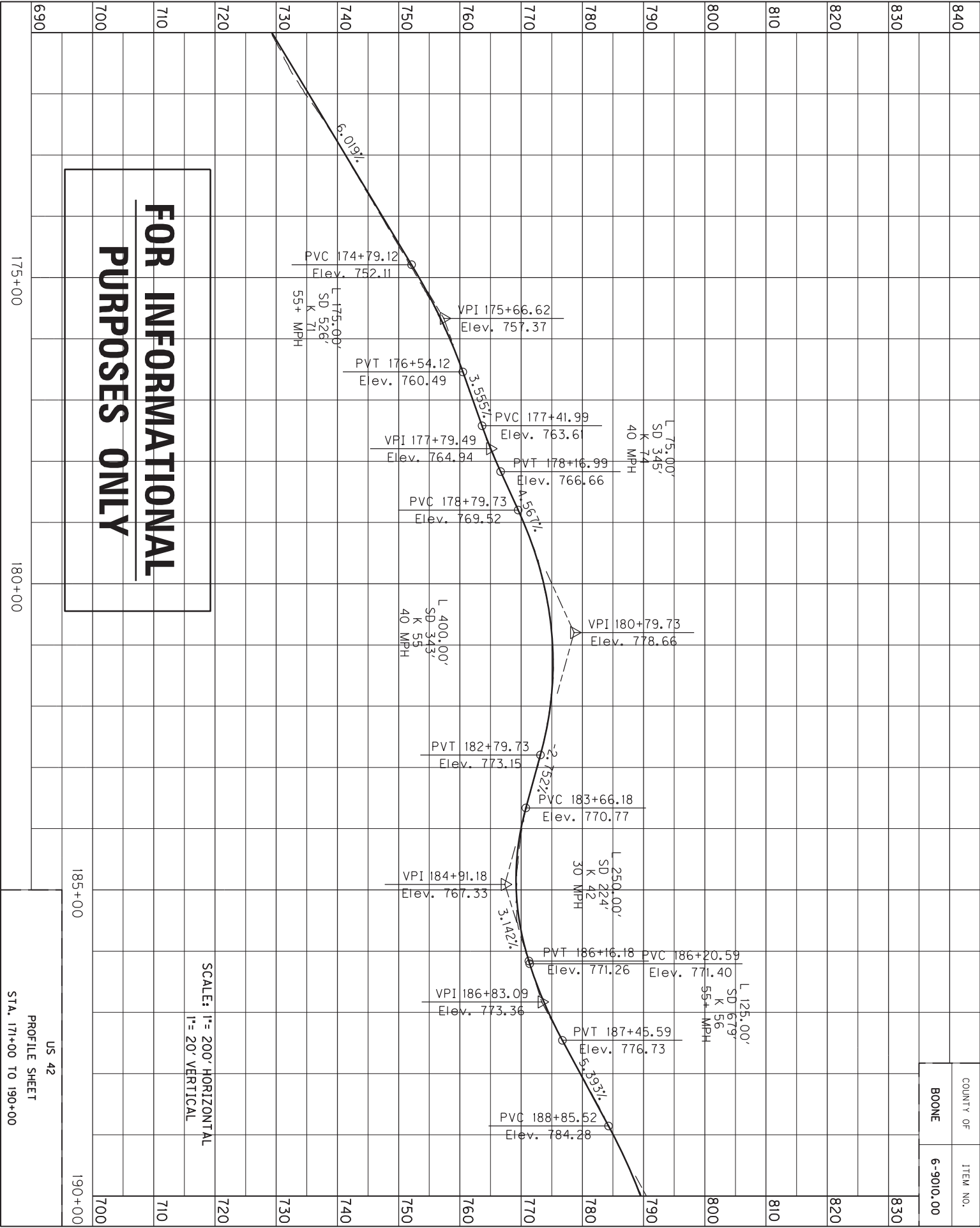
DITCHING & SHOULDERING
M/18 DGA
STA. 171+00 TO STA. 190+00
CONST. LT AND RT

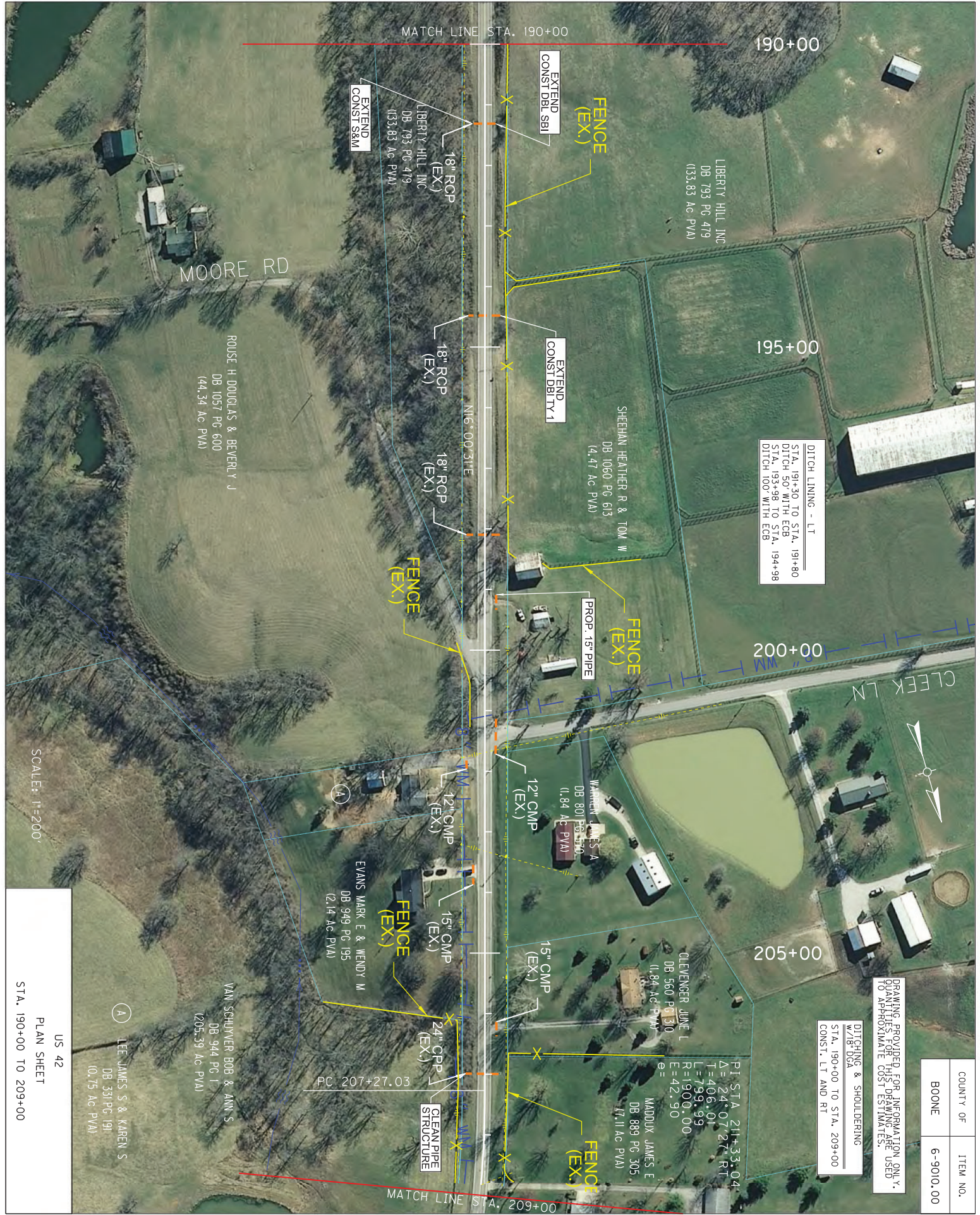
COUNTY OF	ITEM NO.
BOONE	6-9010.00

US 42
PLAN SHEET
STA. 171+00 TO 190+00

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

SCALE: 1"=200'





190+00

195+00

200+00

205+00

MATCH LINE STA. 190+00

MATCH LINE STA. 209+00

DITCH LINING - LT
STA. 191+30 TO STA. 191+80
DITCH 50' WITH ECB
STA. 193+98 TO STA. 194+98
DITCH 100' WITH ECB

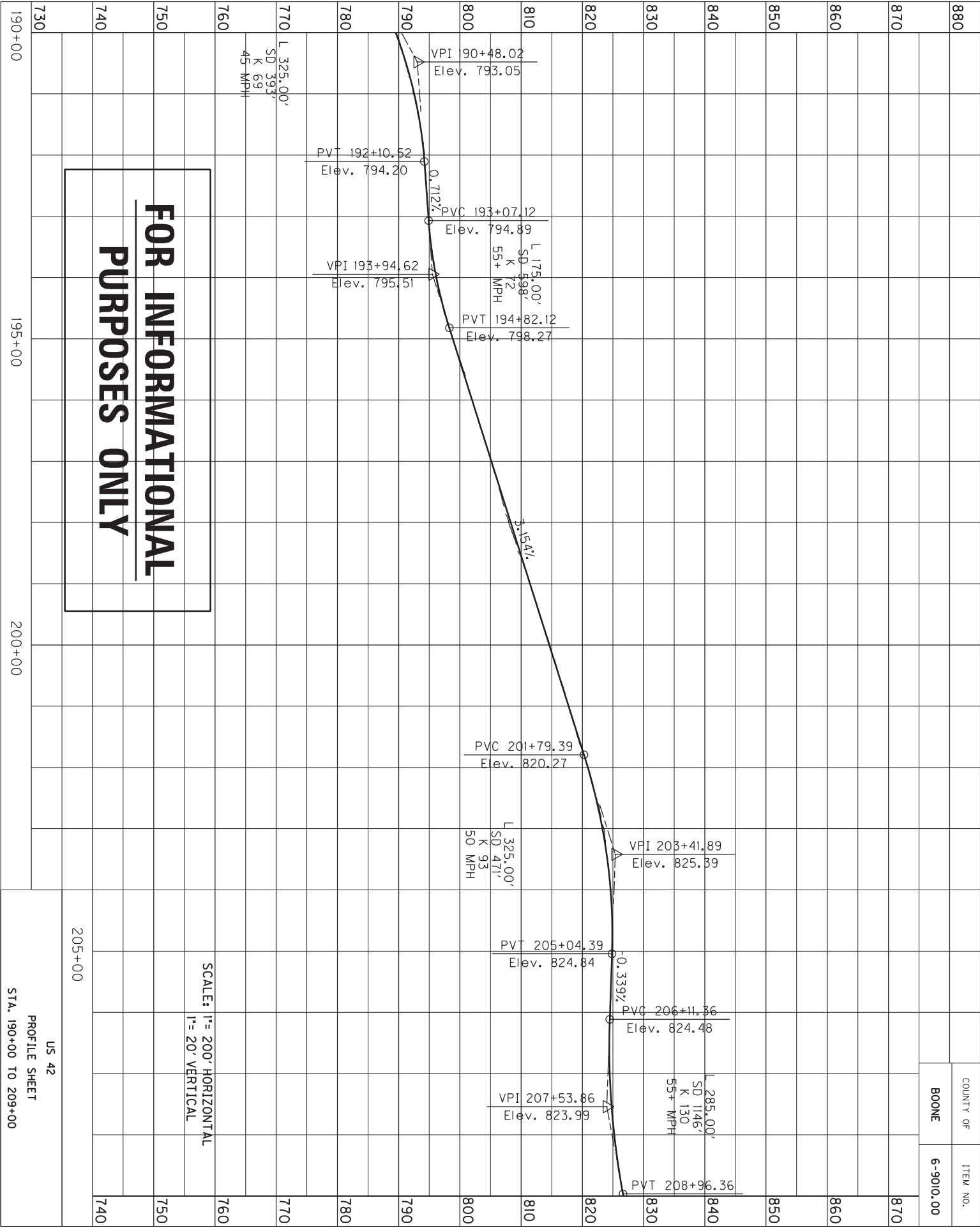
DITCHING & SHOULDERING
STA. 190+00 TO STA. 209+00
CONST. LT AND RT

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

COUNTY OF	ITEM NO.
BOONE	6-9010.00

SCALE: 1"=200'

US 42
PLAN SHEET
STA. 190+00 TO 209+00





COUNTY OF	ITEM NO.
BOONE	6-9010.00

DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

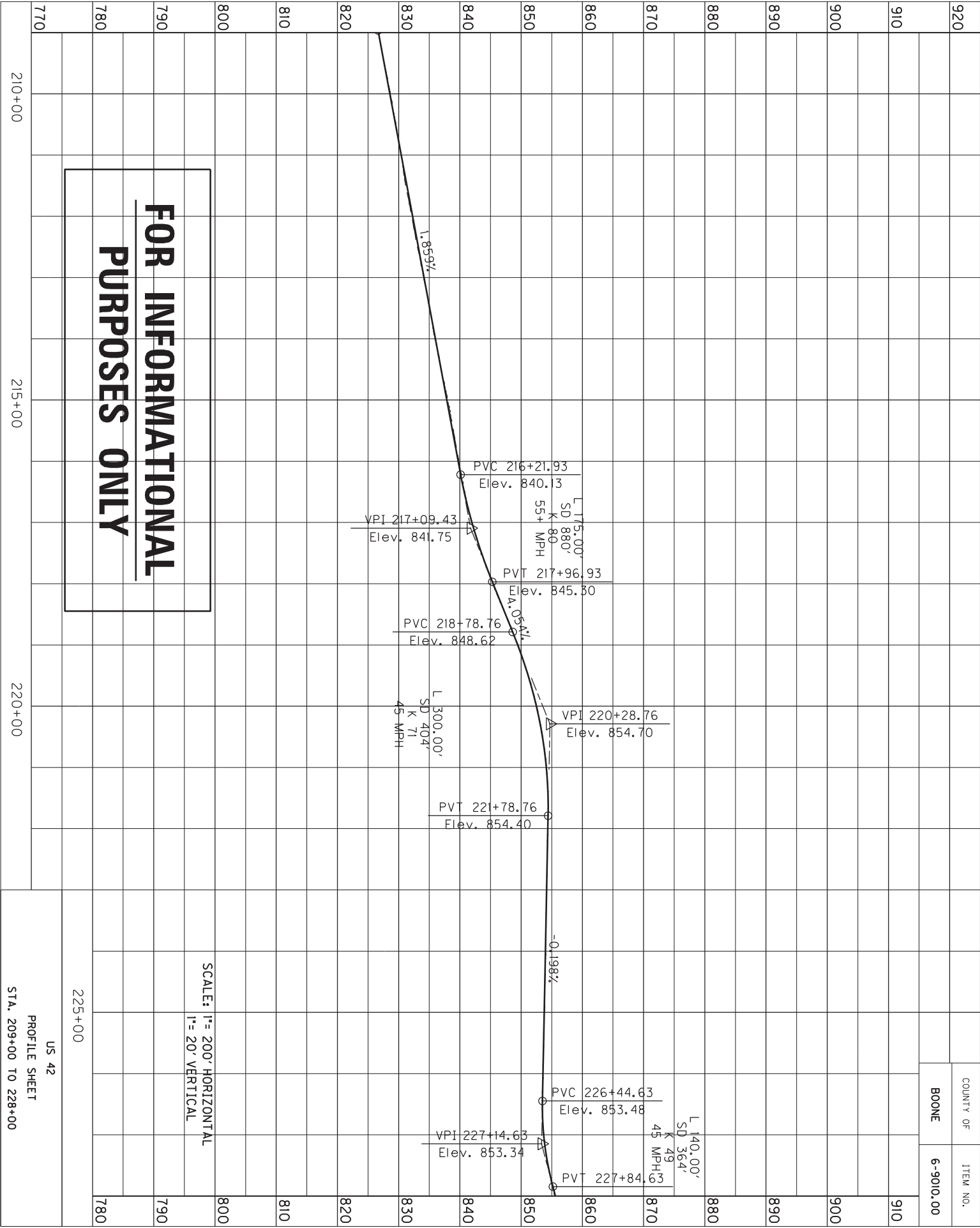
DITCHING & SHOULDERING
w/18\"/>

US 42

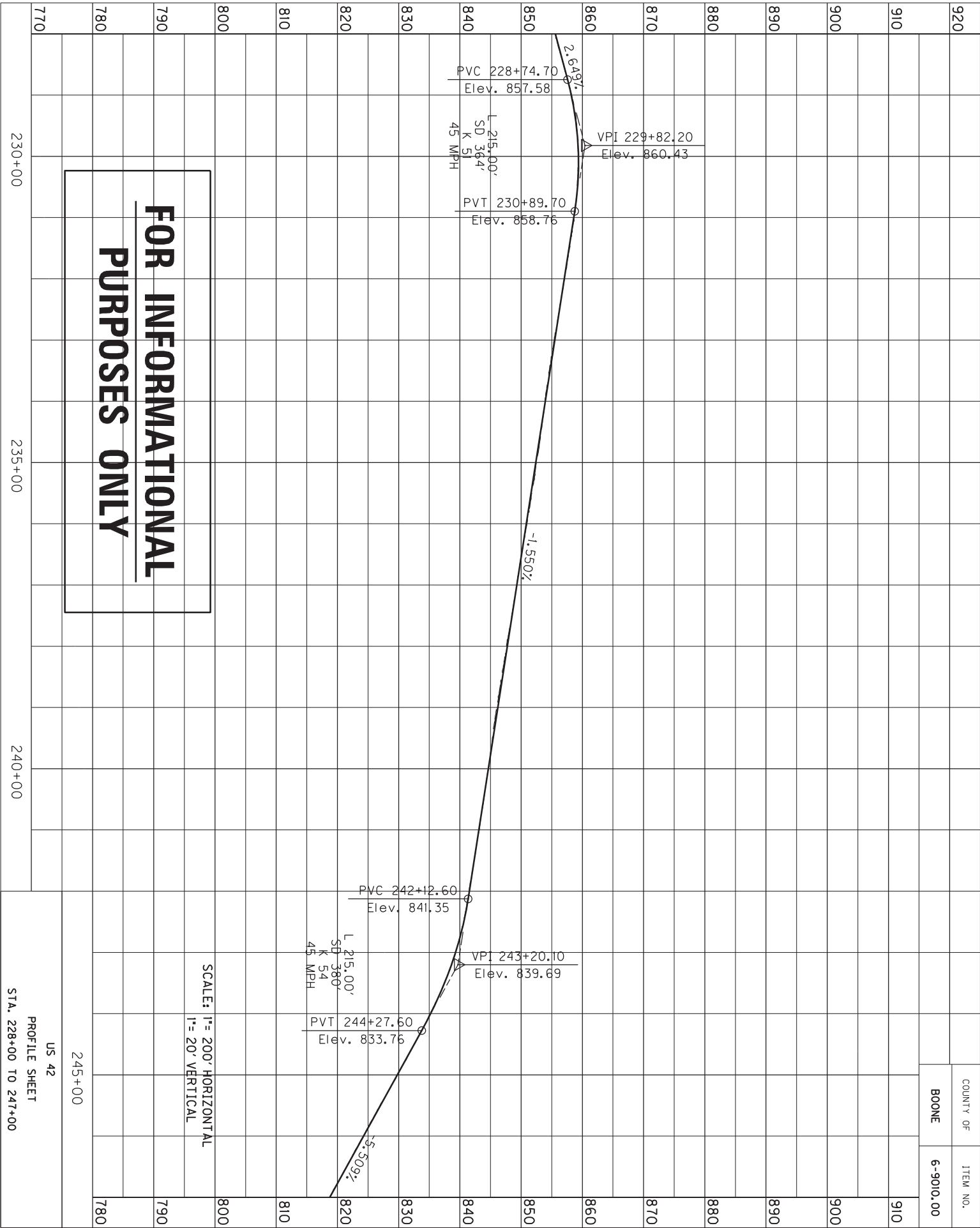
PLAN SHEET

STA. 209+00 TO 228+00

SCALE: 1\"/>









UTILITY NOTES:
1. ADJUST WATER METER STA. 250+81 (30.5 LT)
2. CONSTRUCT WATER SERVICE LINE WITH TRACER WIRE METER AT APPROX. STA. 251+00

DITCH LINING - LT
STA. 265+45 TO STA. 266+65
DITCH 20" WITH ECB
STA. 265+65 TO STA. 265+95
DITCH 30" WITH CLT
STA. 265+95 TO STA. 266+00
DITCH 5" WITH ECB

DITCHING & SHOULDERING
w/18" DBA
STA. 247+00 TO STA. 266+00
CONST. LT AND RT

COUNTY OF	ITEM NO.
BOONE	6-9010.00

DRAWING PROVIDED FOR INFORMATION ONLY. QUANTITIES FOR THIS DRAWING ARE USED TO APPROXIMATE COST ESTIMATES.

PI STA. 267+25.74
 $\Delta = 17.23$ 45° RT
T = 206.53
L = 409.88
R = 1350.00
E = 15.71
e =

SCHWENKE GREG A & CHELSEA V
DB 1040 PG 13
(18.83 AC PVA)

EVANS STEVEN R
DB 928 PG 724
(5.01 AC PVA)

EVANS STEVEN R
DB 842 PG 10
(2.36 AC PVA)

TREADWATER LAWRENCE MADE & LAURA L LEI
DB 807 PG 533
(3.50 AC PVA)

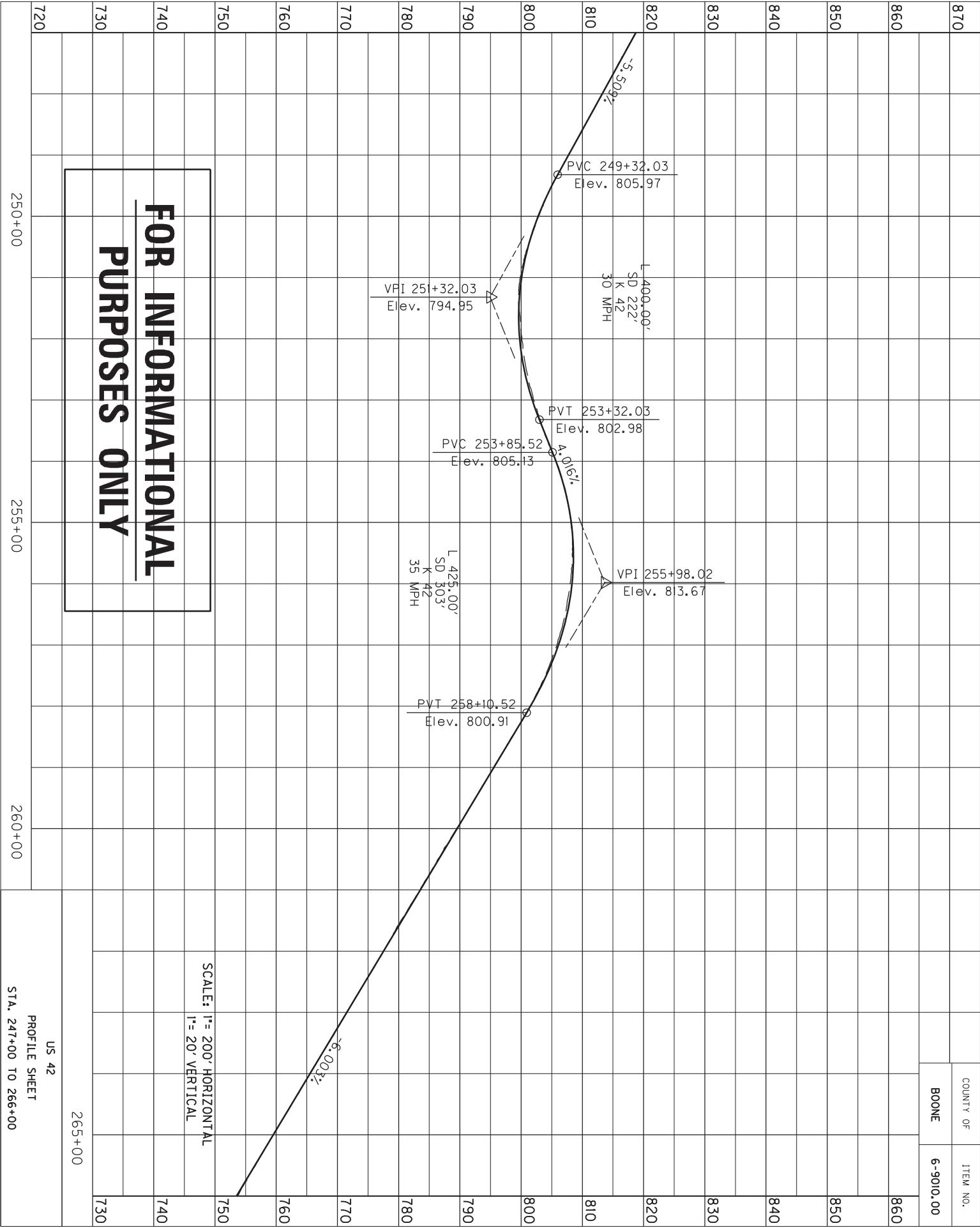
FINLEY JIM & YVONNE
DB 617 PG 1
(7.54 AC PVA)

KING JERRY
RELOCATED TRUST
DB 1045 PG 150
(43.00 AC PVA)

PI STA. 253+57.44
 $\Delta = 23.17$ 45° LT
T = 210.36
L = 414.97
R = 1025.00
E = 21.36
e =

SCALE: 1"=200'

US 42
PLAN SHEET
STA. 247+00 TO 266+00





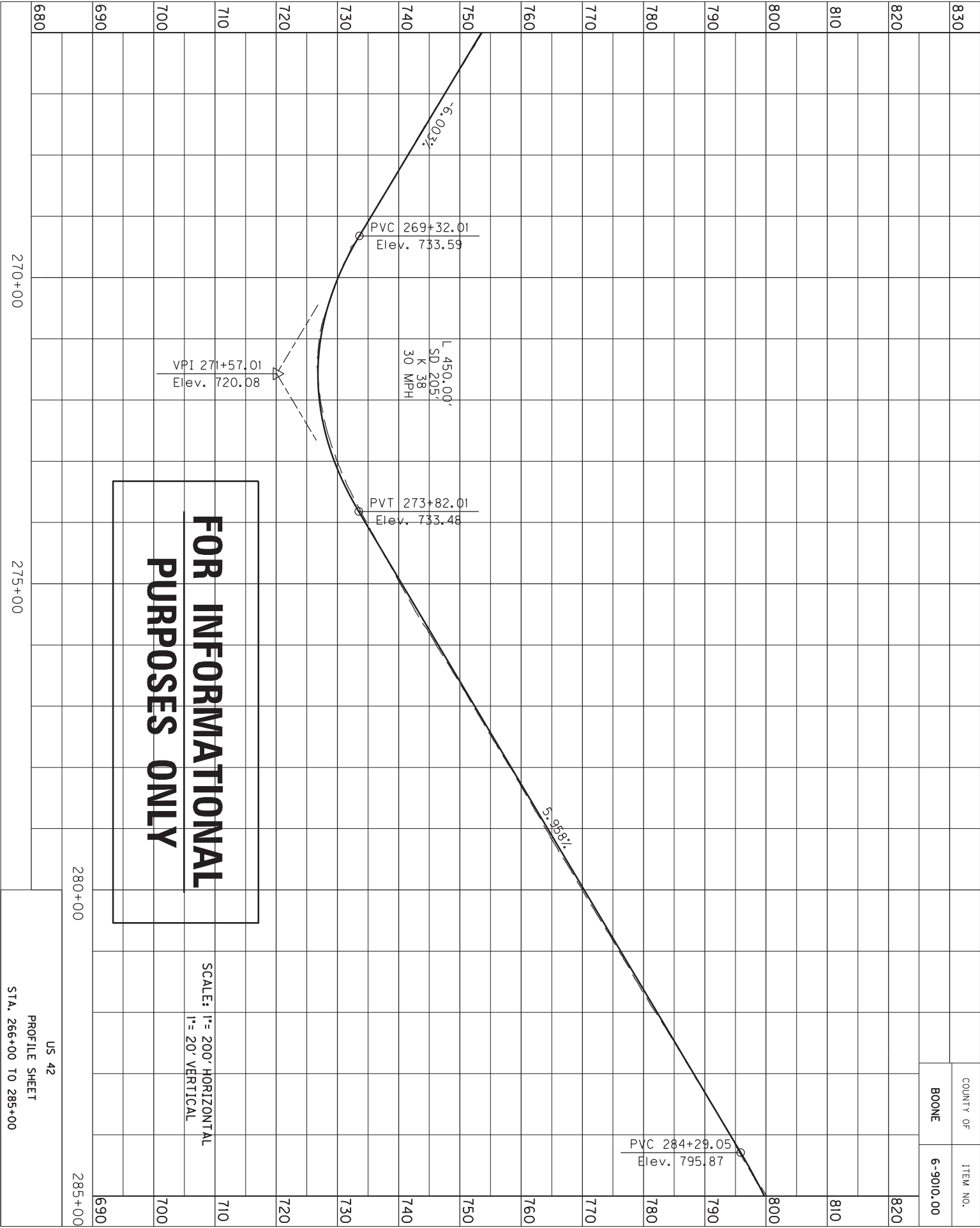
CONSTRUCT STEEL W-BEAM GUARDRAIL LT. (SINGLE FACE)				
BEGIN STATION	TERM. SEC.	END. TREAT.	END STATION	LENGTH
270+33	--	TY 4A	271+68	125'

GUARDRAIL REMOVAL (LT)				
STA. 270+33 TO STA. 271+68	(REMOVE) 189 LF OF GUARDRAIL			

DITCHING & SHOULDERING				
STA. 266+00 TO STA. 285+00	CONST. LT AND RT			

COUNTY OF	ITEM NO.
BOONE	6-9010.00

DRAWING PROVIDED FOR INFORMATION ONLY.
NO GUARANTEE OF ACCURACY OR ESTIMATE.
COST APPROXIMATE.



**FOR INFORMATIONAL
PURPOSES ONLY**

SCALE: 1" = 200' HORIZONTAL
1" = 20' VERTICAL

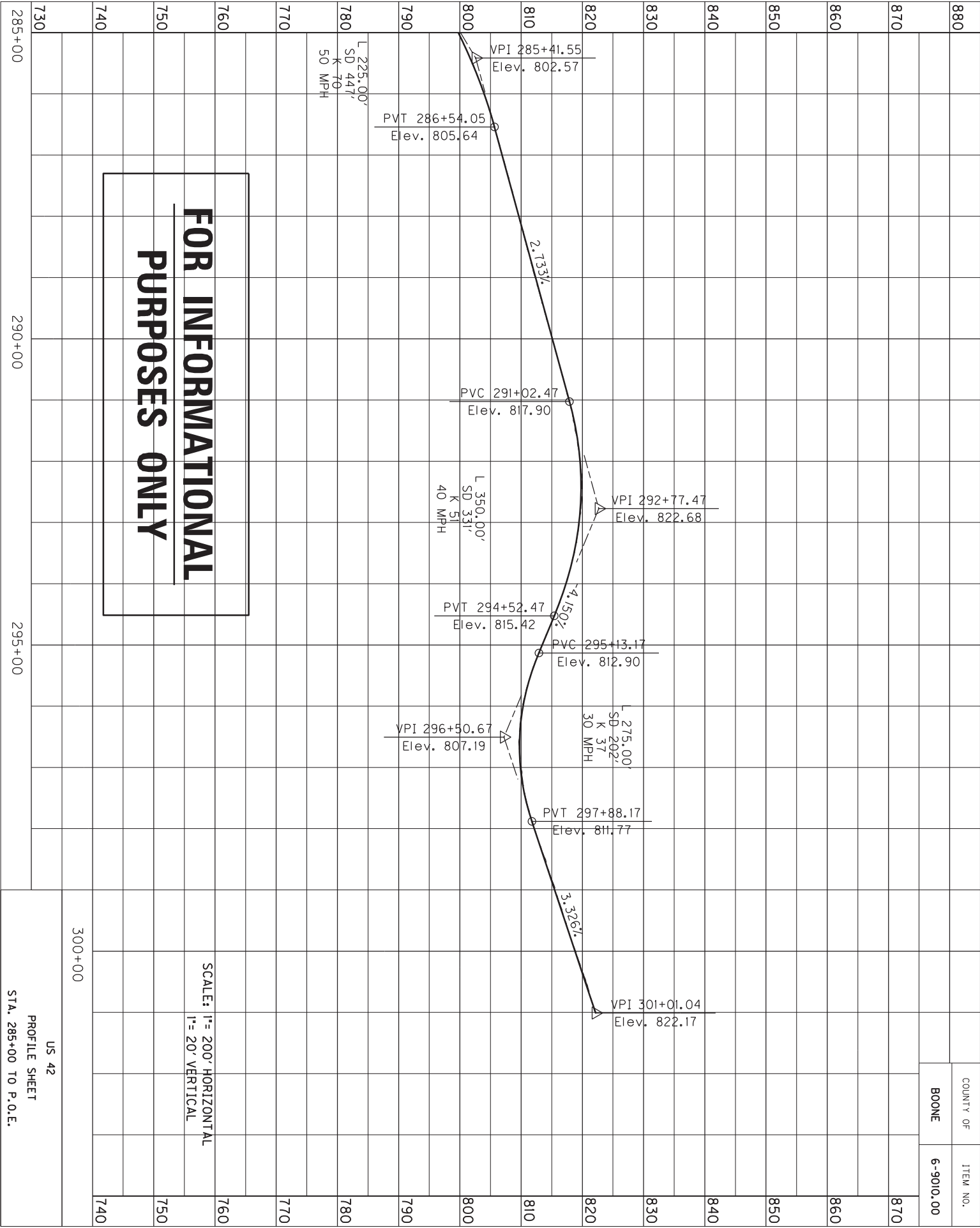
US 42
PROFILE SHEET
STA. 266+00 TO 285+00

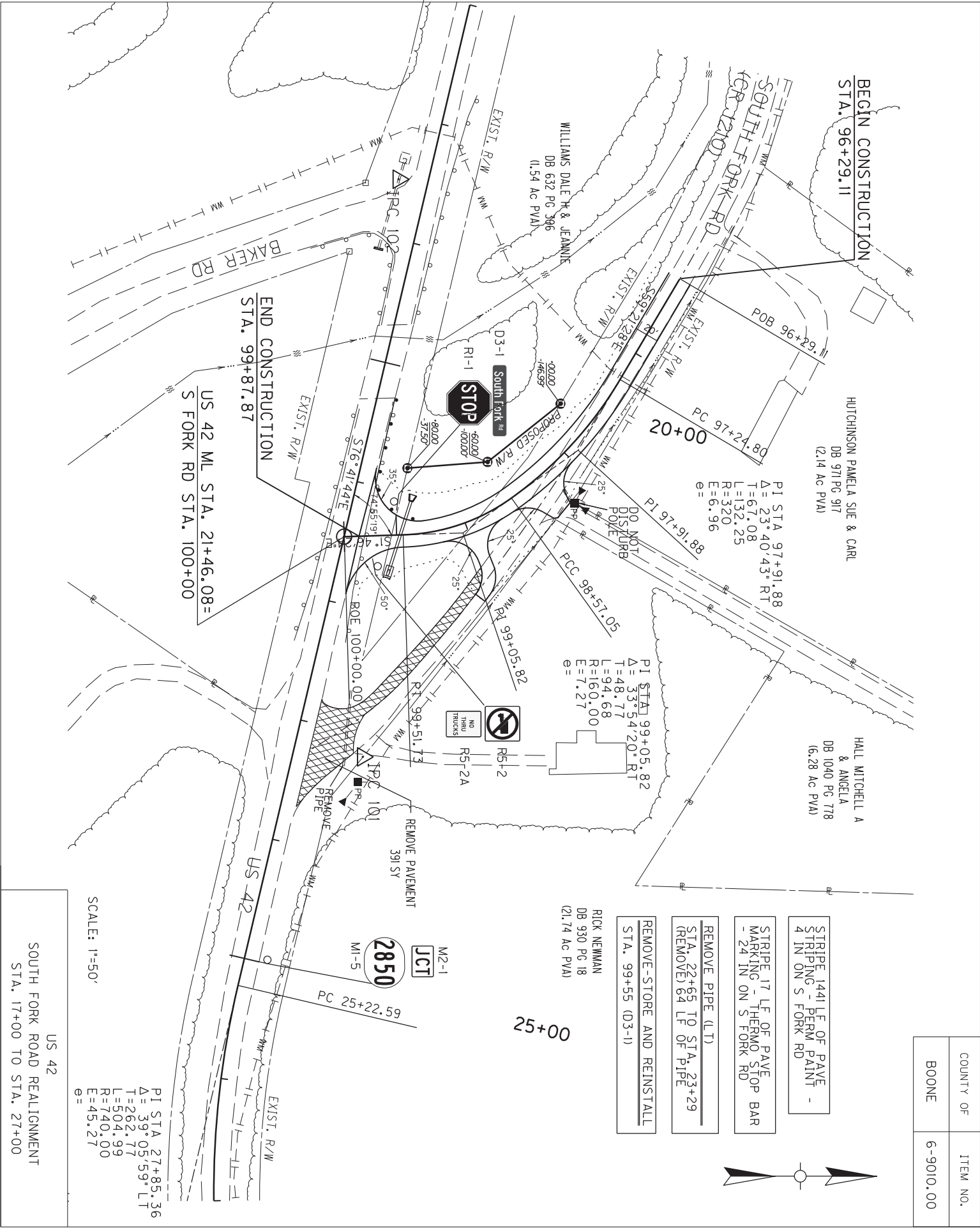
COUNTY OF	ITEM NO.
BOONE	6-9010.00



DRAWING PROVIDED FOR INFORMATION ONLY.
QUANTITIES FOR THIS DRAWING ARE USED
TO APPROXIMATE COST ESTIMATES.

COUNTY OF	ITEM NO.
BOONE	6-9010.00





COUNTY OF	ITEM NO.
BOONE	6-9010.00

STRIPES 1441 LF OF PAVE
STRIPING - PERM PAINT -
4 IN ON S FORK RD

STRIPES 17 LF OF PAVE
MARKING - THERMO STOP BAR
- 24 IN ON S FORK RD

REMOVE PIPE (LT)
STA. 22+65 TO STA. 23+29
(REMOVE) 64 LF OF PIPE

REMOVE STORE AND REINSTALL
STA. 99+55 (03-1)

RICK NEWMAN
DB 930 PG 18
(21.74 Ac PVA)

M2-1
JCT

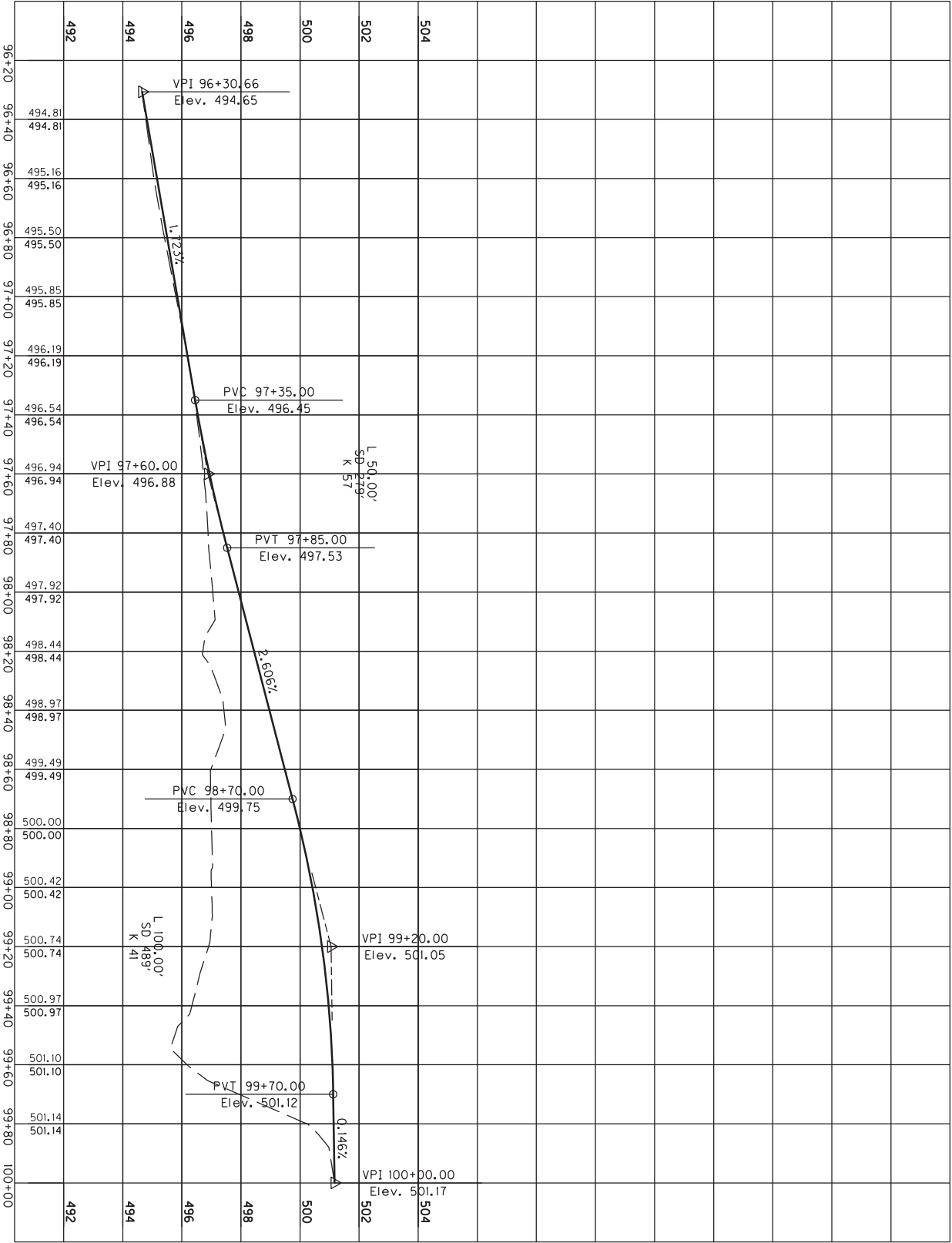
2850
MI-5

US 42
SOUTH FORK ROAD REALIGNMENT
STA. 17+00 TO STA. 27+00

SCALE: 1"=50'

PI STA. 27+85.36
 $\Delta = 39^{\circ}05'59"$ LT
T=262.77
L=504.99
R=740.00
E=45.27

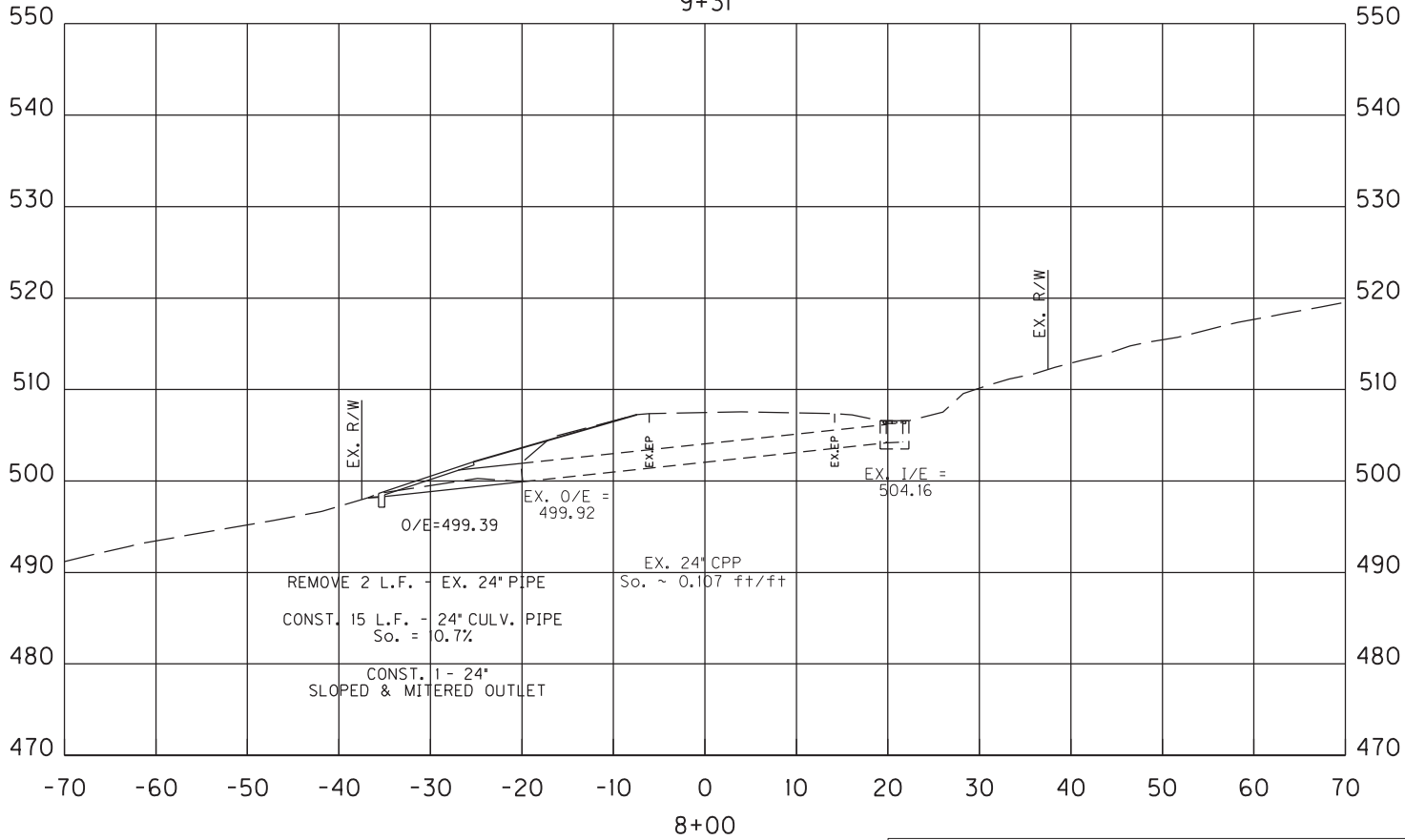
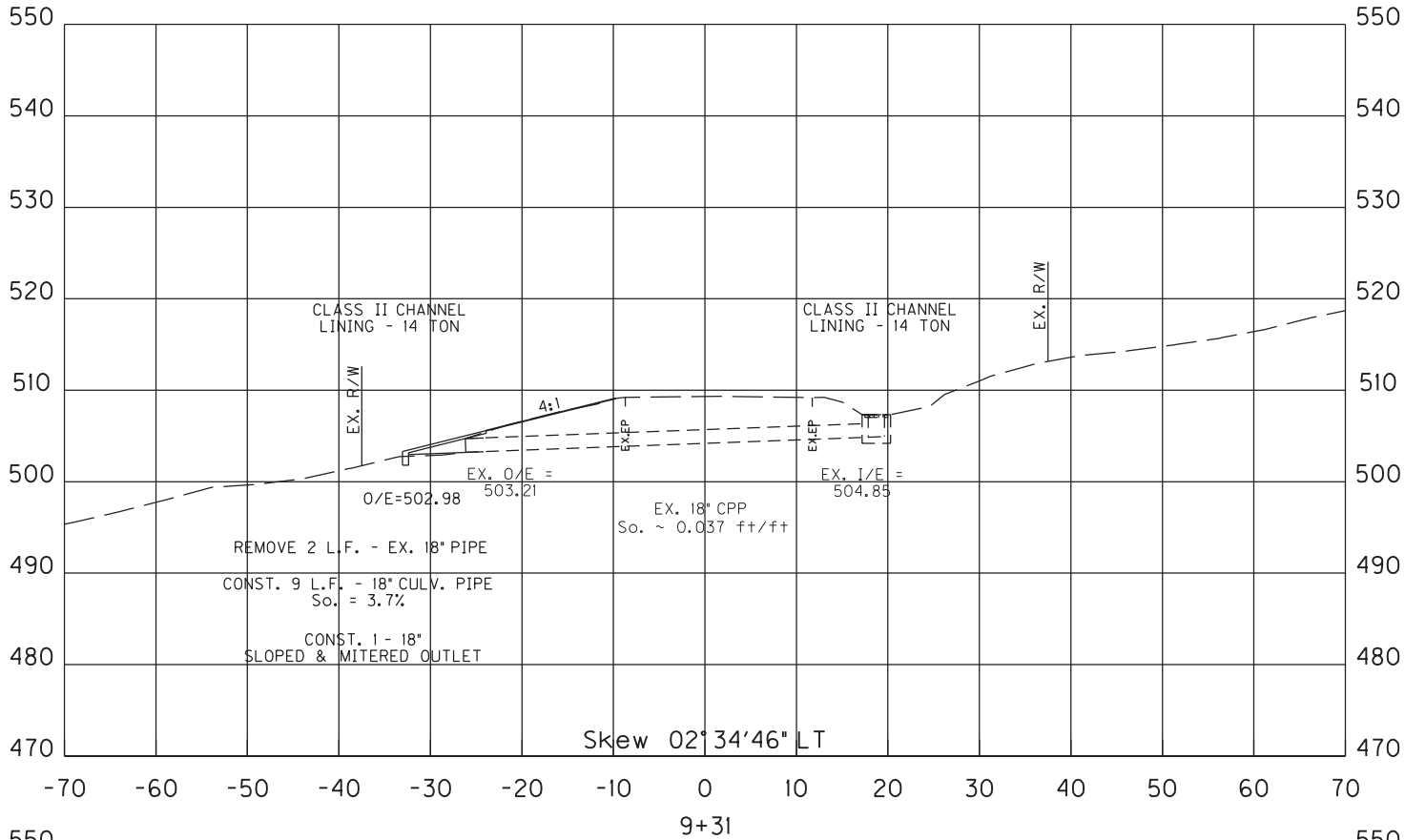
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1"= 50' HORIZONTAL
1"= 05' VERTICAL

SOUTH FORK ROAD REALIGNMENT
PROFILE SHEET
POB TO POE

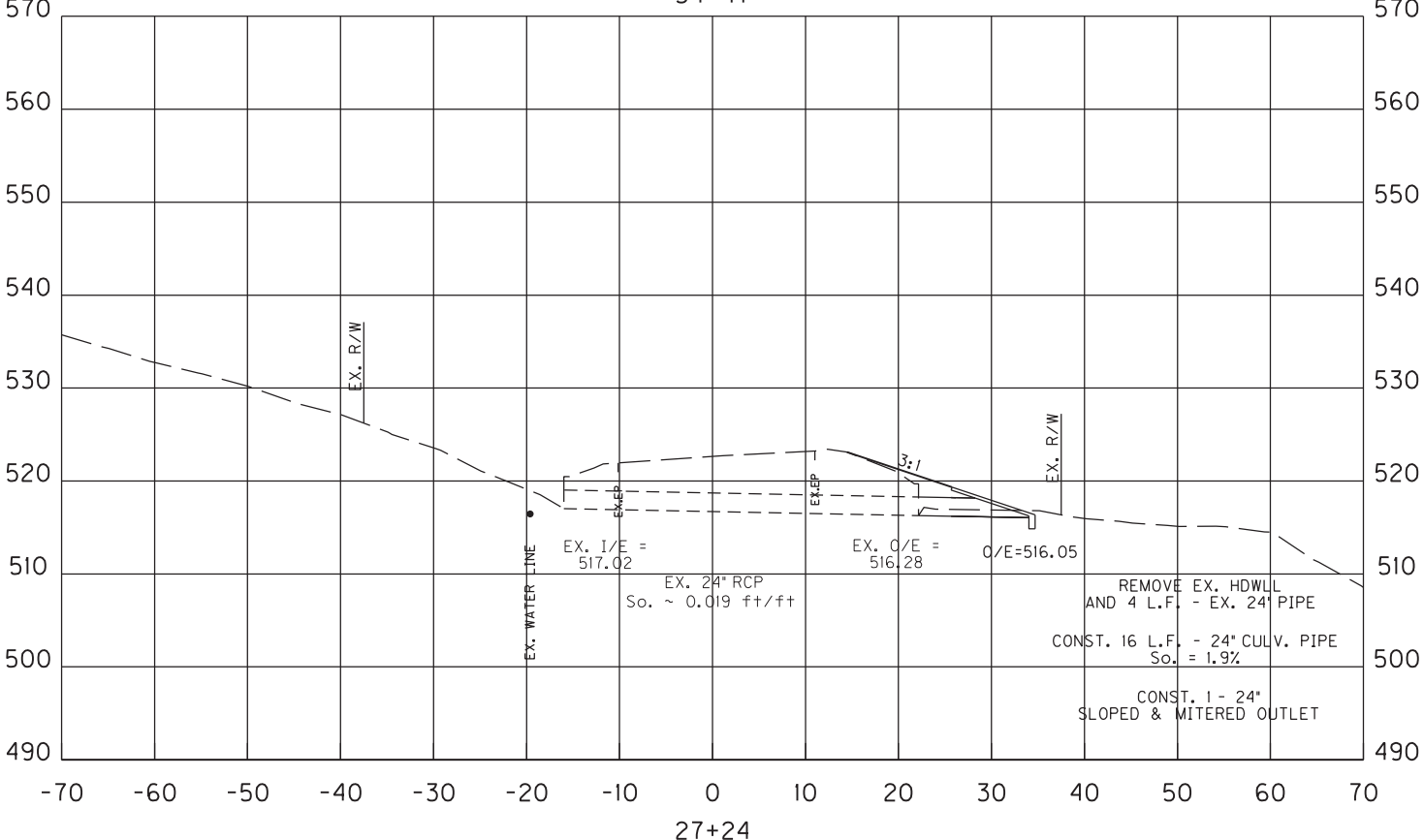
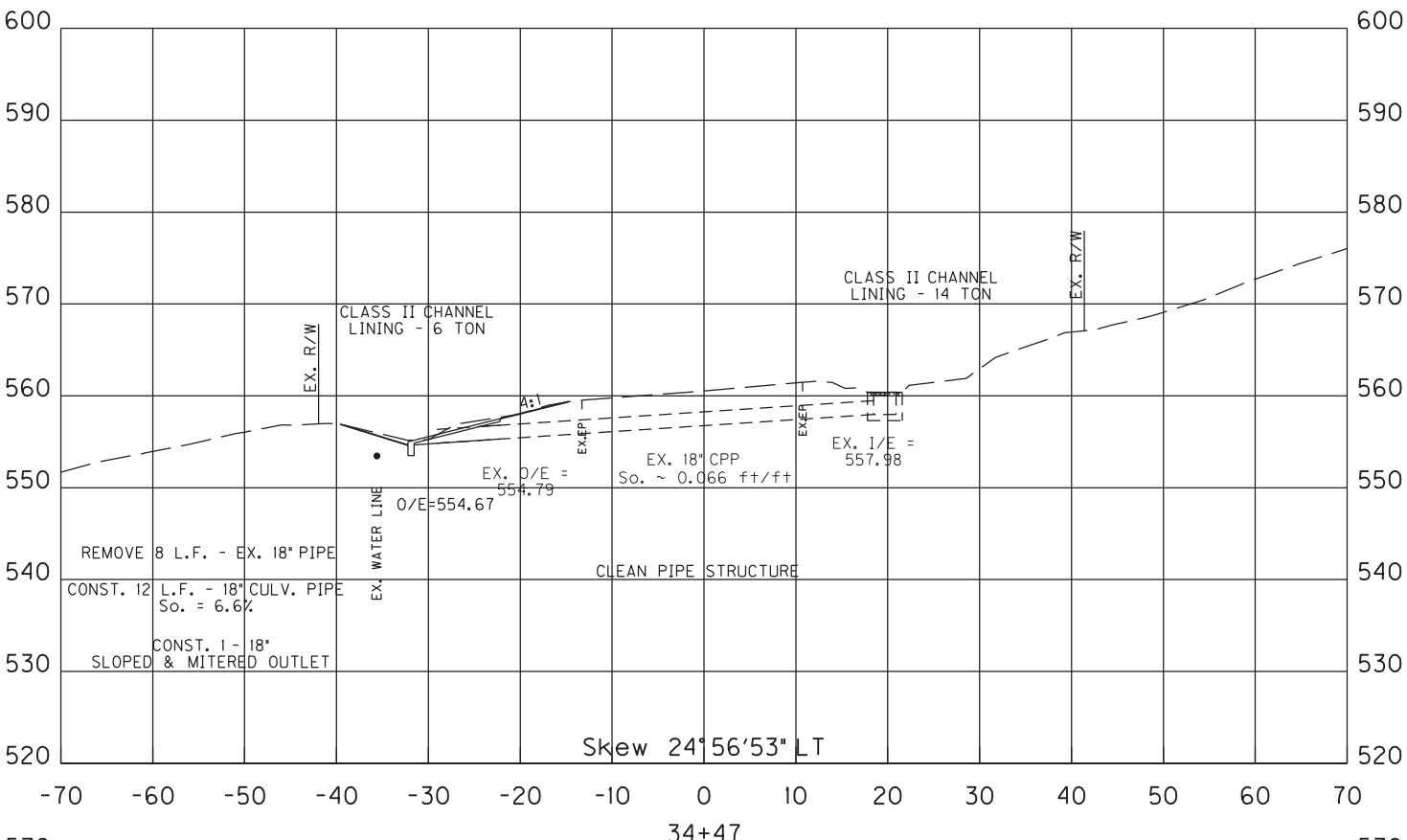
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

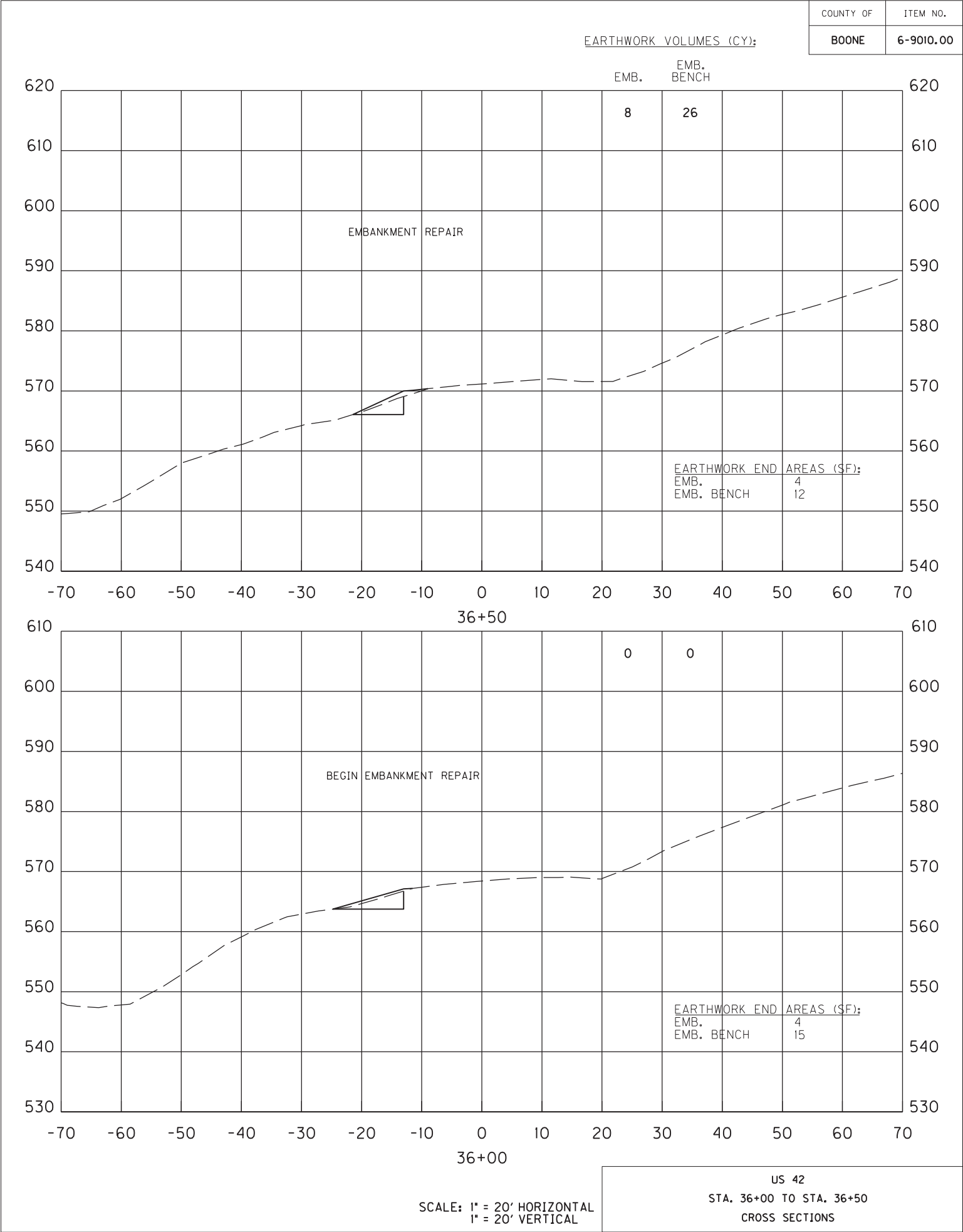
US 42
STA. 8+00 TO STA. 9+31
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

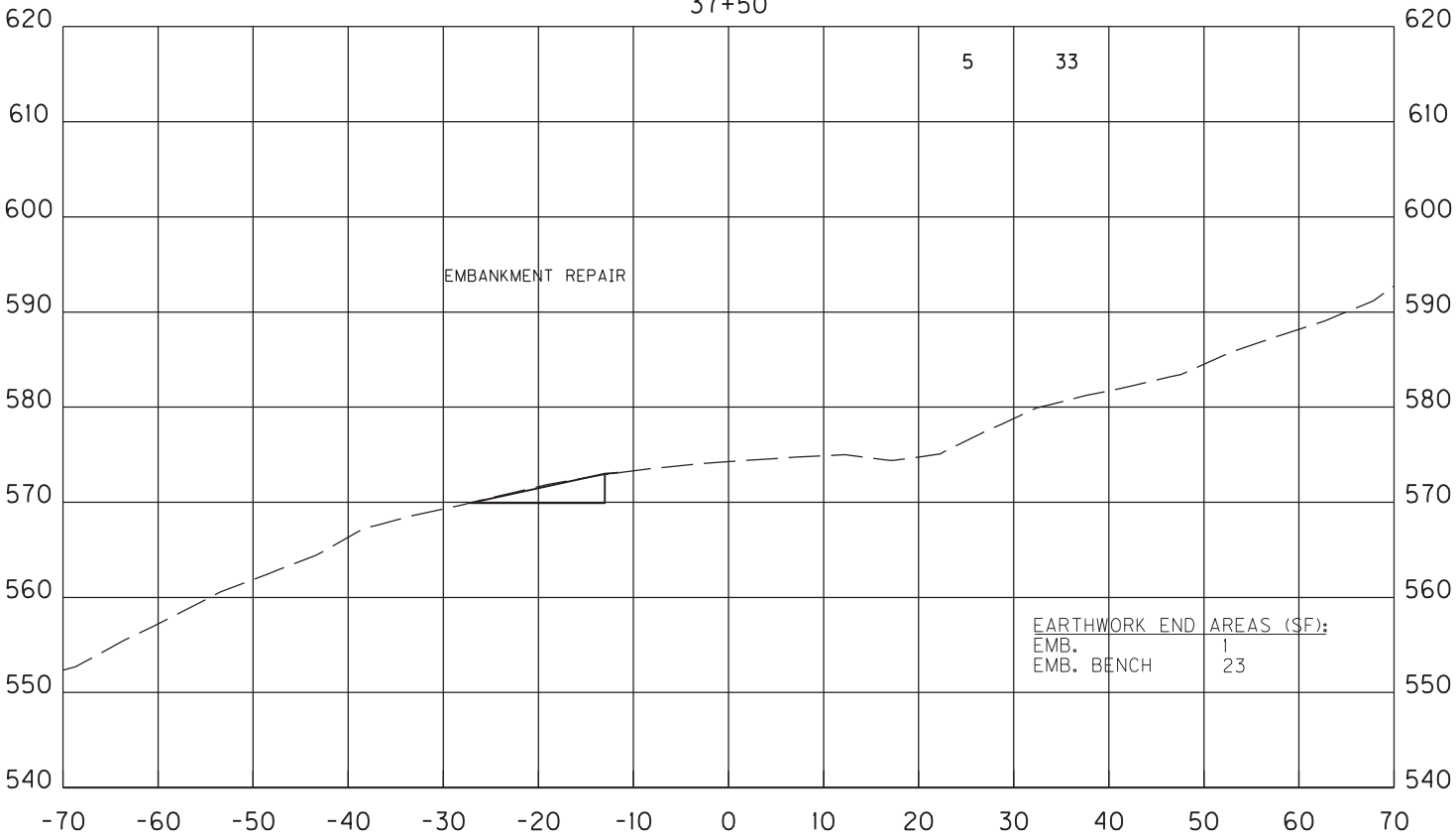
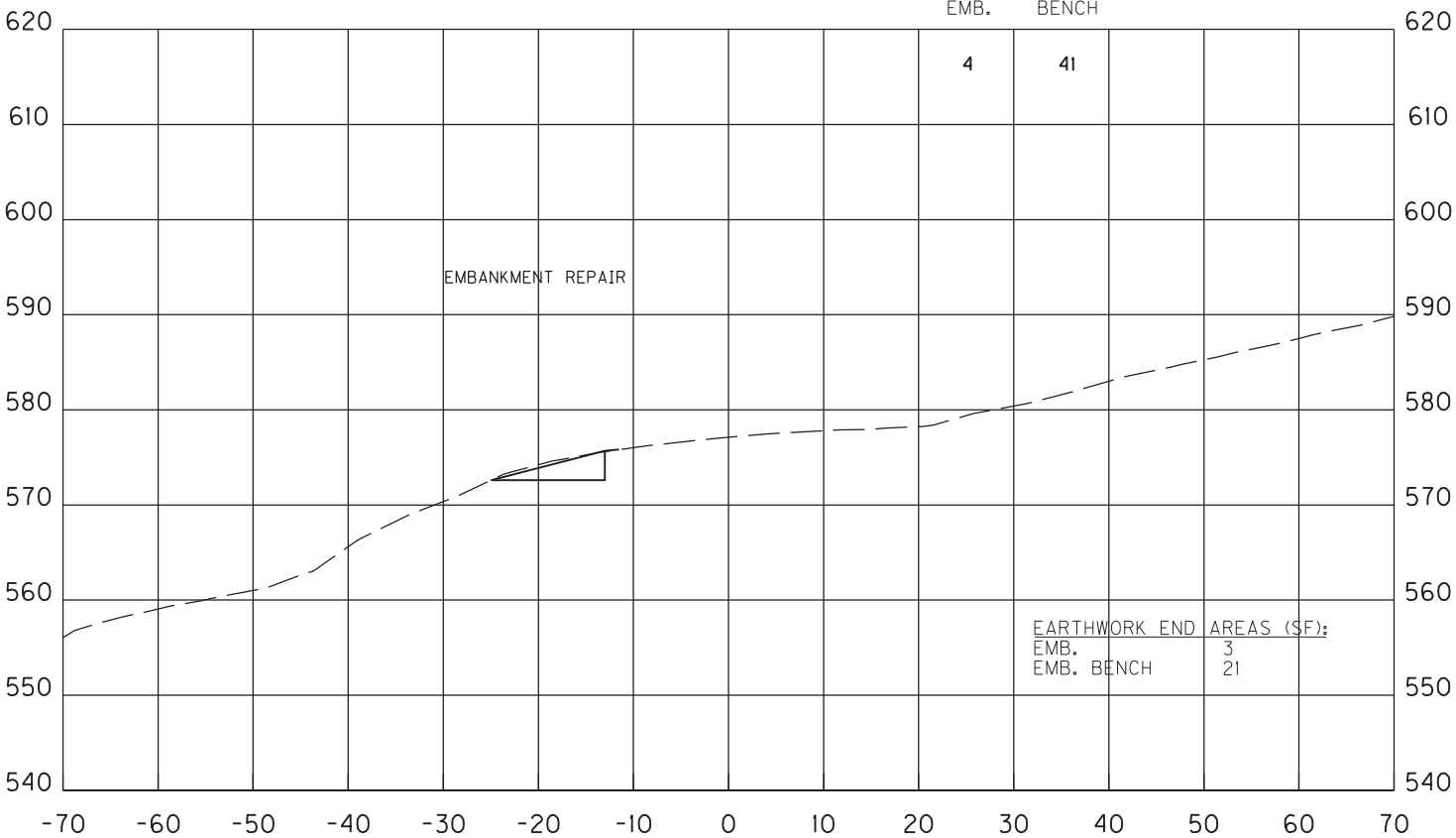
US 42
STA. 27+24 TO STA. 34+47
CROSS SECTIONS



COUNTY OF	ITEM NO.
BOONE	6-9010.00

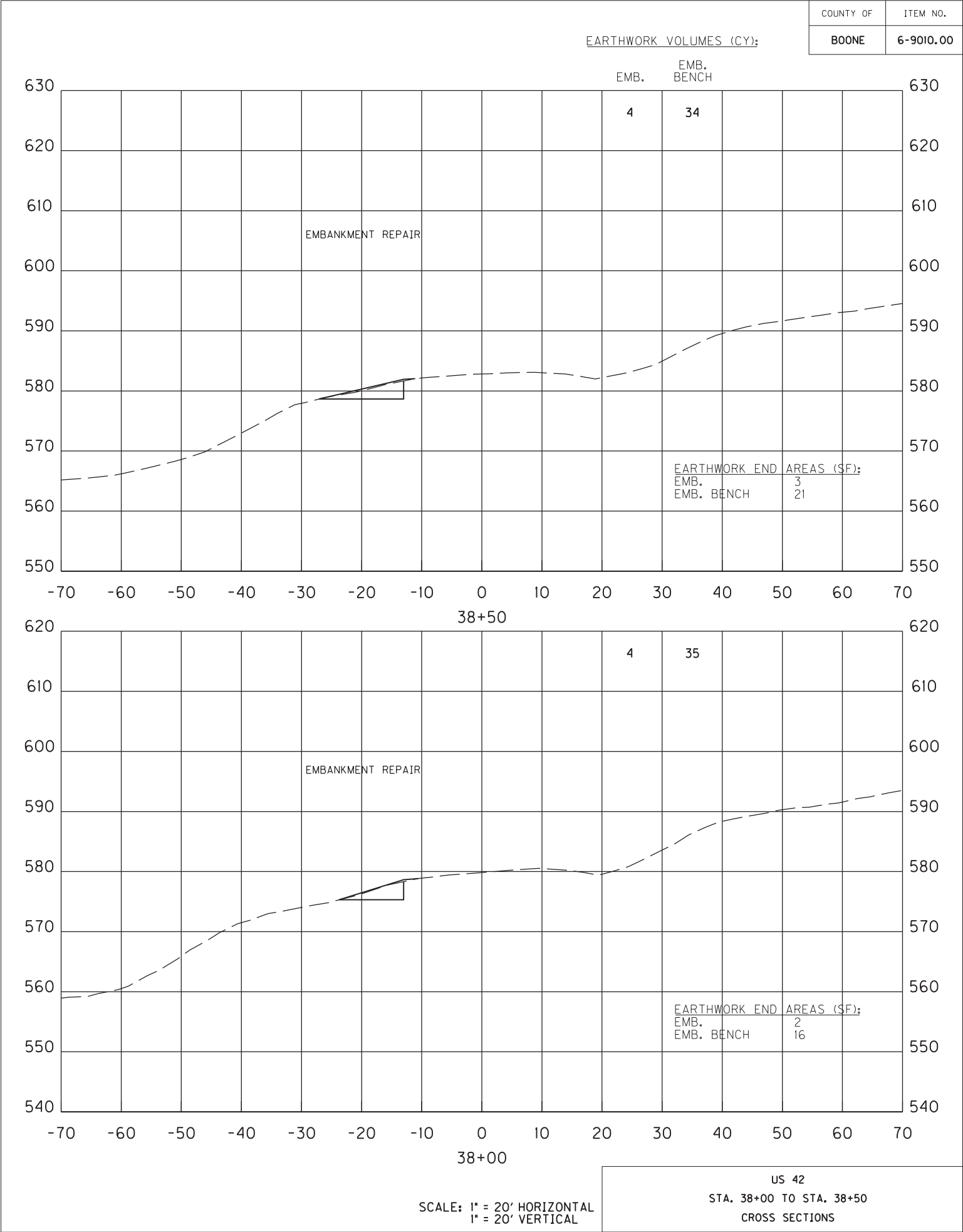
EARTHWORK VOLUMES (CY):

EMB.	EMB. BENCH
4	41



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 37+00 TO STA. 37+50
CROSS SECTIONS



This graph shows the cross-section of an embankment repair at station 38+00. The vertical axis represents elevation in feet, ranging from 540 to 620. The horizontal axis represents distance in feet from the centerline, ranging from -70 to 70. A dashed line represents the existing ground profile, and a solid line represents the proposed embankment. The area between the existing ground and the proposed embankment is shaded and labeled 'EMBANKMENT REPAIR'. The volume of embankment material is 4 cubic yards, and the volume of bench material is 35 cubic yards. The graph also includes a table of earthwork end areas (SF) for embankment and bench.

EARTHWORK END AREAS (SF):	
EMB.	2
EMB. BENCH	16

38+00

EMB. EMB. BENCH

4 35

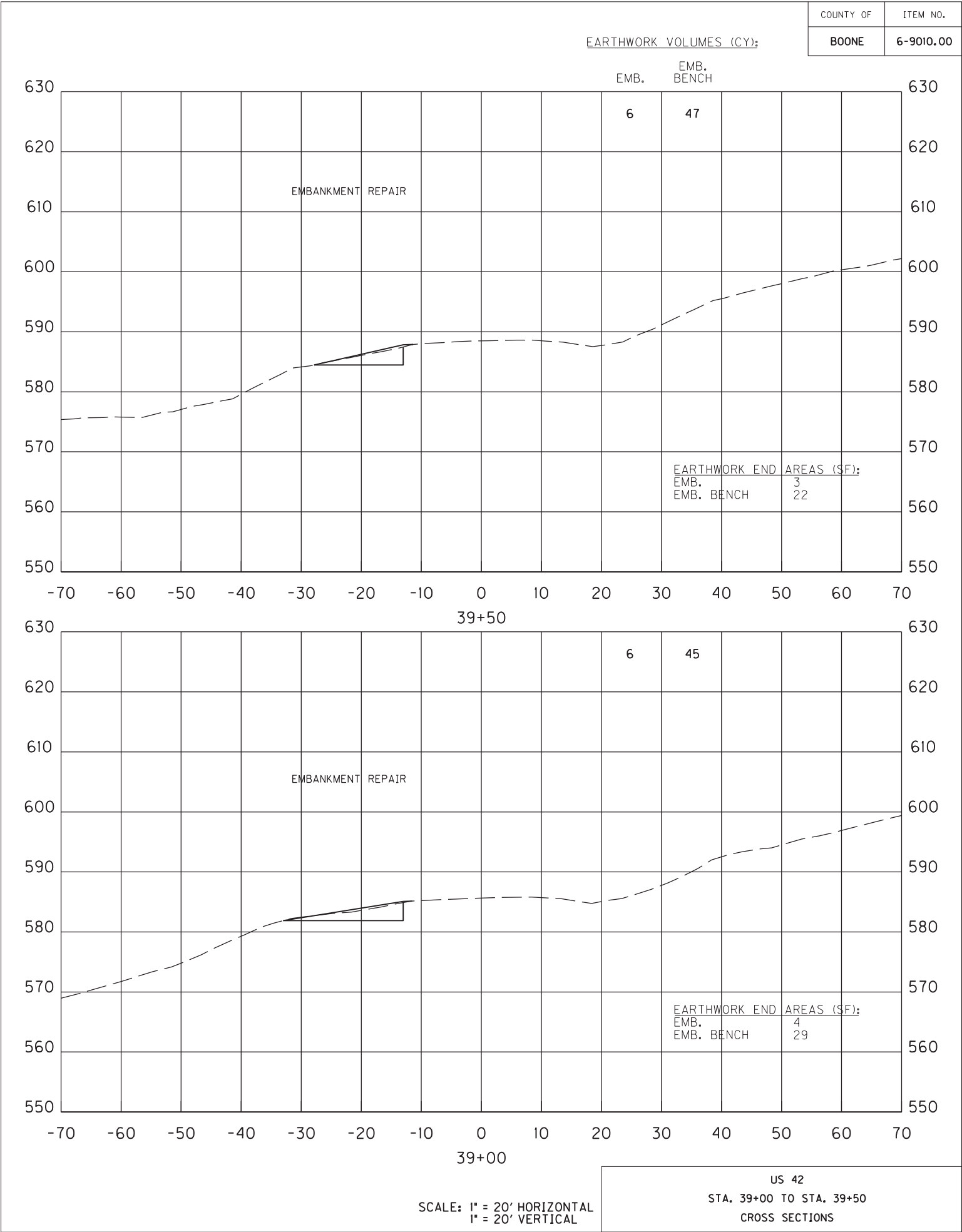
US 42

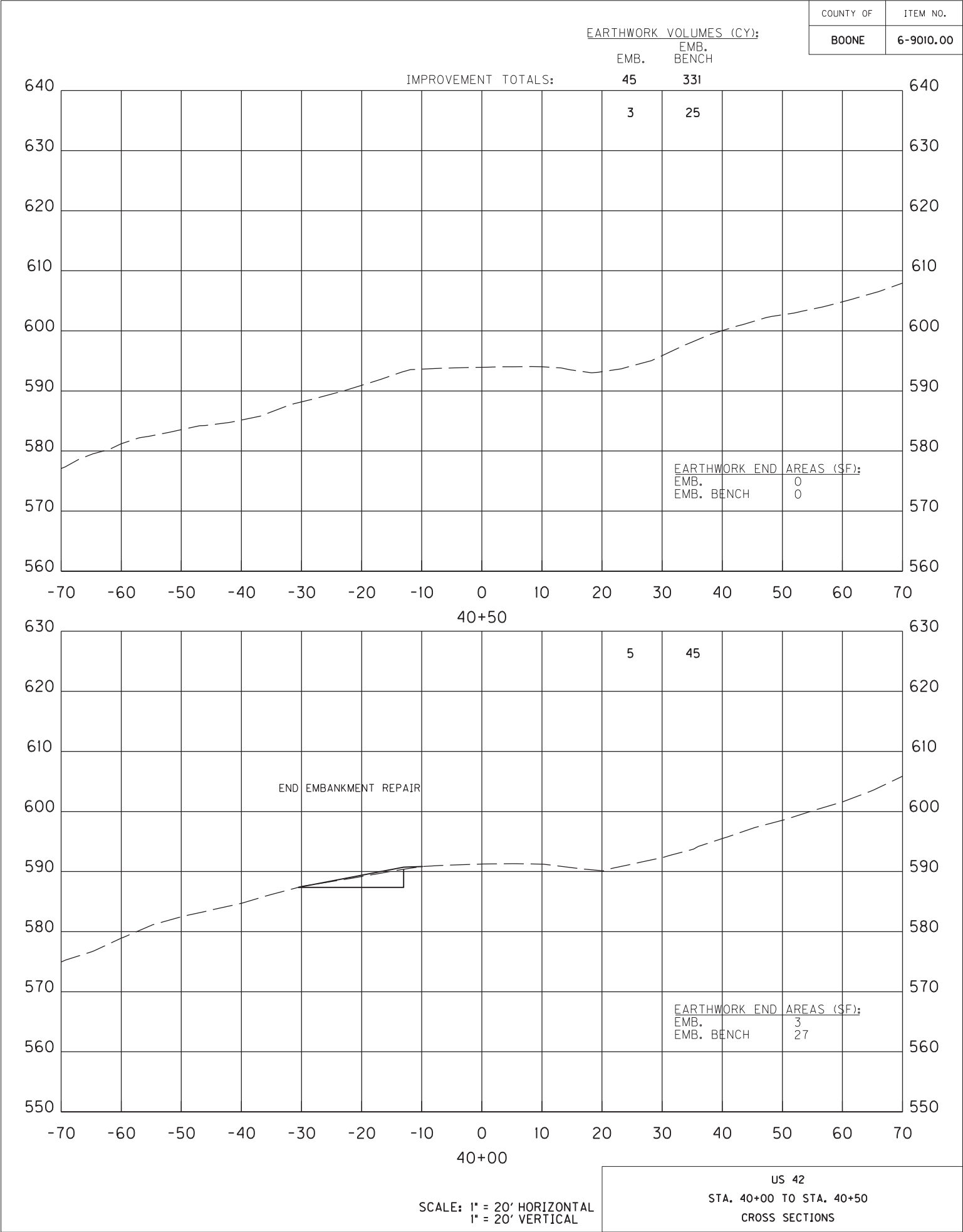
STA. 38+00 TO STA. 38+50

CROSS SECTIONS

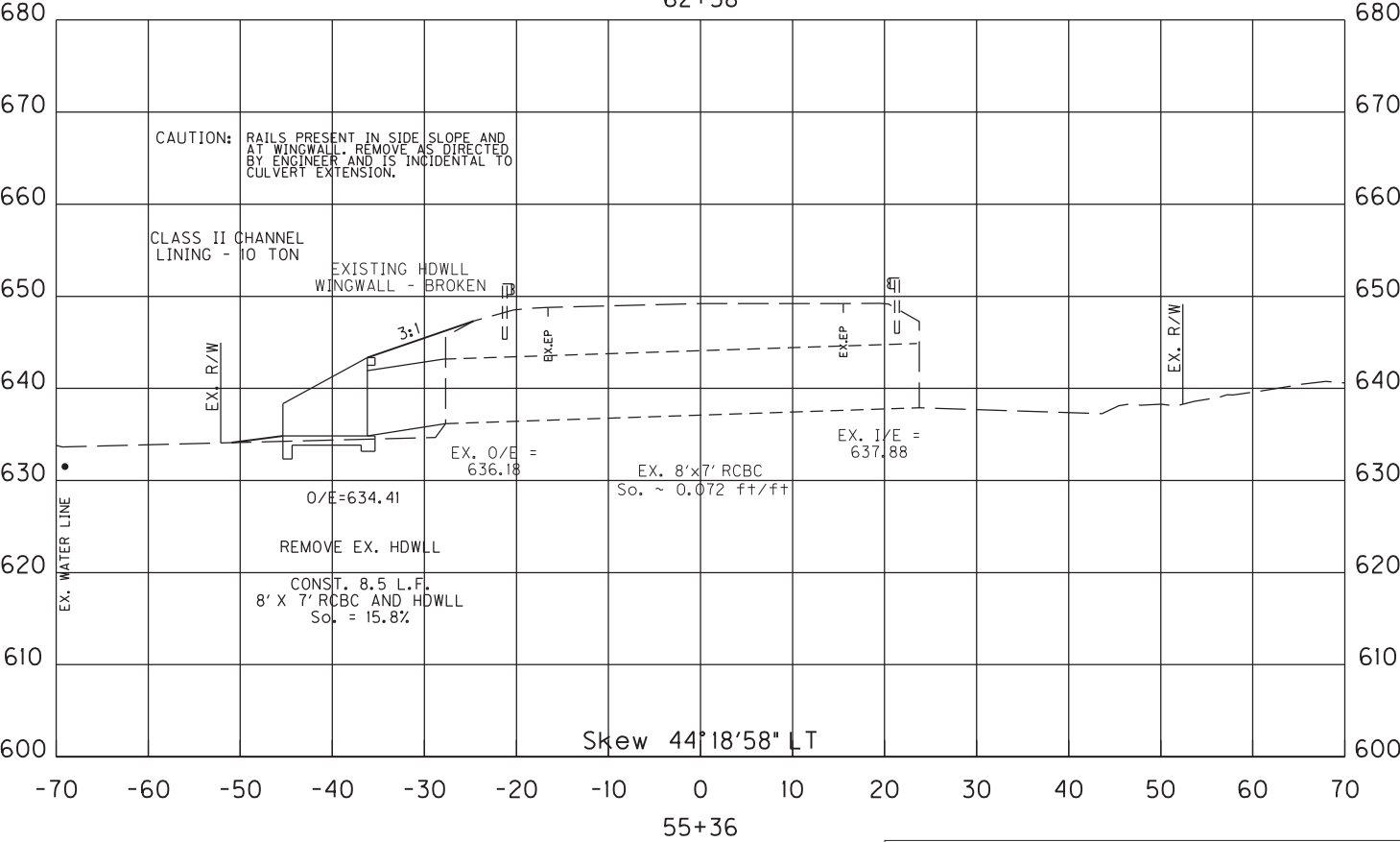
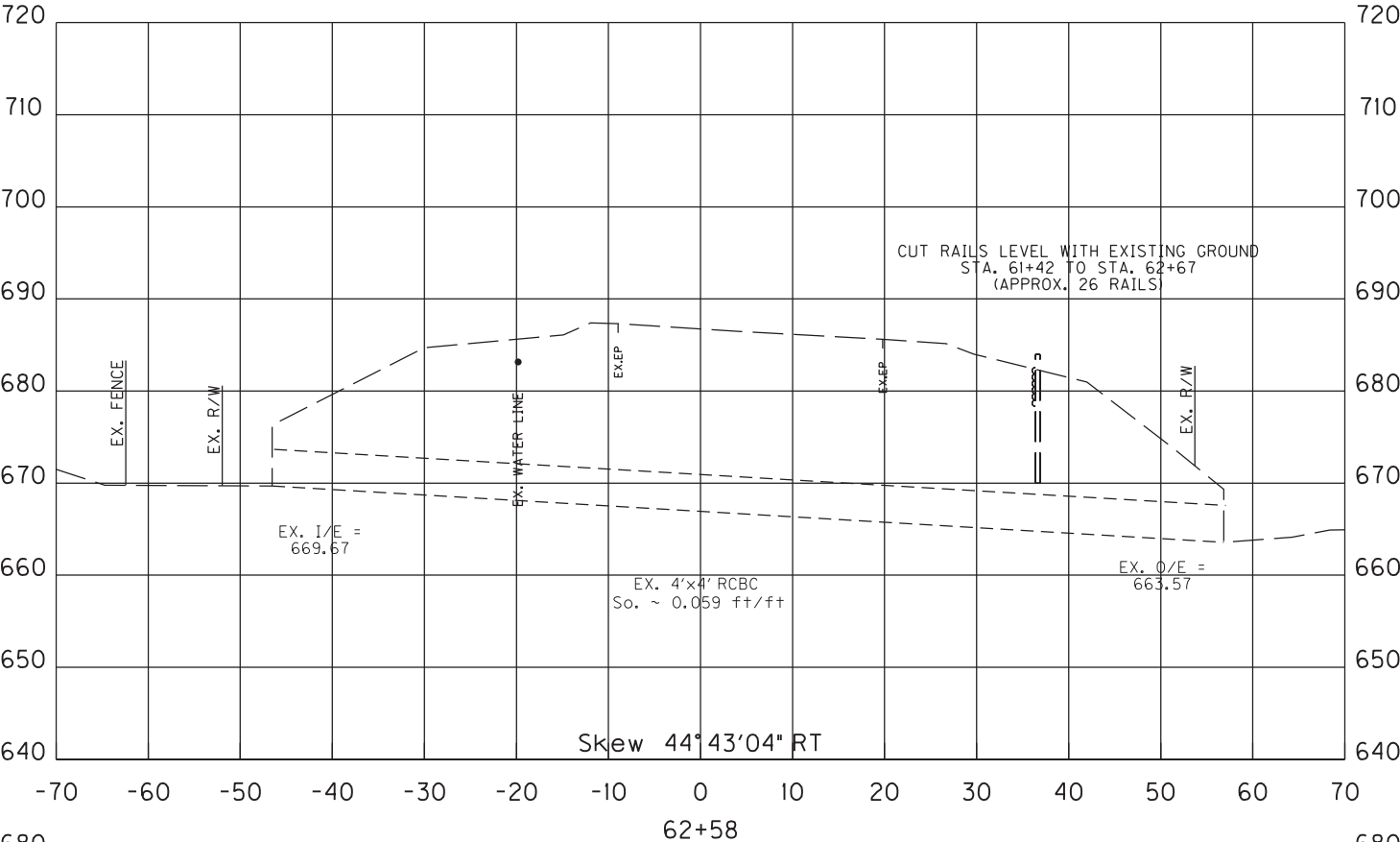
SCALE: 1" = 20' HORIZONTAL

1" = 20' VERTICAL





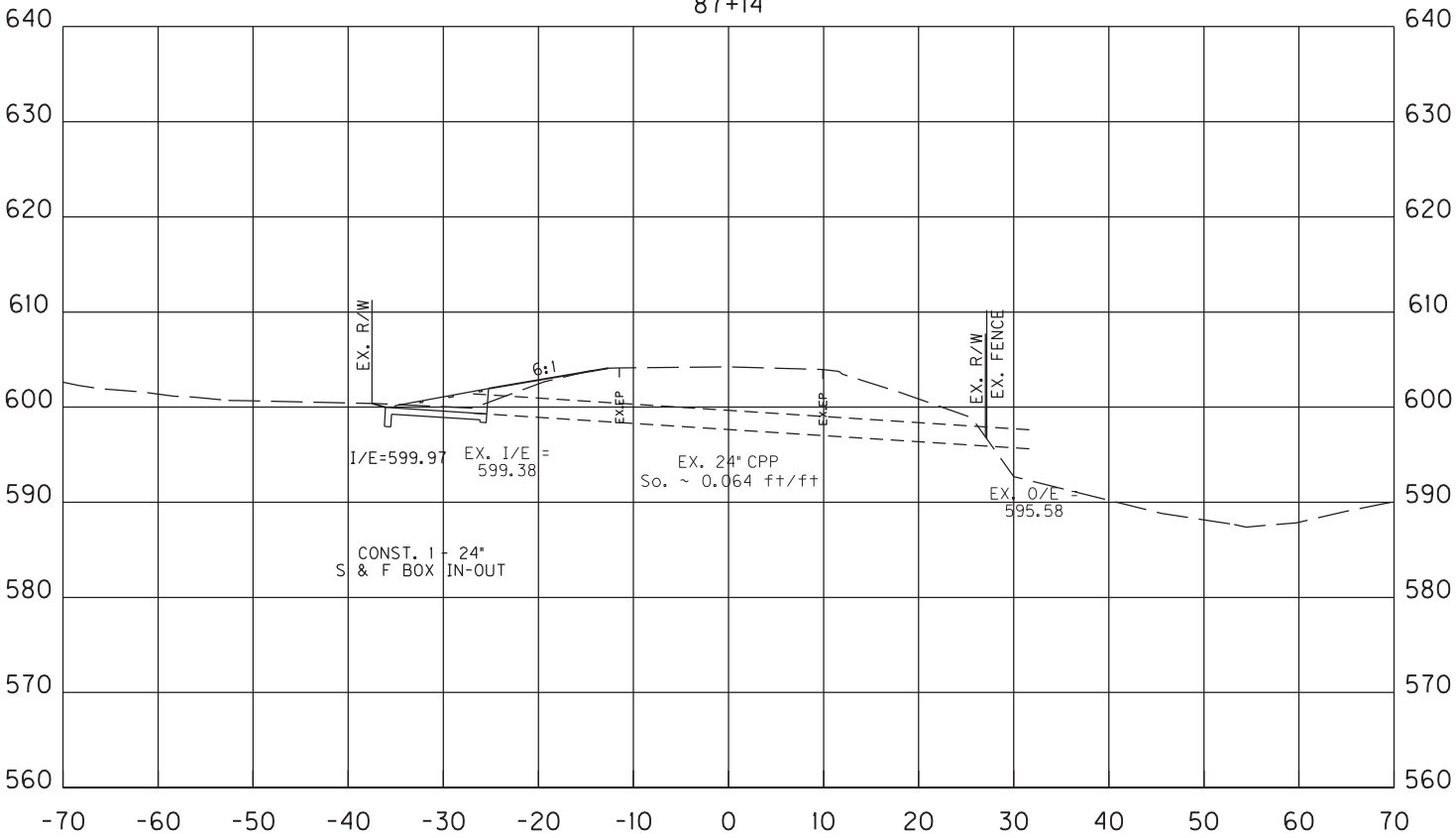
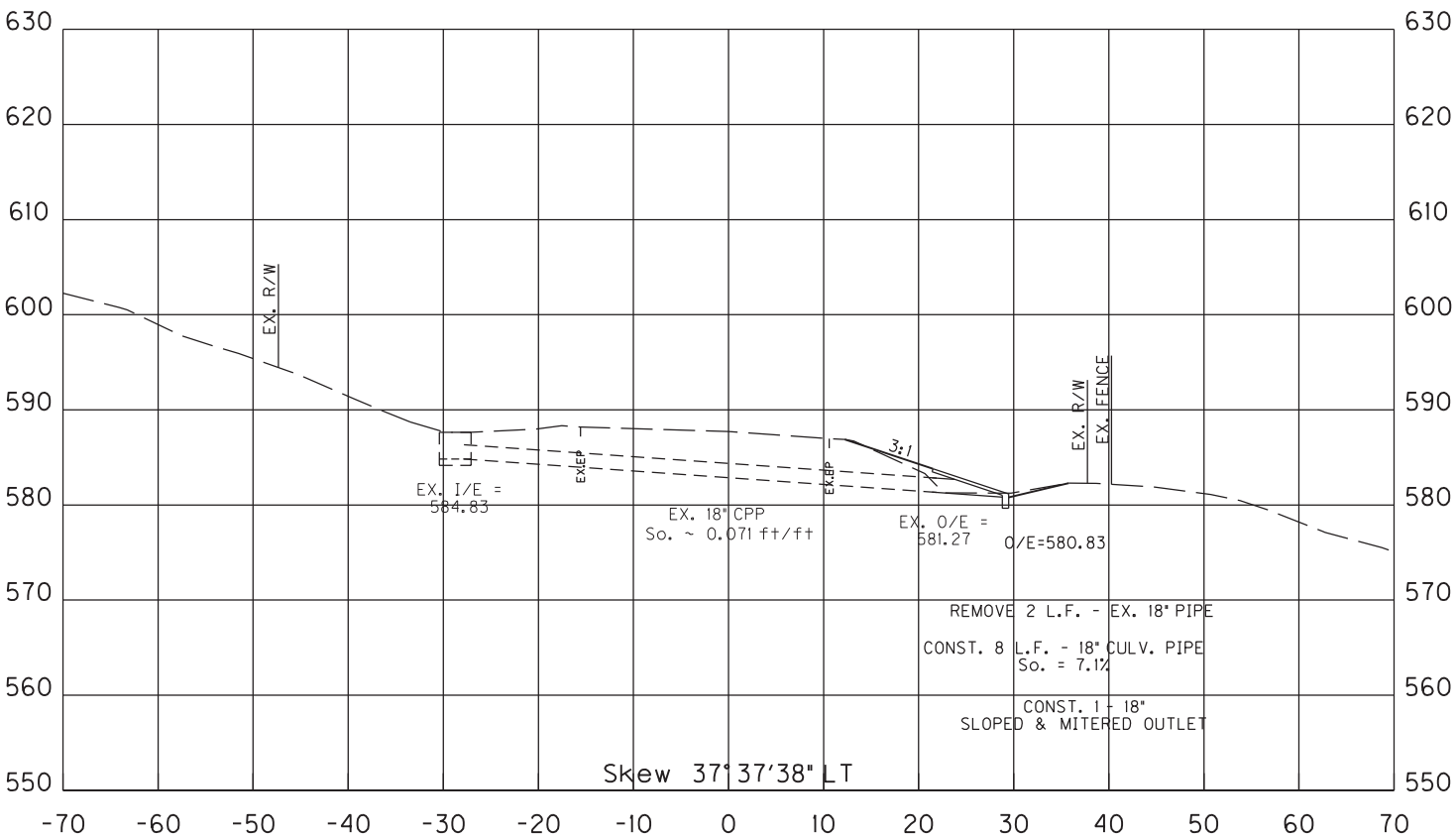
COUNTY OF	ITEM NO.
BOONE	6-9010.00



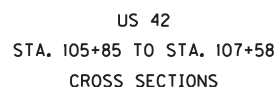
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 55+36 TO STA. 62+58
CROSS SECTIONS

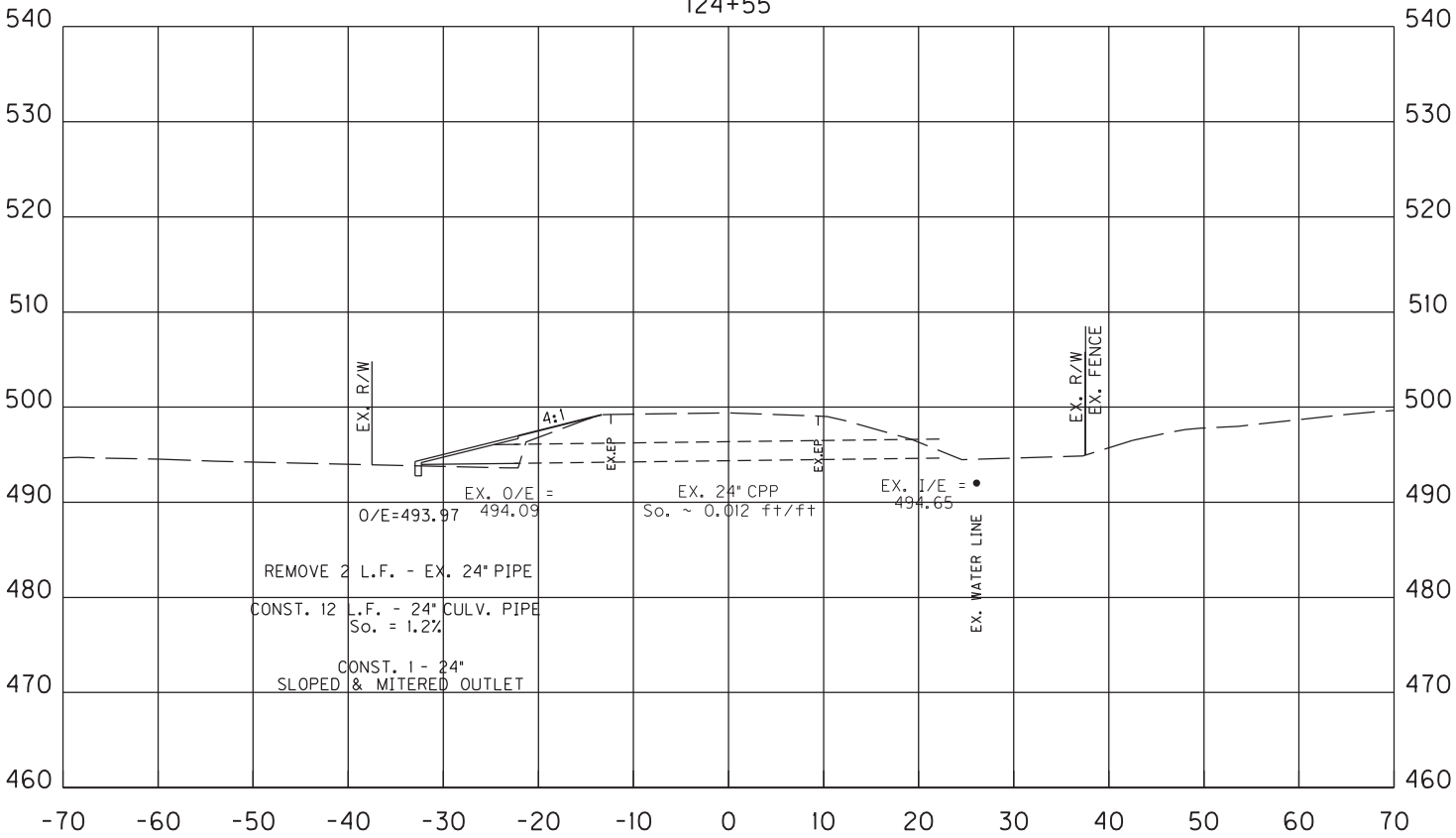
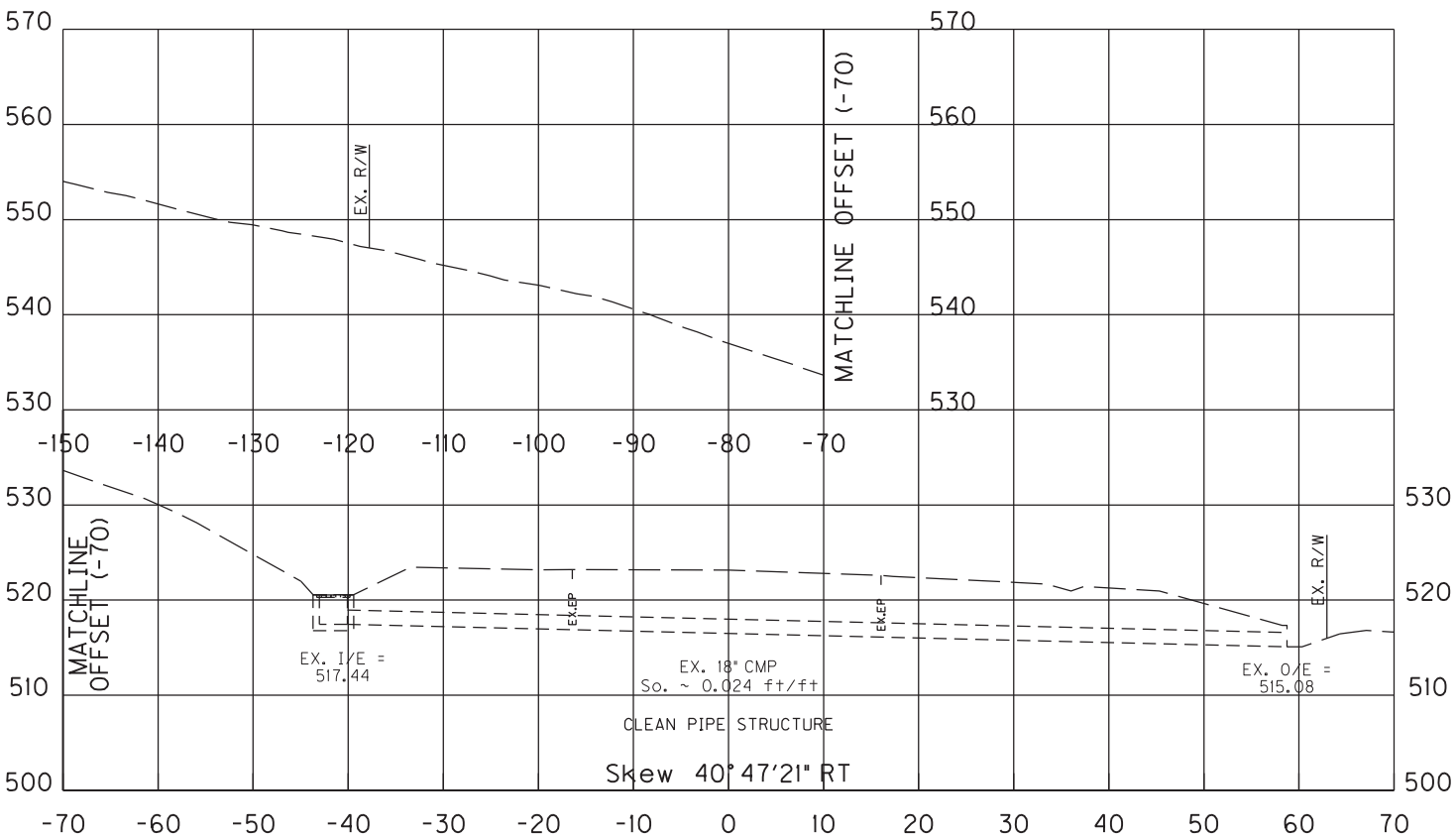
COUNTY OF	ITEM NO.
BOONE	6-9010.00



US 42
STA. 89+00 TO STA. 102+60
CROSS SECTIONS



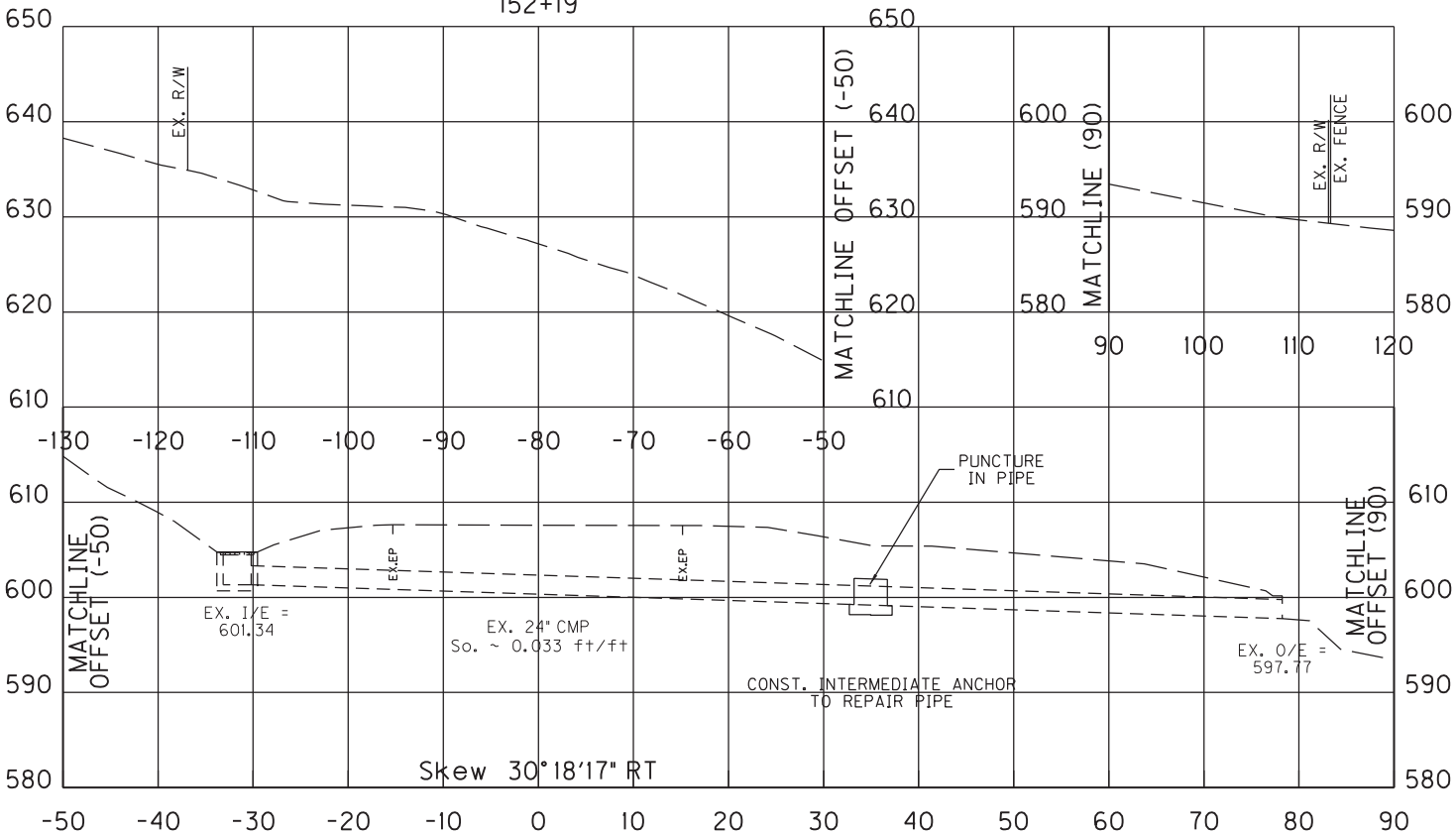
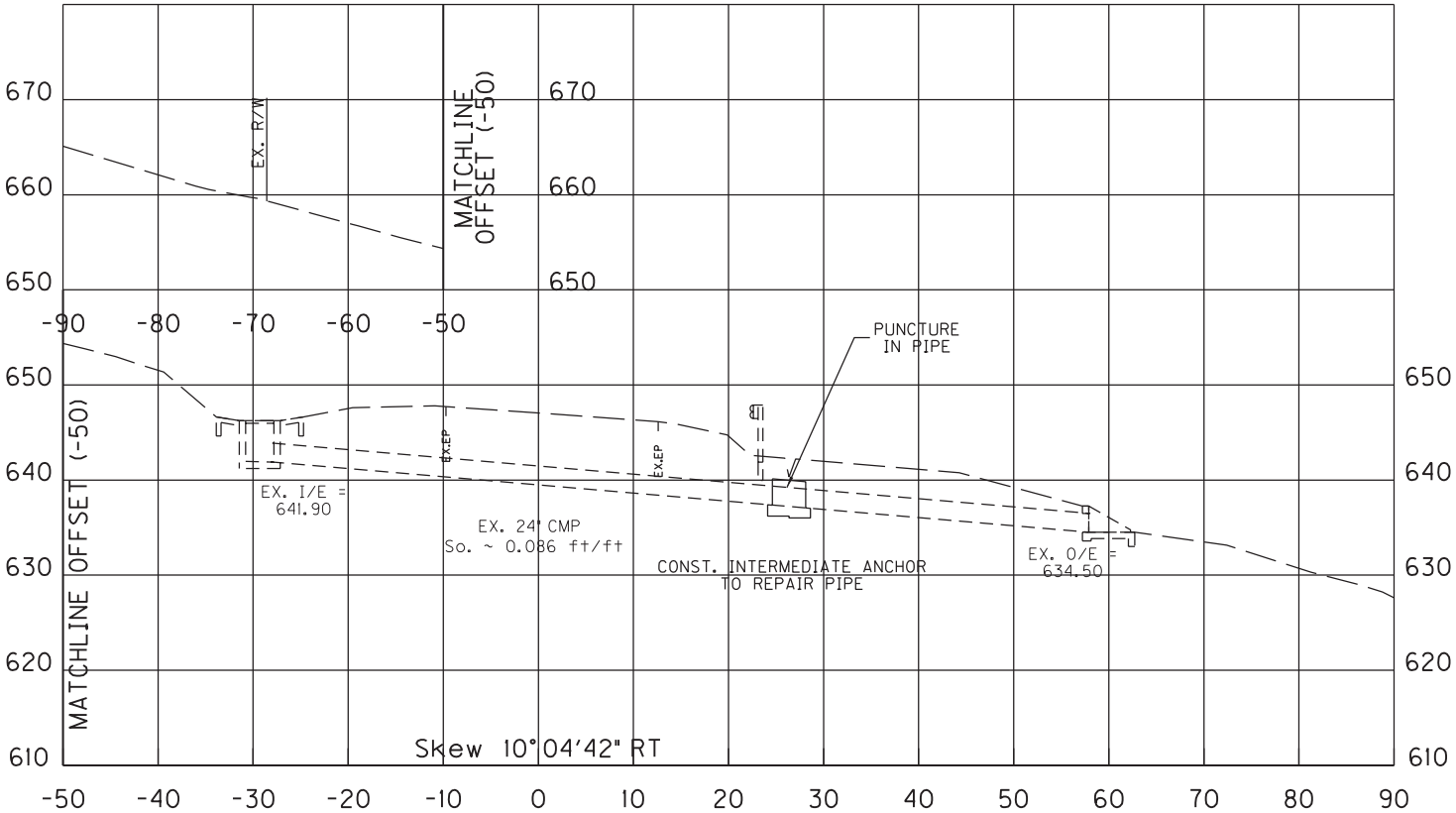
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 112+55 TO STA. 124+55
CROSS SECTIONS

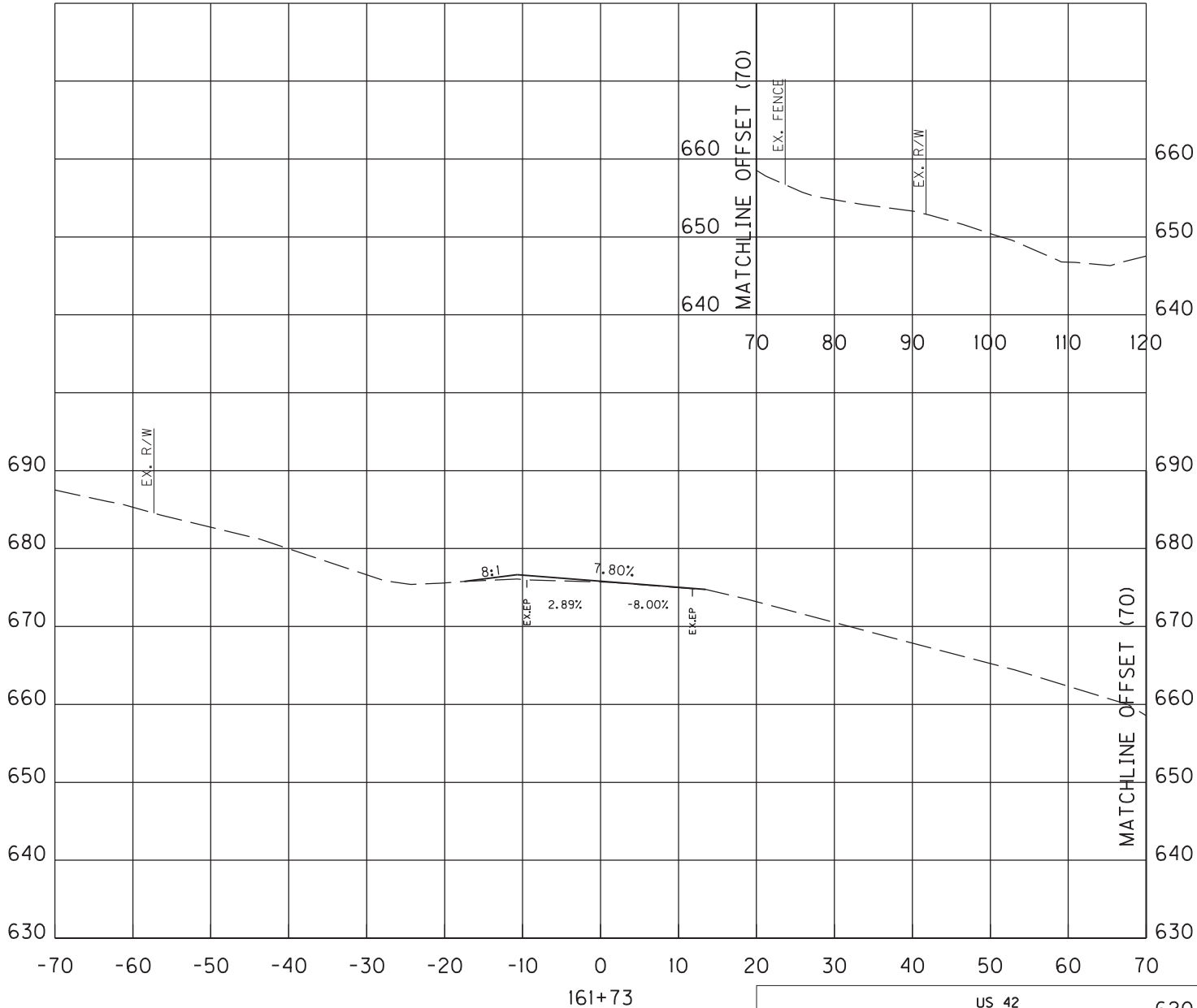
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 141+43 TO STA. 152+19
CROSS SECTIONS

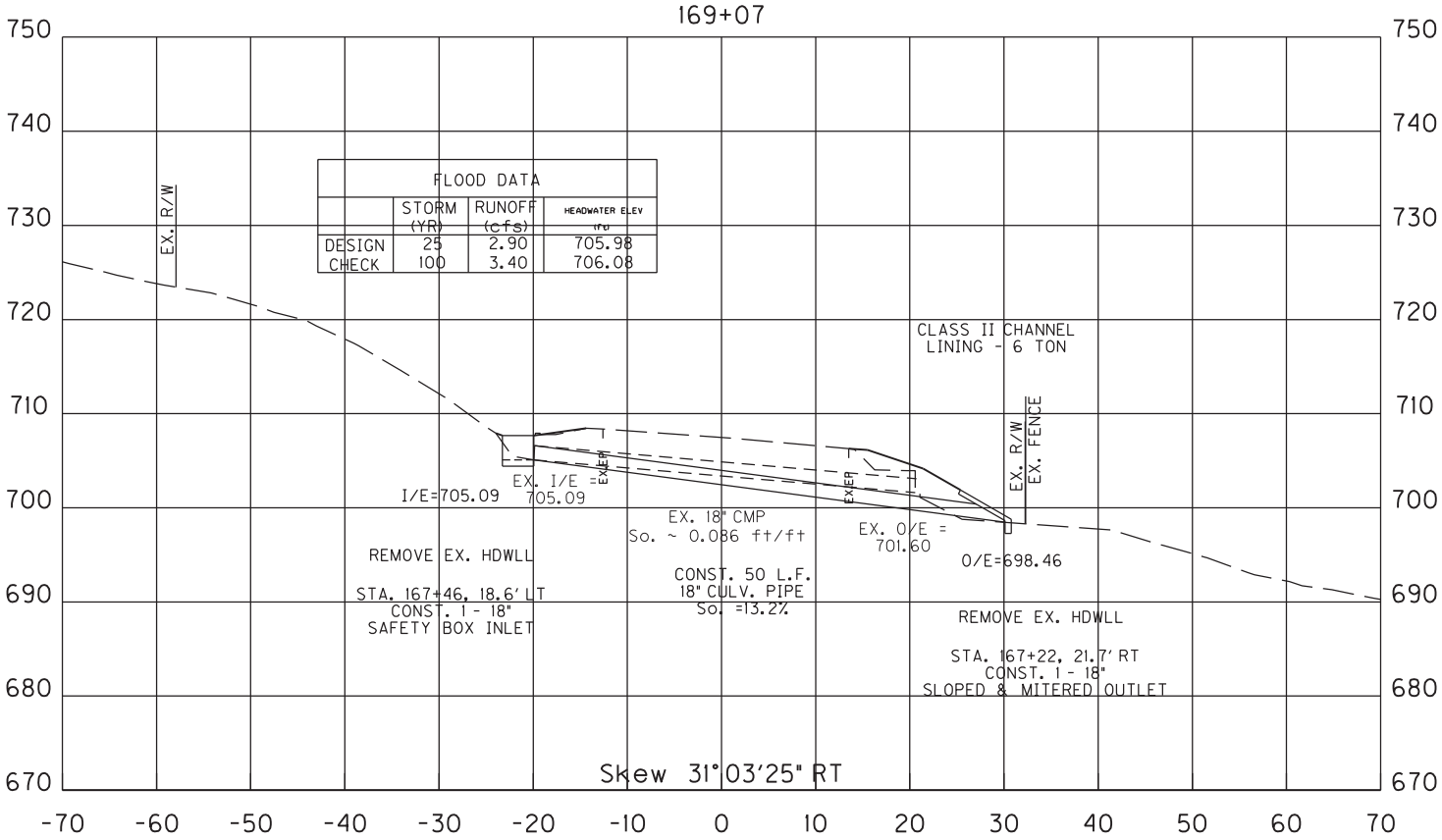
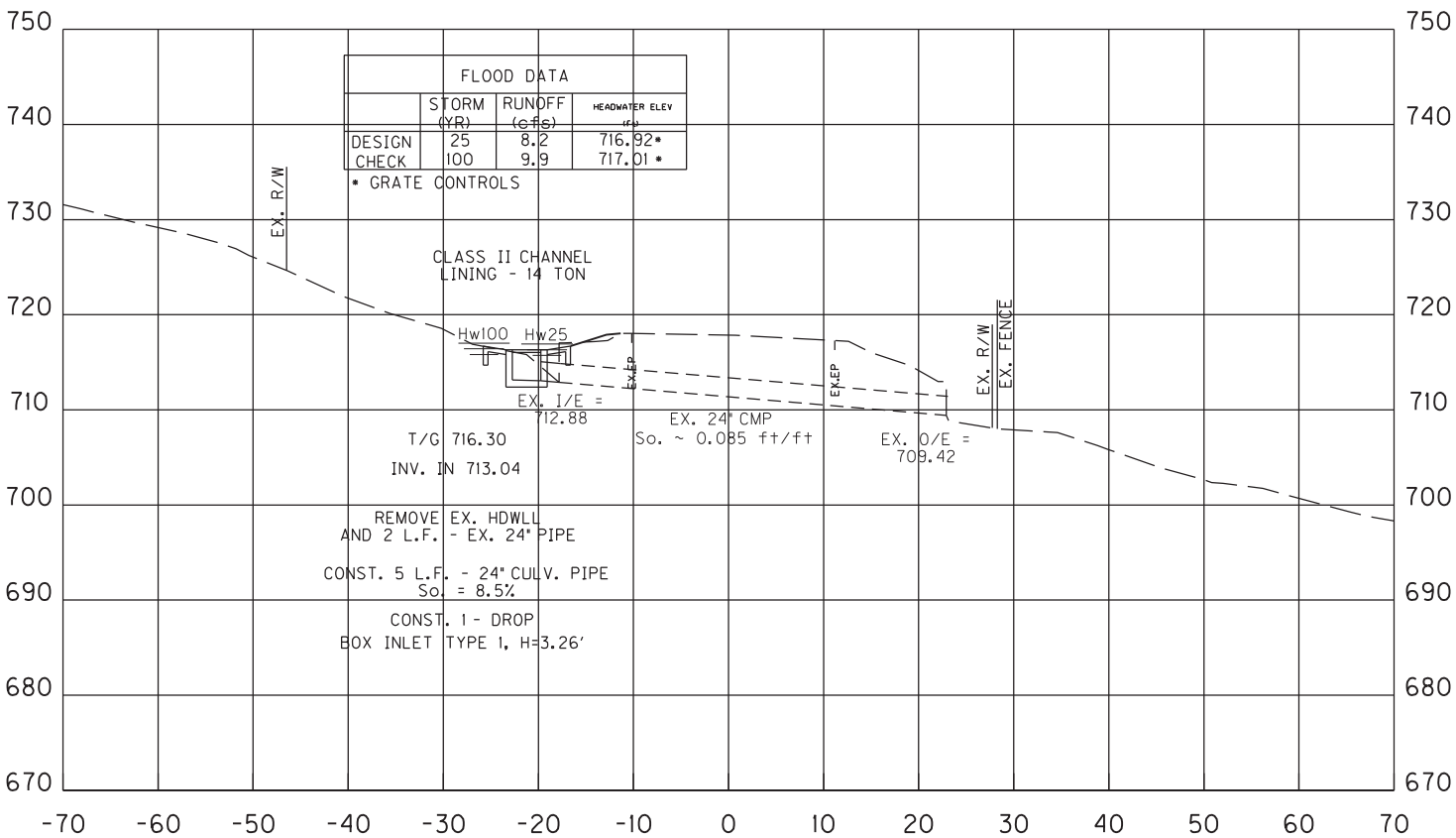
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 161+73
CROSS SECTIONS

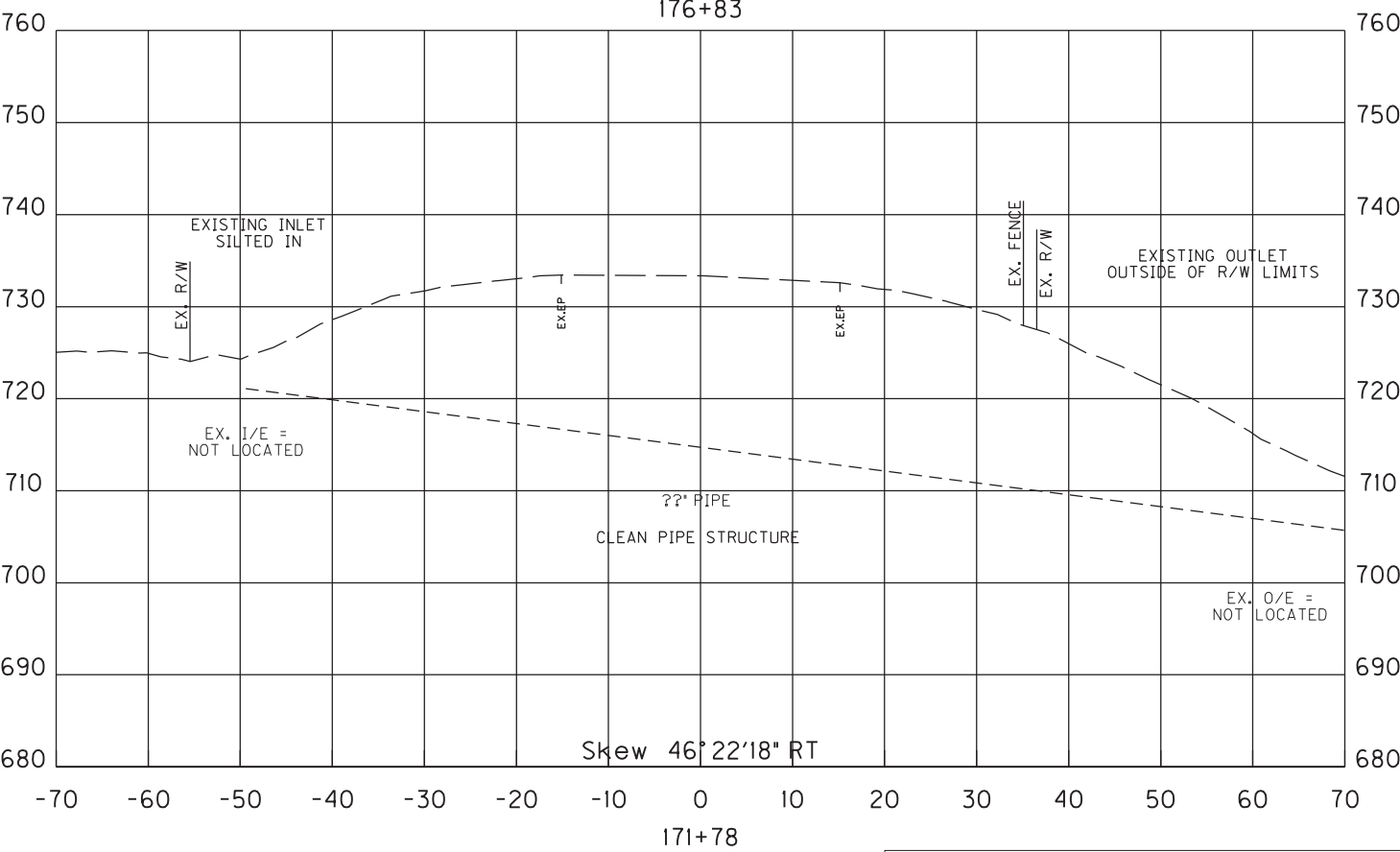
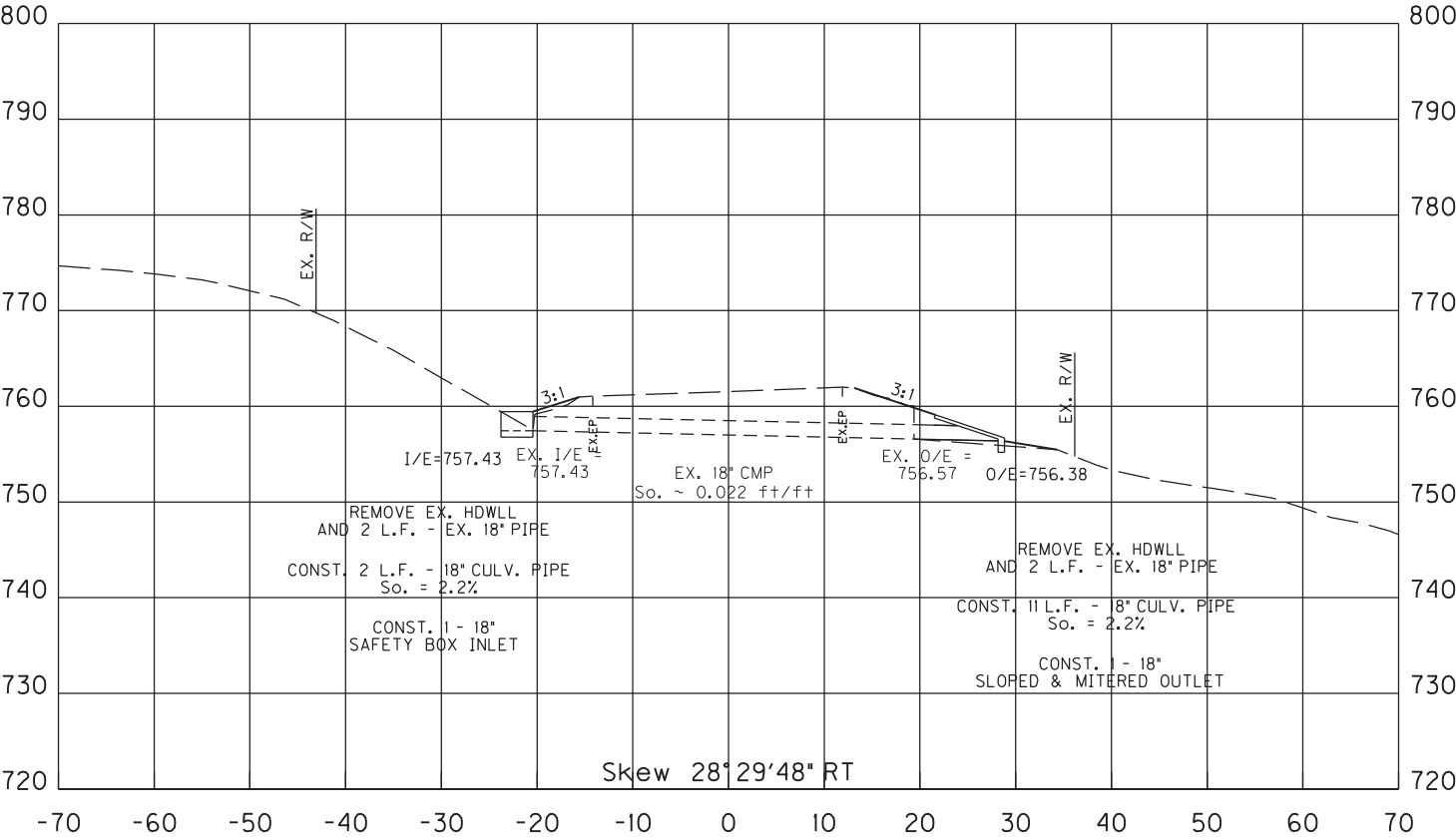
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 167+35 TO STA. 169+07
CROSS SECTIONS

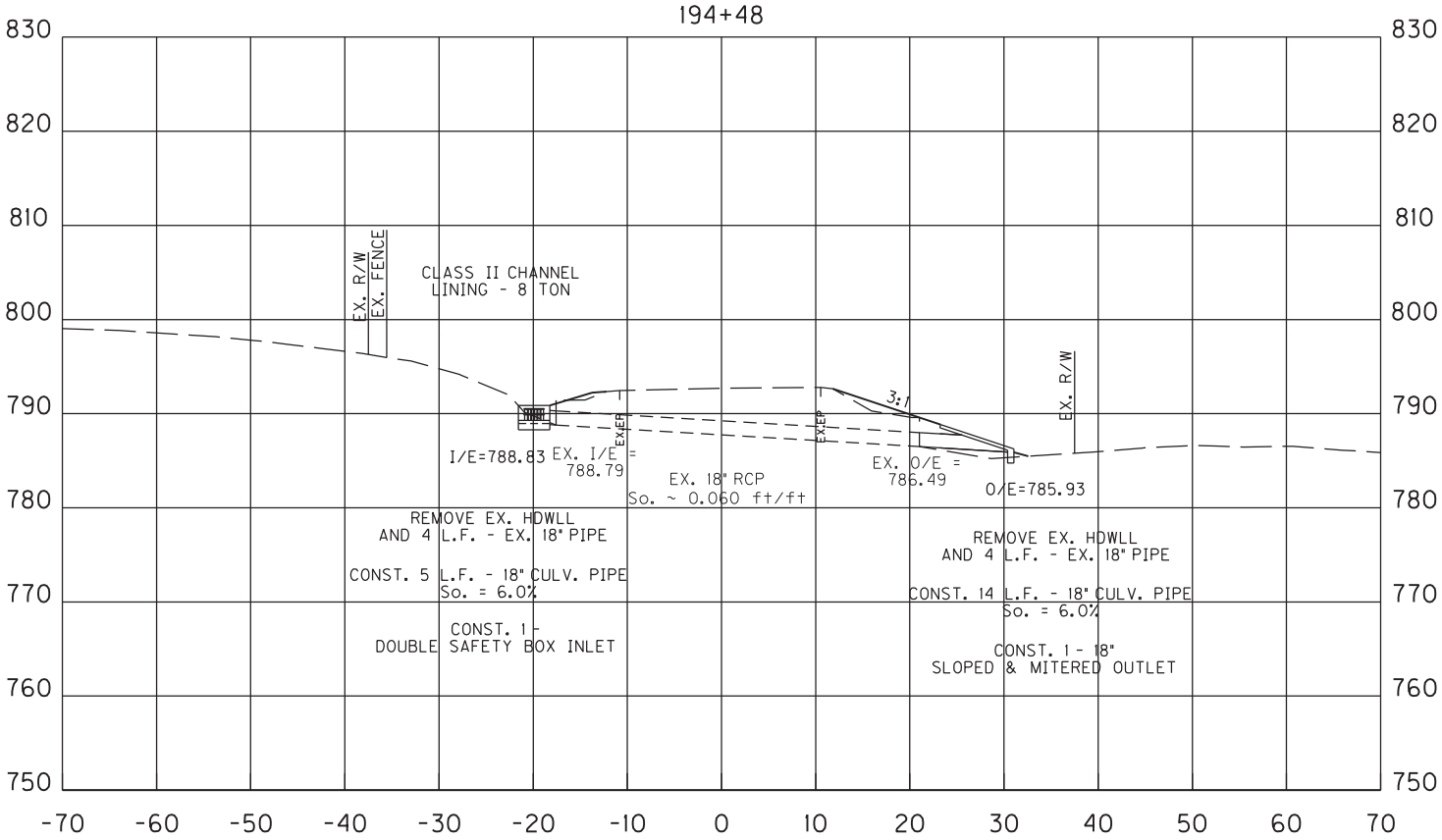
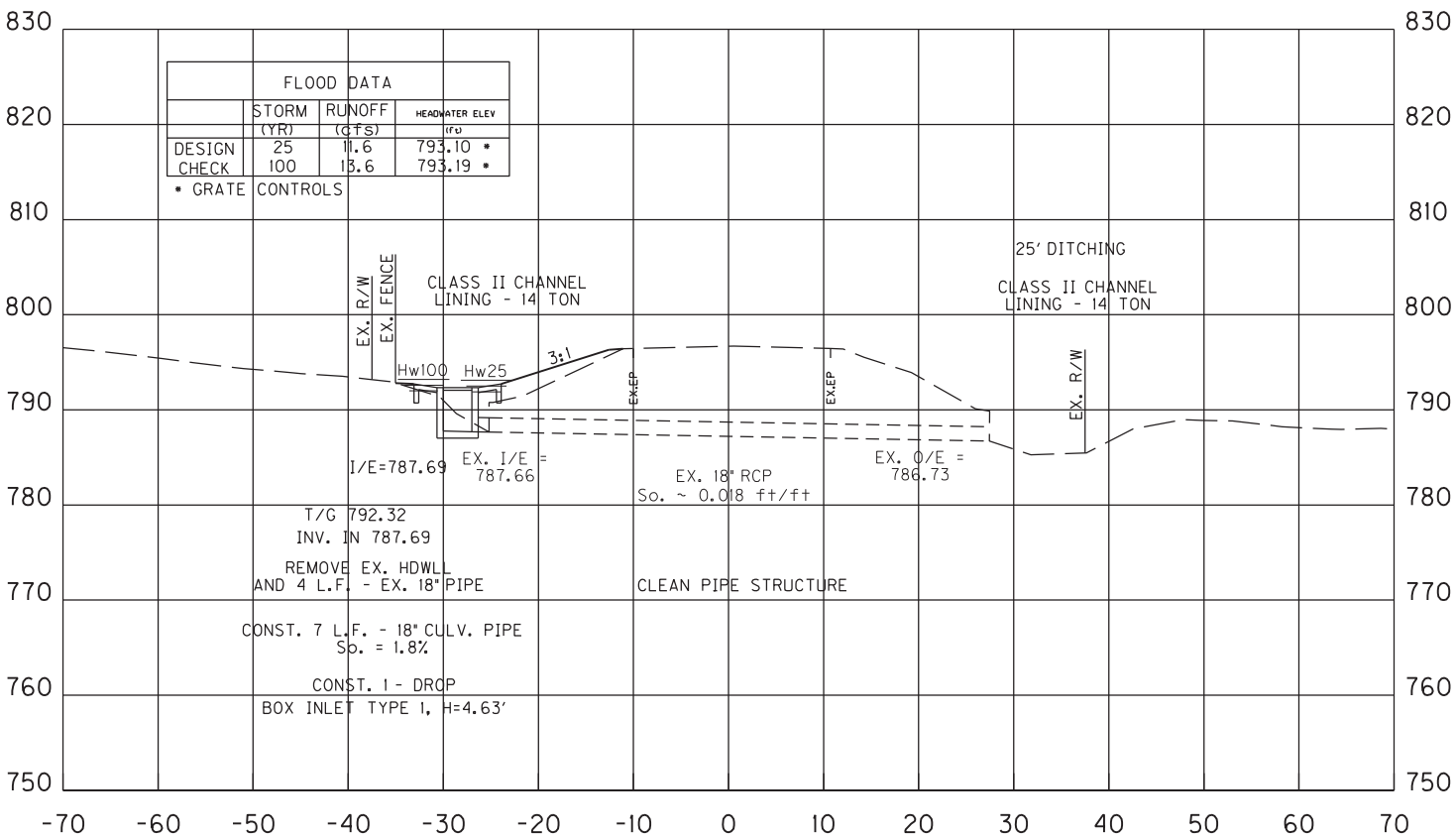
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 171+78 TO STA. 176+83
CROSS SECTIONS

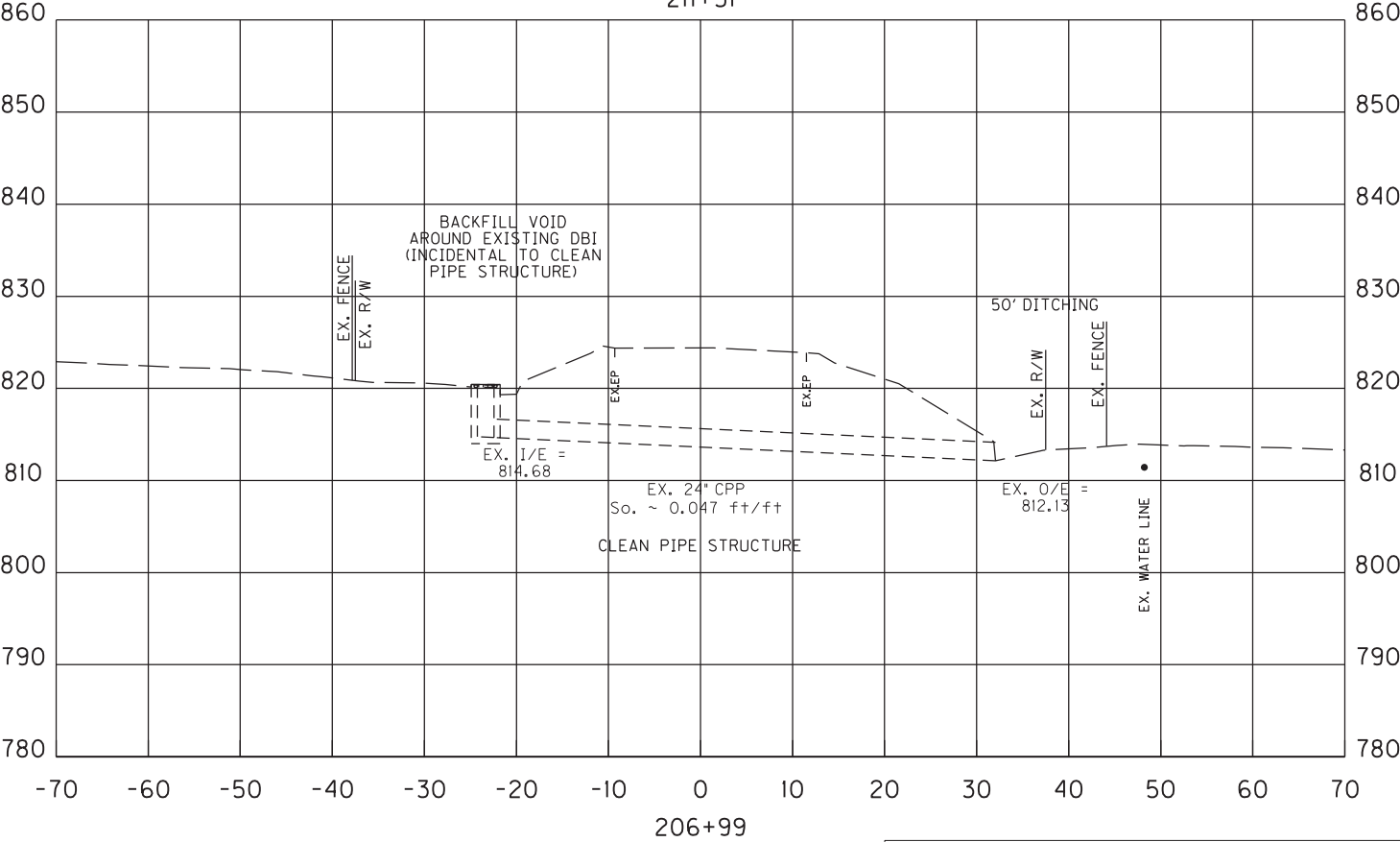
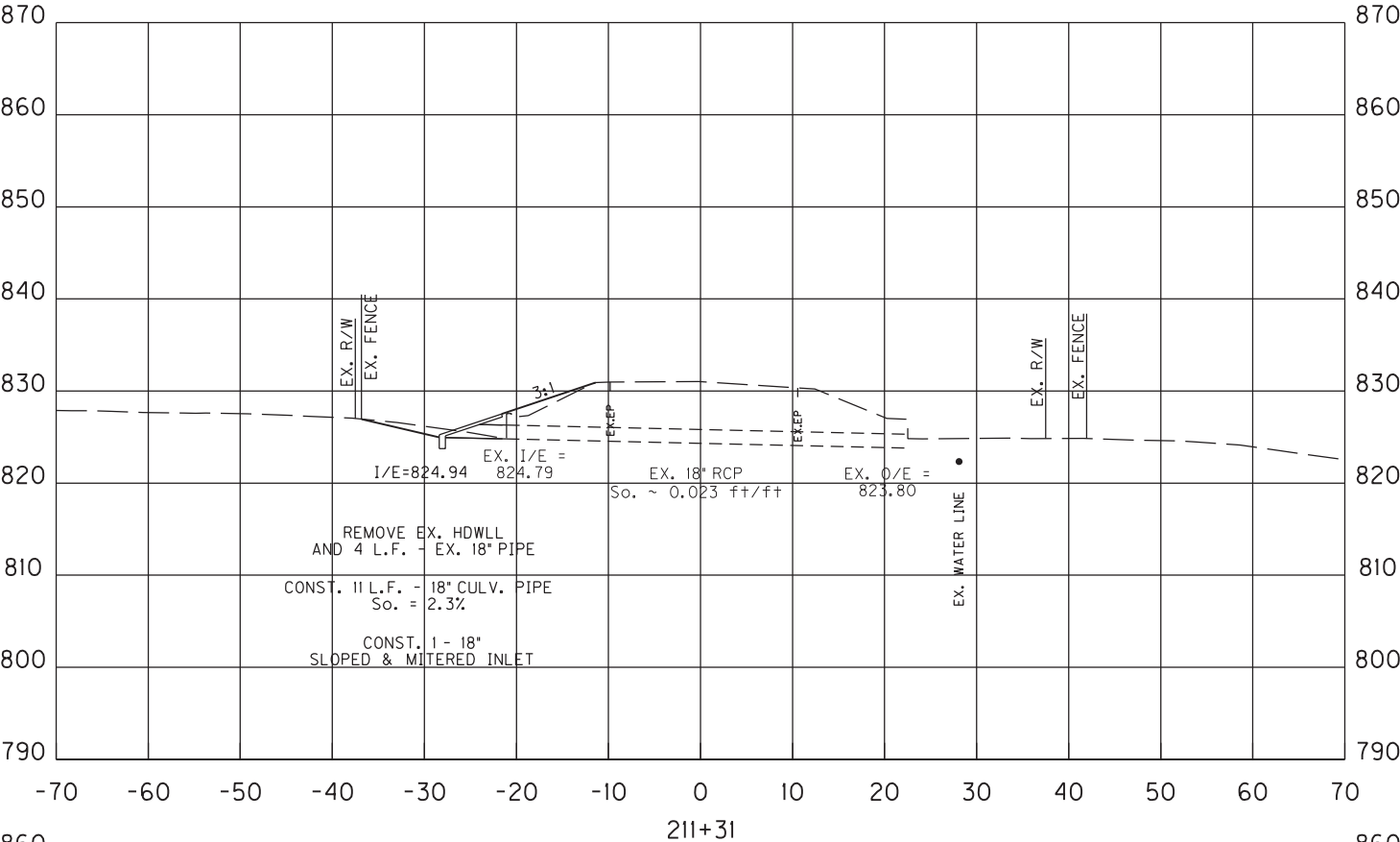
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 191+31 TO STA. 194+48
CROSS SECTIONS

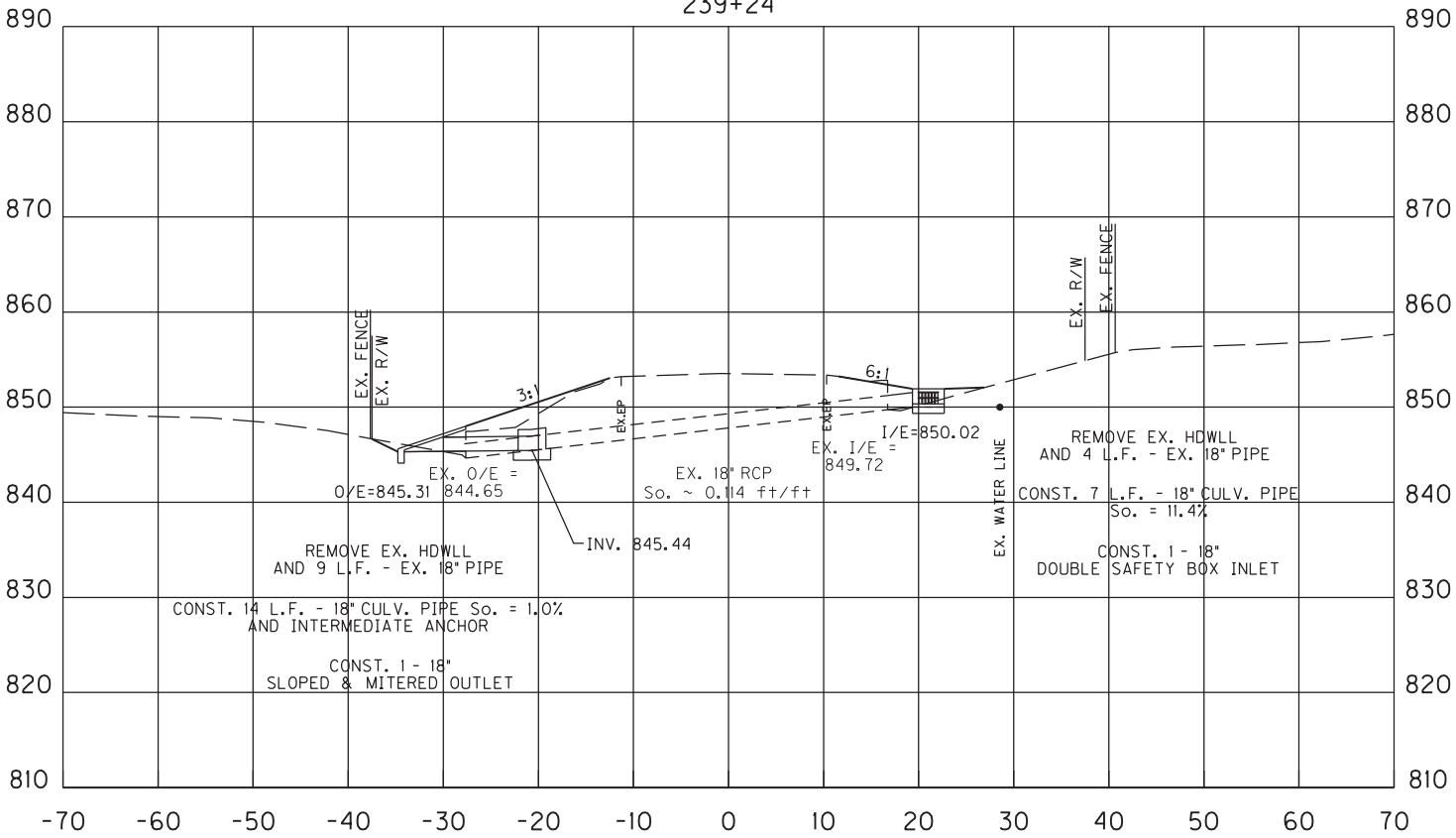
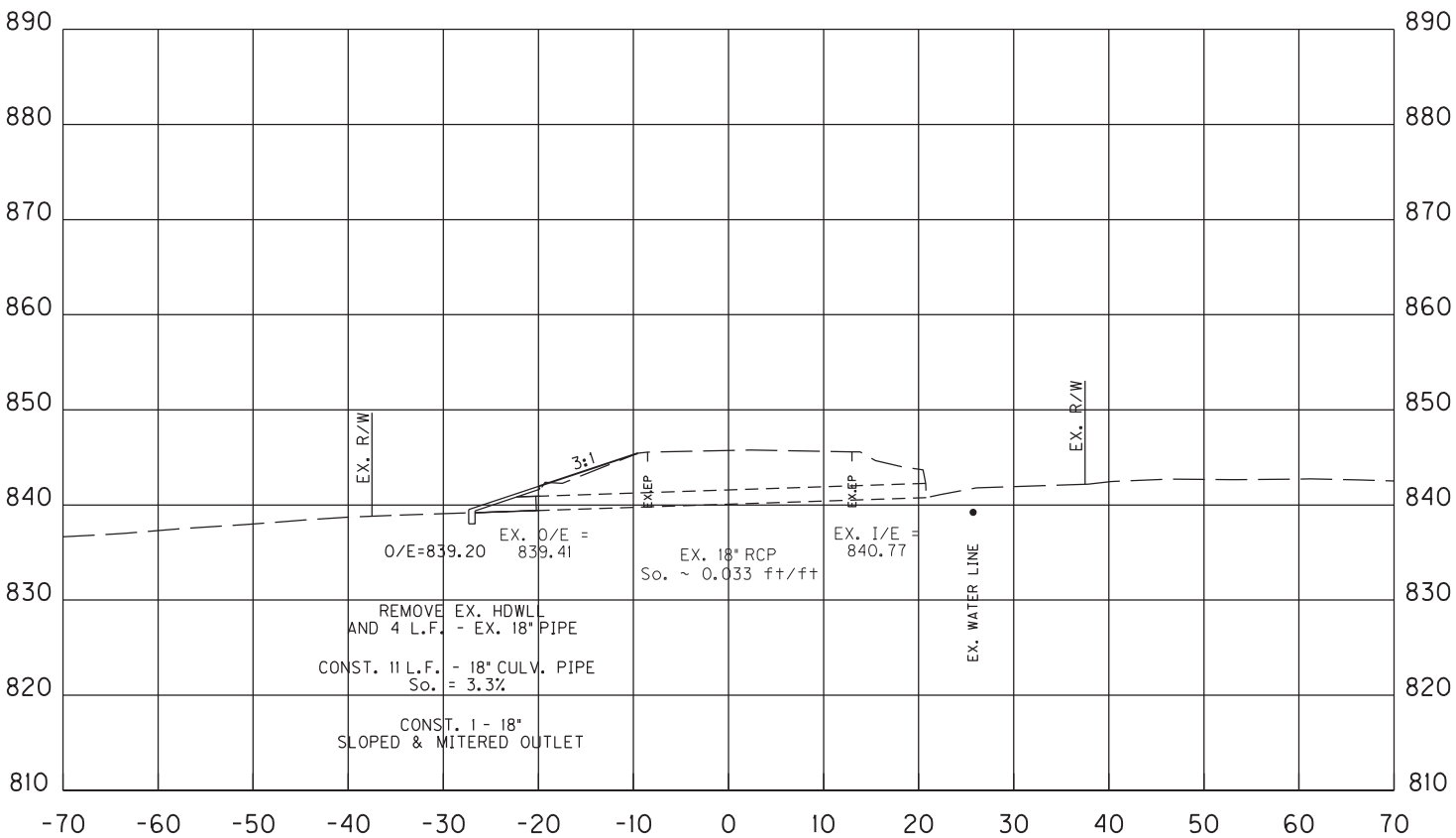
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 206+99 TO STA. 211+31
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00



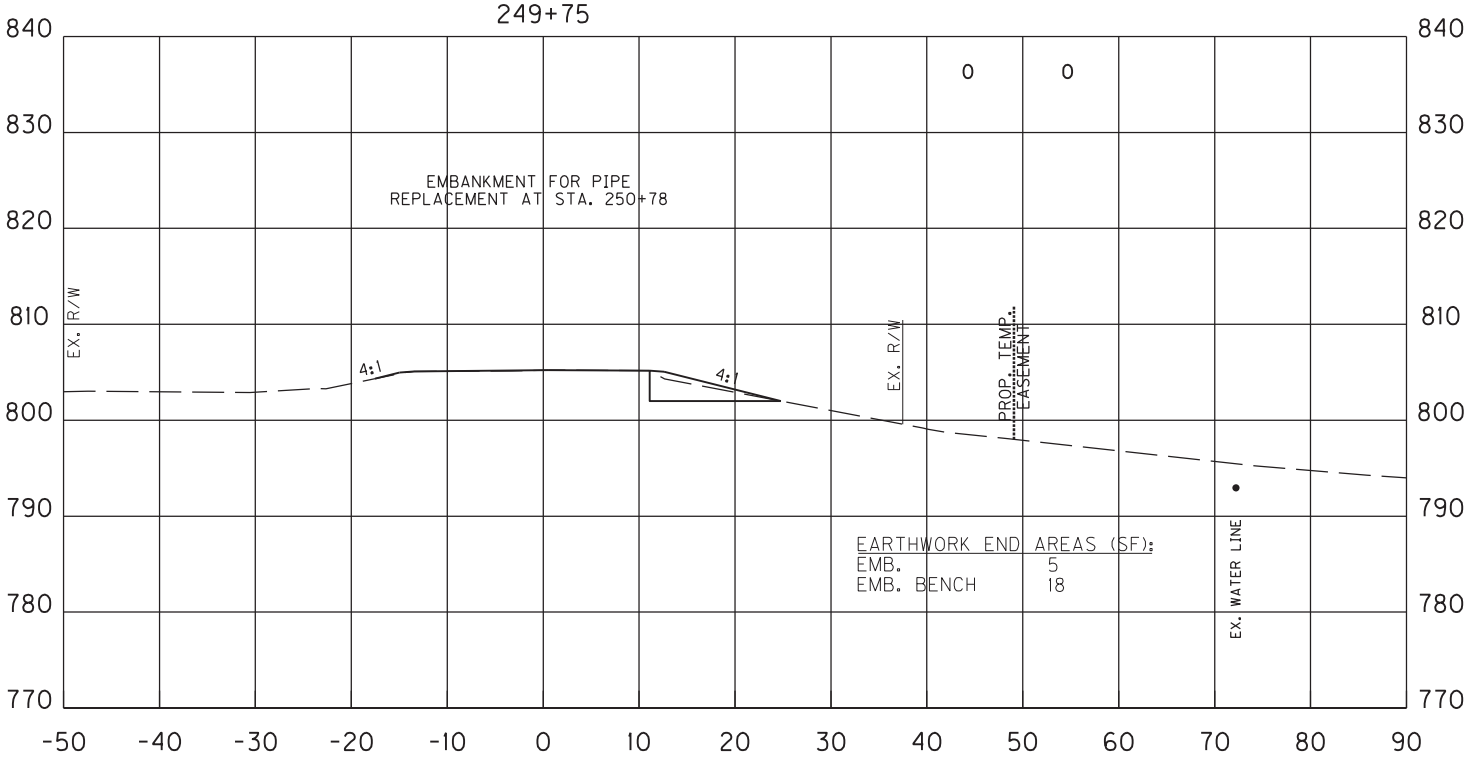
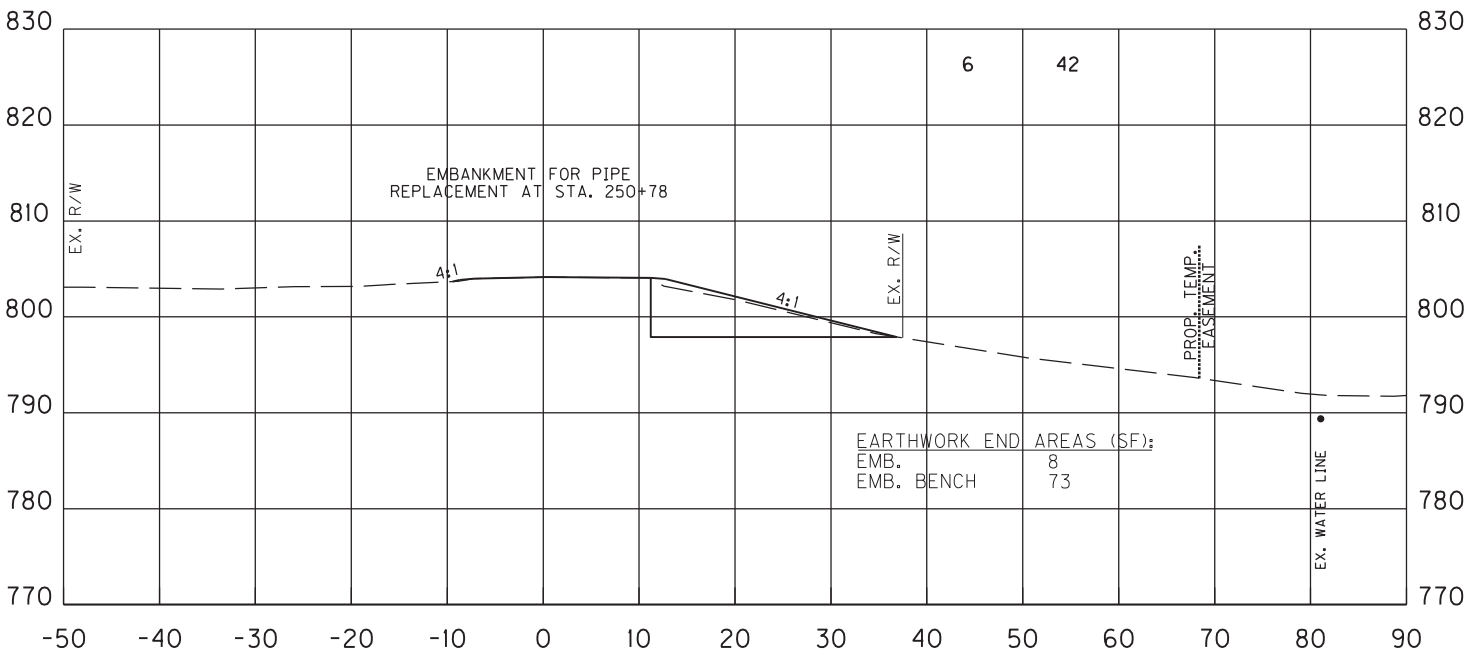
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 226+73 TO STA. 239+24
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

EMB.	EMB. BENCH
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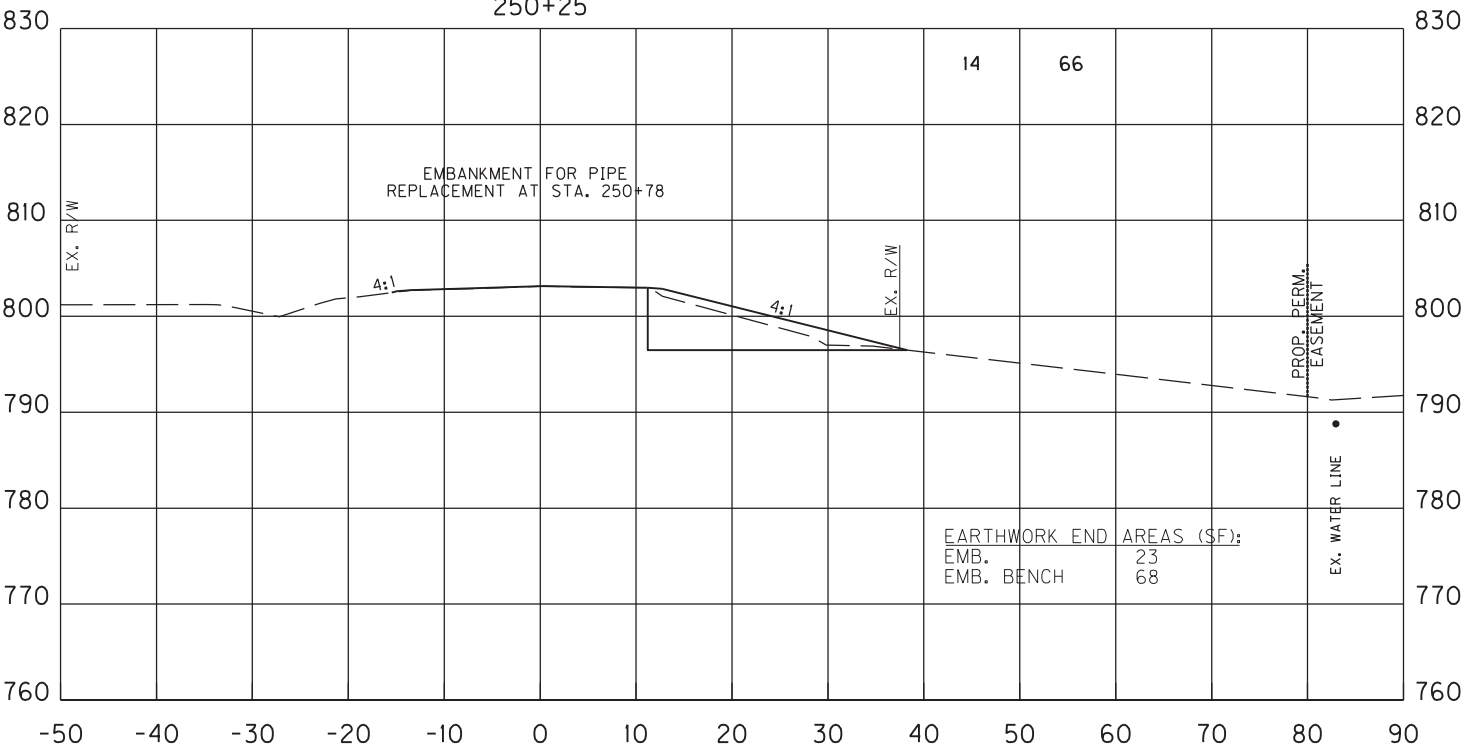
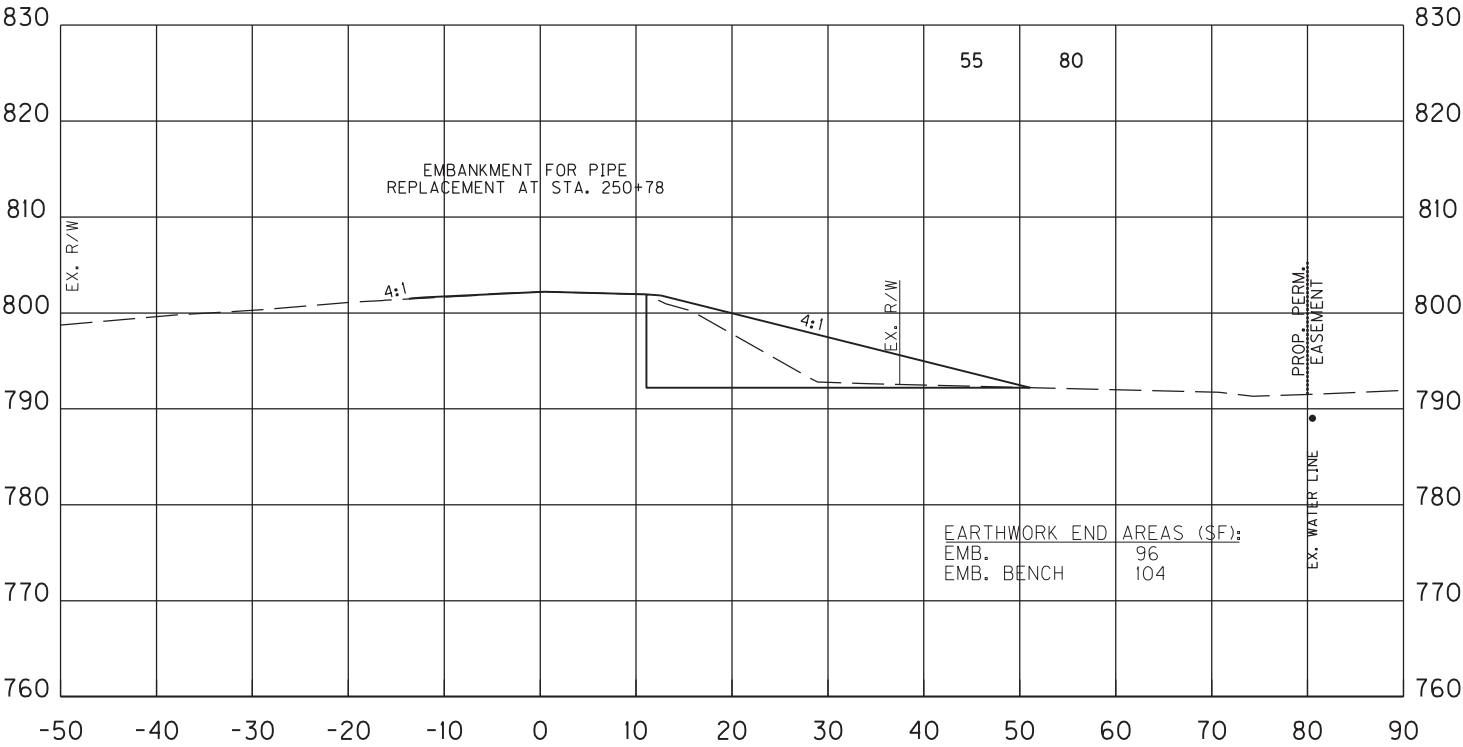
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 249+50 TO STA. 249+75
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

EMB. EMB.
EMB. BENCH



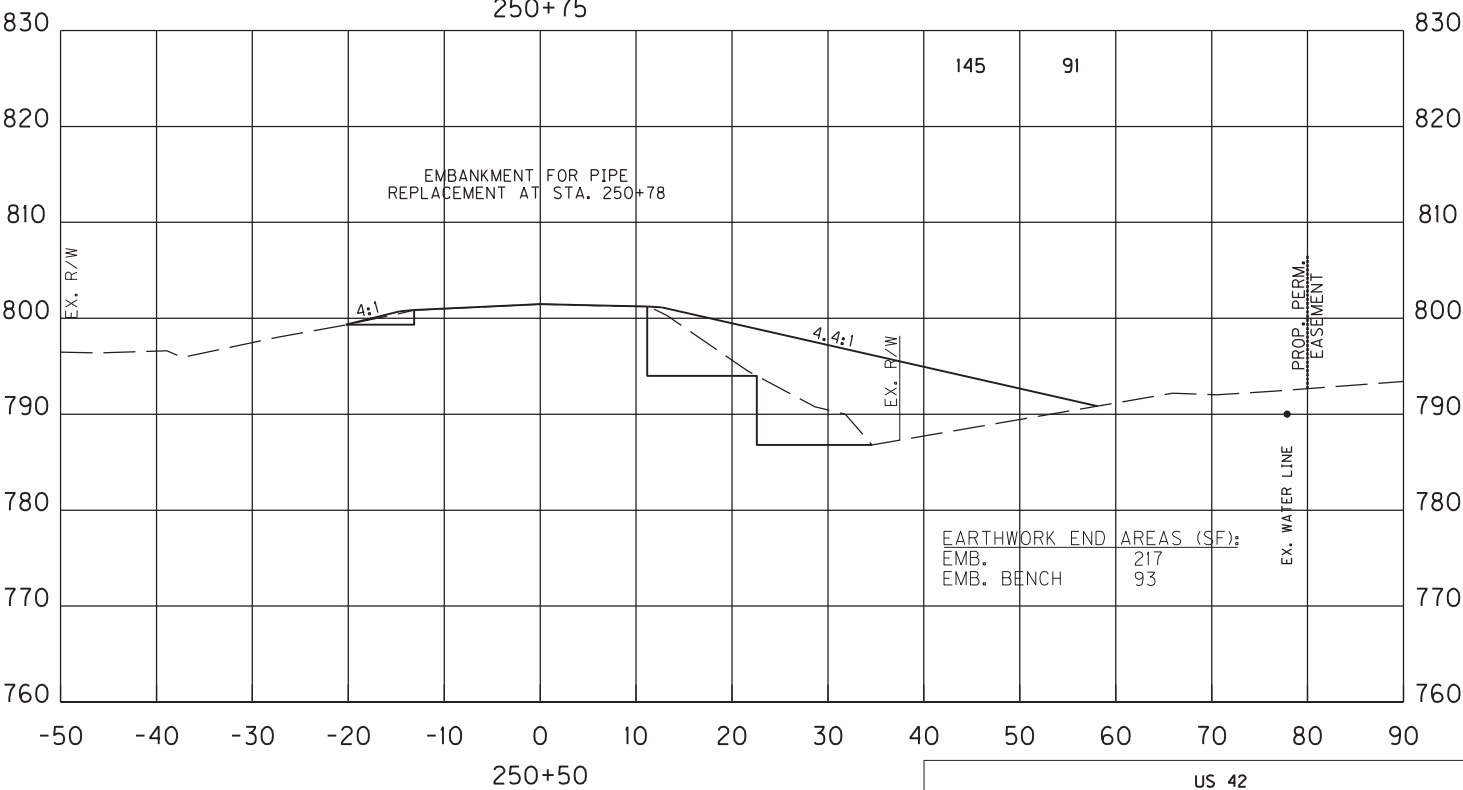
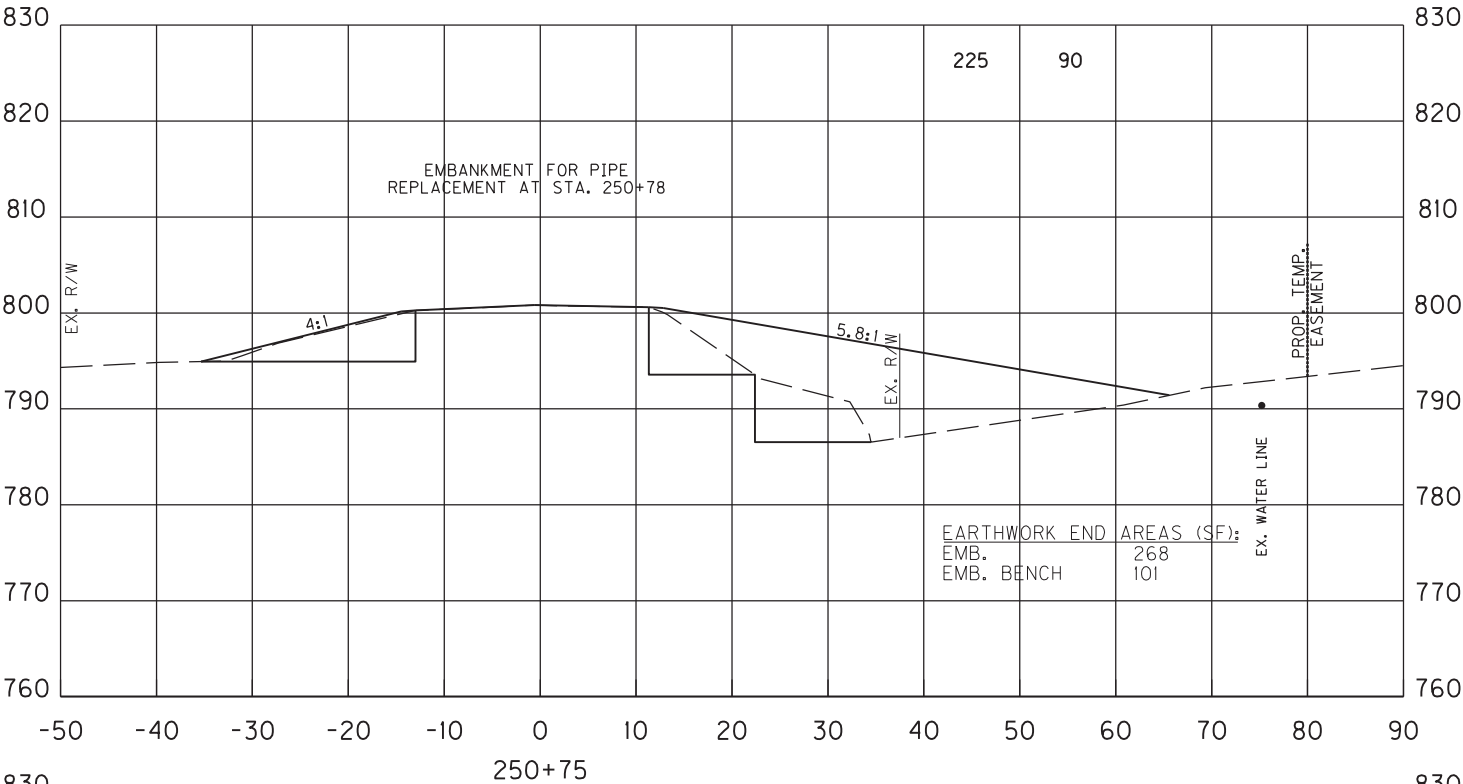
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 250+00 TO STA. 250+25
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

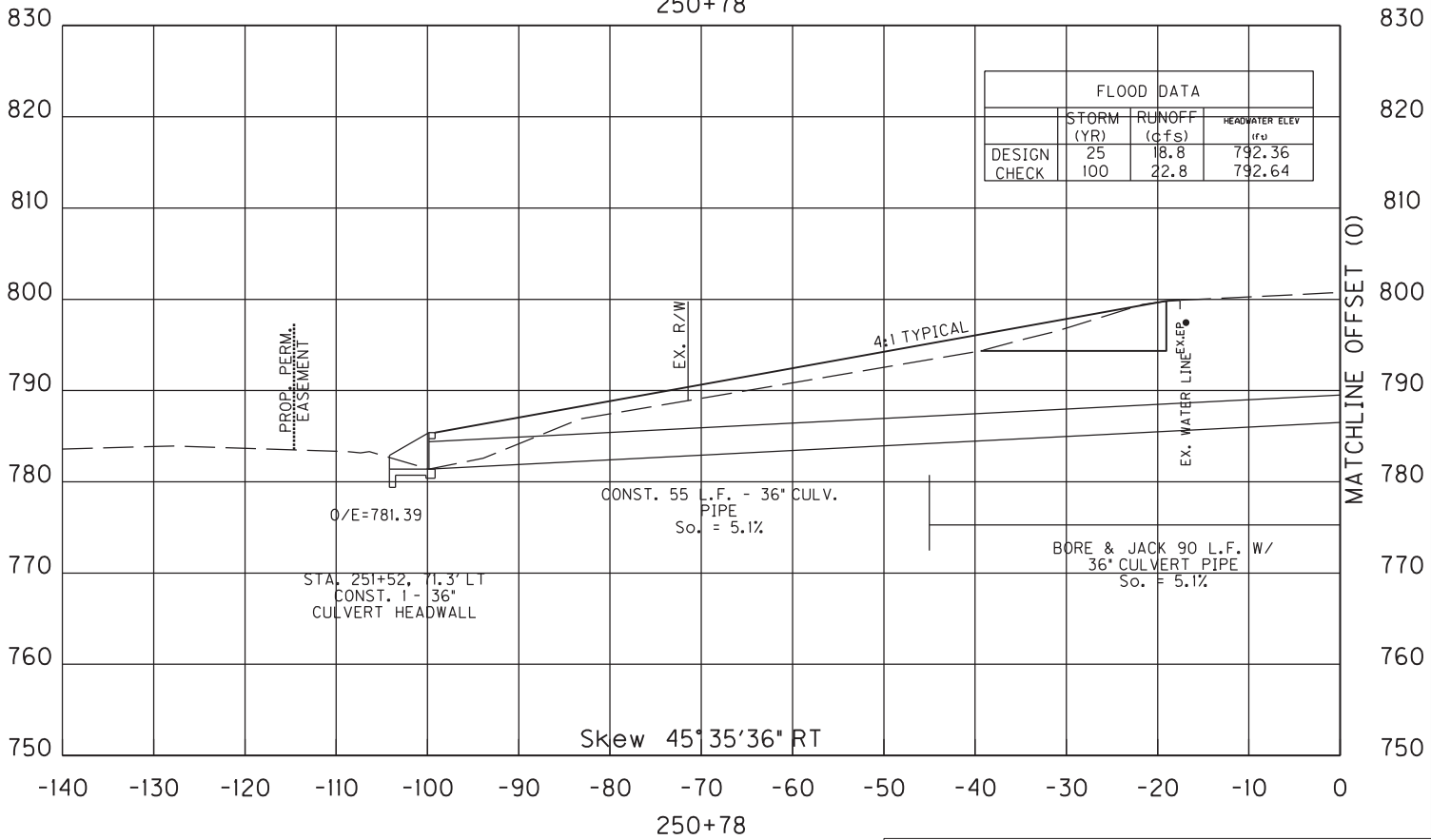
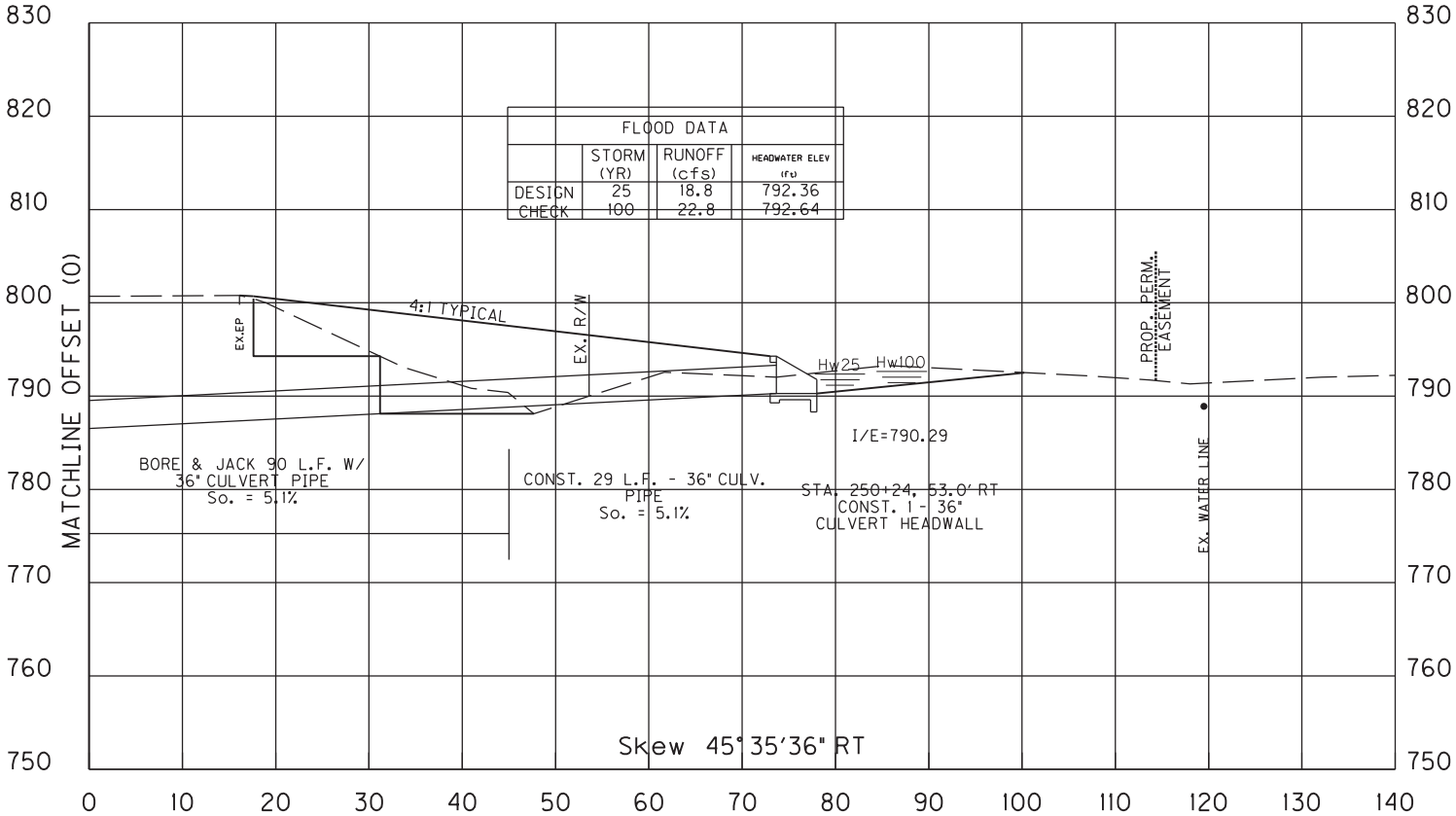
EMB. EMB.
EMB. BENCH



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 250+50 TO STA. 250+75
CROSS SECTIONS

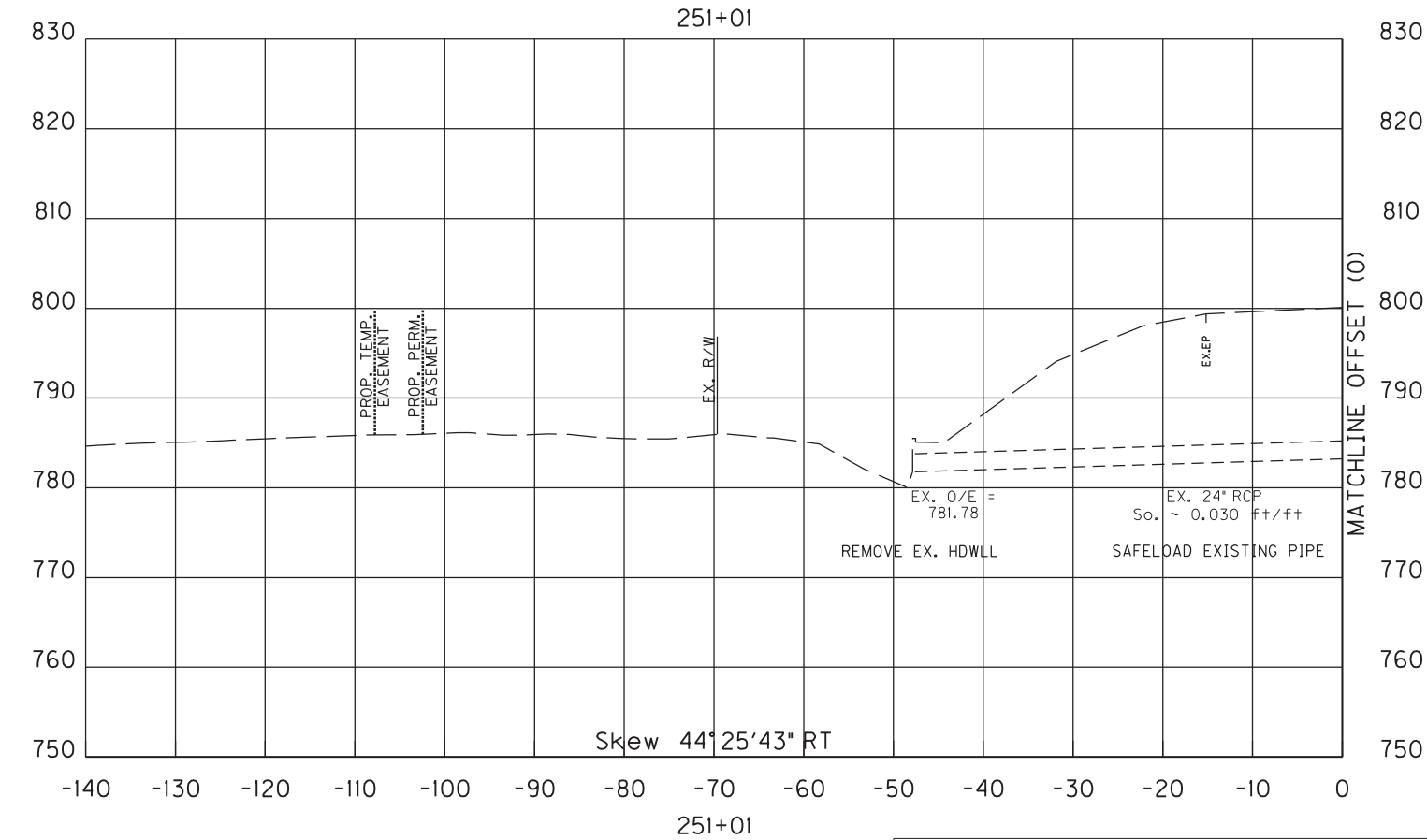
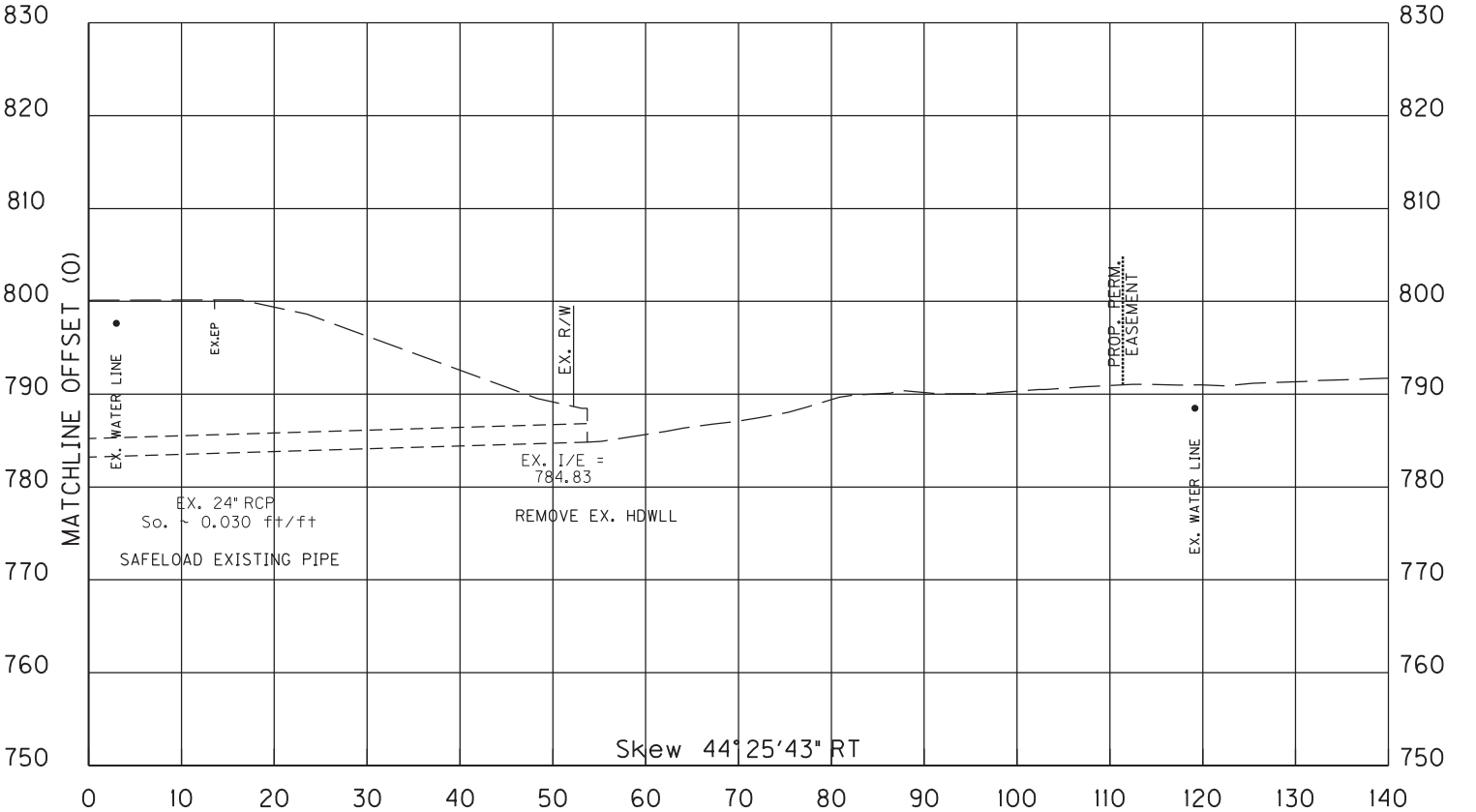
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 250+78
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00



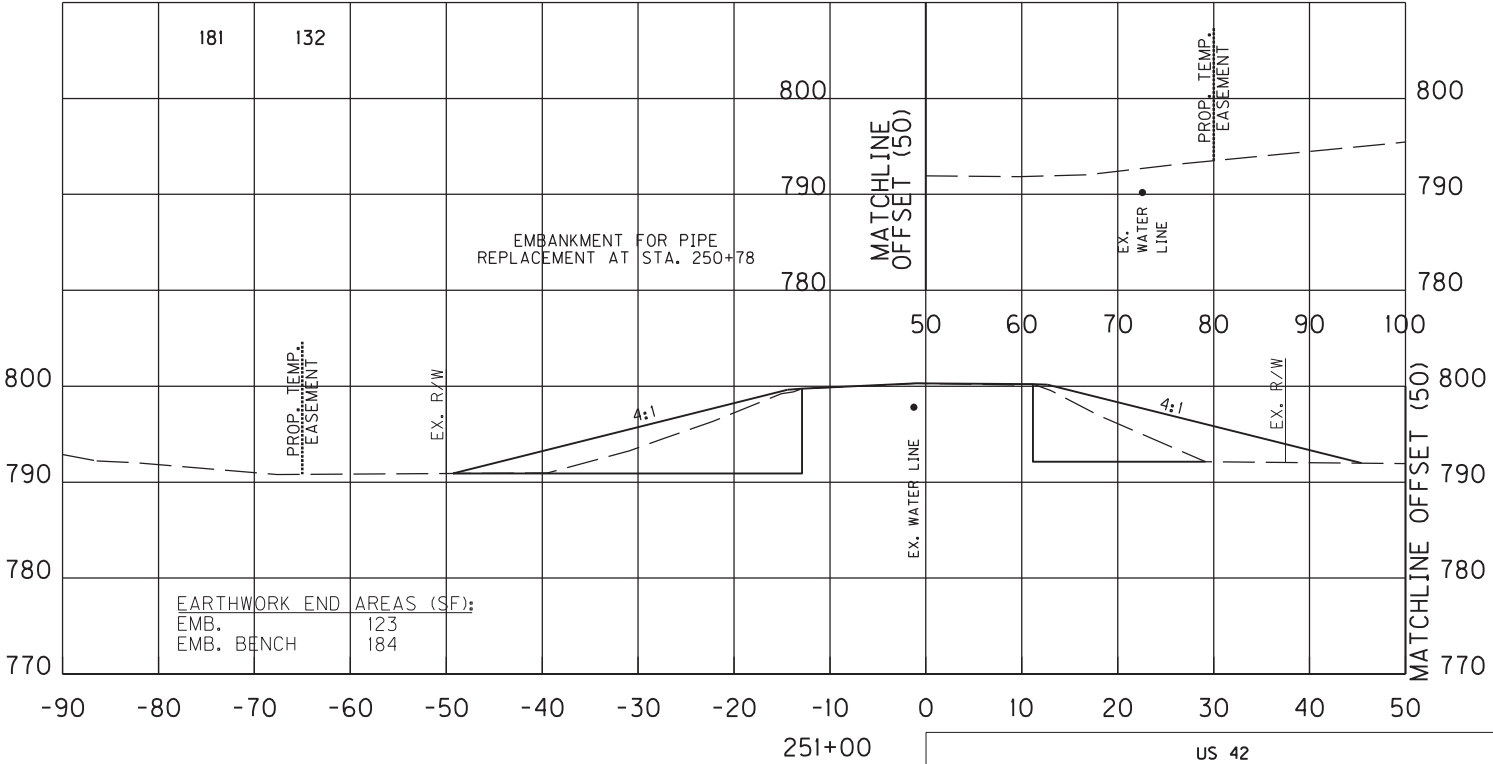
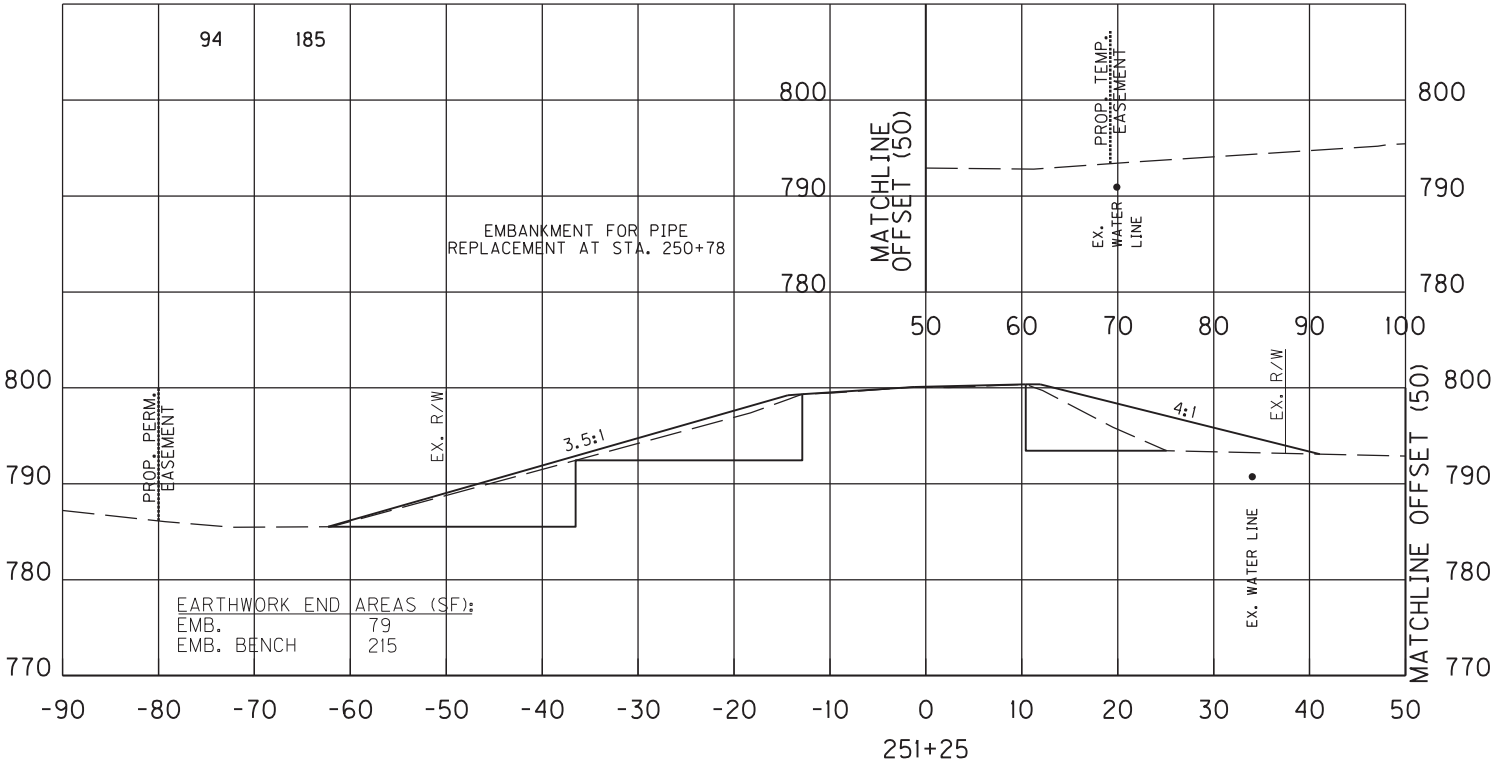
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 251+01
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

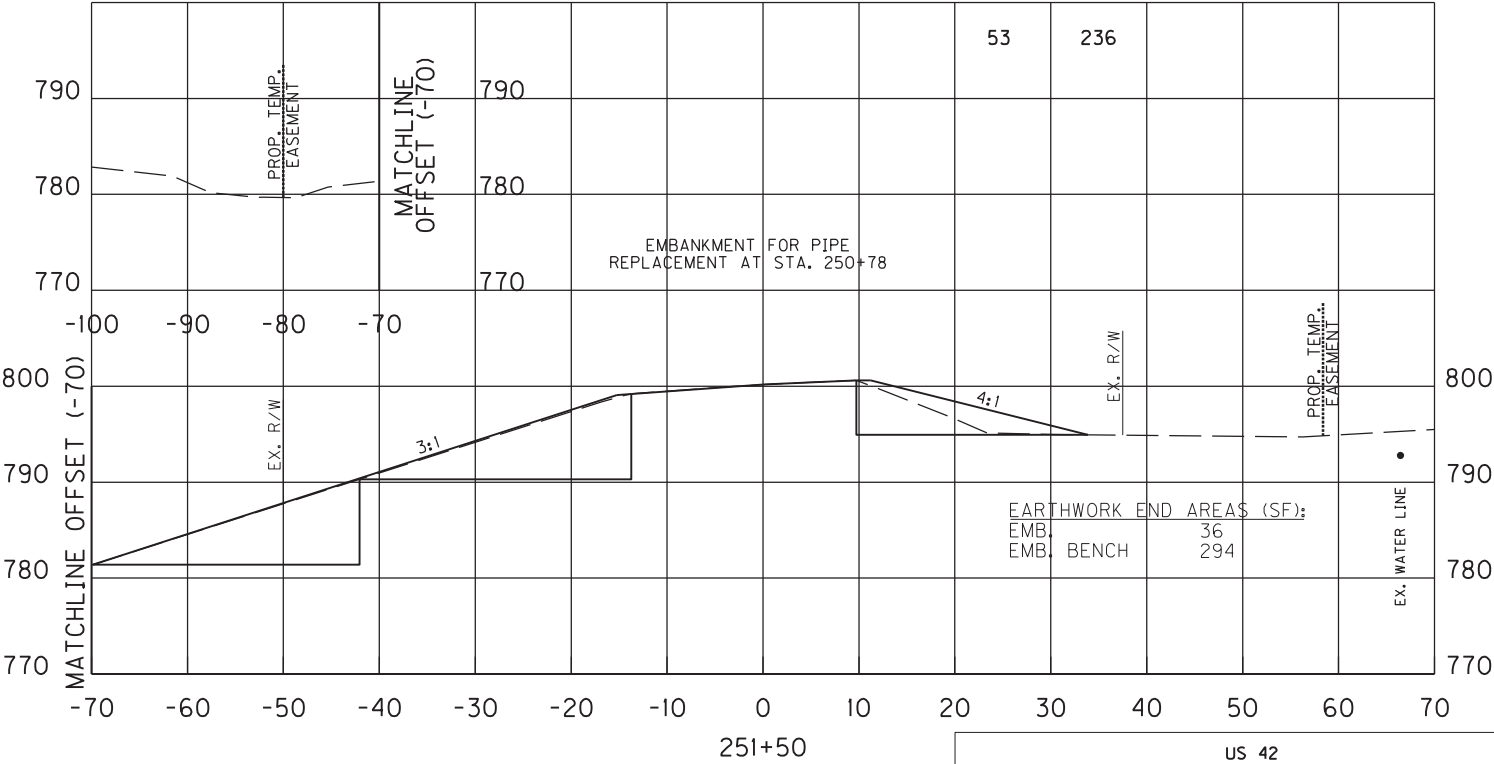
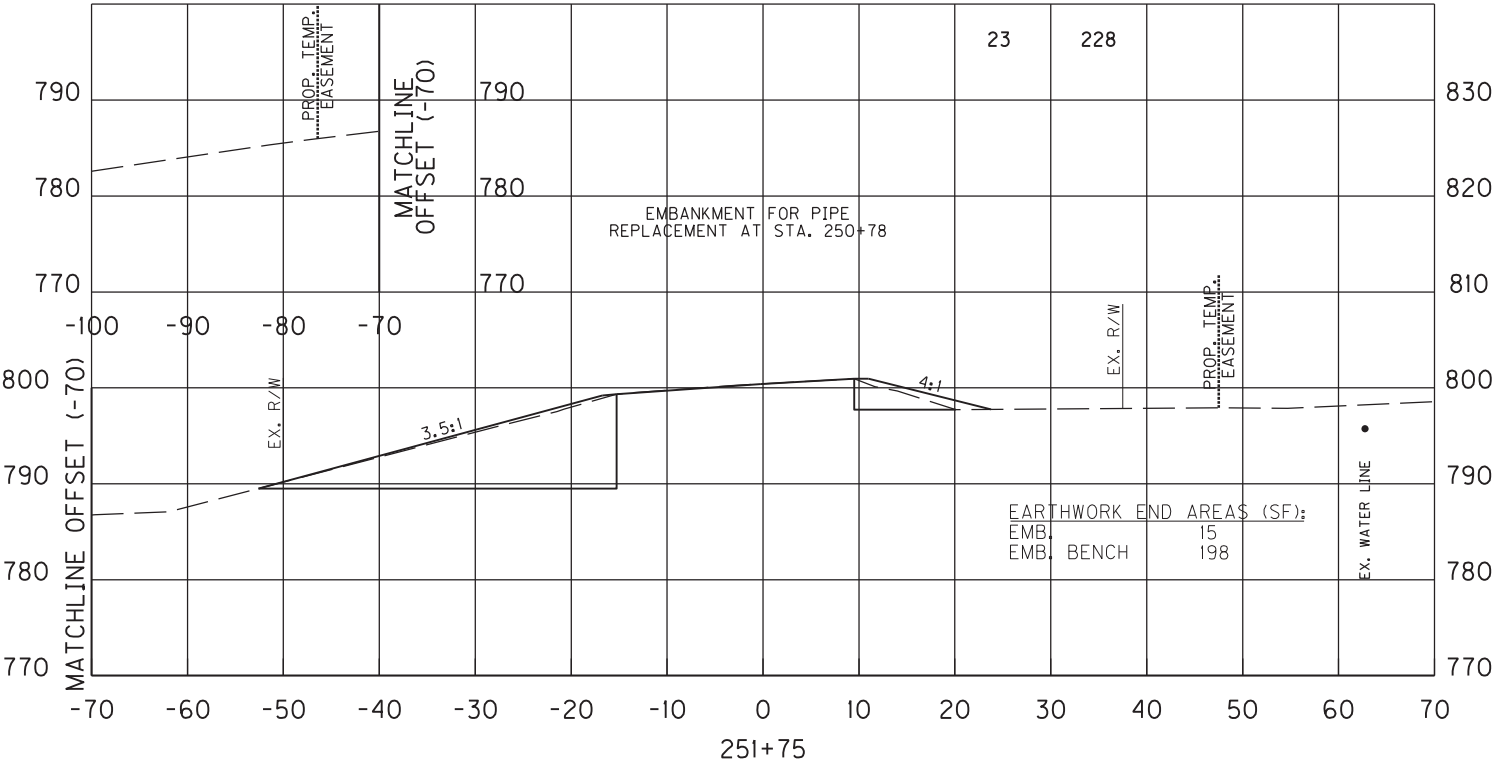
EMB. EMB.
 BENCH



EARTHWORK VOLUMES (CY):

EMB. EMB.
BENCH BENCH

COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

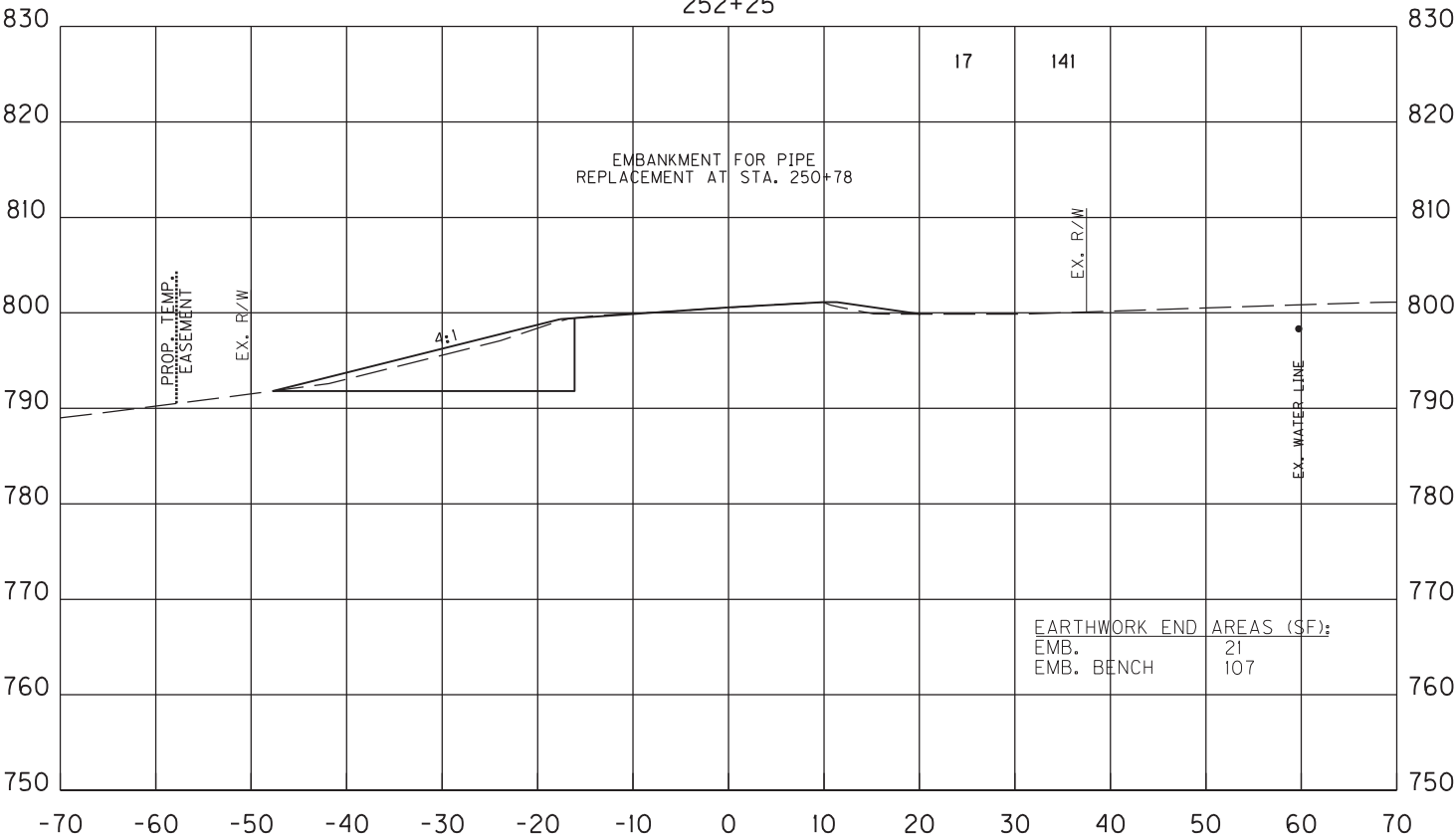
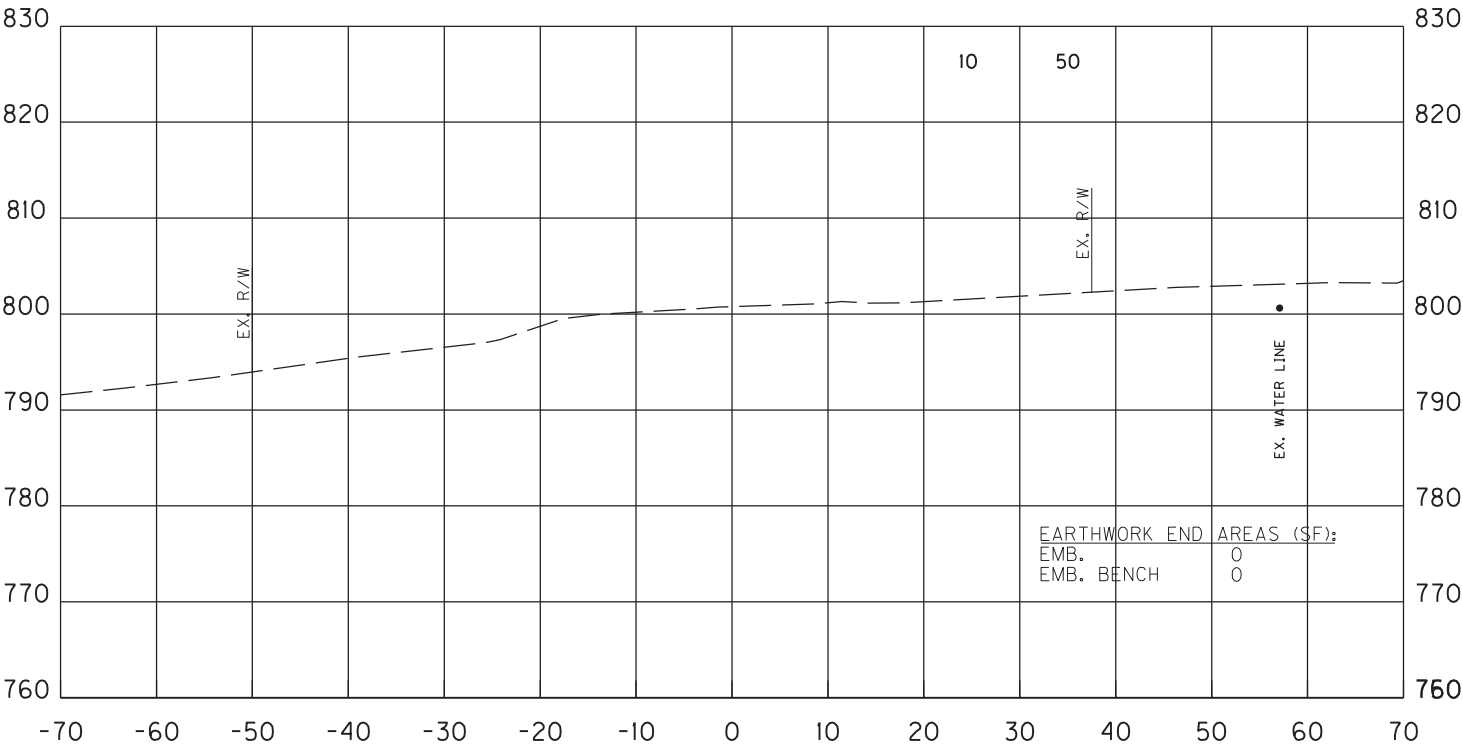
US 42
STA. 251+50 TO STA. 251+75
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

EMB. EMB.
 BENCH

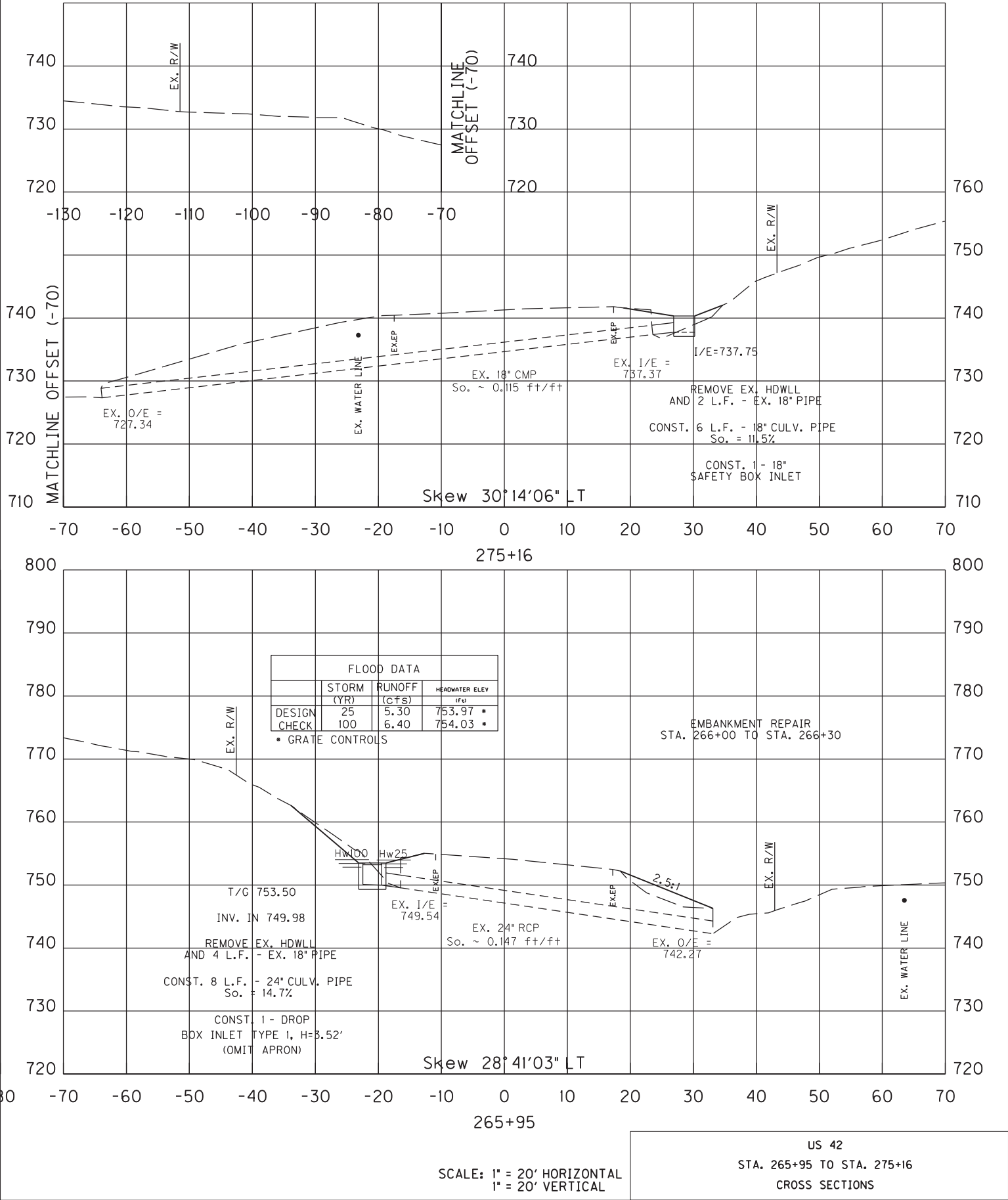
IMPROVEMENT TOTALS: 823 1341



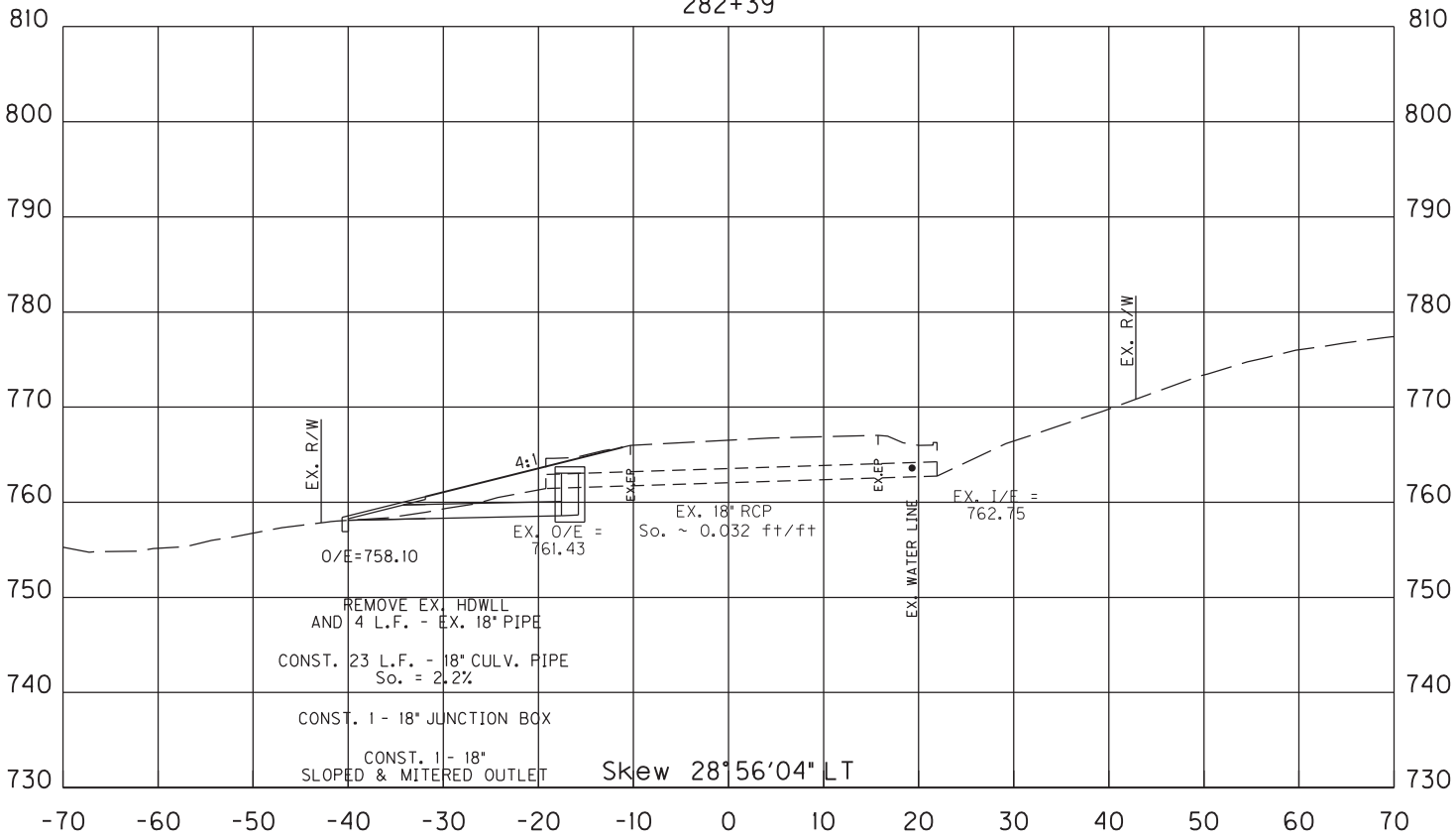
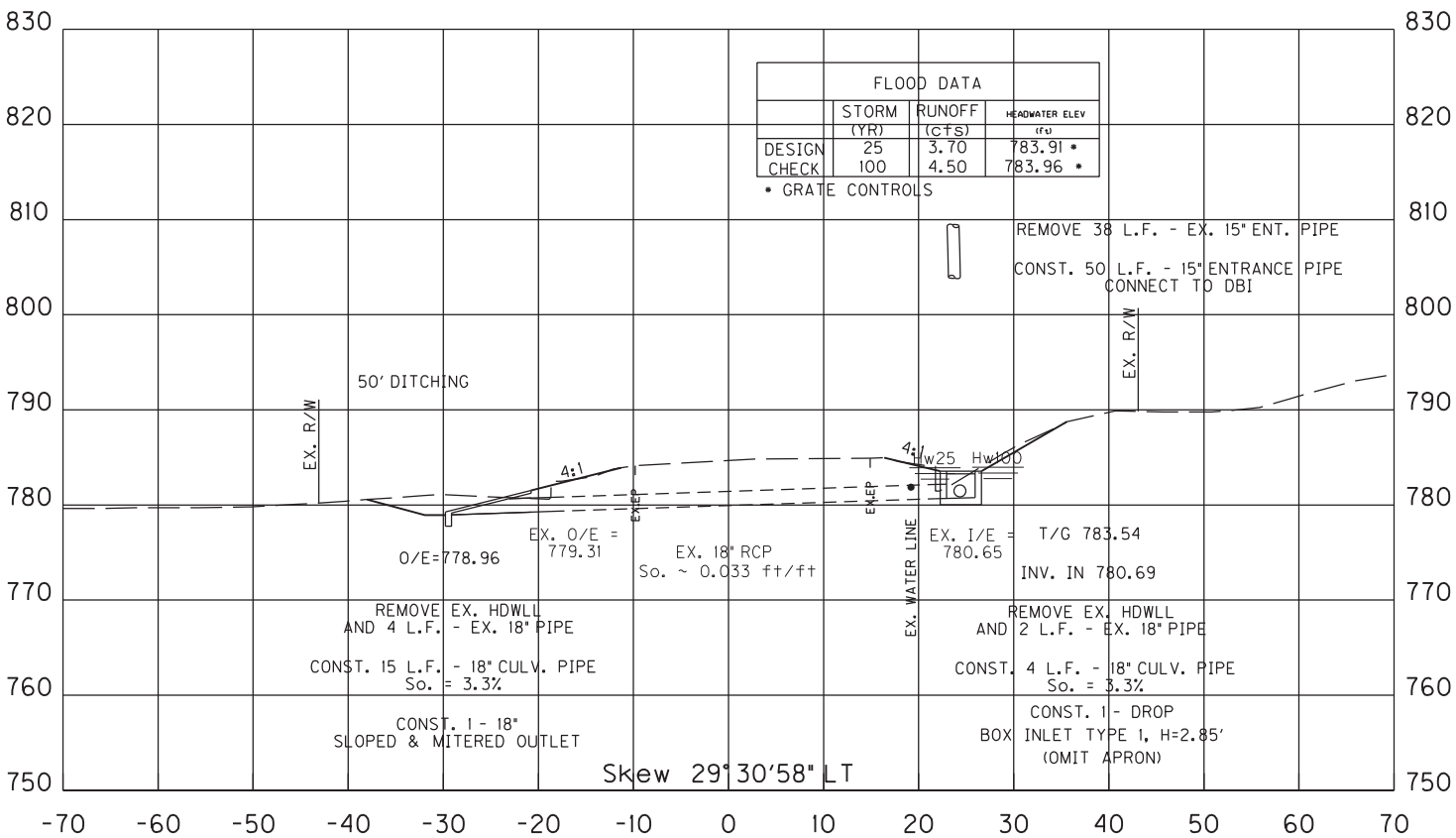
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 252+00 TO STA. 252+25
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00



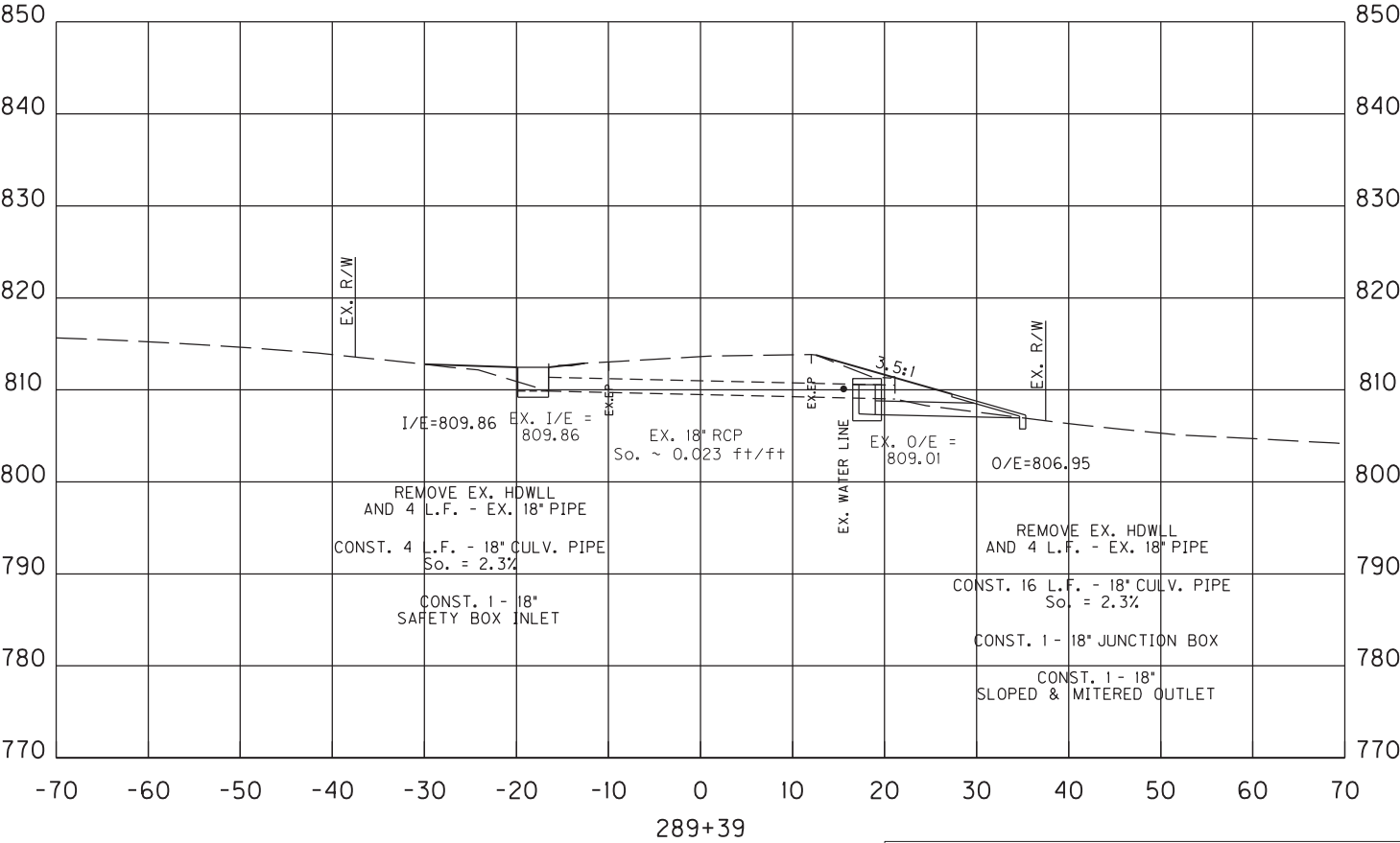
COUNTY OF	ITEM NO.
BOONE	6-9010.00



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

US 42
STA. 279+39 TO STA. 282+39
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

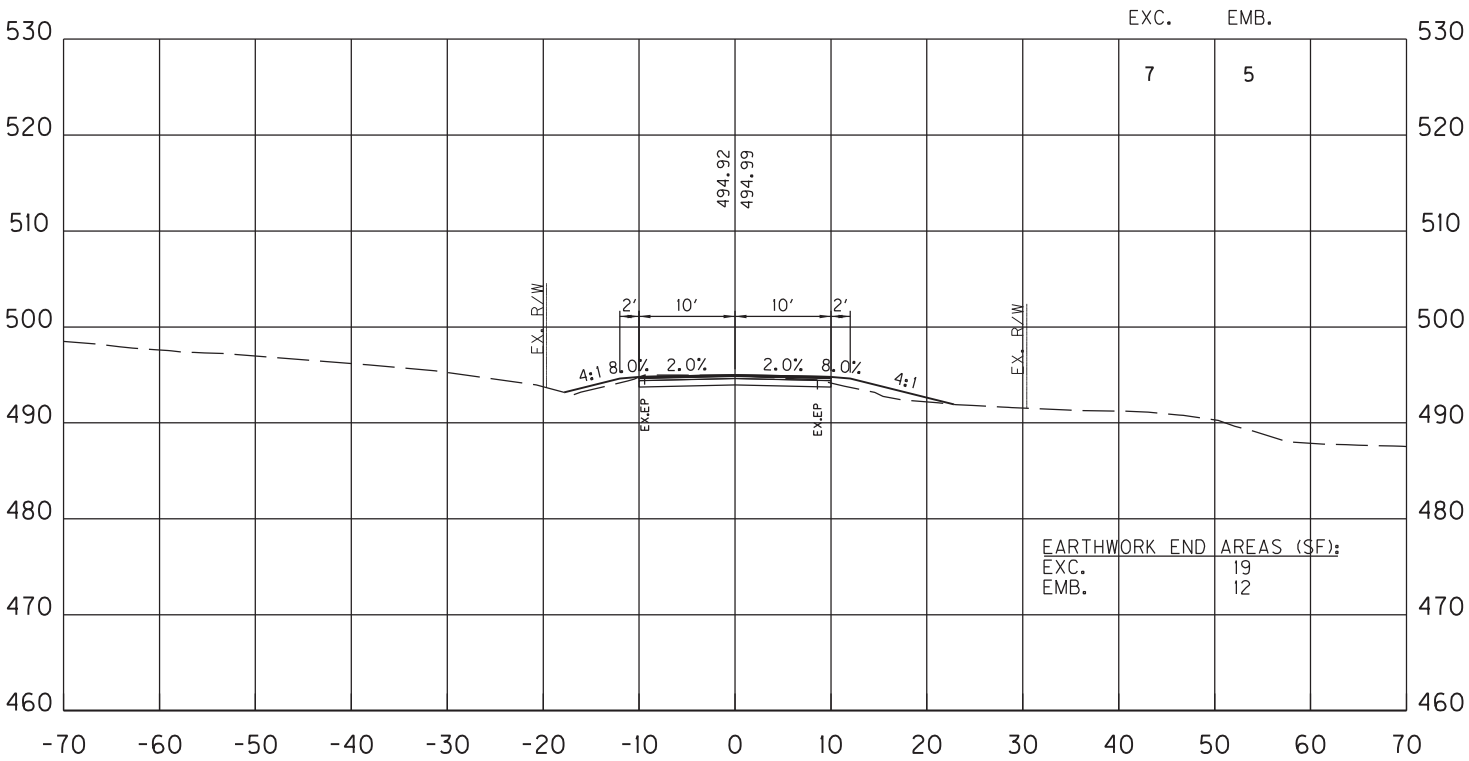


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

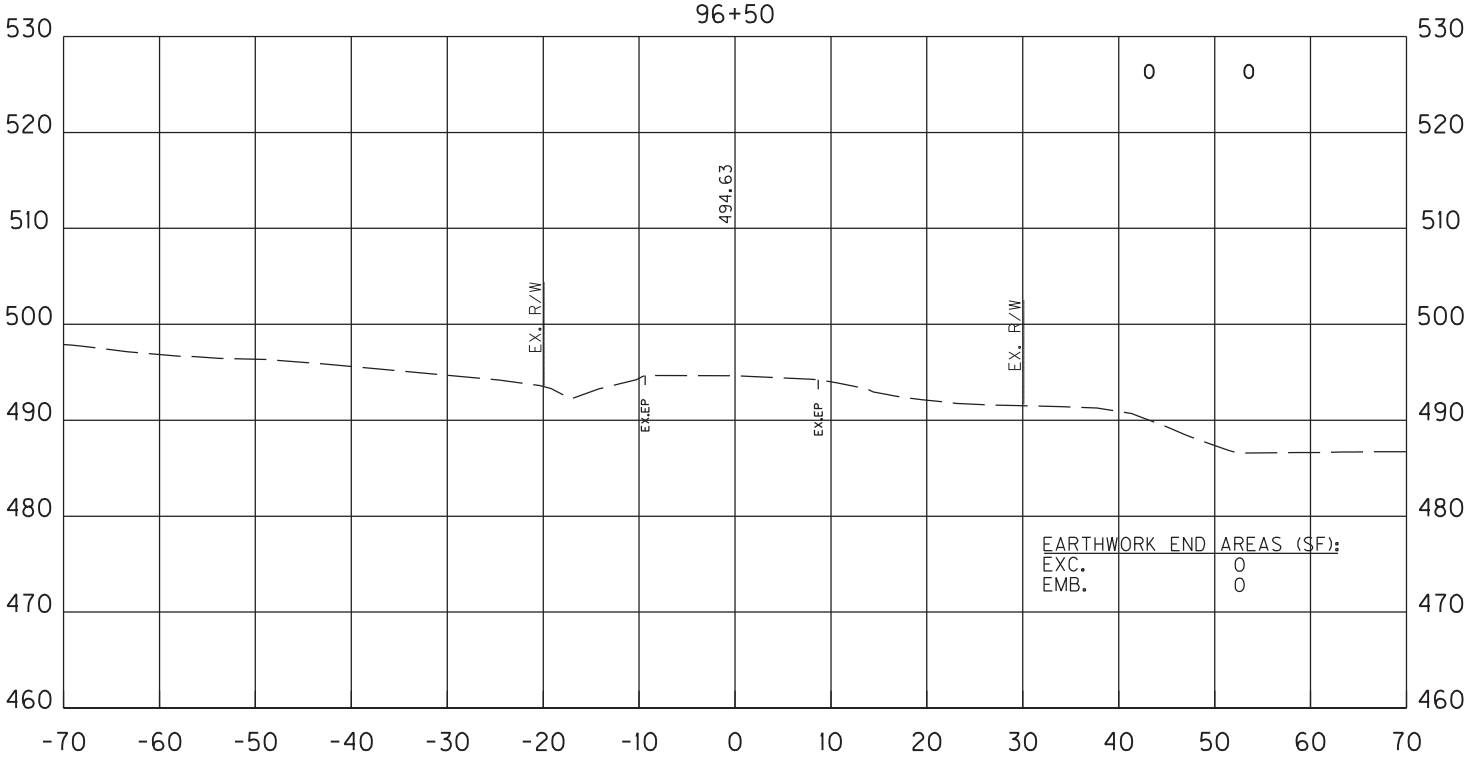
US 42
STA. 289+39
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):



EARTHWORK END AREAS (SF):
EXC. 19
EMB. 12



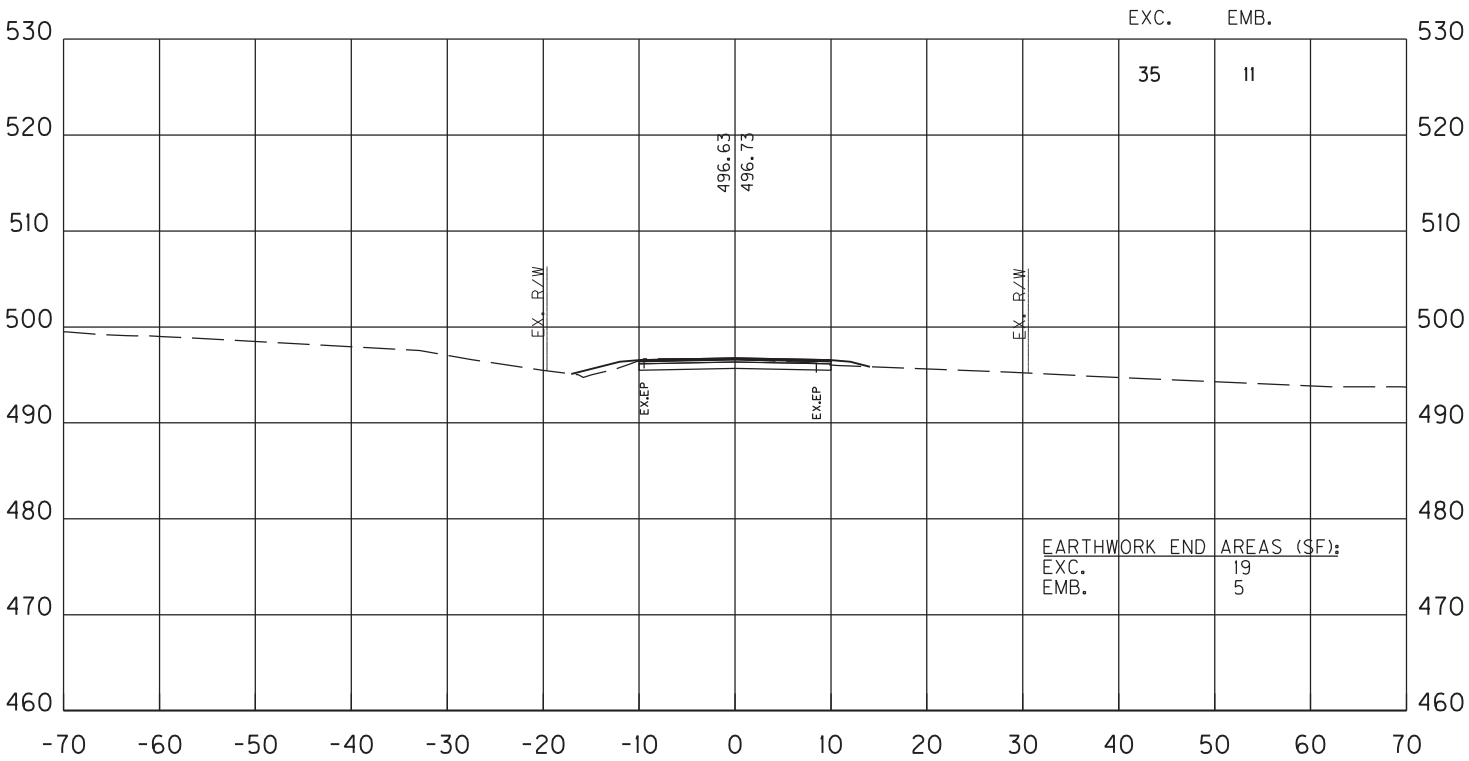
EARTHWORK END AREAS (SF):
EXC. 0
EMB. 0

SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

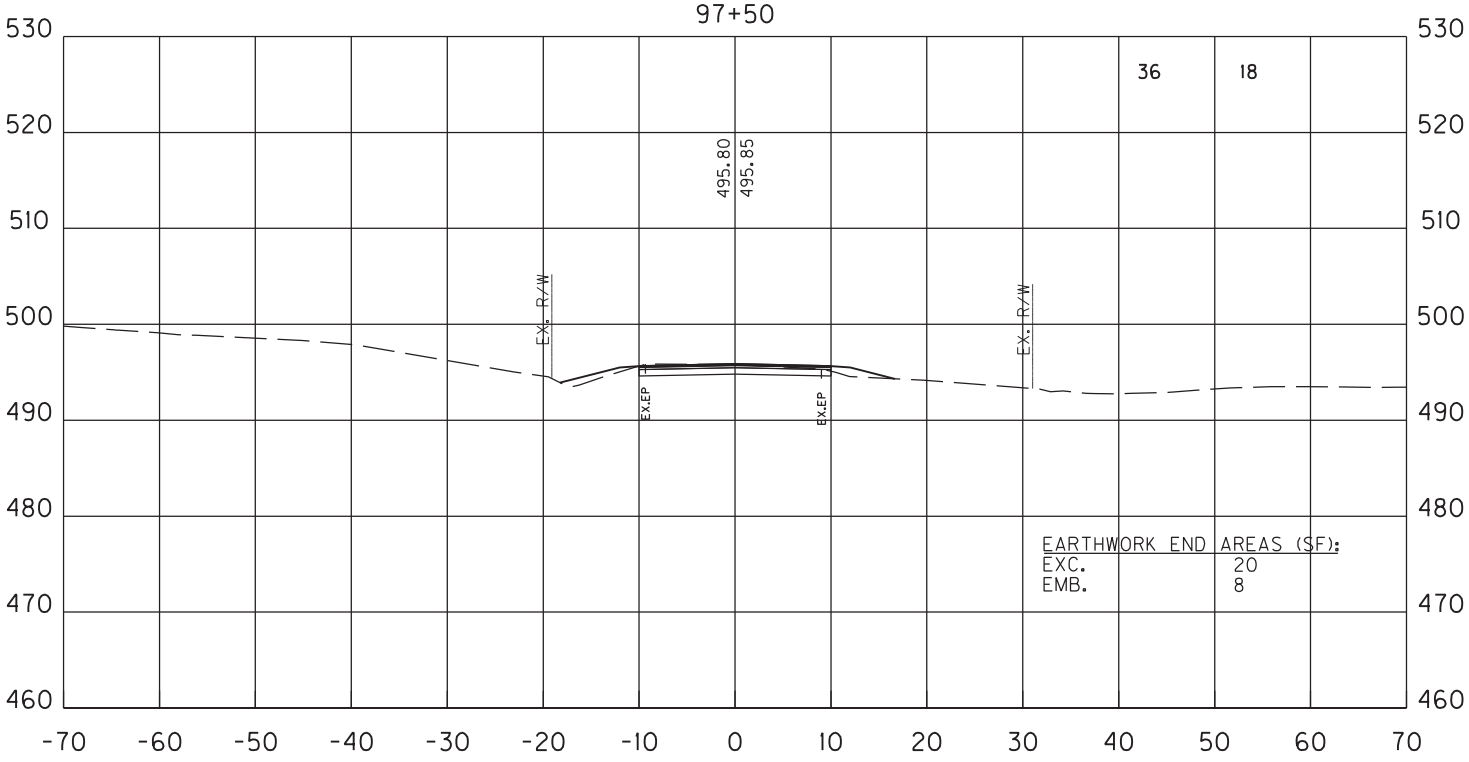
SOUTH FORK ROAD REALIGNMENT
STA. 96+29 TO STA. 96+50
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):



EARTHWORK END AREAS (SF):
EXC. 19
EMB. 5



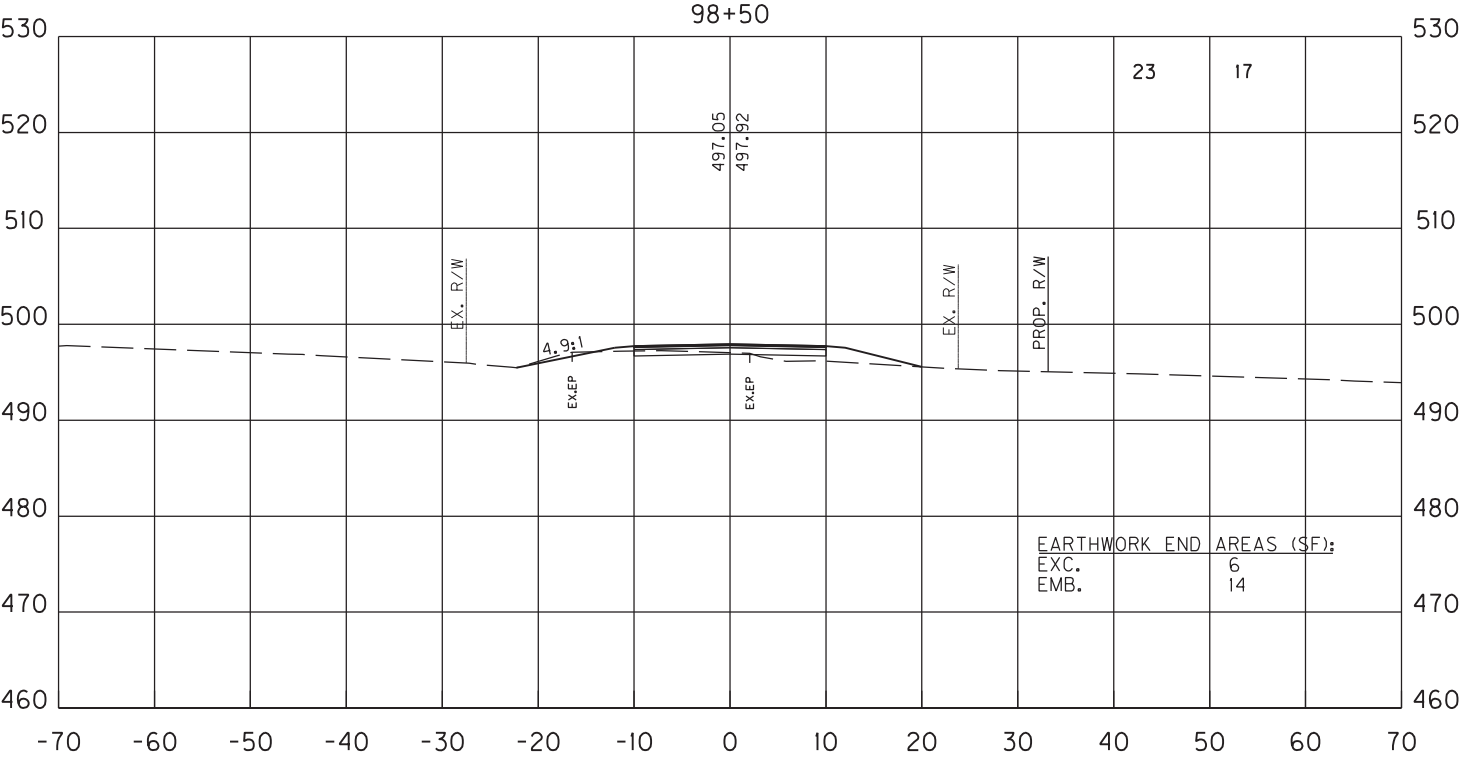
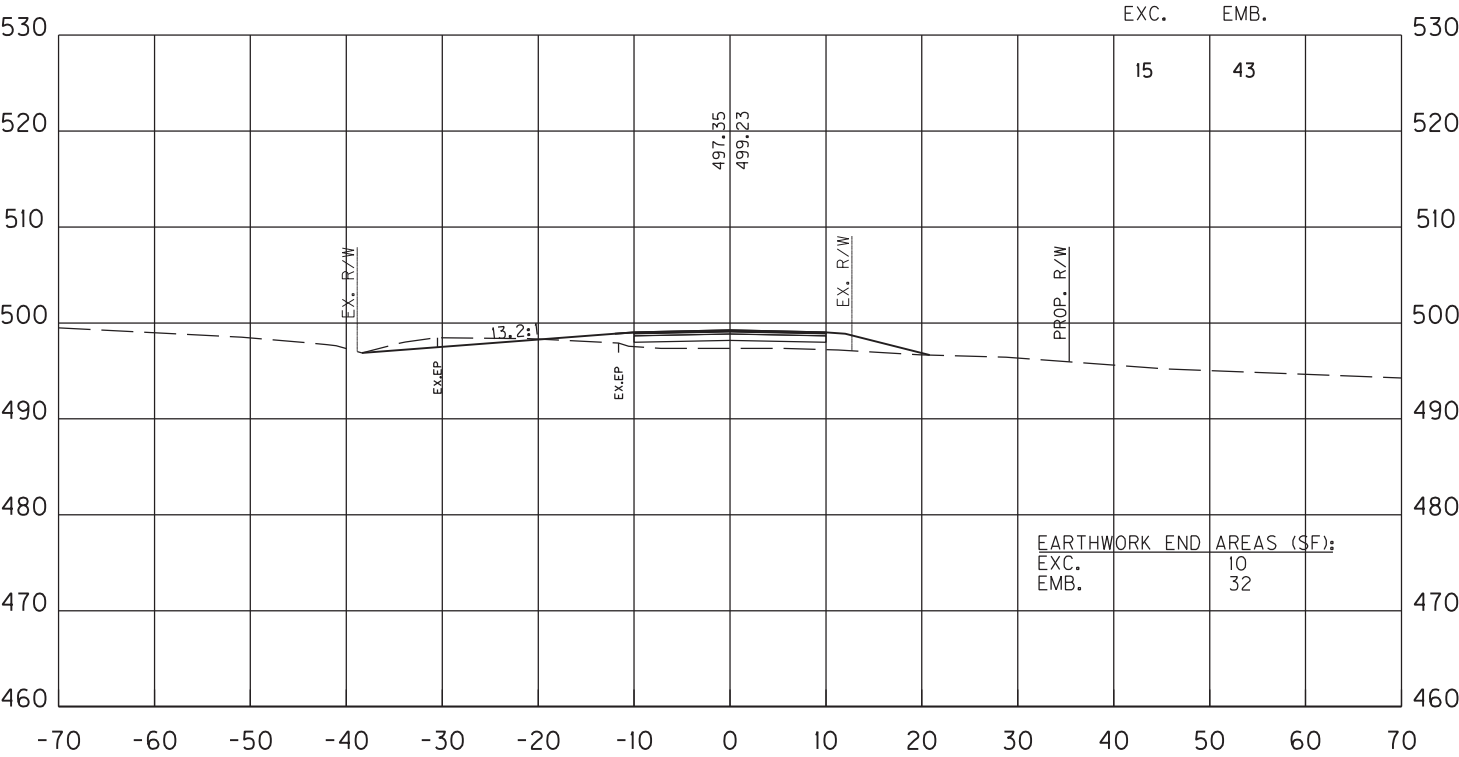
EARTHWORK END AREAS (SF):
EXC. 20
EMB. 8

SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

SOUTH FORK ROAD REALIGNMENT
STA. 97+00 TO STA. 97+50
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

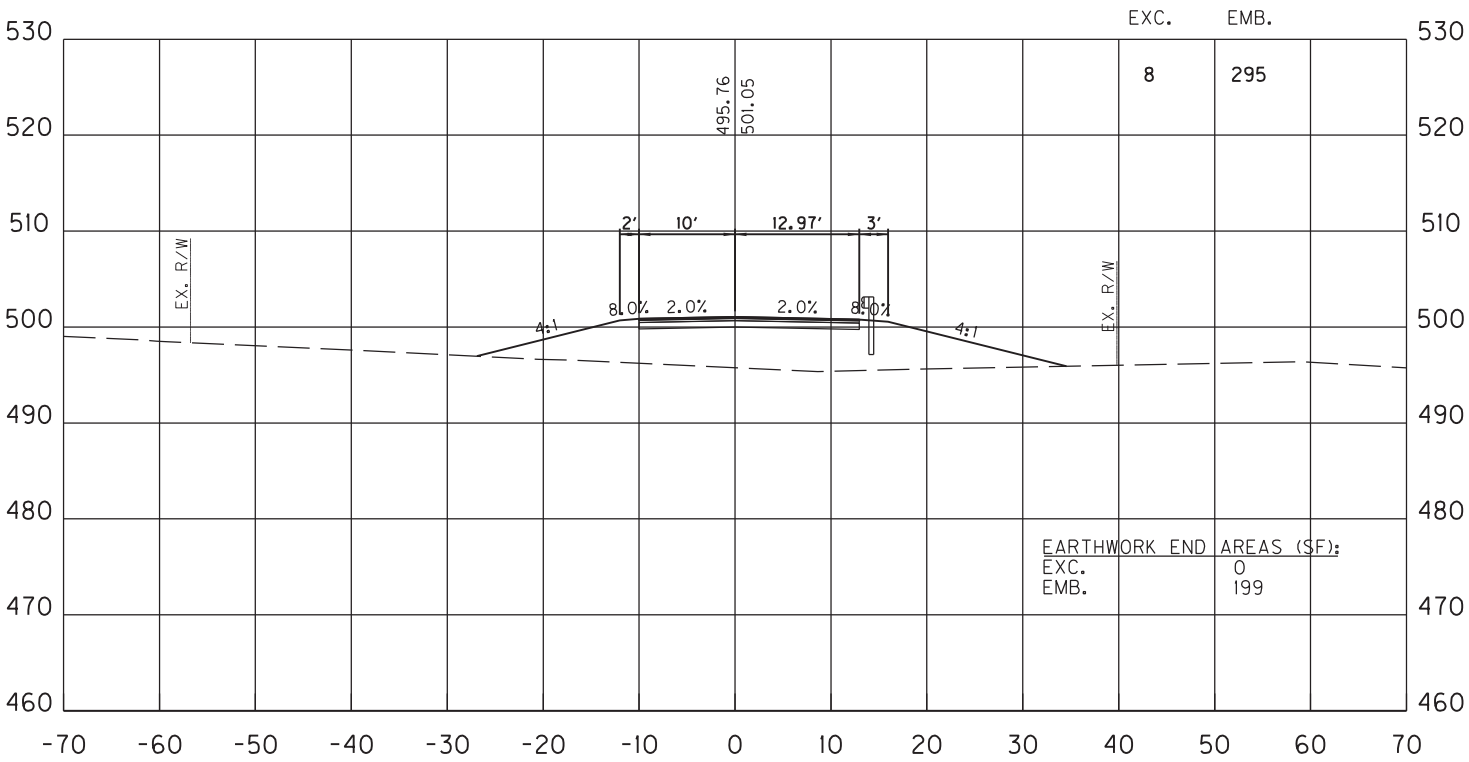


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

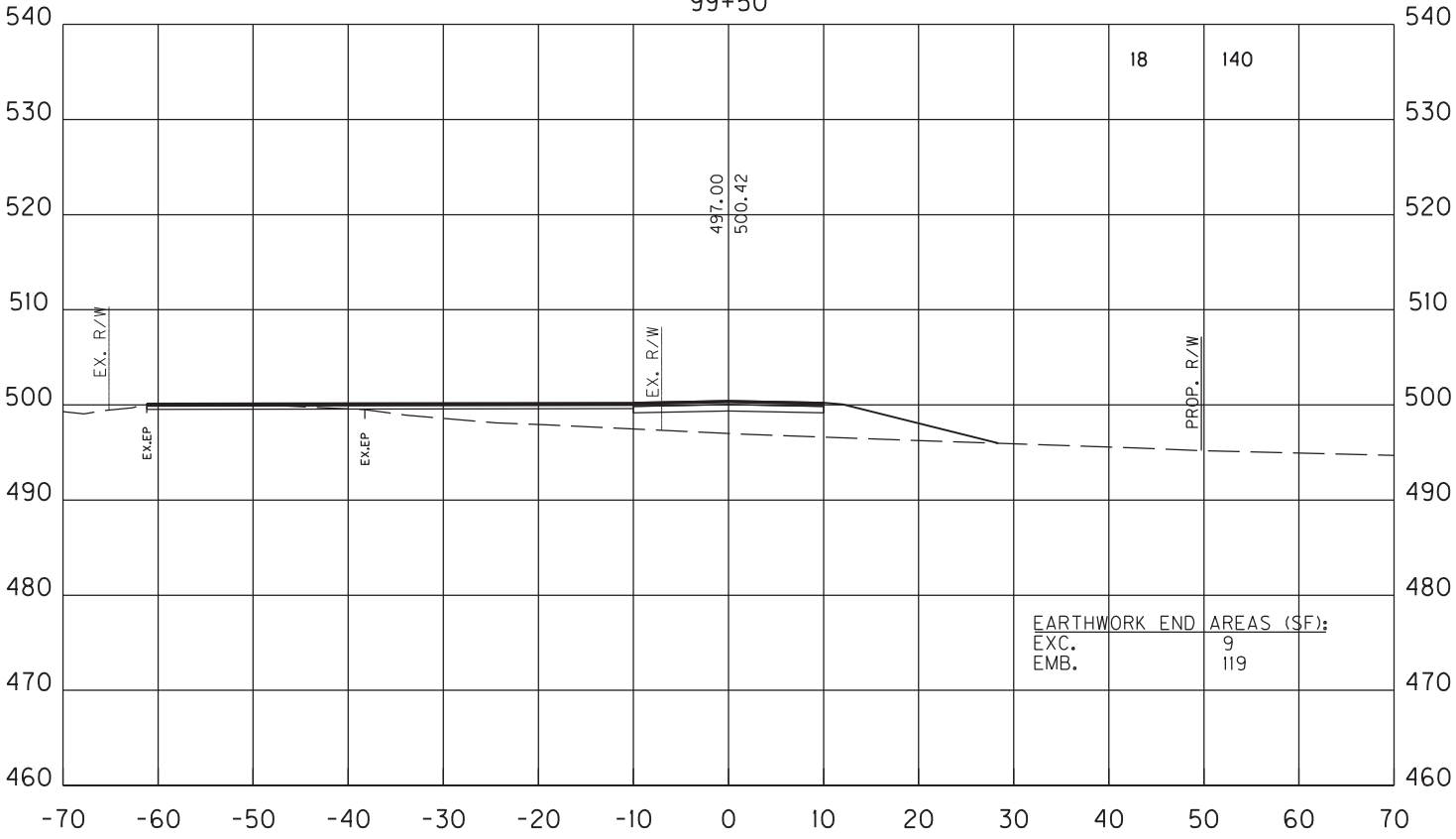
SOUTH FORK ROAD REALIGNMENT
STA. 98+00 TO STA. 98+50
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):



EARTHWORK END AREAS (SF):
EXC. 0
EMB. 199



EARTHWORK END AREAS (SF):
EXC. 9
EMB. 119

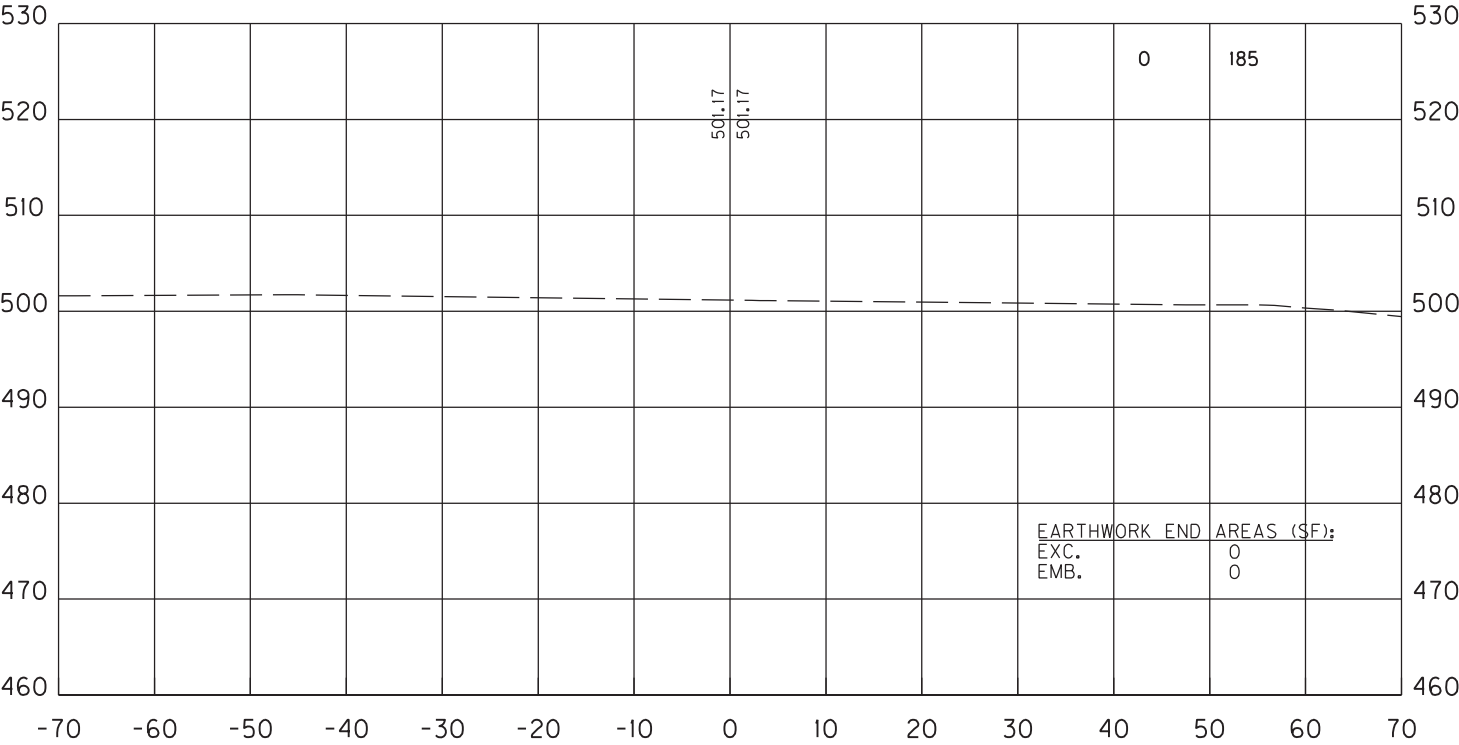
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

SOUTH FORK ROAD REALIGNMENT
STA. 99+00 TO STA. 99+50
CROSS SECTIONS

COUNTY OF	ITEM NO.
BOONE	6-9010.00

EARTHWORK VOLUMES (CY):

	EXC.	EMB.
IMPROVEMENT TOTALS:	143	713



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

SOUTH FORK ROAD REALIGNMENT
STA. 100+00
CROSS SECTIONS



PLAN

DESIGN LOAD. THIS STRUCTURE IS DESIGNED FOR KY HL-93 LIVE LOAD WHICH IS 1.25 TIMES THE HL-93 LIVE LOAD.

MASONRY COATING: MASONRY COATING WILL NOT BE REQUIRED FOR THIS STRUCTURE.

BEVELED EDGES: ALL EXPOSED EDGES SHALL BE BEVELED $\frac{1}{4}$ " UNLESS OTHERWISE SHOWN.

REINFORCEMENT DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE TO CENTER OF BARS UNLESS OTHERWISE STATED. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS UNLESS OTHERWISE STATED. ALL REINFORCING BARS DESIGNATED BY SUFFIX (S) IN THE PLAN SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 811.0 OF THE STANDARD SPECIFICATIONS. ANY REINFORCING BARS DESIGNATED BY SUFFIX (S) IN A BILL OF REINFORCEMENT SHALL BE CONSIDERED A STIRRUP FOR PURPOSES OF BEND DIAMETERS.

WEIGHT OF FILL MATERIALS: THE ASSUMED WEIGHT OF FILL MATERIAL IS 120 LBS PER CUBIC FOOT.

CONCRETE: CLASS "A" CONCRETE SHALL BE USED THROUGHOUT

ON SITE INSPECTION. EACH CONTRACTOR SUBMITTING A BID FOR THIS WORK SHALL MAKE A THOROUGH INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE EXPEDITIOUSLY PERFORMED AFTER A CONTRACT IS AWARDED. SUBMISSION OF A BID WILL BE CONSIDERED EVIDENCE OF THIS INSPECTION HAVING BEEN MADE. ANY CLAIMS RESULTING FROM SITE CONDITIONS WILL NOT BE FORWARDED BY THE DEPARTMENT OF HIGHWAYS.

CONDITIONS OF THE STRUCTURE. THE CONTRACTOR IS REQUIRED TO COMPLETE THE INSPECTION OF THE STRUCTURE PRIOR TO SUBMITTING A BID. THE BID OR PROPOSAL SHALL INCLUDE A DETAILED LISTING OF THE DEFECTS, DAMAGE, OR CONSTRUCTION OPERATIONS NOT INVOLVED. SPECIFIC, AS TO BE INCLUDED IN THE BID TO CORRECT THE DEFECTS, DAMAGE, OR CONSTRUCTION OPERATIONS. INCIDENTAL MATERIALS, LABOR OR ANYTHING ELSE REQUIRED TO REPAIR THE STRUCTURE.

[illegible]

BONDING TO HARDENED CONCRETE. AFTER CLEANING THE CONSTRUCTION JOINT IN ACCORDANCE WITH 602.03.10 B, AN EPOXY RESIN SYSTEM MEETING THE REQUIREMENTS FOR SECTION 826 TYPE V SHALL BE USED TO BOND ALL PROPOSED PLASTIC CONCRETE TO EXISTING HARDENED CONCRETE. FOLLOW MANUFACTURER'S INSTRUCTION FOR PREPARATION, MIXING AND APPLICATION TIMES. INCLUDE ALL COST ASSOCIATED WITH THIS ITEM OF WORK IN THE PRICE BID PER LINEAR FOOT OF BOX CULVERT.

SAWCUTTING EXISTING CONCRETE: PRIOR TO REMOVAL OF THE EXISTING OUTLET HEADWALL, CUT THE SURFACE WITH A CONCRETE SAW TO A DEPTH OF 1 INCH TO FACILITATE A NEAT LINE, IF DIRECTED BY THE ENGINEER, THE COST OF CUTTING AND REMOVING CONCRETE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE HEADWALL".

HEADWALLS: USE A 8' x 7', 45° SKEW BOX CULVERT HEADWALL FROM THE HEADWALL SUPPLEMENT OF THE KYTC STANDARD DRAWINGS. ADJUST AS NEEDED FOR THE 17" DIMENSION

IN THE STANDARD AS SHOWN HEREIN, ADJUST THE "B" AND "C" DIMENSIONS TO MATCH THE RAISE OR OPENING OF THE EXISTING BOX CULVERT. VALUES FOR OTHER CHARTED CULVERTS, BASED ON THE DIMENSIONS LISTED FOR THE STANDARD, MAY BE OBTAINED BY ORDER OF THE MANUFACTURER. DIMENSIONS DIFFER FROM THE STANDARD BECAUSE OF THE REINFORCEMENT IN THE WINGS, AFRON & PARAPET TO FIT THE ADJUSTED DIMENSIONS. BAR SIZE AND SPACING SHALL MATCH THE STANDARD DRAWING. INCLUDE ALL COSTS FOR REINFORCEMENT AND STEEL. REINFORCEMENT IN WITH THE PRICE BID OF BOX CULVERT HEADWALL.

ESTIMATE OF QUANTITIES

BID ITEM CODE	ITEM	UNIT	QUANTITY
8100	CONCRETE CLASS "A"	CU YD.	28
8150	STEEL REINFORCEMENT	LB	3002
8003	FOUNDATION PREPARATION	L.S.	1
2625	REMOVE HEADWALL	EA.	1

ITEM NUMBER		6-9010.00	
ROUTE US 42			
55+36 BOX CULVERT EXT. CHESING			
8' x 7' - 8-6" LONG BARREL EXT.			
PALMER ENGINEERING CO. PREPARED BY			
DATE AUGUST, 2016			
CHECKED BY L.M. SALLIE			
DESIGNED BY: R.M. DAMON R.M. DAMON			
COMMONWEALTH of Kentucky DEPARTMENT OF HIGHWAYS COUNTY BOONE			
SHEET NO. 501			
DRAWING NO.			

NOTE: THE BILL OF REINFORCEMENT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS SHOWN AND DETERMINE THE NUMBER OF BARS AND LENGTHS NOT SHOWN BASED ON THE LENGTH OF THE EXTENSION ALONG WITH ANY ADJUSTMENTS NECESSARY TO CONFORM TO THE FIELD CONDITIONS ENCOUNTERED. THIS BILL DOES NOT INCLUDE REINFORCEMENT REQUIRED TO CONSTRUCT REINFORCED WALLS AND WINGS. SEE GENERAL NOTES AND STD. DRAWINGS FOR REINFORCEMENT.



NOTE: THE COST OF DRILLING HOLES, GROUTING, AND EPOXY BONDING MATERIAL SHALL BE INCIDENTAL TO THE COST OF THE BOX CULVERT.

	MATERIAL BEFORE PLACING NEW CONCRETE NEW CONCRETE DONNEL NEW CONCRETE DETAIL DRILLING HOLES, IF BONDING MATERIAL AL TO THE COST OF	
	ITEM NUMBER 6-9010.00	
PALMER ENGINEERING CO. PREPARED BY		
REVISION DATE: AUGUST, 1916 DESIGNED BY R.M. DAWSON DETAILED BY J.A. ROSE R.M. DAWSON		
CHECKED BY L.M. SALLIE		
ROUTE 42 55 + 36 BOX CULVERT EXT. COUNT BOONE CONCRETE		
8' x 7' - 8'-6" LONG BARREL EXT.		
SHEET NO. 502 DRAWING NO.		



BOTH INLET AND OUTLET OF CULVERT SHALL BE EXTENDED
(OUTLET SHOWN, INLET SIMILAR BUT OPPOSITE HAND)

ESTIMATE OF QUANTITIES

BID ITEM CODE	ITEM	UNIT	QUANTITY
800	CONCRETE CLASS "A"	CU.YD.	52
810	STEEL REINFORCEMENT	LB.	8056
8003	FOUNDATION PREPARATION	L.S.	2
2625	REMOVE HEADWALL	EA.	2

GENERAL NOTES

SPECIFICATIONS, ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH CURRENT SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE AASHTO PERFORMANCE DESIGN SPECIFICATIONS, WITH INTERIMS.

DESIGN LOAD: THIS STRUCTURE IS DESIGNED FOR KY HL-93 LIVE LOAD WHICH IS 1.25 TIMES THE HL-93 LIVE LOAD.

MASONRY COATING: MASONRY COATING WILL NOT BE REQUIRED FOR THIS STRUCTURE.

BEVELED EDGES: ALL EXPOSED EDGES SHALL BE BEVELED $\frac{3}{4}$ " UNLESS OTHERWISE SHOWN.

CENTER OF BARS. CLEAR DISTANCE TO FACE OF CONCRETE IS 2" UNLESS OTHERWISE NOTED. ANY REINFORCING BARS DESIGNATED BY SUEFIX (E) IN THE PLANS SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 811.0 OF THE STANDARD SPECIFICATIONS. ANY REINFORCING BARS DESIGNATED BY SUEFIX (S) IN A BILL OF REINFORCEMENT SHALL BE CONSIDERED A TIEBARS FOR PURPOSES OF BEND DIAMETERS.

WEIGHT OF FILL MATERIALS: THE ASSUMED WEIGHT OF FILL MATERIAL IS 120 LBS PER CUBIC FOOT.

CONCRETE: CLASS "A" CONCRETE SHALL BE USED THROUGHOUT.

BOX VULGAR, EXHIBITS WITH UNKNOWN FINDINGS; CONSTRUCT THE EXTENSION AS THE ORIGINAL BOX ALTERN, EITHER ENTIRELY ON COMPRESSIBLE OR NON-COMPRESSIBLE DESIGN FOOTING ELEMENTS. SOIL MUST BE EXCAVATED AND BACKFILLED WITH GRANULAR, UNSETTLING, NON-EXPANSIVE SOIL, MEETING THE MATERIAL REQUIREMENTS OF SECTION 805. THE MAXIMUM SIZE IS 1/4" INCHES FOR COMPRESSIBLE MATERIAL, RICH WITH 3 FT. OF THE DESIGN ELEMENT, MUST BE EXCAVATED AND BACKFILLED WITH PROPERLY COMPACTED SOIL TO THE BASE OF THE SLAB. INCLUDE ALL COSTS ASSOCIATED WITH THIS ITEM OF WORK. THE SLAB MUST INCLUDE ALL COSTS ASSOCIATED WITH CONCRETE, FORMWORK, AND BACKFILLING IN WITH THE SLAB. SLAB BID FOR FOUNDATION PREPARATION.

IN ACCORDANCE TO HARDENED CONCRETE, AFTER CLEANING THE CONSTRUCTION JOINT IN SECTION 826 TYPE V SHALL BE USED TO MAND ALL PROPOSED PLASTIC CONCRETE TO FOLLOW MANUFACTURER'S INSTRUCTION FOR PREPARATION, MIXING AND APPLICATION TIMES, INCLUDE ALL COST ASSOCIATED WITH THIS ITEM OF WORK IN THE PRICE BID PER LINEAR FOOT OF BOX CURB/VENT.

SAW CUTTING EXISTING CONCRETE PRIOR TO REMOVAL OF THE EXISTING HEADWALLS, CUT THE SURFACE WITH A CONCRETE SAW TO A DEPTH OF 1 INCH TO FACILITATE A NEAT LINE, REMOVE THE EXISTING CONCRETE, AND REMOVING CONCRETE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR REMOVE HEADWALL.

ON SITE INSPECTION. EACH CONTRACTOR SUBMITTING A BID FOR THIS WORK SHALL MAKE A THOROUGH INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE RESPONSIBLY AND COMPLETELY INFORMED OF THE EXISTING CONDITIONS OF THE PROJECT. IT IS EXPEDIENTLY PERFORMED AFTER A CONTRACT IS AWARDED. SUBMISSION OF A BID WILL BE CONSIDERED EVIDENCE THAT THIS INSPECTION HAS BEEN MADE. ANY CLAIMS RESULTING FROM SITE CONDITIONS WILL NOT BE HONORED BY THE DEPARTMENT OF HIGHWAYS.

THE COMPLETION OF THE STRUCTURE, THE CONTRACTOR IS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE STRUCTURE. NOT THE PAST SPECIFIED FOR TO BE INCLUDED IN THE BID ITEM MOST APPROPRIATE TO THE WORK INVOLVED. THIS MAY INCLUDE COFFERDAMS, SHORINGS, EXCAVATIONS, BACKFILLING, REMOVAL OF, OR PARTS OF EXISTING STRUCTURES, OR ANY OTHER NECESSARY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETION OF THE STRUCTURE.

ITEM NUMBER		6-9010.00																	
<table border="1"> <tr> <td colspan="2">REVISION</td> <td colspan="2">DATE</td> </tr> <tr> <td colspan="2"> </td> <td colspan="2"> </td> </tr> <tr> <td colspan="2"> </td> <td colspan="2"> </td> </tr> <tr> <td colspan="2"> </td> <td colspan="2"> </td> </tr> </table>				REVISION		DATE													
REVISION		DATE																	
DATE: AUGUST, 2006 DESIGNED BY: R.M. DAMON DETAILED BY: J.A. ROSE		J.A.C. THOMAS R.M. DAMON																	
Checked by _____ Date _____																			
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY _____																			
BOONE																			
ROUTE	CONCRETE																		
US 42	105 + 85 BOX CULVERT EXT.																		
PREPARED BY <i>DBL 8'x4' X 8' EXTENSION</i>																			
PALMER ENGINEERING CO.		SHEET NO. <i>S01</i>																	
Drawing No.																			



QUANTITY SHOWN IN TABLE ABOVE IS FOR ONE EXTENSION

CONSTRUCT HEADWALLS AND WINGS. SEE GENERAL NOTES AND STD. DRAWINGS FOR HEADWALL REINFORCEMENT.

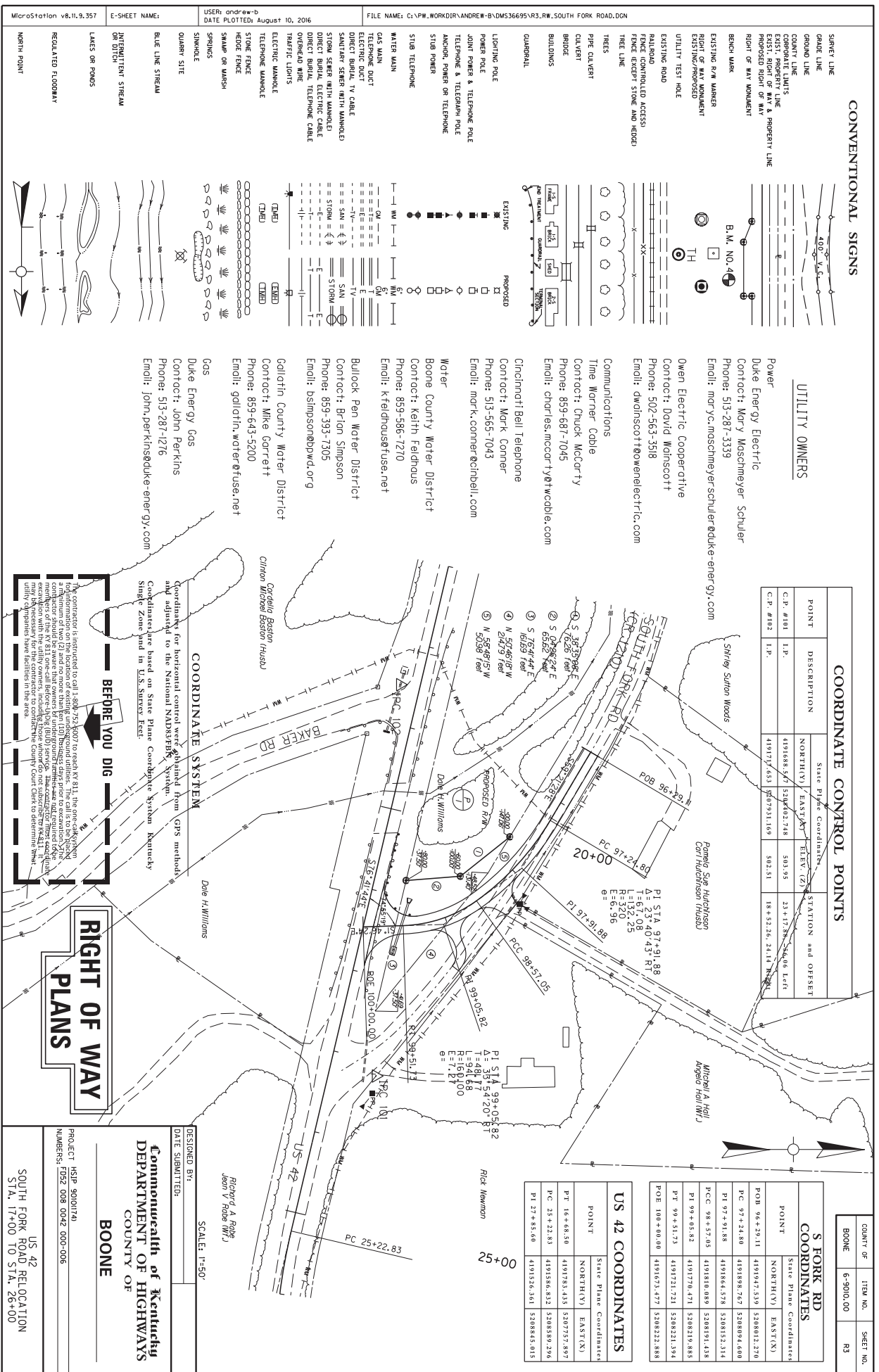


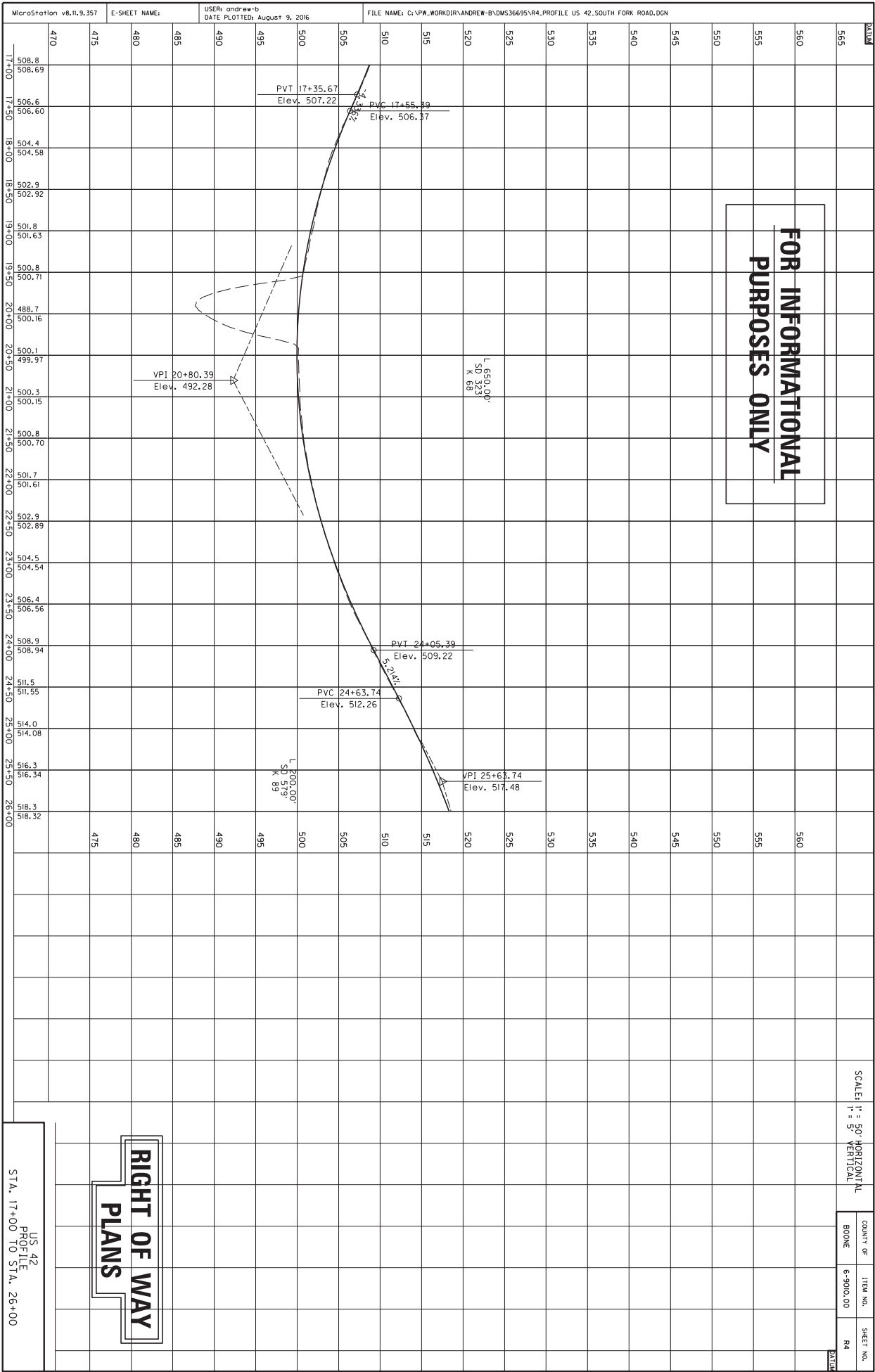
THE DIAGONAL & LATERAL "P" BARS SHOWN.

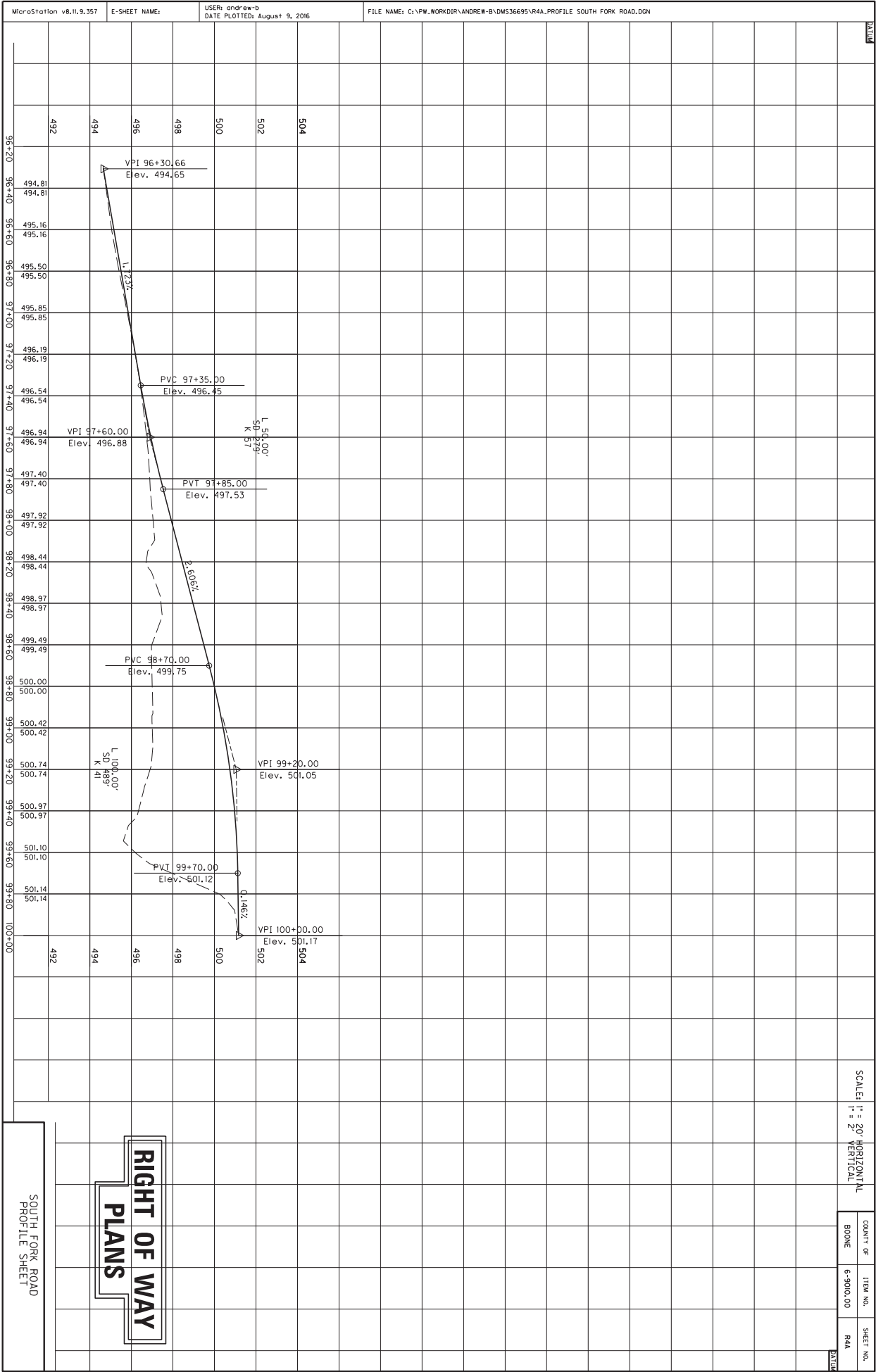


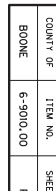
THE BOX CULVERT.

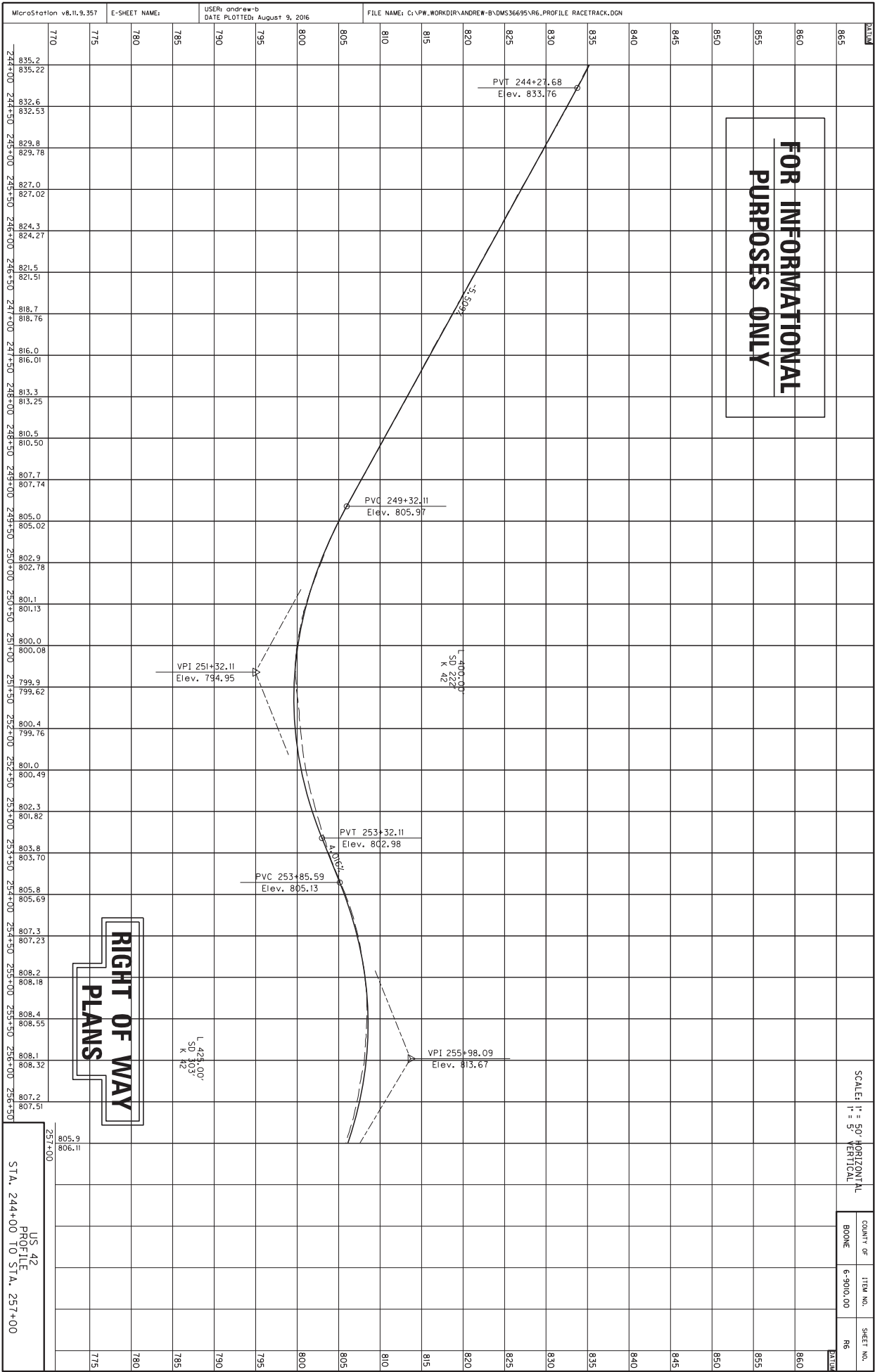
PALMER ENGINEERING CO.











COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-3010.00	R7

US 42 COORDINATES		
POINT	State Plane Coordinate (NORTHING)	EASTING)
PC 57+14.67	4194161.387	5209570.628
PT 58+51.66	4194297.082	5209589.394
PT 59+88.22	4194434.070	5209589.484

COORDINATE SYSTEM

Coordinates for horizontal control were obtained from GPS methods and adjusted to the National NAD83/FBN System. Coordinates are based on State Plane Coordinate System Kentucky Single Zone and in U.S. Survey Feet.

BEFORE YOU DIG

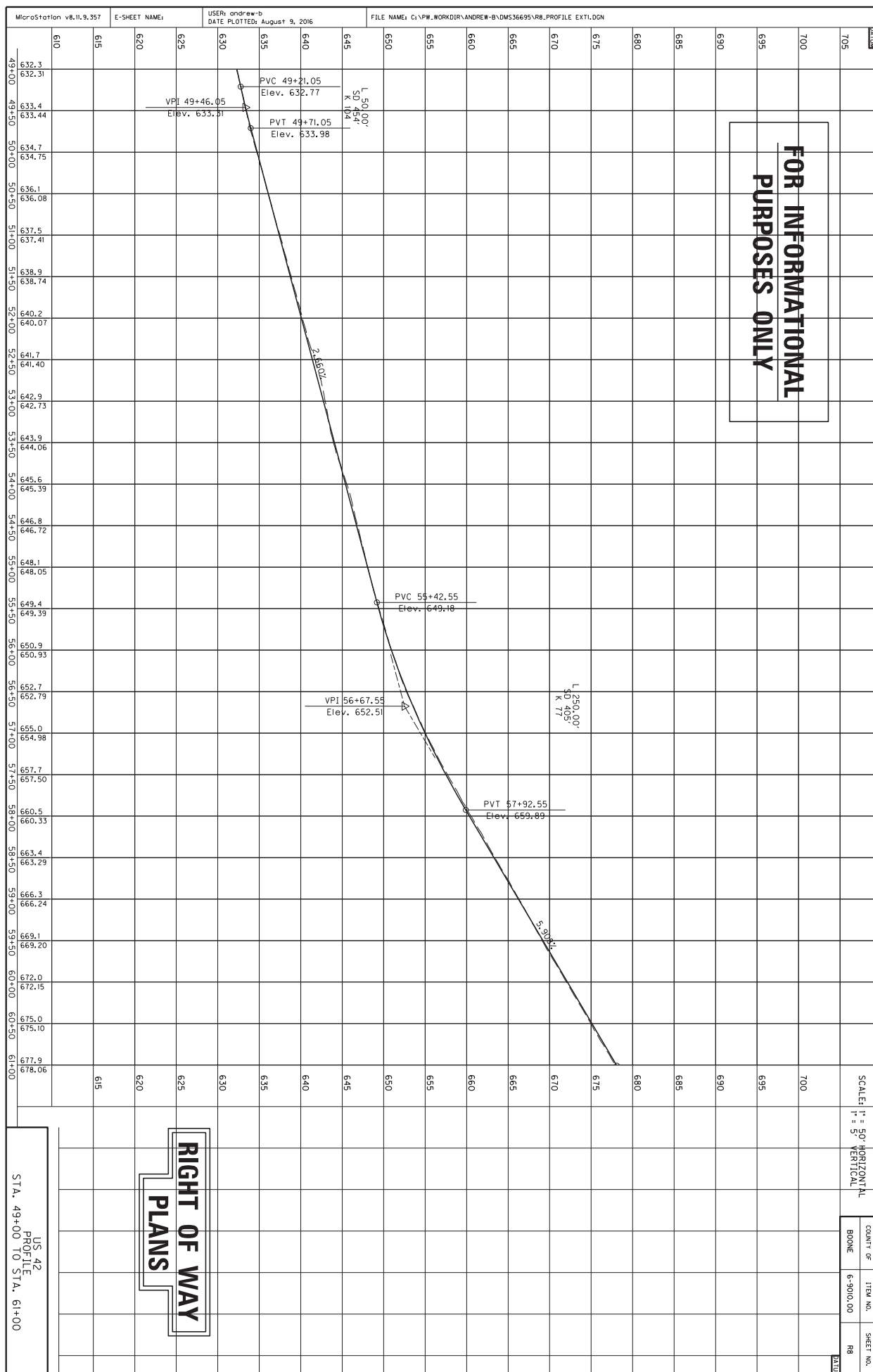
The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system. The contractor must obtain all necessary permits and approvals from the appropriate agencies and utilities before any excavation work begins. A minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor must coordinate with the utility owners, including those whom do not subscribe to KY 811. It is the responsibility of the contractor to ensure that the correct data is received from utility companies have facilities in the area.

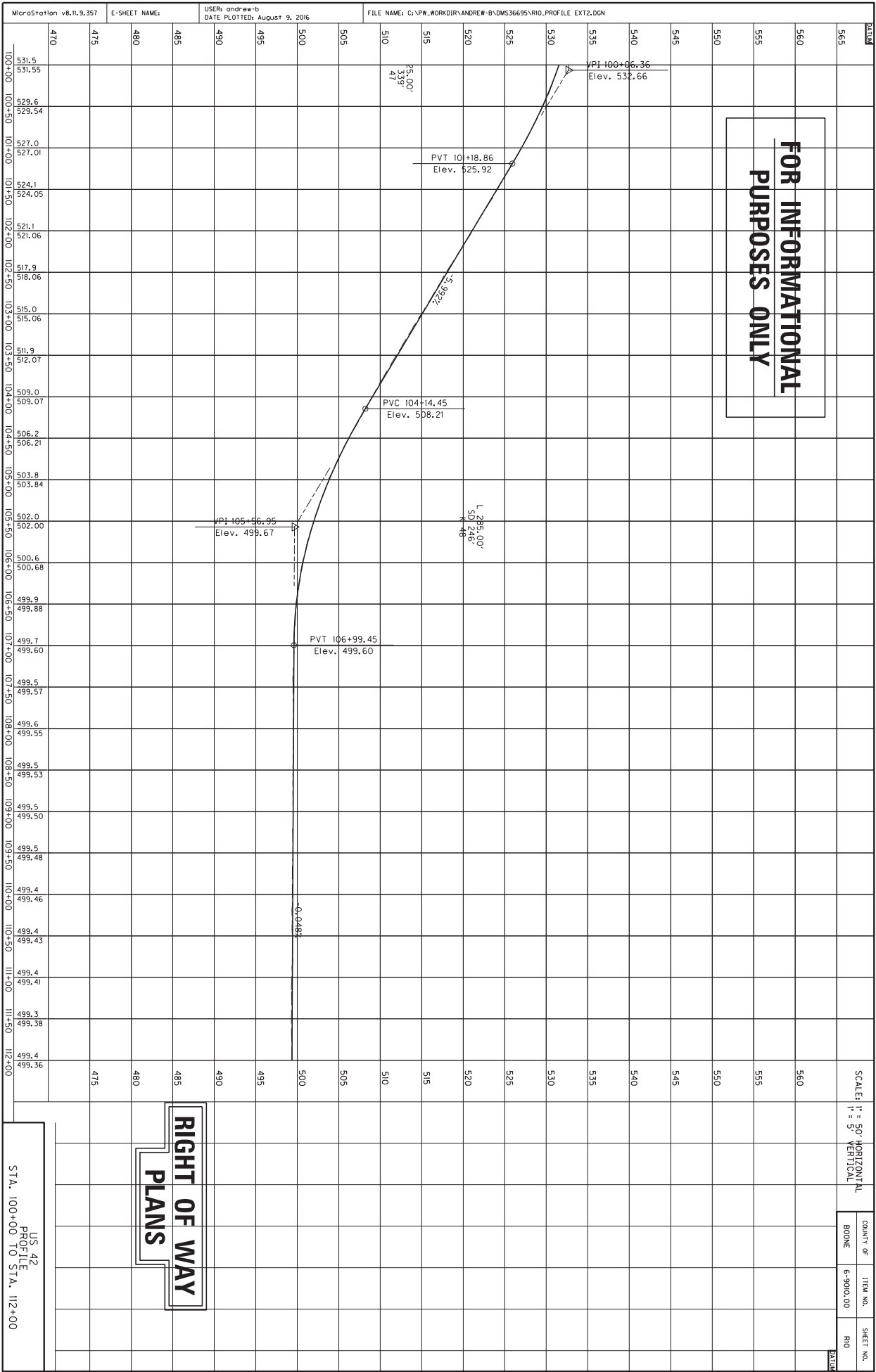
COORDINATE CONTROL POINTS				
POINT	DESCRIPTION	State Plane Coordinates		STATION and OFFSET
		NORTHING)	EASTING)	ELEV. (Z)
C.P. #3003	I.P.	4193739.330	5209495.587	641.24
C.P. #3002	I.P.	4194160.631	5209582.035	654.37
				57°49'08.81, 21.70 RIGHT

RIGHT OF WAY PLANS

SCALE: 1" = 50'

US 42
CULVERT EXTENSION - STA. 55+36
PLAN STA. 49+00 TO STA. 61+00





[illegible]

Contract Id: _____ Contractor: _____

Section Engineer: _____ District & County: _____

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

***Required Signatures before Leaving Project Site**

Printed Section Engineer’s Representative_____ & Date_____

Signature Section Engineer’s Representative_____ & Date_____

Printed Contractor’s Representative_____ & Date_____

Signature Contractor’s Representative_____ & Date_____

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

Printed Bailey Bridge Yard Representative_____ & Date_____

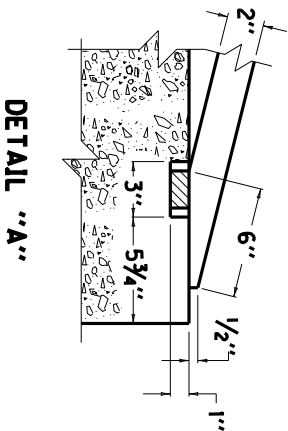
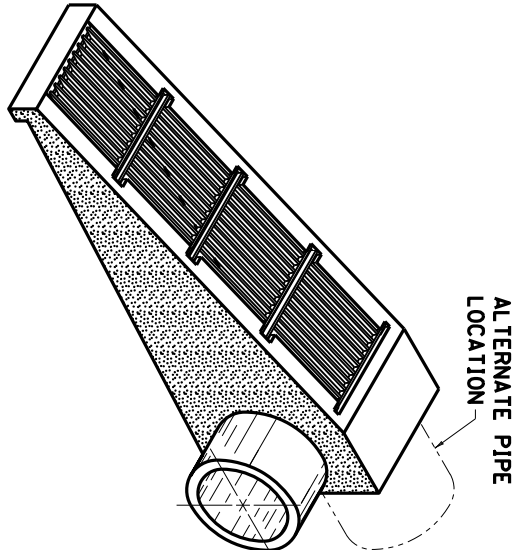
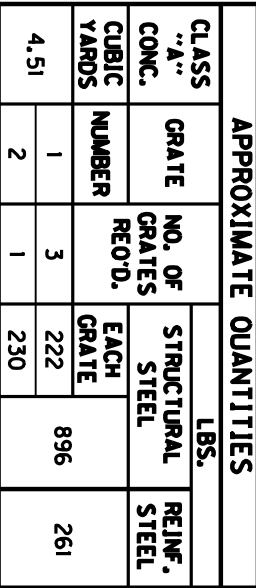
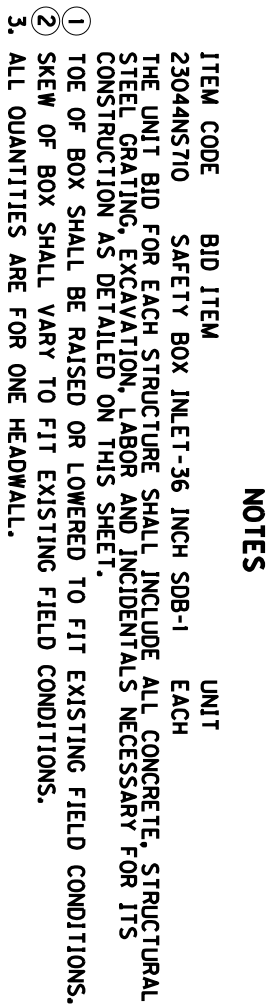
Signature Bailey Bridge Yard Representative_____ & Date_____

Printed Contractor’s Representative_____ & Date_____

Signature Contractor’s Representative_____ & Date_____

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





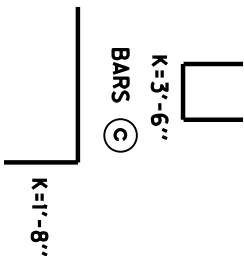
KENTUCKY
DEPARTMENT OF HIGHWAYS
**SAFETY TYPE
BOX INLET
(36")**
APPROVED _____
BY _____
DATE 06-04-2008

COUNTY OF	ITEM NO.	SHEET NO.
-----------	----------	-----------

NOTES

1. NUMBER OF BARS IN ONE HEADWALL.
2. DIMENSIONS ARE 0. TO 0. OF BARS.
3. ALL BARS ARE STRAIGHT EXCEPT THOSE SHOWN BELOW.

BENT BAR SHAPES

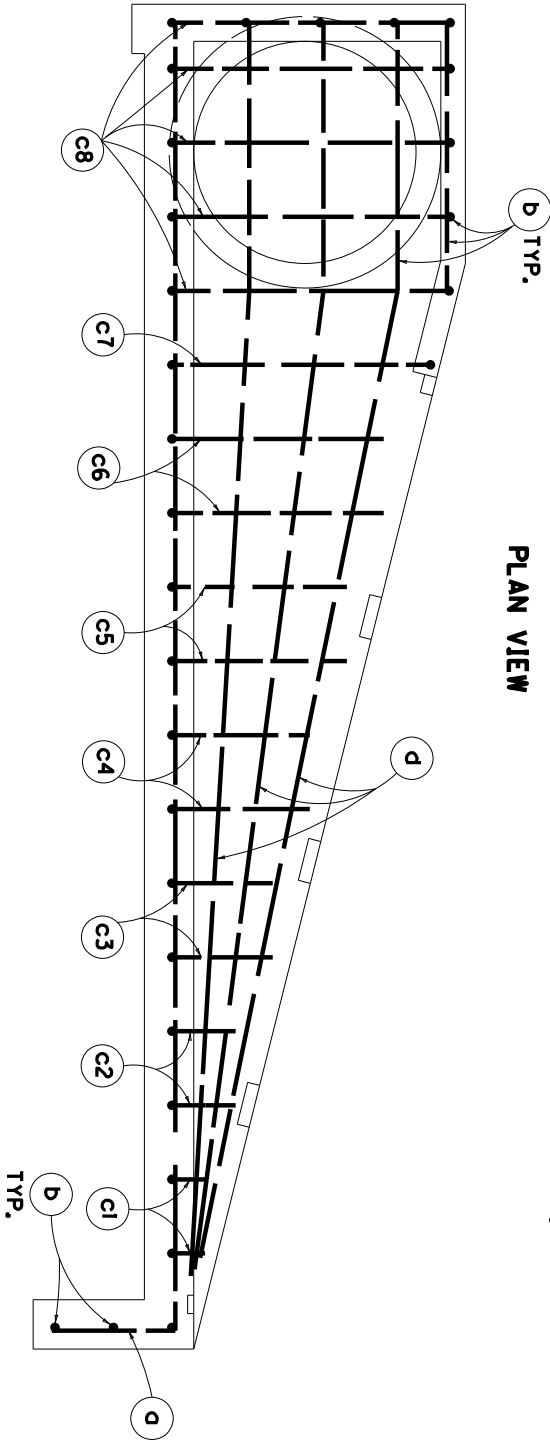


BARS (O)

BARS (C)

M	A	R	K	NO	LGTH	K
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70
71	72	73	74	75	76	77
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981	982	983	984	985	986	987
988	989	990	991	992	993	994
995	996	997	998	999	1000	1001

PLAN VIEW



ELEVATION VIEW

SHEET 2 OF 2
KENTUCKY
DEPARTMENT OF HIGHWAYS
BILL OF REINFORCEMENT
SAFETY TYPE BOX INLET
(36")

APPROVED _____ 06-04-2008
DATE

DESIGNED BY
H. J. JONES



COUNTY OF	ITEM NO.	SHEET NO.

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

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

SUPPLEMENTAL SPECIFICATIONS

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

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

SPECIAL NOTE FOR TURF REINFORCING MAT

1.0 DESCRIPTION. Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS.

2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.

- A) Dimensions. Ensure TRMs are furnished in strips with a minimum width of 4 feet and length of 50 feet.
- B) Weight. Ensure that all mat types have a minimum mass per unit area of 7 ounces per square yard according to ASTM D 6566.
- C) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

2.2 Classifications

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical

11F

structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

Turf Reinforcement Matting					
Properties ¹	Type 1	Type 2	Type 3	Type 4	Test Method
Minimum tensile Strength lbs/ft	125	150	175	3000 by 1500	ASTM D6818 ²
UV stability (minimum % tensile retention)	80	80	80	90	ASTM D4355 ³ (1000-hr exposure)
Minimum thickness (inches)	0.25	0.25	0.25	0.40	ASTM D6525
Slopes applications	2H:1V or flatter	1.5H:1V or flatter	1H:1V or flatter	1 H: 1V or greater	
Shear stress lbs/ft ² Channel applications	6.0 ⁴	8.0 ⁴	10.0 ⁴	12.0 ⁴	ASTM D6459 ASTM D6460-07

¹ For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting alone.

²Minimum Average Roll Values for tensile strength of sample material machine direction.

³Tensile Strength percentage retained after stated 1000 hr duration of exposure under ASTM D4355 testing. Based on nondegradable components exclusively.

⁴Maximum permissible shear design values based on short-term (0.5 hr) vegetated data obtained by full scale flume testing ASTM D6459, D6460-07. Based on nondegradable components exclusively. Testing will be done at Independent Hydraulics Facility such as Colorado State University hydraulics laboratory, Utah State University hydraulics laboratory, Texas Transportation Institute (TTI) hydraulics and erosion control laboratory.

2.3 Quality Assurance Sampling, Testing, and Acceptance

- A) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.
- B) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.
- C) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

Current mats meeting the above criteria are shown on the Department’s List of Approved Materials.

2.4 Fasteners. When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer’s Representative. Provide staples with colored tops when requested by the Engineer.

3.0 CONSTRUCTION. When requested by the Engineer, provide a Manufacturer’s Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department’s criteria and the Manufacturer’s criteria, construct using the more restrictive. The Engineer and Manufacturer’s Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer’s recommendations and the following as minimum installation technique:

3.1 Site Preparation. Grade areas to be treated with matting and compact. Remove large rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.

3.2 Installation. Install mats according to Standard Drawing Sepias “Turf Mat Channel Installation” and “Turf Mat Slope Installation.” Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer’s Representative. The mat should be in direct contact with the soil surface.

4.0 MEASUREMENT. The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer’s Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
23274EN11F	Turf Reinforcement Mat 1	Square Yard
23275EN11F	Turf Reinforcement Mat 2	Square Yard
23276EN11F	Turf Reinforcement Mat 3	Square Yard
23277EN11F	Turf Reinforcement Mat 4	Square Yard

June 15, 2012

SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

1.0 DESCRIPTION. Install barcode label on sheeting signs. Section references herein are to the Department’s 2012 Standard Specifications for Road and Bridge Construction.

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

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

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

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

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

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

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

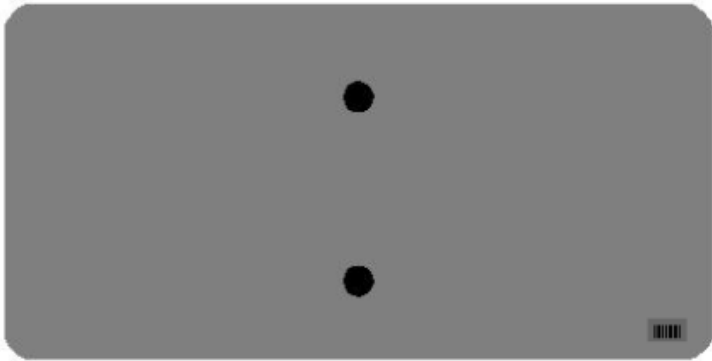
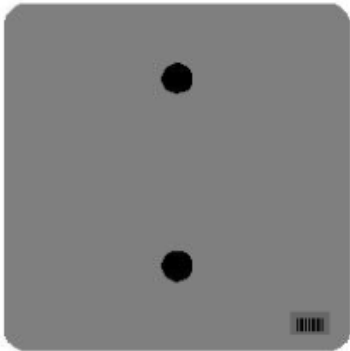
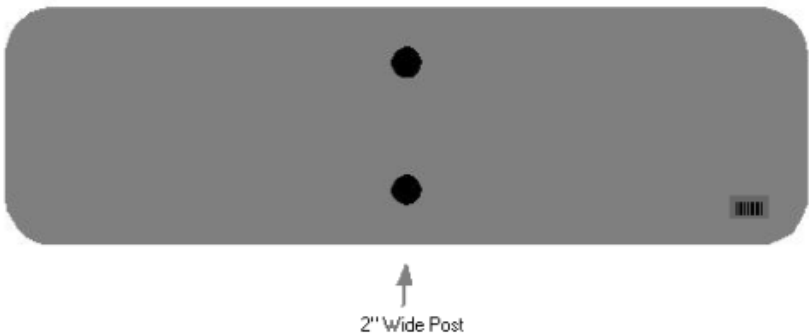
The installation of the permanent sign will be measured in accordance to Section 715.

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

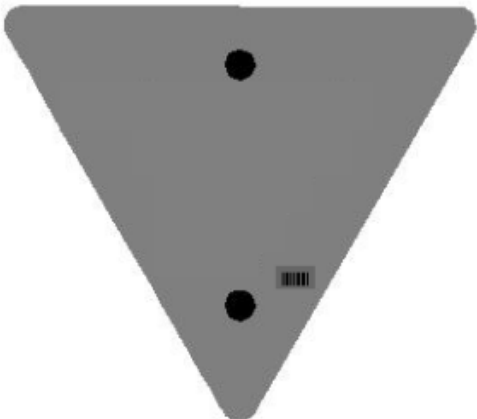
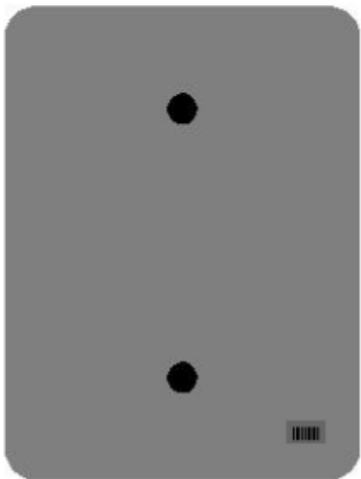
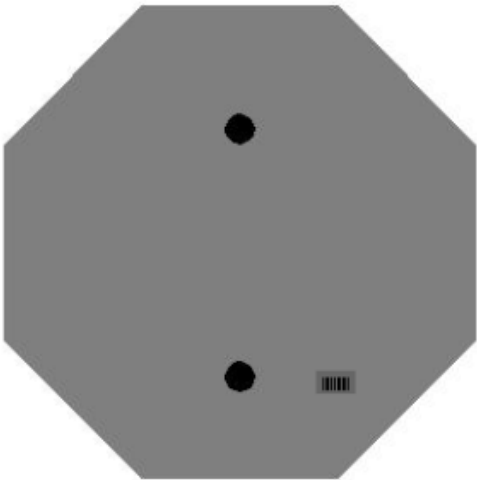
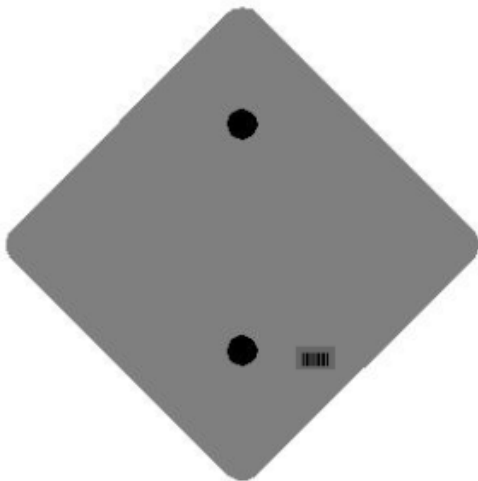
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

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

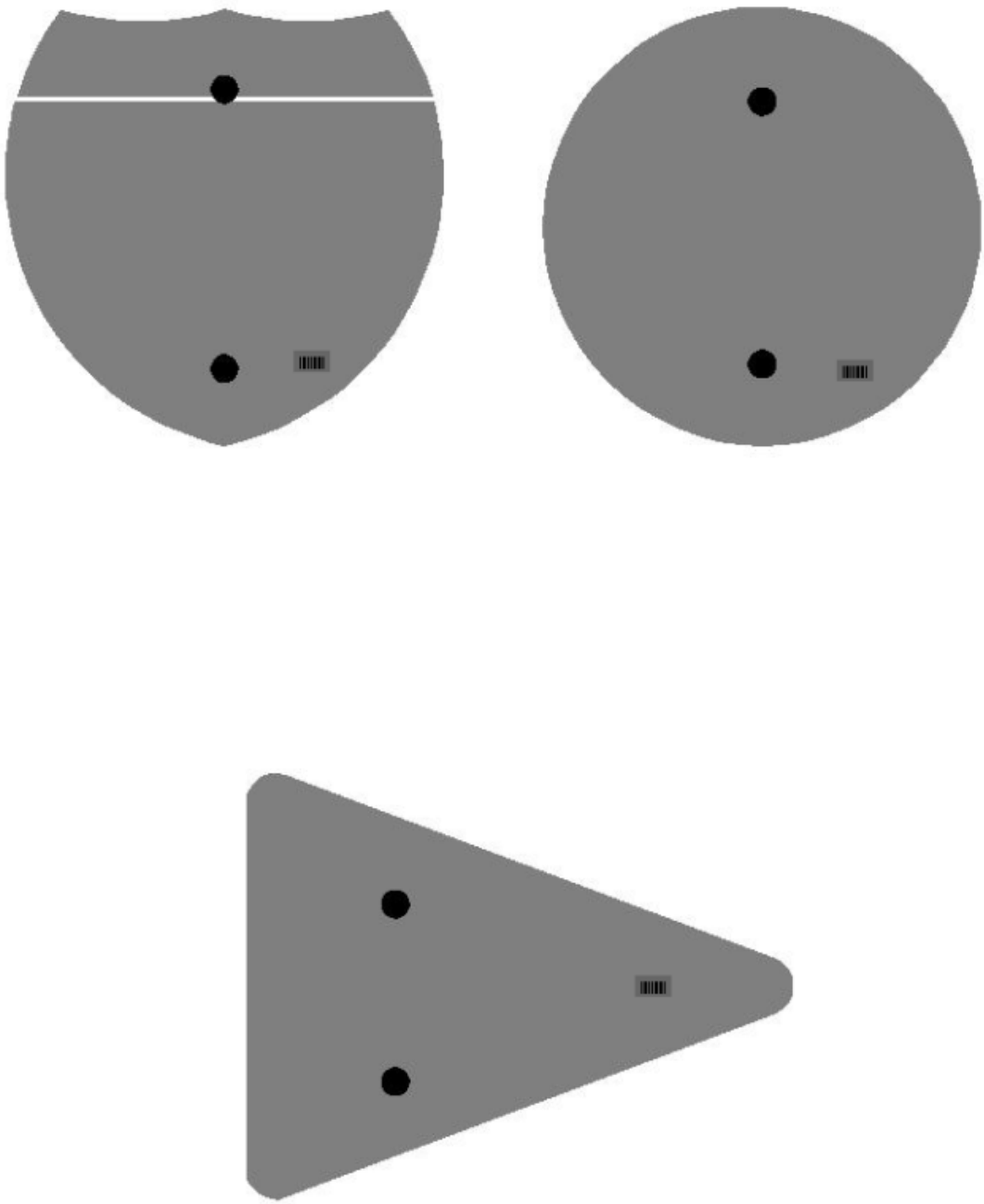
One Sign Post



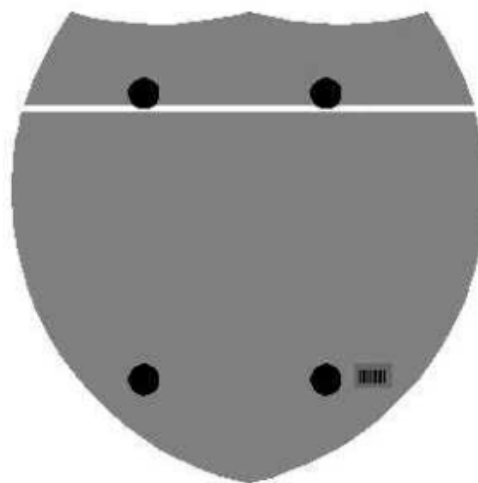
One Sign Post



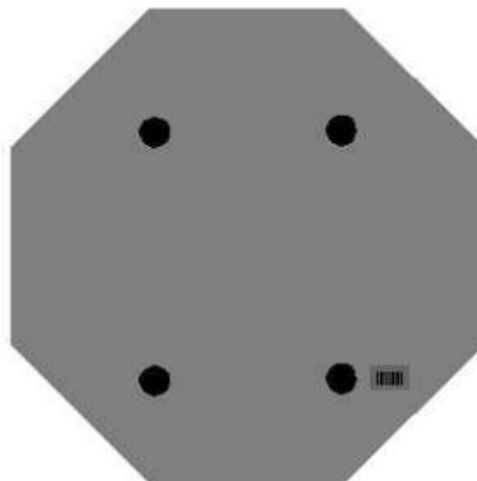
One Sign Post



Double Sign Post

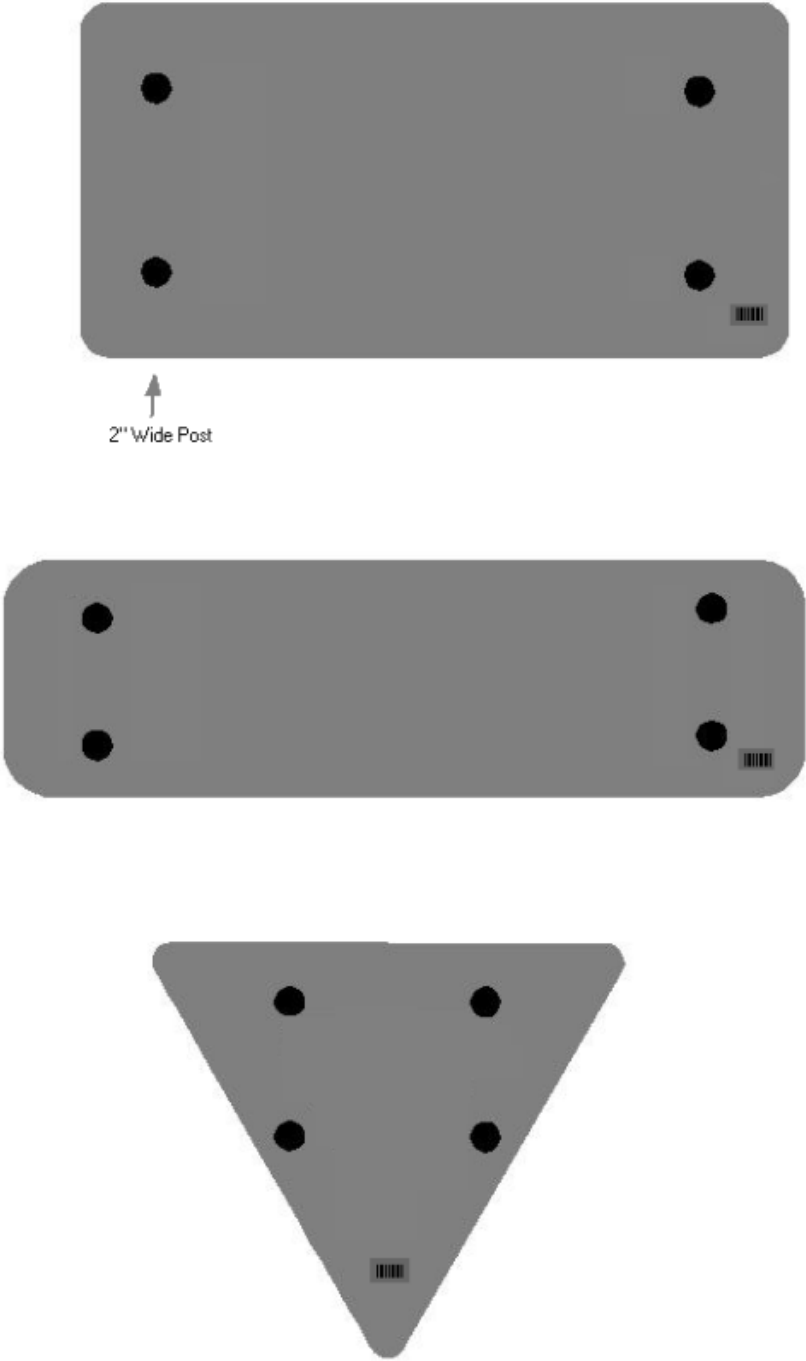


Interstate
Shield



48" Stop

2 Post Signs



2016 STANDARD DRAWINGS THAT APPLY

ROADWAY	
~ <i>BARRIERS</i> ~	
<u>GUARDRAIL AND BRIDGE END DRAINAGE</u>	
GUARDRAIL TRANSITION FROM NORMAL SHOULDER TO NARROW BRIDGE.....	SEPIA-012
<u>TYPICAL BARRIER INSTALLATIONS</u>	
TYPICAL GUARDRAIL INSTALLATIONS.....	SEPIA-024
TYPICAL GUARDRAIL INSTALLATIONS.....	RBI-002-07
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1.....	SEPIA-025
<u>GUARDRAIL HARDWARE</u>	
STEEL BEAM GUARDRAIL (W-BEAM).....	SEPIA-027
GUARDRAIL COMPONENTS.....	RBR-005-11
STEEL GUARDRAIL POSTS.....	SEPIA-028
GUARDRAIL END TREATMENT TYPE 1.....	SEPIA-029
GUARDRAIL END TREATMENT TYPE 4A.....	SEPIA-030
DELINEATORS FOR GUARDRAIL.....	SEPIA-032
GUARDRAIL HEIGHT TRANSITION DETAIL	SEPIA-033
~ <i>DRAINAGE</i> ~	
<u>BOX INLETS AND OUTLETS</u>	
<u>DROP BOXES</u>	
DROP BOX INLET TYPE 1.....	RDB-001-12
<u>SLOPED BOXES</u>	
SLOPED AND FLARED BOX INLET-OUTLET 18"-24"-30"-36" ALL SKEWS.....	RDB-105-06
GRATES FOR SLOPED AND FLARED BOX INLET-OUTLET	RDB-106-05
<u>PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS</u>	
CHANNEL LINING CLASS II AND III.....	RDD-040-05
<u>PIPE CULVERT HEADWALLS</u>	
<u>12" – 27" - SINGLE LINE PIPE</u>	
CONCRETE HEADWALLS FOR 12" - 27" CIRCULAR PIPE CULVERTS	RDH-005-02
CONCRETE HEADWALLS FOR 15" - 27" NON-CIRCULAR PIPE CULVERTS	RDH-010-02
SLOPED AND FLARED HEADWALLS FOR 12" TO 27" PIPE.....	RDH-020-03
<u>30" – 108" - SINGLE LINE PIPE</u>	
PIPE CULVERT HEADWALLS, 15°, 30°, AND 45° SKEW (LAYOUT AND STEEL PATTERN)	RDH-120-02
DIMENSIONS AND QUANTITIES, 30" TO 108" HEADWALLS, CIRCULAR PIPE, 45° SKEW	RDH-216-02
BILL OF REINFORCEMENT 30" TO 66" DIAMETER, CIRCULAR PIPE, HEADWALLS, 45° SKEW	RDH-340-05
<u>BOX CULVERT HEADWALLS</u>	
<u>3' X 2' – 12' X 12' SINGLE LINE BOX</u>	
PRECAST BOX CULVERT HEADWALLS - 15° - 30° AND 45° SKEW (BOX RISE LESS THAN 6'-0") (LAYOUT AND STEEL PATTERN).....	RDH-1010-02
PRECAST BOX CULVERT HEADWALLS - 15° - 30° AND 45° SKEW (BOX RISE 6'- 0" OR GREATER) (LAYOUT AND STEEL PATTERN).....	RDH-1015-02
DIMENSIONS 7' X 4' – 9' X 9' HEADWALLS, PRECAST BOX CULVERT - 30° SKEW	RDH-1145-02
DIMENSIONS 7' X 4' – 9' X 9' HEADWALLS, PRECAST BOX CULVERT - 45° SKEW	RDH-1165-02
QUANTITIES 3' X 2' – 12' X 12' HEADWALLS, PRECAST BOX CULVERTS - 30° SKEW.....	RDH-1210-02

Standard Drawings That Apply
Page 2 of 3

QUANTITIES 3' X 2' – 12' X 12' HEADWALLS, PRECAST BOX CULVERTS - 45° SKEW..... RDH-1215-02

BILL OF REINFORCEMENT 7' X 5' – 8' X 5' HEADWALLS, PRECAST BOX CULVERTS –
30° SKEW RDH-1332-03

BILL OF REINFORCEMENT 8' X 7' – 9' X 6' HEADWALLS, PRECAST BOX CULVERTS –
45° SKEW RDH-1356-03

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12” – 24” PIPE) RDI-001-10

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (27” – 42” PIPE) RDI-002-05

PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE RDI-020-09

PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE RDI-021-01

PIPE BEDDING, TRENCH CONDITION RDI-025-05

PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE RDI-026-01

EROSION CONTROL BLANKET SLOPE INSTALLATION..... RDI-040-01

EROSION CONTROL BLANKET CHANNEL INSTALLATION..... RDI-041-01

FILL HEIGHTS FOR PRECAST REINFORCED CONCRETE BOX CULVERTS..... RDI-100-05

BEDDING FOR PRECAST BOX CULVERTS, SEWERS, STORM DRAINS, AND THEIR
COMBINATIONS..... RDI-120-04

PERFORATED PIPE

PERFORATED PIPE TYPES AND COVER HEIGHTS RDP-001-06

PERFORATED PIPE FOR SUBGRADE DRAINAGE ON TWO-LANE (CLASS 2) AND
MULTI-LANE ROADS RDP-005-05

PERFORATED PIPE UNDERDRAINS (LONGITUDINAL AND TRANSVERSE) RDP-006-04

PERFORATED PIPE DETAILS (SOLID ROCK) RDP-007-04

PERFORATED PIPE HEADWALLS..... RDP-010-09

MISCELLANEOUS DRAINAGE

JUNCTION BOX RDX-001-06

JUNCTION BOX (DIMENSIONS AND QUANTITIES)..... RDX-002-04

INTERMEDIATE AND END ANCHORS FOR CIRCULAR PIPE RDX-060-04

SECURITY DEVICES FOR FRAMES, GRATES AND LIDS..... RDX-160-06

TEMPORARY SILT FENCE..... RDX-210-03

TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC..... RDX-215-01

SILT TRAP - TYPE A RDX-220-05

SILT TRAP - TYPE B..... RDX-225-01

SILT TRAP - TYPE C..... RDX-230-01

PRECAST BOX CULVERT EXTENSION..... RDX-300-04

~ GENERAL ~

CURVE WIDENING AND SUPERELEVATION

CURVE WIDENING AND SUPERELEVATION TRANSITIONS RGS-001-07

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS PART 1 RGX-001-06

RIGHT OF WAY MONUMENTS..... RGX-005-06

TYPICAL EMBANKMENT FOUNDATION BENCHES RGX-010-04

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT RPM-110-07

Standard Drawings That Apply
Page 3 of 3

TRAFFIC
~ *PERMANENT* ~

RAISED PAVEMENT MARKERS

SHOULDER & EDGELINE RUMBLE STRIP DETAILS	SEPIA-005
EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS	SEPIA-006

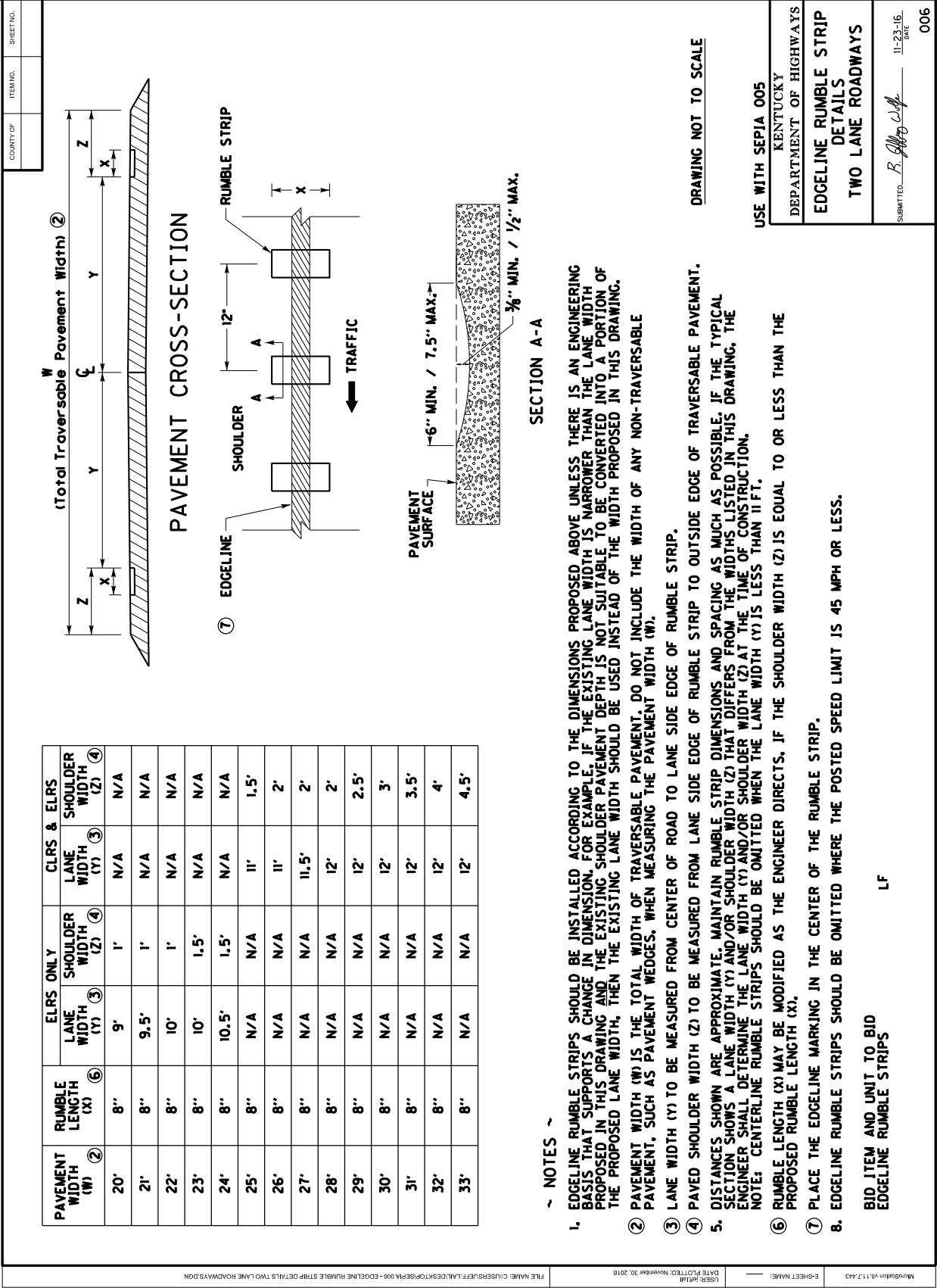
~ *TEMPORARY* ~
TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-04
SHOULDER CLOSURE	TTC-135-02

STRIPING OPERATIONS

MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02
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MicroStation v8.11.7.443	E-SHEET NAME: —	DATE PLOTTED: December 2, 2016 USER: jhuan	FILE NAME: C:\USERS\JEFF.LAI\DESKTOP\SEP14.005 - TBM165 - SHOULDER & EDGELINE RUMBLE STRIP DETAILS.DGN
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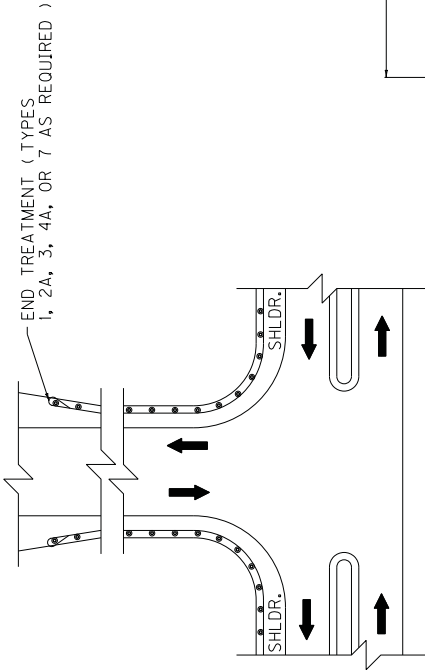


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DATE PLOTTED: November 30, 2016
USER: jrlfll
E-SHEET NAME: —
MicroStation v8.11.7.443

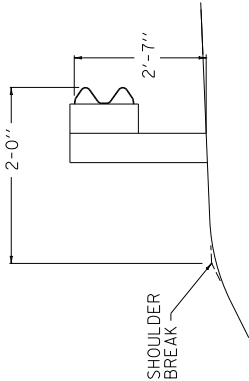
COUNTY OF	ITEM NO.	SHEET NO.

~ NOTES ~

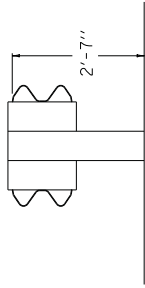
1. FOR END TREATMENT TYPE 4A USE CUR. STD. DWG. RBR-035 FOR OFFSETS.
2. THE MINIMUM LENGTH OF GUARDRAIL, INCLUDING THE END TREATMENT, PRECEDING A FIXED OBJECT IS 200 FEET: (LENGTH MAY BE REDUCED SHOULD FIELD CONDITIONS WARRANT).



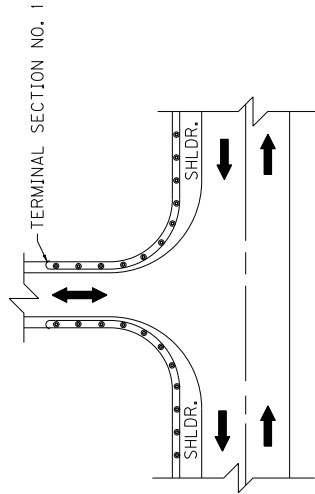
APPROACH ROADS



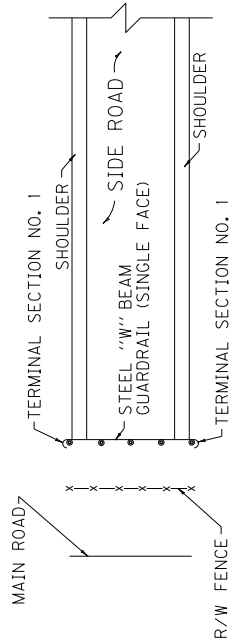
NORMAL GUARDRAIL INSTALLATION



TYPICAL DOUBLE FACE
GUARDRAIL INSTALLATION



ENTRANCES

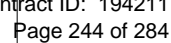


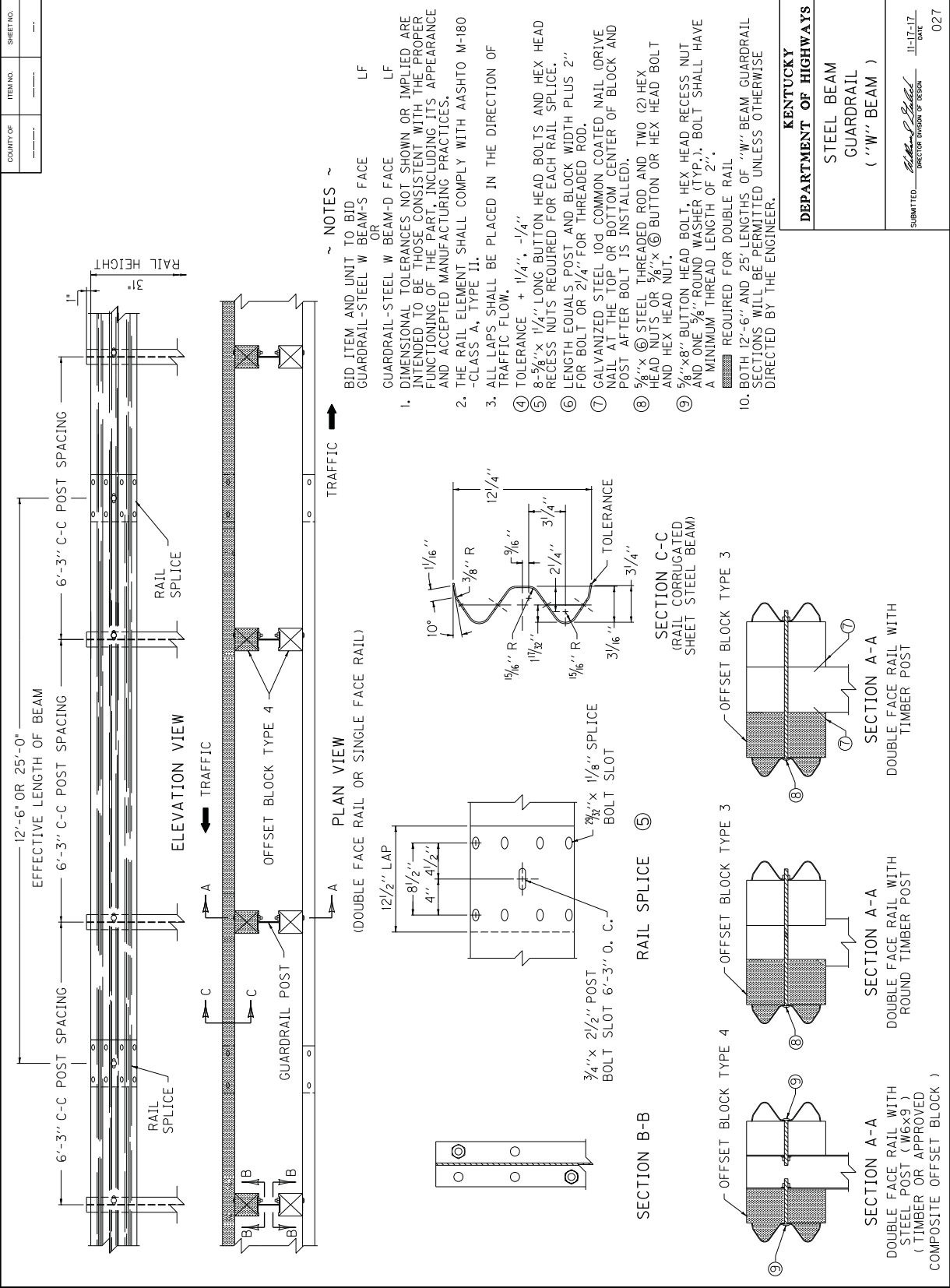
GUARDRAIL USED AS A BARRICADE

USE WITH CUR. STD. DWG.
RBI-002, RBR-035

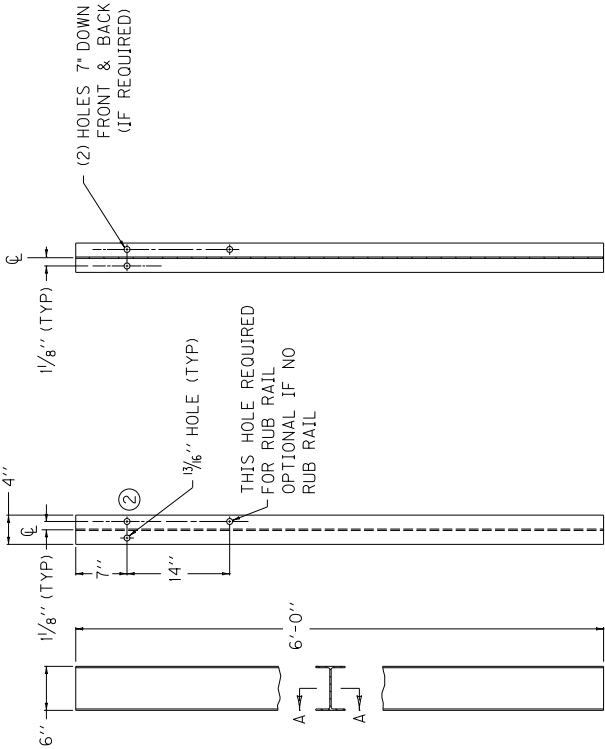
KENTUCKY DEPARTMENT OF HIGHWAYS TYPICAL GUARDRAIL INSTALLATIONS
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SUBMITTED: <i>[Signature]</i> DIRECTOR DIVISION OF DESIGN	DATE: 11-17-17
024	



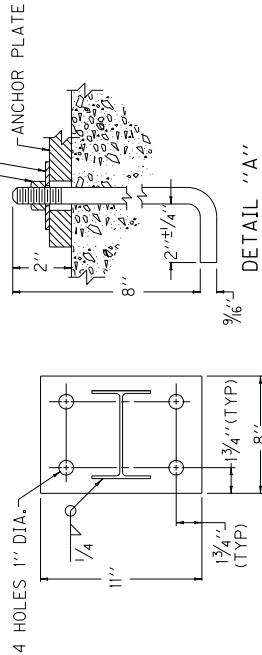


COUNTY OF	ITEM NO.	SHEET NO.



SECTION A-A

~ W6 X 9.0 STEEL POST ① ~

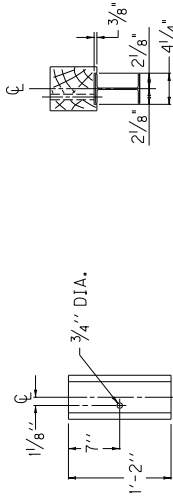


PLAN VIEW

SEE DETAIL "A"

SIDE VIEW

ANCHOR PLATE



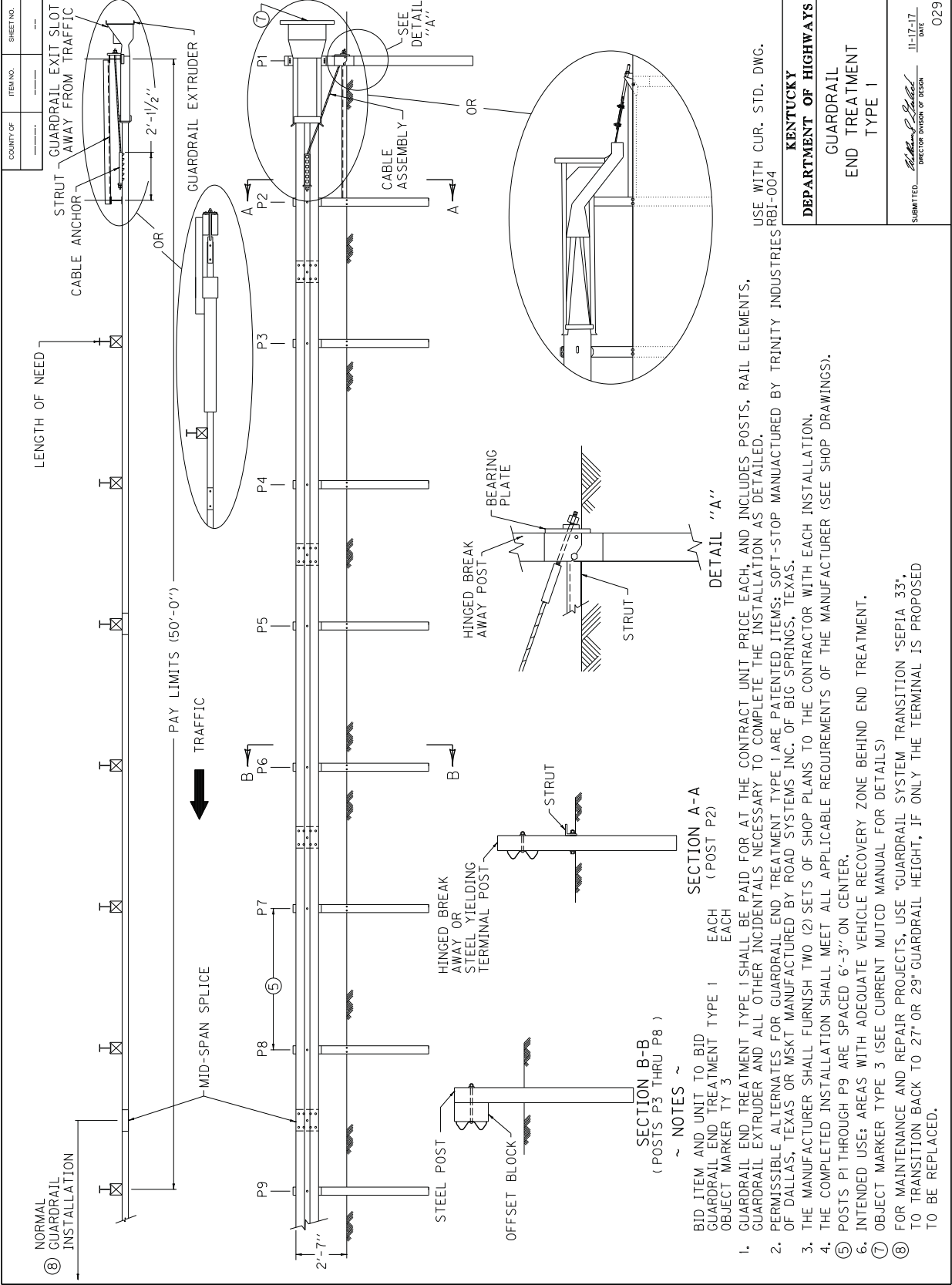
REAR ELEVATION

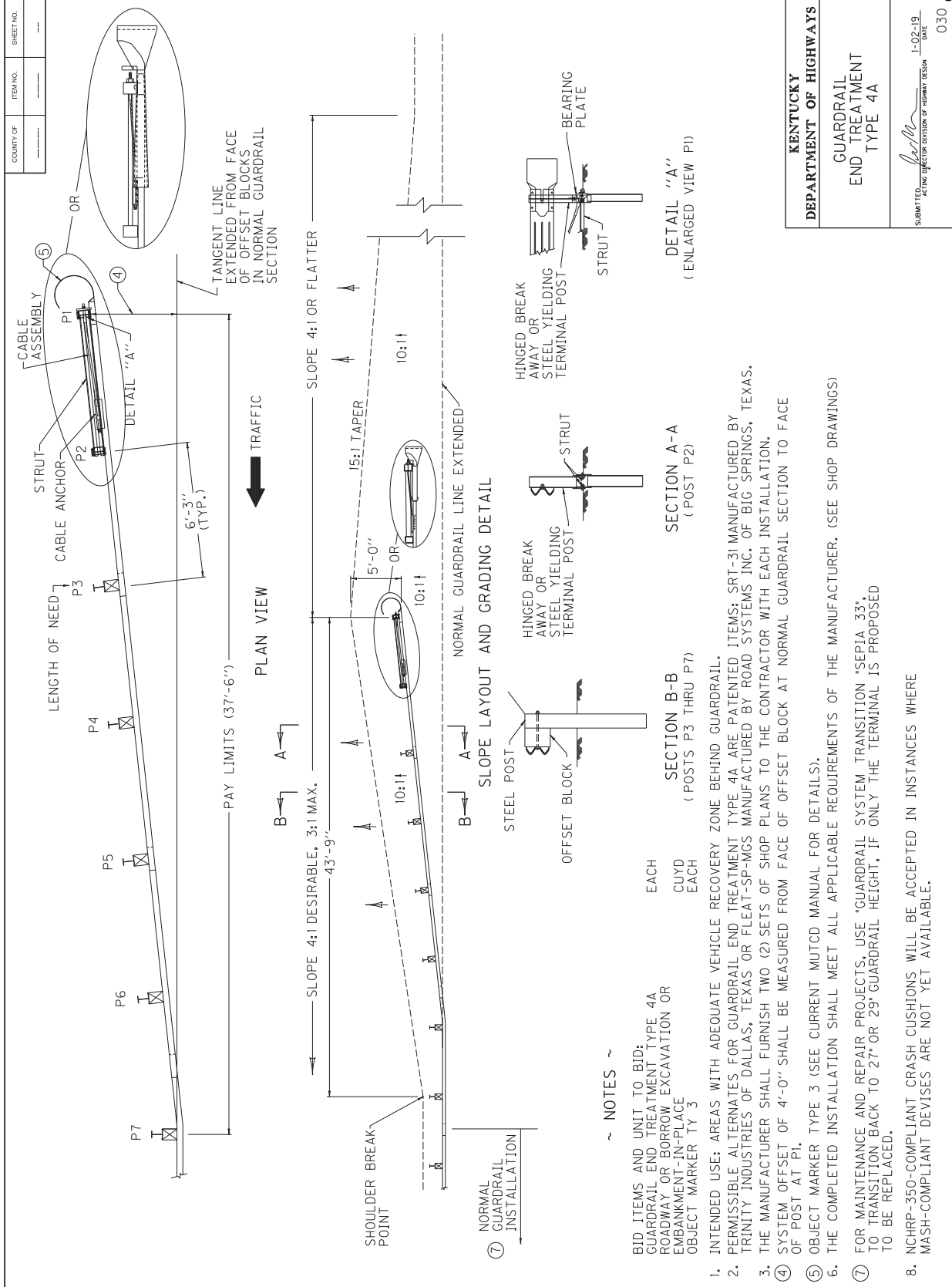
PLAN VIEW

OFFSET BLOCK TYPE 4
6" X 8" (Nominal Size)
(TIMBER OR APPROVED COMPOSITE)
(FOR USE WITH STEEL POST ONLY)

- ~ NOTES ~
- ① W6 X 8.5 IS AN ACCEPTABLE ALTERNATE.
 - ② THESE HOLES ARE REQUIRED FOR ATTACHING RAIL.
 - ③ TIMBER OR COMPOSITE BLOCKOUTS MAY BE USED WITH STEEL POST.

KENTUCKY DEPARTMENT OF HIGHWAYS
STEEL GUARDRAIL POSTS
SUBMITTED: <i>William P. Sabel</i> DATE: 3-06-18 DIRECTOR DIVISION OF DESIGN
028



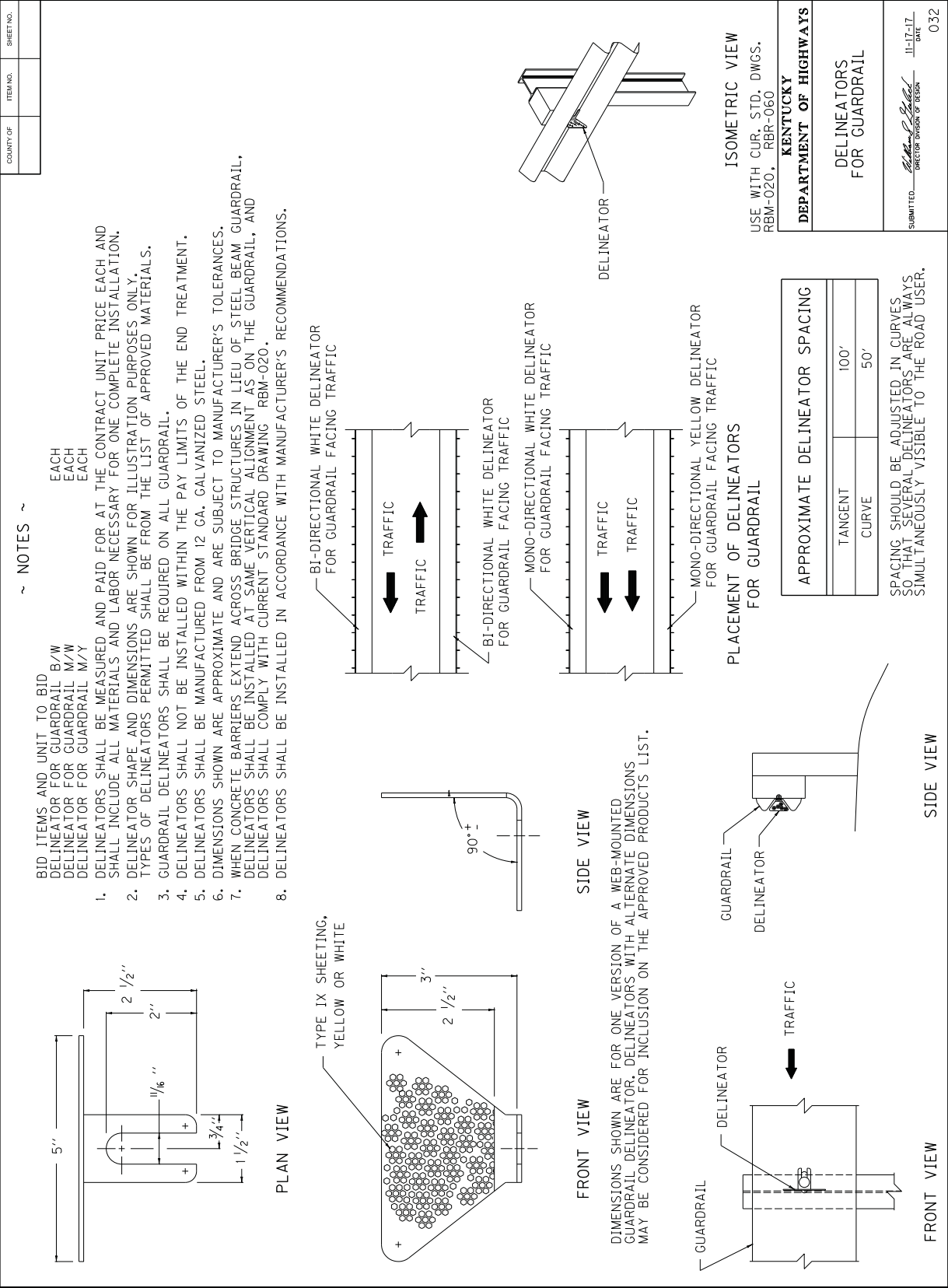


KENTUCKY
DEPARTMENT OF HIGHWAYS

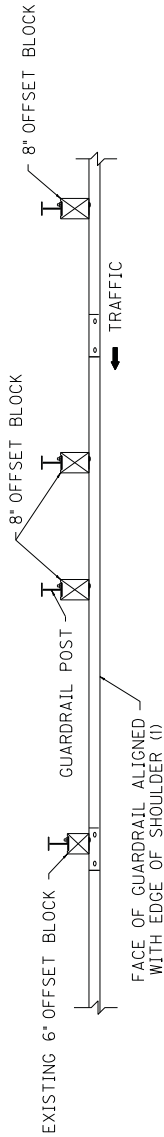
GUARDRAIL
END TREATMENT
TYPE 4A

SUBMITTED: 1-02-19
DATE
ACTING SPECTOR DIVISION OF HIGHWAY DESIGN

030

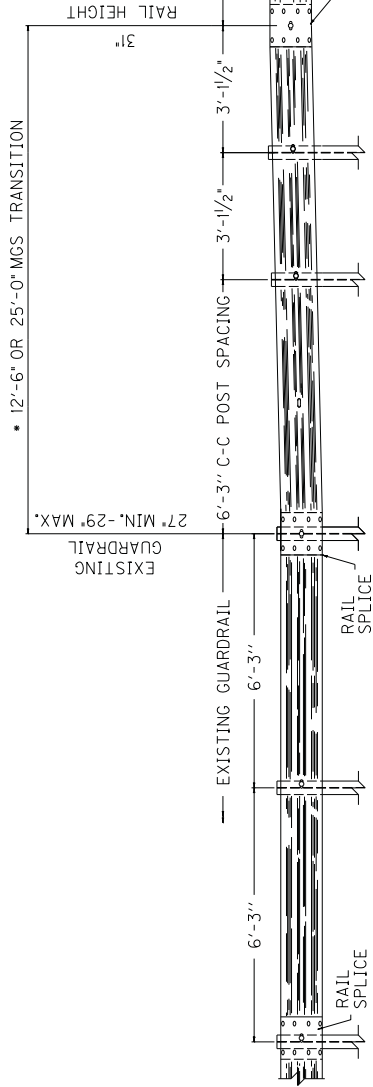


COUNTY OF	ITEM NO.	SHEET NO.



PLAN VIEW

- 12'-6' TRANSITION FROM 29" TO 31" SHOWN, 25'-0" REQUIRED FOR 27" TO 31" TRANSITION.



ELEVATION VIEW

~ NOTES ~

- 1) WHERE POST OFFSET IS CONSTRAINED, AND WHEN THE EXISTING SHOULDER IS WIDER THAN 4 FEET, THE EXISTING SHOULDER MAY BE REDUCED UP TO 2 INCHES TO ACCOMMODATE THE 8 INCH BLOCKS OF THE MGS GUARDRAIL. WHERE SITE CONSTRAINTS PROHIBIT THE POST FROM BEING PLACED AT LEAST 6 INCHES IN FRONT OF THE SLOPE BREAK POINT, USE 7 FOOT POSTS.
- 2) MGS TRANSITION FROM EXISTING GUARDRAIL SHALL BE COMPLETED OUTSIDE THE 50 FEET MGS END TERMINAL LIMITS.

KENTUCKY DEPARTMENT OF HIGHWAYS
GUARDRAIL SYSTEM TRANSITION
SUBMITTED: <i>William P. Shuler</i> DIRECTOR DIVISION OF DESIGN 4-04-18 DATE 033

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

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

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

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

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

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

II. NONDISCRIMINATION

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

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

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6. Training and Promotion:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

**EMPLOYMENT REQUIREMENTS
RELATING TO
NONDISCRIMINATION OF EMPLOYEES
(APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)**

**AN ACT OF THE KENTUCKY GENERAL ASSEMBLY
TO PREVENT DISCRIMINATION IN EMPLOYMENT**

**KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

General Decision Number: KY190039 02/01/2019 KY39

Superseded General Decision Number: KY20180101

State: Kentucky

Construction Type: Highway

Counties: Boone, Campbell, Kenton and Pendleton Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/04/2019
1	02/01/2019

BRKY0002-005 06/01/2017

	Rates	Fringes
BRICKLAYER.....	\$ 27.81	13.01

BROH0001-005 06/01/2008

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 25.75	8.60

CARP0698-001 05/01/2014

BOONE, CAMPBELL, KENTON & PENDLETON COUNTIES:

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 27.27	14.59
Diver.....	\$ 40.58	9.69

ELEC0212-007 06/04/2018

	Rates	Fringes
ELECTRICIAN.....	\$ 28.39	18.98

* ELEC0212-013 11/26/2018

	Rates	Fringes
Sound & Communication Technician.....	\$ 24.35	10.99

ENGI0018-013 05/01/2018

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 36.14	14.90
GROUP 2.....	\$ 36.02	14.90
GROUP 3.....	\$ 34.98	14.90
GROUP 4.....	\$ 33.80	14.90
GROUP 5.....	\$ 28.34	14.90
GROUP 6.....	\$ 36.39	14.90
GROUP 7.....	\$ 36.64	14.90

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Capacity); Concrete Pump; Crane (All Types, Including Boom Truck, Cherry Picker); Crane-Compact, Track or Rubber over 4,000 lbs. capacity; Cranes-Self Erecting, Stationary, Track or Truck (All Configurations); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating Equipment (All Types); Gradall; Helicopter Crew (Operator-Hoist or Winch); Hoe (all types); Hoisting Engine on Shaft or Tunnel Work; Hydraulic Gantry (Lifting System); Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine (All Types); Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Rail Tamper (with auto lifting & aligning device); Refrigerating Machine (Freezer Operation); Rotary Drill, on Caisson work; Rough Terrain Fork Lift with Winch/Hoist; Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24"

wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; & Wheel Excavator

GROUP 2 - Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Hydro Milling Machine; Horizontal Directional Drill (over 500,000 ft. lbs. thrust); Kolman-type Loader (production type-Dirt); Lead Greaseman; Lighting & Traffic Signal Installation Equipment (includes all groups or classifications); Material Transfer Equipment (Shuttle Buggy) Asphalt; Pettibone-Rail Equipment; Power Grader; Power Scraper; Push Cat; Rotomill (all), Grinders & Planers of All types; Trench Machine (24" wide & under); & Vermeer type Concrete Saw

GROUP 3 - A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer; Bobcat-type and/or Skid Steer Loader with or without Attachments; Highway Drills (all types); Locomotive (narrow gauge); Material Hoist/Elevator; Mixer, Concrete (more than one bag capacity); Mixer, one bag capacity (Side Loader); Power Boiler (Over 15 lbs. Pressure) Pump Operator installing & operating Well Points; Pump (4" & over discharge); Roller, Asphalt; Rotovator (lime soil stabilizer); Switch & Tie Tampers (without lifting & aligning device); Utility Operator (Small equipment); & Welding Machines

GROUP 4 - Backfiller; Ballast Re-locator; Bars, Joint & Mesh Installing Machine; Batch Plant; Boring Machine Operator (48" or less); Bull Floats; Burlap & Curing Machine; Concrete Plant (capacity 4 yd. & under); Concrete Saw (Multiple); Conveyor (Highway); Crusher; Deckhand; Farm-type Tractor with attachments (highway) except Masonry); Finishing Machine; Fireperson, Floating Equipment (all types); Fork Lift (highway); Form Trencher; Hydro Hammer; Hydro Seeder; Pavement Breaker; Plant Mixer; Post Driver; Post Hole Digger (Power Auger); Power Brush Burner; Power Form Handling Equipment; Road Widening Trencher; Roller (Brick, Grade & Macadam); Self-Propelled Power Spreader; Self-Propelled Power Subgrader; Steam Fireperson; Tractor (Pulling Sheepfoot, Roller or Grader); & Vibratory Compactor with Integral Power

GROUP 5 - Compressor (Portable, Sewer, Heavy & Highway); Drum Fireperson (Asphalt); Generator; Masonry Fork Lift; Inboard-Outboard Motor Boat Launch; Masonry Fork Lift; Oil Heater (asphalt plant); Oiler; Power Driven Heater; Power Sweeper & Scrubber; Pump (under 4" discharge); Signalperson; Tire Repairperson; & VAC/ALLS

GROUP 6 - Master Mechanic & Boom from 150 to 180

GROUP 7 - Boom from 180 and over

IRON0044-008 06/01/2018		
	Rates	Fringes

Ironworkers:

Fence Erector.....	\$ 26.76	21.20
Structural.....	\$ 28.17	21.20

IRON0044-018 06/01/2018

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 28.17	21.20

LABO0189-004 07/01/2018

PENDLETON COUNTY:

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 23.07	14.21
GROUP 2.....	\$ 23.32	14.21
GROUP 3.....	\$ 23.37	14.21
GROUP 4.....	\$ 23.97	14.21

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal

Boring; Air Track Driller (All Types); Powderman & Blaster;
Troxler & Concrete Tester if Laborer is Utilized

LABO0265-009 05/01/2018

BOONE, CAMPBELL & KENTON COUNTIES:

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 30.62	10.95
GROUP 2.....	\$ 30.79	10.95
GROUP 3.....	\$ 31.12	10.95
GROUP 4.....	\$ 31.57	10.95

LABORER CLASSIFICATIONS

GROUP 1 - Asphalt Laborer; Carpenter Tender; Concrete Curing Applicator; Dump Man (Batch Truck); Guardrail and Fence Installer; Joint Setter; Laborer (Construction); Landscape Laborer; Highway Lighting Worker; Signalization Worker; Mesh Handlers & Placer; Right-of-way Laborer; Riprap Laborer & Grouter; Scaffold Erector; Seal Coating; Surface Treatment or Road Mix Laborer; Sign Installer; Slurry Seal; Utility Man; Bridge Man; Handyman; Waterproofing Laborer; Flagperson; Hazardous Waste (level D); Diver Tender; Zone Person & Traffic Control

GROUP 2 - Skid Steer; Asphalt Raker; Concrete Puddler; Kettle Man (Pipeline); Machine Driven Tools (Gas, Electric, Air); Mason Tender; Brick Paver; Mortar Mixer; Power Buggy or Power Wheelbarrow; Sheeting & Shoring Man; Surface Grinder Man; Plastic Fusing Machine Operator; Pug Mill Operator; & Vacuum Devices (wet or dry); Rodding Machine Operator; Diver; Screwman or Paver; Screed Person; Water Blast, Hand Held Wand; Pumps 4" & Under (Gas, Air or Electric) & Hazardous Waste (level C); Air Track and Wagon Drill; Bottom Person; Cofferdam (below 25 ft. deep); Concrete Saw Person; Cutting with Burning Torch; Form Setter; Hand Spiker (Railroad); Pipelayer; Tunnel Laborer (without air) & Caisson; Underground Person (working in Sewer and Waterline, Cleaning, Repairing & Reconditioning); Sandblaster Nozzle Person; & Hazardous Waste (level B)

GROUP 3 - Blaster; Mucker; Powder Person; Top Lander; Wrencher (Mechanical Joints & Utility Pipeline); Yarner; Hazardous Waste (level A); Concrete Specialist; Concrete Crew in Tunnels (With Air-pressurized - \$1.00 premium); Curb Setter & Cutter; Grade Checker; Utility Pipeline Tapper; Waterline; and Caulker

GROUP 4 - Miner; & Gunitite Nozzle Person

TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE

SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.

PAIN0012-016 05/01/2015

	Rates	Fringes
PAINTER		
Bridge.....	\$ 24.39	9.06
Bridge Equipment Tender and Containment Builder.....	\$ 20.73	9.06
Brush & Roller.....	\$ 23.39	9.06
Sandblasting & Water Blasting.....	\$ 24.14	9.06
Spray.....	\$ 23.89	9.06

PLUM0392-008 06/01/2018

	Rates	Fringes
PLUMBER.....	\$ 32.01	19.67

SUKY2010-161 02/05/1996

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 15.85	4.60
GROUP 2.....	\$ 16.29	4.60

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Driver

GROUP 2 - Euclid Wagon; End Dump; Lowboy; Heavy Duty
Equipment; Tractor-Trailer Combination; & Drag

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage

payment data, project description, area practice material,
etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an
interested party may appeal directly to the Administrative
Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
11.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director
Office of Federal Contract Compliance Programs
61 Forsyth Street, SW, Suite 7B75
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Boone County.

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form – not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

194211

PROPOSAL BID ITEMS

Report Date 4/3/19

Page 1 of 3

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	2,977.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	916.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	110.00	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	1,217.00	TON		\$	
0050	00214		CL3 ASPH BASE 1.00D PG64-22	464.00	TON		\$	
0060	00356		ASPHALT MATERIAL FOR TACK	19.00	TON		\$	
0070	02091		REMOVE PAVEMENT	391.00	SQYD		\$	
0080	02101		CEM CONC ENT PAVEMENT-8 IN	48.00	SQYD		\$	
0090	02677		ASPHALT PAVE MILLING & TEXTURING	3,151.00	TON		\$	
0100	02697		EDGE LINE RUMBLE STRIPS	56,000.00	LF		\$	
0110	03240		BASE FAILURE REPAIR	157.00	SQYD		\$	
0120	20748ED		SHOULDER MILLING/TRENCHING	808.00	SQYD		\$	
0130	22906ES403		CL3 ASPH SURF 0.38A PG64-22	2,750.00	TON		\$	
0140	23593EC		SHOULDER FAILURE REPAIR	9.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0150	01000		PERFORATED PIPE-4 IN	200.00	LF		\$	
0160	01010		NON-PERFORATED PIPE-4 IN	50.00	LF		\$	
0170	01024		PERF PIPE HEADWALL TY 2-4 IN	2.00	EACH		\$	
0180	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	103.00	EACH		\$	
0190	02159		TEMP DITCH	14,977.00	LF		\$	
0200	02160		CLEAN TEMP DITCH	7,488.00	LF		\$	
0210	02230		EMBANKMENT IN PLACE	3,340.00	CUYD		\$	
0220	02237		DITCHING	125.00	LF		\$	
0230	02367		GUARDRAIL END TREATMENT TYPE 1	13.00	EACH		\$	
0240	02381		REMOVE GUARDRAIL	5,142.00	LF		\$	
0250	02391		GUARDRAIL END TREATMENT TYPE 4A	7.00	EACH		\$	
0260	02483		CHANNEL LINING CLASS II	803.00	TON		\$	
0270	02545		CLEARING AND GRUBBING (APPROX 0.35 ACRES)	1.00	LS		\$	
0280	02562		TEMPORARY SIGNS	390.00	SQFT		\$	
0290	02575		DITCHING AND SHOULDERING	29,954.00	LF		\$	
0300	02650		MAINTAIN & CONTROL TRAFFIC (BOONE US 42)	1.00	LS		\$	
0310	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0320	02676		MOBILIZATION FOR MILL & TEXT (BOONE US 42)	1.00	LS		\$	
0330	02690		SAFELOADING	12.00	CUYD		\$	
0340	02701		TEMP SILT FENCE	5,000.00	LF		\$	
0350	02703		SILT TRAP TYPE A	5.00	EACH		\$	
0360	02704		SILT TRAP TYPE B	5.00	EACH		\$	
0370	02705		SILT TRAP TYPE C	5.00	EACH		\$	
0380	02706		CLEAN SILT TRAP TYPE A	5.00	EACH		\$	
0390	02707		CLEAN SILT TRAP TYPE B	5.00	EACH		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0400	02708		CLEAN SILT TRAP TYPE C	5.00	EACH		\$	
0410	02726		STAKING (BOONE US 42)	1.00	LS		\$	
0420	04832		WIRE-NO. 12	120.00	LF		\$	
0430	05950		EROSION CONTROL BLANKET	750.00	SQYD		\$	
0440	05952		TEMP MULCH	11,342.00	SQYD		\$	
0450	05953		TEMP SEEDING AND PROTECTION	8,506.00	SQYD		\$	
0460	05963		INITIAL FERTILIZER	.50	TON		\$	
0470	05964		MAINTENANCE FERTILIZER	.80	TON		\$	
0480	05985		SEEDING AND PROTECTION	13,973.00	SQYD		\$	
0490	05992		AGRICULTURAL LIMESTONE	9.00	TON		\$	
0500	06510		PAVE STRIPING-TEMP PAINT-4 IN	228,675.00	LF		\$	
0510	06514		PAVE STRIPING-PERM PAINT-4 IN	115,779.00	LF		\$	
0520	06568		PAVE MARKING-THERMO STOP BAR-24IN	17.00	LF		\$	
0530	08100		CONCRETE-CLASS A (FOR INTERMEDIATE ANCHOR)	5.00	CUYD		\$	
0540	10020NS		FUEL ADJUSTMENT	6,927.00	DOLL	\$1.00	\$	\$6,927.00
0550	10030NS		ASPHALT ADJUSTMENT	17,398.00	DOLL	\$1.00	\$	\$17,398.00
0560	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	5,475.00	LF		\$	
0570	23274EN11F		TURF REINFORCEMENT MAT 1	690.00	SQYD		\$	
0580	24540		R/W MONUMENT TYPE 3	11.00	EACH		\$	
0590	24894EC		REMOVE (RAILROAD RAIL ABOVE GROUND LINE BY TORCH CUTTING)	42.00	EACH		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0600	00440		ENTRANCE PIPE-15 IN	115.00	LF		\$	
0610	00441		ENTRANCE PIPE-18 IN	75.00	LF		\$	
0620	00443		ENTRANCE PIPE-24 IN	55.00	LF		\$	
0630	00462		CULVERT PIPE-18 IN	248.00	LF		\$	
0640	00464		CULVERT PIPE-24 IN	119.00	LF		\$	
0650	00468		CULVERT PIPE-36 IN	84.00	LF		\$	
0660	01208		PIPE CULVERT HEADWALL-24 IN	1.00	EACH		\$	
0670	01212		PIPE CULVERT HEADWALL-36 IN	2.00	EACH		\$	
0680	01310		REMOVE PIPE	346.00	LF		\$	
0690	01451		S & F BOX INLET-OUTLET-24 IN	1.00	EACH		\$	
0700	01490		DROP BOX INLET TYPE 1	4.00	EACH		\$	
0710	01642		JUNCTION BOX-18 IN	2.00	EACH		\$	
0720	01726		SAFETY BOX INLET-18 IN SDB-1	4.00	EACH		\$	
0730	01728		SAFETY BOX INLET-18 IN DBL SDB-5	2.00	EACH		\$	
0740	02625		REMOVE HEADWALL (MP 1.05 - 8'X7' RCBC - OUTLET)	1.00	EACH		\$	
0750	02625		REMOVE HEADWALL (MP 2.00 - 8'X4' - DOUBLE RCBC - OUTLET)	1.00	EACH		\$	
0760	02625		REMOVE HEADWALL (MP 2.00 8'X4' - DOUBLE RCBC - INLET)	1.00	EACH		\$	
0770	03262		CLEAN PIPE STRUCTURE	6.00	EACH		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0780	08003		FOUNDATION PREPARATION (RCBC EXTENSION - MP 1.05)	1.00	LS		\$	
0790	08003		FOUNDATION PREPARATION (RCBC EXTENSION - MP 2.00)	1.00	LS		\$	
0800	08100		CONCRETE-CLASS A (FOR RCBC EXTENSIONS)	80.00	CUYD		\$	
0810	08150		STEEL REINFORCEMENT	11,058.00	LB		\$	
0820	23497EC		REMOVE CULVERT PIPE HEADWALL	20.00	EACH		\$	
0830	24186EC		BORE AND JACK PIPE-36 IN	90.00	LF		\$	
0840	24575ES610		HEADWALL (SLOPED & MITERED CONCRETE FOR 18 INCH PIPE)	14.00	EACH		\$	
0850	24575ES610		HEADWALL (SLOPED & MITERED CONCRETE FOR 24 INCH PIPE)	4.00	EACH		\$	

Section: 0004 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0860	06406		SBM ALUM SHEET SIGNS .080 IN	67.00	SQFT		\$	
0870	06410		STEEL POST TYPE 1	102.00	LF		\$	
0880	21134ND		REMOVE-STORE AND REINSTALL SIGN	11.00	EACH		\$	
0890	21373ND		REMOVE SIGN	4.00	EACH		\$	
0900	24631EC		BARCODE SIGN INVENTORY	12.00	EACH		\$	

Section: 0005 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0910	14029		W METER ADJUST	1.00	EACH		\$	
0920	14077		W SERV PE/PLST LONG SIDE 1 IN	1.00	EACH		\$	

Section: 0006 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0930	02569		DEMOBILIZATION	1.00	LS		\$	