CALL NO. 106

CONTRACT ID. 204000

WARREN COUNTY

FED/STATE PROJECT NUMBER HSIP 5073 (005)

DESCRIPTION KY HIGHWAY 234 (KY 234)

WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB

PRIMARY COMPLETION DATE 9/30/2021

LETTING DATE: September 25,2020

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 am EASTERN DAYLIGHT TIME September 25,2020. Bids will be publicly announced at 10:00 am EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 10.50%

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

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SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 03

CONTRACT ID - 204000

HSIP 5073 (005)

COUNTY - WARREN

PCN - 03114023420001
HSIP 5073 (005)

KY HIGHWAY 234 (KY 234) (MP 0.000) FROM ALLEN CO LINE TO HUNTS LANE (MP 7.218), A DISTANCE OF 07.22 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 03-09015.00.

GEOGRAPHIC COORDINATES LATITUDE 36:55:45.00 LONGITUDE -86:17:32.00

COMPLETION DATE(S):

COMPLETED BY 09/30/2021 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.

FEDERAL CONTRACT NOTES

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

102.02 Current Rating	102.08 Preparation and Delivery of Proposals
102.13 Irregular Bid Proposals	102.14 Disqualification of Bidders
102.09 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 Proposal Line Number, Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
3. The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows;
   a. If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
      - The entire expenditure paid to a DBE manufacturer;
      - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
      - The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

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

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

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

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

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

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

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

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

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

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

- 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 of Subcontractor Payment (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be completed and signed within 7 days of being paid by the Cabinet.

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

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

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

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

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 in this office is Mr. Melvin Bynes. Mr. Bynes' current contact information is email address – melvin.bynes2@ky.gov and the telephone number is (502) 564-3601.

DEFAULT OR DECERTIFICATION OF THE DBE

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

PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES

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

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

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

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

SECTION 7 is expanded by the following new Article:

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

Pursuant to Title 46CFR Part 381, the Contractor agrees

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

SURFACING AREAS

The Department estimates the mainline surfacing width to be 20 feet.

The Department estimates the total mainline area to be surfaced to be 93,160 square yards.

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

The Department estimates the total shoulder area to be surfaced to be 8,469 square yards.

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.

INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION B

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

SPECIAL NOTE FOR AWARD OF CONTRACT

In accordance to section 103.02 of the Standard Specifications for Road and Bridge Construction, the Department may hold and not award the contract for a period not to exceed sixty (60) calendar days from the date of letting.

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

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.

STATIONING

The contractor is advised that the planned locations of work were established from the center of the intersection of KY 234 and Motley Lane (MP 3.668). Mile Point 3.668 is converted to STA. 193+67.04 by multiplication by 5,280 feet. The existing mile marker signs may not correspond to the proposed work locations.

LIDAR

Survey information was obtained from three sources for this project. The existing ground line was obtained from KYTC Statewide Aerial LiDAR. Existing centerline and edge of pavement horizontal locations were obtained from Mobile LiDAR data. Due to the lack of vertical control, no elevation data is available from the Mobile LiDAR. Pipe inlet and outlet elevations were obtained from conventional survey with control from GPS methods. All work should be field verified as appropriate during construction and prior to incorporating the various project work items. Refer to the Special Note for Staking concerning staking operations required to control and construct the work.

ON-SITE INSPECTION

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

RIGHT OF WAY LIMITS

The Department has not established the exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. If private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities 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.

UTILITY COORDINATION

Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility

damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

CONTROL

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

DESCRIPTION OF WORK

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

Pavement Widening. The existing roadway, within the project limits, will be widened one foot on each side. Work will include trenching the existing earth shoulder, placing asphalt base, and re-grading the roadside, as shown on the Typical Section and the Ditching and Shouldering Detail. Also, refer to the Special Note for Shoulder Milling/Trenching for more information. The Contractor is required to complete this work item prior to KY 234 being resurfaced.

Re-grade Embankment Slopes. Several embankment locations within the project limits will be regraded to improve their slopes to 3:1 or better. Work will include embankment benching, the placement of fill material to achieve embankment slopes of at least 3:1, ditching, and reseeding. The proposed shoulder, ditch, and/or roadside dimensions are detailed on the Typical Sections. All work to re-grade embankment slopes will be paid for under the lump sum bid item "Site Preparation" per designated location. Site preparation will remain incidental to all other work items as detailed in the Standard Specifications or the special notes that are included in this proposal. If a fence is present within an embankment improvement location, it will be replaced in like-kind to the satisfaction of the Engineer. Temporary fencing will be installed for livestock containment, as needed, and maintained by the Contractor until permanent fencing is installed. Temporary Fencing shall be in place, and must be approved by the Engineer, prior to the demolition of the existing fence. The Contractor is required to complete this work item prior to KY 234 being resurfaced.

Pipe Extensions. Culvert pipes will be replaced and/or extended in conjunction with the re-graded embankment slopes. Locations are noted on the Pipe Replacement & Extension Summary. Other items that may be associated with the pipe replacements and/or extensions include: Sloped & Mitered Concrete

Headwalls, Ditching & Shouldering, Boring and Jacking Pipe, Drainage Structures, and Channel Lining. Refer to the Special Note for Pipe Replacements / Extensions for more information on this item of work. The Contractor is required to complete this work item prior to KY 234 being resurfaced. **The Bid item 23126EN Bore and Jack Pipe – 18 In shall pay for all labor, material, equipment, and incidentals necessary to bore and jack an 18-inch culvert pipe under the roadway at the location(s) indicated in the proposal.**

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

Signing. New curve signing will be installed along the project corridor. Some existing signs will need to be removed and/or replaced. Refer to the Plan Sheets and Proposed Signing Summary for approximate locations and approximate quantities for sign removal and new sign installations. The District Traffic Engineer will make the final determination as to the removal and placement of all signs and the advisory speeds for all curves. The Contractor shall NOT order signs until the District Traffic Engineer has provided final advisory speeds. Refer to the Special Note for Signing and Special Note for Signage for more details.

Ditching and Shouldering. Several areas throughout the project are set up for Ditching & Shouldering. Perform Ditching & Shouldering at the locations identified in the Ditching and Shouldering Summary, or other locations as directed by the Engineer. The proposed shoulder, ditch, and/or roadside dimensions are detailed on the Typical Sections. 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. The Contractor is required to complete this work item prior to KY 234 being resurfaced.

Channel Lining. In addition to the Class II Channel Lining quantified in the Pipe Replacement and Extension Summary, a quantity of 500 Tons of Channel Lining Class II has been included for use at the locations indicated in both the Embankment Repair Summary and Ditching & Shouldering Summary. The Contractor and Engineer should work together to determine the location and best use of Channel Lining throughout this project. The Engineer will make the final determination as to the needed quantities and placement of Channel Lining.

Erosion Control Blanket. A quantity of 5,000 square yards of Erosion Control Blanket has been included in the Ditching & Shouldering Summary for potential use along areas of regraded shoulders, ditch lines, fills slopes and/or back slopes, inlets and outlets of pipes, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Erosion Control Blanket throughout this project. The Engineer will make the final determination as to the quantities and placement of Erosion Control Blanket.

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

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

III. CONSTRUCTION METHODS

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

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

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

D. Staking. See Special Note for Staking.

E. 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 & SHOULERING. For more information refer to the DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS.

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

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

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

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

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

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

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective

rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

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

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

IV. METHOD OF MEASUREMENT

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

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

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

D. Staking. See Special Note for Staking.

E. Ditching & Shouldering. Contrary to Section 209.04 the Department will measure the bid item DITCHING & SHOULERING in linear feet along the centerline of the roadway as the length of the actual ditching and/or shouldering work performed. Further, this measurement will only include one side of the roadway. Therefore, for areas where ditching and shouldering occurs on both sides of the road, the Department will measure each side independently. The Department will not measure cleaning pipe structures 36 inches or less in diameter or reshaping any deformed ends on metal entrance pipes that are to remain in place, as these operations are considered incidental to the bid item DITCHING & SHOULERING.

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

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

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

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

V. BASIS OF PAYMENT

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

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

C. Staking. See Special Note for Staking.

D. Ditching & Shouldering. The Department will make payment for the completed and accepted quantities under the bid item DITCHING & SHOULERING. 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, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

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

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

SPECIAL 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 the applicable Standard or Sepia Drawings, current editions. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer’s approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.

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

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

III. CONSTRUCTION METHODS

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

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

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

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

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

F. Pipe Backfill. Backfill entrance pipes according to Section 701.03.06. Contrary to Section 701.03.06, 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. The contractor shall bench into the existing slope and apply proper compaction according to Section 206. For more information and details on benching, refer to Note 2 on the detail sheet titled: DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS, found elsewhere in the Proposal. Provide positive drainage of ditches, shoulders, and slopes at all times during, and upon completion of construction.

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

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

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

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

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

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

IV. METHOD OF MEASUREMENT

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

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

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

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

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

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

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

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

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

V. BASIS OF PAYMENT

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

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

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

D. Culvert and Entrance Pipe. The Department will make payment according to Section

701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.

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

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

SPECIAL NOTE FOR EROSION CONTROL

I. DESCRIPTION

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

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

II. MATERIALS

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

III. CONSTRUCTION

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

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

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

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

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

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

The use of Temporary Mulch is encouraged.

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

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

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

IV. MEASUREMENT

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

V. BASIS OF PAYMENT

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

SPECIAL NOTE

For Tree Removal

Warren County
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 234 FROM THE WARREN/ALLEN COUNTY LINE TO CR 1175/CR 1155 IN WARREN COUNTY
Item No. 3-9015

NO CLEARING OF TREES 5 INCHES OR GREATER (DIAMETER BREAST HEIGHT) FROM JUNE 1- 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 NON-TRACKING TACK COAT

1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can "break" within 15 minutes under conditions listed in 3.2.

2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ˚ F	20 – 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue[1], %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ˚ F	20 max.	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ˚ C	1.0 min.	AASHTO T 315
Softening Point, ˚ F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

[1] Bring sample to 212 ˚F over a 10-15 minute period. Maintain 212 ˚F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.

2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 ˚F and 180 ˚F. Do not exceed 180 ˚F. Circulate the material while heating. As required by the manufacturer, ensure the spray bar is equipped with #1 or #2 ¼" V-slot Etnyre nozzles. Other nozzles are not acceptable. Arrange the nozzles in the following patterns from left to right:

Nozzle number(s)	Activity	Orientation
1	On	Vertical
2	Off	-
3	On	Horizontal
4 & 5	Off	-
6	On	Horizontal
Continue 2 off and 1 on pattern through rest of spray bar system.		

Ensure the bar can be raised to between 14 and 18" from the roadway.

2.3 Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

3.2 Non-tracking Tack Application. Ensure the roadway temperature is a minimum of 40 ˚F and rising during the application of the tack. This material is not suitable for use in colder temperatures. Prior to applying the tack, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 – 180 ˚F. After initial heating to between 170 – 180 ˚F, the material may be sprayed between 165 ˚F and 180 ˚F. Do not apply outside this temperature range. Apply material at a rate of 0.50 pounds (0.06 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. If full coverage is not achieved, material application rate may be increased to ensure full coverage. Do not heat material more than twice in one day.

3.3 Non-tracking Tack Certification. Furnish the tacks certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the adhesive. The Department will consider all such items incidental to the non-tracking tack.

5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer’s lot of material based on the degree of compliance as defined in the following schedule. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ˚ F	20 – 100	19 - 102	17 - 18 103 - 105	15 - 16 106 - 107	14 108 - 109	≤13 ≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 – 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F	20 max.	≤ 21	22 - 23	24 - 25	26 - 27	≥ 28
Original Dynamic Shear (G*/sin δ), 82 ˚ C	1.0 min.	≥0.95	0.92 – 0.94	0.90 – 0.91	0.85 - 0.89	≤ 0.84
Softening Point, º F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

Code	Pay Item	Pay Unit
24970EC	Asphalt Material for Tack Non-Tracking	Ton

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

1.1 Description. The KYCT (Kentucky Method for Cracking Test) and the Hamburg test results will help determine if the mixture is susceptible to cracking and rutting. During the experimental phase, data will be gathered and analyzed by the Department to determine the durability of the bituminous mixes. Additionally, the data will help the Department to create future performance based specifications which will include the KYCT and Hamburg test methods.

2.0 Equipment

2.1 KYCT Testing Equipment. The Department will require a Marshall Test Press with digital recordation capabilities. Other CT testing equipment may be used for testing with prior approval by the Department.

2.2 Water Baths. One or more water baths will be required that can maintain a temperature of 77^{o} +/- 1.8^{o} F with a digital thermometer showing the water bath temperature. Also, one water bath shall have the ability to suspend gyratory specimen fully submerged in water in accordance with AASHTO T-166, current edition.

2.3 Hamburg Wheel Track Testing. The department encourages the use of the PTI APA/Hamburg Jr. test equipment to perform the loaded wheel testing. The Department will allow different equipment for the Hamburg testing, but the testing device must be approved by the Department prior to testing.

2.4 Gyratory Molds. Gyratory molds will be required to assist in the production of gyratory specimens in accordance with AASHTO T-312, current edition.

2.5 Ovens. Adequate (minimum of two ovens) will be required to accommodate the additional molds and asphalt mixture necessary to perform the acceptance testing as outlined in Section 402 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

2.6 Department Equipment. The Department will provide gyratory molds, PINE 850 Test Press with digital recordation, and CT testing equipment to assist during this experimental phase so data can be gathered. Hamburg test specimens will be submitted to the Division of Materials for testing on the PTI APA/Hamburg Jr if the asphalt contractor or district materials office does not have an approved Hamburg testing device.

3.0 Testing Requirements

3.1 Acceptance Testing. Perform all acceptance testing and aggregate gradation as according with Section 402 and Section 403 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

3.2 KYCT Testing. Perform crack resistance analysis (KYCT) in accordance with the current Kentucky Method for KYCT Index Testing during the mix design phase and during the plant production of all surface mixtures. For mix design approvals, submit KYCT results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.

3.2.1 KYCT Frequency. Obtain an adequate sample of hot mix asphalt to insure the acceptance testing, gradation, and KYCT gyratory samples can be fabricated and is representative of the bituminous mixture. Acceptance specimens shall be fabricated first, then immediately after, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens and gradation will be required one per sublot produced from the same asphalt material and at the same time as the acceptance specimen is sampled and tested.

3.2.2 Number of Specimens and Conditioning. Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance to KM 64-411. KYCT mix design specimens shall be short-term conditioned for four hours at compaction temperature in accordance to KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours at compaction temperature in accordance to KM 64-411. Additionally, fabricated specimens shall be allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes and conditioned in a 77 °F water bath for 30 minutes +/- 5 minutes. To insure confidence and reliability of the test results provided by KYCT testing and Hamburg testing, reheating of the asphalt mixture is prohibited.

3.2.3 Record Times. For each sublot, record the time required between drying aggregates in the plant to KYCT specimen fabrication. The production time may vary due to the time that the bituminous material is held in the silo. Record the preconditioning time when the time exceeds the one hour specimen cool down time as required in accordance to The Kentucky Method for KYCT Index Testing. The preconditioning time may exceed an hour if the technician is unable to complete the test on the same day or within the specified times as outlined in The Kentucky Method for KYCT Index Testing. The production time and the preconditioning time shall be recorded on the AMAW.

3.2.4 File Name. As according to section 7.12 of The Kentucky Method for KYCT Index Testing, save the filename with the following format; “CID_Approved Mix Number_Lot Number_Sublot Number_ Date”

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

3.3.1 Hamburg Testing Frequency. Perform testing and analysis per lot of material. The plant produced bituminous material sampled for the Hamburg test does not have to be obtained at the same time as the acceptance and KYCT sample. If the Hamburg test sample is not obtained at the same time as the KYCT sample, determine the Maximum Specific Gravity of the KYCT sample in accordance with AASHTO T-209 coinciding with the Hamburg specimens.

3.3.2 Record Times. Record the production time as according to section 3.2.3 in this special note. Also record the time that the specimens were fabricated and the time the Hamburg testing was started. All times shall be recorded on the AMAW.

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

4.0 Data

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and Hamburg testing within five working days once all testing has been completed for a lot to Central Materials Lab and the District Materials Engineer. Also, any data and or comments that the asphalt contractor or district personnel deem informational during this experimental phase, shall also be submitted to the Central Materials Lab and the District Materials Engineer. Any questions or comments regarding any item in this Special Note can be directed to the Central Office, Division of Materials, Asphalt Branch.

5.0 KYCT Video Demonstration

https://www.youtube.com/watch?v=84j0bM45-hg&feature=youtu.be

6.0 Payment

Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered to be incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and Hamburg specimens if a producer does not possess the proper equipment.

June 3, 2019

SPECIAL NOTE FOR SIGNAGE

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

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

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

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

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

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

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

SPECIAL NOTE FOR SIGNING

I. DESCRIPTION

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

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

II. MATERIALS

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

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

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

III. CONSTRUCTION METHODS

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

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

C. Staking. See Special Note for Staking.

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

Fabricate sheet signs from .080 or .125 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209, and to the size and shape specified. Prepare the side of the sheet to be used as the sign face to receive the retroreflective background material

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

All hardware for the erection of sheeting signs shall be rust resistant: stainless steel, zinc coated, aluminum, or an Engineer approved material. All beams and posts shall be of sufficient lengths to extend from the top of the sign to the required embedment in the anchor. Splicing of the sign post shall NOT be allowed. For installations in soil, Type I steel posts shall be mounted on either a standard anchor, with soil stabilizer plate, or on a Type D breakaway sign support. Refer to Sheeting Sign Detail Sheet 1 of 2 for installation details for a standard anchor with soil stabilizer plate. When installing a standard anchor with soil stabilizer plate, if solid rock is encountered, the Contractor shall drill a hole to the required depth into the rock, install the anchor into the hole, and backfill the anchor post with concrete, or other method approved by the Engineer. The cost shall be incidental to Type I steel post, and a soil stabilizer plate will not be required. Refer to Standard Drawing RGX-065, current edition, for installation details of Type D breakaway sign supports. Approved manufacturers for Type D breakaway sign supports have been placed on the list of approved materials. For installations on existing concrete, such as a sidewalk, concrete median, etc., Type I steel posts shall be mounted on a Type D surface mount. For Type D surface mounts use only Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, 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.

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

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

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

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

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

Sign posts shall be erected vertically by using a bubble level. The tolerance shall be a two (2) degree angle in any direction. For locations where 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 sings.

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

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

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

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

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

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

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

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

IV. METHOD OF MEASUREMENT

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

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

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

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

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

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

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

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

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

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

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

V. BASIS OF PAYMENT

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

B. Signs. The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the

signs, as required by these notes and the details found elsewhere in the proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

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

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

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

F. Class A Concrete for Signs. The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work and incidentals necessary to install the concrete as required by Standard Drawing RGX-065, current edition.

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

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

SPECIAL NOTE FOR 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. 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.
3. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations. NOTE: The District Traffic Engineer may determine that the proposed signing, including sign types and messages, needs to be adjusted and/or modified from what is shown in the proposal. Therefore, the Contractor shall not order any sign material for a route until the route has been staked and final sign location approval has been given by the District Traffic Engineer.
4. Produce and furnish to the Engineer "As Built" information for the drainage improvements. 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.
5. 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.

6. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
7. 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 September 30, 2021. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

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

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. Failure to adhere to these restrictions shall result in Liquidated Damages in the amount of **$344** per affected tree. 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 PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

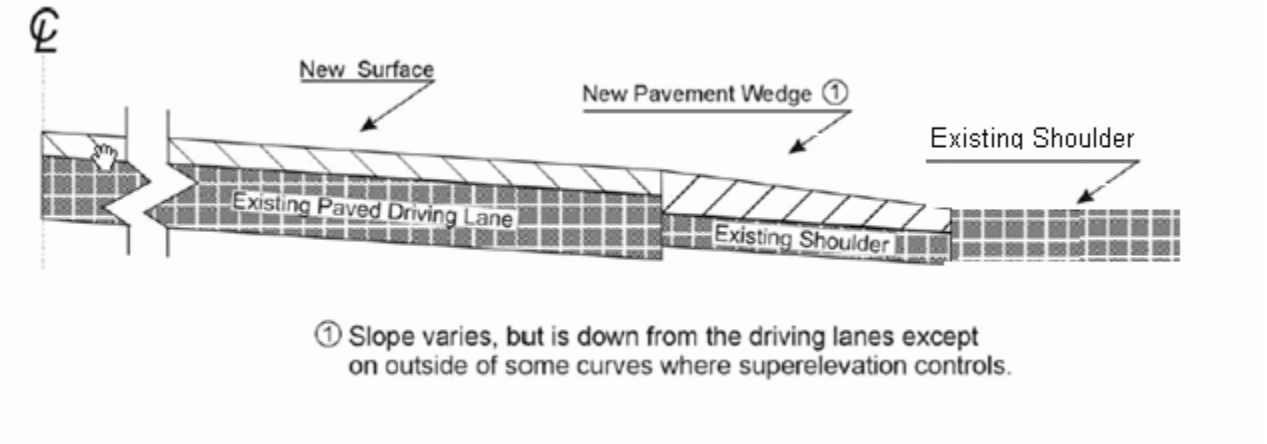
1.0 MATERIALS. Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

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

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

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

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



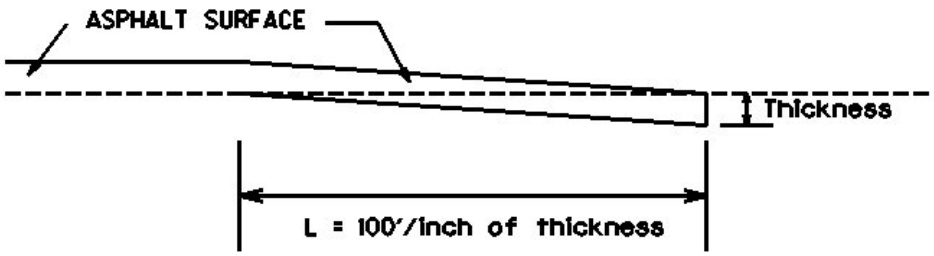
3.0 MEASUREMENT. The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.

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

SPECIAL NOTE FOR EDGE KEY

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

EDGE KEY



Thickness = 1 Inch

L = 100 LF

L= Length of Edge Key

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

SPECIAL 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;

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

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

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

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

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

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

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

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

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

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

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

IV. METHOD OF MEASUREMENT

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

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

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

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

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

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

V. BASIS OF PAYMENT

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

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

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

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

SPECIAL NOTES FOR REMOVAL OF GUARDRAIL TO ACCOMMODATE TRENCHING AND SHOULDER PAVING OPERATIONS

If necessary to accommodate trenching and shoulder paving operations and with prior approval of the Engineer, the Contractor may remove the existing guardrail system rail elements and offset blocks. Do not disturb guardrail posts, bridge end connectors, terminal sections, and/or end treatments. Perform all guardrail removal operations under the same full lane closure required for the trenching or paving operations. Remove the guardrail immediately in front of the trenching operation and reset the guardrail immediately after the operation has passed. If the trenching and the paving operations at the site of the guardrail removal are scheduled to be accomplished on the same day, the Contractor may leave the guardrail removed during the interval between the operations only when the operations are being performed under a single lane closure. Do not leave guardrail down overnight or at other times when operations are not actually in progress.

When resetting guardrail, do not leave blunt ends exposed where they would be hazardous to the public. If left in place between the trenching and paving operations, protect exposed ends protected with a temporary end treatment installed by connecting at least 25 feet of rail to the exposed end, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. Place a drum with bridge panel in advance of the guardrail end and maintain during the interval between the trenching and paving operations.

Reset the guardrail to the lines and grades existing immediately prior to removal as shown on current standard drawings or as designated by the Engineer. The Engineer will check the existing guardrail to be removed and reset before removal begins. If components are found missing or damaged to the extent that they cannot be reused, the Department will furnish the necessary parts and materials to the Contractor for installation when the guardrail is reset. The Department will make these parts available to the Contractor at the Department's Warren County Maintenance facility. Be responsible for all damage to the existing guardrail system resulting from the work. Replace any parts that are damaged or lost during the guardrail removal and replacement process. Correct any vertical or horizontal misalignment not present prior to removal by any method approved by the Engineer, which allows the construction of the guardrail to the true grade and prevents apparent sags.

The Department will not measure removing and resetting the existing guardrail, replacing guardrail components that were damaged or missing prior to project with components furnished by the Department, furnishing and installing parts lost or damaged by the Contractor, and providing and maintaining a temporary end treatment with drum and panel, but shall be incidental to other items of work, as applicable.

SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING

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

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

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

SPECIAL NOTE FOR 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 overall milling and/or leveling and wedging, excavate the designated base failure areas to a depth 8 inches below the existing asphalt pavement surface level. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

Backfill the excavated areas with Class 2 Asphalt Base 1.00D PG64-22. Compact the asphalt base to the compaction required in Section 403.03.10. 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 7 calendar days have elapsed after placement of the asphalt base. After a minimum of 7 calendar days and 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 conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if 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 removing pavement and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, 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 as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, and the Standard and Sepia Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

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

PROJECT PHASING & CONSTRUCTION PROCEDURES

For all construction activities, utilize a lane closure and maintain one 9 ft. lane of alternating one-way traffic. This may require part-width construction of certain work items. Adequate advanced warning signage and flag persons (at a minimum) are required for alternating one-way traffic operations.

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.

LANE CLOSURES

No lane closures will be allowed on the following dates:

Thanksgiving Weekend	Thursday, November 26, 2020 – Sunday, November 29, 2020
Christmas Holiday	Thursday, December 24, 2020 – Friday, December 25, 2020
New Year's Holiday	Thursday, December 31, 2020 – Friday, January 1, 2021
Easter Weekend	Friday, April 2, 2021 – Sunday, April 4, 2021
Memorial Day Weekend	Friday, May 28, 2021 – Monday, May 31, 2021
Independence Day Weekend	Friday, July 2, 2021 – Monday, July 5, 2021
Labor Day Weekend	Friday, September 3, 2021 – Monday, September 6, 2021

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

Do not leave lane closures in place during non-working hours, unless otherwise approved by the Engineer. Liquidated Damages will be assessed at $1,000 per hour, or fraction of an hour, for each occurrence of lane closures during non-working hours.

No long term lane closures (more than 3 days) will be allowed; therefore, lane closures will not be measured for payment. If approved by the Engineer, steel plates may be used to span trenches while the flowable fill cures.

ROAD CLOSURES
When changing from one temporary traffic pattern to another, traffic may be halted for up to 15 minutes. Prior approval by the Engineer will be required for all road closures. It is the intent that all road closures be kept to a minimum time. The Contractor is to schedule operations involving road closures so that all work proceeds in an expeditious manner. Liquidated Damages will be assessed at $1,000 per hour, or fraction of an hour, for each occurrence, of road closures exceeding 15 minutes.

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. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (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. **A quantity of 260 sq. ft. of Temporary Signs has been included for bidding purposes.**

CHANGEABLE MESSAGE SIGNS
If deemed necessary, Portable Changeable Message Signs will be provided by the Department. The Contractor may be asked to assist in the placement and setup of the portable changeable message signs. The Engineer will determine placement locations and the messages to be displayed.

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

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

Except as 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 traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and un-resurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

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

Less than 2" - No protection required.

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

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

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

THERMOPLASTIC INTERSECTION MARKINGS

Prior to milling and/or resurfacing, locate and document the locations of all existing thermoplastic intersection markings within the contract limits. After resurfacing, replace the markings at their approximate, existing locations or as directed by Engineer. Place new markings, not existing prior to resurfacing, as detailed elsewhere within the project proposal, or as directed by the Engineer.

PAVEMENT MARKINGS

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

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

A quantity of 90,522 LF of Temporary 4" Striping has been included for bidding purposes.

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)

Traffic Control Plan
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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

Traffic Control Plan
Page 6 of 8

Standard Abbreviations

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

Word	Abbrev	Example
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

Traffic Control Plan
Page 7 of 8

Standard Abbreviations (cont)

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

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

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

Typical Messages

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

Reason/Problem	Action
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

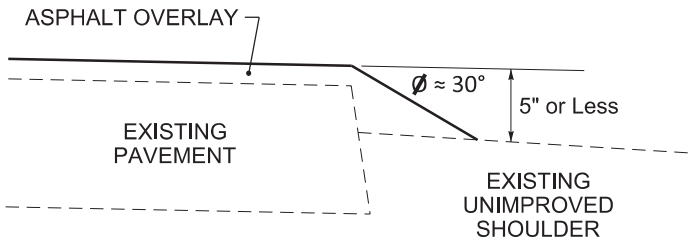
Traffic Control Plan
Page 8 of 8

Typical Messages (cont)

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

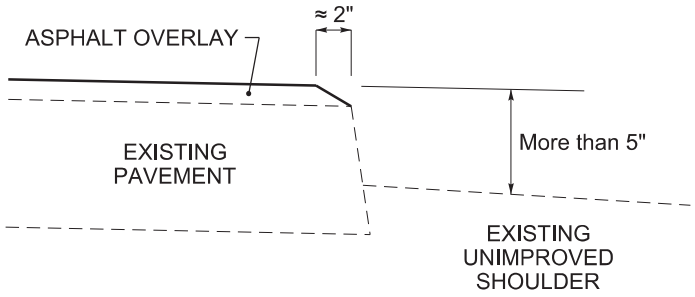
DURABLE PAVEMENT EDGE DETAIL

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



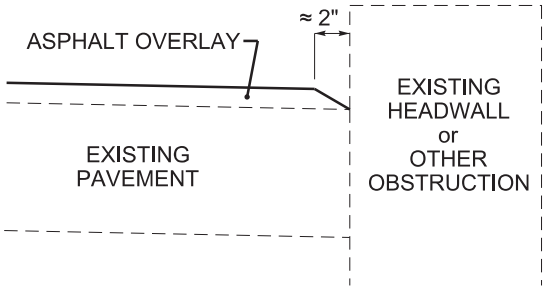
DURABLE PAVEMENT EDGE DETAIL

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



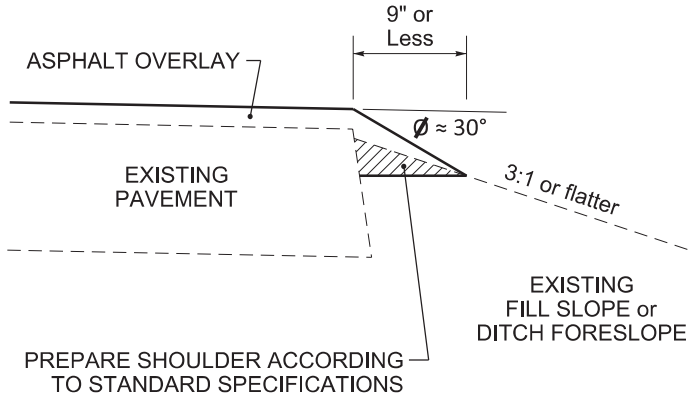
DURABLE PAVEMENT EDGE DETAIL

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



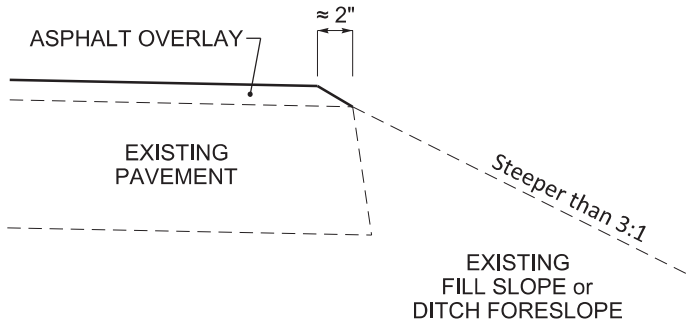
DURABLE PAVEMENT EDGE DETAIL

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



DURABLE PAVEMENT EDGE DETAIL

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



NOTES

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

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS

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

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

RIGHT OF WAY CERTIFICATION

☒ **Original** ☐ **Re-Certification** — **RIGHT OF WAY CERTIFICATION**

ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
03-9015.00	Warren	114 0234 000-008	HSIP 5073005

PROJECT DESCRIPTION

PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 234 FROM THE WARREN/ALLEN COUNTY LINE TO CR 1175/CR 1155 IN WARREN COUNTY

☒ **No Additional Right of Way Required**

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

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

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

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

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

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

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

		EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Total Number of Parcels on Project	-0-		
Number of Parcels That Have Been Acquired			
Signed Deed	-0-		
Condemnation	-0-		
Signed ROE	-0-		

Notes/ Comments (Use Additional Sheet if necessary)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Allen Arnold
Signature		Signature	allen arnold Digitally signed by allen arnold Date: 2020.05.05 08:57:27 -05'00'
Date		Date	05/05/2020
Right of Way Director		**FHWA**	
Printed Name	Kelly Divine	Printed Name	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Signature	2020.05.05 15:23:54 -05'00'	Signature	

Consent & Release Summary

Parcel	Begin MP	End MP	Side	Owner(s)	Consent & Release Description	Status	Additional Notes
1	0.909	0.966	RT	Glen Ray Johnson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
2	0.994	1.070	RT	Glen Ray Johnson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
3	1.145	1.222	RT	Glen Ray Johnson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
4	2.367	2.481	LT	David & Deborah Willoughby	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
5	2.348	2.481	RT	John & Frances Sikes	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
6	3.068	3.135	LT	Edward Jr. & Roberta Grimes	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Unsigned	District working to obtain Consent & Release. Proceed as directed by the Engineer.
7	3.343	3.400	RT	Marvin & Linda Hunt	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
8	3.607	3.630	LT	Alfie & Annette Garcia	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Unsigned	District working to obtain Consent & Release. Proceed as directed by the Engineer.
9	3.570	3.663	RT	Christine & Pat Hunt	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
10	3.663	3.700	RT	Wallace R Carter Jr.	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Unsigned	District working to obtain Consent & Release. Proceed as directed by the Engineer.

Consent & Release Summary

Parcel	Begin MP	End MP	Side	Owner(s)	Consent & Release Description	Status	Additional Notes
27	4.098	4.140	LT	Rivas Serrano & Silvia Flores	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Unsigned	District working to obtain Consent & Release. Proceed as directed by the Engineer.
11	4.205	4.252	LT	Sheila & Phillip Rowel	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
12	4.205	4.213	RT	Patricia & Jairo Munoz	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
13	4.213	4.242	RT	Tammy & Morris Jackson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
14	4.460	4.520	LT	Heather & Jonathan Wade	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
15	4.520	4.545	LT	Sam Rose	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
16	4.554	4.593	RT	Alene & Curtis Hewitt	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
17	4.721	4.773	RT	Kent Preston	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
18	4.857	4.915	LT	Louise & Gabriel Buntzman	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for pet containment, as needed, until permanent fencing is installed. Temporary fencing shall be woven wire fence in accordance with KYTC Standard Practices.	Signed	Temporary fencing shall be woven wire fence.
19	4.971	5.077	LT	Ann B & Jimmie P Gipson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	

Consent & Release Summary

Parcel	Begin MP	End MP	Side	Owner(s)	Consent & Release Description	Status	Additional Notes
20	5.123	5.199	LT	Ann B & Jimmie P Gipson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
21	5.170	5.199	RT	Sarah & Mark Rodgers	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	Temporary fencing shall be woven wire fence. Permanent Board Fencing will be installed after work is complete
22	6.420	6.477	LT	Eagle Ridge Developers LLC	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
23	6.506	6.553	LT	Eagle Ridge Developers LLC	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
24	6.553	6.573	LT	Leah & Benny Farley	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
25	6.515	6.553	RT	Ryan E Nilsson	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	
26	6.553	6.563	RT	Ronald Lee Yaeger	Work off of existing right of way to place fill material for the purpose of ditching, shouldering, flattening the roadway embankment slope, and reseeding. If there is existing fencing, it will be replaced in like kind after the work is complete. Temporary fencing will be installed for livestock containment, as needed, until permanent fencing is installed. Temporary fencing shall be in accordance with KYTC Standard Practices.	Signed	

UTILITIES AND RAIL CERTIFICATION NOTE

WARREN COUNTY, HSIP 5073 (005)
FD52 114 0234 000-008
Safety Improvements along Route KY 234 from MP 0.000 – 7.218
SIX YEAR PLAN ITEM NUMBER 3-9015.00

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

There are existing aerial power and telecommunications facilities located adjacent to, and throughout, the project corridor, with a power sub-station and power transmission facilities identified generally between station 345+00 and station 355+00. In addition to, underground telecommunications facility located throughout the project corridor, identified at various locations north or south of the existing roadway facility.

Water facilities have been identified adjacent to, and throughout, the project corridor; in addition to, the numerous cross-roads located in the corridor. These facilities range in size from 3-inch pvc to 16-inch ductile iron, are located at various points north OR south of the existing roadway, and at some locations north AND south of the existing roadway.

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)**

UTILITIES AND RAIL CERTIFICATION NOTE

WARREN COUNTY, HSIP 5073 (005)
FD52 114 0234 000-008
Safety Improvements along Route KY 234 from MP 0.000 – 7.218
SIX YEAR PLAN ITEM NUMBER 3-9015.00

UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

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

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

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

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

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

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

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

UTILITIES AND RAIL CERTIFICATION NOTE

WARREN COUNTY, HSIP 5073 (005)
FD52 114 0234 000-008
Safety Improvements along Route KY 234 from MP 0.000 – 7.218
SIX YEAR PLAN ITEM NUMBER 3-9015.00

AREA UTILITIES CONTACT LIST AS PROVIDED BY KY 811

Utility Company/Agency	Contact Name	Contact Information
Warren Rural Electric Cooperative Corporation	Jonathan Lindsey	951 Fairview Avenue P.O. Box 1118 Bowling Green, Kentucky 42102 270-842-6541
Bowling Green Municipal Utilities	Chad Spencer Emmet Wood Teresa Newman	801 Center Street P.O. Box 10300 Bowling Green, Kentucky 42102
Warren County Water District	Ryan Leisey	523 Highway US31W Bypass P.O. Box 10180 Bowling Green, Kentucky 42102 270-842-0052
Allen County Water District	Garry Wade	330 New Gallatin Road P.O. Box 58 Scottsville, Kentucky 42164 270-622-3040
AT&T – Kentucky	Travis Parsley	1150 State Street Bowling Green, Kentucky 42101 270-846-3196
AT&T – Corporation	Mike Diederich	7555 East Pleasant Valley Road Suite 140 Independence, OH 44131 216-750-0135
Atmos Energy	Byron Oost	2850 Russellville Road Bowling Green, Kentucky 42101 270-901-1710
Bluegrass Network	Bryan Bell	2902 Ring Road P.O. Box 5012 Elizabethtown, Kentucky 42702 270-766-7660

UTILITIES AND RAIL CERTIFICATION NOTE

WARREN COUNTY, HSIP 5073 (005)
FD52 114 0234 000-008
Safety Improvements along Route KY 234 from MP 0.000 – 7.218
SIX YEAR PLAN ITEM NUMBER 3-9015.00

Centurylink Communications	Kevin Webster	848 South 8th Street Louisville, Kentucky 40203 502-777-8622
Windstream Kentucky	Steve Johnson	130 West New Circle Road Suite 170 Lexington, Kentucky 40505 859-357-6209
Time-Warner / Spectrum	Benny Burch	515 Double Springs Road P.O. Box 659 Bowling Green, Kentucky 42102 270-348-2955

KYTC BMP Plan for Project CID **20-4000**

Kentucky Transportation Cabinet

Highway District 3

And

_____(2), Construction

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

Groundwater protection plan

For Highway Construction Activities

For

Highway Safety Improvement Project on KY 234 in Warren County

Project: CID 20-4000

Revised 3/4/2016

Project information

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

1. Owner – Kentucky Transportation Cabinet, District 3
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): KY 234
6. Latitude/Longitude (project mid-point): 36° 55’ 45”, -86° 17’ 32”
7. County (project mid-point): Warren
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project CID **20-4000**

A. Site description:

1. Nature of Construction Activity (from letting project description): Asphalt Pavement & Roadway Rehab.
2. Order of major soil disturbing activities: (2) and (3)
3. Projected volume of material to be moved: 18,200 CY
4. Estimate of total project area (acres): 57.8 acres
5. Estimate of area to be disturbed (acres): 31.7 acres
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7. Data describing existing soil condition: (1) & (2)
8. Data describing existing discharge water quality (if any): (1) & (2)
9. Receiving water name: Barren River
10. TMDLs and Pollutants of Concern in Receiving Waters: *No TDML's were involved on this project.*
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12. Potential sources of pollutants:

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

B. Sediment and Erosion Control Measures:

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

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

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

3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:

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

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

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

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

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

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

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

C. Other Control Measures

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

2. Waste Materials

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

3. Hazardous Waste

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

4. Spill Prevention

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

➢ **Good Housekeeping:**

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

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

➢ **Hazardous Products:**

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

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

The following product-specific practices will be followed onsite:

➢ **Petroleum Products:**

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

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

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

- **Fertilizers:**

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

- **Paints:**

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

- **Concrete Truck Washout:**

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

- **Spill Control Practices**

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

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.

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

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

G. Non – Storm Water discharges

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

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

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

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

H. Groundwater Protection Plan (3)

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

- Contractors statement: (3)

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

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

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

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

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

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

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

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

_____ 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 **20-4000**

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

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

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

KYTC BMP Plan for Project CID **20-4000**

Contractor and Resident Engineer Plan certification

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

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

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

Resident Engineer and Contractor Certification:

(2) Resident Engineer signature

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

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

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

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

KYTC BMP Plan for Project CID **20-4000**

Sub-Contractor Certification

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

Subcontractor

Name:
Address:
Address:

Phone:

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

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

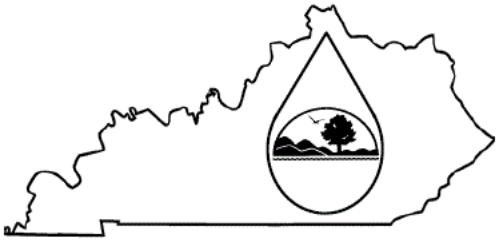
Signed _____title_____, _____
Typed or printed name[1] signature

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

CID 20-4000
Warren County
Highway Safety Improvement Project along KY 234
from MP 0.000 – 7.218
Item No.: 3-9015.00

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: 197189



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

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

Click here for Instructions (Controls/KPDES_FormKYR10_Instructions.htm)

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

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

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

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

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

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

SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)

Company Name:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
Kentucky Transportation Cabinet, District 3	Joe	MI	Plunk

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
900 Morgantown Rd	Bowling Green	Kentucky	42101

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
Joseph.Plunk@ky.gov	270-746-7898	Phone

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)	Status of Owner/Operator(*)	SIC Code(*)
KYTC Project: CID 204000	State Government	1611 Highway and Street Cons

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

Site Physical Address:(*)
KY 234

City:(*)	State:(*)	Zip:(*)
Bowling Green	Kentucky	42103

County:(*)	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal)	Longitude(decimal degrees)(*)
Warren	36.929167	-86.292222

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)
Highway Safety Improvement Project consisting of roadside slope improvements, trenching and paving the existing shoulders, ditching, replacement and/or extension of v

a. For single projects provide the following information

Total Number of Acres in Project:(✓)	Total Number of Acres Disturbed:(✓)
57.8	31.7
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)

b. For common plans of development provide the following information

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

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

	Company Name	
+		

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

Discharge Point(s):

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	Delete
32	Yes	36.941446	-86.324863	Barren River	Delete
33	Yes	36.942787	-86.326561	Barren River	Delete
34	Yes	36.943697	-86.330277	Barren River	Delete
35	Yes	36.946011	-86.333688	Barren River	Delete
36	Yes	36.946858	-86.335175	Barren River	Delete
37	Yes	36.947289	-86.336571	Barren River	Delete
38	Yes	36.948165	-86.340599	Barren River	Delete
39	Yes	36.949224	-86.343913	Barren River	Delete
40	Yes	36.950437	-86.345551	Barren River	Delete
+					

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

Name of MS4:

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

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

Will the project require construction activities in a water body or the riparian zone?:(*)	No
If Yes, describe scope of activity: (✓)	describe scope of activity
Is a Clean Water Act 404 permit required?:(*)	No

Is a Clean Water Act 401 Water Quality Certification required?:(*)	No

SECTION VII -- NOI PREPARER INFORMATION

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

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

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

SECTION VIII -- ATTACHMENTS

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

SECTION IX -- CERTIFICATION

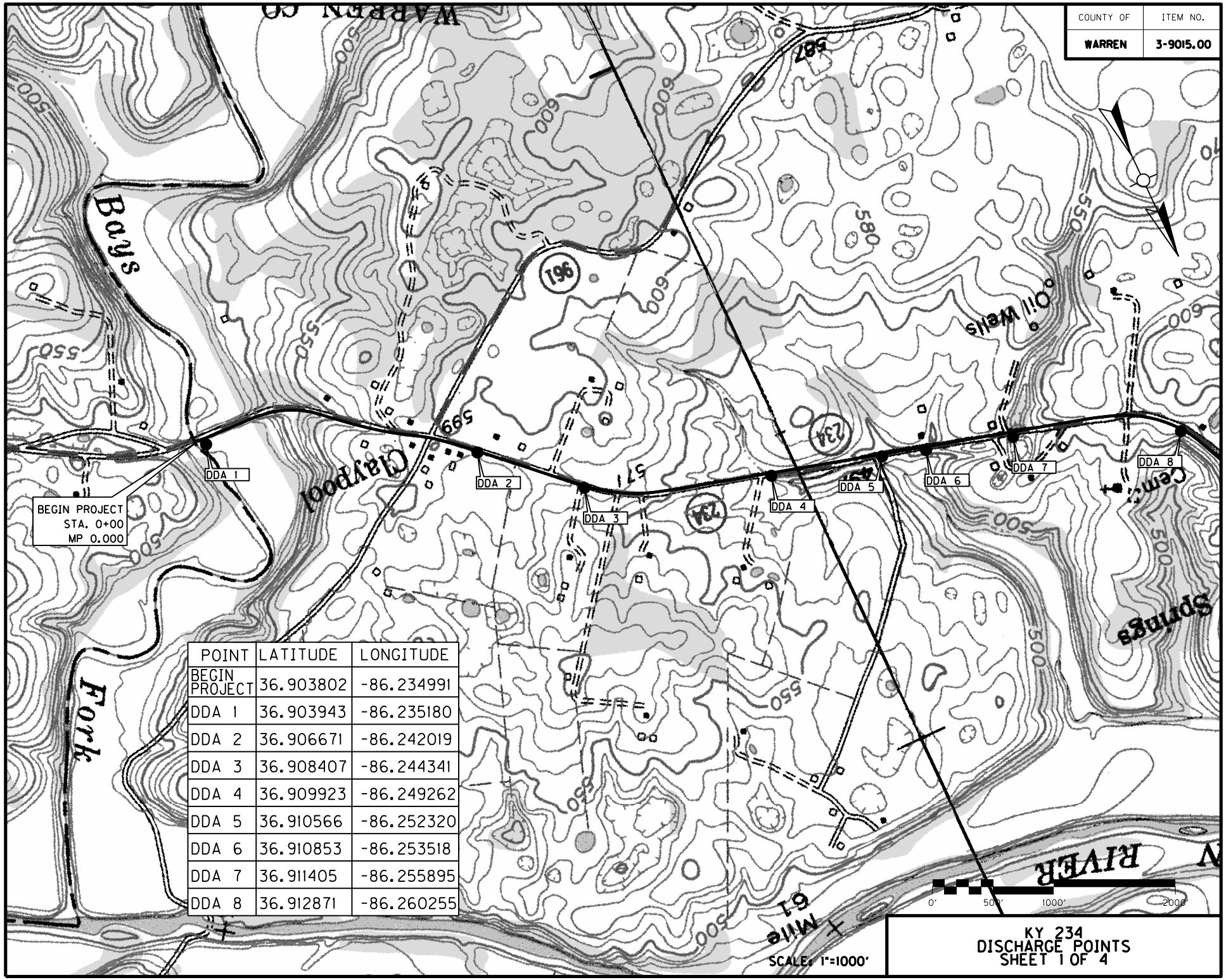
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

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

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

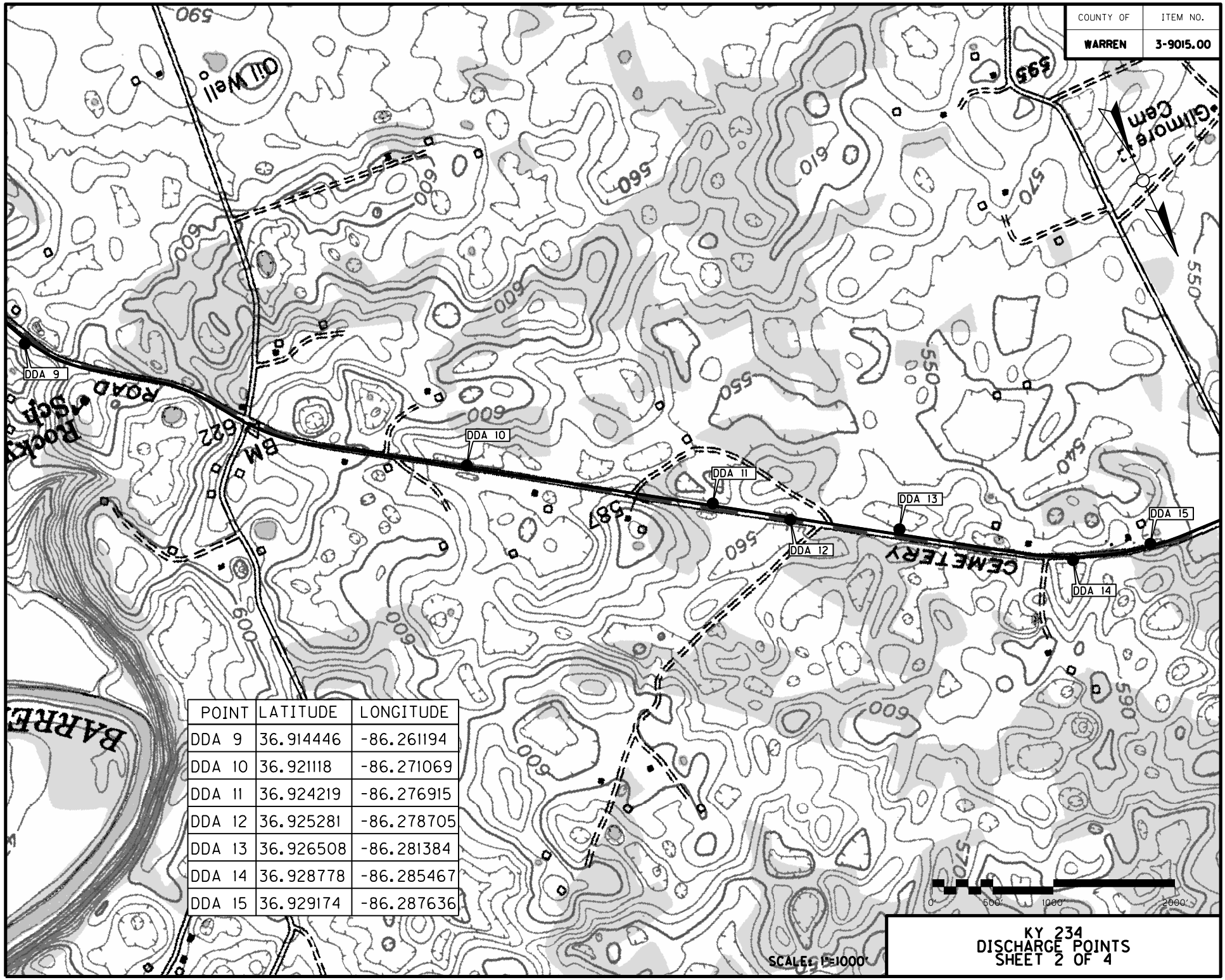
eMail Address:(*)	Business Phone:(*)	Alternate Phone:	Signature Date:(*)
eMail Address	Phone	Phone	Date

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



POINT	LATITUDE	LONGITUDE
BEGIN PROJECT	36.903802	-86.234991
DDA 1	36.903943	-86.235180
DDA 2	36.906671	-86.242019
DDA 3	36.908407	-86.244341
DDA 4	36.909923	-86.249262
DDA 5	36.910566	-86.252320
DDA 6	36.910853	-86.253518
DDA 7	36.911405	-86.255895
DDA 8	36.912871	-86.260255

COUNTY OF	ITEM NO.
WARREN	3-9015.00

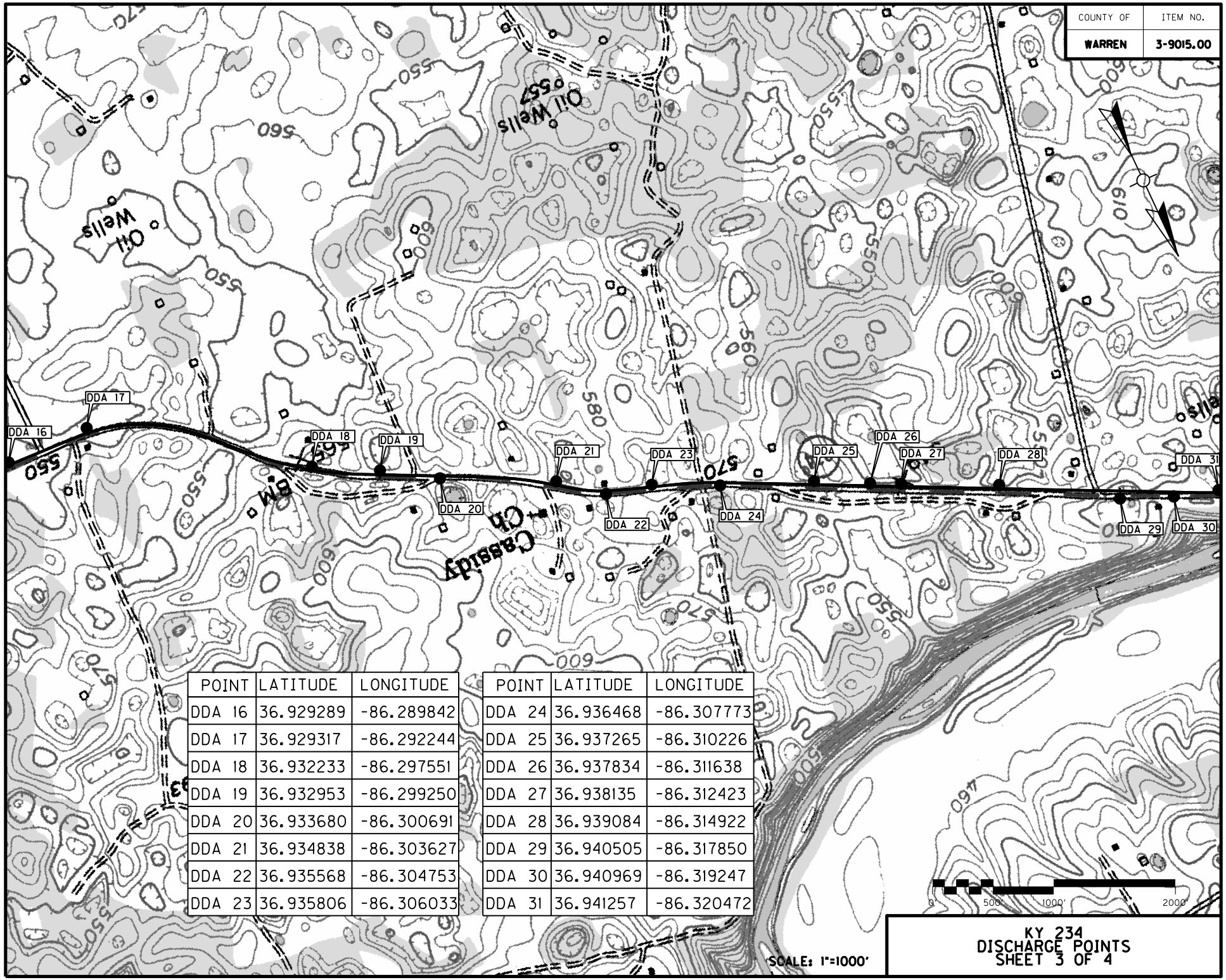


POINT	LATITUDE	LONGITUDE
DDA 9	36.914446	-86.261194
DDA 10	36.921118	-86.271069
DDA 11	36.924219	-86.276915
DDA 12	36.925281	-86.278705
DDA 13	36.926508	-86.281384
DDA 14	36.928778	-86.285467
DDA 15	36.929174	-86.287636

SCALE: 1"=1000'

KY 234
DISCHARGE POINTS
SHEET 2 OF 4

COUNTY OF	ITEM NO.
WARREN	3-9015.00

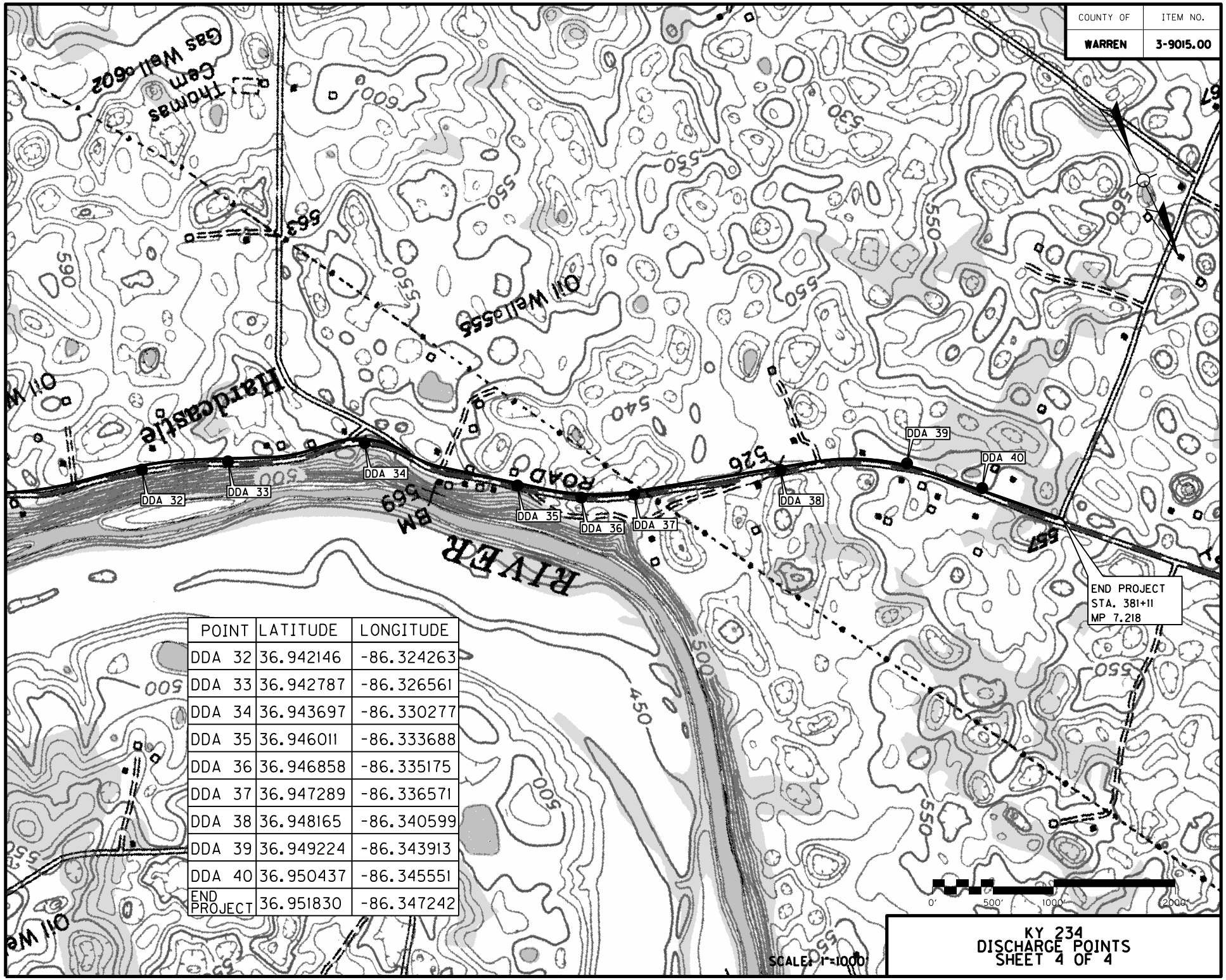


POINT	LATITUDE	LONGITUDE
DDA 16	36.929289	-86.289842
DDA 17	36.929317	-86.292244
DDA 18	36.932233	-86.297551
DDA 19	36.932953	-86.299250
DDA 20	36.933680	-86.300691
DDA 21	36.934838	-86.303627
DDA 22	36.935568	-86.304753
DDA 23	36.935806	-86.306033

POINT	LATITUDE	LONGITUDE
DDA 24	36.936468	-86.307773
DDA 25	36.937265	-86.310226
DDA 26	36.937834	-86.311638
DDA 27	36.938135	-86.312423
DDA 28	36.939084	-86.314922
DDA 29	36.940505	-86.317850
DDA 30	36.940969	-86.319247
DDA 31	36.941257	-86.320472

KY 234
DISCHARGE POINTS
SHEET 3 OF 4

COUNTY OF	ITEM NO.
WARREN	3-9015.00



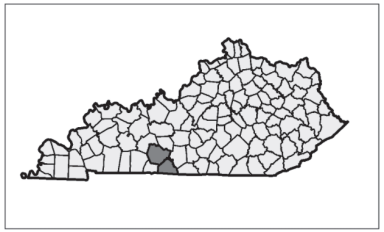
POINT	LATITUDE	LONGITUDE
DDA 32	36.942146	-86.324263
DDA 33	36.942787	-86.326561
DDA 34	36.943697	-86.330277
DDA 35	36.946011	-86.333688
DDA 36	36.946858	-86.335175
DDA 37	36.947289	-86.336571
DDA 38	36.948165	-86.340599
DDA 39	36.949224	-86.343913
DDA 40	36.950437	-86.345551
END PROJECT	36.951830	-86.347242

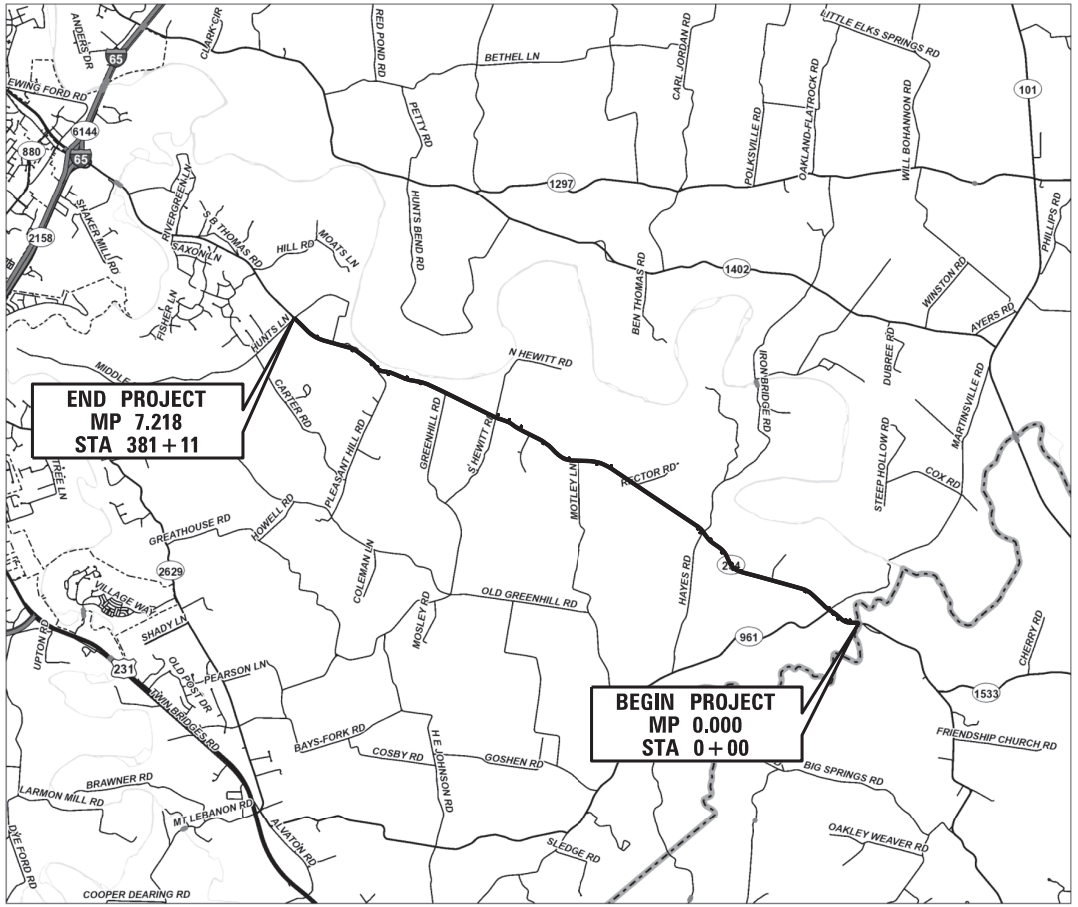
KY 234
DISCHARGE POINTS
SHEET 4 OF 4

COUNTY OF	ITEM NO.
WARREN	3-9015.00

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

WARREN COUNTY
KY 234
HSIP 5073 (005)





0 1 2 4
SCALE IN MILES

VICINITY MAP

GENERAL SUMMARY

Item	Description	Unit	Quantity
1	DGA BASE	TON	1,820
100	ASPHALT SEAL AGGREGATE	TON	424
103	ASPHALT SEAL COAT	TON	50.7
190	Leveling and Wedging PG 64-22	TON	564
212	CL 2 ASPH BASE 1.00D PG 64-22	TON	3,719
301	CL 2 ASPH SURF 0.38D PG 64-22	TON	5,640
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	26
462	CULVERT PIPE - 18 IN	LF	660
464	CULVERT PIPE - 24 IN	LF	35
1310	REMOVE PIPE	LF	75
1585	REMOVE DROP BOX INLET	EACH	1
1643	Junction Box - 24 IN	EACH	2
1726	SAFETY BOX INLET - 18 IN SDB-1	EACH	1
1728	SAFETY BOX INLET - 18 IN DBL SDB-5	EACH	2
2014	BARRICADE TYPE III	EACH	4
2159	TEMP DITCH	LF	19,056
2160	CLEAN TEMP DITCH	LF	9,528
2237	DITCHING	LF	167
2259	FENCE-TEMP	LF	4,400
2268	REMOVE AND REPLACE FENCE	LF	4,400
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	11
2381	REMOVE GUARDRAIL	LF	550
2483	CHANNEL LINING CLASS II	TON	548
2562	TEMPORARY SIGNS	SQFT	470
2568	MOBILIZATION	LS	1
2569	DEMOBILIZATION	LS	1
2575	DITCHING & SHOULDERING	LF	2,450
2625	REMOVE HEADWALL	EACH	27
2650	MAINTAIN & CONTROL TRAFFIC	LS	1
2676	MOBILIZATION FOR MILLING & TEXTURING	LS	1
2677	ASPHALT PAVE MILLING & TEXTURING	TON	50
2690	SAFELOADING	CUYD	30
2697	EDGELINE RUMBLE STRIPS	LF	76,222
2701	TEMP SILT FENCE	LF	19,056
2703	SILT TRAP TYPE A	EACH	32
2704	SILT TRAP TYPE B	EACH	32
2705	SILT TRAP TYPE C	EACH	32
2706	CLEAN SILT TRAP TYPE A	EACH	32
2707	CLEAN SILT TRAP TYPE B	EACH	32
2708	CLEAN SILT TRAP TYPE C	EACH	32
2726	STAKING	LS	1
3240	BASE FAILURE REPAIR	SQYD	505
5950	EROSION CONTROL BLANKET	SQYD	5,000

Item	Description	Unit	Quantity
5952	TEMP MULCH	SQYD	102,797
5953	TEMP SEEDING AND PROTECTION	SQYD	76,714
5963	INITIAL FERTILIZER	TON	5
5964	MAINTENANCE FERTILIZER	TON	7.9
5985	SEEDING AND PROTECTION	SQYD	153,428
5992	AGRICULTURAL LIMESTONE	TON	95.1
6406	SBM ALUM SHEET SIGNS 0.080 INCH	SQFT	1,110.63
6410	STEEL POST TYPE 1	LF	3,360
6427	TRENCHING	LF	76,068
6510	PAVE STRIPING - TEMP PAINT - 4 IN	LF	90,522
6514	PAVE STRIPING - PERM PAINT - 4 IN	LF	143,000
6568	PAVE MARKING - THERMO STOP BAR - 24 IN	LF	170
10020NS	FUEL ADJUSTMENT	DOLLARS	15,223
10030NS	ASPHALT ADJUSTMENT	DOLLARS	36,590
20257NC	SITE PREP - RT STA 48+00 TO 51+00	LS	1
20257NC	SITE PREP - RT STA 53+50 TO 57+00	LS	1
20257NC	SITE PREP - RT STA 62+00 TO 64+00	LS	1
20257NC	SITE PREP - LT STA 124+00 TO 131+00	LS	1
20257NC	SITE PREP - RT STA 124+00 TO 131+00	LS	1
20257NC	SITE PREP - LT STA 162+50 TO 165+50	LS	1
20257NC	SITE PREP - RT STA 177+00 TO 179+00	LS	1
20257NC	SITE PREP - LT STA 189+00 TO 193+50	LS	1
20257NC	SITE PREP - RT STA 188+50 TO 195+00	LS	1
20257NC	SITE PREP - LT STA 216+00 TO 219+00	LS	1
20257NC	SITE PREP - LT STA 222+00 TO 224+00	LS	1
20257NC	SITE PREP - RT STA 222+00 TO 224+00	LS	1
20257NC	SITE PREP - LT STA 236+00 TO 239+50	LS	1
20257NC	SITE PREP - RT STA 241+00 TO 242+00	LS	1
20257NC	SITE PREP - RT STA 249+50 TO 251+50	LS	1
20257NC	SITE PREP - LT STA 257+00 TO 259+00	LS	1
20257NC	SITE PREP - LT STA 263+00 TO 267+00	LS	1
20257NC	SITE PREP - LT STA 272+00 TO 274+00	LS	1
20257NC	SITE PREP - RT STA 273+00 TO 274+00	LS	1
20257NC	SITE PREP - LT STA 339+00 TO 341+50	LS	1
20257NC	SITE PREP - LT STA 344+00 TO 346+50	LS	1
20257NC	SITE PREP - RT STA 344+00 TO 346+50	LS	1
20257NC	SITE PREP - LT STA 361+00 TO 362+50	LS	1
20257NC	SITE PREP - LT STA 367+00 TO 368+00	LS	1
21373ND	REMOVE SIGN	EACH	26
23126EN	BORE AND JACK PIPE - 18 IN	LF	252
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE FOR 18 INCH PIPE)	EACH	25
24575ES610	HEADWALL (SLOPED & MITERED CONCRETE FOR 24 INCH PIPE)	EACH	2
24631EC	BARCODE SIGN INVENTORY	EACH	319

PROPOSED TRENCHING AND WIDENING SUMMARY								
Begin Station	Begin Milepoint	End Station	End Milepoint	Offset	Trench and Widen Width (FT)	Asphalt Base (SY)	Trenching (LF)	8" Asphalt Base (Ton)
000+21	0.000	380+55	7.218	RT	1	4,226	38,034	1,859
000+21	0.000	380+55	7.218	LT	1	4,226	38,034	1,859
					Totals		**76,068**	**3,719**

Item	Description	Unit	Quantity
212	CL2 Asph Base 1.00D PG64-22	TON	3,719
6427	Trenching	LF	76,068
10020NS	Fuel Adjustment (see note 5)	DOLLARS	15,223
10030NS	Asphalt Adjustment (see note 5)	DOLLARS	36,590

NOTES

1. These items, quantities, and locations are approximate and are intended to provide a basis for bid.
2. Final locations and quantities will be determined by the contractor and approved by the engineer in the field.
3. All quantities were carried over to the General Summary.
4. No deductions for approach roads where made to these quantities.
5. This quantity is a project total and includes all HMA and DGA used on this project.

PIPE REPLACEMENT & EXTENSION SUMMARY

Mile Point	Station	Existing					Proposed																						Comments
		Pipe Size, Type	Left Hdwl	Right Hdwl	Skew	Length (LF)	Remove Pipe (LF)[3]		Pipe Extension Length (LF)		Remove Headwall (Each)		Remove Drop Box (Each)	Safeload Pipe (CY)	Class A Concrete for Intermediate Anchor/Collar (CU YD)[4]	Culvert Pipe 18" (LF)	Culvert Pipe 24" (LF)	Bore and Jack (LF)	Junction Box TY A 24" (EA)	Headwall or Drainage Box		Ditching & Shouldering (LF)(Note 4)		Ditching (LF) (Perpndclr to Rdwy)		Channel Lining Cl II (TON)		
							Left	Right	Left	Right	Left	Right								Left	Right	Left	Right	Left	Right	Left	Right		
2.42	127+58	24" RCP	STD.	STD.	0°	39	4	4	21	14	1	1	---	---	3.18	---	35	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	6	9	---	---	Construct with embankment widening
2.93	154+56	18" RCP	STD.	STD.	0°	34	4	4	12	13	1	1	---	---	2.14	25	---	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	---	---	---	---		
3.10	163+56	18" CMP	---	STD.	0°	57	18	---	---	13	---	1	---	---	1.13	13	---	---	---	Sloped & Mitered Conc.	DBL Safety Box Inlet	---	100	---	---	---	---	Construct with embankment widening
3.37	178+05	18" RCP	STD.	STD.	0°	40	---	---	---	---	1	1	---	4	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening
3.37	178+15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	46	---	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	100	---	---	18	---	7	Construct with embankment widening & Flowable Fill Required
3.62	191+05	18" RCP	STD.	STD.	0°	41	4	4	17	16	1	1	---	---	2.14	33	---	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	---	8	---	---	Construct with embankment widening
4.11	216+80	---	---	---	---	---	---	---	---	---	---	---	---	---	---	49	---	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	100	21	---	8	---	Construct with embankment widening & Flowable Fill Required
4.11	217+02	18" RCP	STD.	DBI	0°	54	---	---	---	---	1	---	1	4	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening
4.22	222+68	18" RCP	STD.	STD.	0°	69	---	---	---	---	1	1	---	5	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening
4.22	222+73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	109	---	109	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	8	3	4	---	Construct with embankment widening
4.49	237+10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	52	---	---	---	Sloped & Mitered Conc.	DBL Safety Box Inlet	---	100	33	---	12	---	Construct with embankment widening & Flowable Fill Required
4.49	237+16	18" RCP	STD.	STD.	0°	48	---	---	---	---	1	1	---	4	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening
4.57	241+35	18" RCP	STD.	STD.	0°	40	---	5	---	19	---	1	---	---	1.13	19	---	---	1	---	Sloped & Mitered Conc.	---	---	---	---	---	---	Construct with embankment widening
4.75	250+78	18" RCP	STD.	STD.	0°	45	---	4	---	27	---	1	---	---	1.13	27	---	---	---	---	Sloped & Mitered Conc.	---	---	---	---	---	---	Construct with embankment widening
4.89	258+40	---	---	---	---	---	---	---	---	---	---	---	---	---		44	---	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	30		11	---	Construct with embankment widening & Flowable Fill Required
4.90	258+50	18" RCP	STD.	STD.	0°	45	---	---	---	---	1	1	---	4	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening

PIPE REPLACEMENT & EXTENSION SUMMARY

Mile Point	Station	Existing					Proposed																						Comments
		Pipe Size, Type	Left Hdwl	Right Hdwl	Skew	Length (LF)	Remove Pipe (LF)[3]		Pipe Extension Length (LF)		Remove Headwall (Each)		Remove Drop Box (Each)	Safeload Pipe (CY)	Class A Concrete for Intermediate Anchor/Collar (CU YD)[4]	Culvert Pipe 18" (LF)	Culvert Pipe 24" (LF)	Bore and Jack (LF)	Junction Box TY A 24" (EA)	Headwall or Drainage Box		Ditching & Shouldering (LF)(Note 4)		Ditching (LF) (Perpndclr to Rdwy)		Channel Lining Cl II (TON)		
							Left	Right	Left	Right	Left	Right								Left	Right	Left	Right	Left	Right	Left	Right	
4.98	263+12	18" RCP	STD.	STD.	0°	36	4	4	16	10	1	1	---	---	2.26	26	---	---	1	Sloped & Mitered Conc.	Safety Box Inlet	---	100	8	---	1	---	Construct with embankment widening
5.03	265+66	18" RCP	STD.	STD.	0°	40	4	---	26	---	1	---	---	---	1.13	26	---	---	---	Sloped & Mitered Conc.	---	---	---	---	---	---	---	Construct with embankment widening
5.18	273+65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	75	---	75	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	13	---	5	---	Construct with embankment widening
5.18	273+74	18" RCP	STD.	STD.	0°	57	---	---	---	---	1	1	---	4	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening
6.45	340+53	18" RCP	STD.	UNK.	UNK.	UNK.	4	---	21	---	1	---	---	---	1.07	21	---	---	---	Sloped & Mitered Conc.	---	---	---	4	---	---	---	Construct with embankment widening
6.53	344+84	18" RCP	---	STD.	0°	44	---	---	---	---	---	1	---	5	---	---	---	---	---	---	---	---	---	---	---	---	---	Construct with embankment widening
6.53	344+90	---	---	---	---	---	---	---	---	---	---	---	---	---	---	68	---	68	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	---	---	6	---	---	Construct with embankment widening
6.96	367+53	18" RCP	STD.	STD.	0°	33	4	4	16	11	1	1	---	---	2.26	27	---	---	---	Sloped & Mitered Conc.	Sloped & Mitered Conc.	---	100	---	---	---	---	Construct with embankment widening
					TOTALS:		75 LF				27 EA		1 EA	30 CU YD	17.57 CU YD	660 LF	35 LF	252 LF	2 EA			600 LF		167 LF		48 TON		

Item	Description	Unit	Quantity
462	Culvert Pipe - 18 IN	LF	660
464	Culvert Pipe - 24 IN	LF	35
1310	Remove Pipe	LF	75
1585	Remove Drop Box Inlet	Each	1
1643	Junction Box - 24 IN	Each	2
1726	Safety Box Inlet - 18 In SDB-1	Each	1
1728	Safety Box Inlet - 18 In DBL SDB-5	Each	2
2237	Ditching	LF	167
2483	Channel Lining Class II	Ton	48
2625	Remove Headwall	Each	27
2690	Safeloading	CY	30
23126EN	Bore and Jack Pipe - 18 IN	LF	252
24575ES610	Headwall (Sloped & Mitered Conc. for 18")	Each	25
24575ES611	Headwall (Sloped & Mitered Conc. for 24")	Each	2

NOTES:

1. These Pipe and Drainage Item quantities and locations are approximate and are intended to provide a basis for bid. Final locations, flow line elevations, grate elevations, and quantities will be determined by the contractor and approved by the engineer in the field.
2. Clearing and grubbing necessary to install drainage items, as directed by the Engineer, will be considered part of Site Preparation, which is incidental to the Contract.
3. See Standard Drawing RDX-060-03 for Intermediate Anchor details. Intermediate anchors shall be incidental to the construction of new pipe.
4. These locations of Ditching & Shouldering are already accounted for in the Ditching and Shouldering Summary and are NOT duplicated in the PROJECT TOTALS.
5. All quantities were carried over to the General Summary.

RE-GRADE EMBANKMENT SUMMARY							
Offset	Begin Station	Begin Milepoint	End Station	End Milepoint	Approximate Embankment (CY)	Fencing (LF)	Temporary Fencing (LF)
RT	48+00	0.909	51+00	0.966	1,100	300	300
RT	53+50	1.013	57+00	1.080	900	350	350
RT	62+00	1.174	64+00	1.212	1,100	200	200
LT	124+00	2.348	131+00	2.481	600	---	---
RT	124+00	2.348	131+00	2.481	600	---	---
LT	162+50	3.078	165+50	3.134	700	300	300
RT	177+00	3.352	179+00	3.390	800	200	200
LT	189+00	3.580	193+50	3.665	200	450	450
RT	188+50	3.570	195+00	3.693	1,100	650	650
LT	216+00	4.091	219+00	4.148	500	---	---
LT	222+00	4.205	224+00	4.242	1,200	200	200
RT	222+00	4.205	224+00	4.242	300	200	200
LT	236+00	4.470	239+50	4.536	1,300	350	350
RT	241+00	4.564	242+00	4.583	500	100	100
RT	249+50	4.725	251+50	4.763	500	200	200
LT	257+00	4.867	259+00	4.905	900	200	200
LT	263+00	4.981	267+00	5.057	1,100	400	400
LT	272+00	5.152	274+00	5.189	1,200	200	200
RT	273+00	5.170	274+00	5.189	300	100	100
LT	339+00	6.420	341+50	6.468	1,000	---	---
LT	344+00	6.515	346+50	6.563	400	---	---
RT	344+00	6.515	346+50	6.563	800	---	---
LT	361+00	6.837	362+50	6.866	100	---	---
LT	367+00	6.951	368+00	6.970	200	---	---
			TOTAL		**17,400**	**4,400**	**4,400**

Item	Description	Column1	Column2	Column3	Unit	Quantity
2259	Fence-Temp				LF	4,400
2268	Remove and Replace Fence				LF	4,400
20257NC	SITE PREP - RT STA 48+00 TO 51+00				LS	1
20257NC	SITE PREP - RT STA 53+50 TO 57+00				LS	1
20257NC	SITE PREP - RT STA 62+00 TO 64+00				LS	1
20257NC	SITE PREP - LT STA 124+00 TO 131+00				LS	1
20257NC	SITE PREP - RT STA 124+00 TO 131+00				LS	1
20257NC	SITE PREP - LT STA 162+50 TO 165+50				LS	1
20257NC	SITE PREP - RT STA 177+00 TO 179+00				LS	1
20257NC	SITE PREP - LT STA 189+00 TO 193+50				LS	1
20257NC	SITE PREP - RT STA 188+50 TO 195+00				LS	1
20257NC	SITE PREP - LT STA 216+00 TO 219+00				LS	1
20257NC	SITE PREP - LT STA 222+00 TO 224+00				LS	1
20257NC	SITE PREP - RT STA 222+00 TO 224+00				LS	1
20257NC	SITE PREP - LT STA 236+00 TO 239+50				LS	1
20257NC	SITE PREP - RT STA 241+00 TO 242+00				LS	1
20257NC	SITE PREP - RT STA 249+50 TO 251+50				LS	1
20257NC	SITE PREP - LT STA 257+00 TO 259+00				LS	1
20257NC	SITE PREP - LT STA 263+00 TO 267+00				LS	1
20257NC	SITE PREP - LT STA 272+00 TO 274+00				LS	1
20257NC	SITE PREP - RT STA 273+00 TO 274+00				LS	1
20257NC	SITE PREP - LT STA 339+00 TO 341+50				LS	1
20257NC	SITE PREP - LT STA 344+00 TO 346+50				LS	1
20257NC	SITE PREP - RT STA 344+00 TO 346+50				LS	1
20257NC	SITE PREP - LT STA 361+00 TO 362+50				LS	1
20257NC	SITE PREP - LT STA 367+00 TO 368+00				LS	1

NOTES

1. These items, quantities, and locations are approximate and are intended to provide a basis for bid.
2. Final locations and quantities will be determined by the contractor and approved by the engineer in the field.
3. All quantities were carried over to the General Summary.
4. The Estimated Volumes of Embankment are provided for informational purposes ONLY. The Department gives no guarantee to the accuracy of the estimated volumes. The Bidder must draw his/her own conclusion. Payment at the Lump Sum unit price for each Site Prep Location will be full compensation for all work, equipment, and incidentals necessary to perform the embankment re-grade work at the indicated site, regardless of the accuracy of the estimated volumes of Embankment.

Ditching & Shouldering Summary — Warren County — KY 234

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

LOCATION					Length (LF)	Estimated Excavation Volume** (CU YD)	Estimated Embankment Volume** (CU YD)	Ditching & Shouldering Detail Sheet Figure Ref.*	Include DGA Wedge? (Yes/No)	DGA (TONS)	Asphalt Seal Coat (TON)	Asphalt Seal Aggregate (TON)	Channel Line Ditch, Fill Slope or Cut Slope? (Yes/No)	Channel Lining Class II (TONS)	Geotex. Fabric Type IV (SQ YD)	Remarks
Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint												
RT	29+50	0.559	32+50	0.616	300	0	67	Figure 2	No				No			
LT	55+50	1.051	56+50	1.070	100	0	30	Figure 2	No				No			
LT	110+00	2.083	111+00	2.102	100	0	37	Figure 2	No				No			
RT	111+50	2.112	112+50	2.131	100	0	11	Figure 2	No				No			
RT	119+50	2.263	120+50	2.282	100	0	22	Figure 2	No				No			
RT	153+00	2.898	155+50	2.945	250	0	56	Figure 2	No				No			Pipe Ext.
LT	153+50	2.907	154+50	2.926	100	0	22	Figure 2	No				No			Pipe Ext.
RT	163+00	3.087	164+00	3.106	100	26	63	Figure 9	No				No			Pipe Ext.
RT	168+50	3.191	173+50	3.286	500	0	148	Figure 3	No				No			
LT	177+65	3.365	178+65	3.384	100	22	0	Figure 7	No				No			Pipe Ext.
RT	216+30	4.097	217+30	4.116	100	74	0	Figure 7	No				No			Pipe Ext.
RT	236+40	4.477	237+40	4.496	100	7	52	Figure 9	No				No			Pipe Ext.
RT	262+60	4.973	263+60	4.992	100	26	33	Figure 9	No				No			Pipe Ext.
LT	356+50	6.752	357+50	6.771	100	0	30	Figure 2	No				No			
RT	360+00	6.818	362+00	6.856	200	0	44	Figure 2	No				No			
RT	367+00	6.951	368+00	6.970	100	0	30	Figure 2	No				No			Pipe Ext.

Summary of Items

Ditching & Shouldering	2,450	LF		Asphalt Seal Coat	0	TONS		Channel Lining Class II	0	TONS
DGA	0	TONS		Asphalt Seal Aggregate	0	TONS		Geotextile Fabric Type IV	0	SQ YD

PROPOSED BASE FAILURE REPAIR SUMMARY					
Station	**Milepoint**	**Direction**	**Length**	**Width**	**SQYD**
26+40	0.500	WB	10	5	6
31+15	0.590	WB	50	4	22
121+33	2.298	WB	80	4	36
123+02	2.330	WB	120	4	53
128+04	2.425	EB	15	4	7
129+25	2.448	EB	10	4	4
147+05	2.785	EB	120	4	53
165+21	3.129	WB	60	4	27
167+90	3.180	WB	60	4	27
170+54	3.230	EB	50	3	17
178+99	3.390	EB	20	4	9
187+97	3.560	EB	15	4	7
245+52	4.650	WB	15	4	7
249+74	4.730	WB	60	3	20
252+38	4.780	EB	60	3	20
281+95	5.340	EB	160	4	71
303+60	5.750	WB	20	3	7
312+05	5.910	EB	20	3	7
359+04	6.800	EB/WB	60	6	40
379+10	7.180	WB	100	6	67
				Total	**505**

PROPOSED MILLING SUMMARY						
Station	**Milepoint**	**Comment**	**Length**	**Width**	**Avg. Depth**	**Tons**
0+00	0.000	Edge Key @ Bridge End to Begin Project	100	23	0.5	7.5
381+11	7.218	Edge Key @ End of Project	100	23	0.5	7.5
		EDGE KEYS AT APPROACH ROADS*				35.0
				Total		**50.0**

* Additional Edge Key at Approach Roads subject to direction of Engineer

GUARDRAIL SUMMARY

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

Proposed Guardrail to be Constructed									Existing Guardrail to be Removed					
Side of Road	Proposed BEGINNING Treatment	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Proposed ENDING Treatment	Proposed Length (LF)	Remarks	Side of Road	Approx. BEGIN Station	Approx. BEGIN Milepoint	Approx. END Station	Approx. END Milepoint	Existing Length (LF)
LT	Connect to Existing	6+85	0.130	7+35	0.139	Type 1	0.00		LT	6+85	0.130	7+35	0.139	50.00
RT	Type 1	280+00	5.303	280+50	5.313	Connect to Existing	0.00		RT	280+00	5.303	280+50	5.313	50.00
RT	Connect to Existing	285+00	5.398	285+50	5.407	Type 1	0.00		RT	285+00	5.398	285+50	5.407	50.00
RT	Type 1	297+00	5.625	297+50	5.634	Connect to Existing	0.00		RT	297+00	5.625	297+50	5.634	50.00
RT	Connect to Existing	303+60	5.750	304+10	5.759	Type 1	0.00		RT	303+60	5.750	304+10	5.759	50.00
RT	Type 1	307+00	5.814	307+50	5.824	Connect to Existing	0.00		RT	307+00	5.814	307+50	5.824	50.00
RT	Connect to Existing	311+00	5.890	311+50	5.900	Type 1	0.00		RT	311+00	5.890	311+50	5.900	50.00
RT	Type 1	321+50	6.089	*322+00*	6.098	Connect to Existing	0.00		RT	321+50	6.089	322+00	6.098	50.00
RT	Connect to Existing	*322+95*	6.116	323+45	6.126	Type 1	0.00		RT	322+95	6.116	323+45	6.126	50.00
RT	Type 1	323+95	6.135	324+45	6.145	Connect to Existing	0.00		RT	323+95	6.135	324+45	6.145	50.00
RT	Connect to Existing	326+35	6.181	326+85	6.190	Type 1	0.00		RT	326+35	6.181	326+85	6.190	50.00

Item	Description	Unit	Quantity
2367	Guardrail End Treatment Type 1	Each	11
2381	Remove Guardrail	LF	550

NOTES

1. These items, quantities, and locations are approximate and are intended to provide a basis for bid.
2. Final locations and quantities will be determined by the contractor and approved by the engineer in the field.
3. All quantities were carried over to the General Summary.

PROPOSED THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY									
Station	Milepoint	Intersection	Stop Bar	Arrows			"ONLY"	"STOP"	Notes
			24 Inch White LF	Curve EA	Str. EA	Comb EA	EA	EA	
19+27	0.365	Martinsville Ford Rd / KY 961	20						
57+08	1.081	Jack Johnson Rd	10						
108+77	2.060	Iron Bridge Rd / Hayes Rd	20						
156+97	2.973	Rector Rd	10						
193+67	3.668	Motley Lane	10						
249+00	4.716	N. Hewitt Rd / S. Hewitt Rd	20						
281+79	5.337	Greenhill Rd	20						
323+88	6.134	Pleasant Hill Rd	20						
339+40	6.428	Old Cemetery Rd	10						
354+24	6.709	Castle Heights Rd	10						
381+11	7.218	Castle Heights Rd / Hunts Lane	20						
		Total	**170**	**0**	**0**	**0**	**0**	**0**	

Proposed Sign Summary — Warren County — KY 234

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
1	RT	25	3+30	0.063	WB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
2	LT	25	4+50	0.085	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
3	LT	25	5+70	0.108	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
4	LT	25	6+90	0.131	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
5	LT	25	8+10	0.153	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
6	LT	25	9+30	0.176	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
7	LT	25	10+50	0.199	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
8	RT	25	15+10	0.286	WB	M2-1	Junction		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate		1	12	12	1	
						M1-5A	State Route Sign (3 or 4 digit)	961	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
9	RT	25	17+10	0.324	WB	M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	961	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M5-1L	Advance Left Turn Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
						M3-4	West		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	234	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M6-3	Straight Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
10	RT	25	19+10	0.362	WB	M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	961	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M6-1L	Left Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
						M3-4	West		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	234	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M6-3	Straight Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
11	LT	25	19+45	0.368	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
12	RT	25	19+65	0.372	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel
13	LT	25	20+50	0.388	EB	M3-2	East		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	234	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M6-3	Straight Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
						M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	961	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M6-1R	Right Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
14	LT	25	22+45	0.425	EB	W1-5R	Right Winding Road		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
15	LT	25	24+50	0.464	EB	M3-2	East		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	234	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M6-3	Straight Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
						M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	14	14	1	
						M1-5A	State Route Sign (3 or 4 digit)	961	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
						M5-1R	Advance Right Turn Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate					1	
16	LT	25	27+50	0.521	EB	M2-1	Junction		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate		1	12	12	1	
						M1-5A	State Route Sign (3 or 4 digit)	961	30 x 24	Black	White	XI	5.00		Stnd w/ Soil Plate					1	
17	LT	25	29+50	0.559	EB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
18	RT	25	32+10	0.608	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
19	RT	25	33+90	0.642	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
20	RT	25	35+10	0.665	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
21	RT	25	36+30	0.688	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
22	RT	25	37+50	0.710	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
23	RT	25	38+70	0.733	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
24	LT	25	40+50	0.767	EB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
25	LT/RT	25	48+48	0.918	WB/EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50		Stnd w/ Soil Plate		4	7	28	4	4 object markers at culvert
26	RT	25	53+75	1.018	WB	W2-2R	Side Road Right		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
27	RT	25	57+55	1.090	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel
28	LT/RT	25	57+96	1.098	WB/EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50		Stnd w/ Soil Plate		4	7	28	4	4 object markers at culvert
29	LT	25	60+75	1.151	EB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
30	LT/RT	25	61+78	1.170	WB/EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50		Stnd w/ Soil Plate		4	7	28	4	4 object markers at culvert
31	LT/RT	25	68+85	1.304	WB/EB	OM2-2V	Object Marker Type 2		6 x 12	n/a	Yellow	XI	0.50		Stnd w/ Soil Plate		4	7	28	4	4 object markers at culvert
32	RT	25	73+75	1.397	WB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
33	LT	25	75+10	1.422	EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
34	LT	25	76+30	1.445	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
35	LT	25	77+50	1.468	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
36	LT	25	78+70	1.491	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
37	LT	25	79+90	1.513	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
38	LT	25	81+10	1.536	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
39	LT	25	82+30	1.559	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
40	LT	25	83+50	1.581	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
41	LT	25	84+70	1.604	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
42	RT	25	89+20	1.689	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
43	RT	25	90+40	1.712	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
44	RT	25	91+60	1.735	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
45	RT	25	92+80	1.758	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
46	RT	25	94+00	1.780	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
47	RT	25	95+20	1.803	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
48	LT	25	102+10	1.934	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
49	LT	25	103+30	1.956	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
50	LT	25	104+50	1.979	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
51	RT	25	105+25	1.993	WB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
52	RT	25	108+40	2.053	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
53	LT	25	108+50	2.055	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel

Proposed Sign Summary — Warren County — KY 234

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
54	RT	25	109+25	2.069	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel
55	RT	25	109+60	2.076	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
56	RT	25	110+80	2.098	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
57	RT	25	112+00	2.121	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
58	LT	25	112+40	2.129	EB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
59	RT	25	113+20	2.144	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
60	LT	25	115+50	2.188	EB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
61	RT	25	153+25	2.902	WB	W2-2R	Side Road Right		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
62	RT	25	157+00	2.973	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel
63	RT	25	171+35	3.245	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
64	RT	25	173+60	3.288	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
65	RT	25	174+80	3.311	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
66	RT	25	176+00	3.333	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
67	RT	25	177+20	3.356	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
68	RT	25	178+40	3.379	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
69	RT	25	179+60	3.402	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
70	RT	25	180+80	3.424	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
71	RT	25	182+00	3.447	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
72	RT	25	183+20	3.470	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
73	RT	25	184+40	3.492	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
74	RT	25	185+60	3.515	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
75	RT	25	186+80	3.538	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
76	LT	25	190+00	3.598	EB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
77	RT	25	190+25	3.603	WB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
78	LT	25	193+35	3.662	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Includes red post reflector panel
79	LT	25	195+50	3.703	EB	W2-2R	Side Road Right		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
80	RT	25	195+65	3.705	WB	W1-4R	Right Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
81	LT	25	197+20	3.735	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
82	LT	25	198+40	3.758	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
83	LT	25	199+60	3.780	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
84	LT	25	200+80	3.803	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
85	LT	25	202+00	3.826	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
86	LT	25	203+20	3.848	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
87	LT	25	204+40	3.871	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
88	LT	25	205+60	3.894	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
89	LT	25	206+80	3.917	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
90	RT	25	211+30	4.002	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
91	RT	25	212+50	4.025	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
92	RT	25	213+70	4.047	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
93	RT	25	214+90	4.070	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
94	RT	25	216+10	4.093	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
95	RT	25	217+30	4.116	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
96	RT	25	218+50	4.138	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
97	RT	25	219+70	4.161	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
98	RT	25	220+90	4.184	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
99	LT	25	222+30	4.210	EB	W1-4R	Right Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
100	RT	25	223+60	4.235	WB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
101	LT	25	226+80	4.295	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Add red post reflector panel
102	RT	25	230+10	4.358	WB	W1-5R	Right Winding Road		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
103	LT	25	230+35	4.363	EB	W2-2R	Side Road Right		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
104	LT	25	232+70	4.407	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
105	LT	25	233+90	4.430	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
106	LT	25	235+10	4.453	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
107	LT	25	236+30	4.475	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
108	RT	25	238+80	4.523	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
109	RT	25	240+00	4.545	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
110	RT	25	241+20	4.568	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
111	RT	25	245+60	4.652	WB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
112	LT	25	247+80	4.693	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
113	LT	25	248+60	4.708	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Add red post reflector panel
114	LT	25	249+00	4.716	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
115	RT	25	249+15	4.719	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Add red post reflector panel
116	LT	25	250+20	4.739	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
117	LT	25	252+15	4.776	EB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
118	LT	25	254+15	4.813	EB	W1-5L	Left Winding Road		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
119	LT	25	281+30	5.328	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	
120	LT	25	285+85	5.414	EB	W2-2R	Side Road Right		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)		18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
121	RT	25	290+00	5.492	WB	W1-4L	Left Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
					WB	W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
122	RT	25	292+10	5.532	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
123	RT	25	293+30	5.555	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
124	RT	25	294+50	5.578	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
125	RT	25	295+70	5.600	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
126	RT	25	296+90	5.623	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
127	LT	25	302+00	5.720	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
128	LT	25	303+20	5.742	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
129	LT	25	304+40	5.765	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
130	LT	25	305+60	5.788	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
131	LT	25	306+80	5.811	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
132	LT	25	307+00	5.814	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
133	LT	25	308+15	5.836	EB	W1-4L	Left Reverse Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
134	RT	25	311+00	5.890	WB	W1-5R	Right Winding Road		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
135	RT	25	314+60	5.958	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
136	RT	25	315+80	5.981	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
137	RT	25	317+00	6.004	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
138	LT	25	320+00	6.061	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	
139	LT	25	323+25	6.122	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	
140	RT	25	336+50	6.373	WB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	

Proposed Sign Summary **Warren County** **KY 234**

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
141	RT	25	338+00	6.402	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
142	RT	25	339+20	6.424	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
143	RT	25	340+40	6.447	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
144	RT	25	341+60	6.470	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
145	RT	25	342+80	6.492	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
146	RT	25	344+00	6.515	WB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
147	LT	25	345+45	6.543	EB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
					EB	W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
148	RT	25	350+30	6.634	WB	W2-2R	Side Road Right		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
149	RT	25	354+25	6.709	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Add red post reflector panel
150	LT	25	357+25	6.766	EB	W2-2L	Side Road Left		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
151	RT	25	357+65	6.774	WB	W1-2R	Right Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
152	LT	25	360+40	6.826	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
153	LT	25	361+60	6.848	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
154	LT	25	362+80	6.871	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	

Proposed Sign Summary — Warren County — KY 234

SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2'' Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)	Notes
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type									
155	LT	25	364+00	6.894	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
156	LT	25	365+20	6.917	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
157	LT	25	366+40	6.939	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
158	LT	25	367+60	6.962	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
159	LT	25	368+80	6.985	WB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
					EB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Stnd w/ Soil Plate		1	12	12	1	
160	LT	25	370+65	7.020	EB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
						W13-1P	XX MPH (Advisory Speed)	TBD	18 x 18	Black	FL Yellow	XI	2.25		Stnd w/ Soil Plate					1	
161	RT	25	377+50	7.150	WB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	
162	LT	25	380+00	7.197	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Add red post reflector panel
163	RT	25	380+83	7.213	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13	13	1	Add red post reflector panel
164	LT	25	384+25	7.277	EB	W2-1	Cross Road		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	14	14	1	

Summary of Items		
SBM Alum Sheet Signs 0.080 INCH	1110.63	SQ FT
SBM Alum Sheet Signs 0.125 INCH	0.00	SQ FT
Barcode Sign Inventory	319	EACH

Summary of Items		
Steel Post - Type 1	3360	LF
GMSS Type D	0	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	0	CU YD

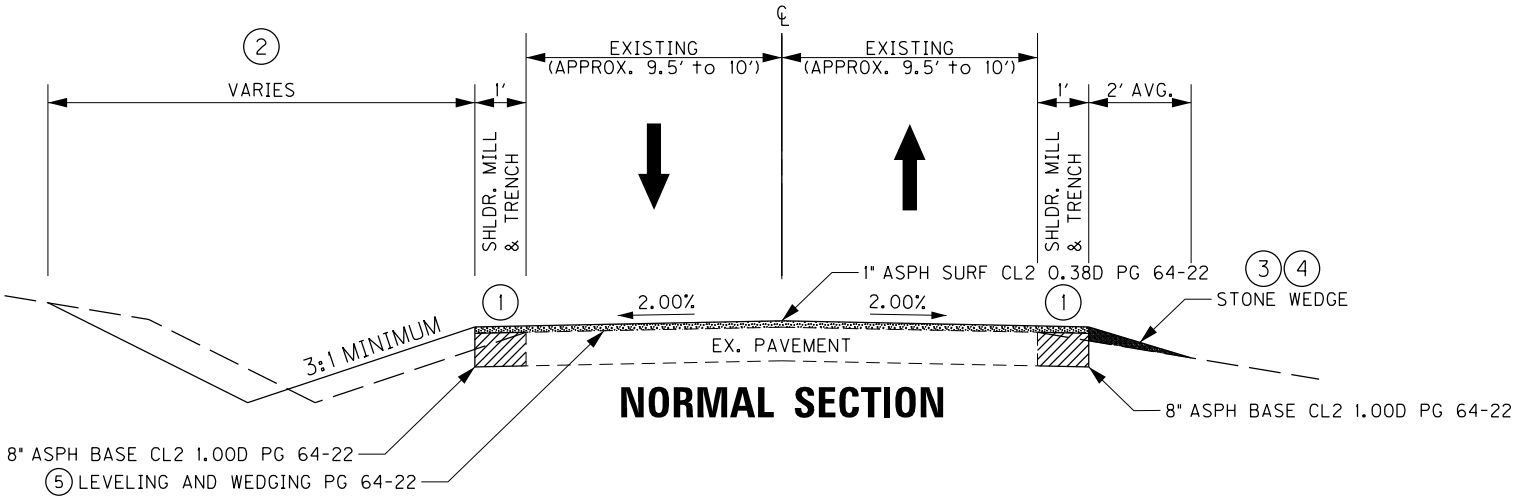
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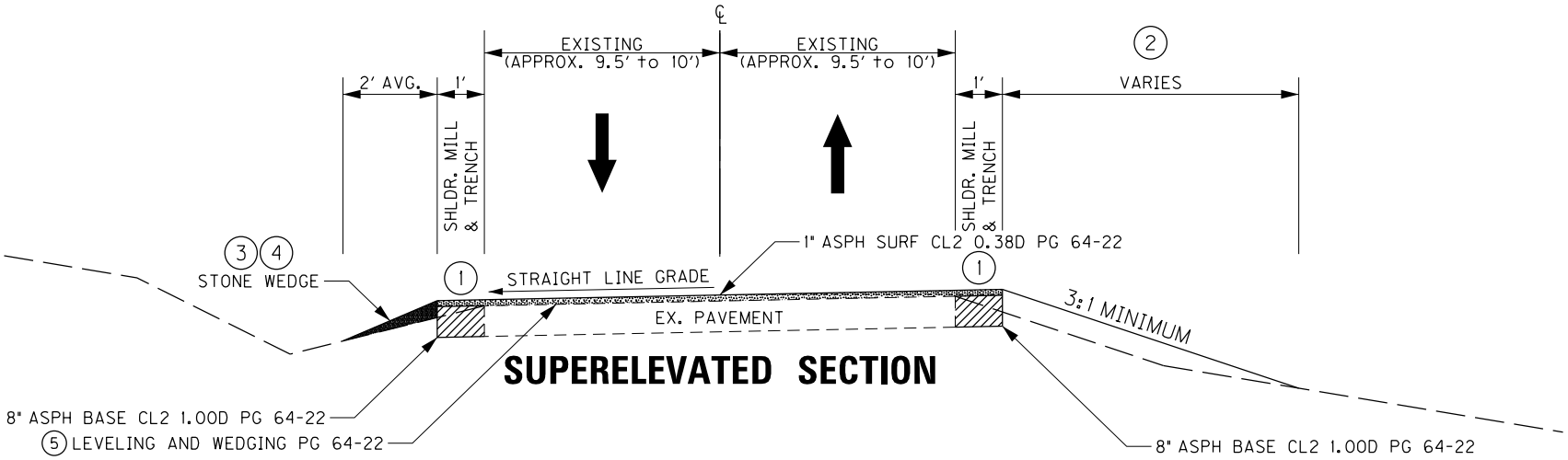
1. These items, quantities, and locations are approximate and are intended to provide a basis for bid.
2. Final locations and quantities will be determined by the contractor and approved by the engineer in the field.
3. All quantities were carried over to the General Summary.

COUNTY OF	ITEM NO.
WARREN	3-9015.00

TYPICAL SECTIONS

PAVEMENT WIDENING





GENERAL NOTES

(1) SEE SPECIAL NOTE FOR SHOULDER MILLING - TRENCHING

(2) SEE DITCHING AND SHOULDERING AND EMBANKMENT BENCHING DETAILS SHEET

(3) STONE WEDGE SHALL BE USED AT THE EDGE OF THE RESURFACED SHOULDER WHEN DROPOFF IS OVER 1 INCH OR AS DIRECTED BY THE ENGINEER. A 2.5 INCH AVERAGE DROPOFF WAS USED FOR ESTIMATE PURPOSES.

(4) DOUBLE ASPHALT SEAL COAT REQUIRED FROM EDGE OF SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE WHEN STONE WEDGE IS PLACED.

(5) LEVEL AND WEDGE AS DIRECTED BY THE ENGINEER

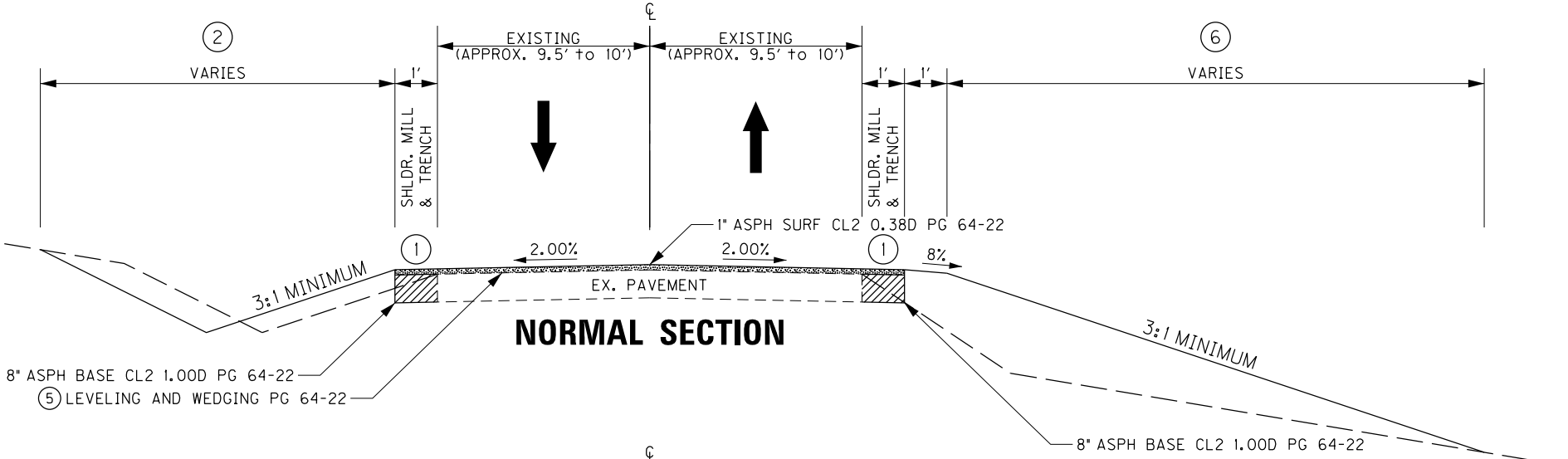
N.T.S.

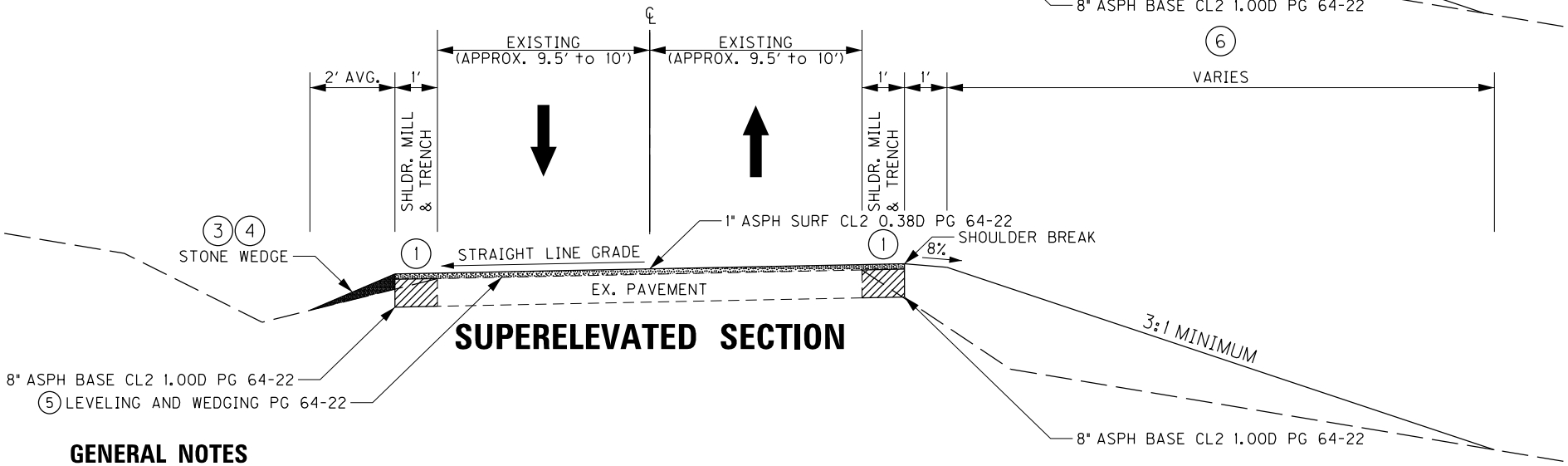
TYPICAL SECTIONS

COUNTY OF	ITEM NO.
WARREN	3-9015.00

TYPICAL SECTIONS

RE-GRADE EMBANKMENT





GENERAL NOTES

(1) SEE SPECIAL NOTE FOR SHOULDER MILLING - TRENCHING.

(2) SEE DITCHING AND SHOULDERING AND EMBANKMENT BENCHING DETAILS SHEET.

(3) STONE WEDGE SHALL BE USED AT THE EDGE OF THE RESURFACED SHOULDER WHEN DROPOFF IS OVER 1 INCH OR AS DIRECTED BY THE ENGINEER. A 2.5 INCH AVERAGE DROPOFF WAS USED FOR ESTIMATE PURPOSES.

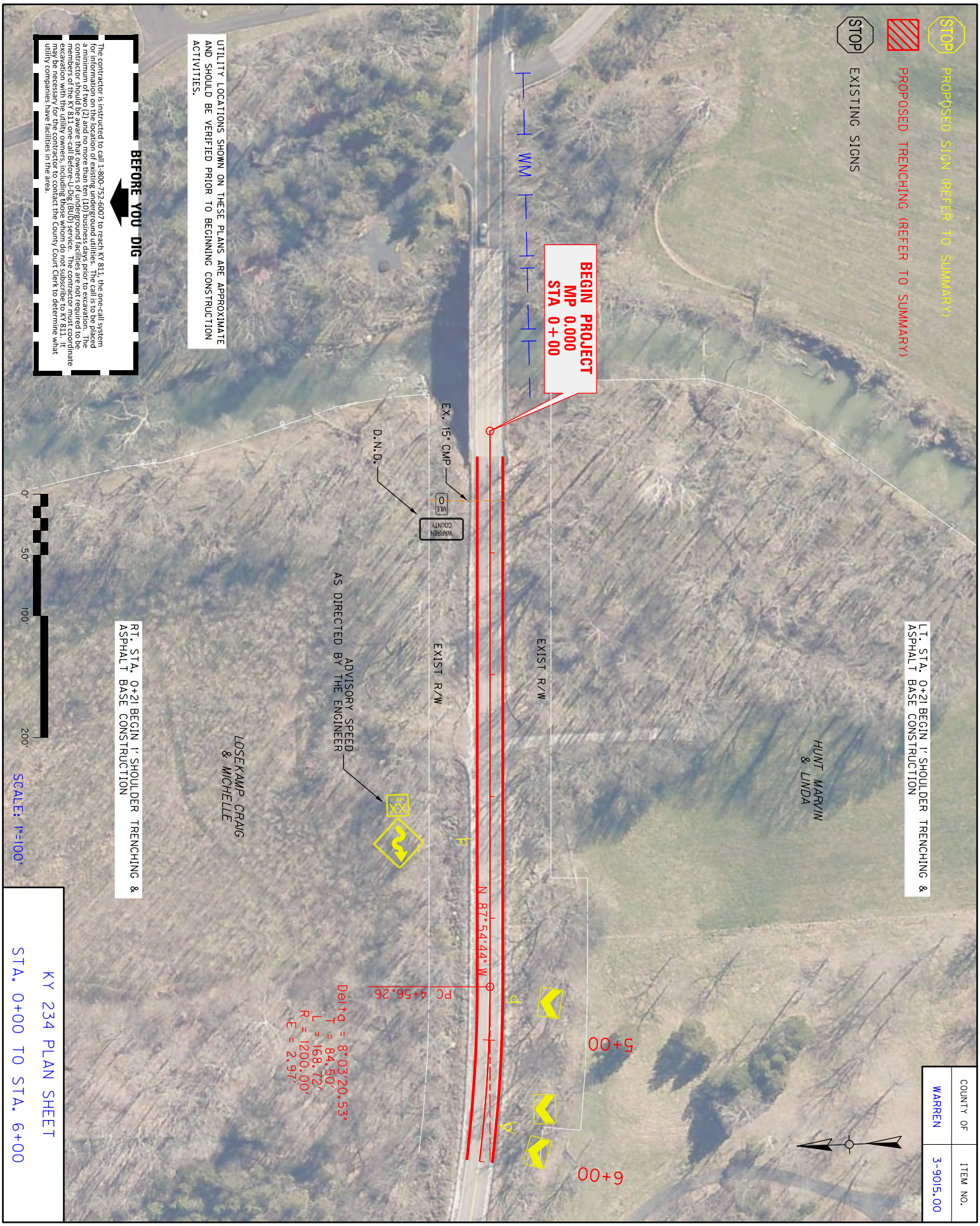
(4) DOUBLE ASPHALT SEAL COAT REQUIRED FROM EDGE OF SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE WHEN STONE WEDGE IS PLACED.

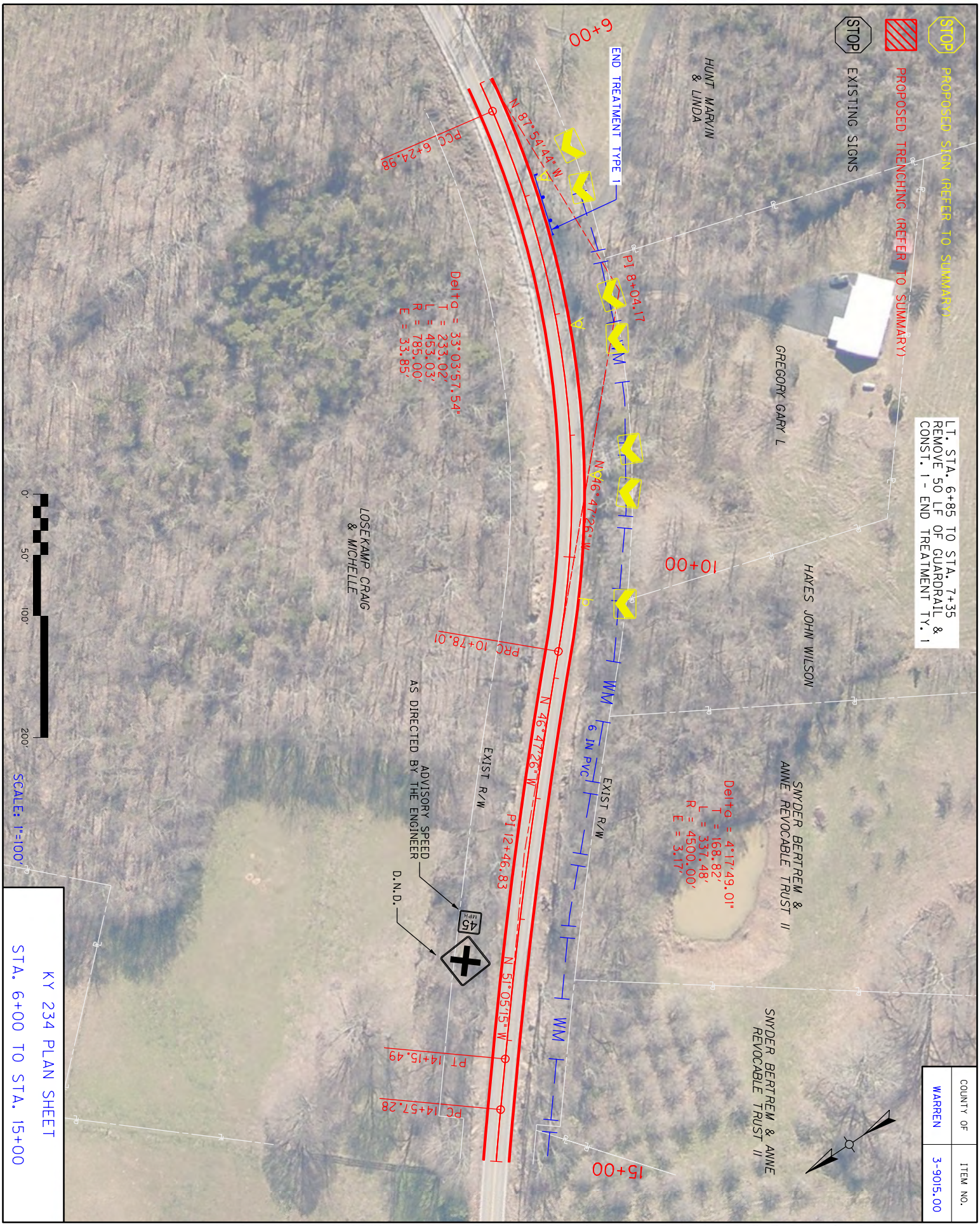
(5) LEVEL AND WEDGE AS DIRECTED BY THE ENGINEER.

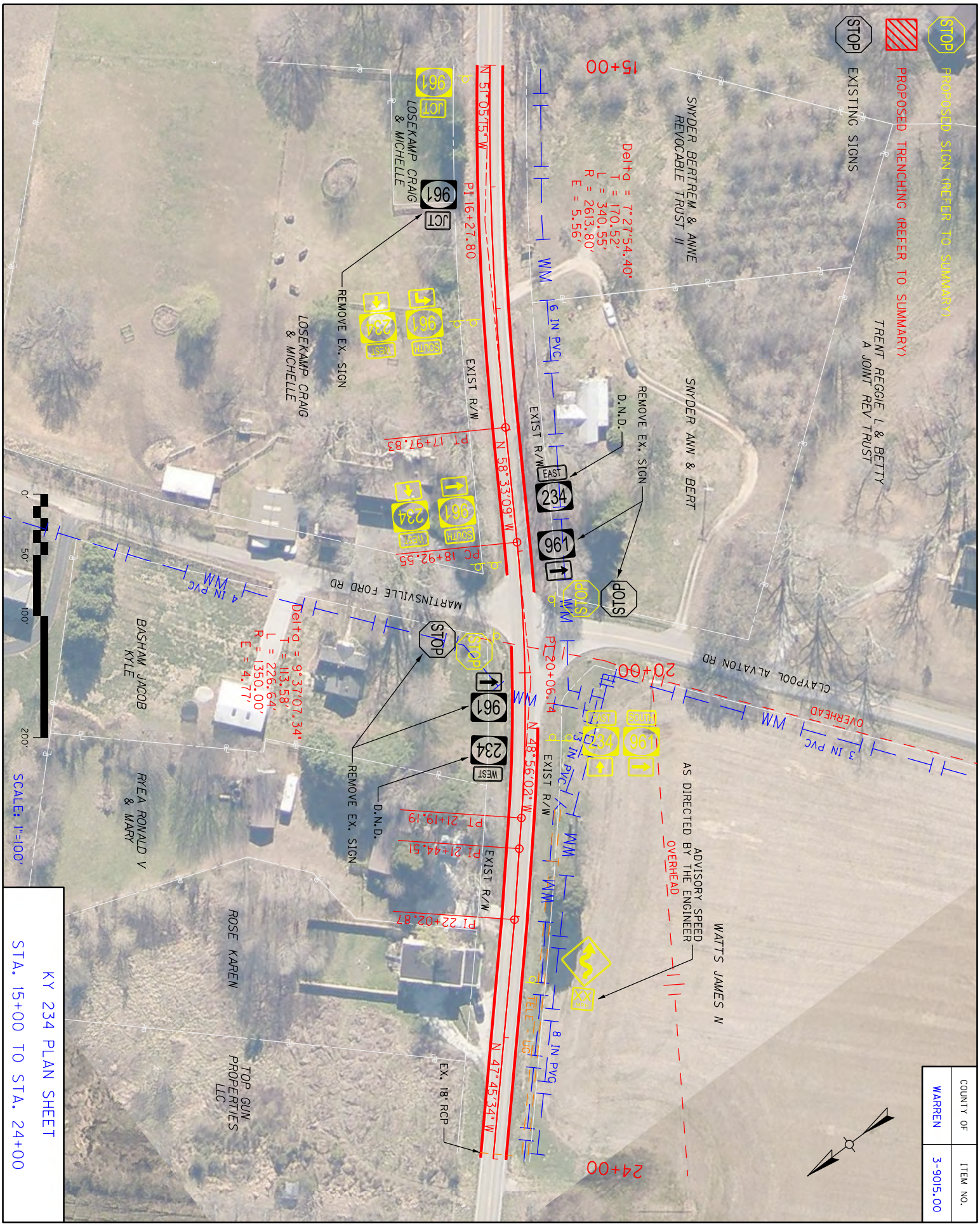
(6) SEE CROSS SECTIONS FOR SLOPES OUTSIDE THE LIMITS OF THE SHOULDER.

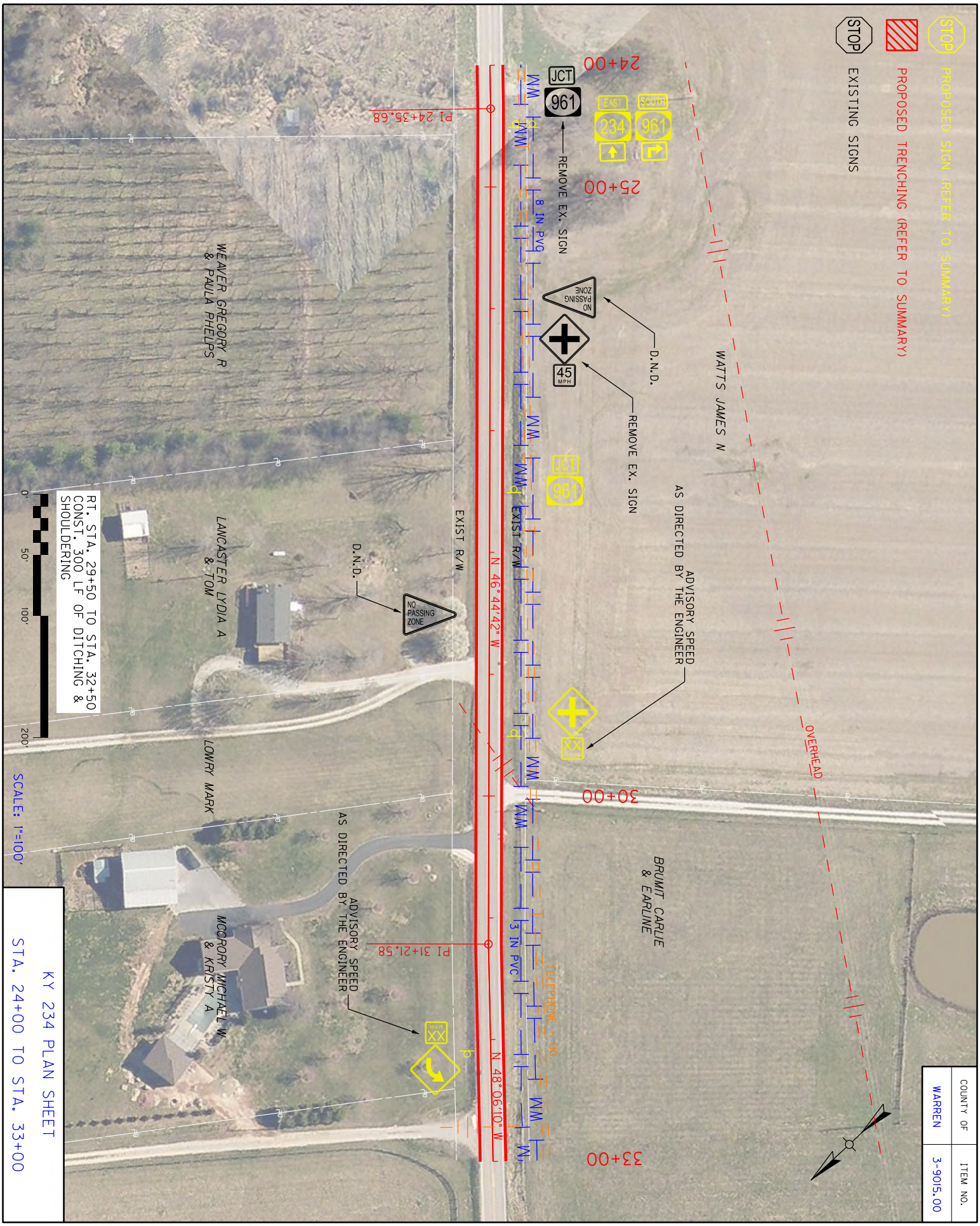
N.T.S.

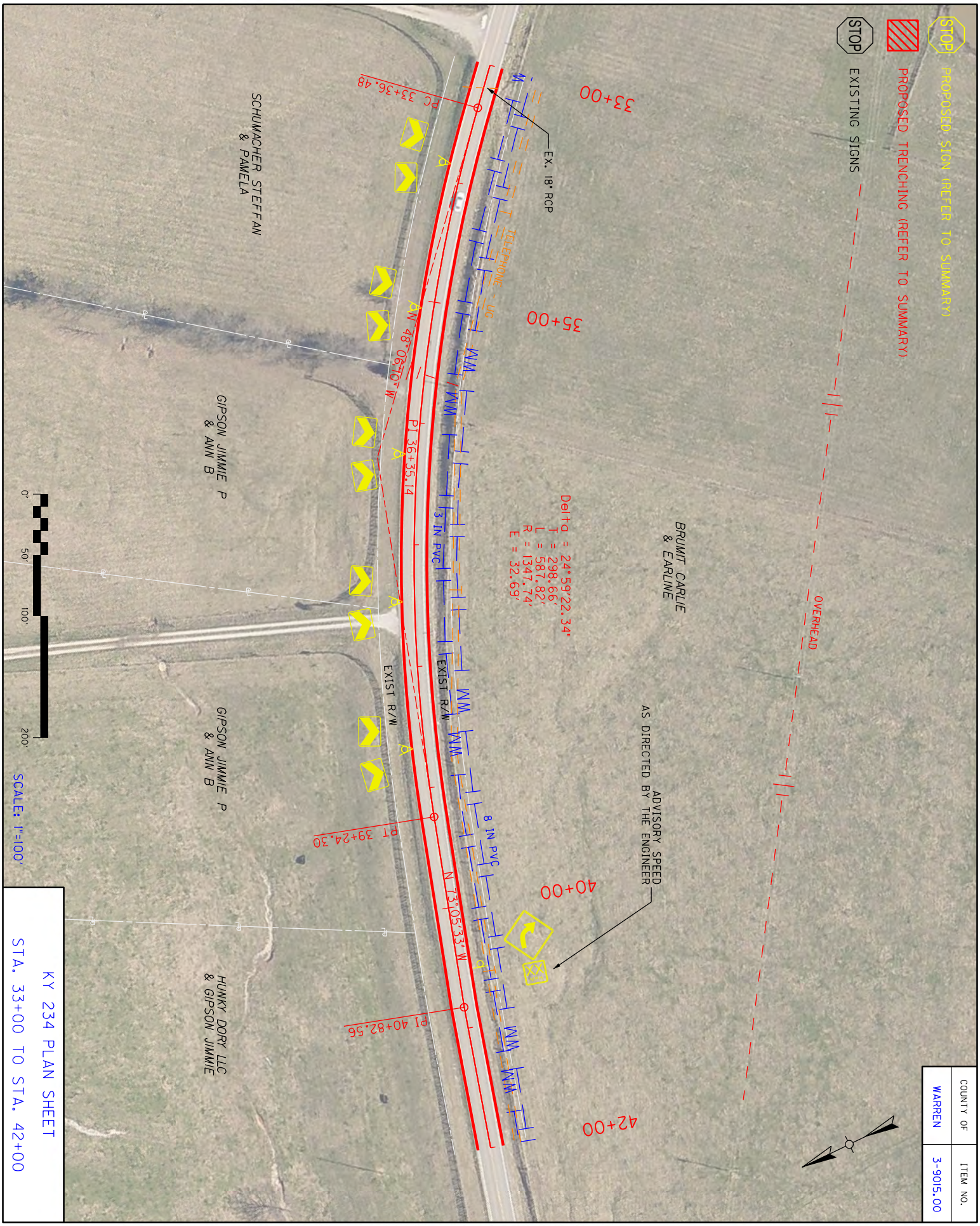
TYPICAL SECTIONS

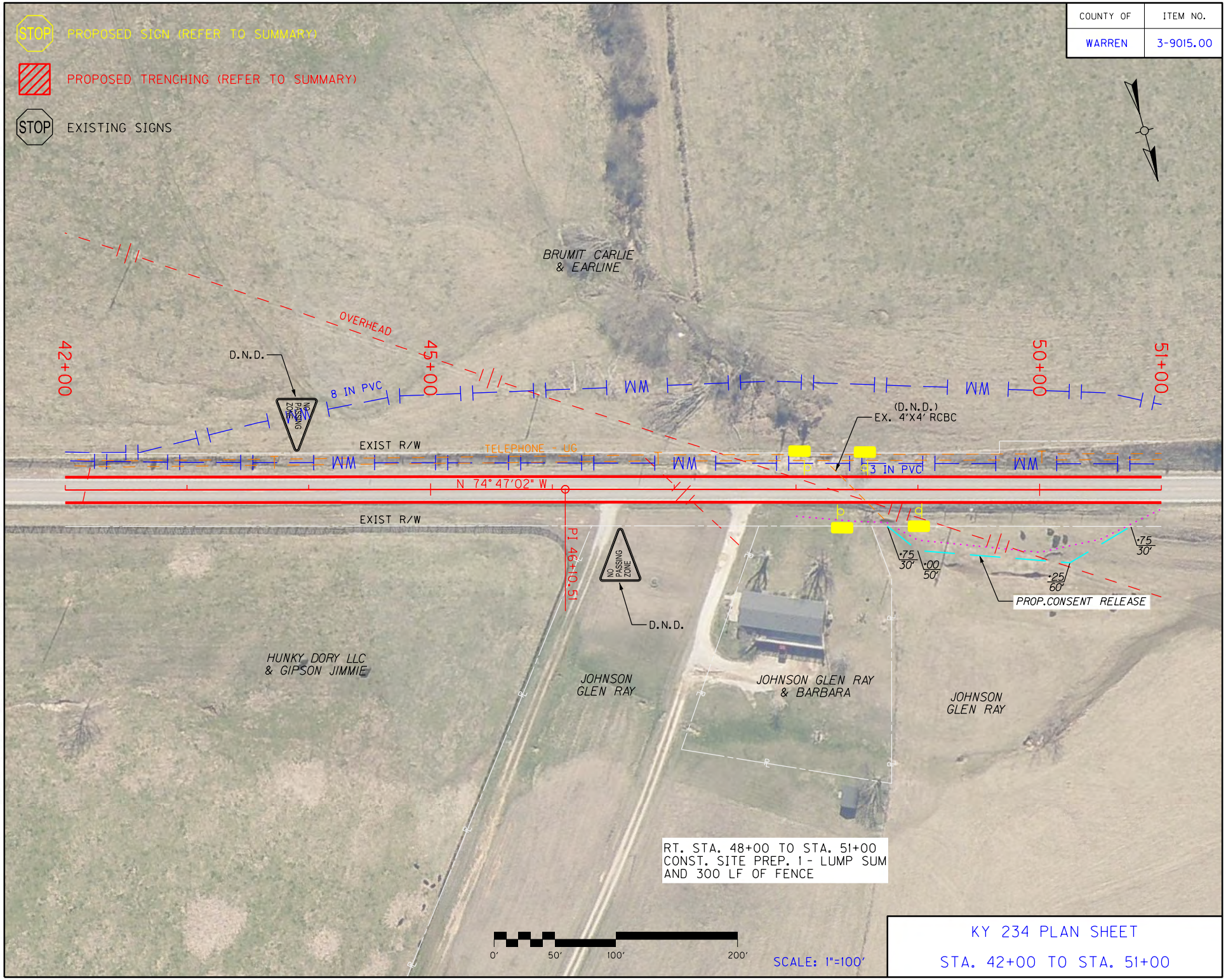

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
STOP
BEGIN PROJECT
MP 0.000
STA 0+00
WM
EX. 15" CMP
D.N.D.
EXIST R/W
EXIST R/W
LT. STA. 0+21 BEGIN 1' SHOULDER TRENCHING & ASPHALT BASE CONSTRUCTION
HUNT MARVIN & LINDA
N 87°54'44" W
PC 4+56.26
Delta = 8°03'20.53"
T = 84.50'
L = 168.72'
R = 1200.00'
E = 2.97'
5+00
6+00
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
LOSEKAMP CRAIG & MICHELLE
RT. STA. 0+21 BEGIN 1' SHOULDER TRENCHING & ASPHALT BASE CONSTRUCTION
UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
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 members of the 811 system are not required to be members of the KY 811 system. There are many (68) underground facilities that do not participate in the KY 811 system. The contractor is responsible to 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.
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 0+00 TO STA. 6+00

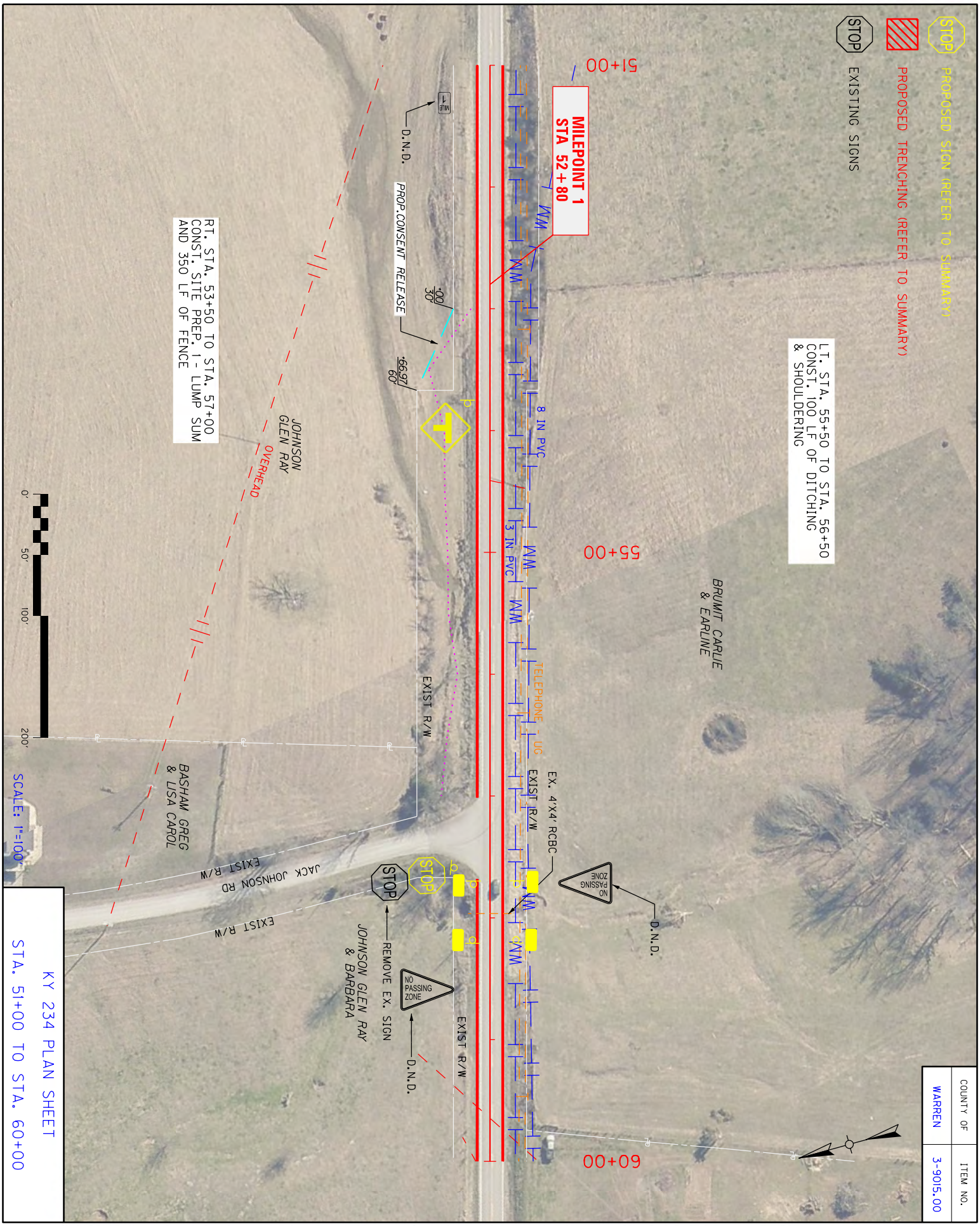

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 6+85 TO STA. 7+35
REMOVE 50 LF OF GUARDRAIL &
CONST. 1- END TREATMENT TY. 1
END TREATMENT TYPE 1
HUNT MARVIN & LINDA
GREGORY GARY L
HAYES JOHN WILSON
SNYDER BERTREM & ANNE REVOCABLE TRUST II
LOSEKAMP CRAIG & MICHELLE
EXIST R/W
6 IN PVC
WM
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
D.N.D.
45 MPH
PI 8+04.17
PC 6+24.98
PRC 10+78.01
PI 12+46.83
PT 14+15.49
PC 14+57.28
N 87°54'44" W
N 46°47'26" W
N 51°05'15" W
Delta = 33°03'57.54"
T = 233.02'
L = 453.03'
R = 785.00'
E = 33.85'
Delta = 4°17'49.01"
T = 168.82'
L = 337.48'
R = 4500.00'
E = 3.17'
6+00
10+00
15+00
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 6+00 TO STA. 15+00

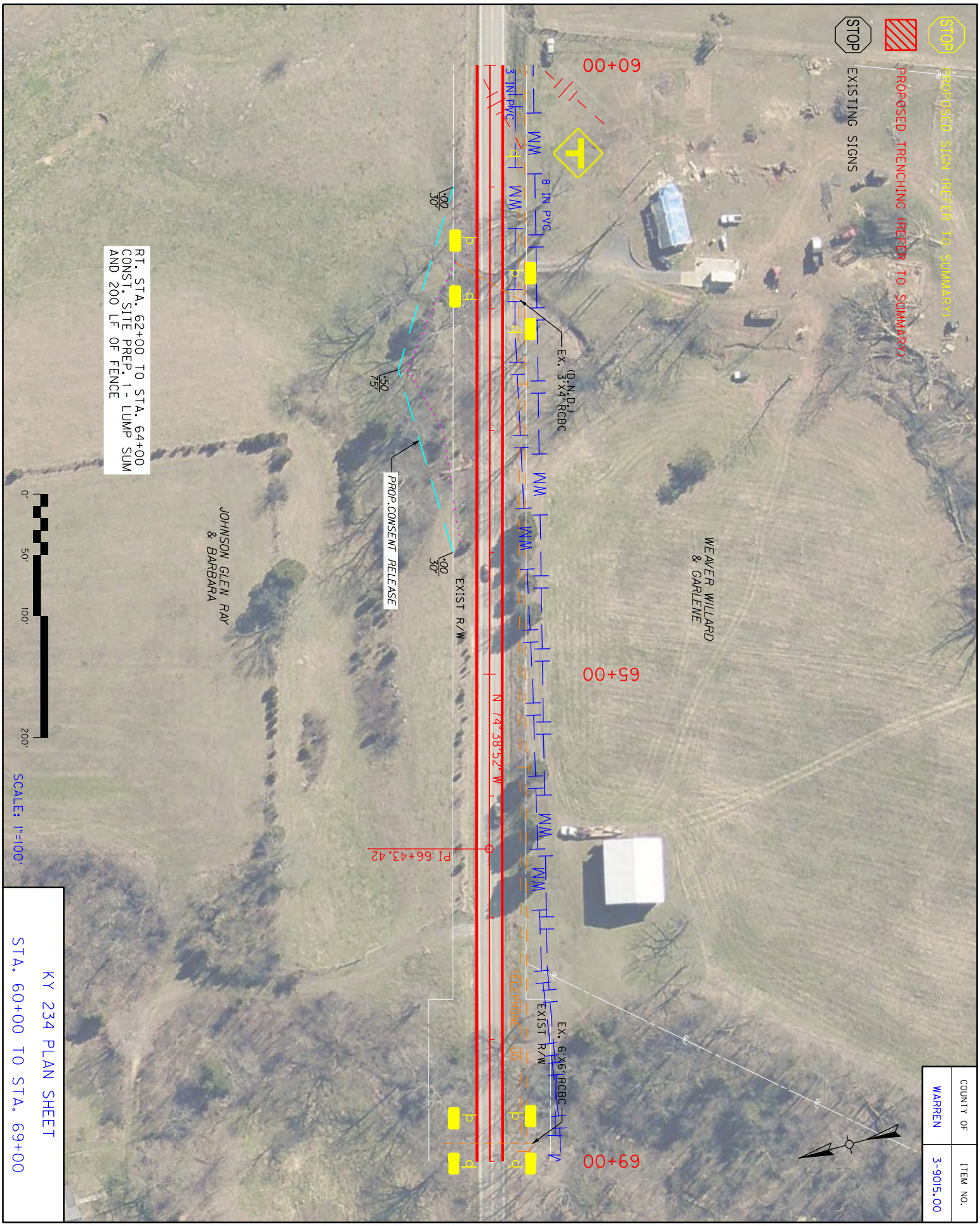

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
15+00
20+00
24+00
SNYDER BERTREM & ANNE REVOCABLE TRUST II
TRENT REGGIE L & BETTY A JOINT REV TRUST
SNYDER ANN & BERT
LOSEKAMP CRAIG & MICHELLE
MARTINSVILLE FORD RD
CLAYPOOL ALVATON RD
WATTS JAMES N
BASHAM JACOB KYLE
RYEA RONALD V & MARY
ROSE KAREN
TOP GUN PROPERTIES LLC
Delta = 7°27'54.40"
T = 170.52'
L = 340.55'
R = 2613.80'
E = 5.56'
N 51°05'15"W
PI 16+27.80
N 58°33'09"W
PT 17+97.83
PC 18+92.55
PT 20+06.14
N 48°56'02"W
PI 21+19.19
PI 21+44.51
PI 22+02.87
N 47°45'34"W
Delta = 9°37'07.34"
T = 113.58'
L = 226.64'
R = 1350.00'
E = 4.77'
REMOVE EX. SIGN
D.N.D.
EXIST R/W
6 IN PVC
4 IN PVC
3 IN PVC
8 IN PVC
OVERHEAD
TELE - UG
EX. 18" RCP
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
EAST
WEST
SOUTH
JCT
961
234
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 15+00 TO STA. 24+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
JCT 961
EAST 234
SOUTH 961
REMOVE EX. SIGN
NO PASSING ZONE
45 MPH
D.N.D.
ADVISORY SPEED BY THE ENGINEER
WATTS JAMES N
OVERHEAD
8 IN PVC
EXIST R/W
N 46°44'42" W
13 IN PVC
TELEPHONE - UG
N 48°06'10" W
24+00
25+00
30+00
33+00
PI 24+35.68
PI 31+21.58
WEAVER GREGORY R & PAULA PHELPS
LANCASTER LYDIA A & TOM
LOWRY MARK
MCCRORY MICHAEL W & KRISTY A
BRUMIT CARLIE & EARLINE
RT. STA. 29+50 TO STA. 32+50
CONST. 300 LF OF DITCHING & SHOULDERING
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 24+00 TO STA. 33+00

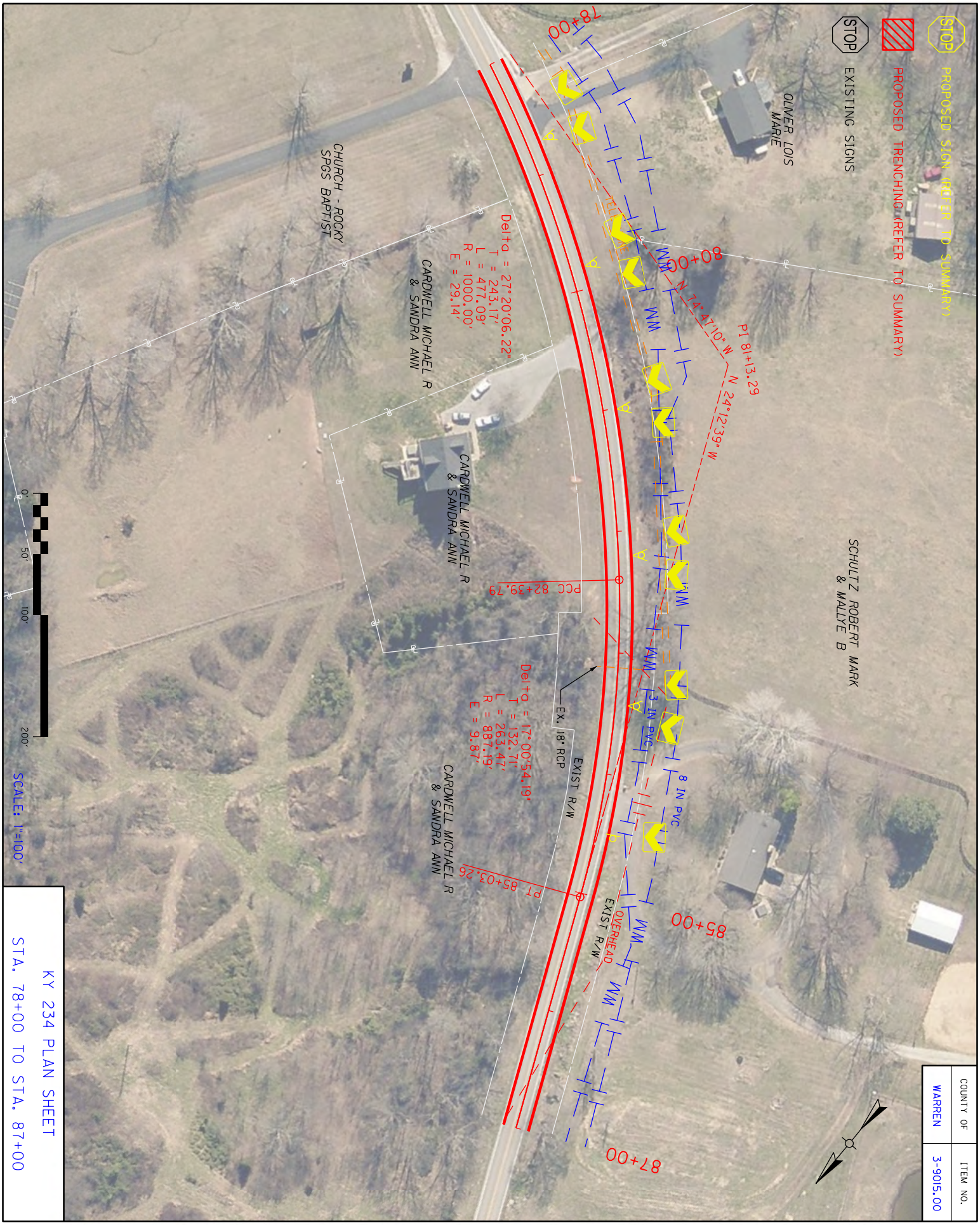

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
STOP
EX. 18" RCP
TELEPHONE - UG
OVERHEAD
WM
3 IN PVC
8 IN PVC
EXIST R/W
EXIST R/W
ADVISORY SPEED
AS DIRECTED BY THE ENGINEER
Delta = 24°59'22.34"
T = 298.66'
L = 587.82'
R = 1347.74'
E = 32.69'
PC 33+36.48
PI 36+35.14
PT 39+24.30
PI 40+82.56
N 48°06'10" W
N 73°05'33" W
33+00
35+00
40+00
42+00
SCHUMACHER STEFFAN & PAMELA
GIPSON JIMMIE P & ANN B
GIPSON JIMMIE P & ANN B
BRUMIT CARLIE & EARLINE
HUNKY DORY LLC & GIPSON JIMMIE
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 33+00 TO STA. 42+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

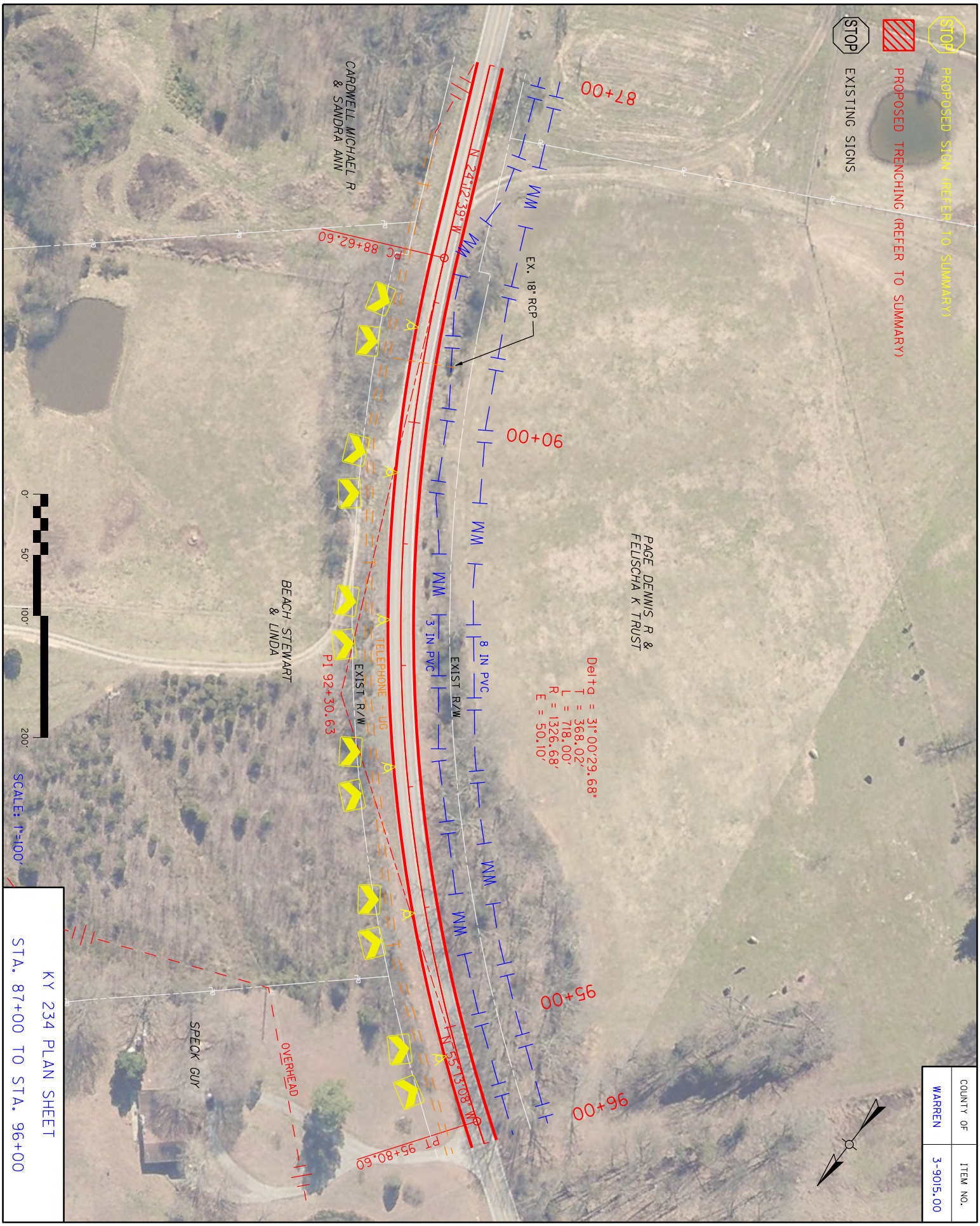

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
BRUMIT CARLIE & EARLINE
OVERHEAD
42+00
45+00
50+00
51+00
D.N.D.
NO PASSING ZONE
8 IN PVC
WM
EXIST R/W
TELEPHONE - UG
(D.N.D.)
EX. 4'X4' RCBC
3 IN PVC
N 74° 47'02" W
EXIST R/W
PI 49+10.51
D.N.D.
.75 30'
.00 50'
.25 60'
.75 30'
PROP.CONSENT RELEASE
HUNKY DORY LLC & GIPSON JIMMIE
JOHNSON GLEN RAY
JOHNSON GLEN RAY & BARBARA
JOHNSON GLEN RAY
RT. STA. 48+00 TO STA. 51+00
CONST. SITE PREP. 1 - LUMP SUM
AND 300 LF OF FENCE
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 42+00 TO STA. 51+00

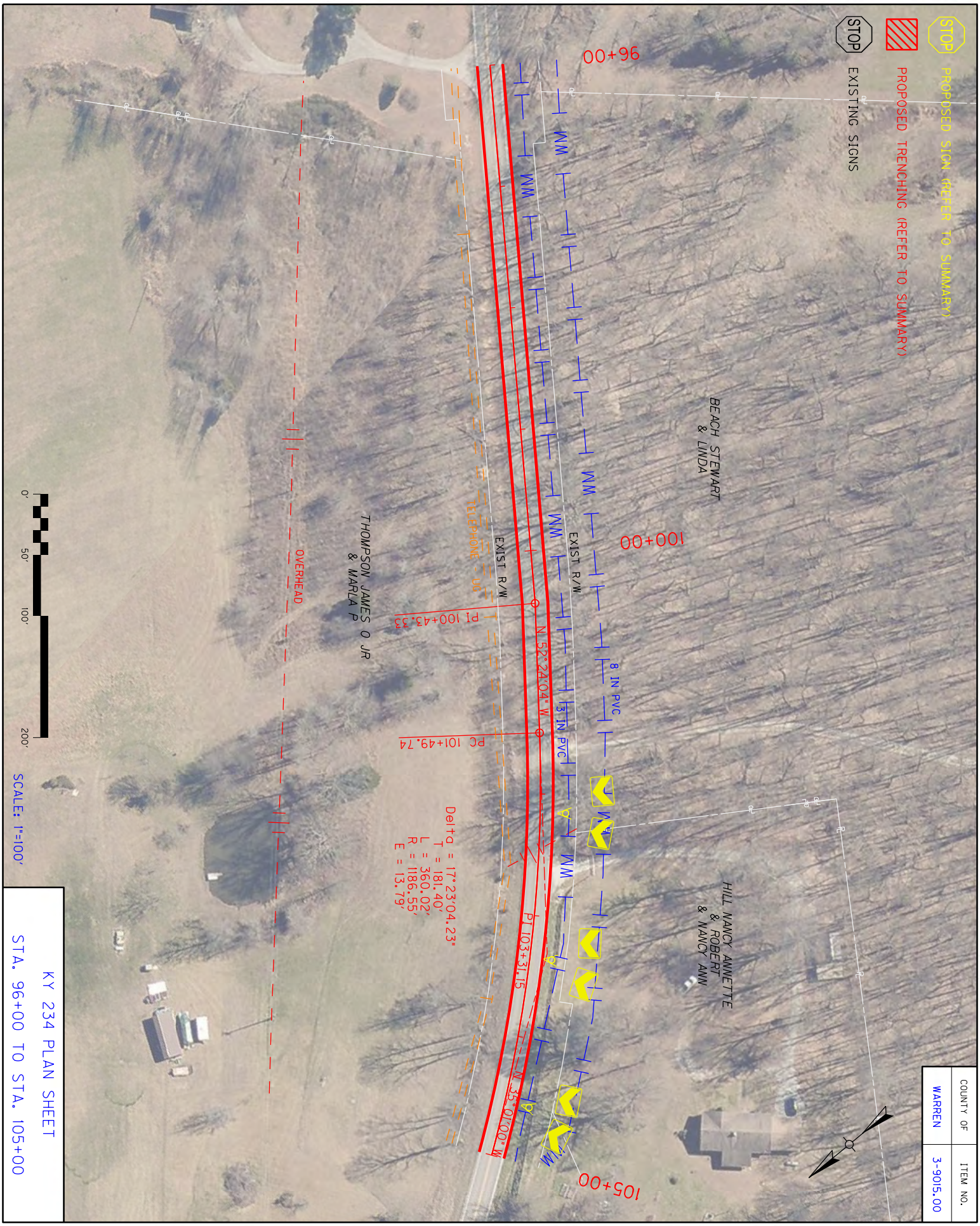

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 55+50 TO STA. 56+50
CONST. 100 LF OF DITCHING
& SHOULDERING
51+00
MILEPOINT 1
STA 52+80
55+00
60+00
8 IN PVC
3 IN PVC
TELEPHONE UG
EXIST R/W
EX. 4'X4' RCBC
NO PASSING ZONE
D.N.D.
BRUMIT CARLIE
& EARLINE
D.N.D.
PROP.CONSENT RELEASE
-00
30'
-66.97
60'
RT. STA. 53+50 TO STA. 57+00
CONST. SITE PREP. 1 - LUMP SUM
AND 350 LF OF FENCE
JOHNSON
GLEN RAY
OVERHEAD
EXIST R/W
BASHAM GREG
& LISA CAROL
JACK JOHNSON RD
EXIST R/W
STOP
STOP
REMOVE EX. SIGN
JOHNSON GLEN RAY
& BARBARA
NO PASSING ZONE
D.N.D.
EXIST R/W
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 51+00 TO STA. 60+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

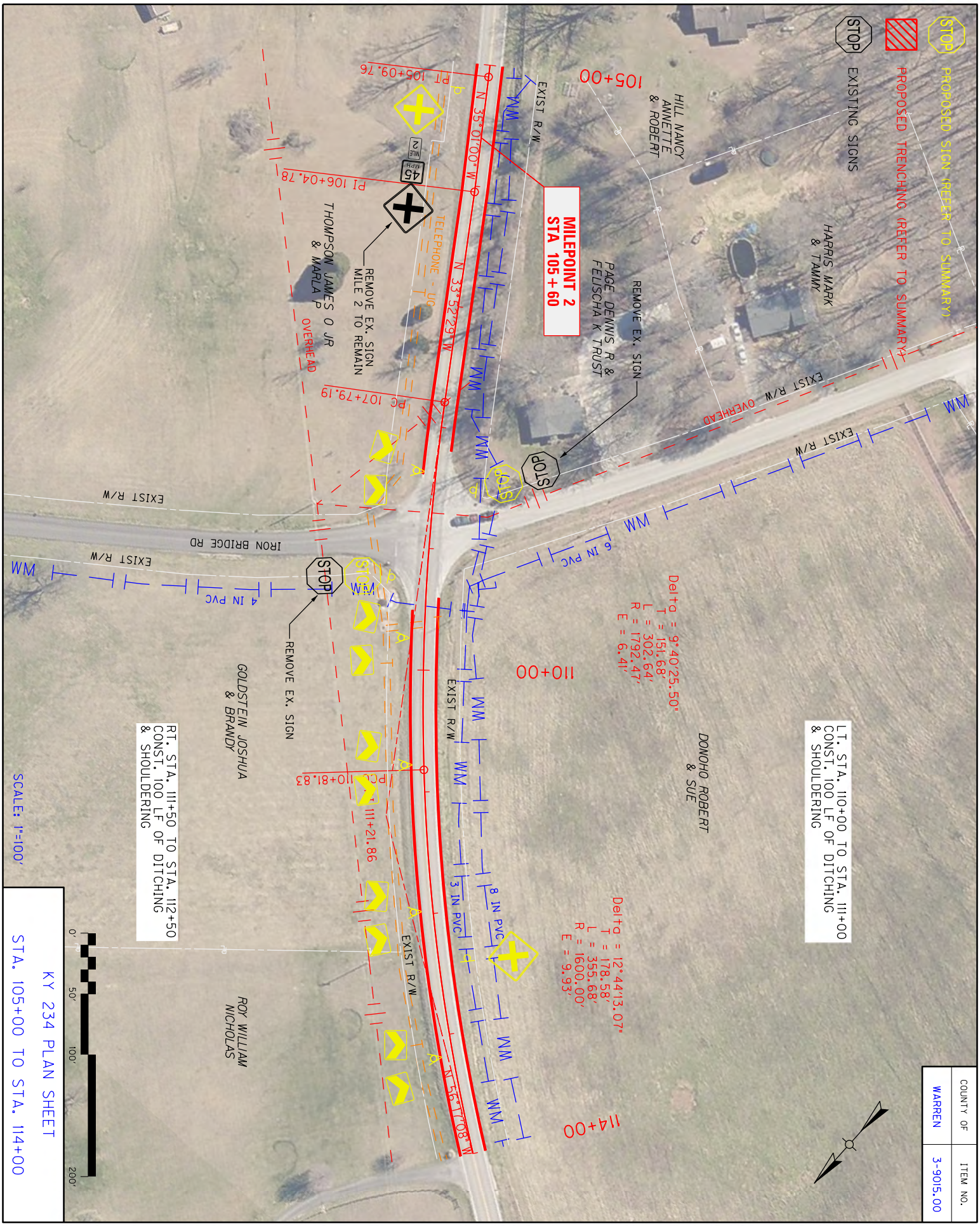

STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
60+00
65+00
69+00
8" IN PVC
3" IN PVC
EX. 3'X4' RCBC (D.N.D.)
EX. 6'X6' RCBC
EXIST R/W
PROP. CONSENT RELEASE
WEAVER WILLARD & GARLENE
JOHNSON GLEN RAY & BARBARA
N 74°38'52" W
PI 66+43.42
TELEPHONE UG
RT. STA. 62+00 TO STA. 64+00
CONST. SITE PREP. 1- LUMP SUM
AND 200 LF OF FENCE
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 60+00 TO STA. 69+00

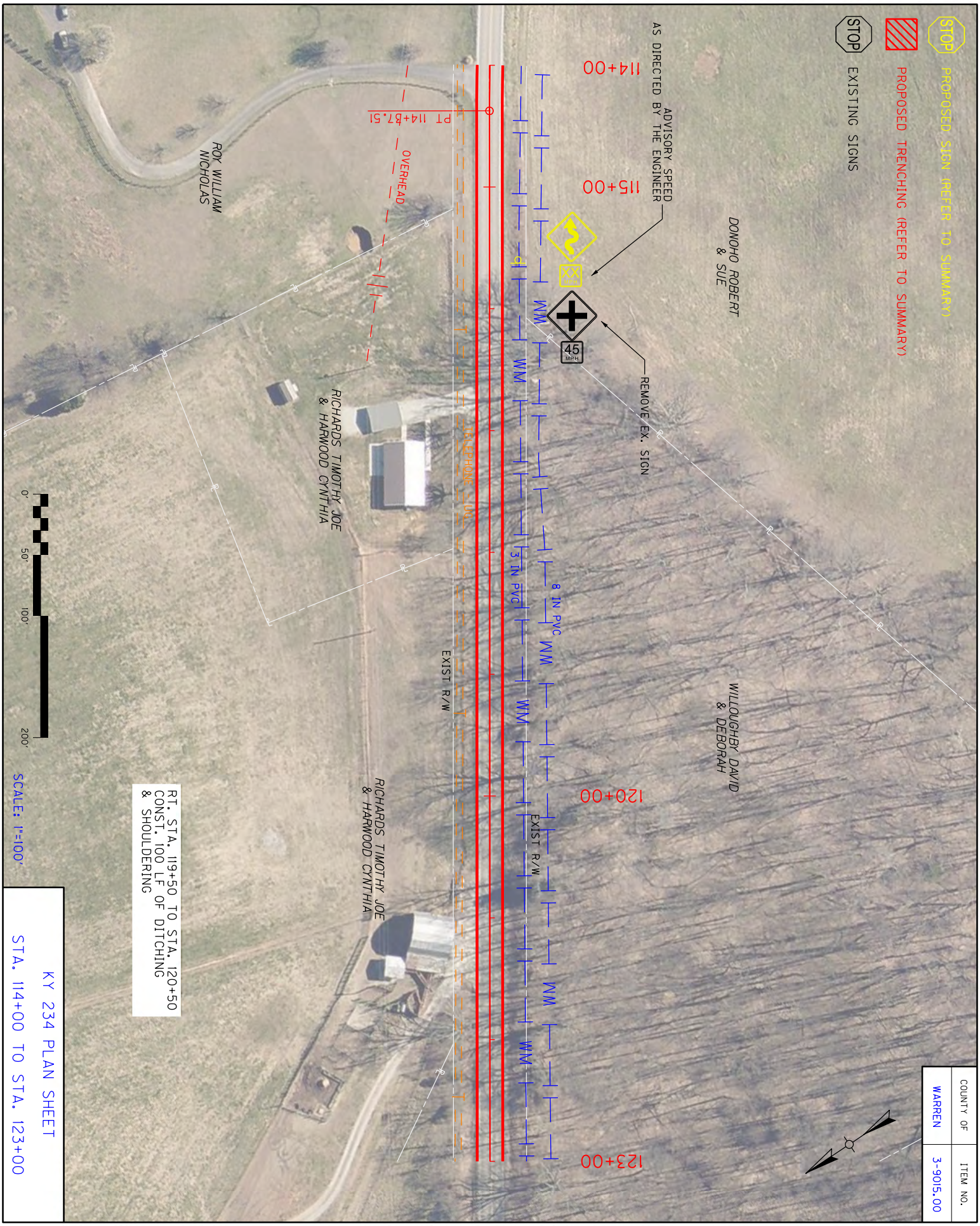

STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
WEAVER WILLARD & GARLENE
69+00
70+00
75+00
78+00
EXIST R/W
TELEPHONE - UG
8 IN PVC WM
3 IN PVC WM
ROWE LARRY S & LINDA TRUSTEES OF REV TR
EXIST R/W
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
JOHNSON GLEN RAY & BARBARA
N 74°47'10" W
PC 75+08.08
Delta = 6°13'30.46"
T = 127.44'
L = 254.62'
R = 2343.53'
E = 3.46'
PCC 77+62.70
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 69+00 TO STA. 78+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

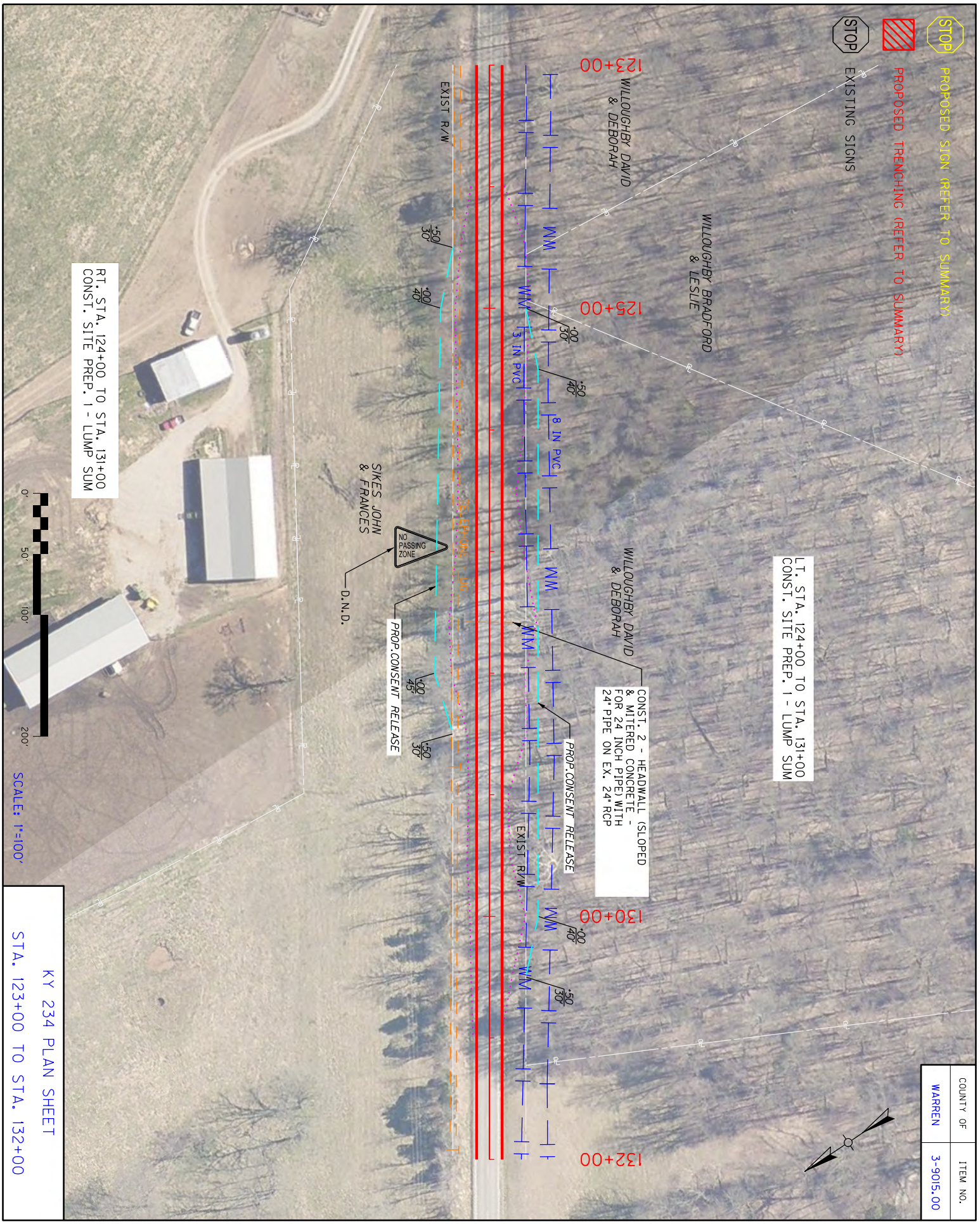

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
OLIVER LOIS MARIE
SCHULTZ ROBERT MARK & MALLYE B
CHURCH - ROCKY SPGS BAPTIST
CARDWELL MICHAEL R & SANDRA ANN
CARDWELL MICHAEL R & SANDRA ANN
CARDWELL MICHAEL R & SANDRA ANN
78+00
80+00
85+00
87+00
N 74°47'10" W
N 24°12'39" W
PI 81+13.29
Delta = 27°20'06.22"
T = 243.17'
L = 477.09'
R = 1000.00'
E = 29.14'
PCC 82+39.79
Delta = 17°00'54.19"
T = 132.71'
L = 263.47'
R = 887.19'
E = 9.87'
PT 85+03.26
EXIST R/W
EX. 18" RCP
8 IN PVC
OVERHEAD
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 78+00 TO STA. 87+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
STOP
STOP
87+00
90+00
95+00
96+00
CARDWELL MICHAEL R & SANDRA ANN
BEACH STEWART & LINDA
PAGE DENNIS R & FELISCHA K TRUST
SPECK GUY
N 24°12'39" W
PC 88+62.60
PT 95+80.60
N 55°13'08" W
EX. 18" RCP
8 IN PVC
3 IN PVC
EXIST R/W
EXIST R/W
TELEPHONE - UG
OVERHEAD
PI 92+30.63
Delta = 31°00'29.68"
T = 368.02'
L = 718.00'
R = 1326.68'
E = 50.10'
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 87+00 TO STA. 96+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
96+00
100+00
105+00
BEACH STEWART
& LINDA
HILL NANCY ANNETTE
& ROBERT
& NANCY ANN
THOMPSON JAMES O JR
& MARLA P
EXIST R/W
EXIST R/W
8 IN PVC
3 IN PVC
TELEPHONE - UG
OVERHEAD
PI 100+43.
PC 101+49.74
PT 103+31.15
N 52°24'04" W
N 35°01'00" W
Delta = 17°23'04.23"
T = 181.40'
L = 360.02'
R = 1186.55'
E = 13.79'
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 96+00 TO STA. 105+00

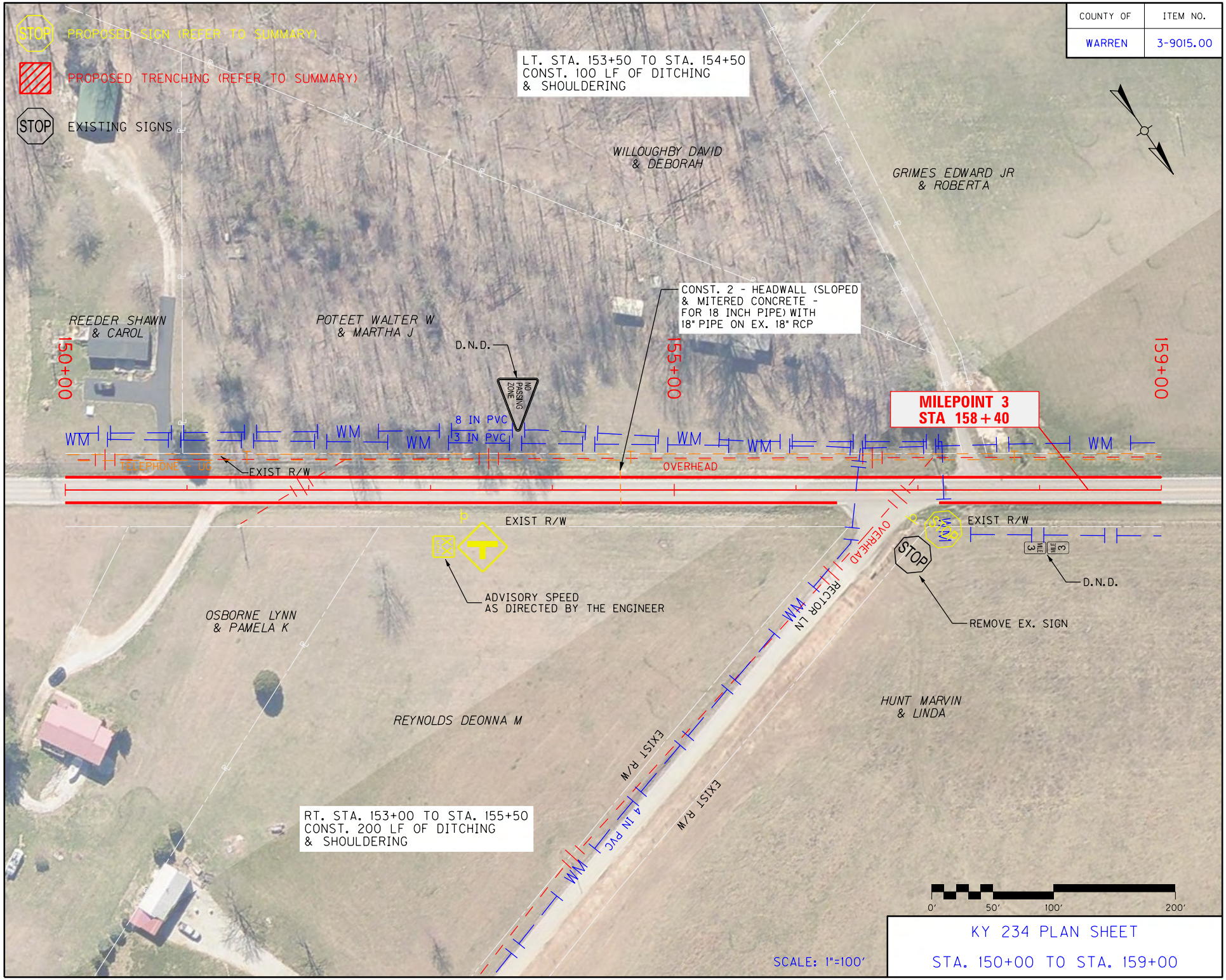

PROPOSED SIGN (REFER TO SUMMARY)
EXISTING SIGNS
PROPOSED TRENCHING (REFER TO SUMMARY)
105+00
110+00
114+00
MILEPOINT 2
STA 105+60
HILL NANCY ANNETTE & ROBERT
HARRIS MARK & TAMMY
PAGE DENNIS R & FELISCHA K TRUST
DONOHO ROBERT & SUE
GOLDSTEIN JOSHUA & BRANDY
ROY WILLIAM NICHOLAS
THOMPSON JAMES O JR & MARLA P
REMOVE EX. SIGN
REMOVE EX. SIGN MILE 2 TO REMAIN
IRON BRIDGE RD
EXIST R/W
OVERHEAD
TELEPHONE - UC
PT 105+09.76
PI 106+04.78
PC 107+79.19
N 35°00'00" W
N 33°52'29" W
N 56°17'08" W
Delta = 9°40'25.50"
T = 151.68'
L = 302.64'
R = 1792.47'
E = 6.41'
Delta = 12°44'13.07"
T = 178.58'
L = 355.68'
R = 1600.00'
E = 9.93'
0+81.83
111+21.86
6 IN PVC
4 IN PVC
8 IN PVC
3 IN PVC
LT. STA. 110+00 TO STA. 111+00
CONST. 100 LF OF DITCHING
& SHOULDERING
RT. STA. 111+50 TO STA. 112+50
CONST. 100 LF OF DITCHING
& SHOULDERING
COUNTY OF
WARREN
ITEM NO.
3-9015.00
SCALE: 1"=100'
0'
50'
100'
200'
KY 234 PLAN SHEET
STA. 105+00 TO STA. 114+00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
45 MPH
REMOVE EX. SIGN
114+00
115+00
120+00
123+00
PT 114+87.51
OVERHEAD
TELEPHONE U/G
8 IN PVC
3 IN PVC
WM
EXIST R/W
DONOHO ROBERT & SUE
ROY WILLIAM NICHOLAS
RICHARDS TIMOTHY JOE & HARWOOD CYNTHIA
WILLOUGHBY DAVID & DEBORAH
RICHARDS TIMOTHY JOE & HARWOOD CYNTHIA
0'
50'
100'
200'
SCALE: 1"=100'
RT. STA. 119+50 TO STA. 120+50
CONST. 100 LF OF DITCHING
& SHOULDERING
KY 234 PLAN SHEET
STA. 114+00 TO STA. 123+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
STOP
WILLOUGHBY BRADFORD & LESLIE
WILLOUGHBY DAVID & DEBORAH
WILLOUGHBY DAVID & DEBORAH
123+00
125+00
130+00
132+00
EXIST R/W
EXIST R/W
8 IN PVC
3 IN PVC
WM
WM
WM


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
STOP
132+00
135+00
140+00
141+00
WILLOUGHBY DAVID & DEBORAH
WILLOUGHBY DAVID & DEBORAH
D.N.D.
NO PASSING ZONE
WM
3 IN PVC
EXIST R/W
8 IN PVC
EXIST R/W
OVERHEAD
SIKES JOHN & FRANCES
GREEN JEFFREY S & JACKLYN A
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 132+00 TO STA. 141+00

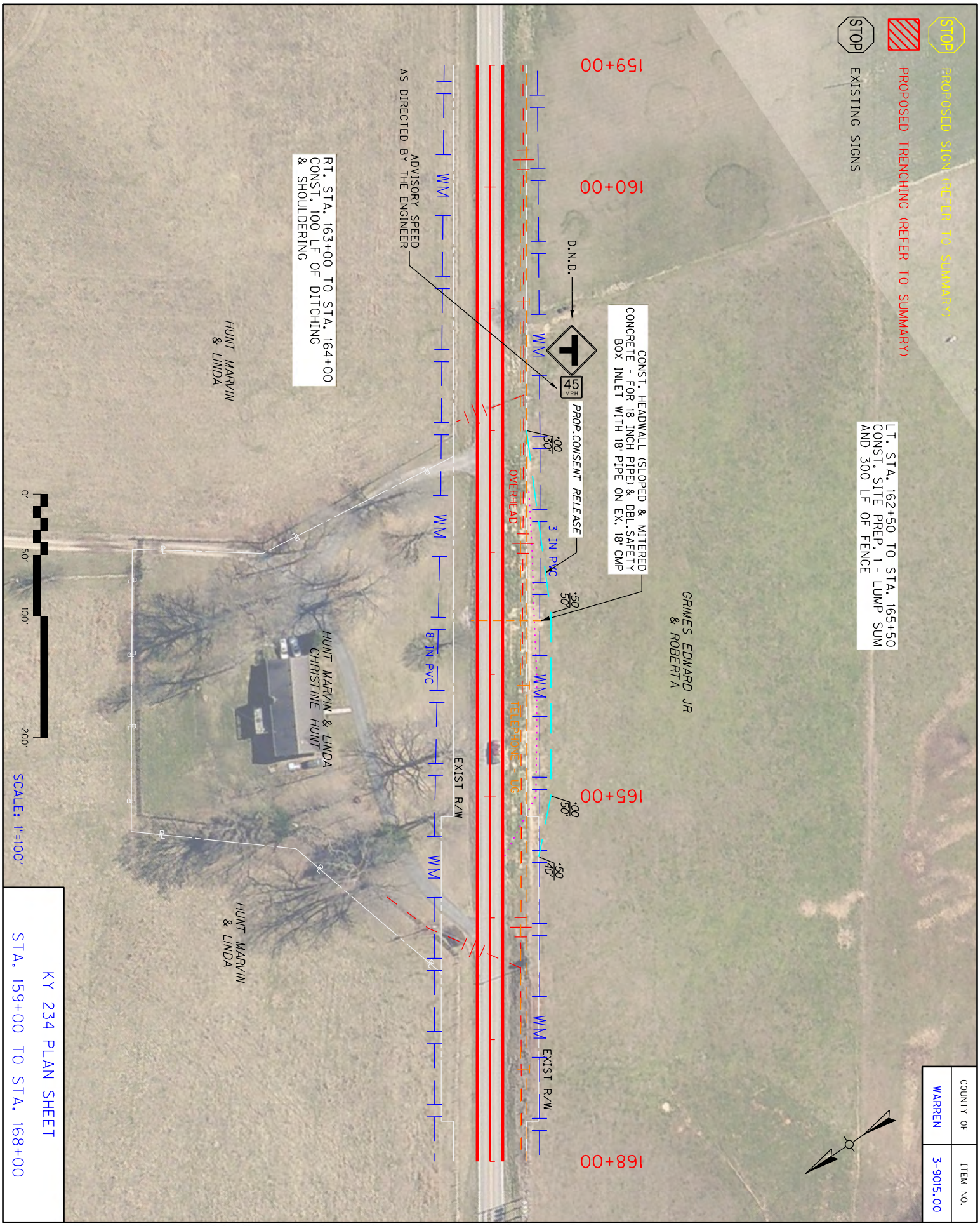

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
WILLOUGHBY DAVID & DEBORAH
GRINSTEAD ERIN S & PHILIP W
SMITH LARRY R & CLARISSA
141+00
145+00
150+00
WM
8 IN PVC
3 IN PVC
EXIST R/W
OVERHEAD
TELEPHONE - UG
N 56°17'08" W
PI 143+11.74
EX. 18" RCP
NO PASSING ZONE
D.N.D.
ZELLER STEVEN R & GAYLE
BLAIR MARK & REBECCA
CLINE SHAWN & CAYSE R
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 141+00 TO STA. 150+00

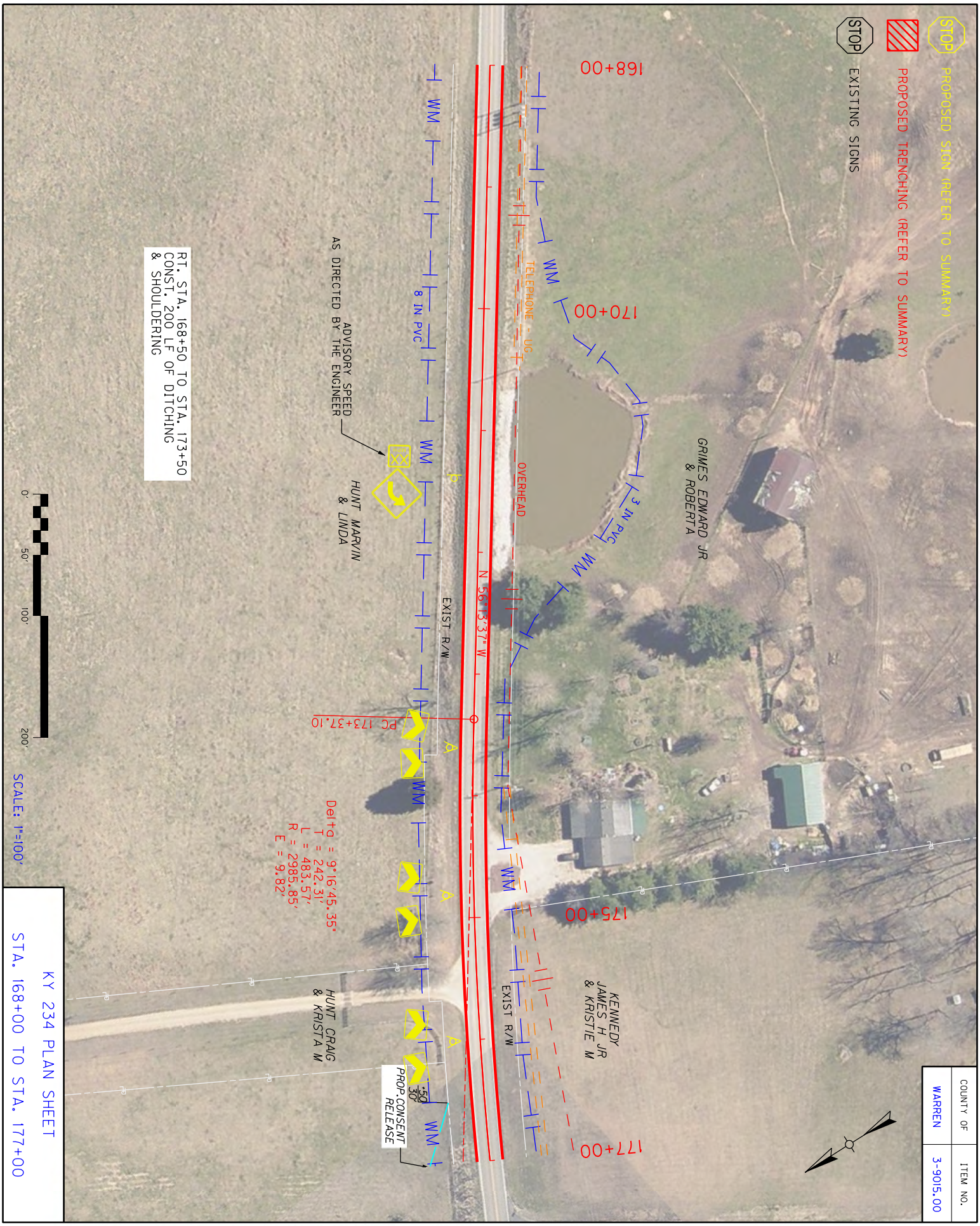


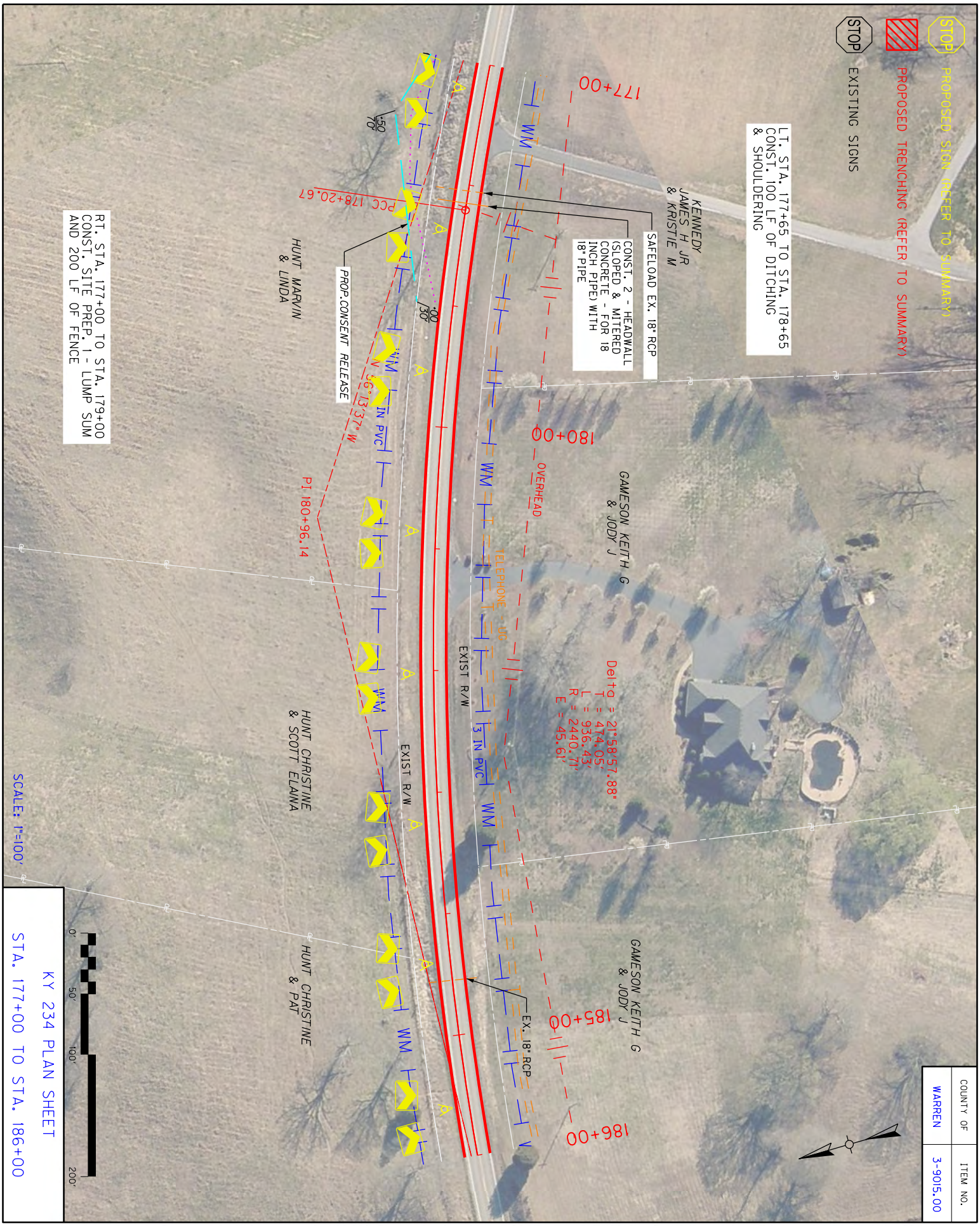
COUNTY OF	ITEM NO.
WARREN	3-9015.00

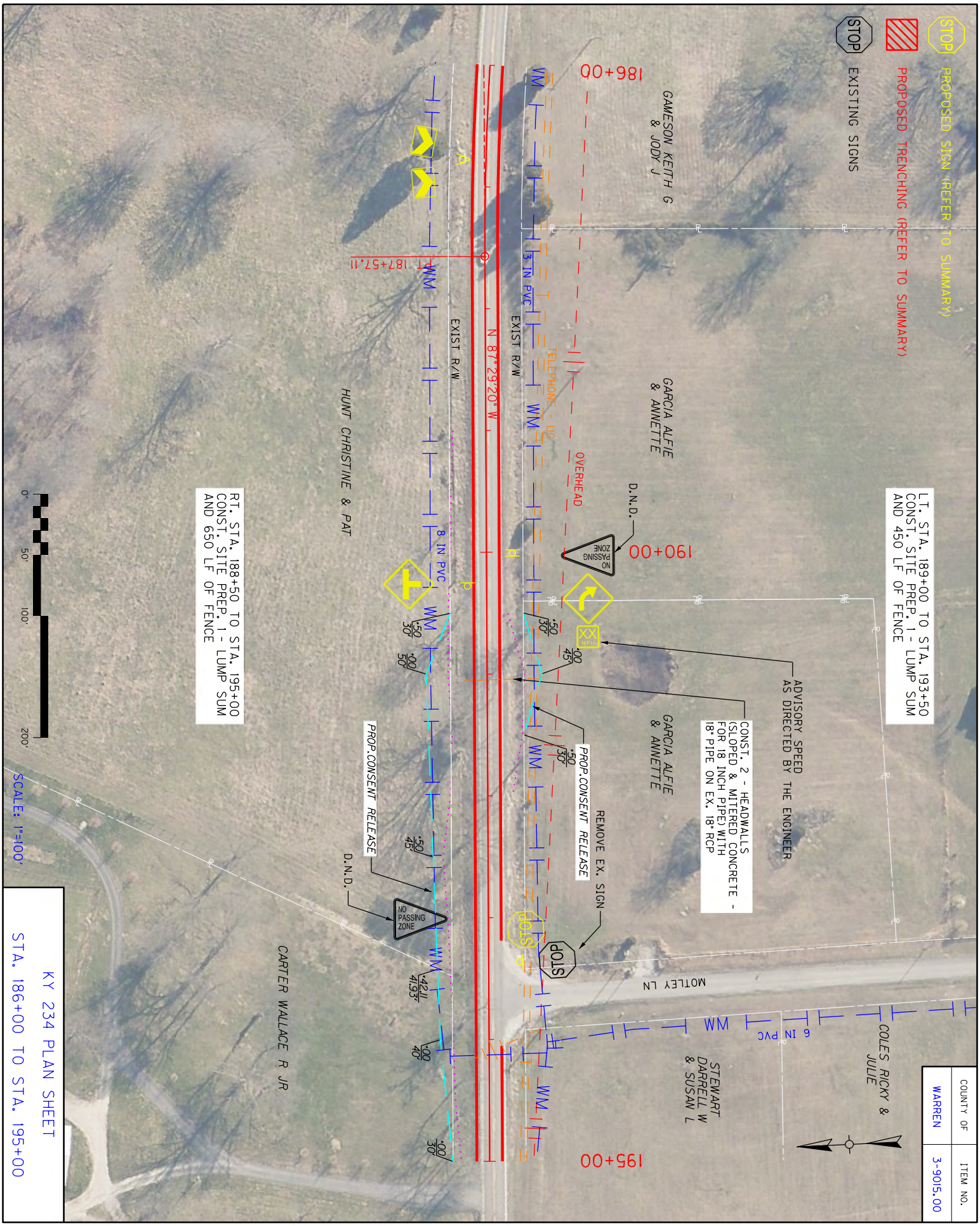
KY 234 PLAN SHEET

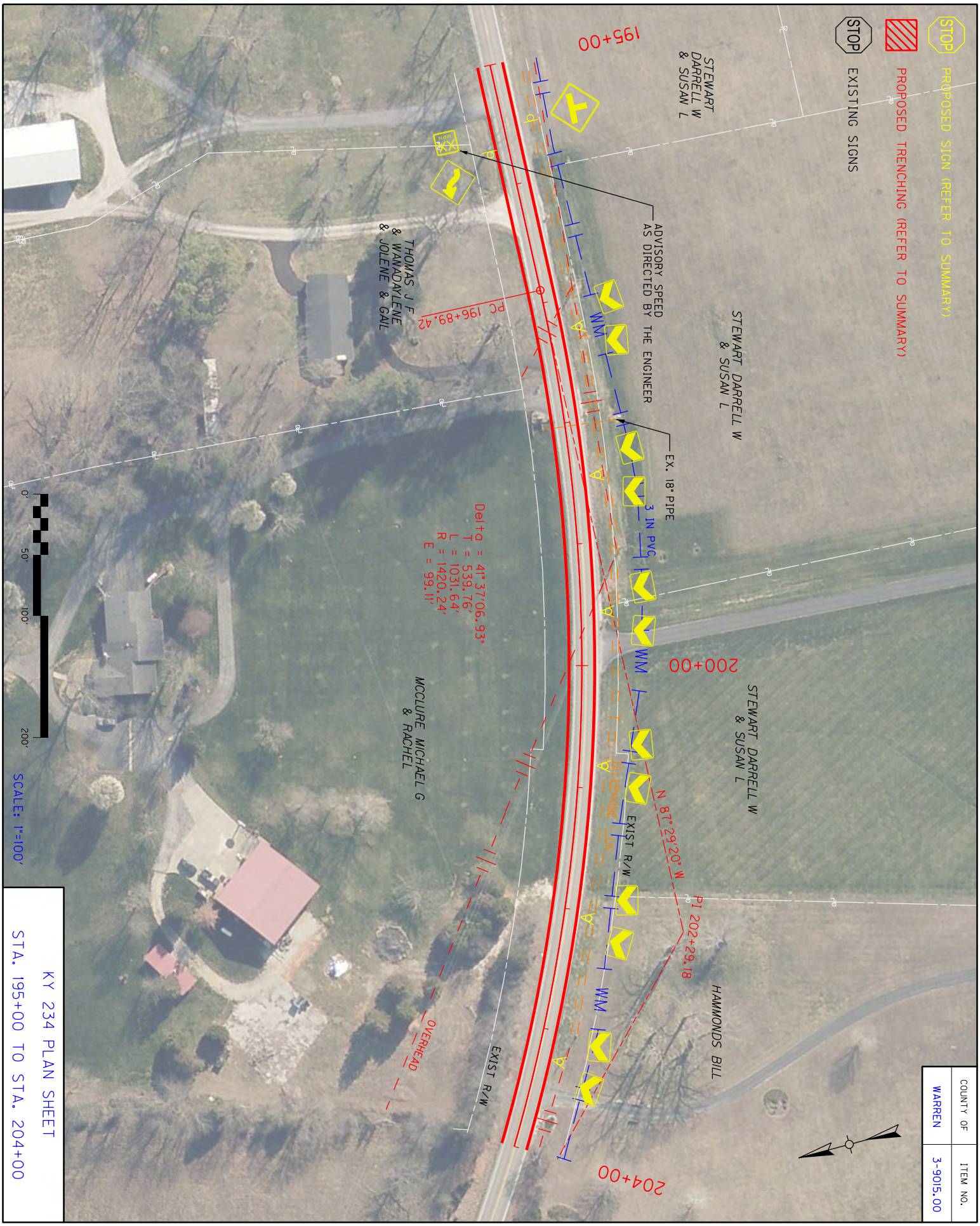
STA. 150+00 TO STA. 159+00

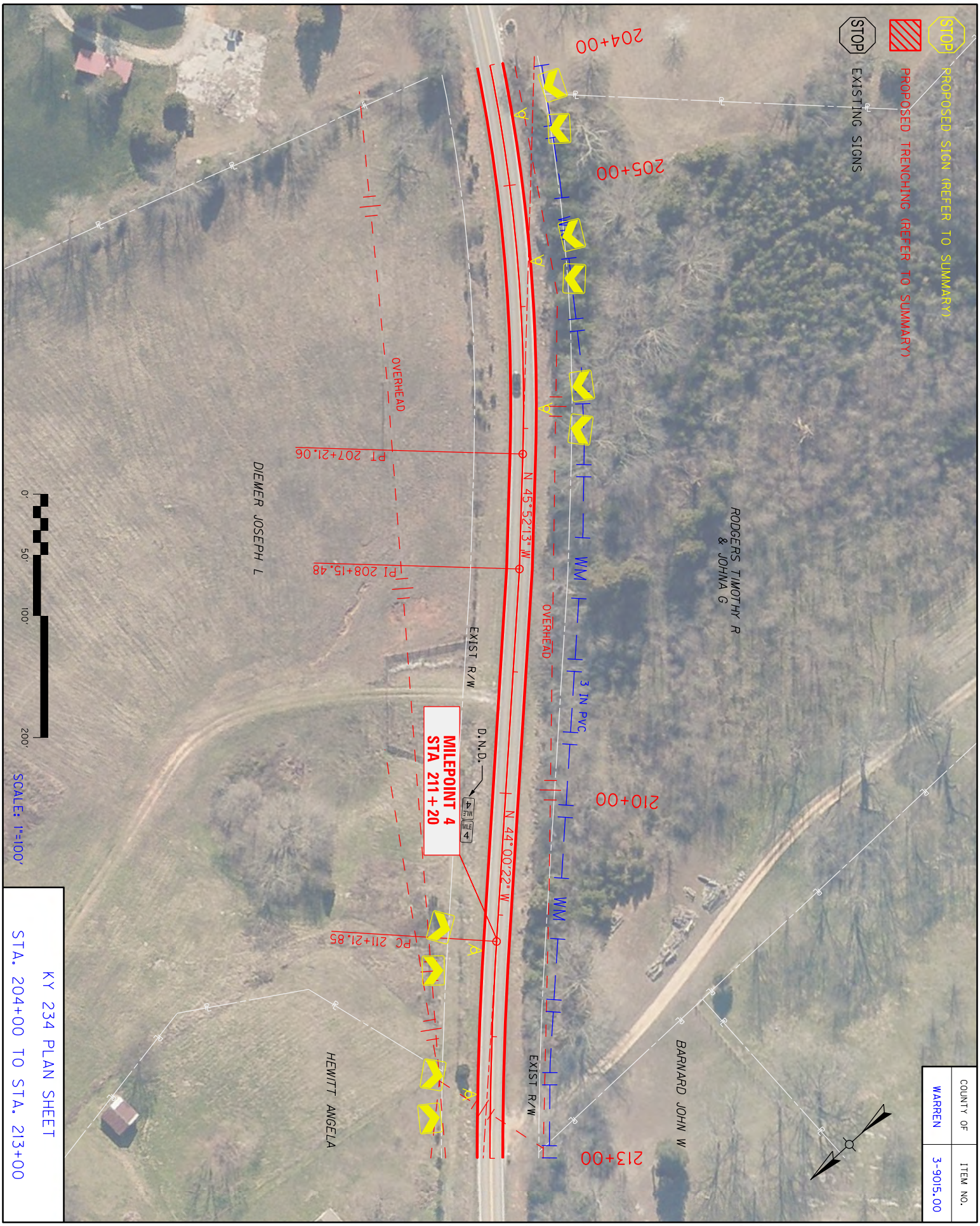

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
LT. STA. 162+50 TO STA. 165+50
CONST. SITE PREP. 1 - LUMP SUM
AND 300 LF OF FENCE
GRIMES EDWARD JR
& ROBERTA
159+00
160+00
165+00
168+00
D.N.D.
45 MPH
CONST. HEADWALL (SLOPED & MITERED
CONCRETE - FOR 18 INCH PIPE) & DBL. SAFETY
BOX INLET WITH 18" PIPE ON EX. 18" CMP
PROP. CONSENT RELEASE
3 IN PVC
8 IN PVC
WM
OVERHEAD
TELEPHONE
EXIST R/W
ADVISORY SPEED
AS DIRECTED BY THE ENGINEER
RT. STA. 163+00 TO STA. 164+00
CONST. 100 LF OF DITCHING
& SHOULDERING
HUNT MARVIN
& LINDA
HUNT MARVIN & LINDA
CHRISTINE HUNT
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 159+00 TO STA. 168+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

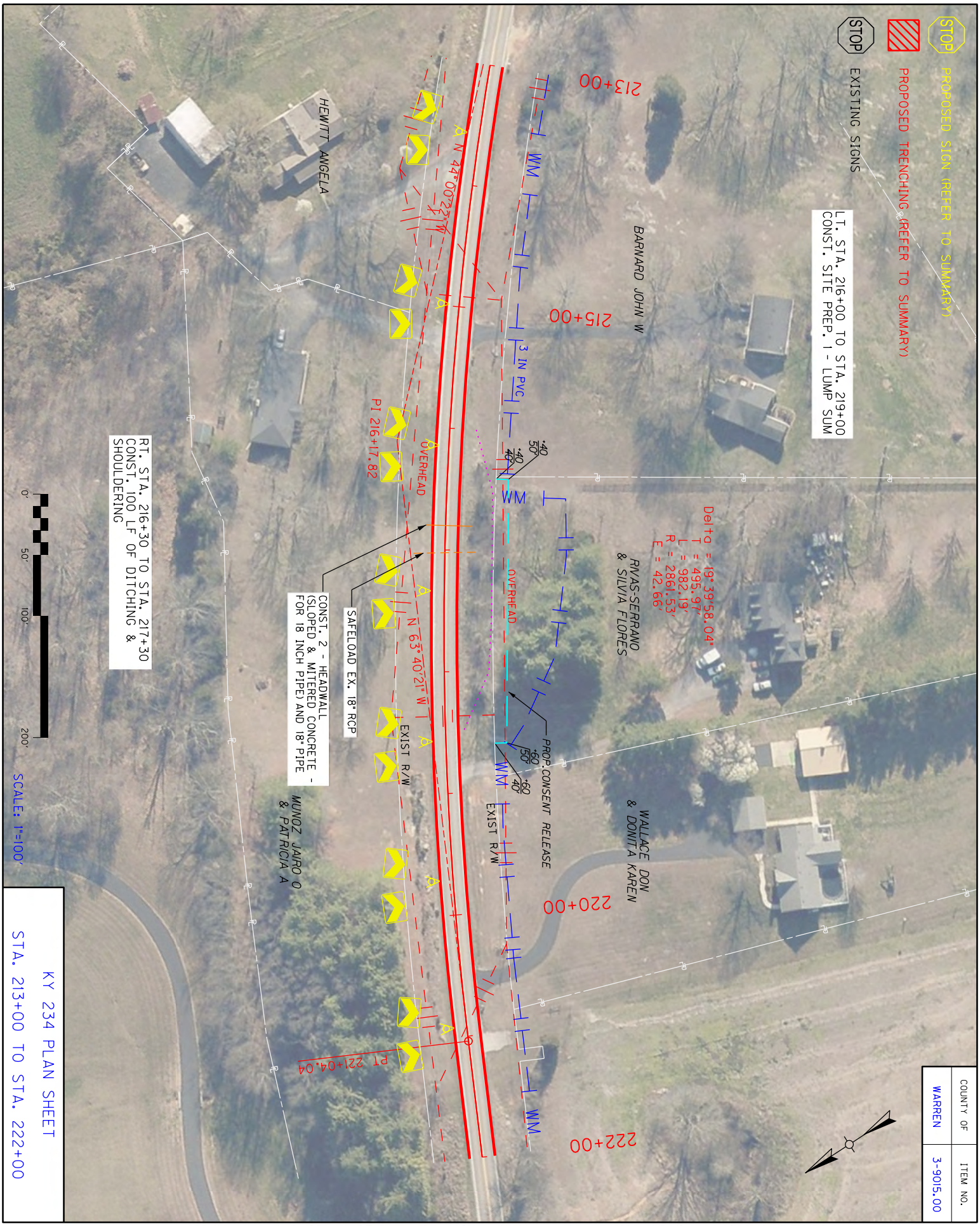

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
168+00
170+00
175+00
177+00
WM
8 IN PVC
3 IN PVC
TELEPHONE - UG
OVERHEAD
N 56°13'37" W
EXIST R/W
GRIMES EDWARD JR & ROBERTA
HUNT MARVIN & LINDA
KENNEDY JAMES H JR & KRISTIE M
HUNT CRAIG & KRISTA M
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
PC 173+37.10
Delta = 9°16'45.35"
T = 242.31'
L = 483.57'
R = 2985.85'
E = 9.82'
50'
30'
PROP. CONSENT RELEASE
RT. STA. 168+50 TO STA. 173+50
CONST. 200 LF OF DITCHING
& SHOULDERING
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 168+00 TO STA. 177+00

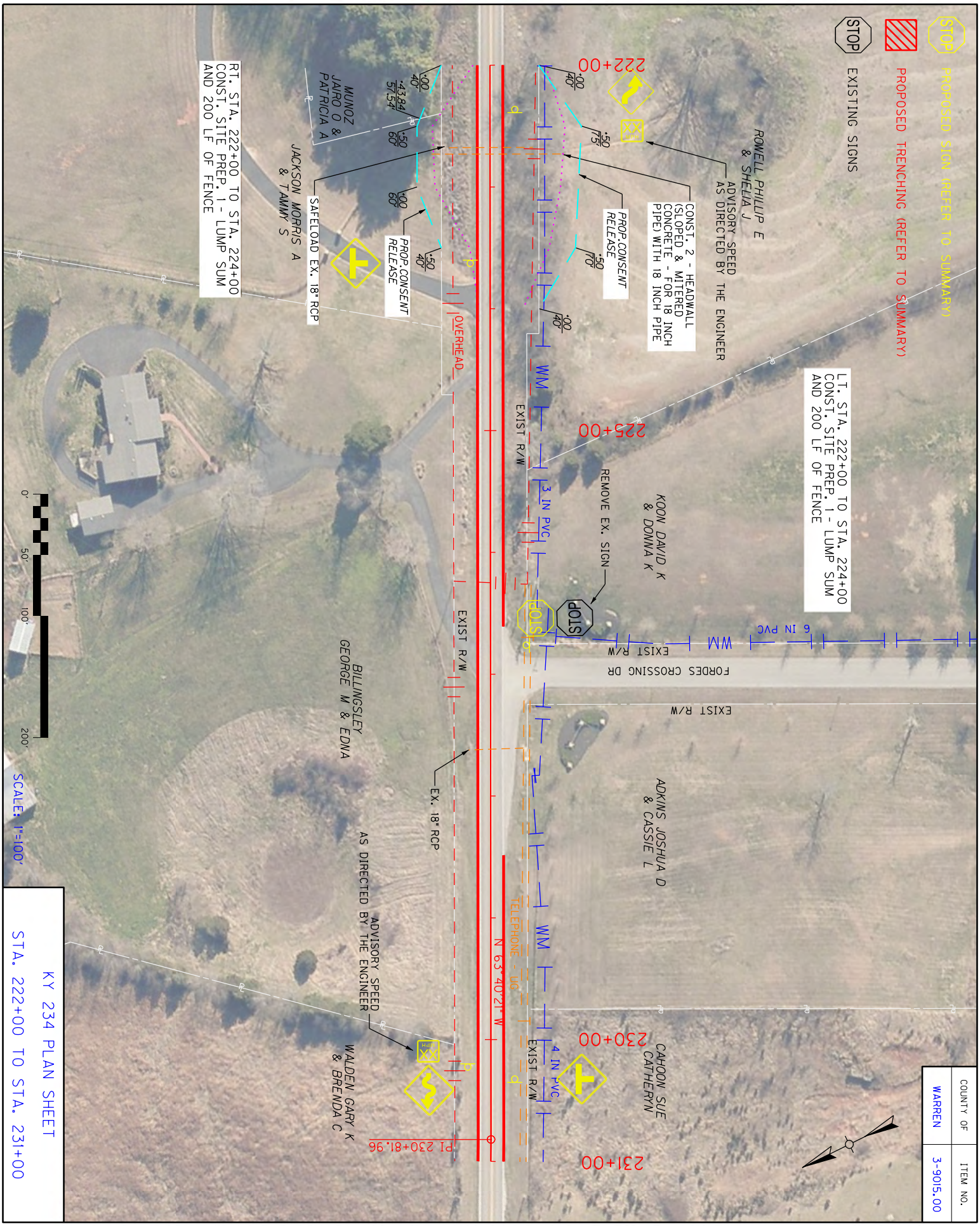

STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
LT. STA. 177+65 TO STA. 178+65
CONST. 100 LF OF DITCHING
& SHOULDERING
KENNEDY
JAMES H JR
& KRISTIE M
SAFELOAD EX. 18" RCP
CONST. 2 - HEADWALL
(SLOPED & MITERED
CONCRETE - FOR 18
INCH PIPE) WITH
18" PIPE
177+00
180+00
185+00
186+00
WM
OVERHEAD
TELEPHONE - UG
EXIST R/W
3 IN PVC
EX. 18" RCP
GAMESON KEITH G
& JODY J
Delta = 21°58'57.88"
T = 474.05'
L = 936.43'
R = 2440.71'
E = 45.61'
PCC 178+20.67
PROP. CONSENT RELEASE
N 56°13'37" W
PI 180+96.14
HUNT MARVIN
& LINDA
HUNT CHRISTINE
& SCOTT ELAINA
HUNT CHRISTINE
& PAT
RT. STA. 177+00 TO STA. 179+00
CONST. SITE PREP. 1 - LUMP SUM
AND 200 LF OF FENCE
50'
100'
30'
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 177+00 TO STA. 186+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

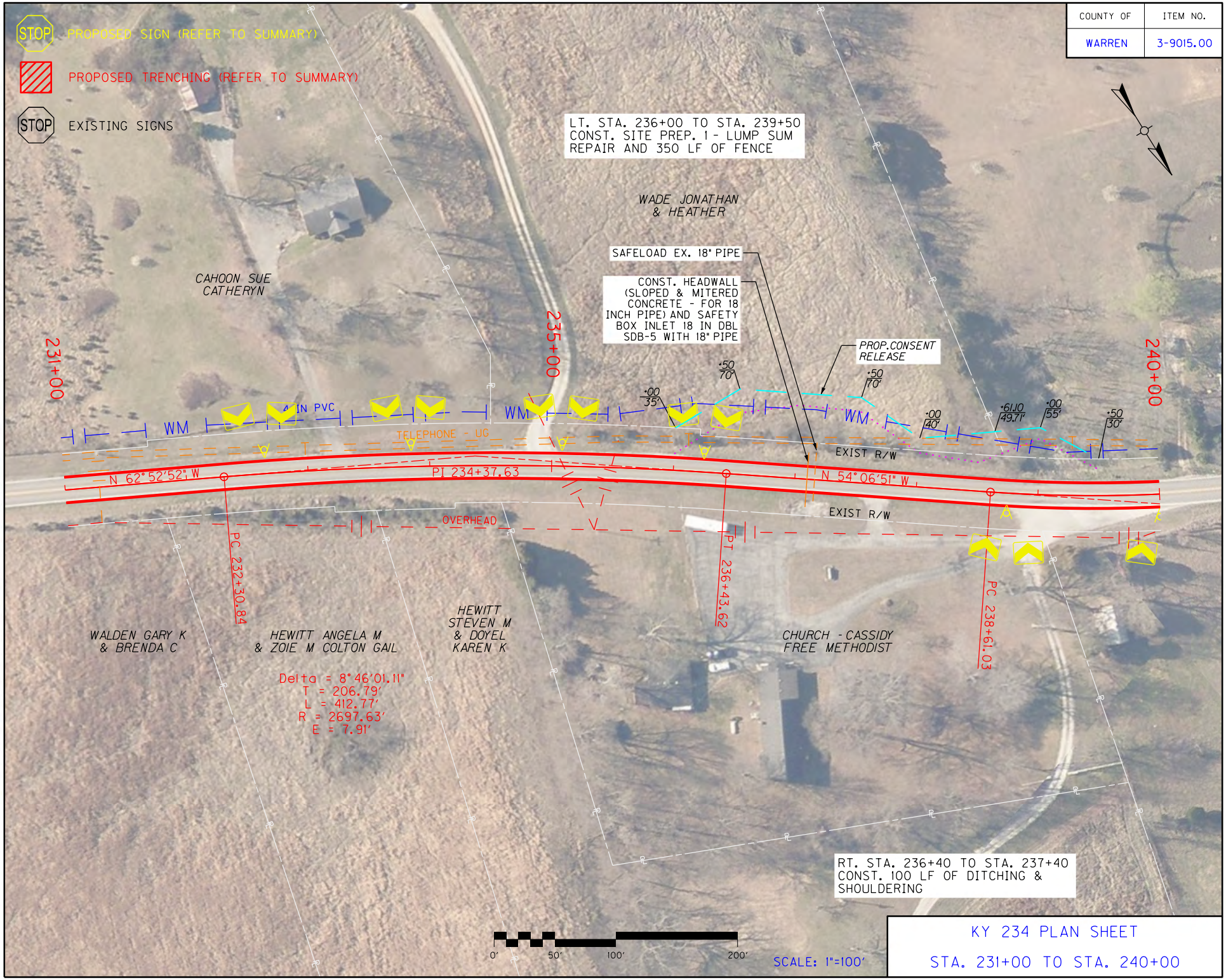

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 189+00 TO STA. 193+50
CONST. SITE PREP. 1 - LUMP SUM
AND 450 LF OF FENCE
RT. STA. 188+50 TO STA. 195+00
CONST. SITE PREP. 1 - LUMP SUM
AND 650 LF OF FENCE
ADVISORY SPEED
AS DIRECTED BY THE ENGINEER
CONST. 2 - HEADWALLS
(SLOPED & MITERED CONCRETE -
FOR 18 INCH PIPE) WITH
18" PIPE ON EX. 18" RCP
REMOVE EX. SIGN
PROP.CONSENT RELEASE
PROP.CONSENT RELEASE
GAMESON KEITH G
& JODY J
GARCIA ALFIE
& ANNETTE
GARCIA ALFIE
& ANNETTE
HUNT CHRISTINE & PAT
CARTER WALLACE R JR
STEWART
DARRELL W
& SUSAN L
COLES RICKY &
JULIE
MOTLEY LN
EXIST R/W
EXIST R/W
N 87°29'20" W
186+00
187+57.11
190+00
195+00
3 IN PVC
8 IN PVC
6 IN PVC
OVERHEAD
TELEPHONE - UG
WM
D.N.D.
NO PASSING ZONE
STOP
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 186+00 TO STA. 195+00


STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
195+00
200+00
204+00
STEWART DARRELL W & SUSAN L
STEWART DARRELL W & SUSAN L
STEWART DARRELL W & SUSAN L
HAMMONDS BILL
THOMAS J F & WANDAYLENE & JOLENE & GAIL
MCCLURE MICHAEL G & RACHEL
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
EX. 18" PIPE
3 IN PVC
WM
TELEPHONE
EXIST R/W
EXIST R/W
OVERHEAD
PC 196+89.42
PI 202+29.18
N 87°29'20" W
Delta = 41°37'06.93"
T = 539.76'
L = 1031.64'
R = 1420.24'
E = 99.11'
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 195+00 TO STA. 204+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
204+00
205+00
210+00
213+00
WM
3 IN PVC
WM
OVERHEAD
OVERHEAD
PT 207+21.06
PI 208+15.48
PC 211+21.85
N 45°52'13" W
N 44°00'22" W
EXIST R/W
EXIST R/W
D.N.D.
MILEPOINT 4
STA 211+20
DIEMER JOSEPH L
RODGERS TIMOTHY R
& JOHNA G
BARNARD JOHN W
HEWITT ANGELA
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 204+00 TO STA. 213+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 216+00 TO STA. 219+00
CONST. SITE PREP. 1 - LUMP SUM
213+00
215+00
220+00
222+00
BARNARD JOHN W
RIVAS-SERRANO & SILVIA FLORES
WALLACE DON & DONITA KAREN
HEWITT ANGELA
MUNOZ JAIRO O & PATRICIA A
Delta = 19°39'58.04"
T = 495.97'
L = 982.19'
R = 2861.53'
E = 42.66'
N 44°00'23" W
3 IN PVC
OVERHEAD
PI 216+17.82
PROP. CONSENT RELEASE
EXIST R/W
N 63°40'21" W
SAFELOAD EX. 18" RCP
CONST. 2 - HEADWALL (SLOPED & MITERED CONCRETE - FOR 18 INCH PIPE) AND 18" PIPE
RT. STA. 216+30 TO STA. 217+30
CONST. 100 LF OF DITCHING & SHOULDERING
PT 221+04.04
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 213+00 TO STA. 222+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
ROWELL PHILLIP E & SHELIA J
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
CONST. 2 - HEADWALL (SLOPED & MITERED CONCRETE - FOR 18 INCH PIPE) WITH 18 INCH PIPE
PROP. CONSENT RELEASE
LT. STA. 222+00 TO STA. 224+00 CONST. SITE PREP. 1 - LUMP SUM AND 200 LF OF FENCE
222+00
225+00
230+00
231+00
WM
EXIST R/W
3 IN PVC
6 IN PVC
4 IN PVC
REMOVE EX. SIGN
STOP
FORDES CROSSING DR
KOON DAVID K & DONNA K
ADKINS JOSHUA D & CASSIE L
CAHOON SUE CATHERYN
TELEPHONE UG
N 63°40'21" W
OVERHEAD
EXIST R/W
EX. 18" RCP
MUNOZ JAIRO O & PATRICIA A
JACKSON MORRIS A & TAMMY S
SAFELOAD EX. 18" RCP
PROP. CONSENT RELEASE
RT. STA. 222+00 TO STA. 224+00 CONST. SITE PREP. 1 - LUMP SUM AND 200 LF OF FENCE
BILLINGSLEY GEORGE M & EDNA
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
WALDEN GARY K & BRENDA C
PI 230+81.96
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 222+00 TO STA. 231+00

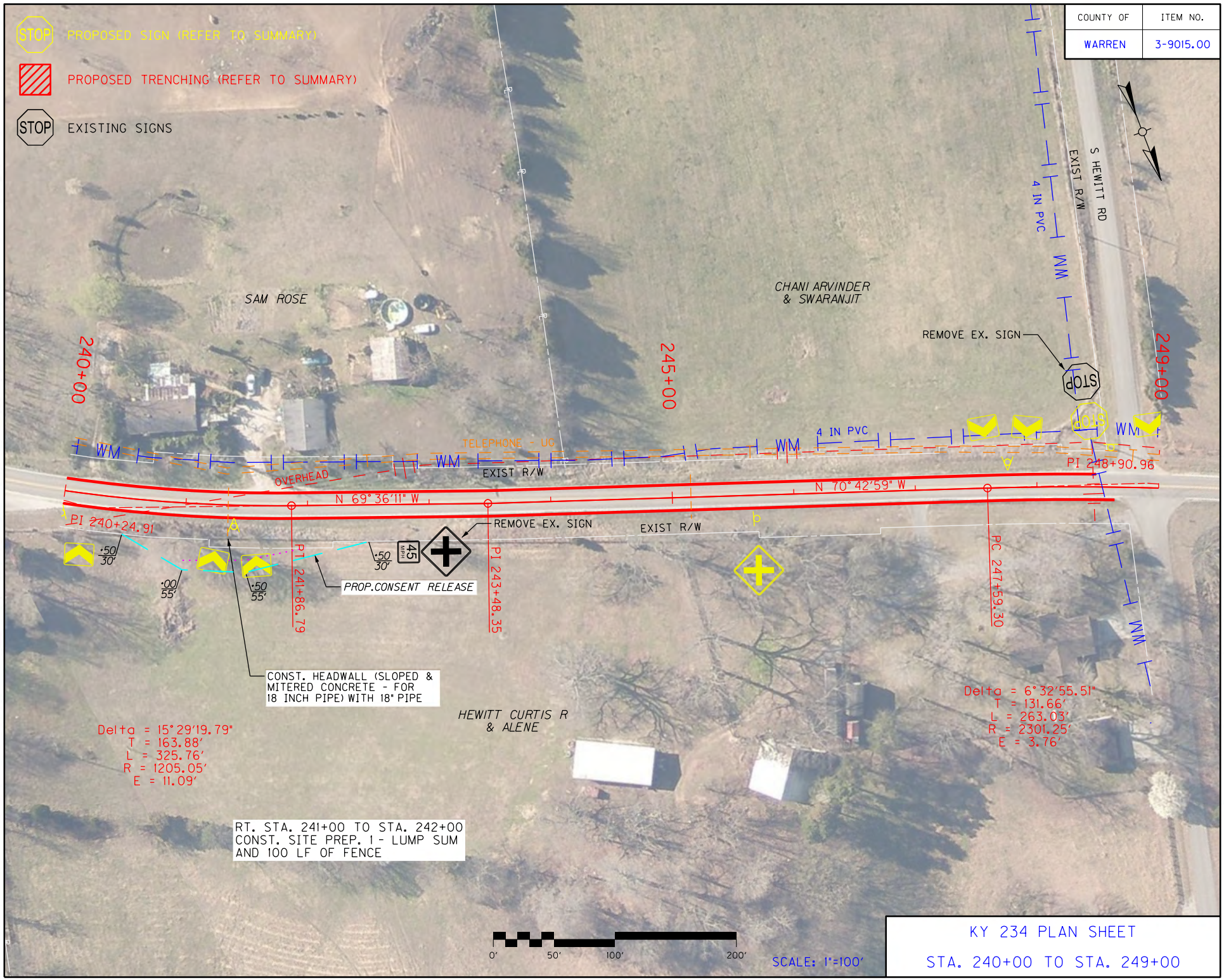

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
LT. STA. 236+00 TO STA. 239+50
CONST. SITE PREP. 1 - LUMP SUM
REPAIR AND 350 LF OF FENCE
WADE JONATHAN
& HEATHER
SAFELOAD EX. 18" PIPE
CONST. HEADWALL
(SLOPED & MITERED
CONCRETE - FOR 18
INCH PIPE) AND SAFETY
BOX INLET 18 IN DBL
SDB-5 WITH 18" PIPE
PROP.CONSENT
RELEASE
CAHOON SUE
CATHERYN
231+00
235+00
240+00
WM
IN PVC
TELEPHONE - UG
EXIST R/W
N 62°52'52" W
PI 234+37.63
N 54°06'51" W
OVERHEAD
PC 232+30.84
PT 236+43.62
PC 238+61.03
WALDEN GARY K
& BRENDA C
HEWITT ANGELA M
& ZOIE M COLTON GAIL
HEWITT
STEVEN M
& DOYEL
KAREN K
CHURCH - CASSIDY
FREE METHODIST
Delta = 8°46'01.11"
T = 206.79'
L = 412.77'
R = 2697.63'
E = 7.91'
RT. STA. 236+40 TO STA. 237+40
CONST. 100 LF OF DITCHING &
SHOULDERING
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 231+00 TO STA. 240+00

COUNTY OF	ITEM NO.
WARREN	3-9015.00

STOP PROPOSED SIGN (REFER TO SUMMARY)

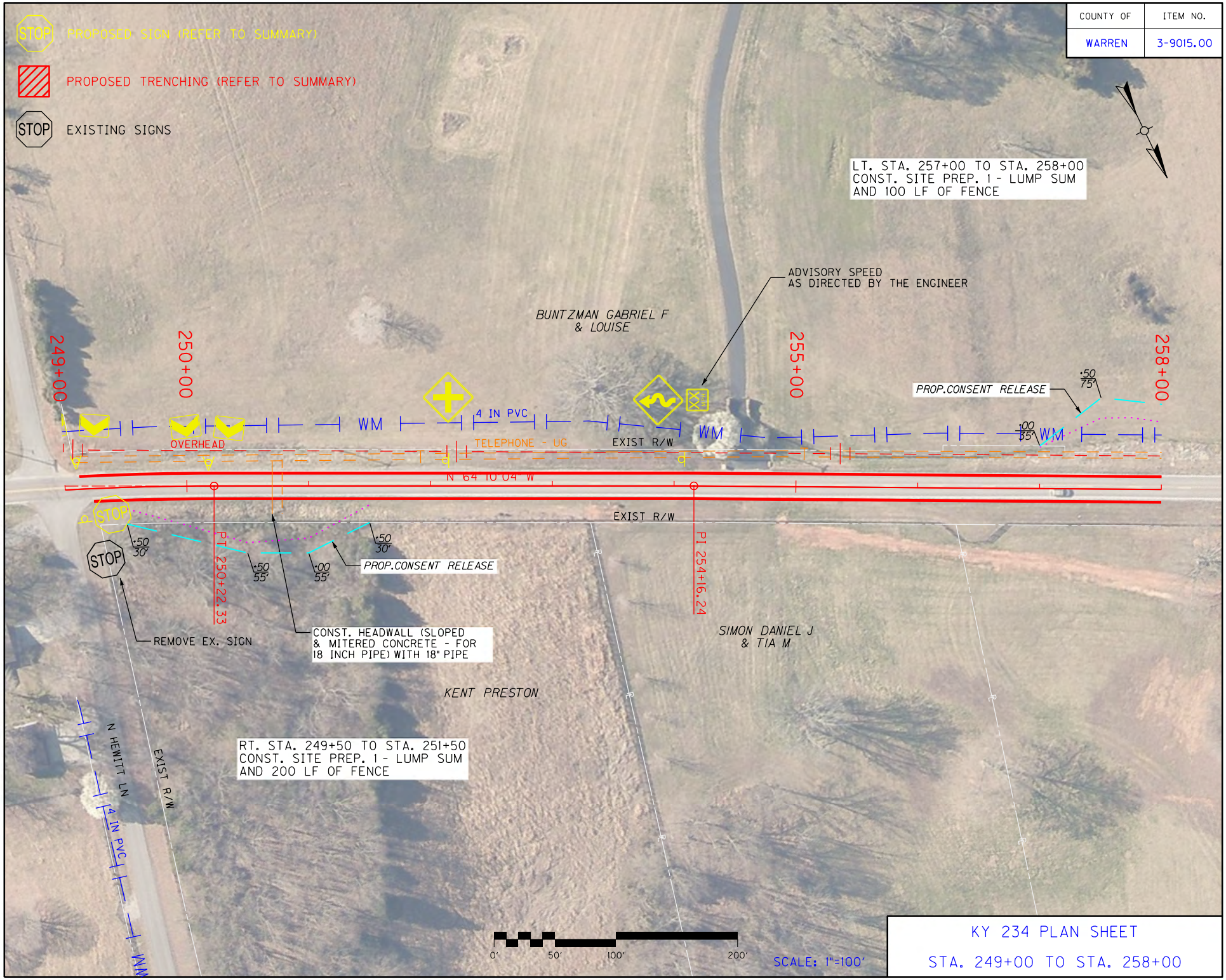
PROPOSED TRENCHING (REFER TO SUMMARY)

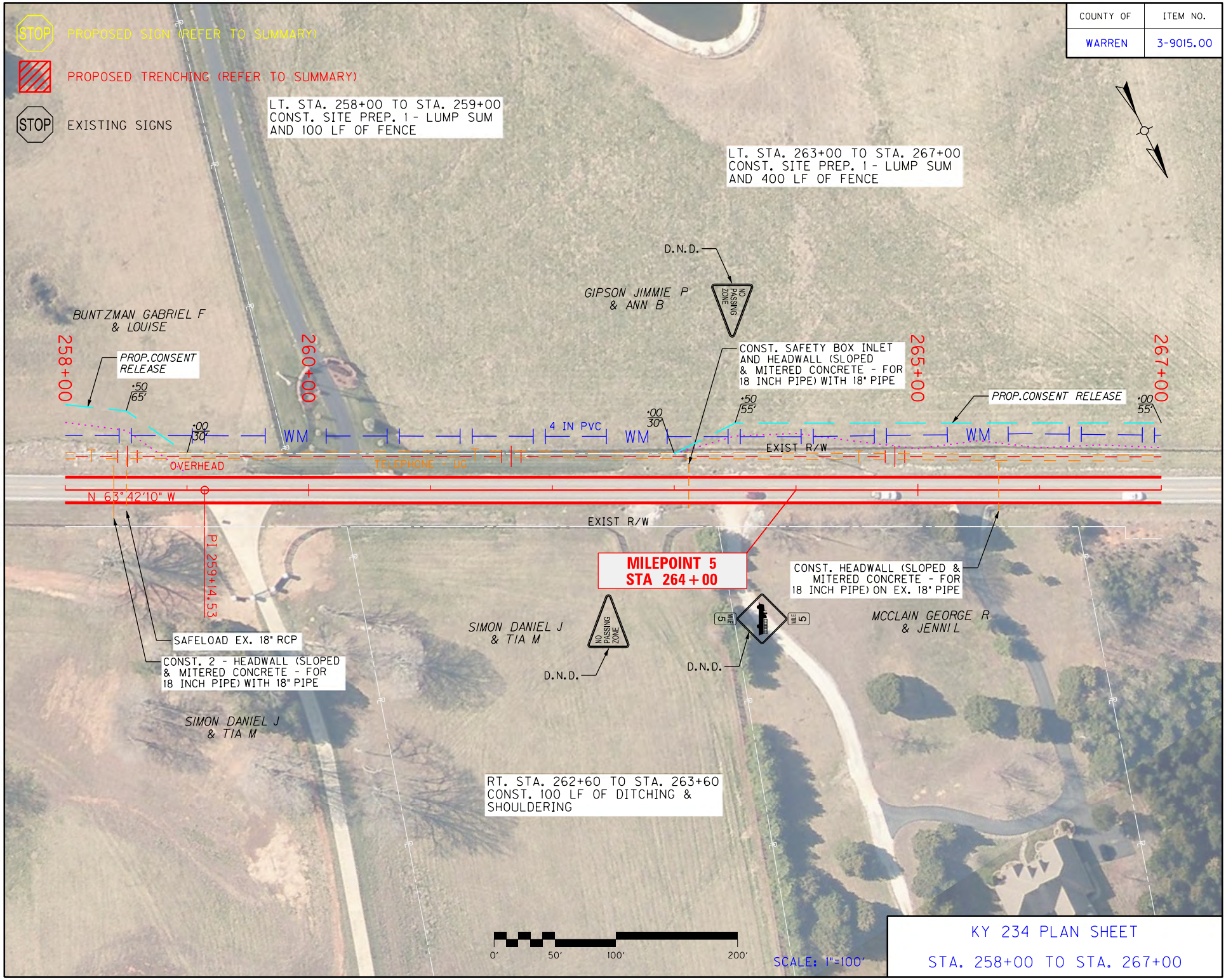
STOP EXISTING SIGNS

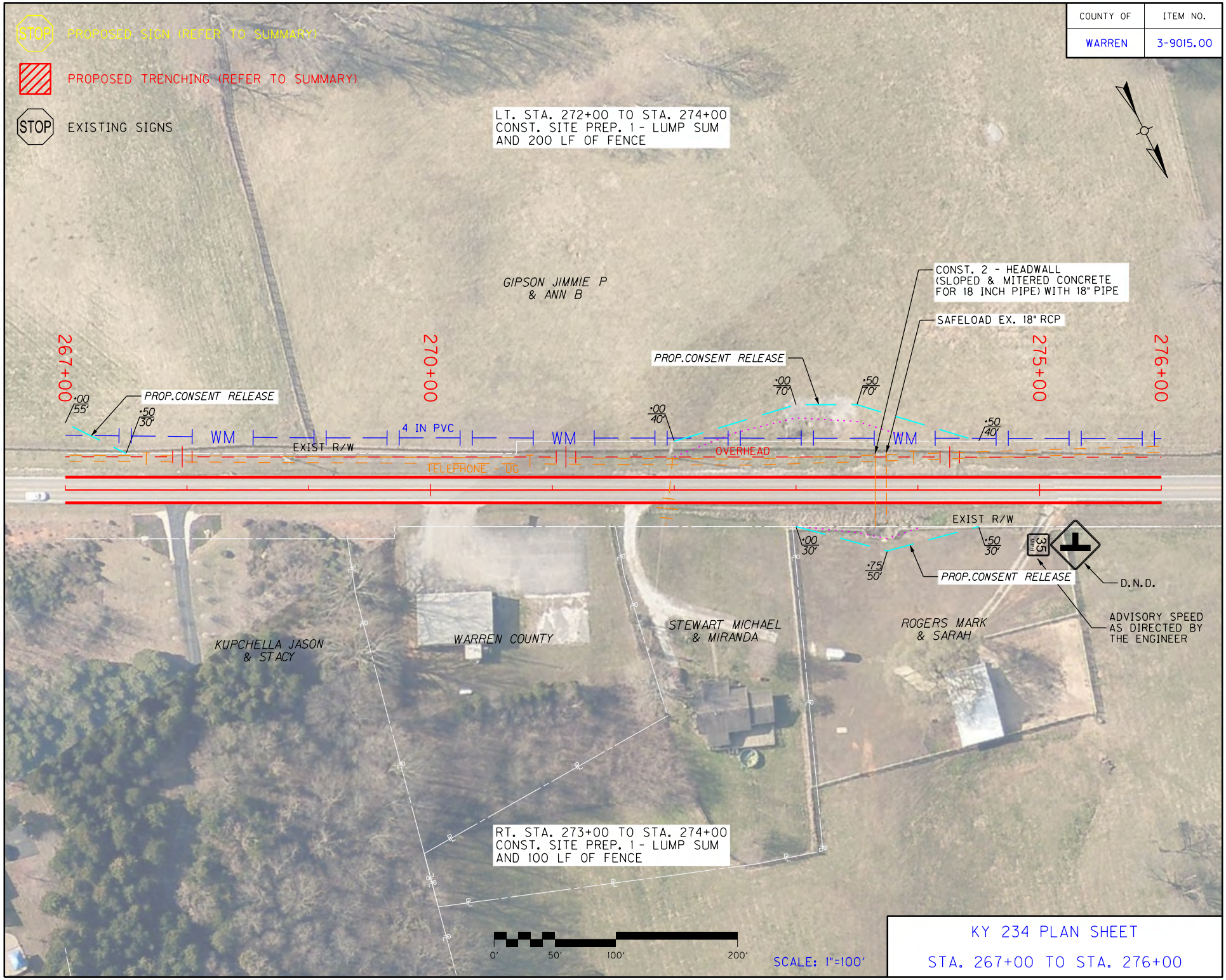


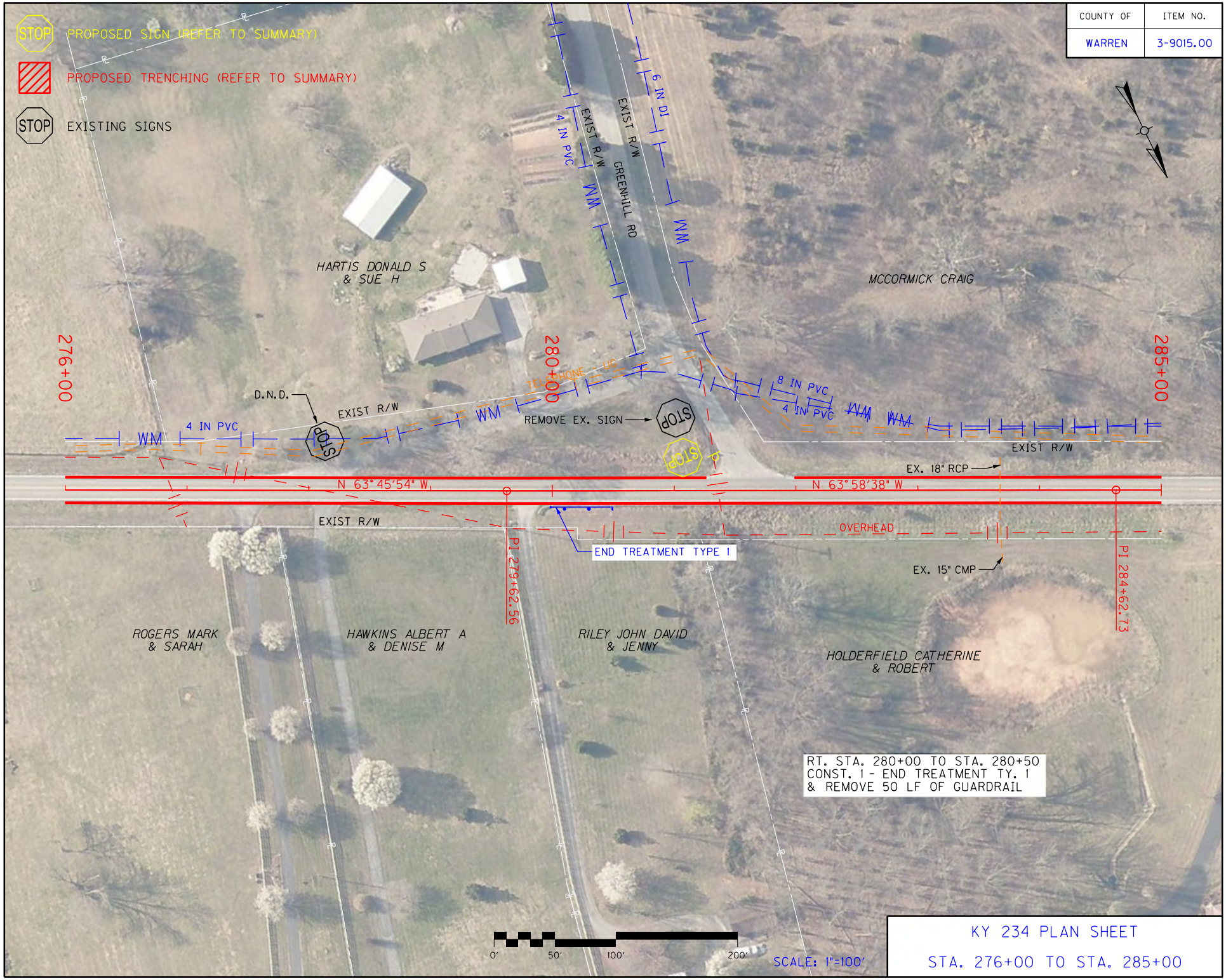
KY 234 PLAN SHEET

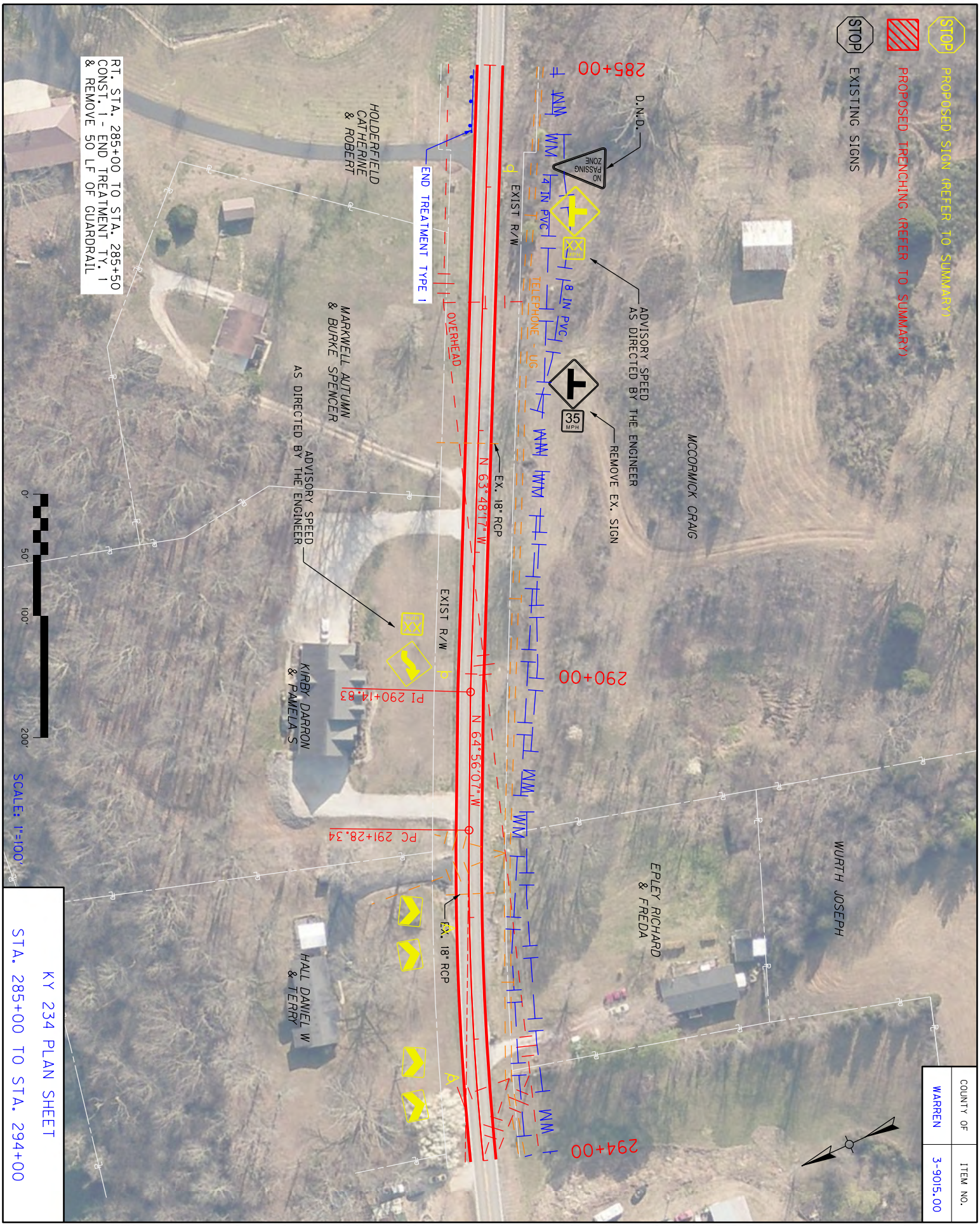
STA. 240+00 TO STA. 249+00

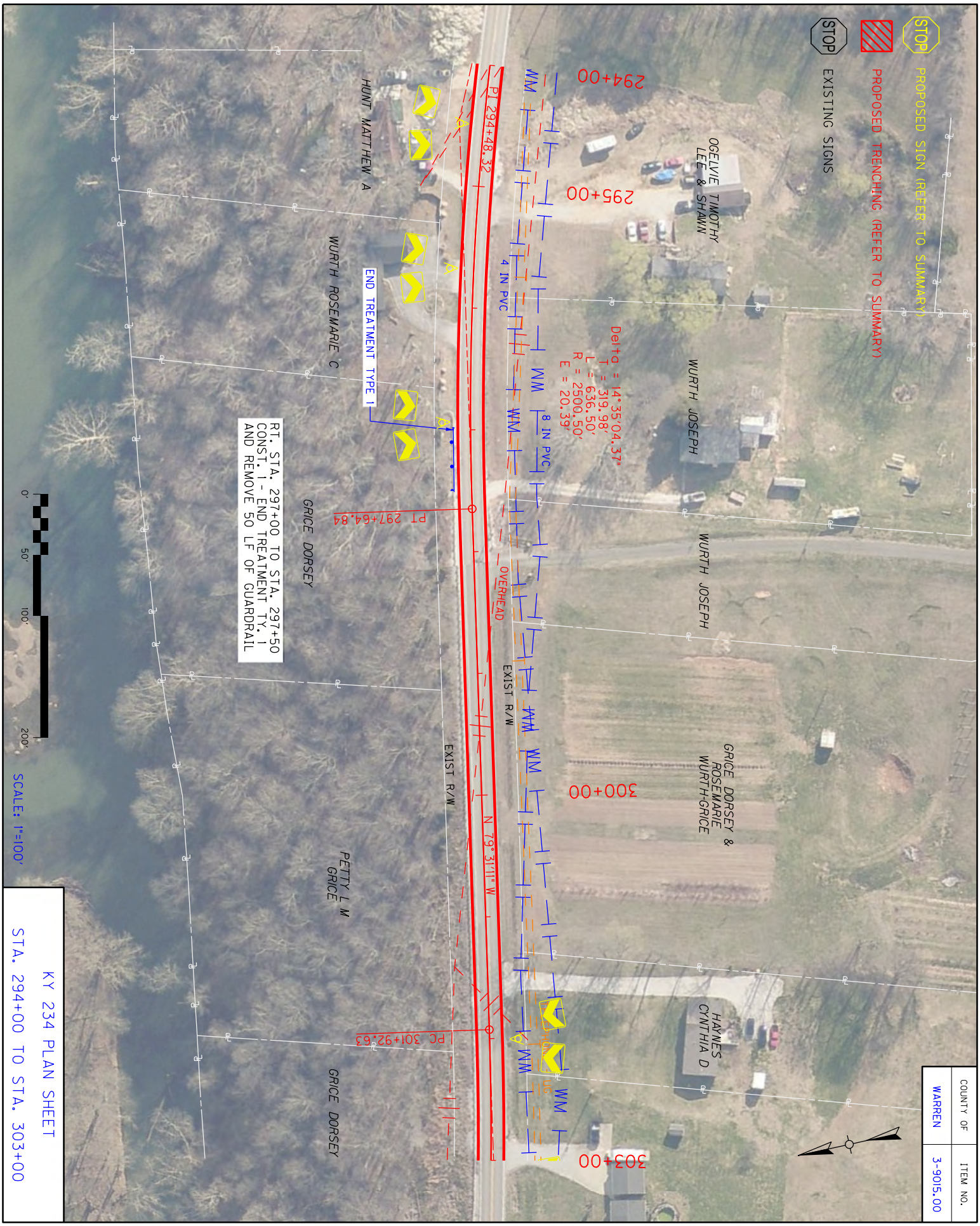

COUNTY OF
WARREN
ITEM NO.
3-9015.00
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 257+00 TO STA. 258+00
CONST. SITE PREP. 1 - LUMP SUM
AND 100 LF OF FENCE
ADVISORY SPEED
AS DIRECTED BY THE ENGINEER
BUNTZMAN GABRIEL F
& LOUISE
249+00
250+00
255+00
258+00
PROP.CONSENT RELEASE
50
75'
4 IN PVC
WM
OVERHEAD
TELEPHONE - UG
EXIST R/W
N 64 10 04 W
STOP
50
30'
PT 250+22.33
50
55'
00
55'
PROP.CONSENT RELEASE
EXIST R/W
PI 254+16.24
REMOVE EX. SIGN
CONST. HEADWALL (SLOPED
& MITERED CONCRETE - FOR
18 INCH PIPE) WITH 18" PIPE
SIMON DANIEL J
& TIA M
KENT PRESTON
RT. STA. 249+50 TO STA. 251+50
CONST. SITE PREP. 1 - LUMP SUM
AND 200 LF OF FENCE
N HEWITT LN
EXIST R/W
4 IN PVC
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 249+00 TO STA. 258+00

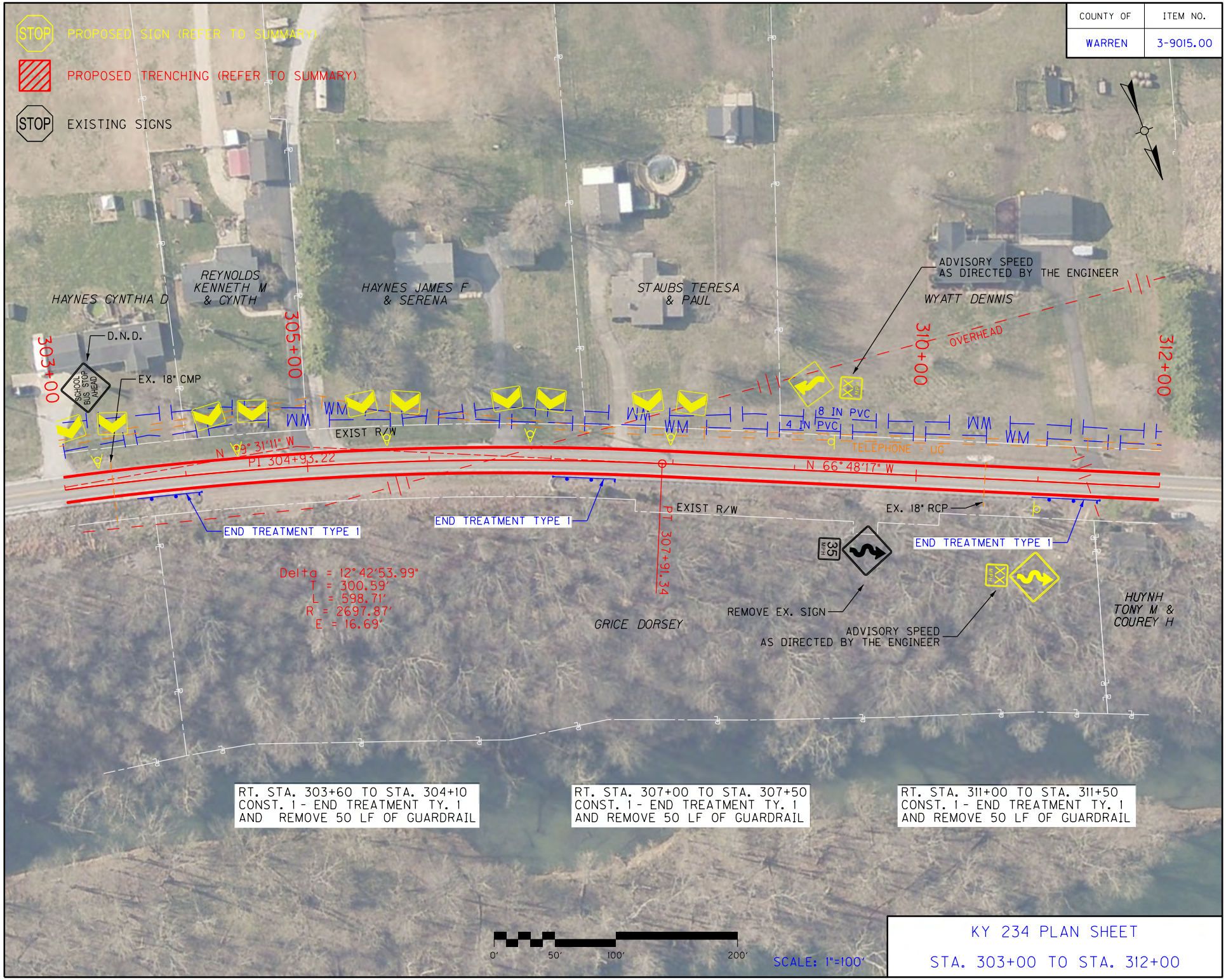

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
LT. STA. 258+00 TO STA. 259+00
CONST. SITE PREP. 1 - LUMP SUM
AND 100 LF OF FENCE
LT. STA. 263+00 TO STA. 267+00
CONST. SITE PREP. 1 - LUMP SUM
AND 400 LF OF FENCE
D.N.D.
GIPSON JIMMIE P
& ANN B
NO PASSING ZONE
BUNTZMAN GABRIEL F
& LOUISE
258+00
260+00
265+00
267+00
PROP.CONSENT RELEASE
50
65'
00
30'
WM
4 IN PVC
WM
00
30'
50
55'
CONST. SAFETY BOX INLET
AND HEADWALL (SLOPED
& MITERED CONCRETE - FOR
18 INCH PIPE) WITH 18" PIPE
PROP.CONSENT RELEASE
WM
00
55'
EXIST R/W
OVERHEAD
TELEPHONE - UG
N 63° 42' 10" W
EXIST R/W
PI 259+14.53
MILEPOINT 5
STA 264+00
CONST. HEADWALL (SLOPED &
MITERED CONCRETE - FOR
18 INCH PIPE) ON EX. 18" PIPE
MILE 5
MILE 5
MCCLAIN GEORGE R
& JENNI L
SIMON DANIEL J
& TIA M
NO PASSING ZONE
D.N.D.
D.N.D.
SAFELOAD EX. 18" RCP
CONST. 2 - HEADWALL (SLOPED
& MITERED CONCRETE - FOR
18 INCH PIPE) WITH 18" PIPE
SIMON DANIEL J
& TIA M
RT. STA. 262+60 TO STA. 263+60
CONST. 100 LF OF DITCHING &
SHOULDERING
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 258+00 TO STA. 267+00

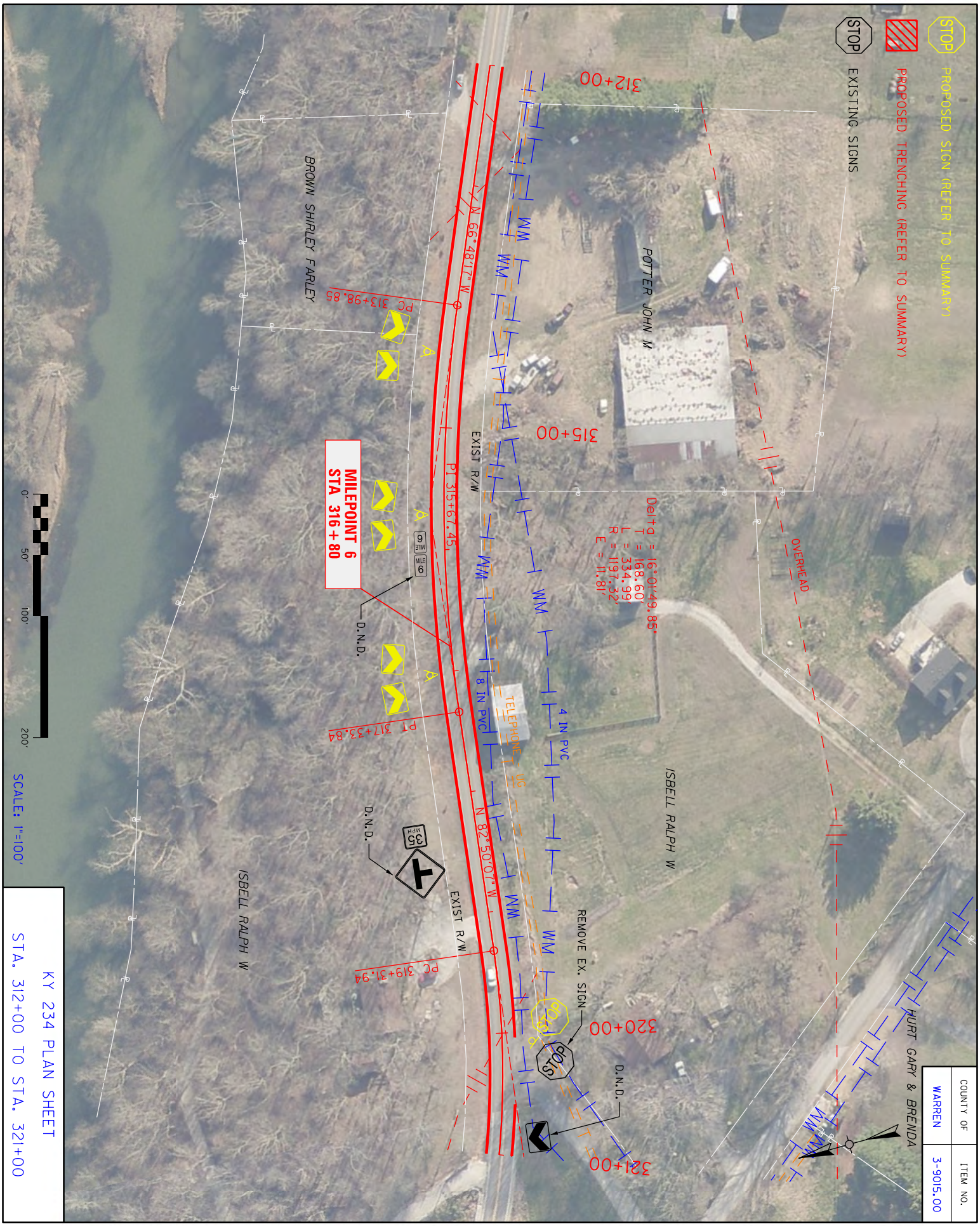

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
LT. STA. 272+00 TO STA. 274+00
CONST. SITE PREP. 1 - LUMP SUM
AND 200 LF OF FENCE
GIPSON JIMMIE P
& ANN B
CONST. 2 - HEADWALL
(SLOPED & MITERED CONCRETE
FOR 18 INCH PIPE) WITH 18" PIPE
SAFELOAD EX. 18" RCP
267+00
270+00
275+00
276+00
PROP.CONSENT RELEASE
PROP.CONSENT RELEASE
PROP.CONSENT RELEASE
·00 55'
·50 30'
·00 40'
·00 70'
·50 70'
·50 40'
·00 30'
·75 50'
·50 30'
WM
WM
WM
4 IN PVC
EXIST R/W
EXIST R/W
OVERHEAD
TELEPHONE - UG
35 MPH
D.N.D.
ADVISORY SPEED
AS DIRECTED BY
THE ENGINEER
KUPCHELLA JASON
& STACY
WARREN COUNTY
STEWART MICHAEL
& MIRANDA
ROGERS MARK
& SARAH
RT. STA. 273+00 TO STA. 274+00
CONST. SITE PREP. 1 - LUMP SUM
AND 100 LF OF FENCE
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 267+00 TO STA. 276+00

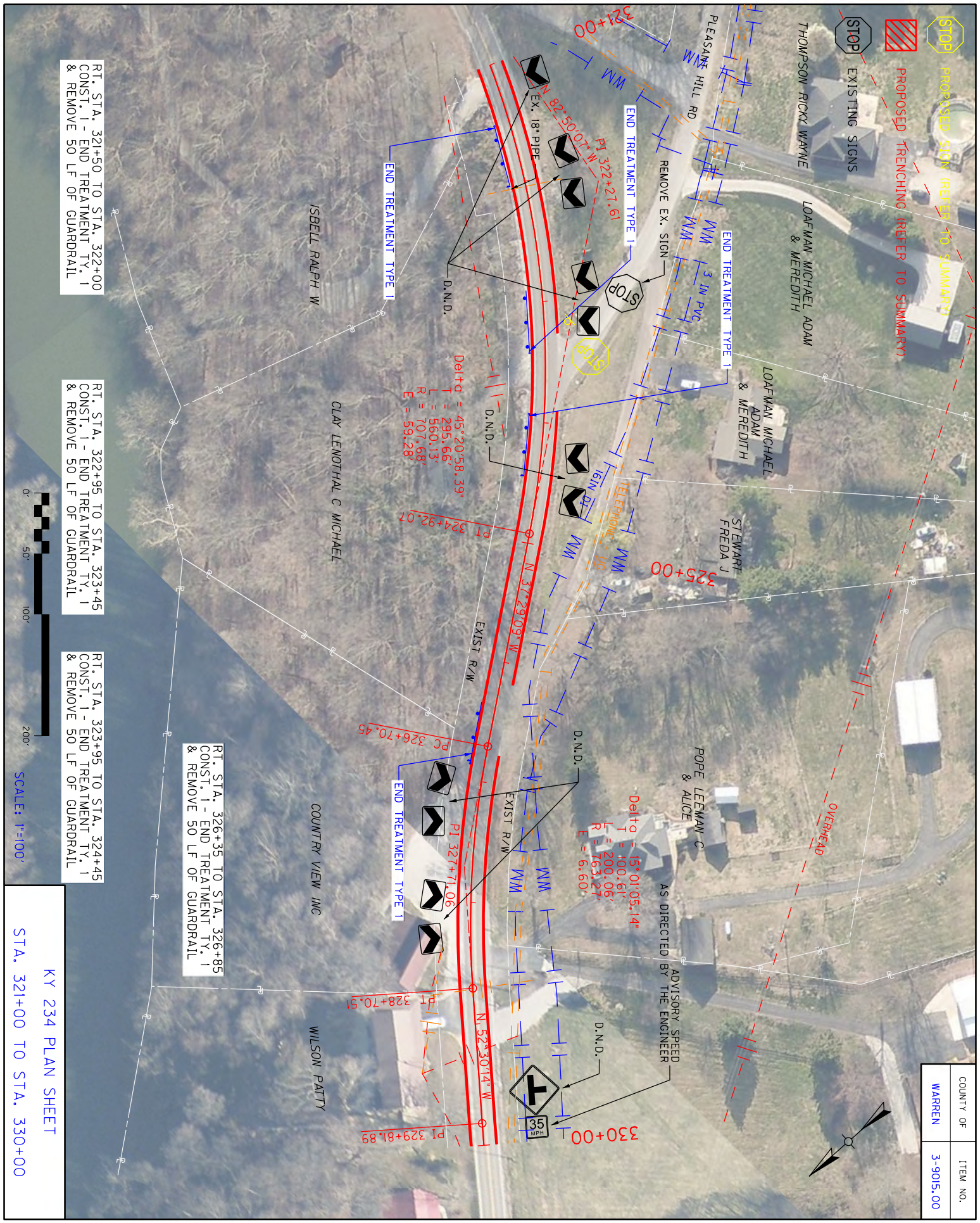

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
6 IN DI
EXIST R/W
4 IN PVC
GREENHILL RD
HARTIS DONALD S
& SUE H
MCCORMICK CRAIG
276+00
280+00
285+00
D.N.D.
EXIST R/W
4 IN PVC
WM
TELEPHONE UG
REMOVE EX. SIGN
STOP
8 IN PVC
4 IN PVC
EXIST R/W
EX. 18" RCP
N 63°45'54" W
N 63°58'38" W
EXIST R/W
OVERHEAD
END TREATMENT TYPE I
EX. 15" CMP
PI 279+62.56
PI 284+62.73
ROGERS MARK
& SARAH
HAWKINS ALBERT A
& DENISE M
RILEY JOHN DAVID
& JENNY
HOLDERFIELD CATHERINE
& ROBERT
RT. STA. 280+00 TO STA. 280+50
CONST. 1 - END TREATMENT TY. 1
& REMOVE 50 LF OF GUARDRAIL
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 276+00 TO STA. 285+00


STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
285+00
D.N.D.
NO PASSING ZONE
14 IN PVC
8 IN PVC
TELEPHONE - UG
EXIST R/W
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
REMOVE EX. SIGN
35 MPH
MCCORMICK CRAIG
END TREATMENT TYPE 1
HOLDERFIELD CATHERINE & ROBERT
OVERHEAD
EX. 18" RCP
N 63°48'17" W
MARKWELL AUTUMN & BURKE SPENCER
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
EXIST R/W
290+00
PI 290+14.83
KIRBY DARRON & PAMELA S
N 64°56'07" W
PC 291+28.34
EX. 18" RCP
EPLEY RICHARD & FREDA
WURTH JOSEPH
HALL DANIEL W & TERRY
294+00
RT. STA. 285+00 TO STA. 285+50
CONST. 1 - END TREATMENT TY. 1
& REMOVE 50 LF OF GUARDRAIL
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 285+00 TO STA. 294+00

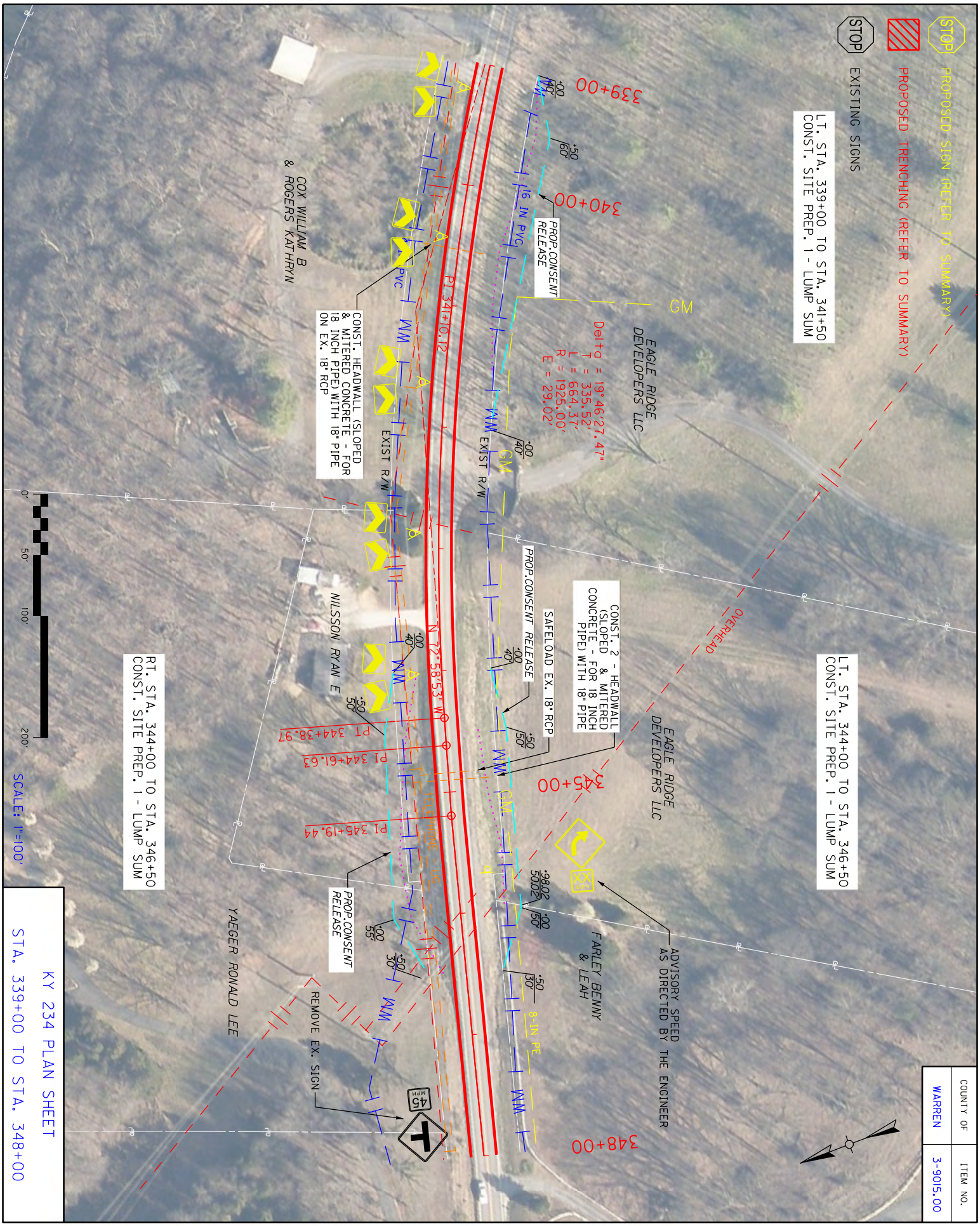

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
STOP
294+00
295+00
300+00
303+00
PI 294+48.32
Delta = 14°35'04.37"
T = 319.98'
L = 636.50'
R = 2500.50'
E = 20.39'
4 IN PVC
8 IN PVC
WM
OVERHEAD
EXIST R/W
N 79°31'11" W
PT 297+64.84
PC 301+92.63
END TREATMENT TYPE 1
RT. STA. 297+00 TO STA. 297+50
CONST. 1 - END TREATMENT TY. 1
AND REMOVE 50 LF OF GUARDRAIL
OGELVIE TIMOTHY LEE & SHAWN
WURTH JOSEPH
WURTH JOSEPH
GRICE DORSEY & ROSEMARIE WURTH-GRICE
HAYNES CYNTHIA D
HUNT MATTHEW A
WURTH ROSEMARIE C
GRICE DORSEY
PETTY L M GRICE
GRICE DORSEY
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 294+00 TO STA. 303+00

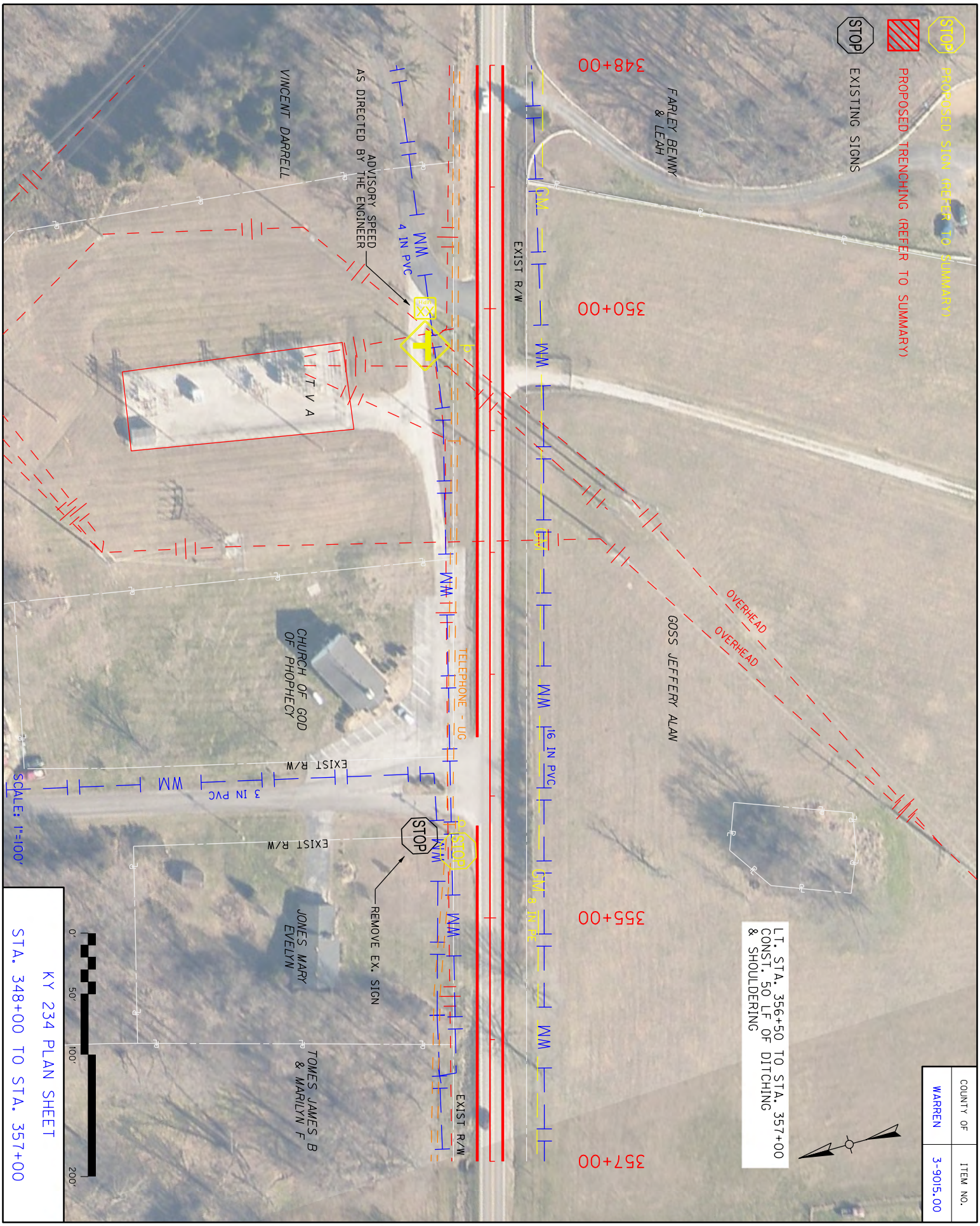

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
HAYNES CYNTHIA D
REYNOLDS KENNETH M & CYNTH
HAYNES JAMES F & SERENA
STAUBS TERESA & PAUL
WYATT DENNIS
303+00
305+00
310+00
312+00
D.N.D.
SCHOOL BUS STOP AHEAD
EX. 18" CMP
EXIST R/W
N 79° 31'11" W
PI 304+93.22
N 66° 48'17" W
OVERHEAD
8 IN PVC
4 IN PVC
TELEPHONE - UG
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
END TREATMENT TYPE 1
END TREATMENT TYPE 1
END TREATMENT TYPE 1
EXIST R/W
EX. 18" RCP
PI 307+91.34
Delta = 12°42'53.99"
T = 300.59'
L = 598.71'
R = 2697.87'
E = 16.69'
35 MPH
REMOVE EX. SIGN
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
GRICE DORSEY
HUYNH TONY M & COUREY H
RT. STA. 303+60 TO STA. 304+10
CONST. 1 - END TREATMENT TY. 1
AND REMOVE 50 LF OF GUARDRAIL
RT. STA. 307+00 TO STA. 307+50
CONST. 1 - END TREATMENT TY. 1
AND REMOVE 50 LF OF GUARDRAIL
RT. STA. 311+00 TO STA. 311+50
CONST. 1 - END TREATMENT TY. 1
AND REMOVE 50 LF OF GUARDRAIL
0' 50' 100' 200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 303+00 TO STA. 312+00

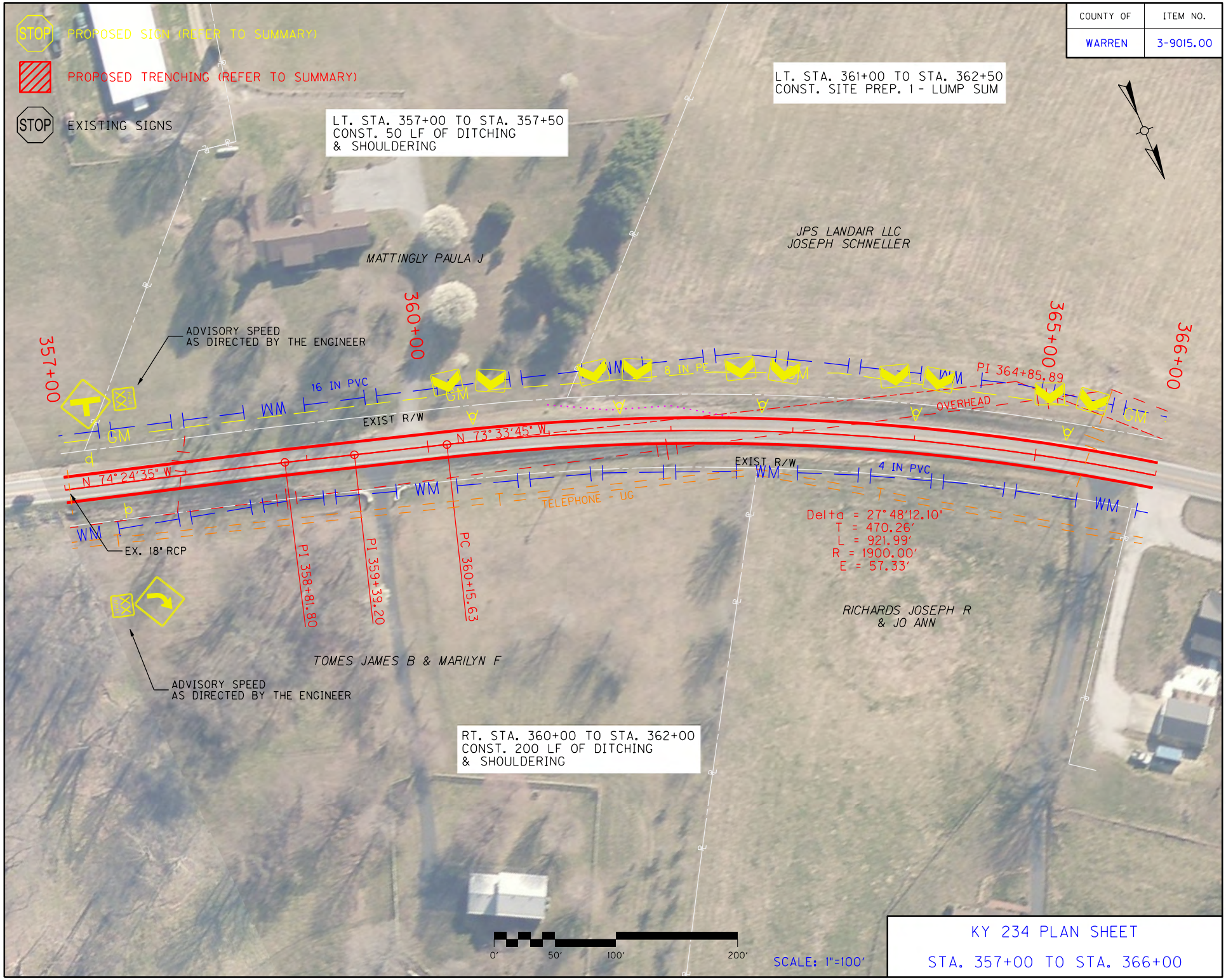

STOP
PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP
EXISTING SIGNS
312+00
315+00
320+00
321+00
BROWN SHIRLEY FARLEY
POTTER JOHN M
ISBELL RALPH W
ISBELL RALPH W
HURT GARY & BRENDA
N 66°48'17" W
PC 313+98.85
PT 315+67.45
PT 317+33.84
PC 319+31.94
N 82°50'07" W
EXIST R/W
EXIST R/W
Delta = 16°01'49.85"
T = 168.60'
L = 334.99'
R = 1197.32'
E = 11.81'
MILEPOINT 6
STA 316+80
D.N.D.
D.N.D.
D.N.D.
REMOVE EX. SIGN
OVERHEAD
TELEPHONE
UG
8 IN PVC
4 IN PVC
WM
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 312+00 TO STA. 321+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

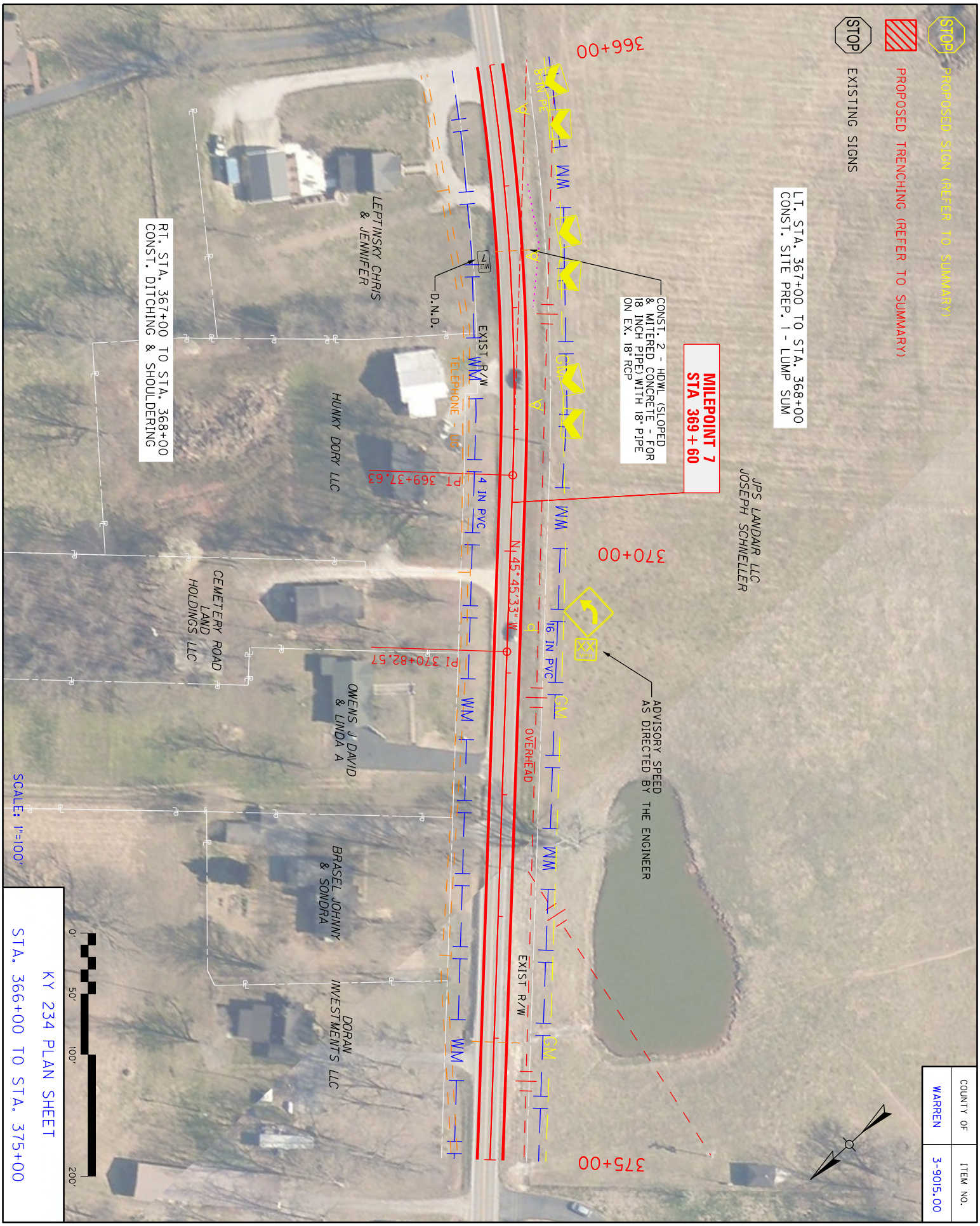

PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
THOMPSON RICKY WAYNE
LOAFMAN MICHAEL ADAM & MEREDITH
PLEASANT HILL RD
REMOVE EX. SIGN
3 IN PVC
END TREATMENT TYPE 1
EX. 18" PIPE
N 82°59'07" W
PI 322+27.61
321+00
ISBELL RALPH W
CLAY LENOTHAL C MICHAEL
D.N.D.
Delta = 45°20'58.39"
T = 295.66'
L = 560.13'
R = 707.68'
E = 59.28'
PT 324+92.07
STEWART FREDA J
325+00
TELEPHONE - UG
N 37°29'09" W
EXIST R/W
PC 326+70.45
POPE LEEMAN C & ALICE
Delta = 15°01'05.14"
T = 100.61'
L = 200.06'
R = 763.27'
E = 6.60'
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
OVERHEAD
COUNTRY VIEW INC
PI 327+71.06
N 52°30'14" W
PT 328+70.51
WILSON PATTY
PI 329+81.89
330+00
35 MPH
RT. STA. 321+50 TO STA. 322+00
CONST. 1 - END TREATMENT TY. 1
& REMOVE 50 LF OF GUARDRAIL
RT. STA. 322+95 TO STA. 323+45
CONST. 1 - END TREATMENT TY. 1
& REMOVE 50 LF OF GUARDRAIL
RT. STA. 323+95 TO STA. 324+45
CONST. 1 - END TREATMENT TY. 1
& REMOVE 50 LF OF GUARDRAIL
RT. STA. 326+35 TO STA. 326+85
CONST. 1 - END TREATMENT TY. 1
& REMOVE 50 LF OF GUARDRAIL
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 321+00 TO STA. 330+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

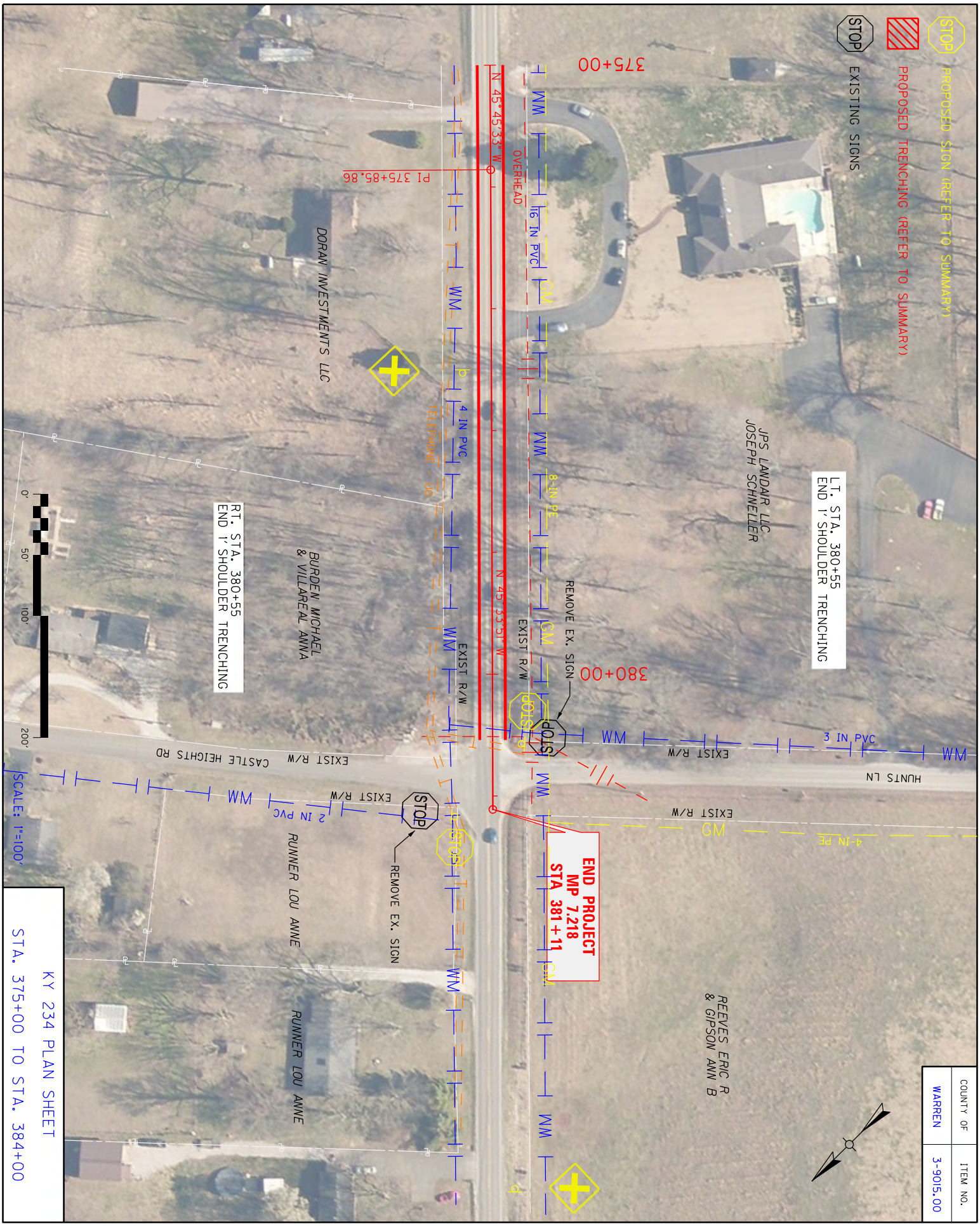

STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
330+00
335+00
339+00
FOX FRANKLIN & MARILYN & FOX MELINDA L
GILLENWATER DEBORAH & KIRBY D
GILLENWATER DEBORAH & KIRBY D
D.N.D.
35 MPH
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
OVERHEAD
16 IN PVC
4 IN PVC
EXIST R/W
EX. 18" RCP
EXIST R/W
HULSEY TIMOTHY K & CYNTHIA B
EAGLE RIDGE DEVELOPERS LLC
TELEPHONE
N 53°12'25" W
BROWN TERRY M
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
GOODIN BRENT & BETH
HONAKER KEITH
PC 337+74.60
MARLIN JOSHUA & AMANDA
COX WILLIAM B & ROGERS KATHRYN
0'
50'
100'
200'
SCALE: 1"=100'
COUNTY OF
WARREN
ITEM NO.
3-9015.00
KY 234 PLAN SHEET
STA. 330+00 TO STA. 339+00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 339+00 TO STA. 341+50
CONST. SITE PREP. 1 - LUMP SUM
LT. STA. 344+00 TO STA. 346+50
CONST. SITE PREP. 1 - LUMP SUM
RT. STA. 344+00 TO STA. 346+50
CONST. SITE PREP. 1 - LUMP SUM
339+00
340+00
345+00
348+00
PI 341+10.12
Delta = 19°46'27.47"
T = 335.52'
L = 664.37'
R = 1925.00'
E = 29.02'
PI 344+38.97
PI 344+61.63
PI 345+19.44
N 72°58'53" W
16 IN PVC
PROP. CONSENT RELEASE
EXIST R/W
CONST. HEADWALL (SLOPED & MITERED CONCRETE - FOR 18 INCH PIPE) WITH 18" PIPE ON EX. 18" RCP
CONST. 2 - HEADWALL (SLOPED & MITERED CONCRETE - FOR 18 INCH PIPE) WITH 18" PIPE
SAFELOAD EX. 18" RCP
8" UN PE
REMOVE EX. SIGN
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
EAGLE RIDGE DEVELOPERS LLC
COX WILLIAM B & ROGERS KATHRYN
NILSSON RYAN E
YAEGER RONALD LEE
FARLEY BENNY & LEAH
OVERHEAD
45 MPH
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 339+00 TO STA. 348+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
348+00
350+00
355+00
357+00
FARLEY BENNY & LEAH
GOSS JEFFERY ALAN
VINCENT DARRELL
CHURCH OF GOD OF PHOPHECY
JONES MARY EVELYN
TOMES JAMES B & MARILYN F
EXIST R/W
OVERHEAD
WM
4 IN PVC
6 IN PVC
3 IN PVC
TELEPHONE - UG
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
REMOVE EX. SIGN
STOP
LT. STA. 356+50 TO STA. 357+00
CONST. 50 LF OF DITCHING
& SHOULDERING
COUNTY OF
WARREN
ITEM NO.
3-9015.00
SCALE: 1"=100'
0'
50'
100'
200'
KY 234 PLAN SHEET
STA. 348+00 TO STA. 357+00


STOP PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
STOP EXISTING SIGNS
COUNTY OF
WARREN
ITEM NO.
3-9015.00
LT. STA. 357+00 TO STA. 357+50
CONST. 50 LF OF DITCHING
& SHOULDERING
LT. STA. 361+00 TO STA. 362+50
CONST. SITE PREP. 1 - LUMP SUM
MATTINGLY PAULA J
JPS LANDAIR LLC
JOSEPH SCHNELLER
357+00
360+00
365+00
366+00
ADVISORY SPEED
AS DIRECTED BY THE ENGINEER
16 IN PVC
8 IN PE
PI 364+85.89
OVERHEAD
EXIST R/W
N 73°33'45" W
N 74°24'35" W
4 IN PVC
TELEPHONE - UG
Delta = 27°48'12.10"
T = 470.26'
L = 921.99'
R = 1900.00'
E = 57.33'
EX. 18" RCP
PI 358+81.80
PI 359+39.20
PC 360+15.63
RICHARDS JOSEPH R
& JO ANN
TOMES JAMES B & MARILYN F
ADVISORY SPEED
AS DIRECTED BY THE ENGINEER
RT. STA. 360+00 TO STA. 362+00
CONST. 200 LF OF DITCHING
& SHOULDERING
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 357+00 TO STA. 366+00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
LT. STA. 367+00 TO STA. 368+00
CONST. SITE PREP. 1 - LUMP SUM
CONST. 2 - HDWL (SLOPED & MITERED CONCRETE - FOR 18 INCH PIPE) WITH 18" PIPE ON EX. 18" RCP
MILEPOINT 7
STA 369+60
ADVISORY SPEED AS DIRECTED BY THE ENGINEER
RT. STA. 367+00 TO STA. 368+00
CONST. DITCHING & SHOULDERING
366+00
370+00
375+00
JPS LANDAIR LLC
JOSEPH SCHNELLER
LEPTINSKY CHRIS & JENNIFER
HUNKY DORY LLC
CEMETERY ROAD LAND HOLDINGS LLC
OWENS J DAVID & LINDA A
BRASEL JOHNNY & SONDRA
DORAN INVESTMENTS LLC
EXIST R/W
OVERHEAD
TELEPHONE
D.N.D.
4 IN PVC
16 IN PVC
N 45°45'33" W
PT 369+37.63
PI 370+82.57
SCALE: 1"=100'
0'
50'
100'
200'
KY 234 PLAN SHEET
STA. 366+00 TO STA. 375+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00


PROPOSED SIGN (REFER TO SUMMARY)
PROPOSED TRENCHING (REFER TO SUMMARY)
EXISTING SIGNS
STOP
375+00
380+00
N 45°45'33" W
PI 375+85.86
OVERHEAD
16 IN PVC
8-IN PE
4 IN PVC
TELEPHONE - UG
EXIST R/W
REMOVE EX. SIGN
LT. STA. 380+55
END 1' SHOULDER TRENCHING
RT. STA. 380+55
END 1' SHOULDER TRENCHING
END PROJECT
MP 7.218
STA 381+11
3 IN PVC
2 IN PVC
4-IN PE
HUNTS LN
CASTLE HEIGHTS RD
RUNNER LOU ANNE
DORAN INVESTMENTS LLC
BURDEN MICHAEL
& VILLAREAL ANNA
JPS LANDAIR LLC
JOSEPH SCHNELLER
REEVES ERIC R
& GIPSON ANN B
0'
50'
100'
200'
SCALE: 1"=100'
KY 234 PLAN SHEET
STA. 375+00 TO STA. 384+00
COUNTY OF
WARREN
ITEM NO.
3-9015.00

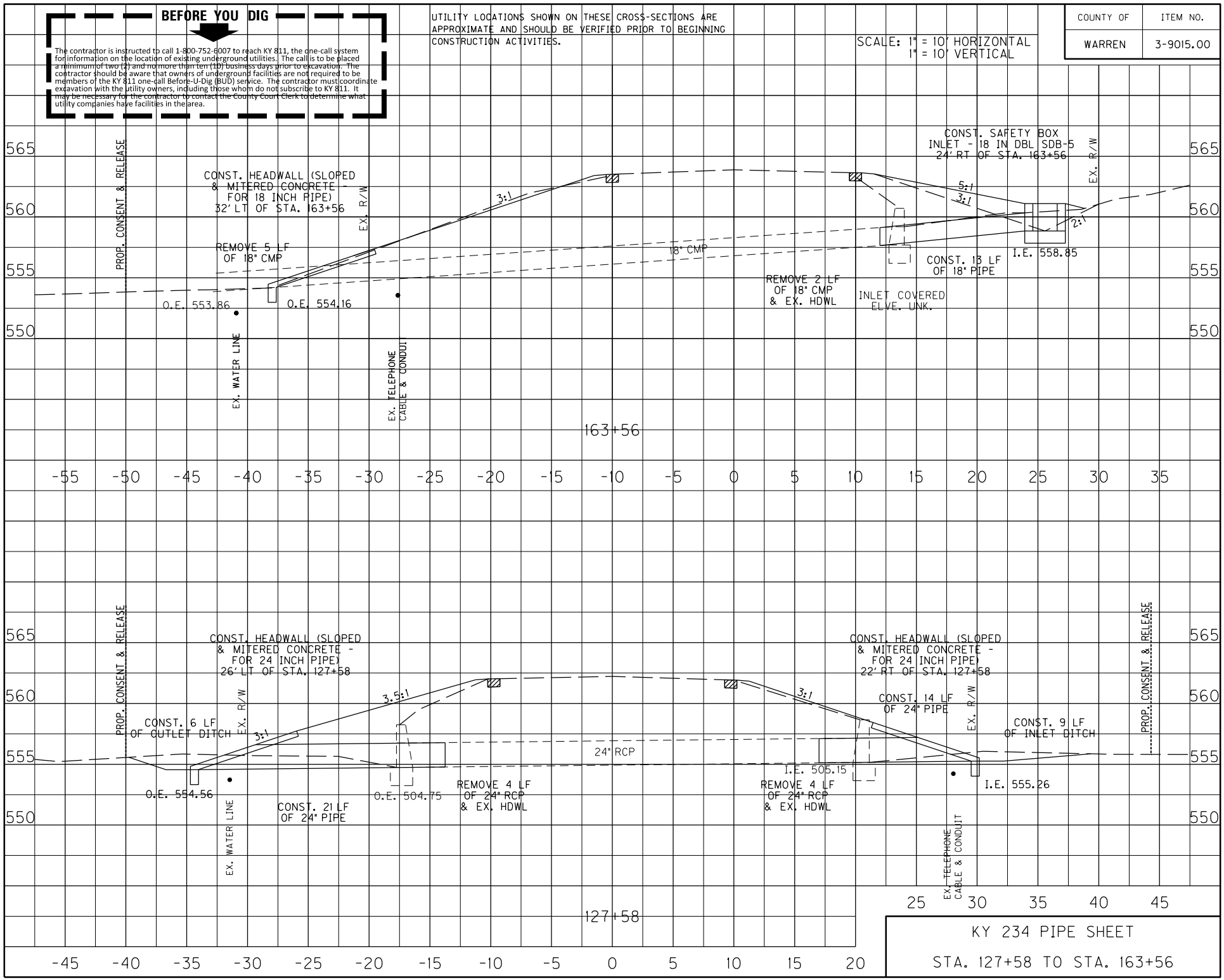
BEFORE YOU DIG

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 who m 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.

UTILITY LOCATIONS SHOWN ON THESE CROSS-SECTIONS ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

COUNTY OF	ITEM NO.
WARREN	3-9015.00

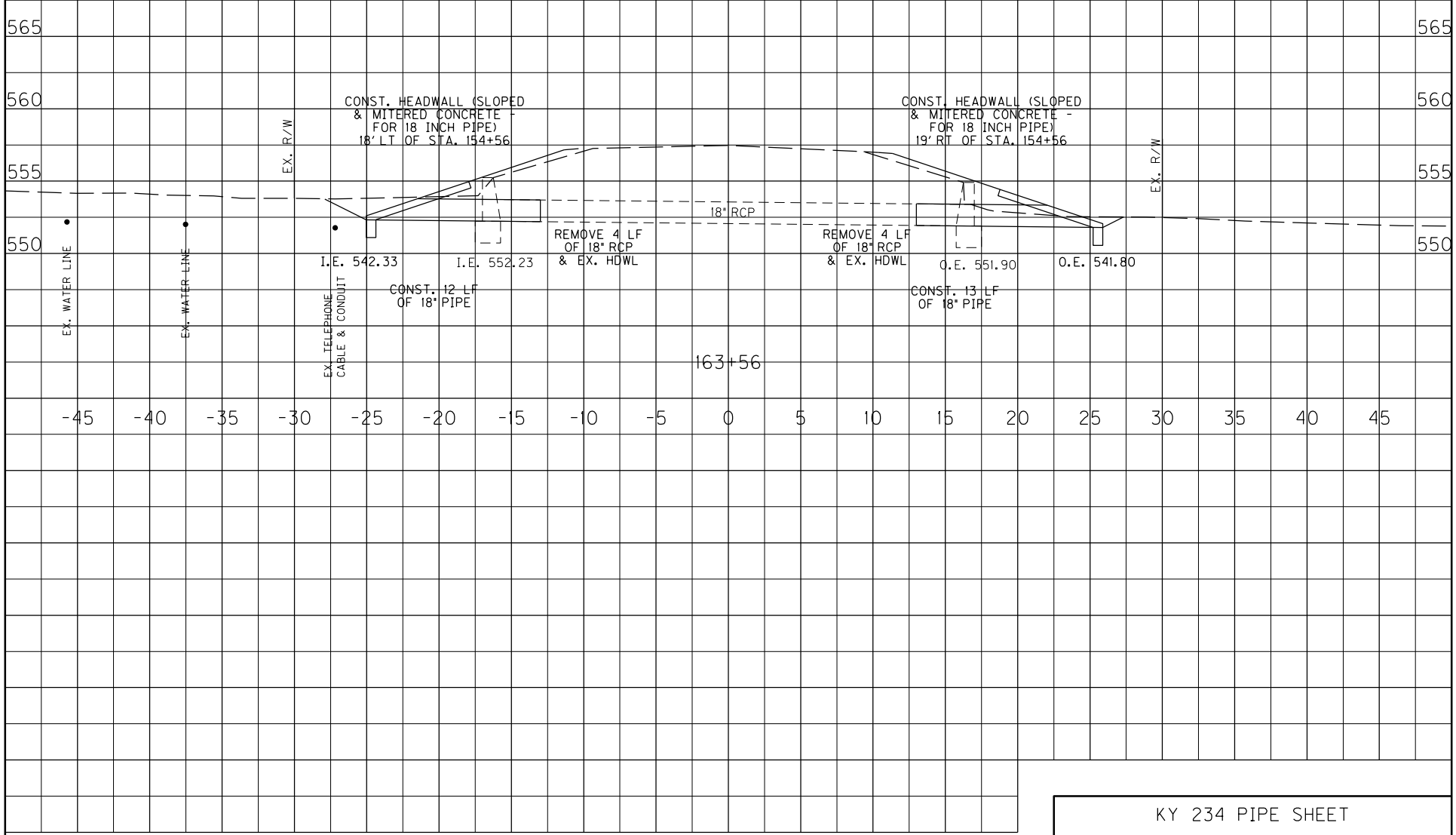


KY 234 PIPE SHEET

STA. 127+58 TO STA. 163+56

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

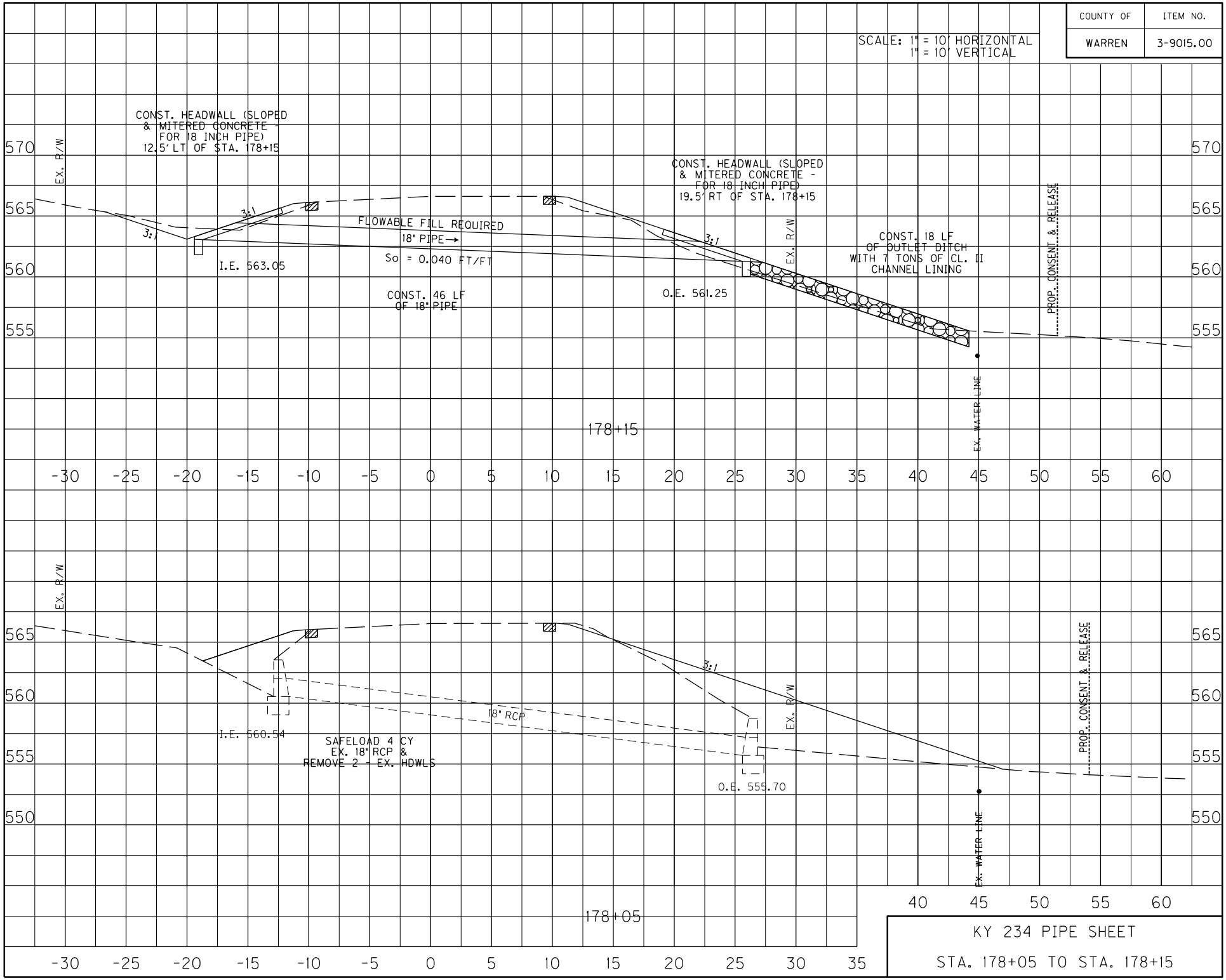


KY 234 PIPE SHEET

STA. 154+56

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

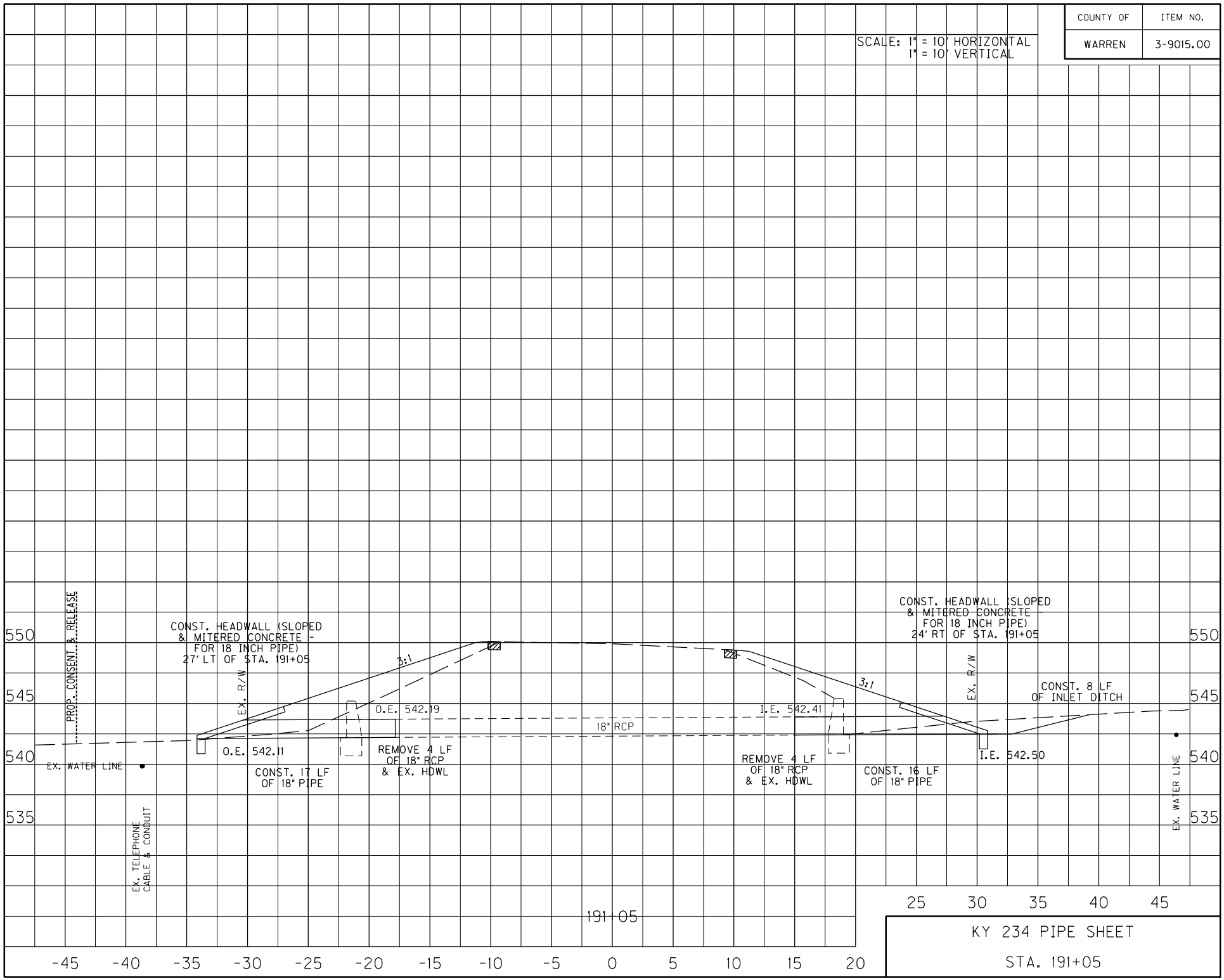


KY 234 PIPE SHEET

STA. 178+05 TO STA. 178+15

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

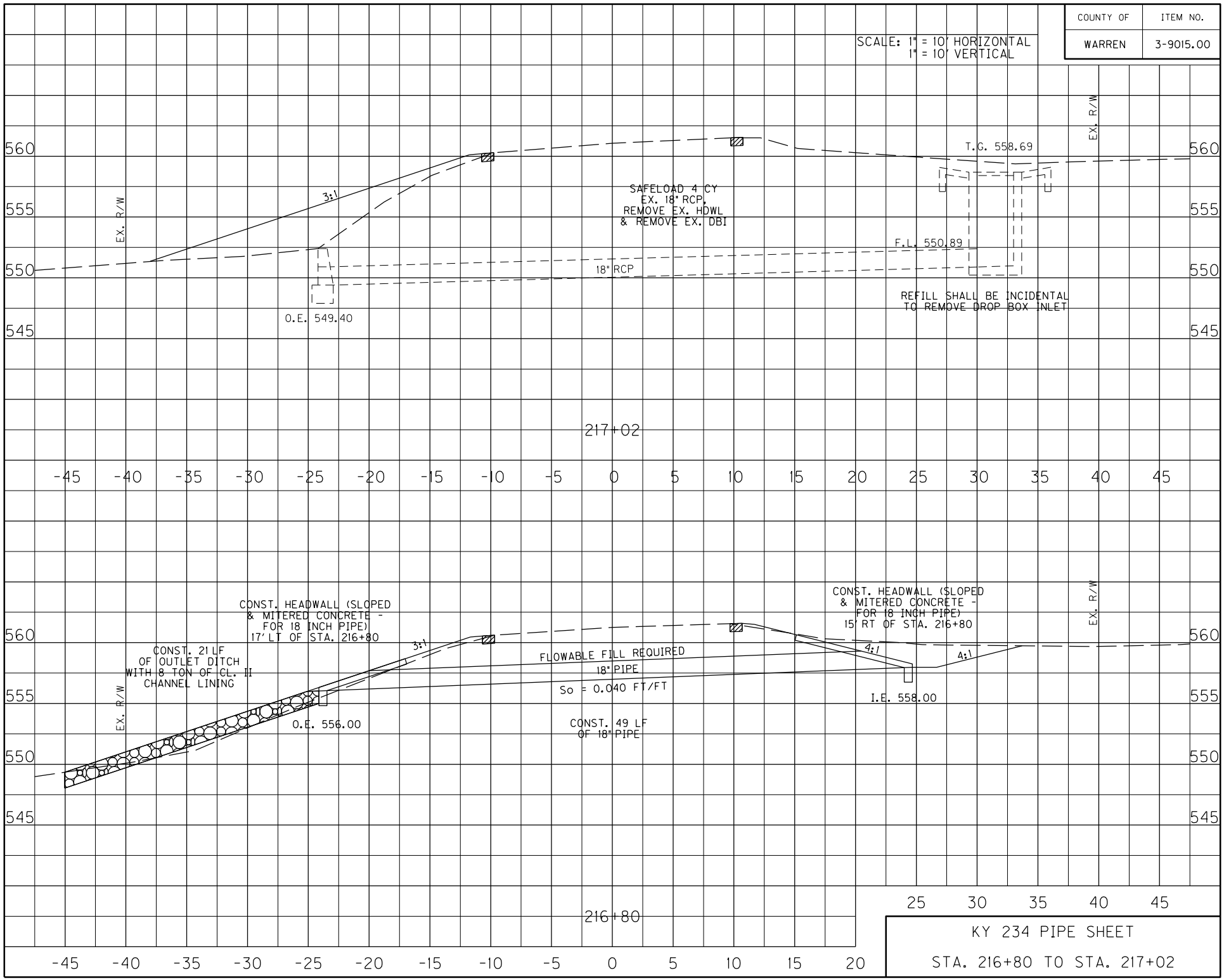


KY 234 PIPE SHEET

STA. 191+05

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

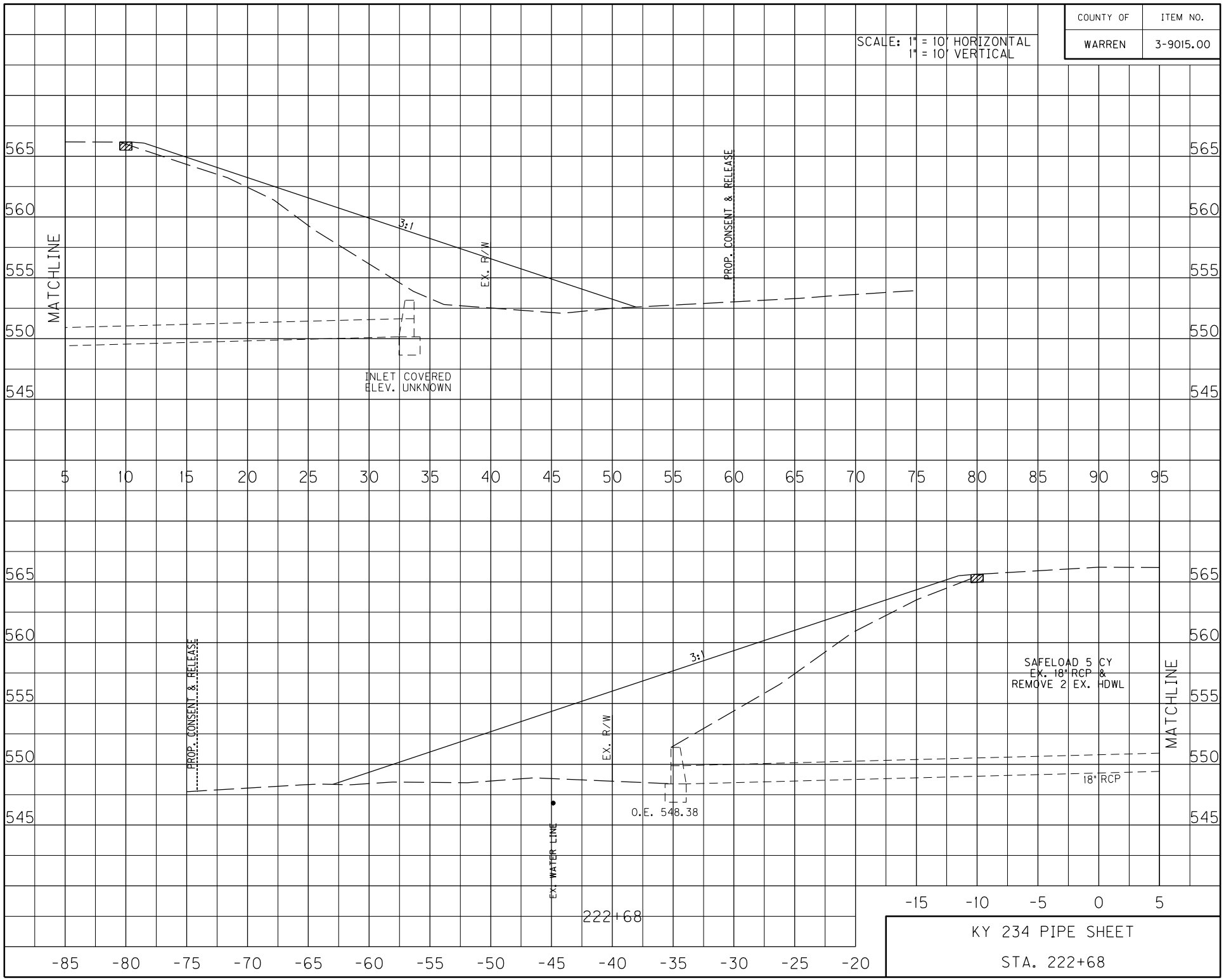


KY 234 PIPE SHEET

STA. 216+80 TO STA. 217+02

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

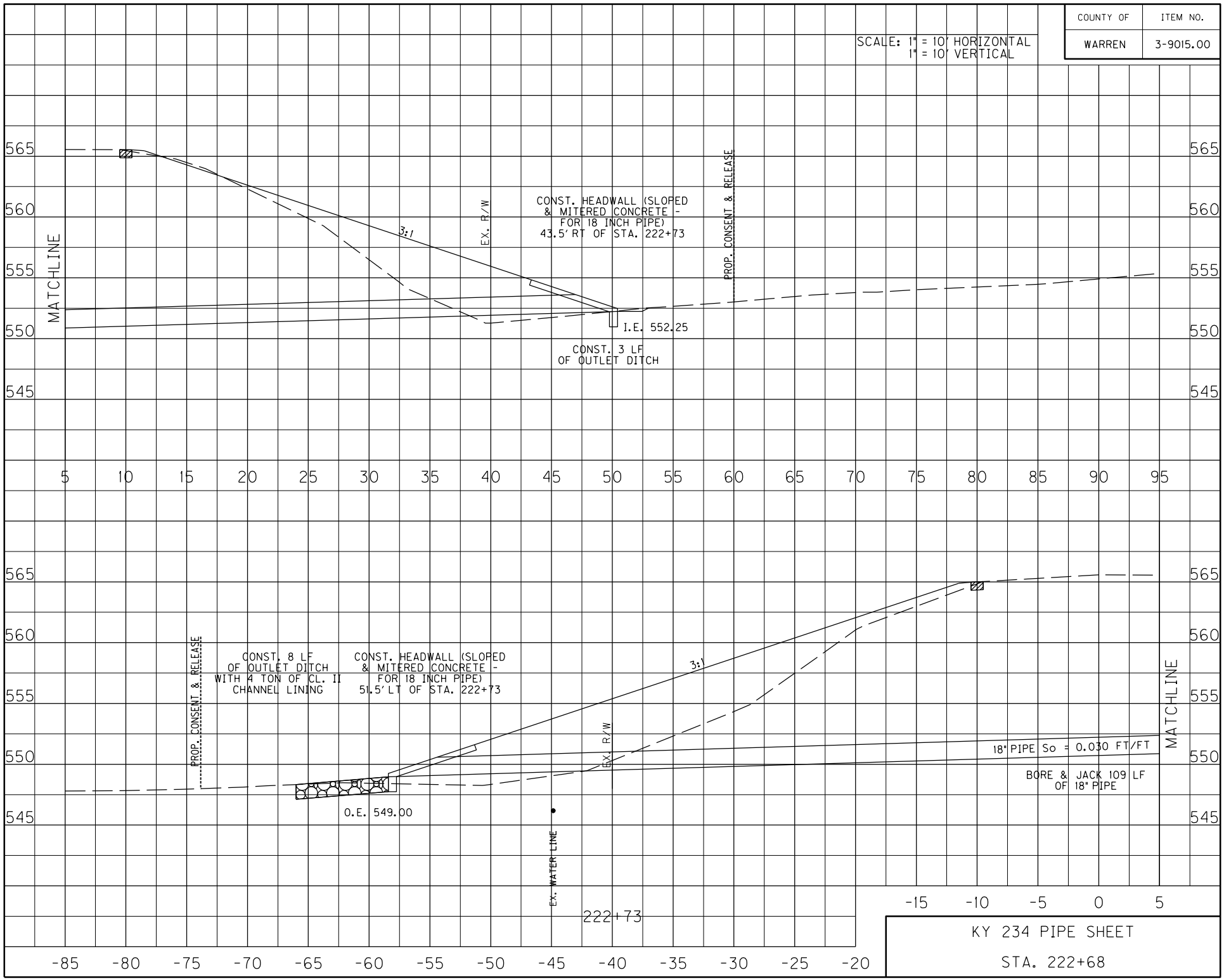


KY 234 PIPE SHEET

STA. 222+68

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

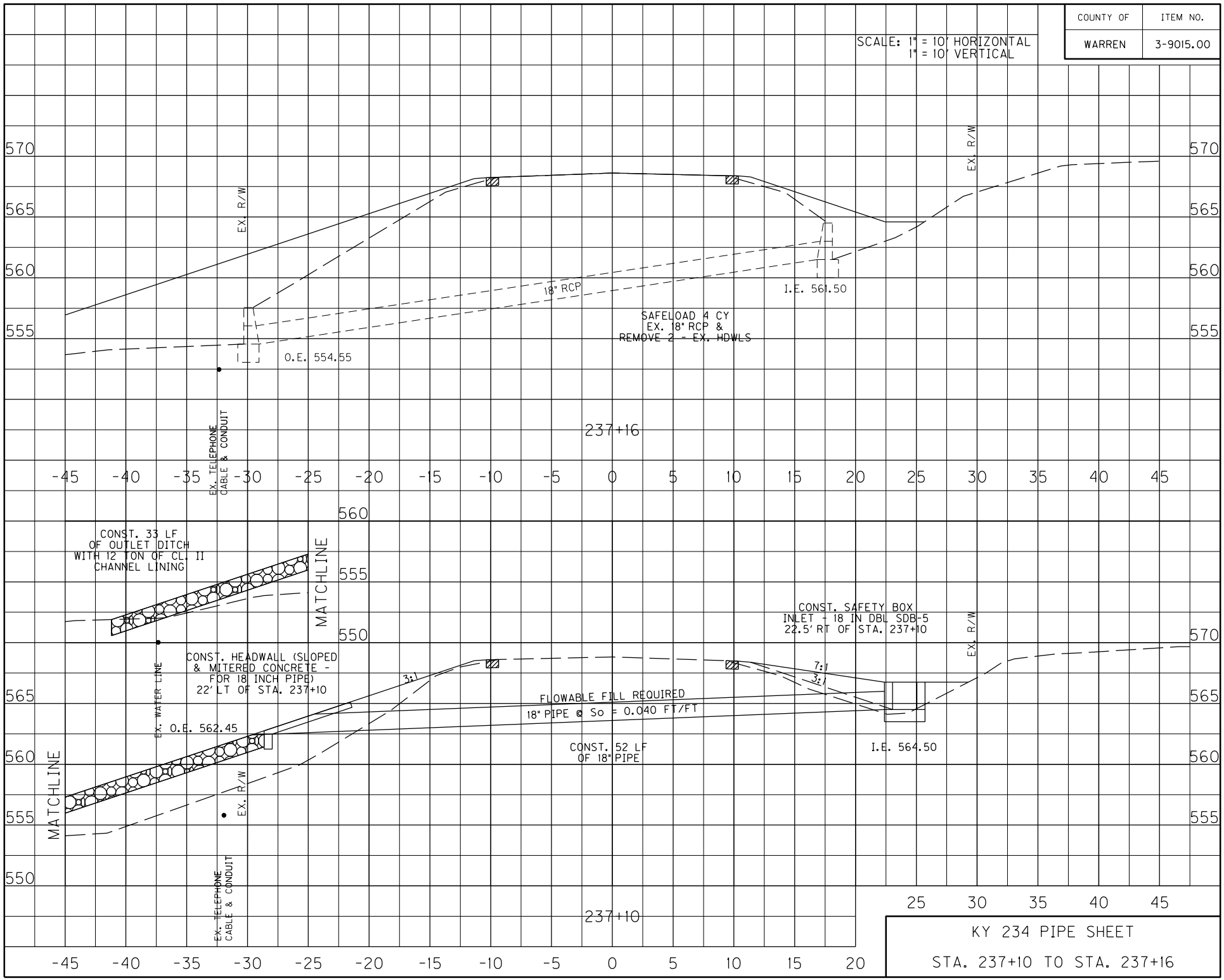


KY 234 PIPE SHEET

STA. 222+68

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

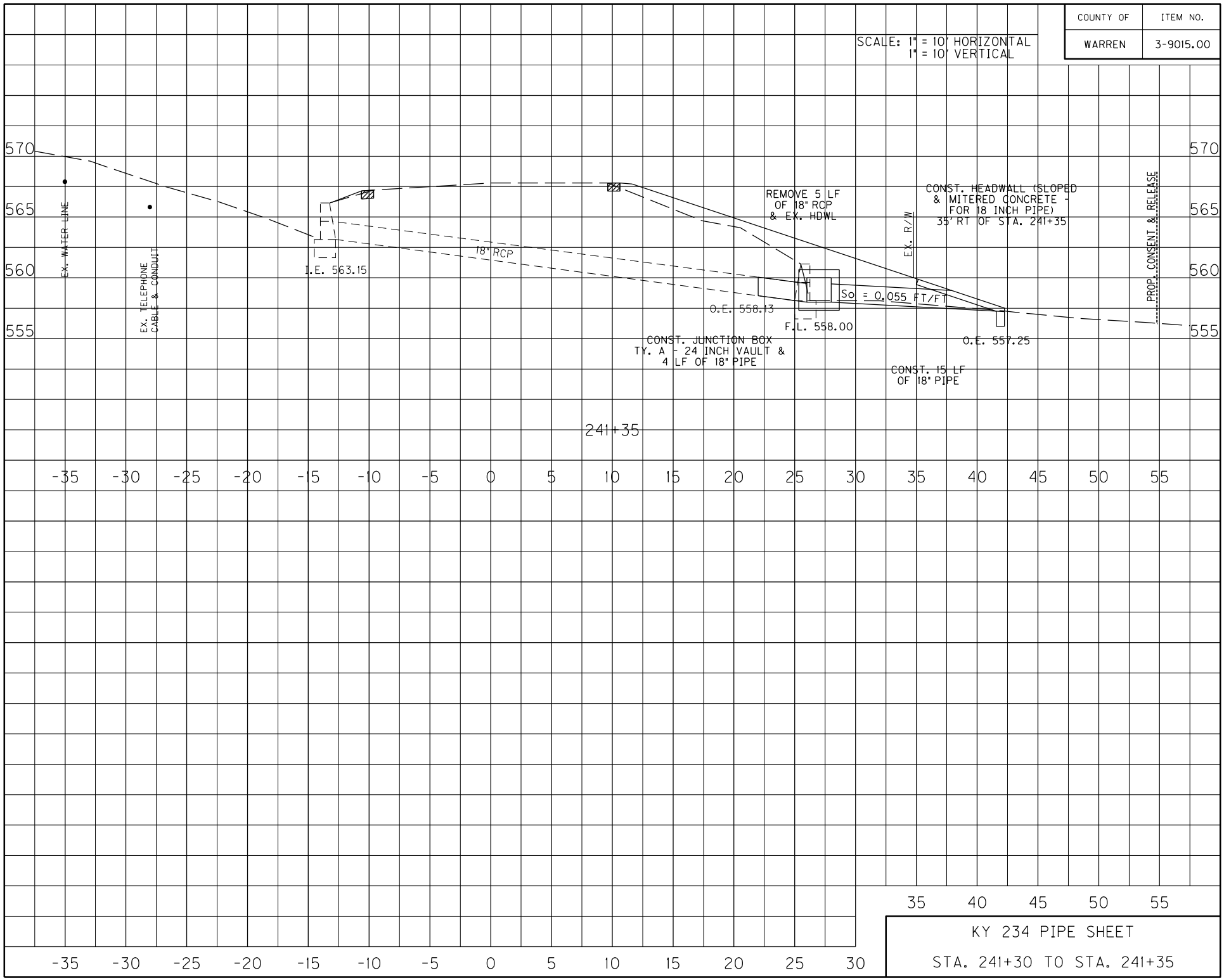


KY 234 PIPE SHEET

STA. 237+10 TO STA. 237+16

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

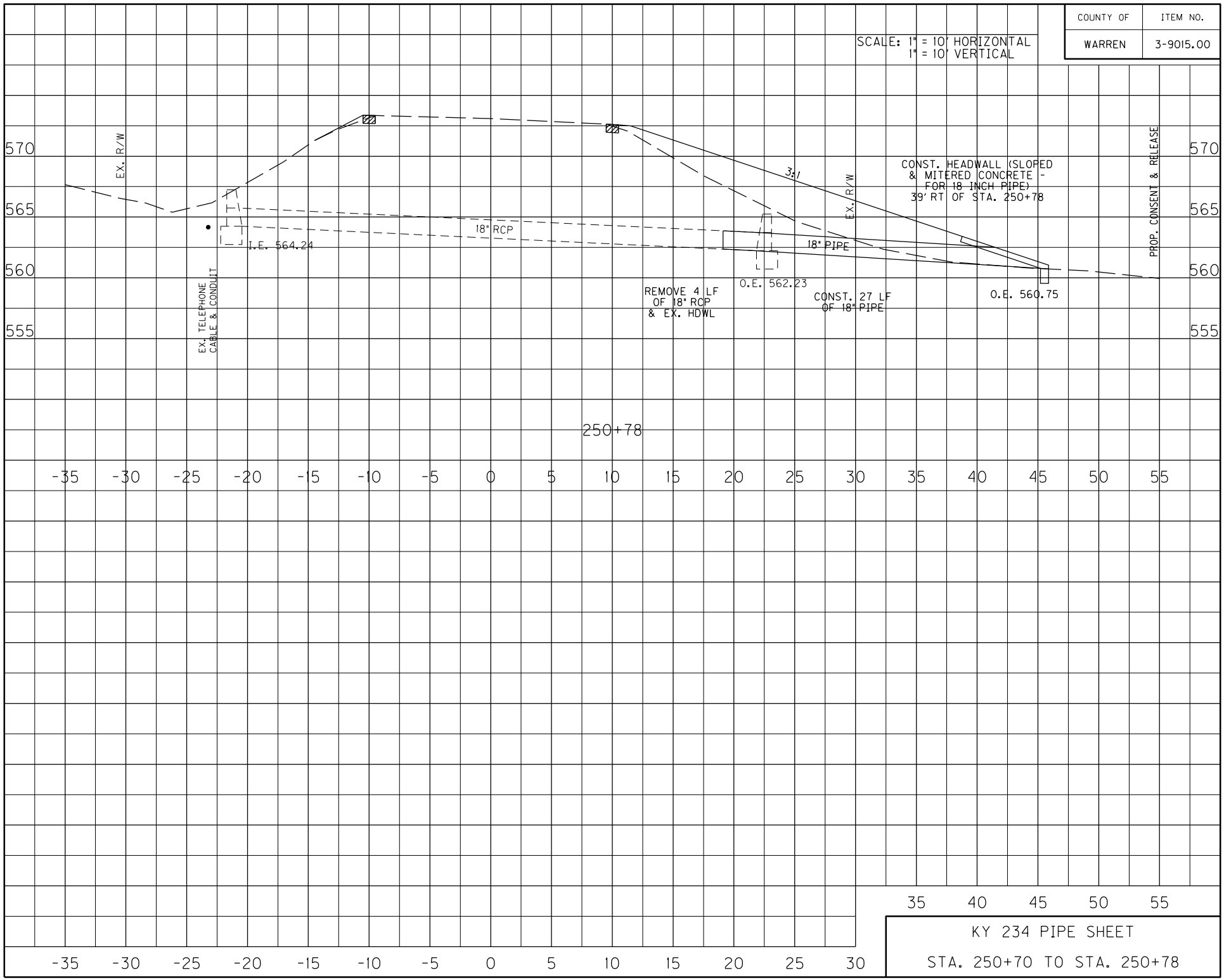


KY 234 PIPE SHEET

STA. 241+30 TO STA. 241+35

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

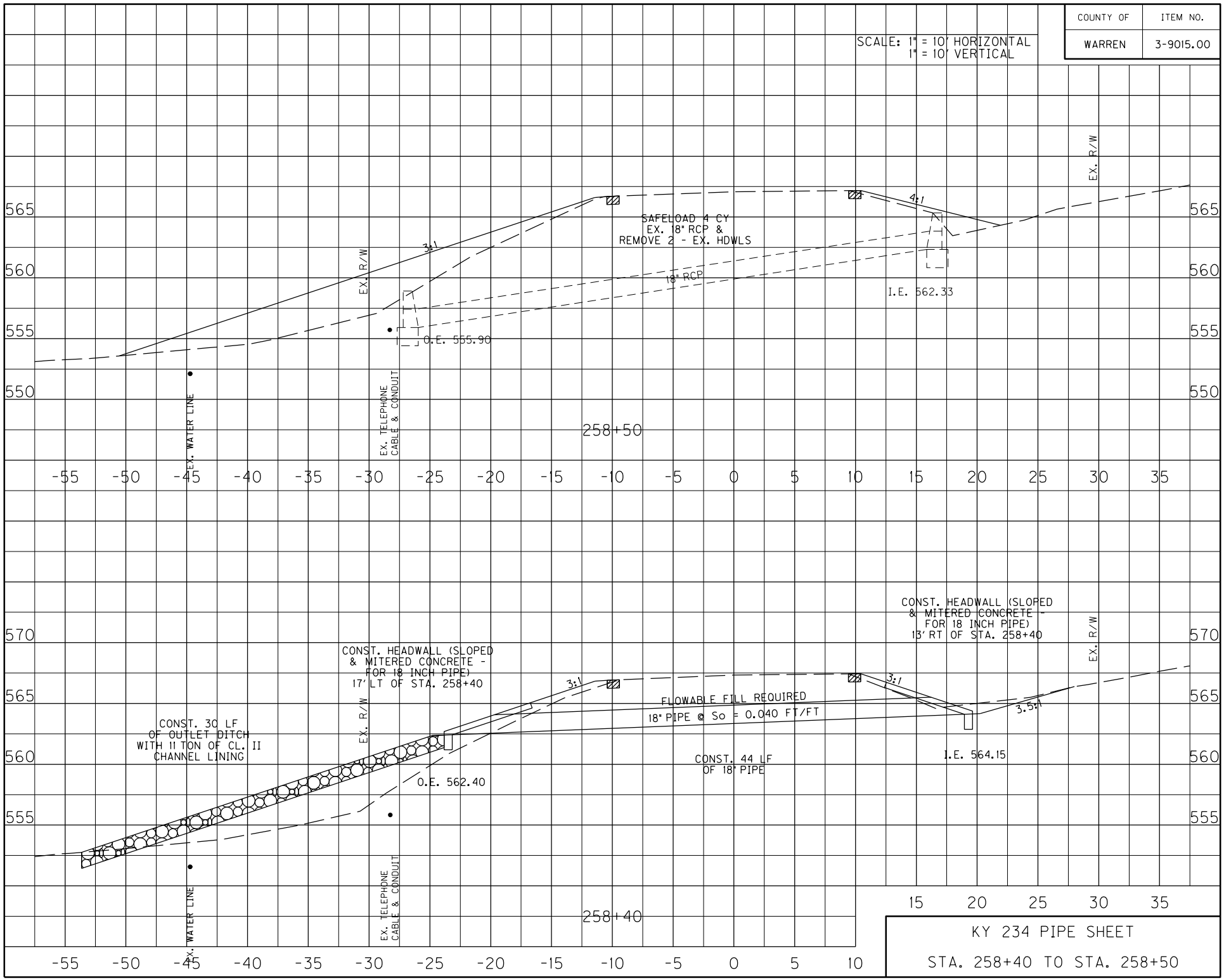


KY 234 PIPE SHEET

STA. 250+70 TO STA. 250+78

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

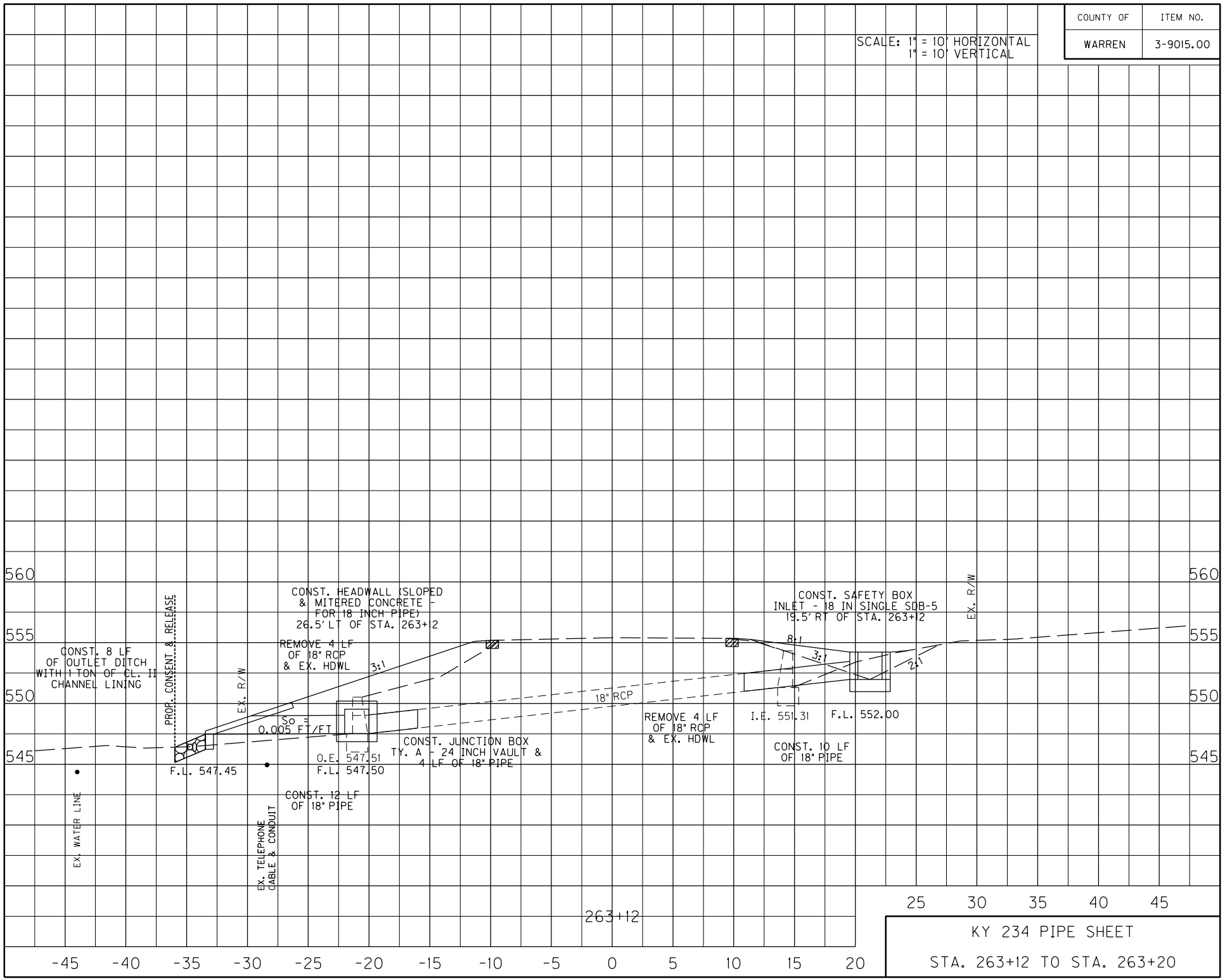


KY 234 PIPE SHEET

STA. 258+40 TO STA. 258+50

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

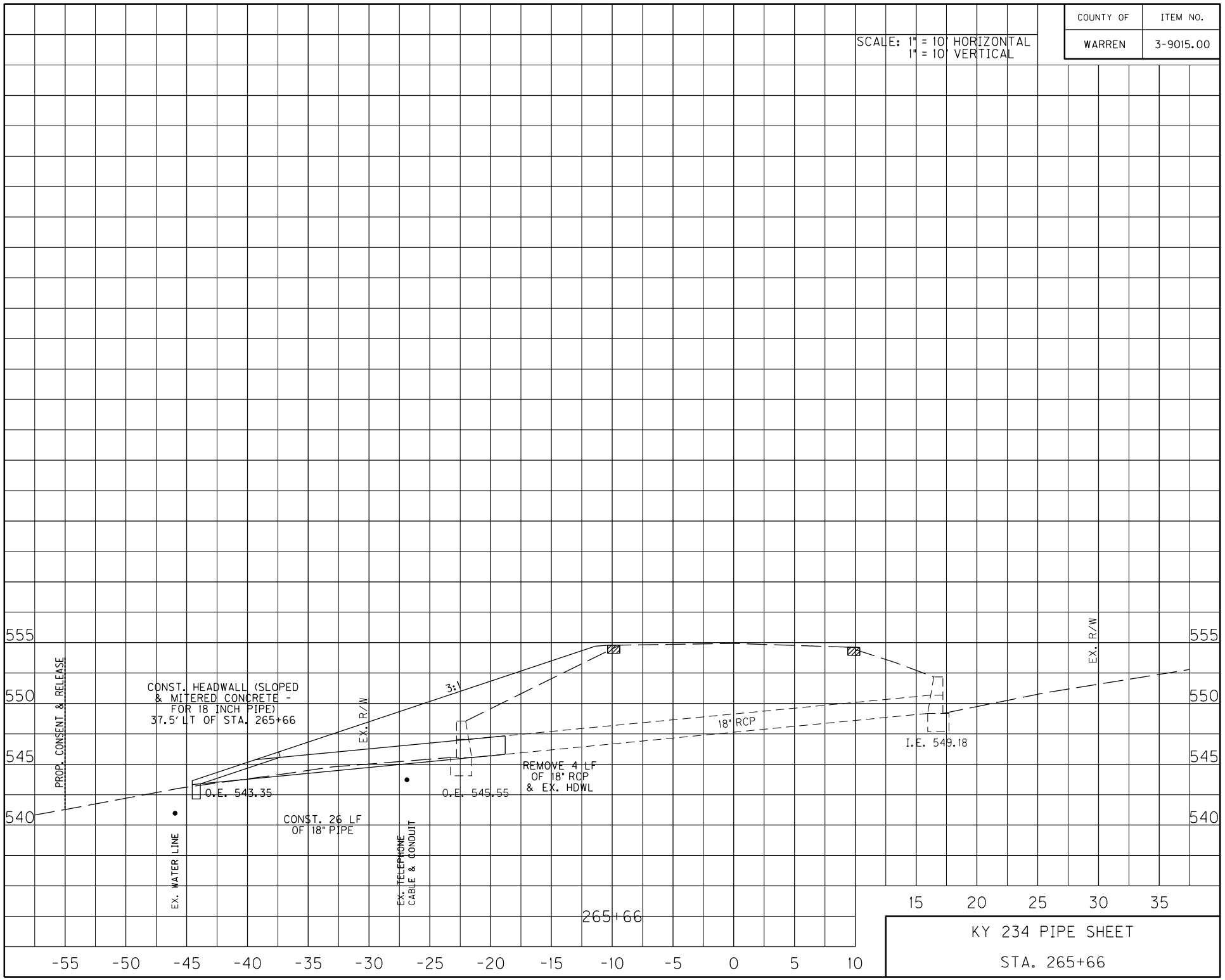


KY 234 PIPE SHEET

STA. 263+12 TO STA. 263+20

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

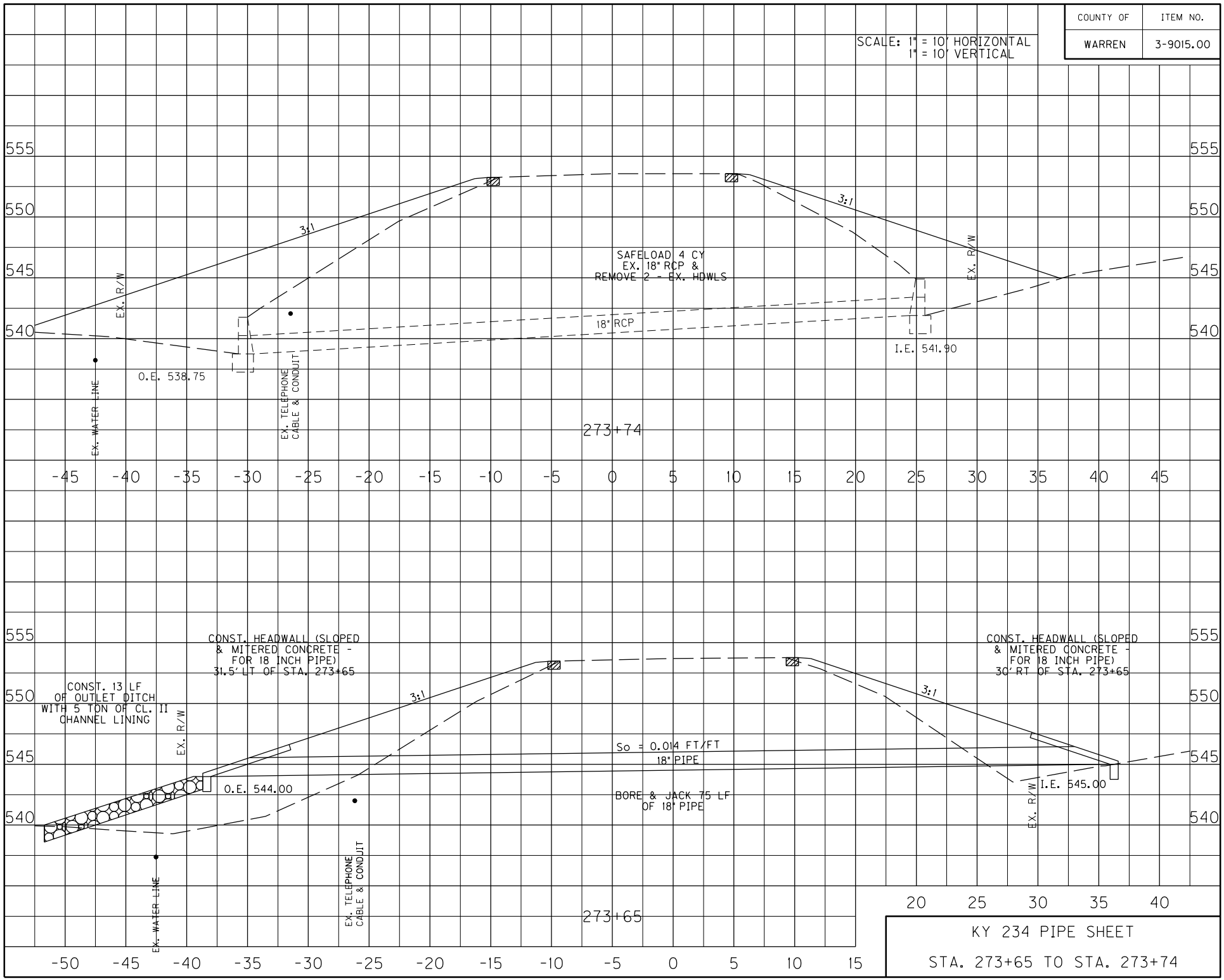


KY 234 PIPE SHEET

STA. 265+66

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

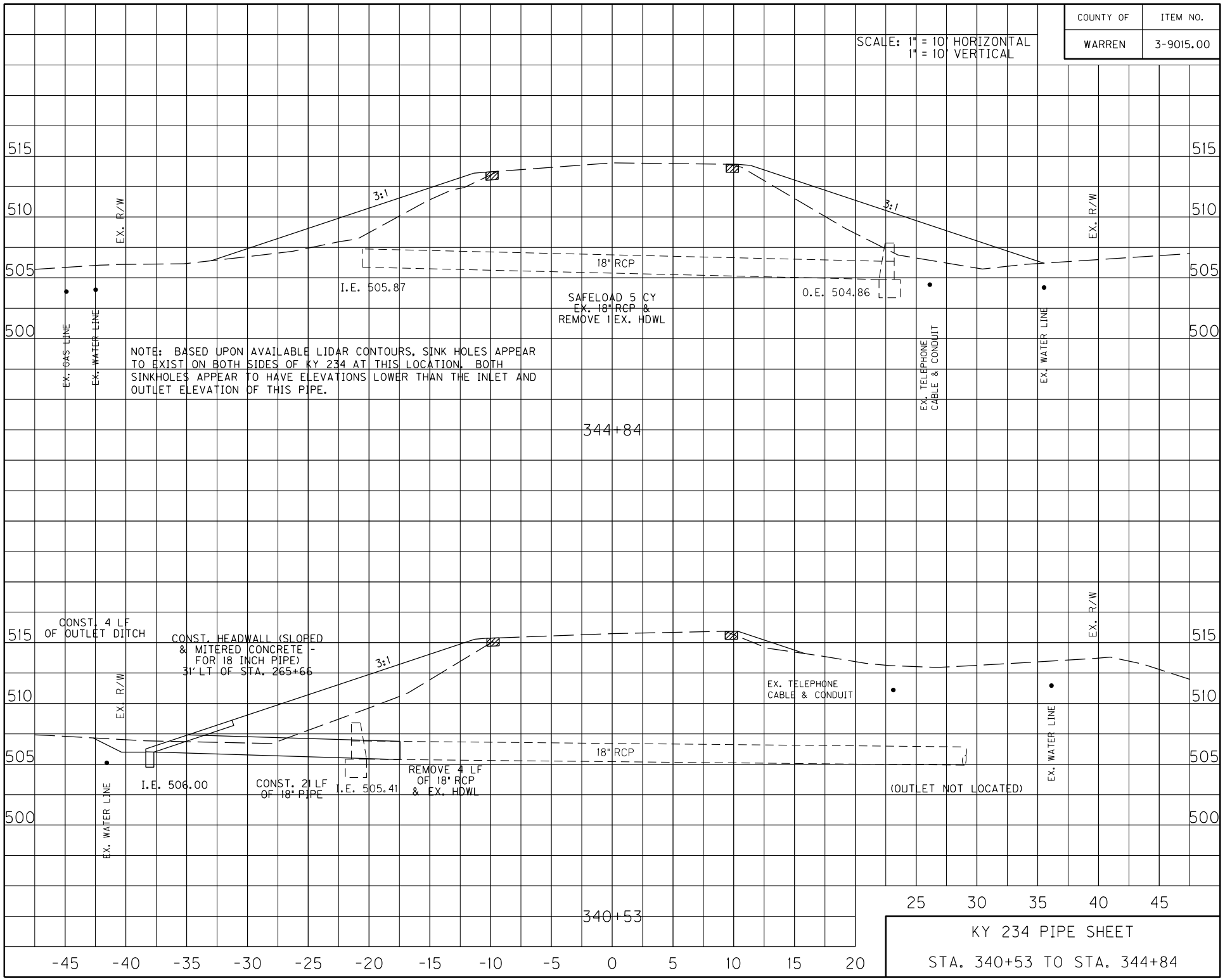


KY 234 PIPE SHEET

STA. 273+65 TO STA. 273+74

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

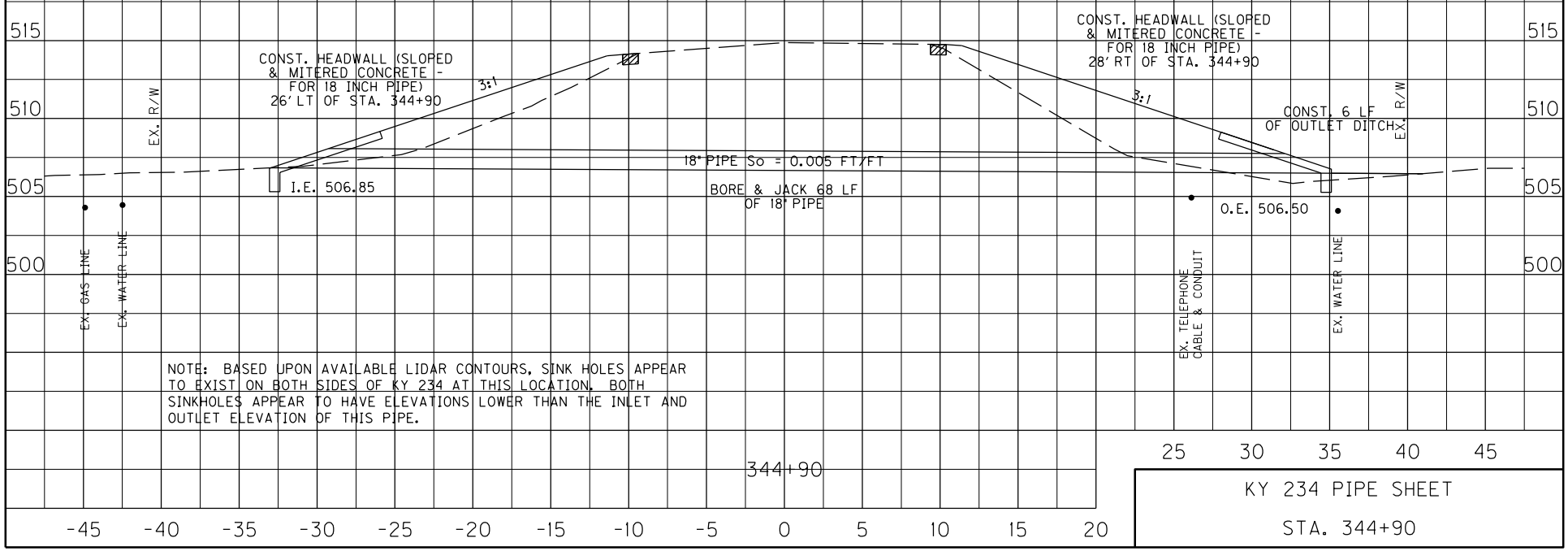


KY 234 PIPE SHEET

STA. 340+53 TO STA. 344+84

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

COUNTY OF	ITEM NO.
WARREN	3-9015.00

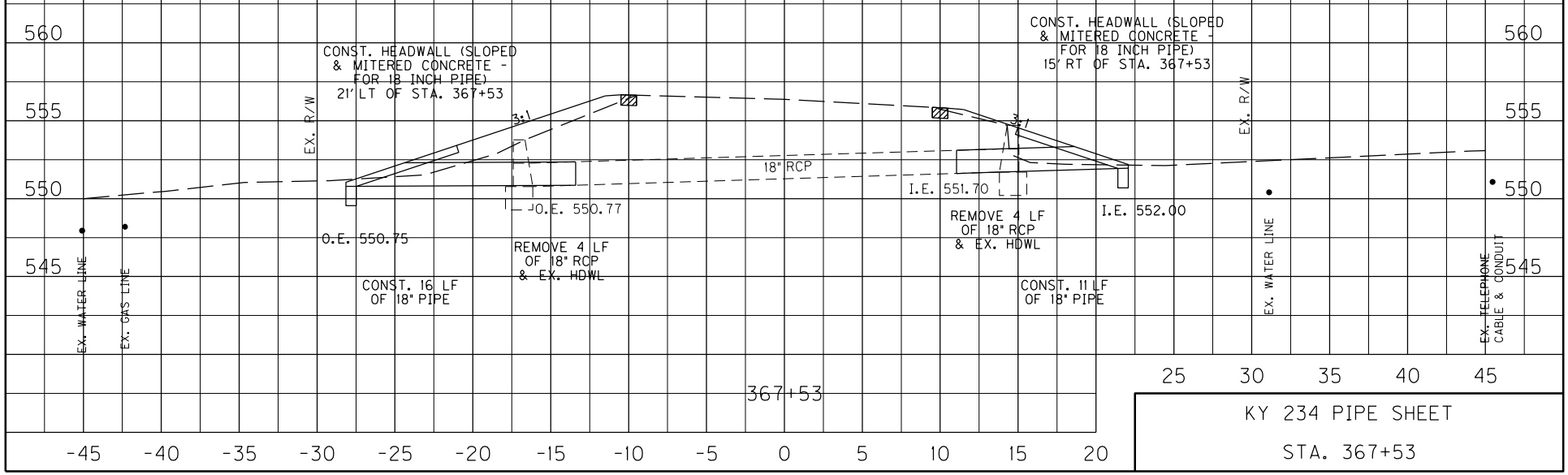


KY 234 PIPE SHEET

STA. 344+90

COUNTY OF	ITEM NO.
WARREN	3-9015.00

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



KY 234 PIPE SHEET

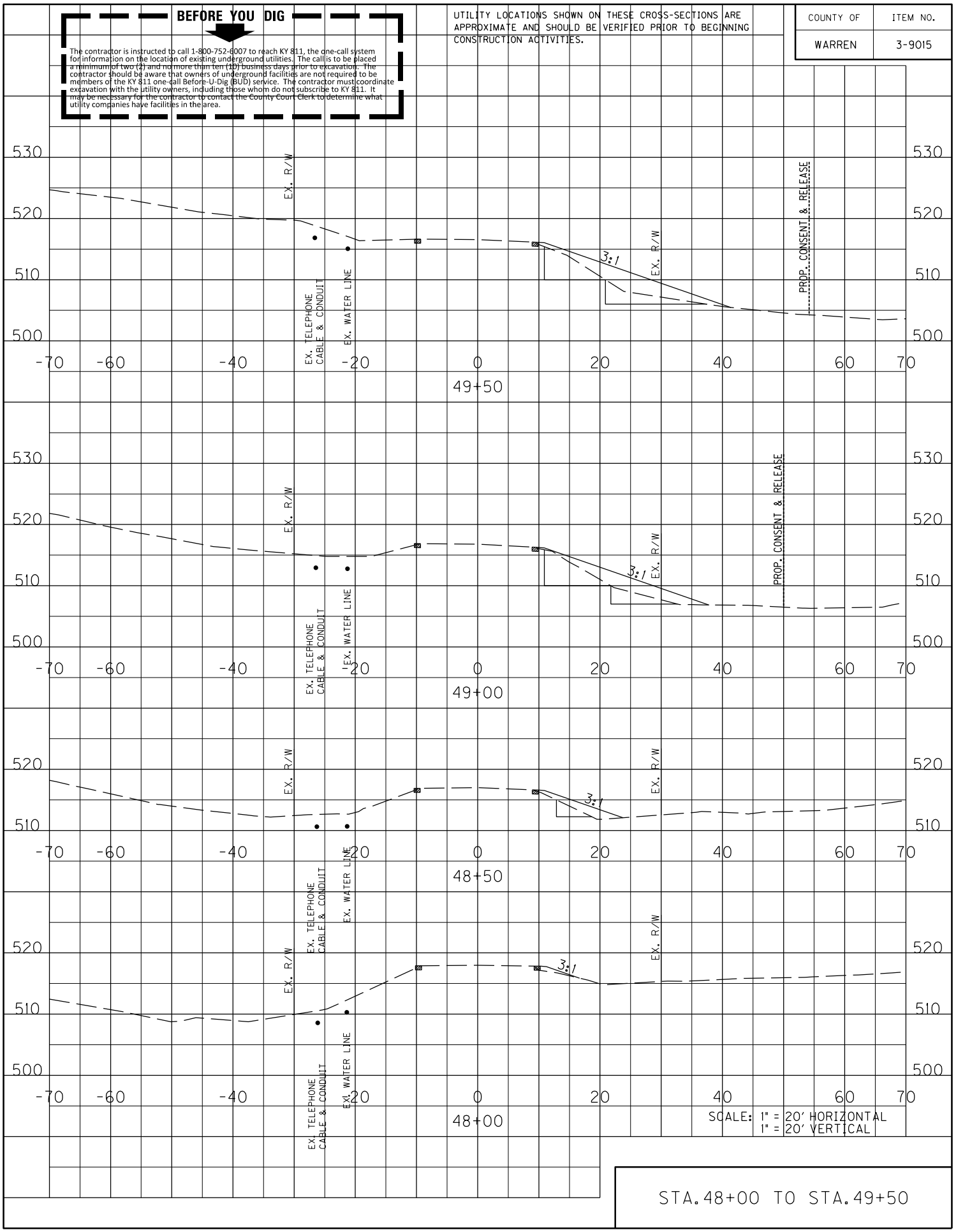
STA. 367+53

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.

UTILITY LOCATIONS SHOWN ON THESE CROSS-SECTIONS ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

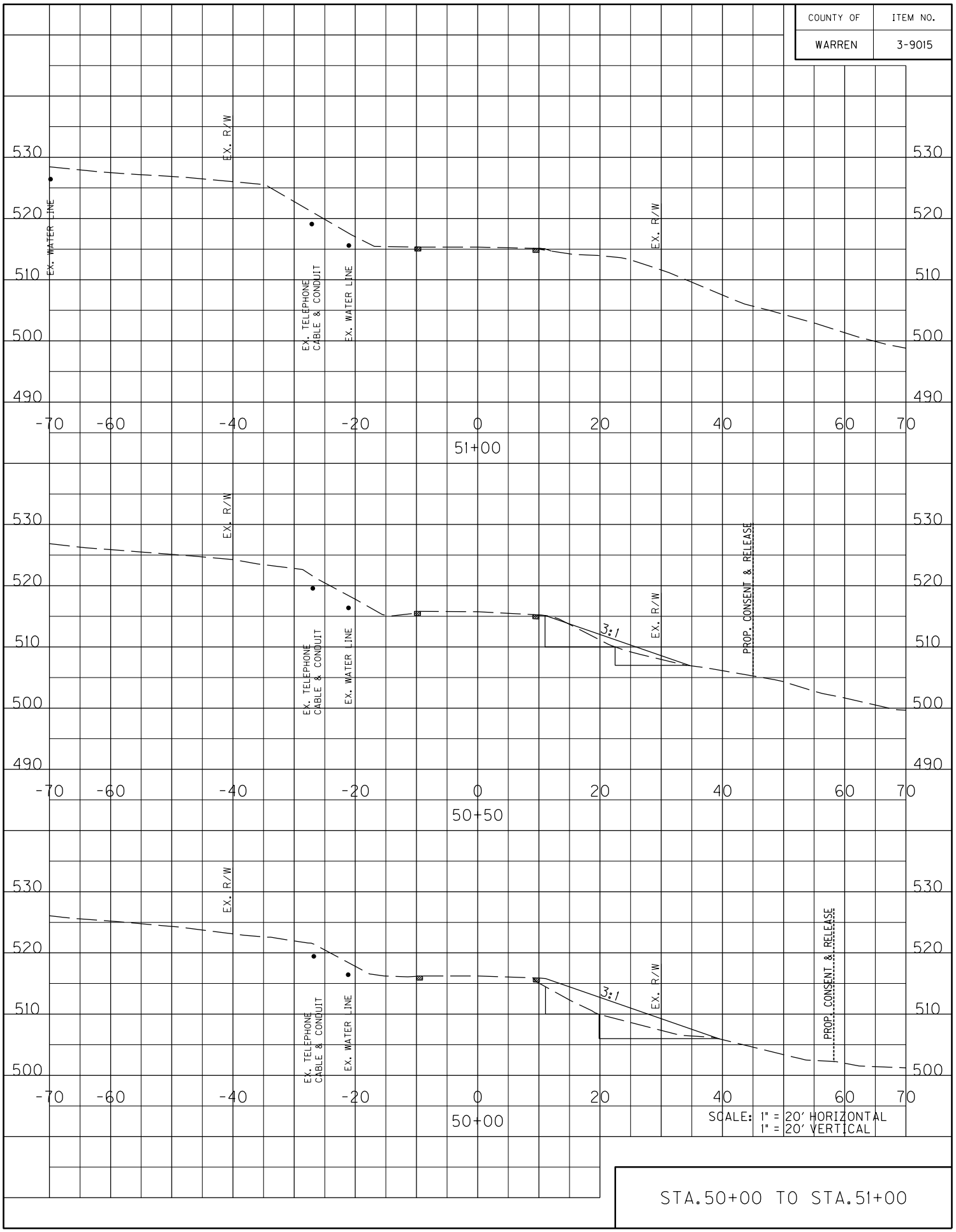
COUNTY OF	ITEM NO.
WARREN	3-9015



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

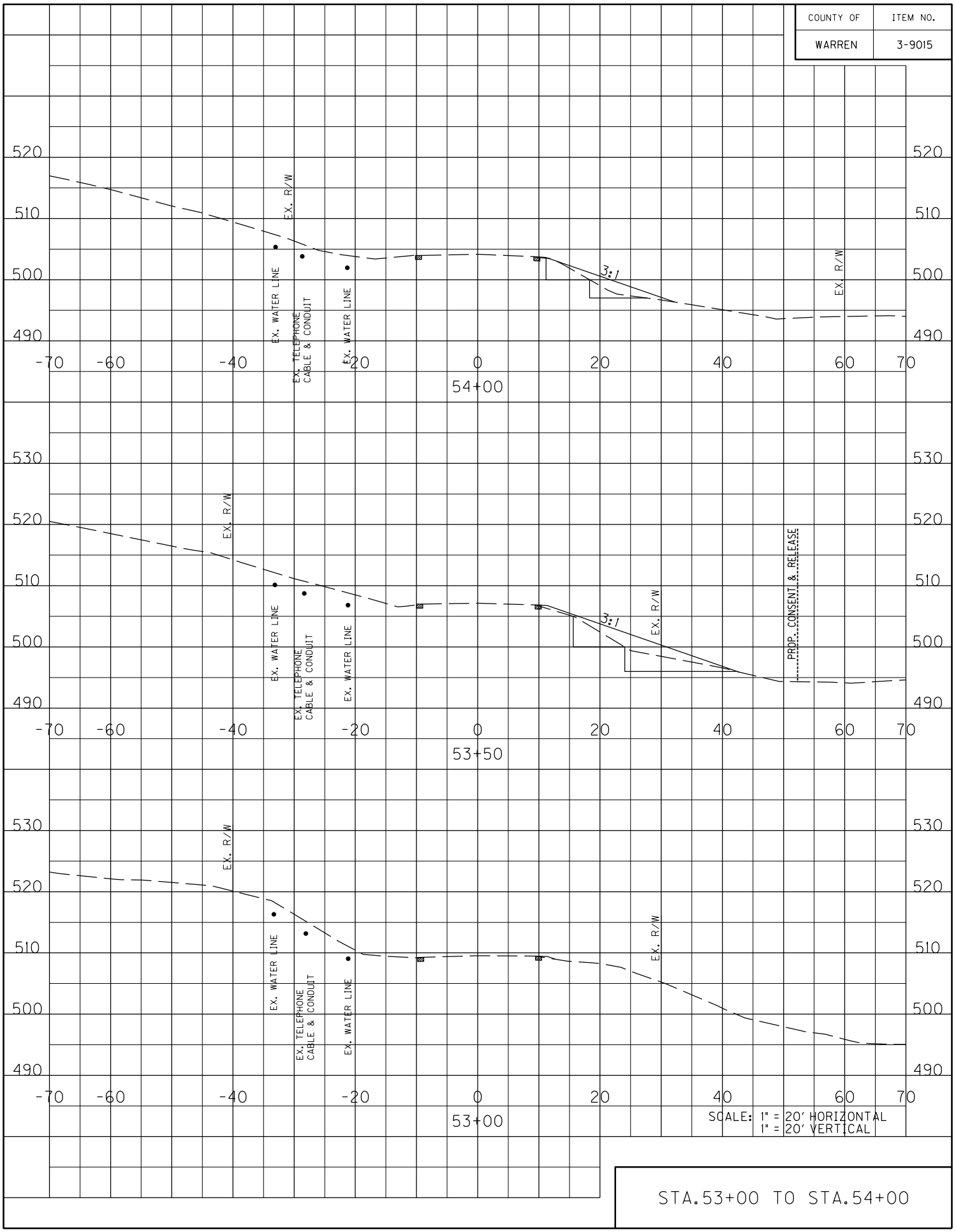
STA. 48+00 TO STA. 49+50

COUNTY OF	ITEM NO.
WARREN	3-9015



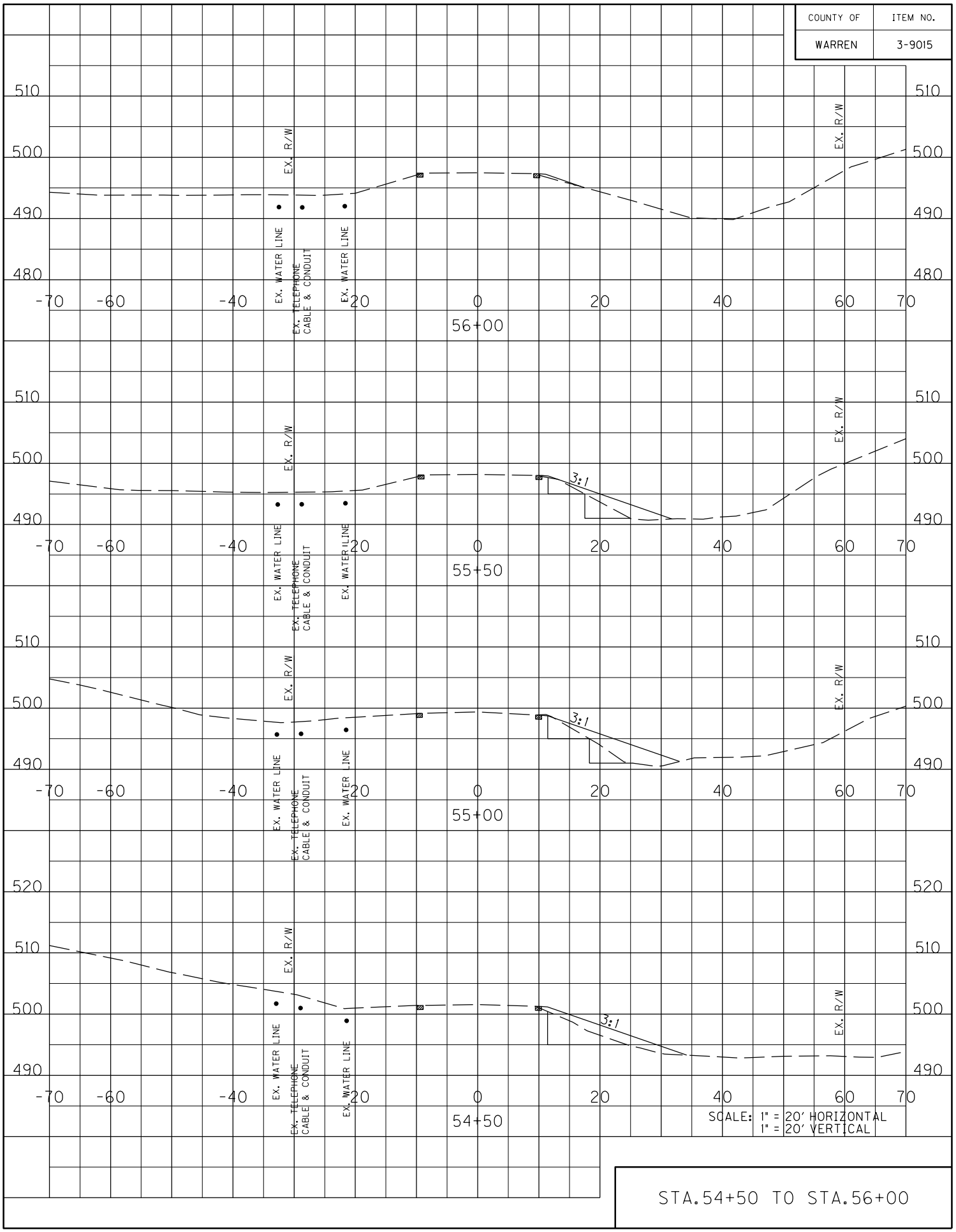
STA.50+00 TO STA.51+00

COUNTY OF	ITEM NO.
WARREN	3-9015



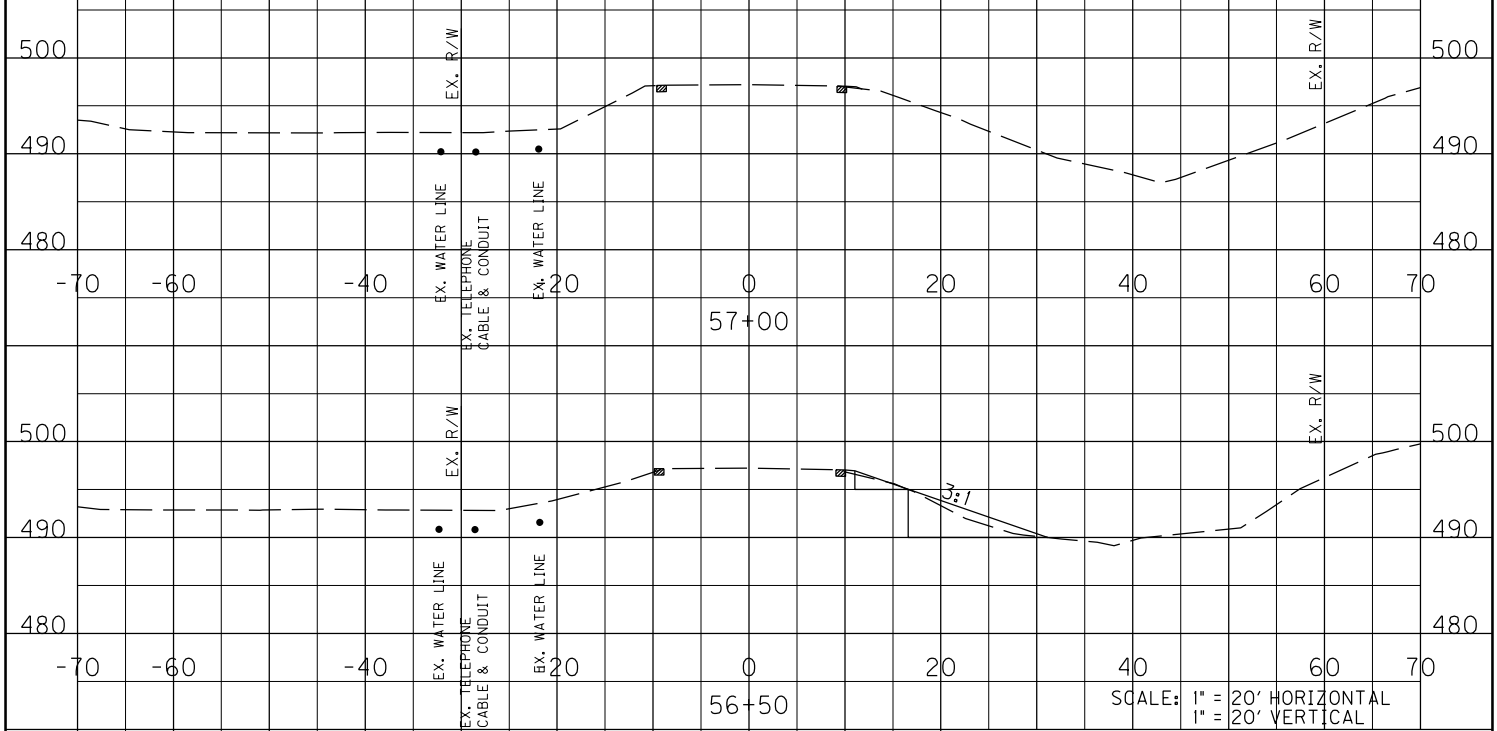
STA.53+00 TO STA.54+00

COUNTY OF	ITEM NO.
WARREN	3-9015



STA. 54+50 TO STA. 56+00

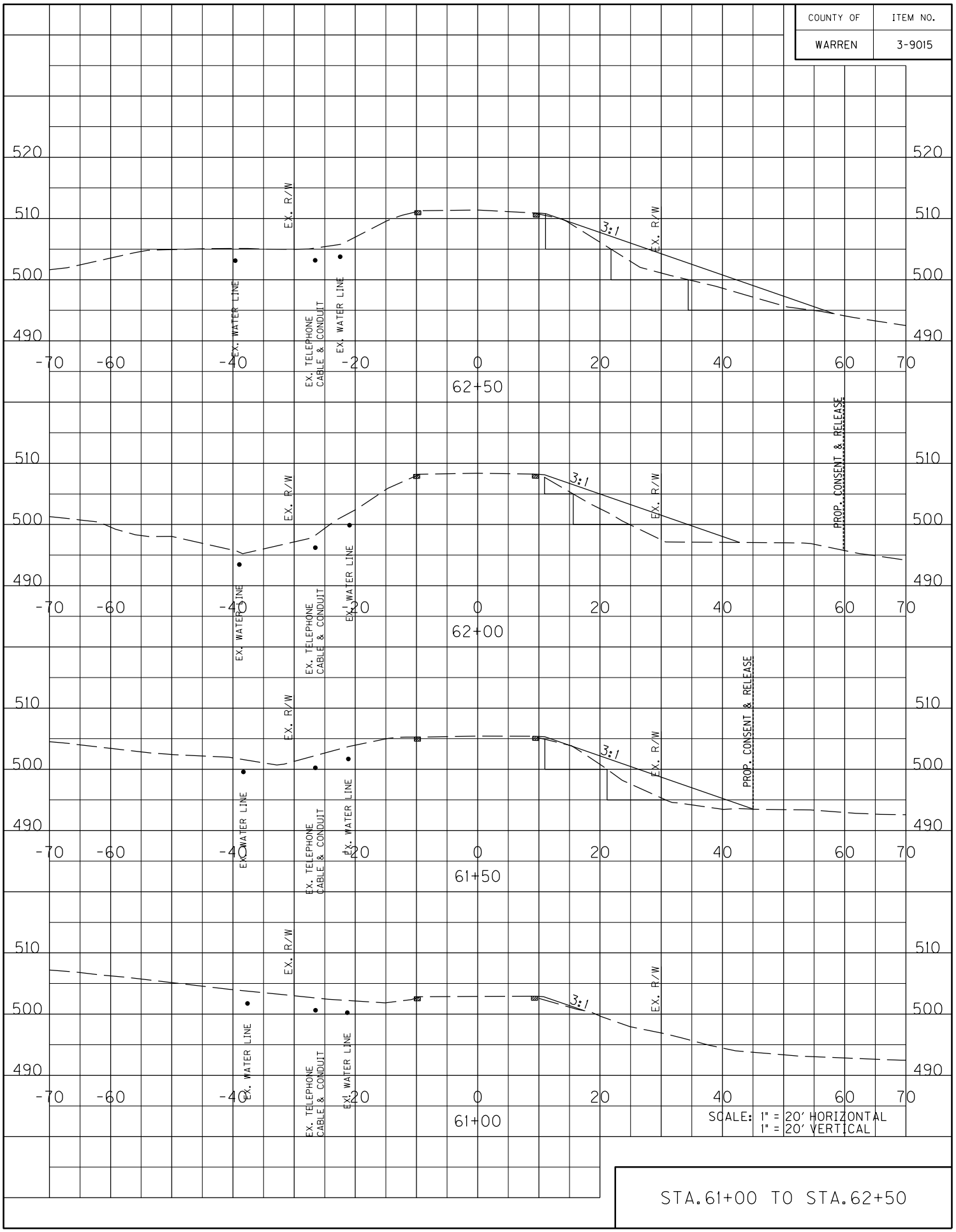
COUNTY OF	ITEM NO.
WARREN	3-9015



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

STA.56+50 TO STA.57+00

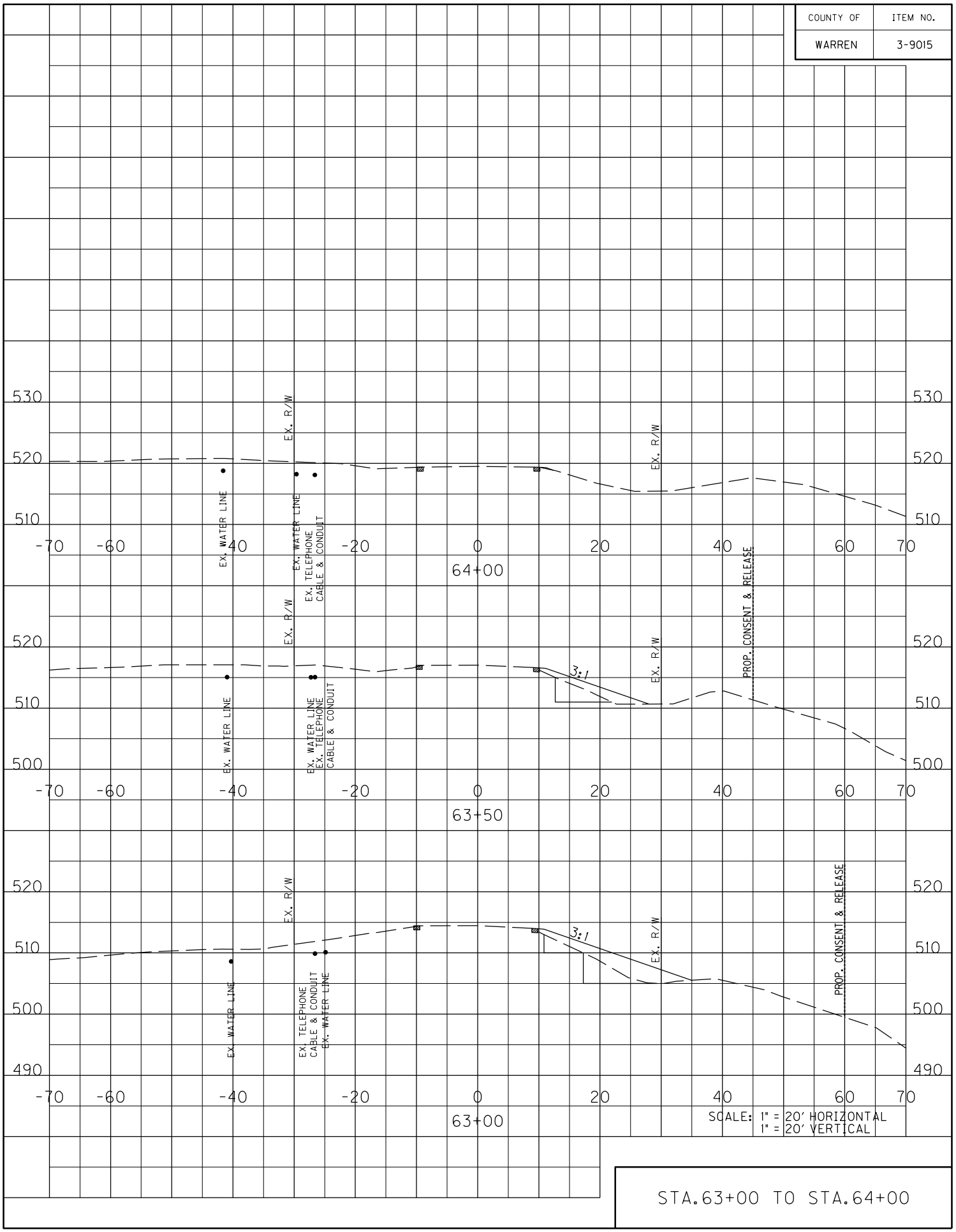
COUNTY OF	ITEM NO.
WARREN	3-9015



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

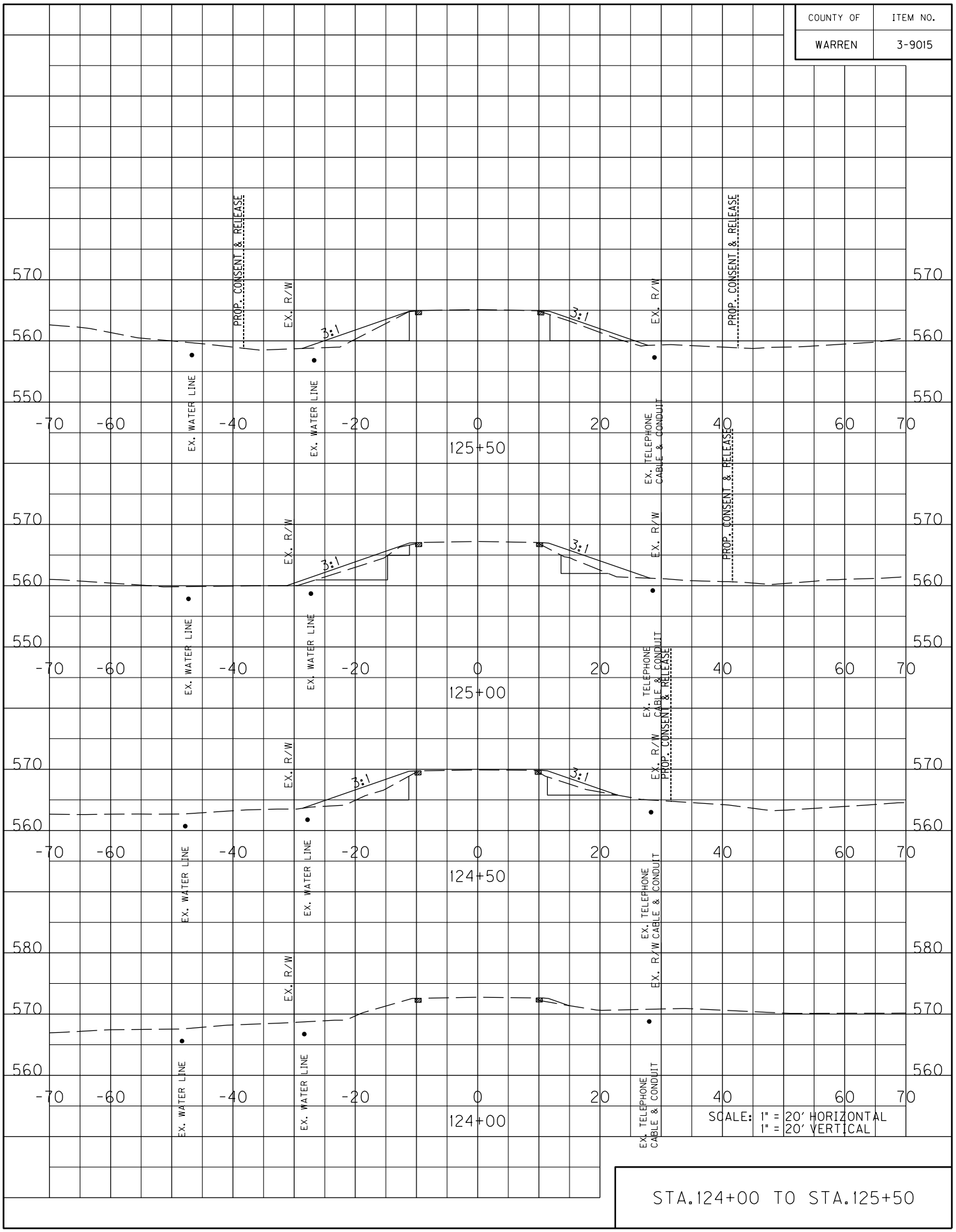
STA. 61+00 TO STA. 62+50

COUNTY OF	ITEM NO.
WARREN	3-9015

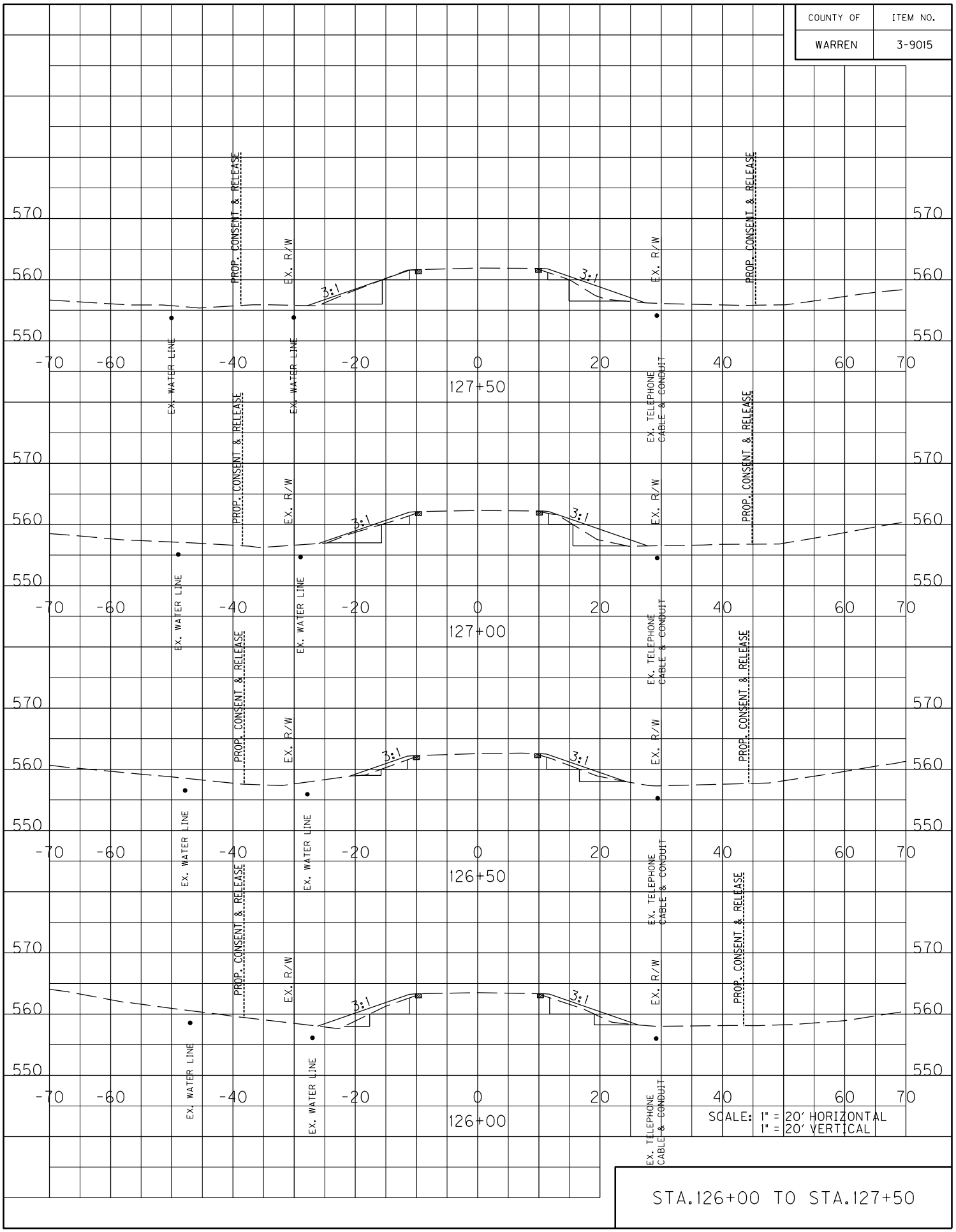


STA.63+00 TO STA.64+00

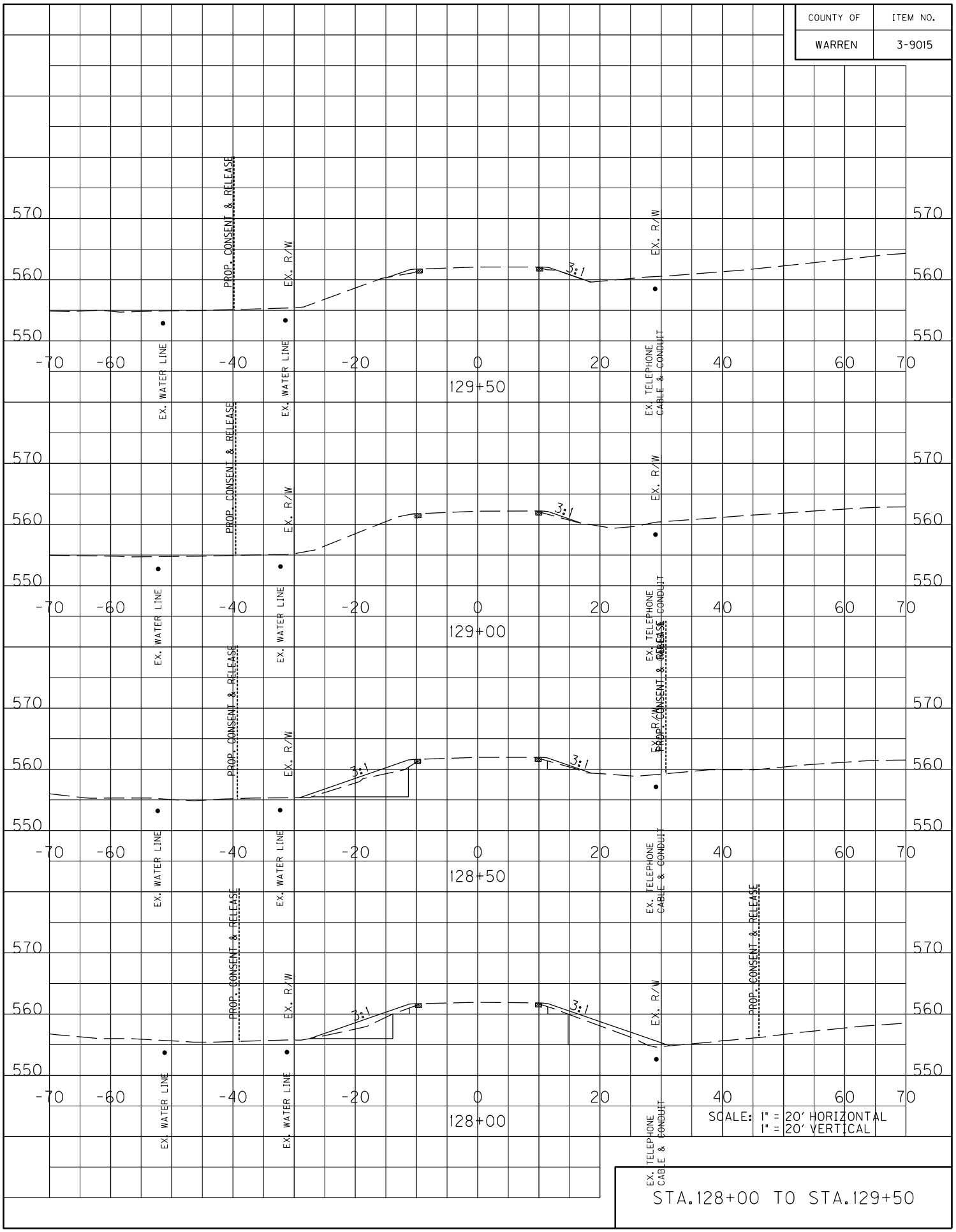
COUNTY OF	ITEM NO.
WARREN	3-9015



STA.124+00 TO STA.125+50

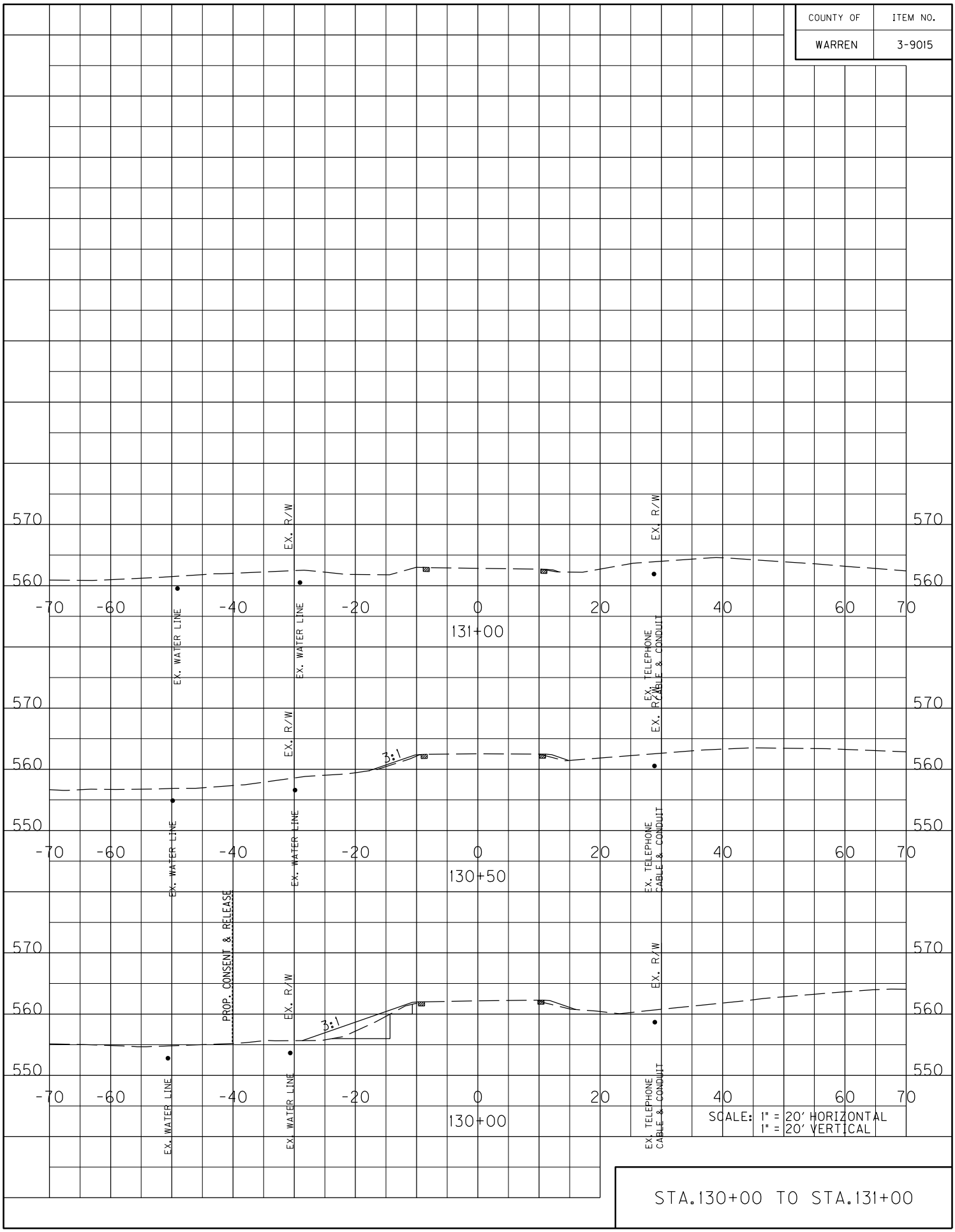

COUNTY OF
WARREN
ITEM NO.
3-9015
570
560
550
-70
-60
-40
-20
0
20
40
60
70
127+50
127+00
126+50
126+00
PROP. CONSENT & RELEASE
EX. R/W
EX. WATER LINE
EX. TELEPHONE CABLE & CONDUIT
3:1
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL
STA.126+00 TO STA.127+50

COUNTY OF	ITEM NO.
WARREN	3-9015

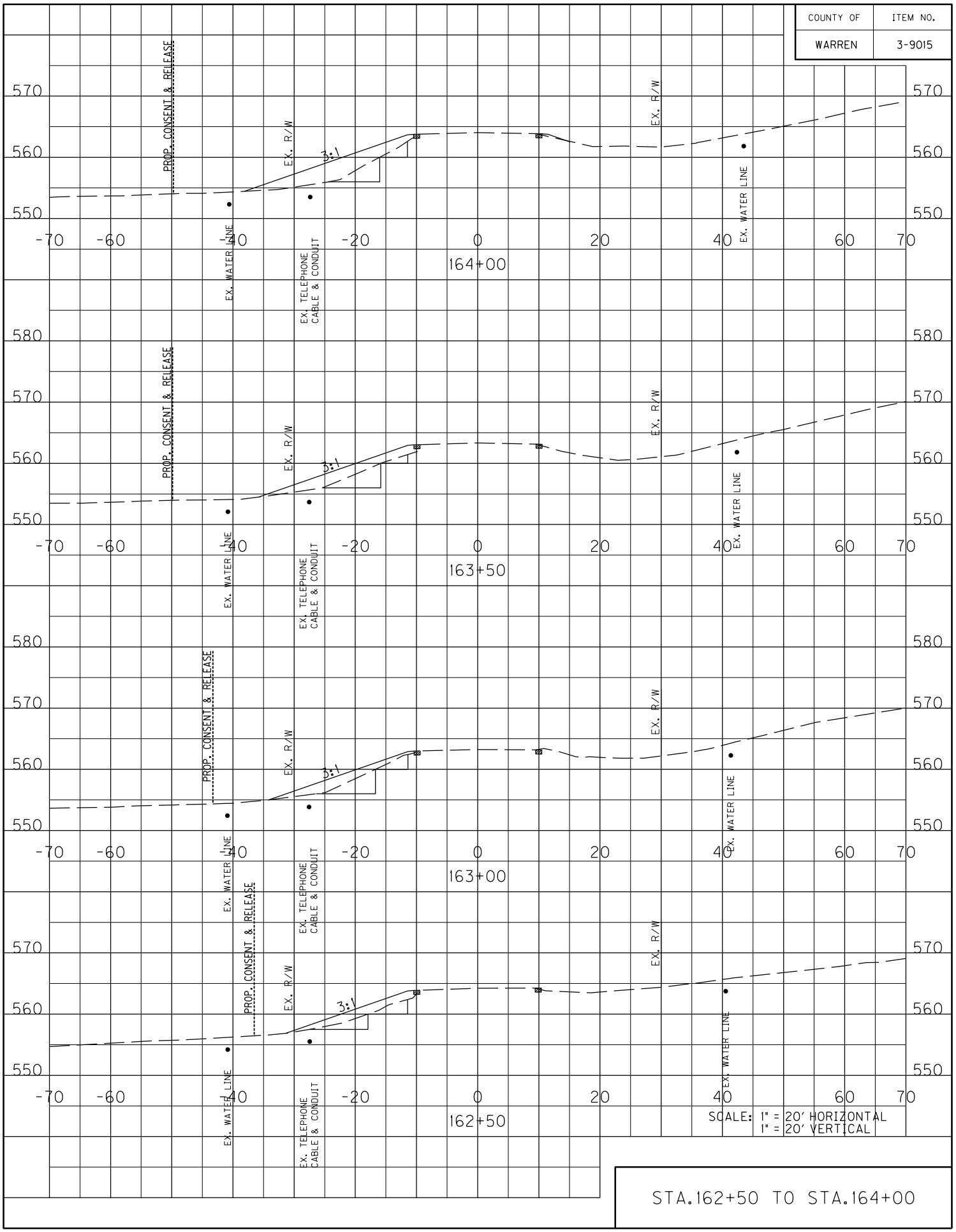


STA.128+00 TO STA.129+50

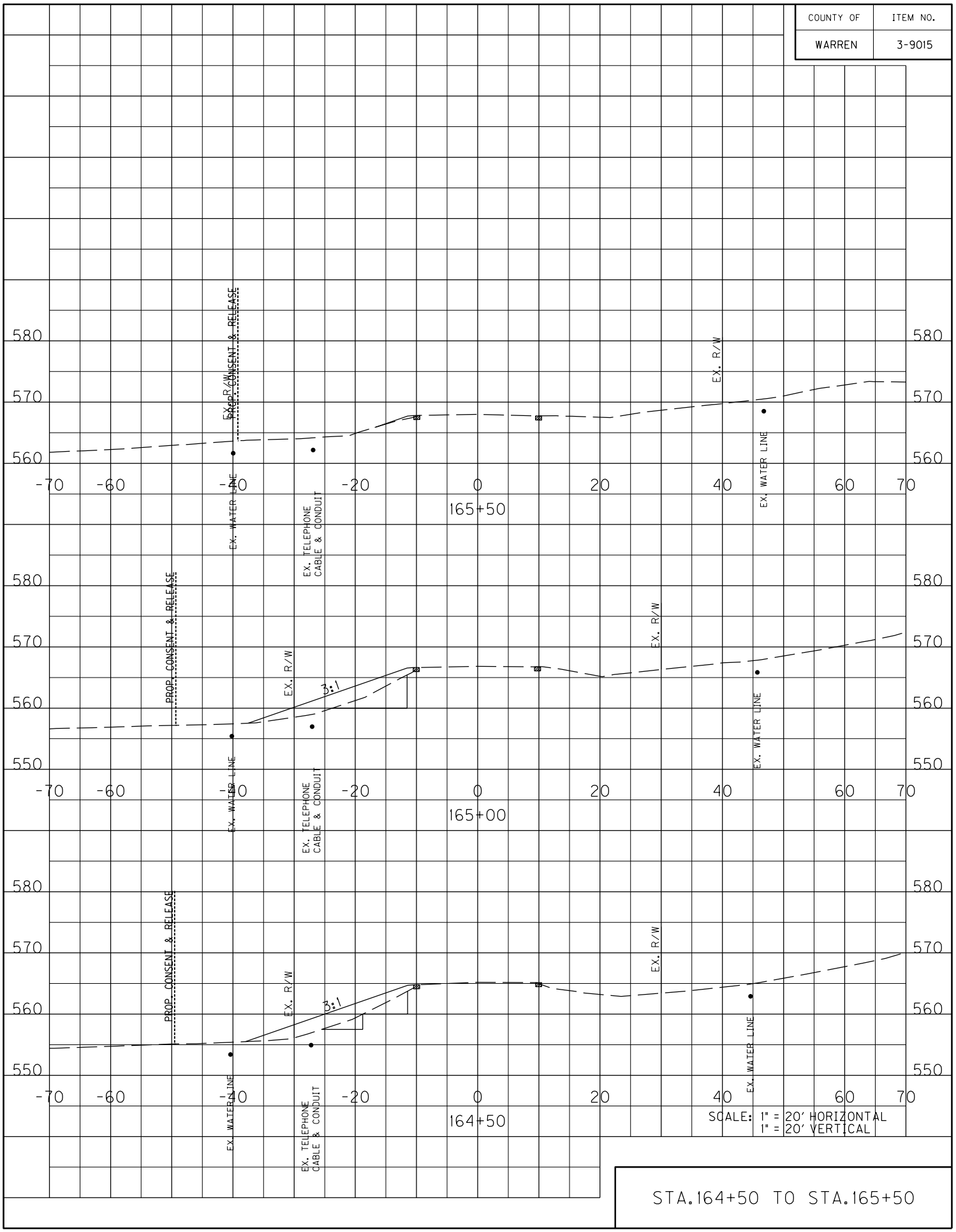
COUNTY OF	ITEM NO.
WARREN	3-9015



STA.130+00 TO STA.131+00

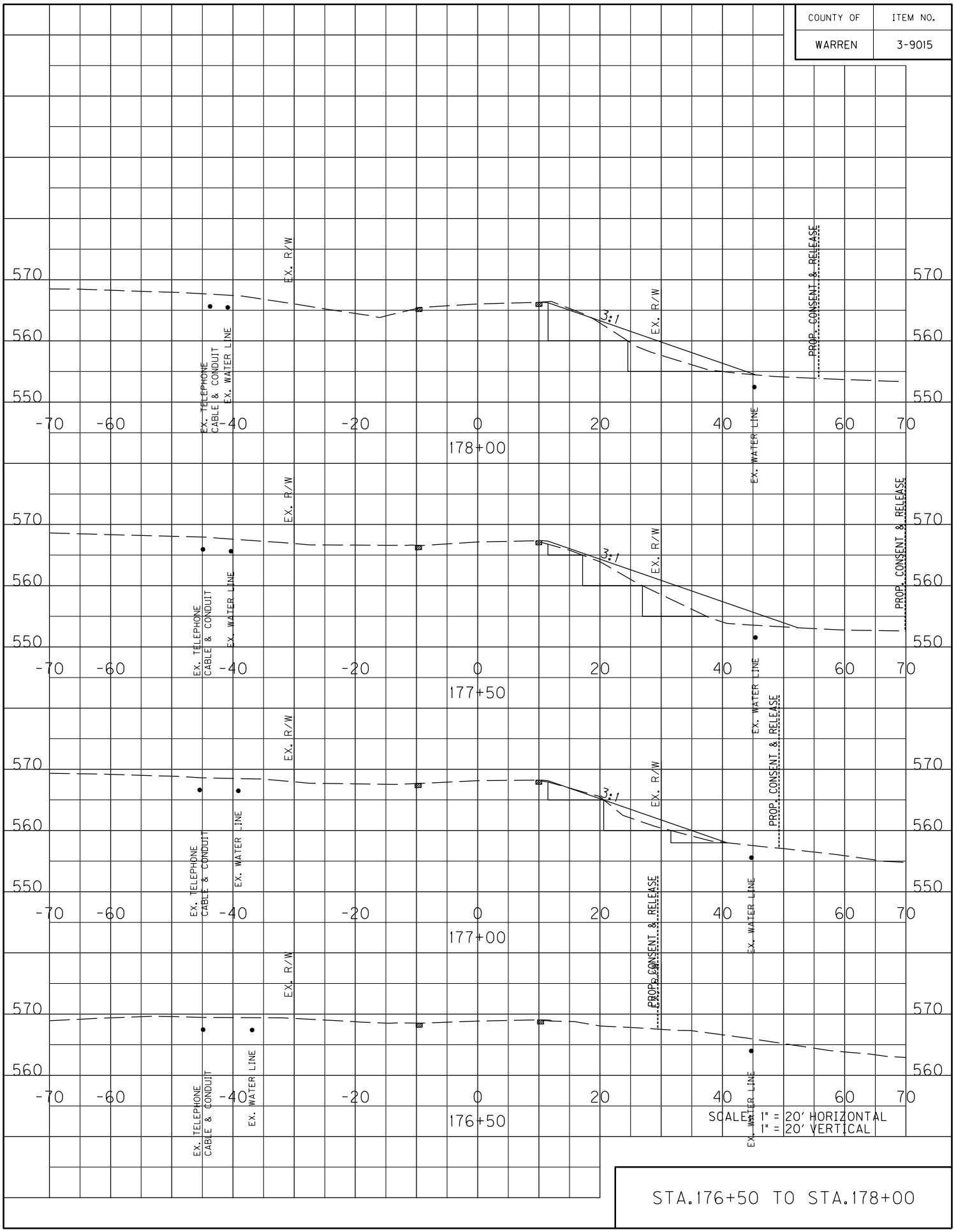

COUNTY OF
WARREN
ITEM NO.
3-9015
PROP. CONSENT & RELEASE
EX. R/W
3:1
EX. WATER LINE
EX. TELEPHONE CABLE & CONDUIT
570
560
550
580
-70
-60
-40
-20
0
20
40
60
70
164+00
163+50
163+00
162+50
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL
STA.162+50 TO STA.164+00

COUNTY OF	ITEM NO.
WARREN	3-9015



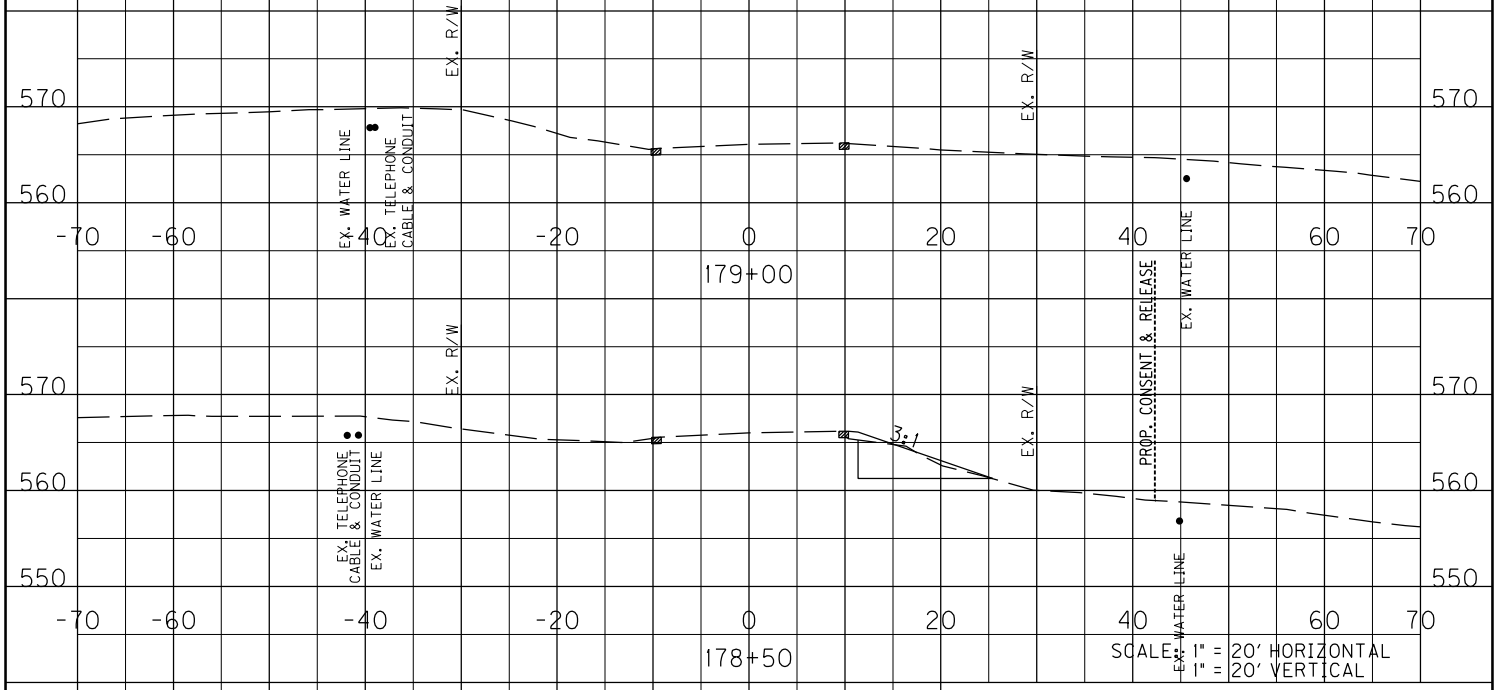
STA.164+50 TO STA.165+50

COUNTY OF	ITEM NO.
WARREN	3-9015



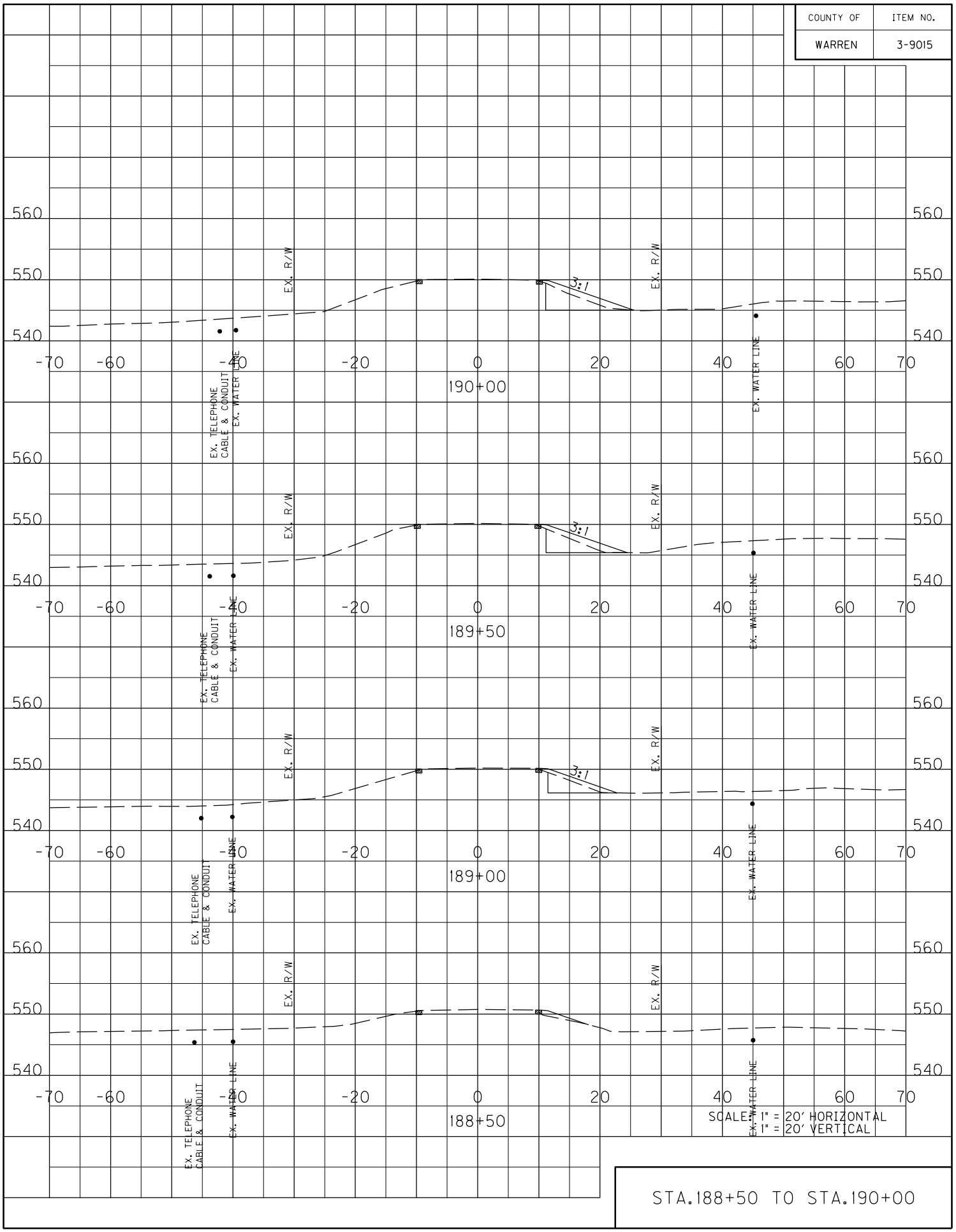
STA.176+50 TO STA.178+00

COUNTY OF	ITEM NO.
WARREN	3-9015



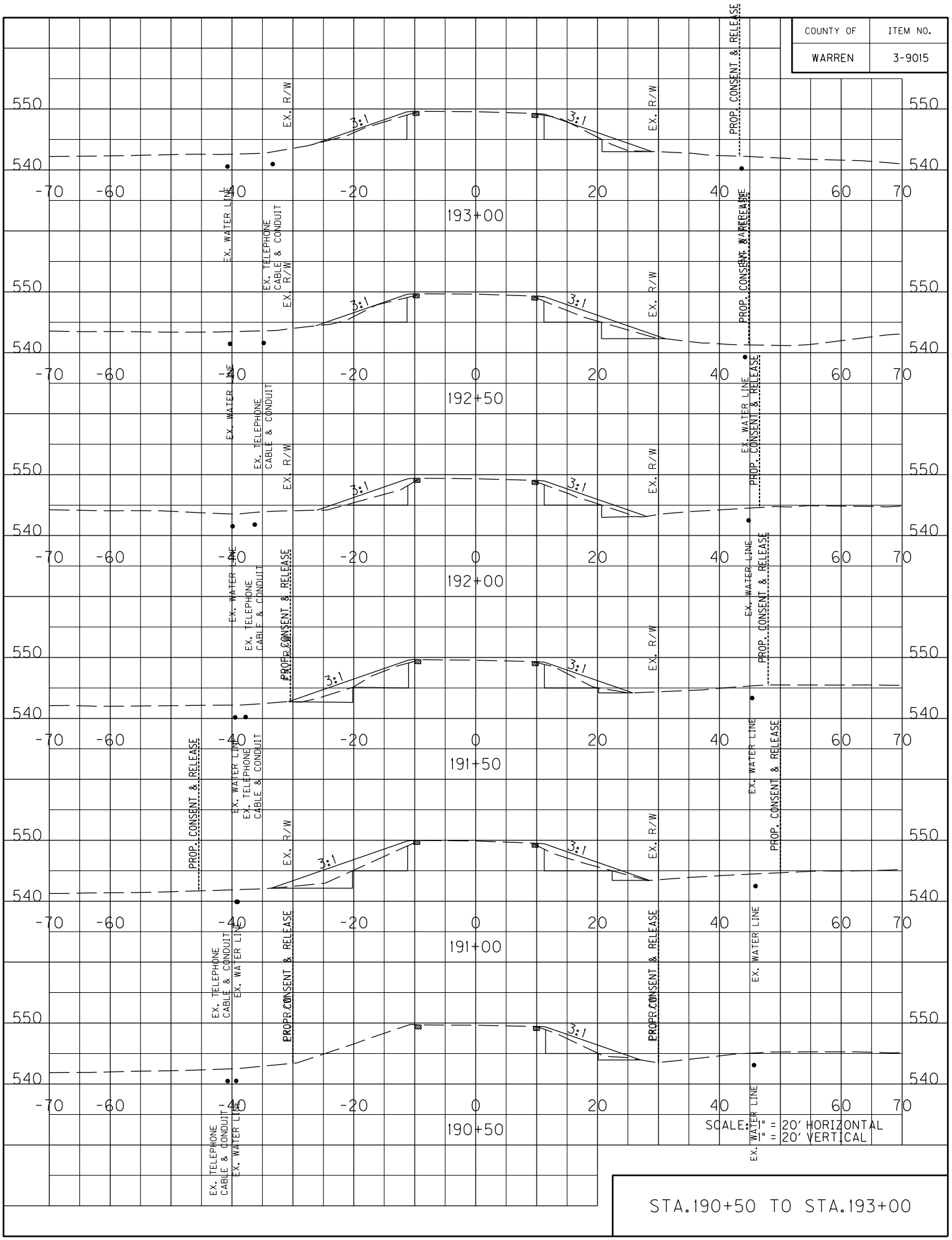
STA.178+50 TO STA.179+00

COUNTY OF	ITEM NO.
WARREN	3-9015



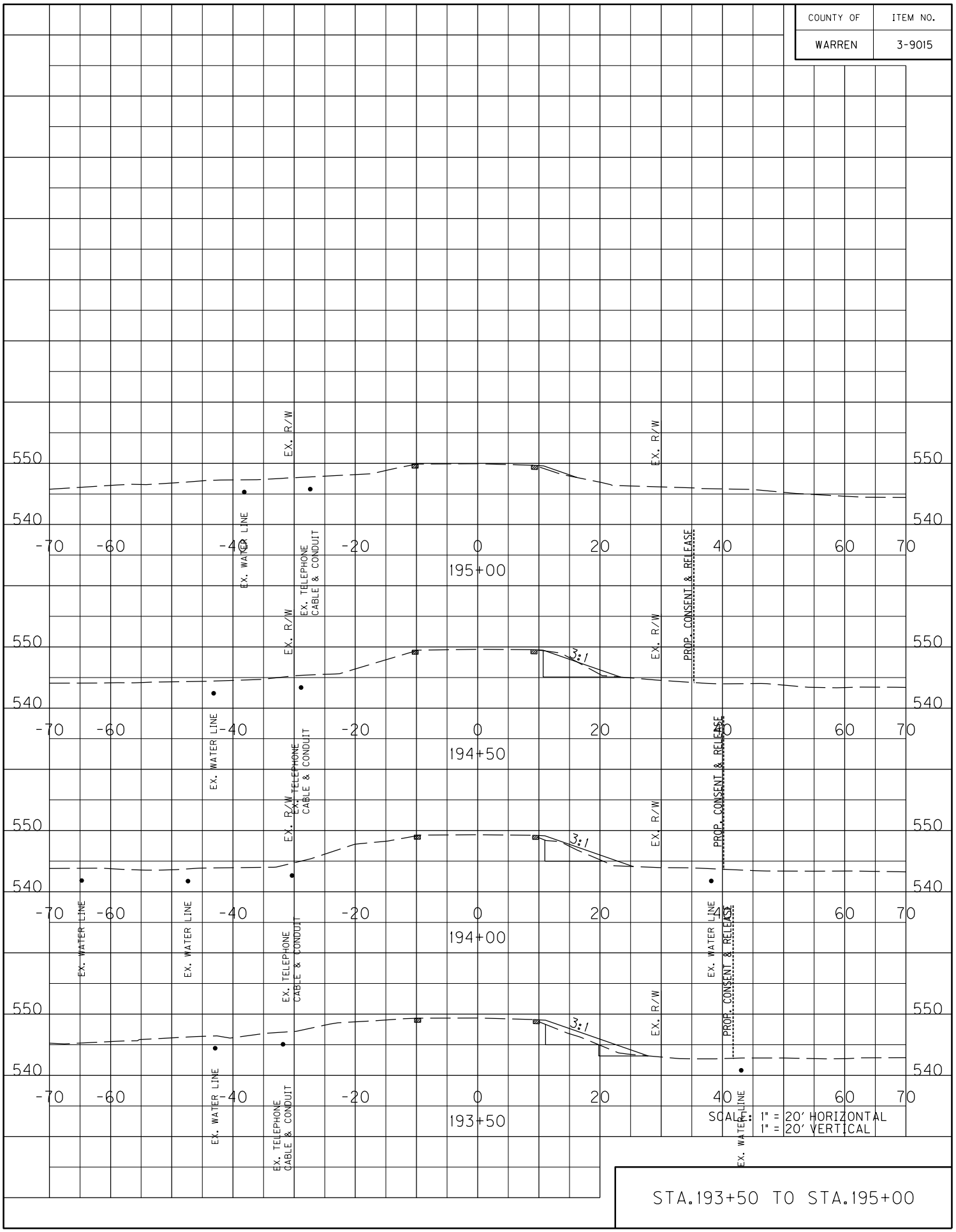
STA. 188+50 TO STA. 190+00

COUNTY OF	ITEM NO.
WARREN	3-9015



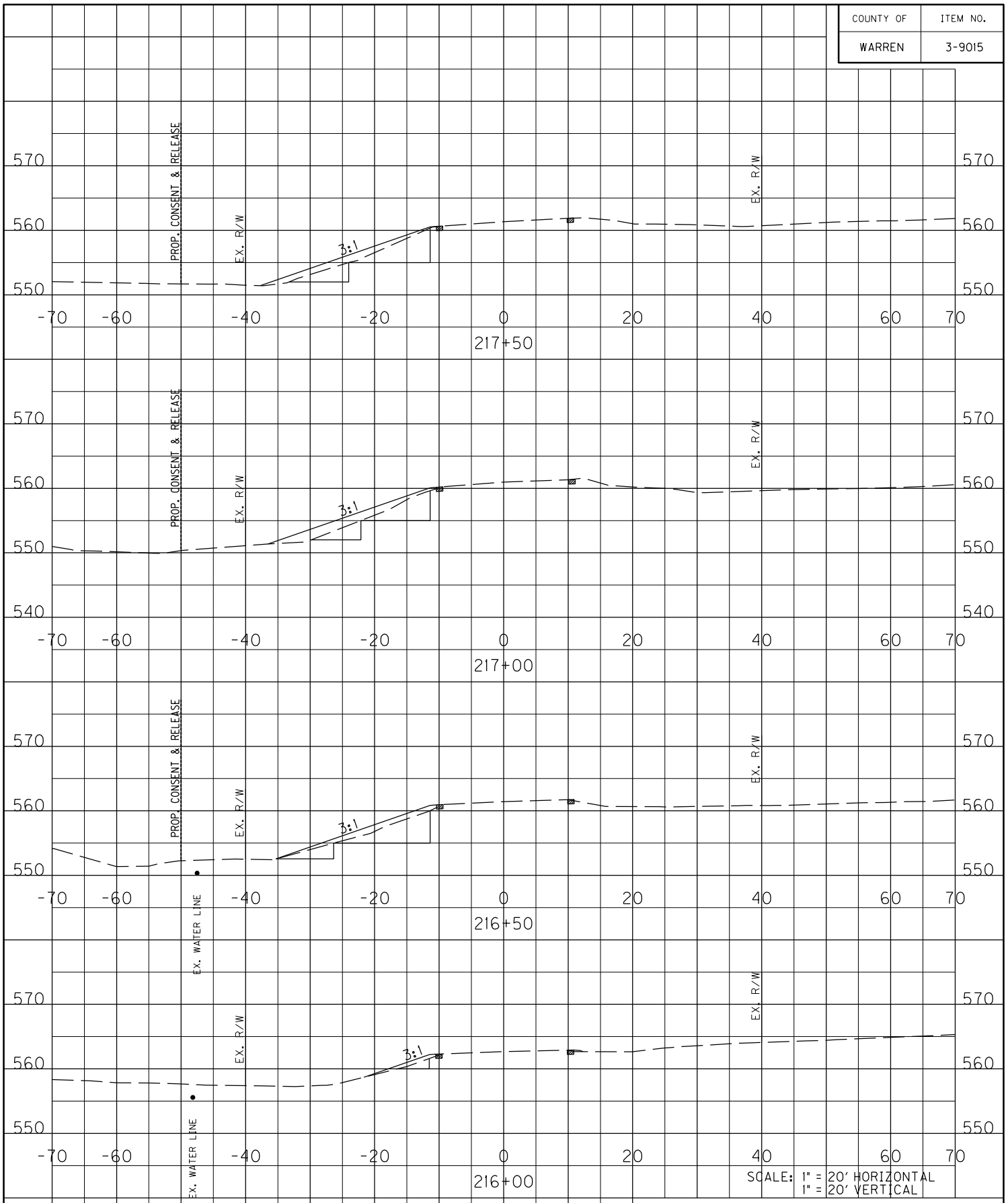
STA.190+50 TO STA.193+00

COUNTY OF	ITEM NO.
WARREN	3-9015



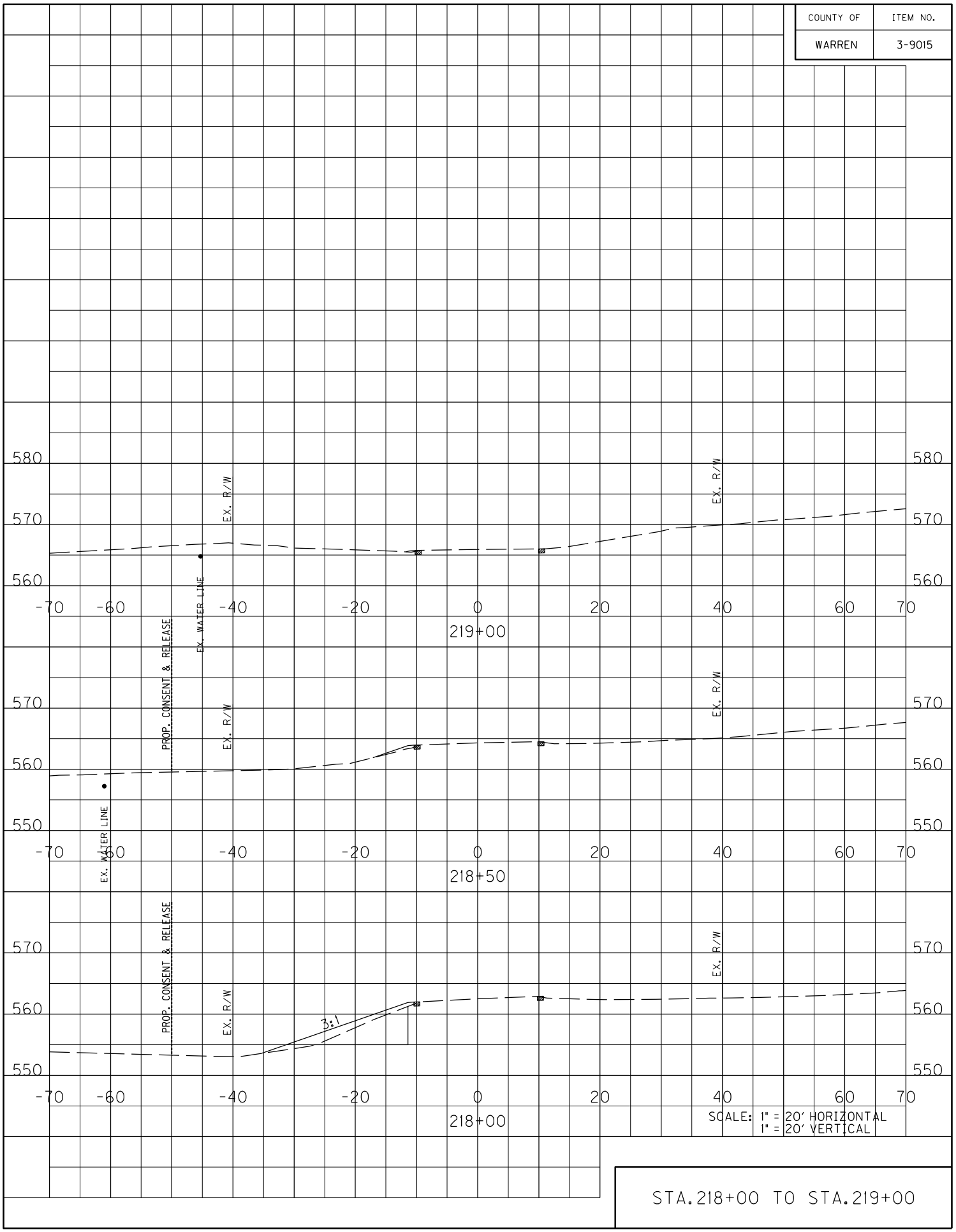
STA.193+50 TO STA.195+00

COUNTY OF	ITEM NO.
WARREN	3-9015



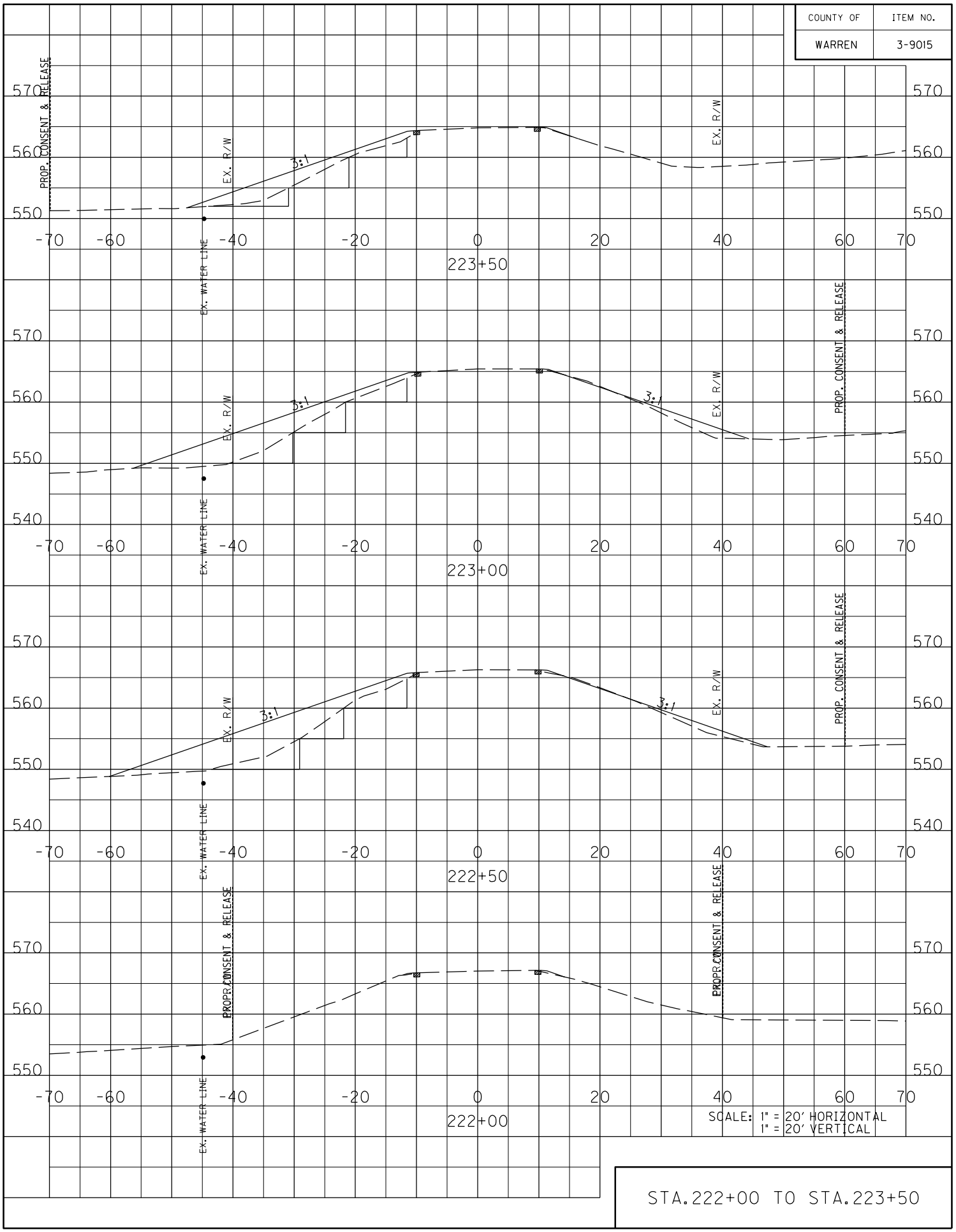
STA. 216+00 TO STA. 217+50

COUNTY OF	ITEM NO.
WARREN	3-9015



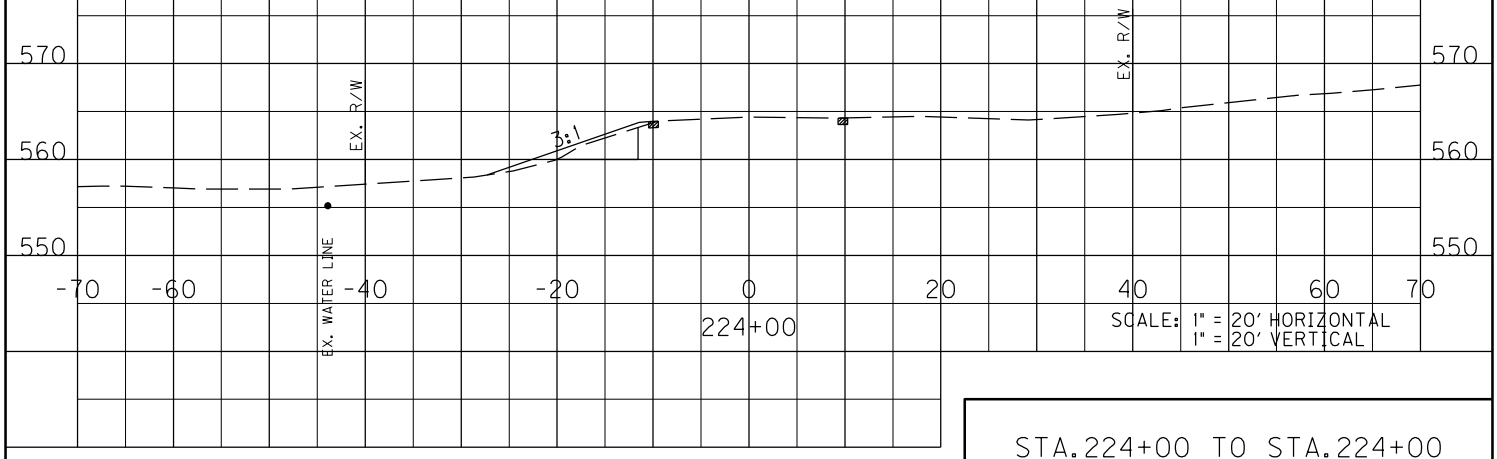
STA. 218+00 TO STA. 219+00

COUNTY OF	ITEM NO.
WARREN	3-9015



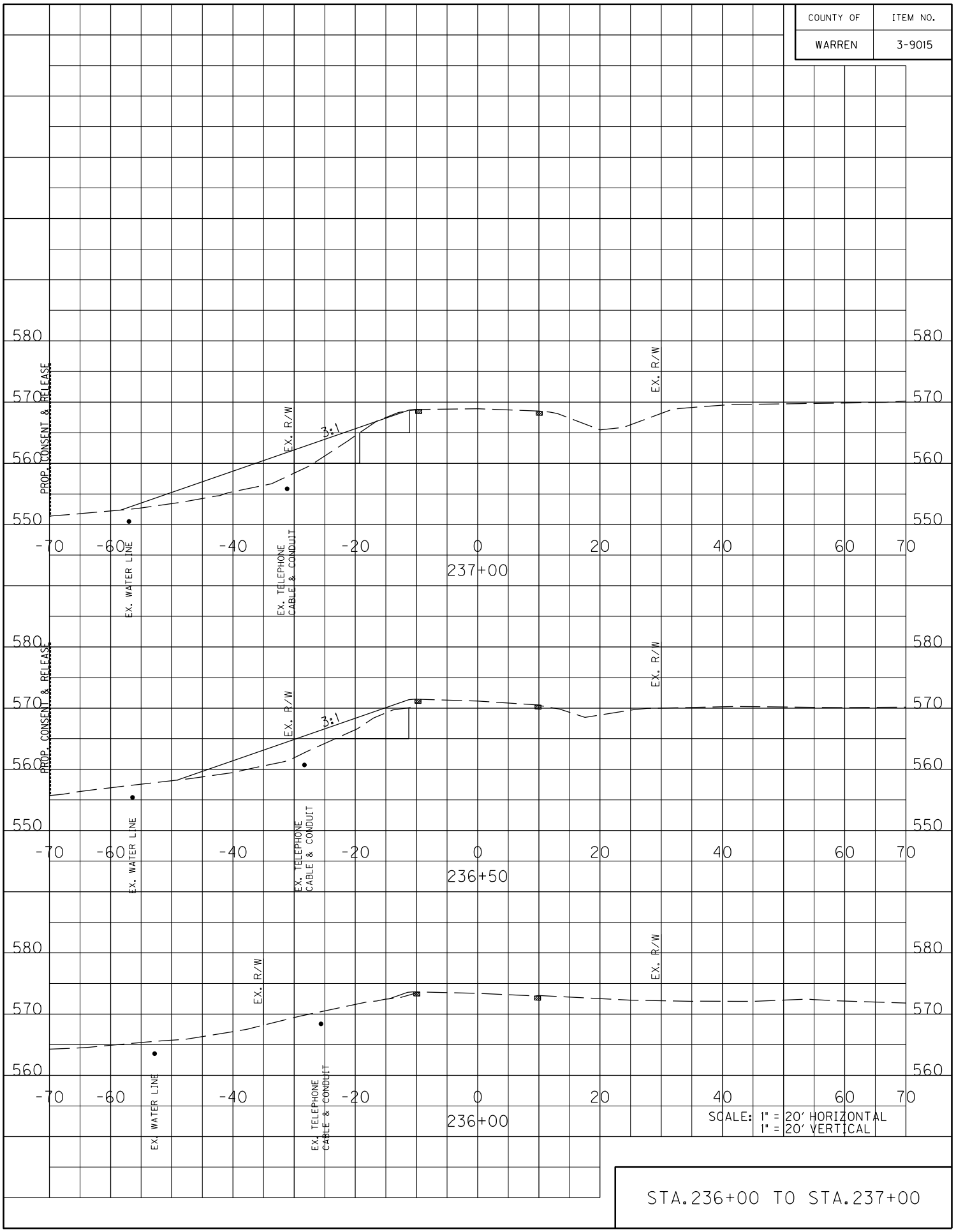
STA. 222+00 TO STA. 223+50

COUNTY OF	ITEM NO.
WARREN	3-9015



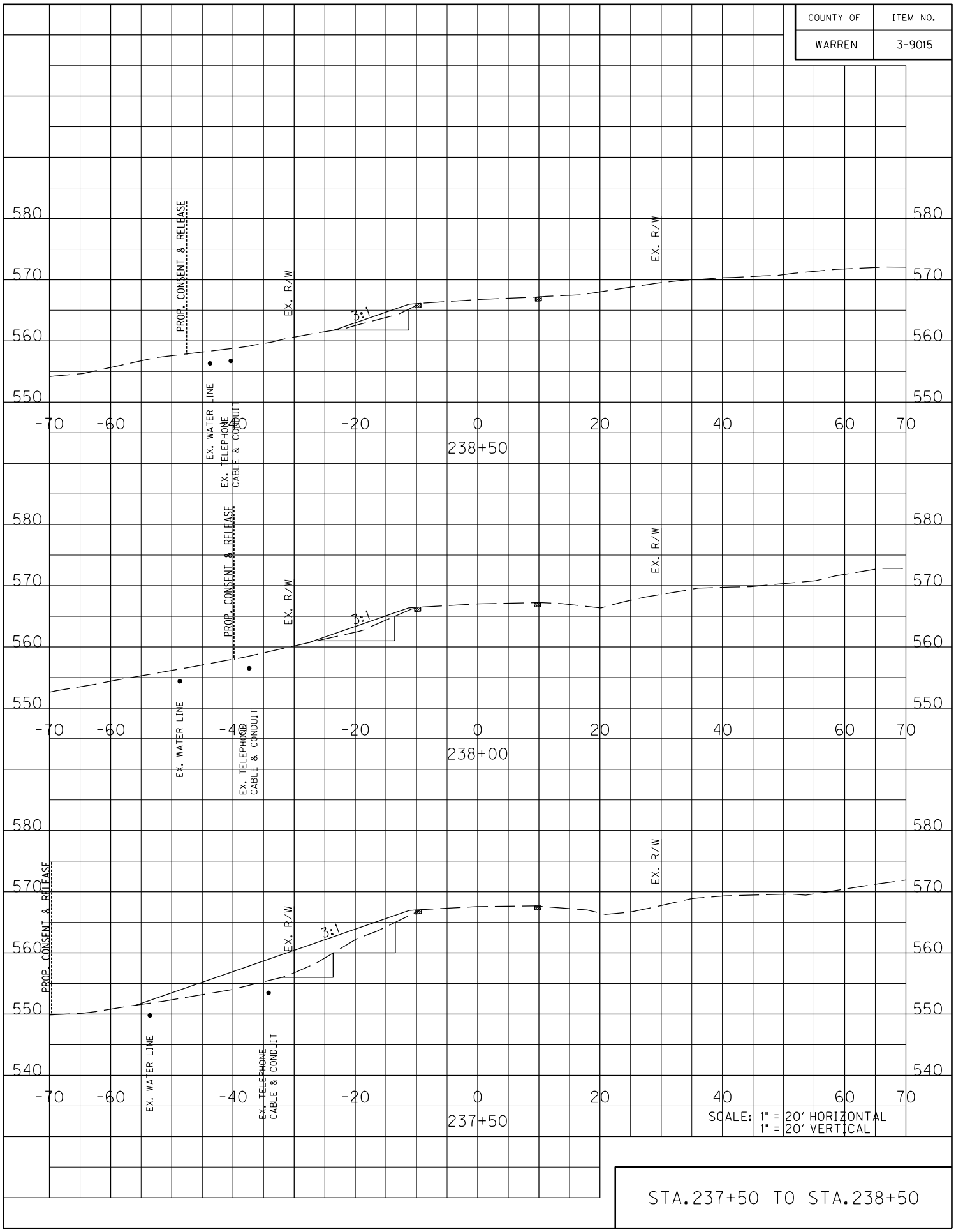
STA.224+00 TO STA.224+00

COUNTY OF	ITEM NO.
WARREN	3-9015



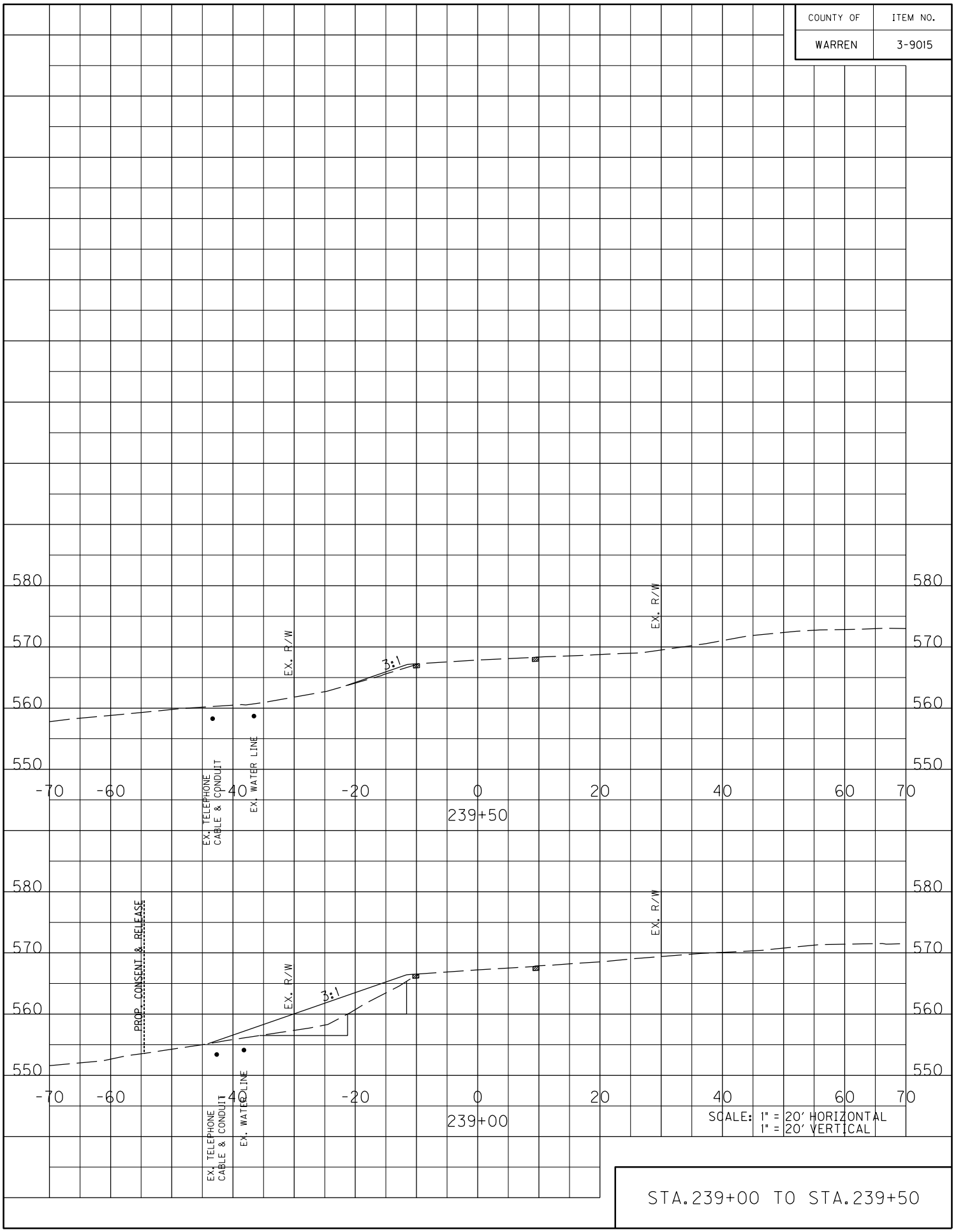
STA.236+00 TO STA.237+00

COUNTY OF	ITEM NO.
WARREN	3-9015



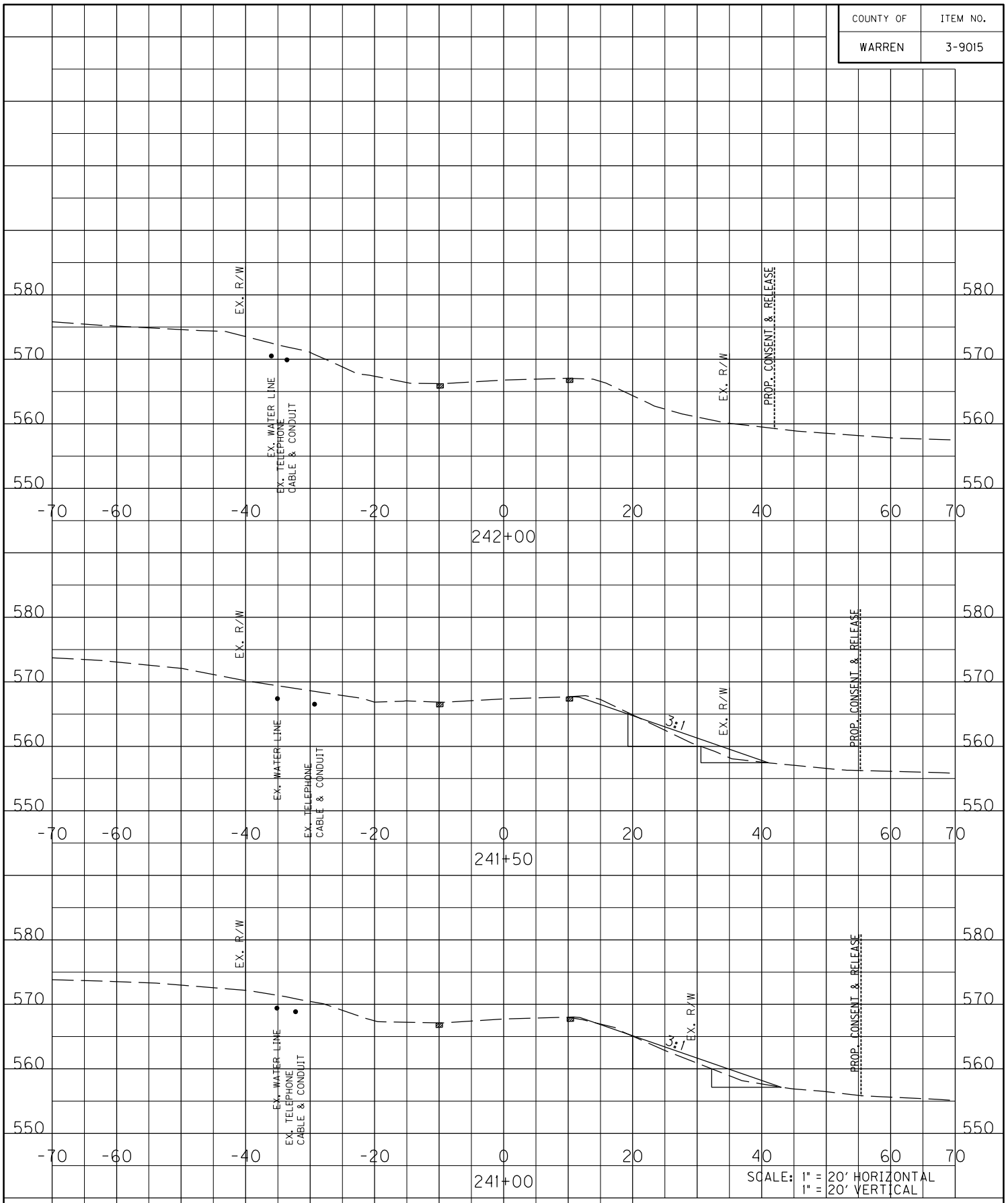
STA.237+50 TO STA.238+50

COUNTY OF	ITEM NO.
WARREN	3-9015



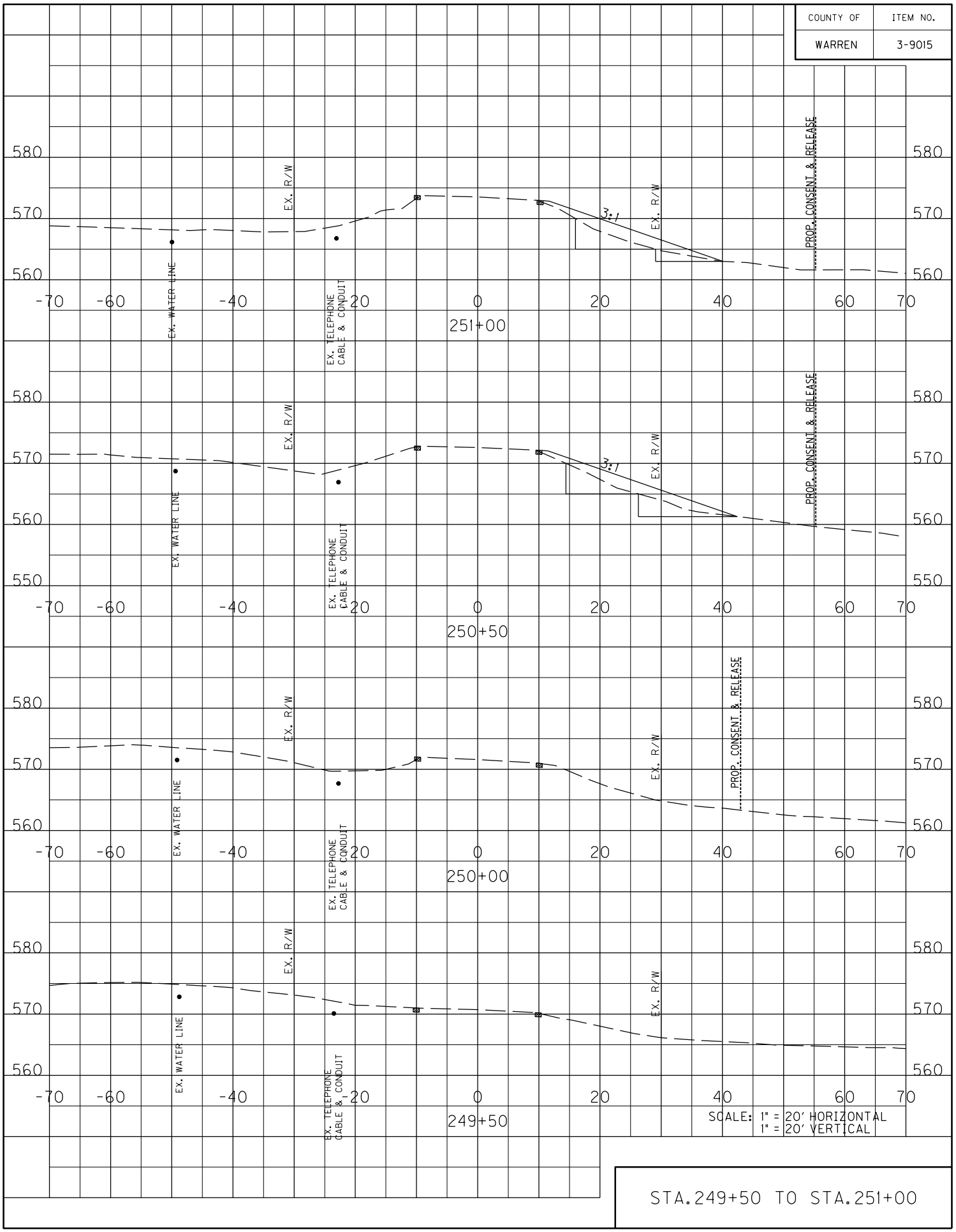
STA. 239+00 TO STA. 239+50

COUNTY OF	ITEM NO.
WARREN	3-9015



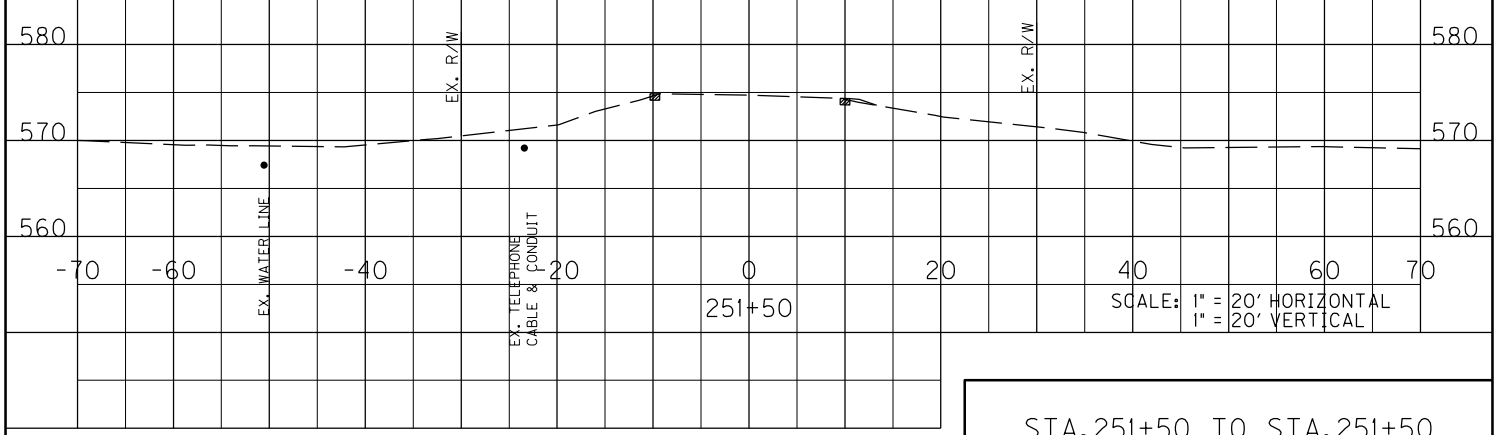
STA. 241+00 TO STA. 242+00

COUNTY OF	ITEM NO.
WARREN	3-9015



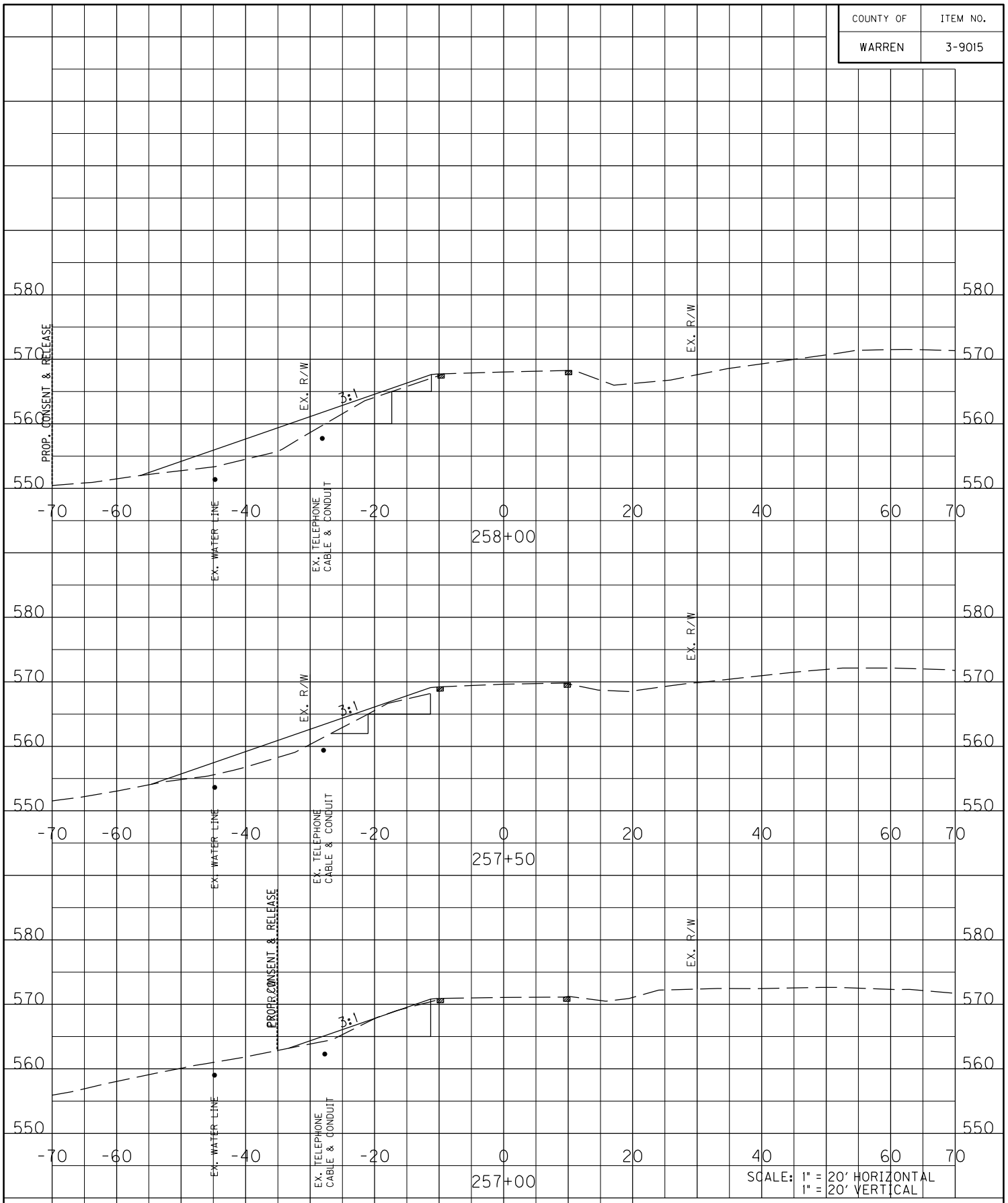
STA.249+50 TO STA.251+00

COUNTY OF	ITEM NO.
WARREN	3-9015



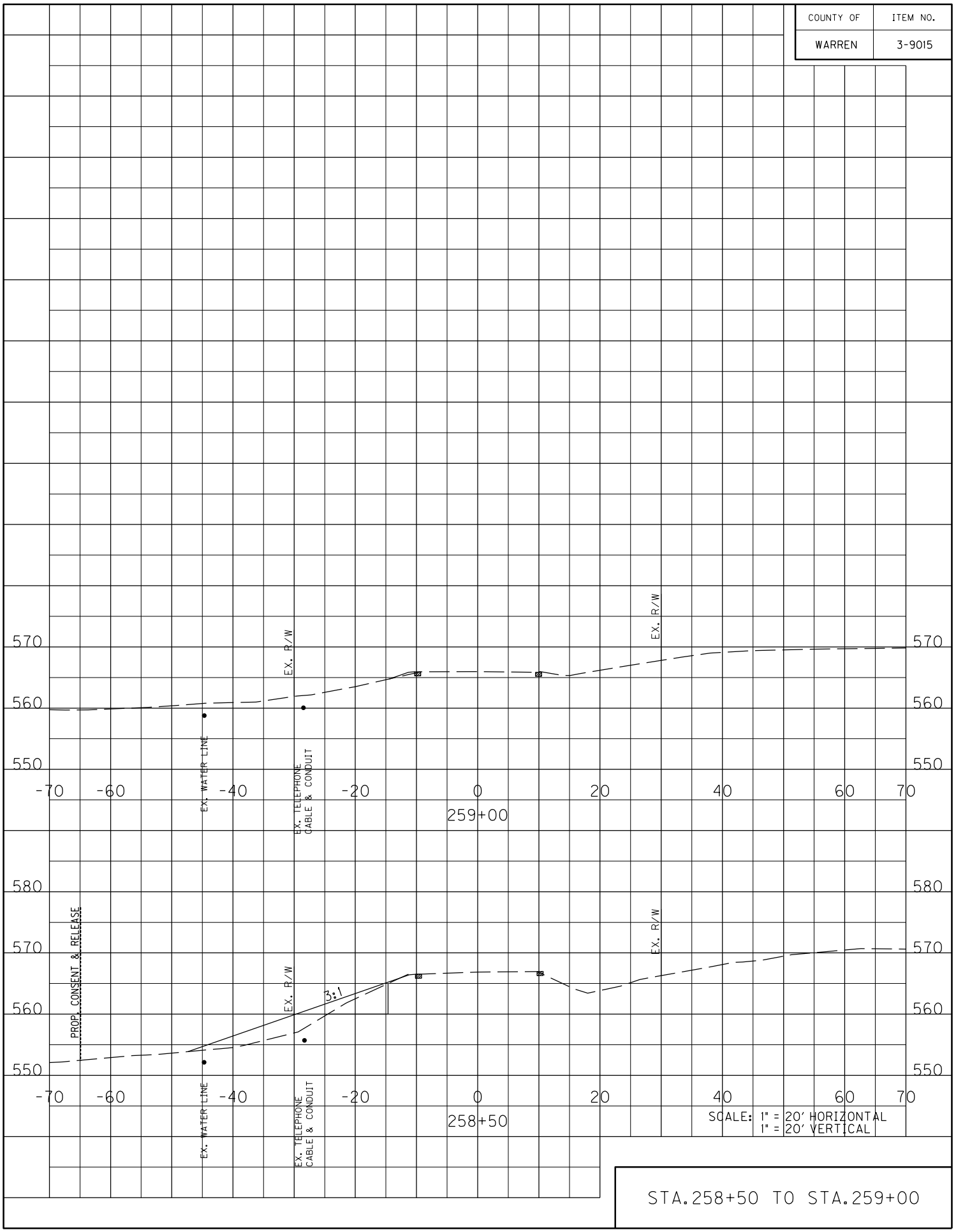
STA. 251+50 TO STA. 251+50

COUNTY OF	ITEM NO.
WARREN	3-9015



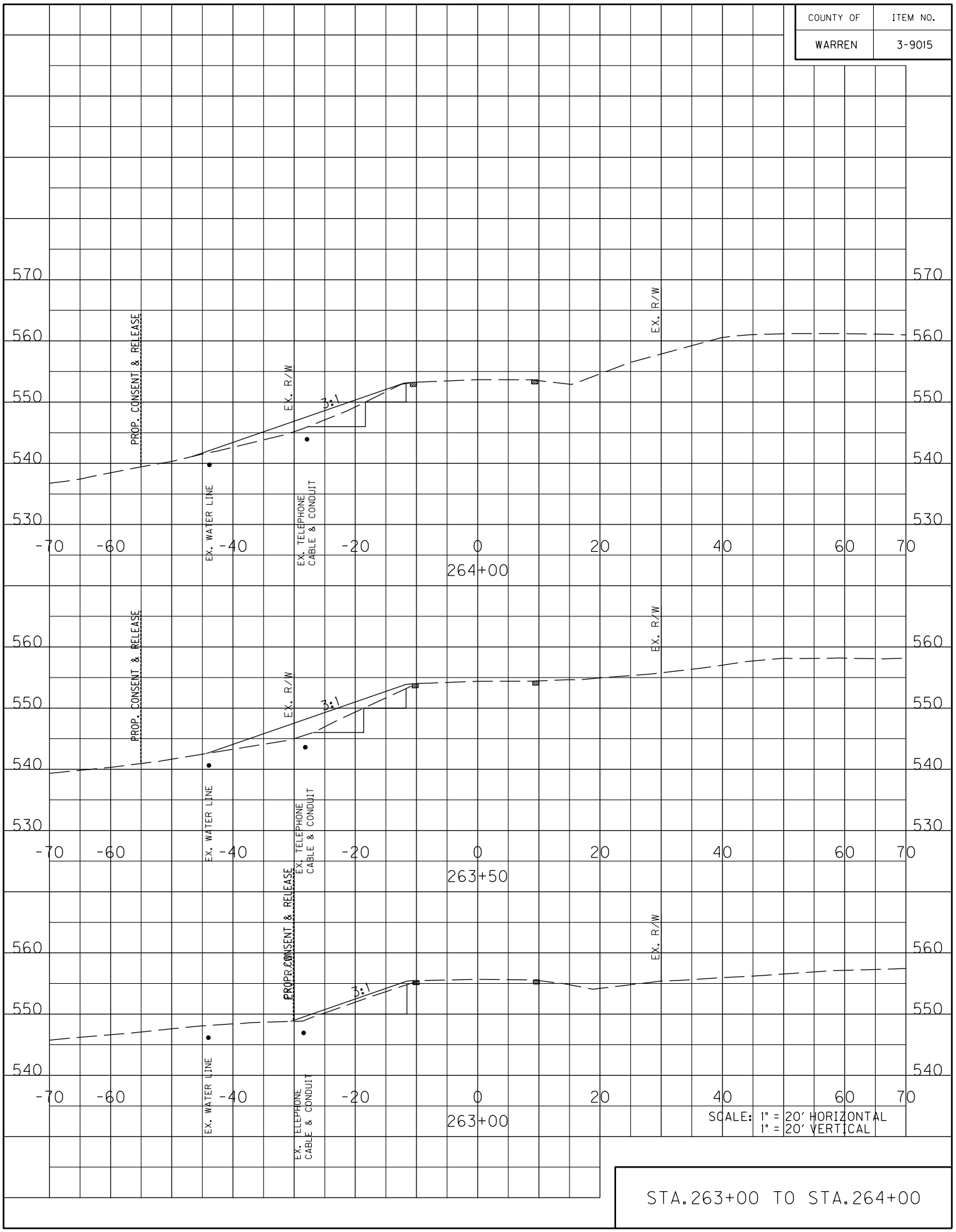
STA.257+00 TO STA.258+00

COUNTY OF	ITEM NO.
WARREN	3-9015



STA. 258+50 TO STA. 259+00

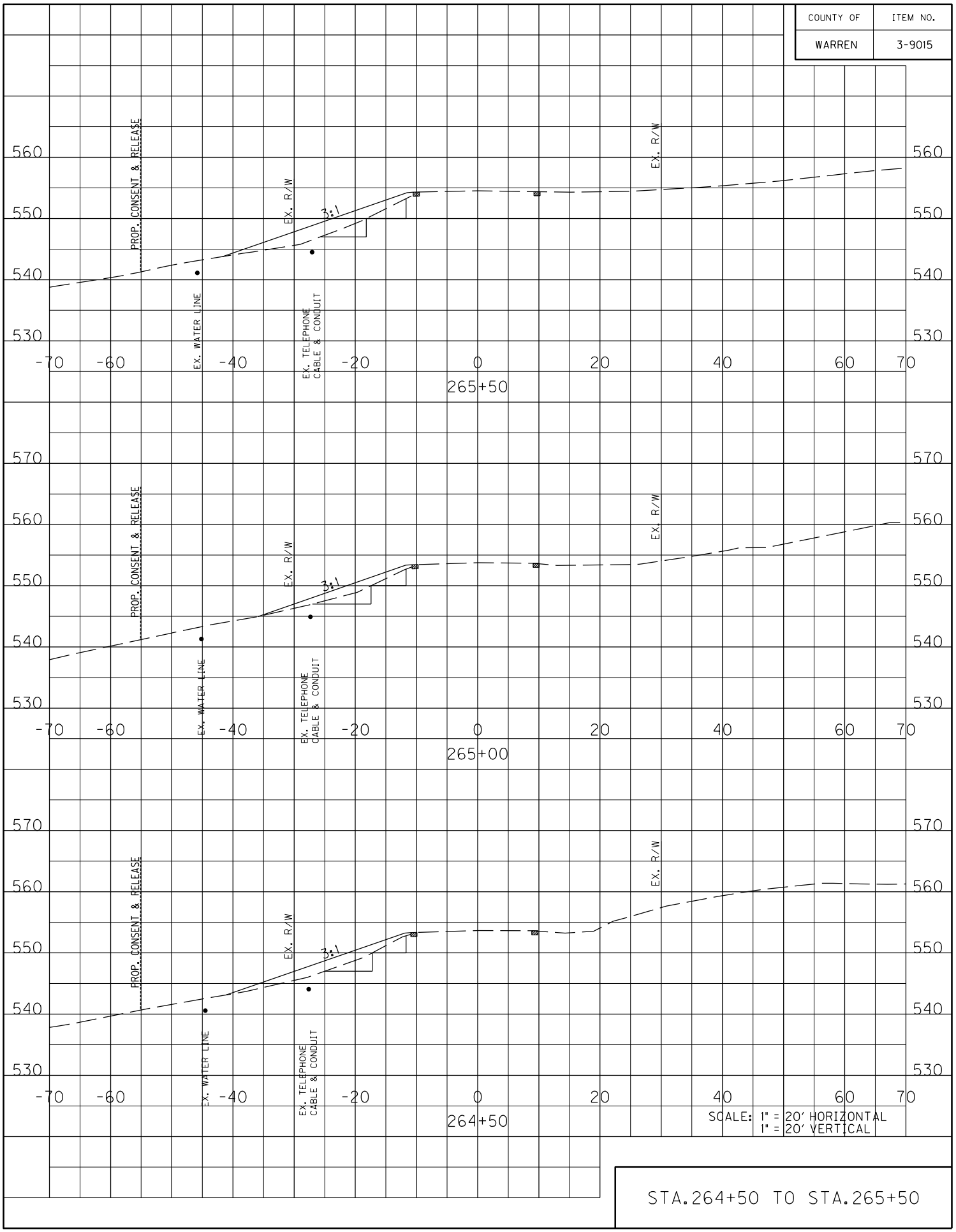
COUNTY OF	ITEM NO.
WARREN	3-9015



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

STA.263+00 TO STA.264+00

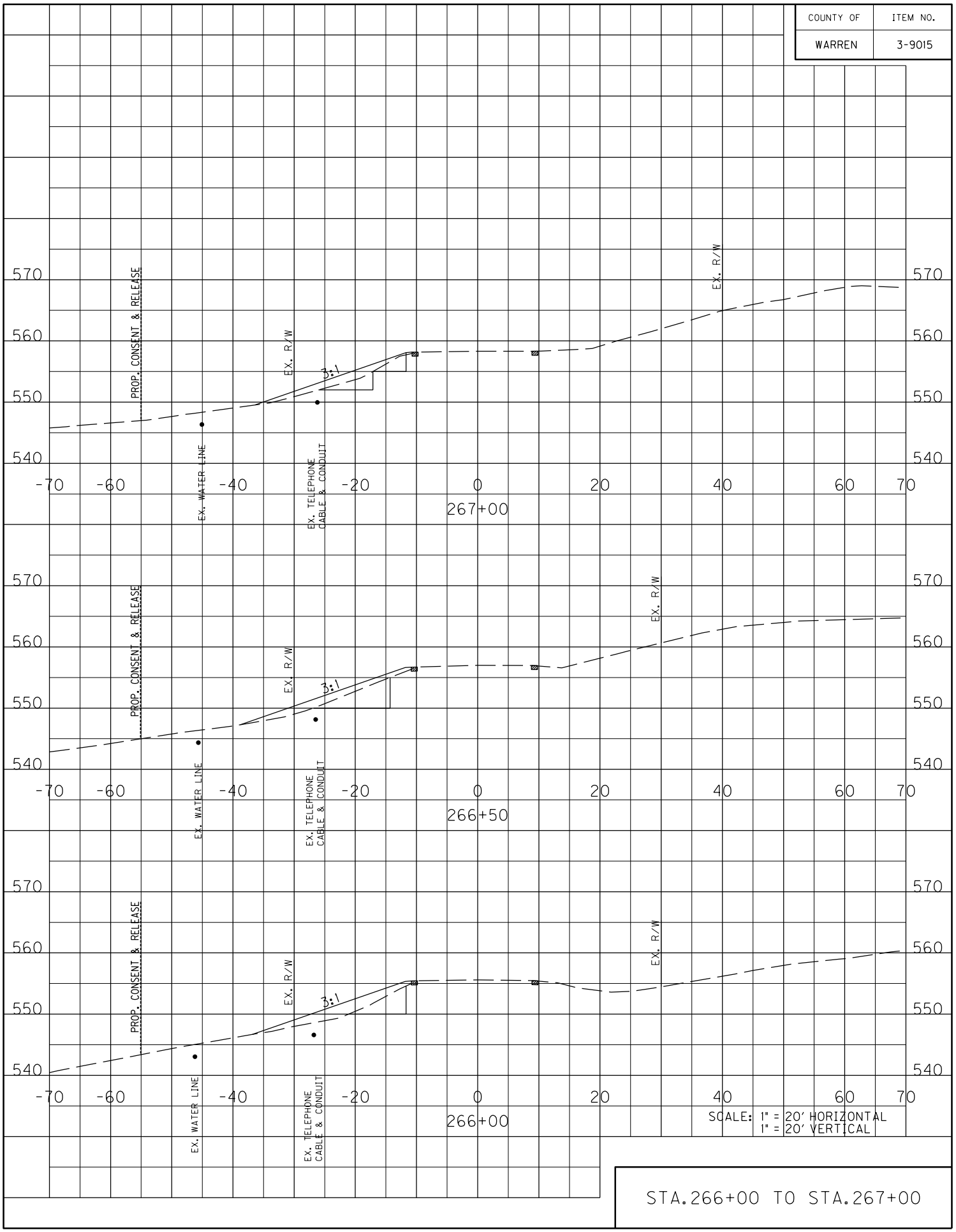
COUNTY OF	ITEM NO.
WARREN	3-9015



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

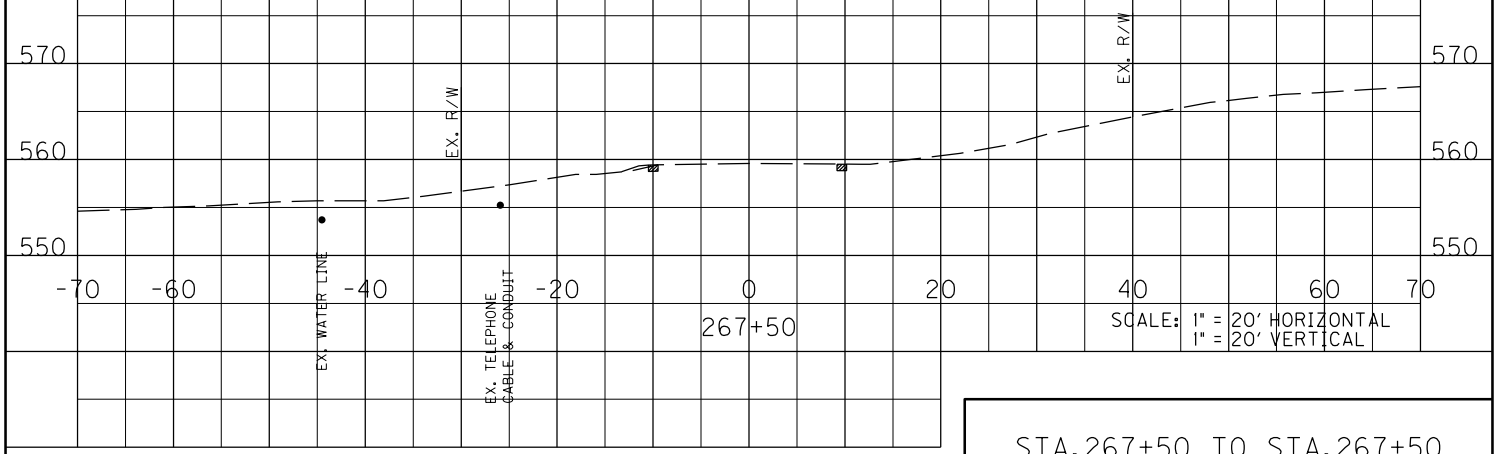
STA.264+50 TO STA.265+50

COUNTY OF	ITEM NO.
WARREN	3-9015



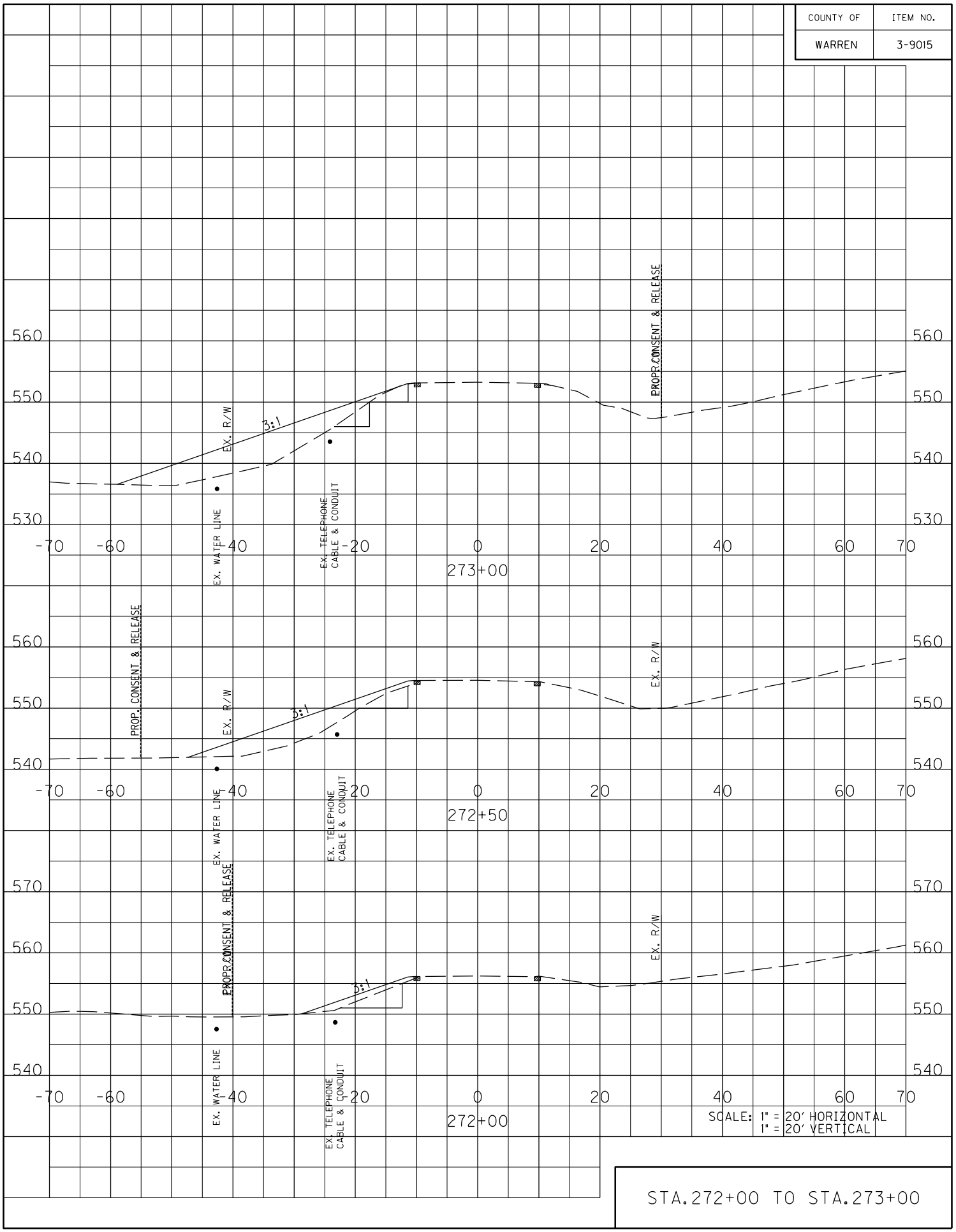
STA.266+00 TO STA.267+00

COUNTY OF	ITEM NO.
WARREN	3-9015



STA.267+50 TO STA.267+50

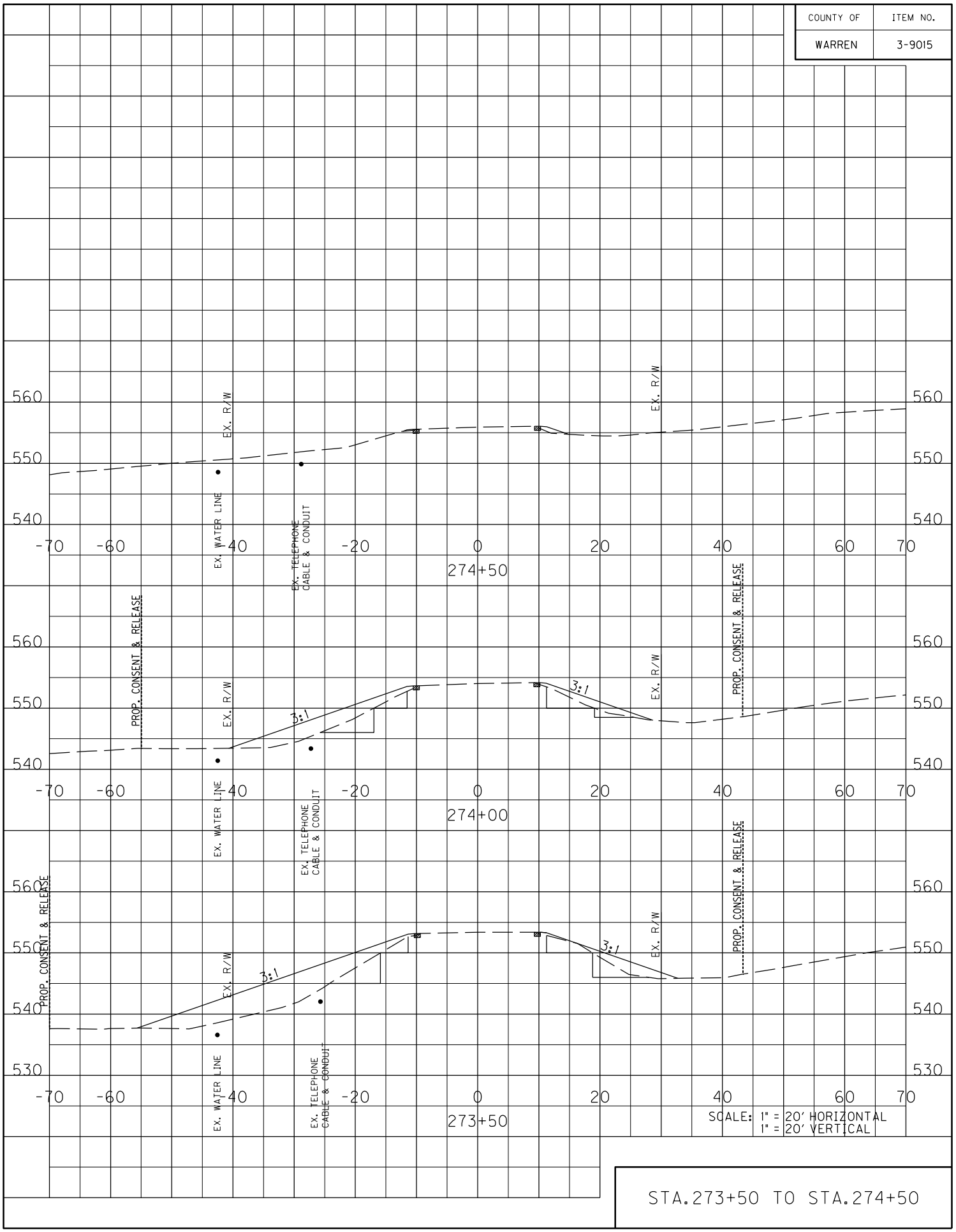
COUNTY OF	ITEM NO.
WARREN	3-9015



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

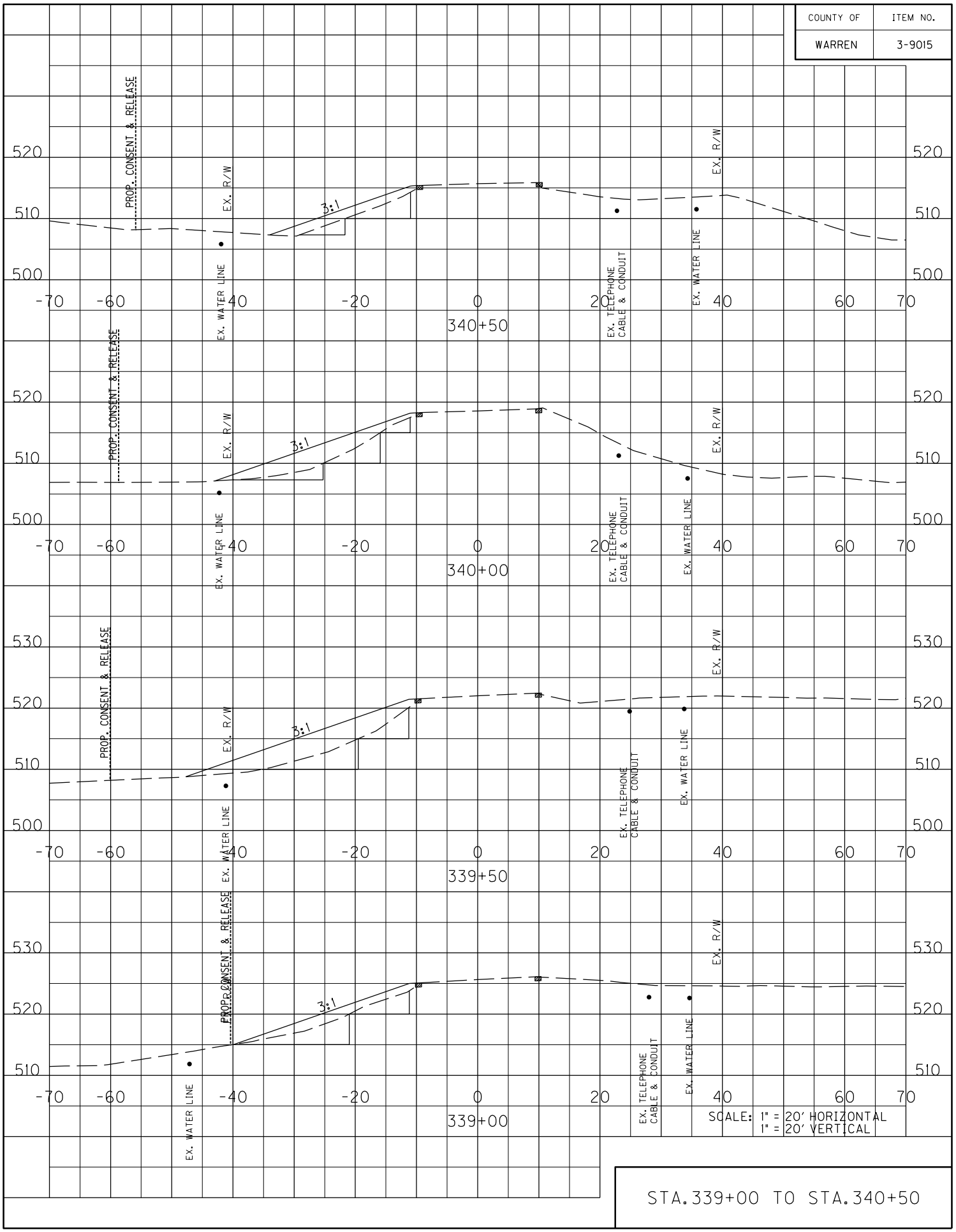
STA.272+00 TO STA.273+00

COUNTY OF	ITEM NO.
WARREN	3-9015



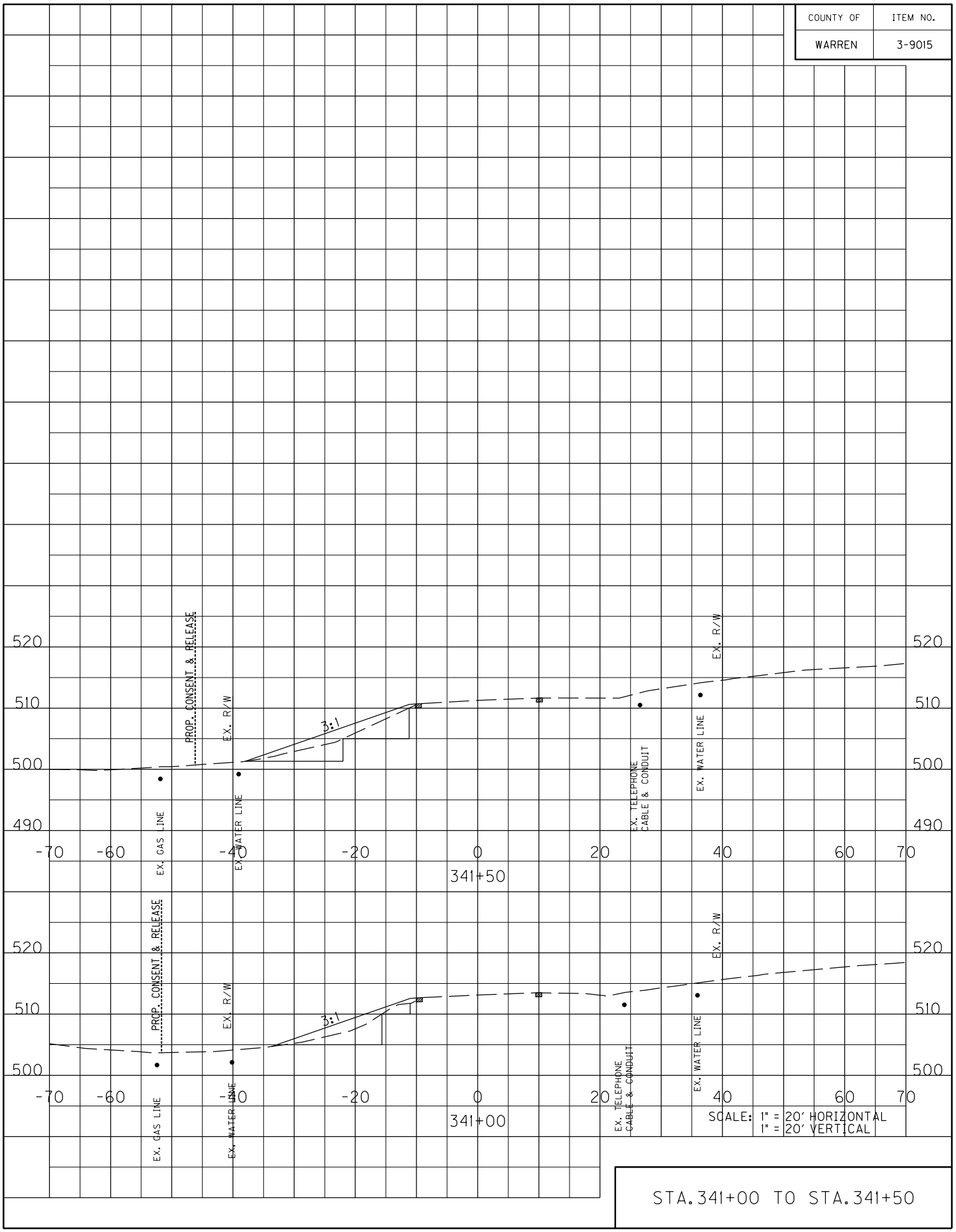
STA.273+50 TO STA.274+50

COUNTY OF	ITEM NO.
WARREN	3-9015

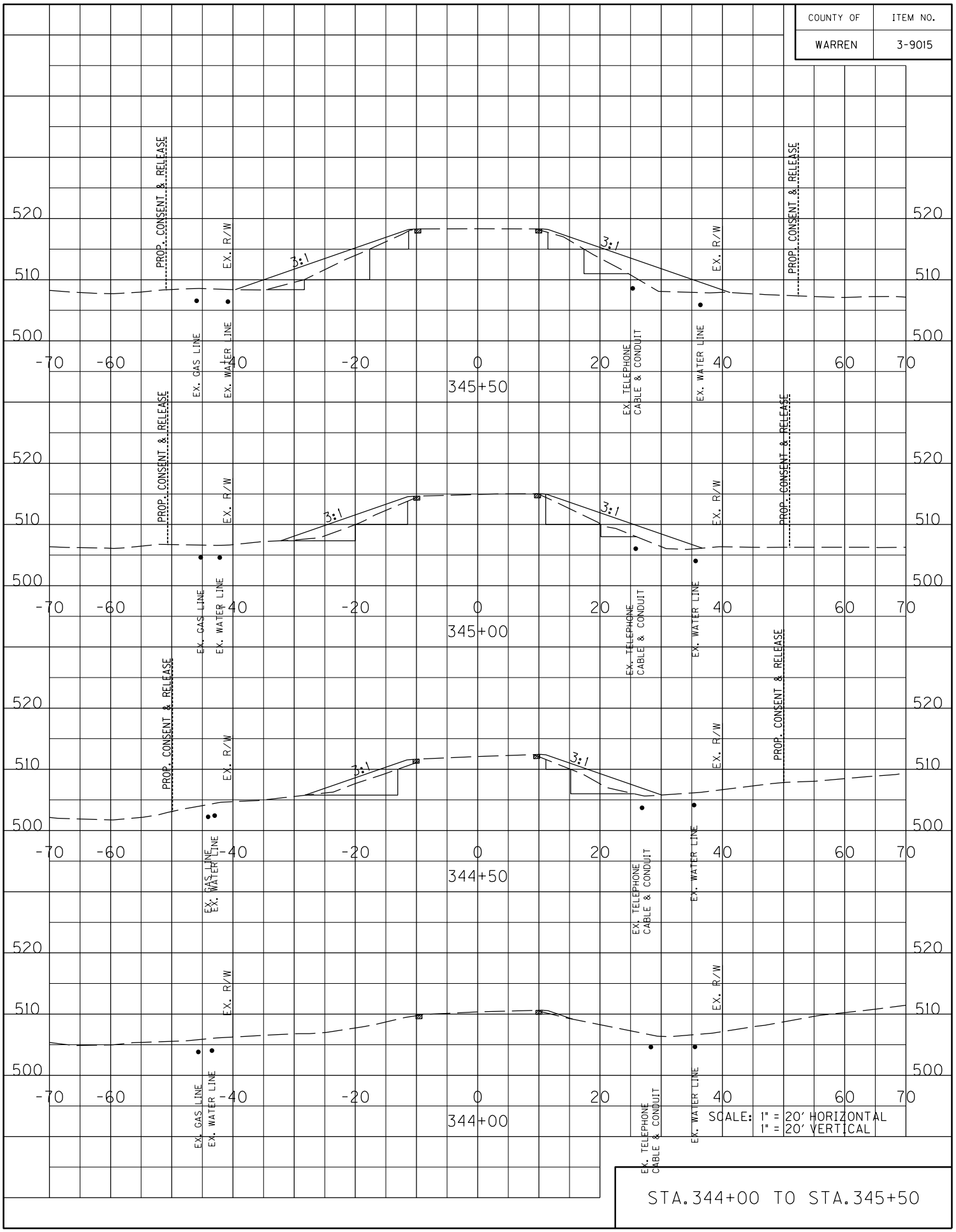


STA. 339+00 TO STA. 340+50

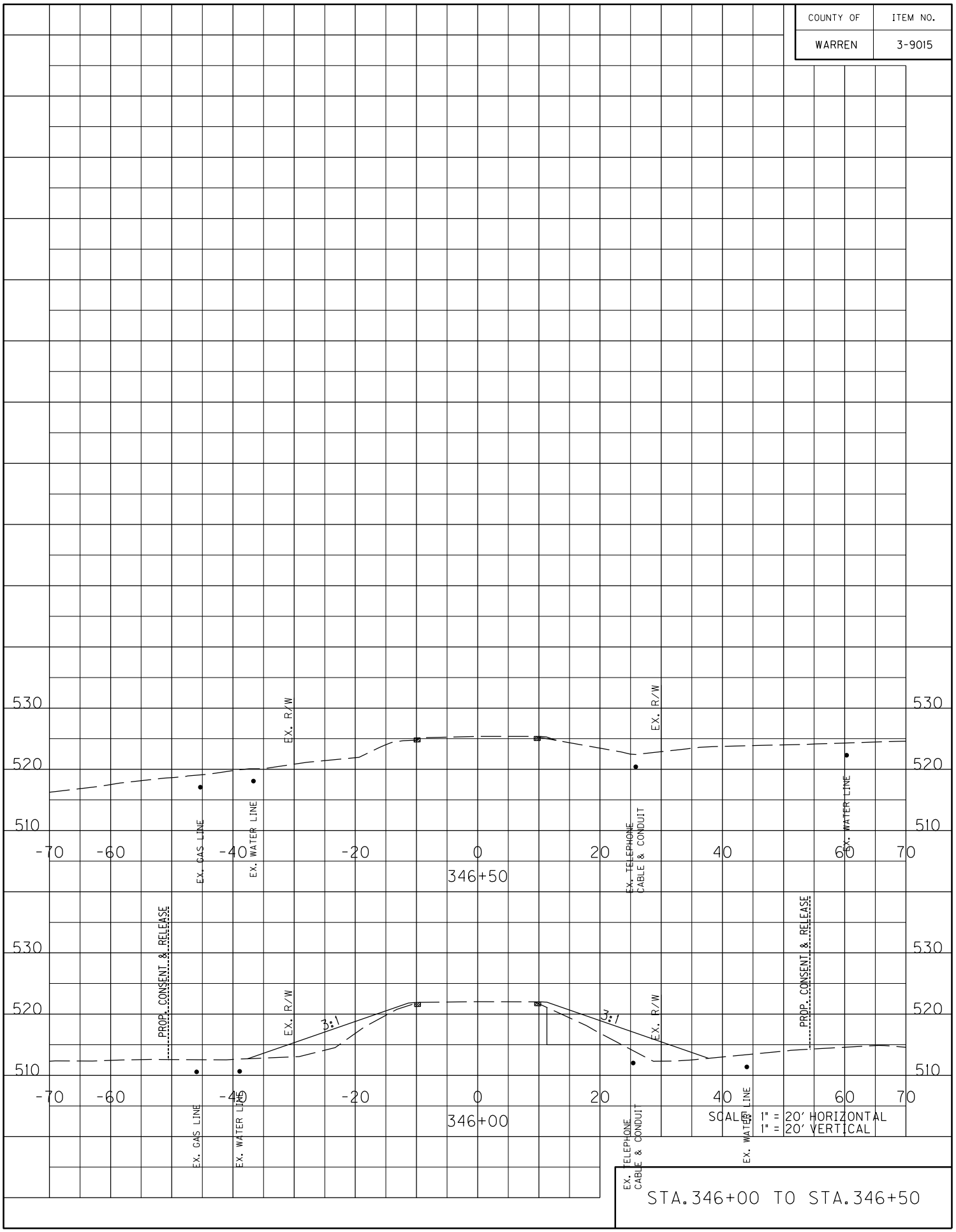
COUNTY OF	ITEM NO.
WARREN	3-9015



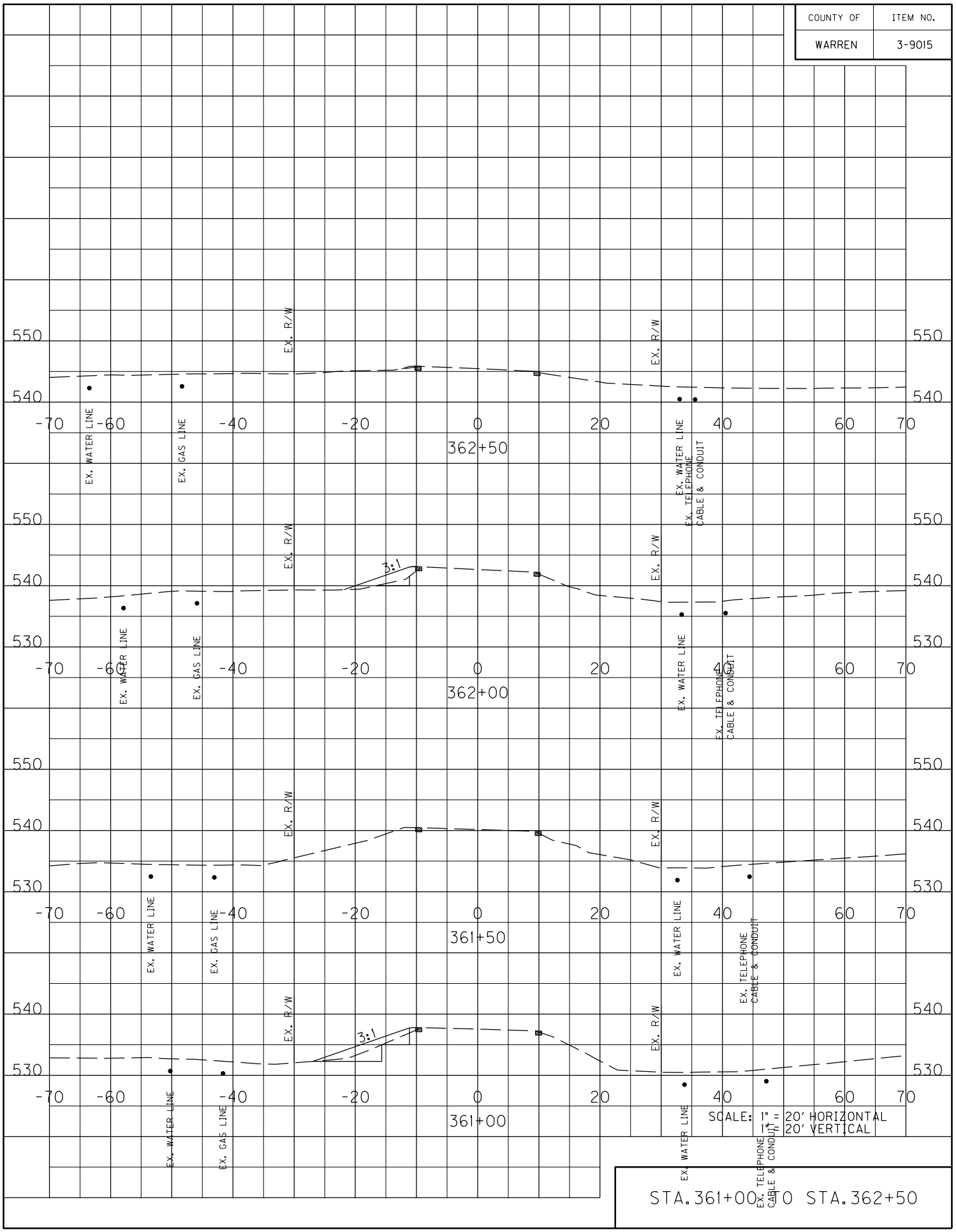
STA. 341+00 TO STA. 341+50


COUNTY OF
WARREN
ITEM NO.
3-9015
PROP. CONSENT & RELEASE
EX. R/W
EX. GAS LINE
EX. WATER LINE
EX. TELEPHONE CABLE & CONDUIT
3:1
520
510
500
-70
-60
-40
-20
0
20
40
60
70
345+50
345+00
344+50
344+00
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL
STA. 344+00 TO STA. 345+50

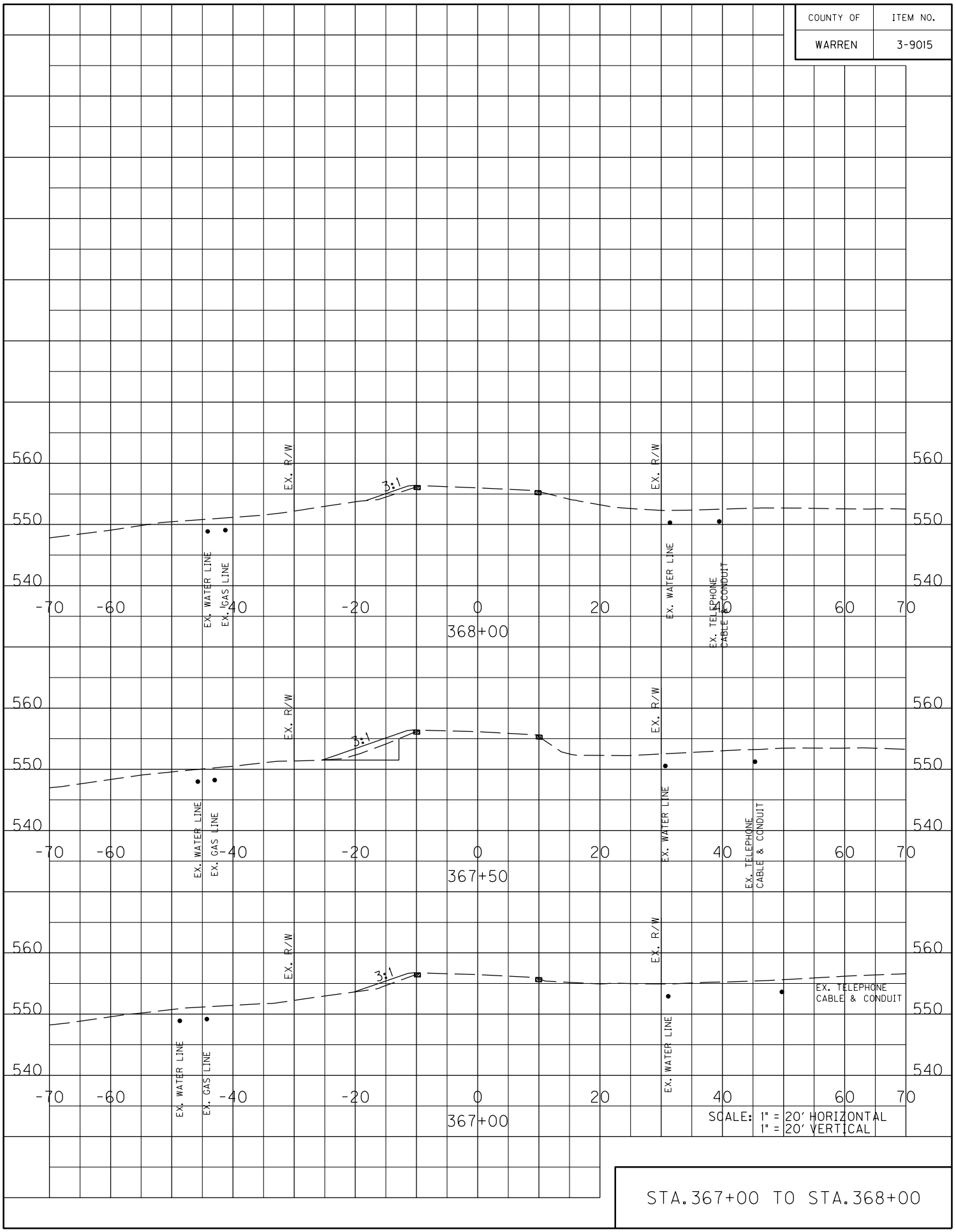
COUNTY OF	ITEM NO.
WARREN	3-9015



STA. 346+00 TO STA. 346+50

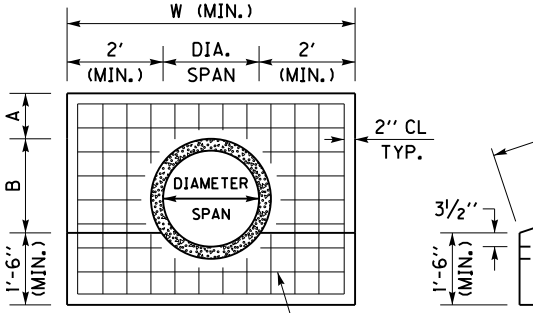

COUNTY OF
WARREN
ITEM NO.
3-9015
EX. R/W
EX. WATER LINE
EX. GAS LINE
EX. TELEPHONE CABLE & CONDUIT
3:1
362+50
362+00
361+50
361+00
550
540
530
-70
-60
-40
-20
0
20
40
60
70
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL
STA. 361+00.00 STA. 362+50

COUNTY OF	ITEM NO.
WARREN	3-9015

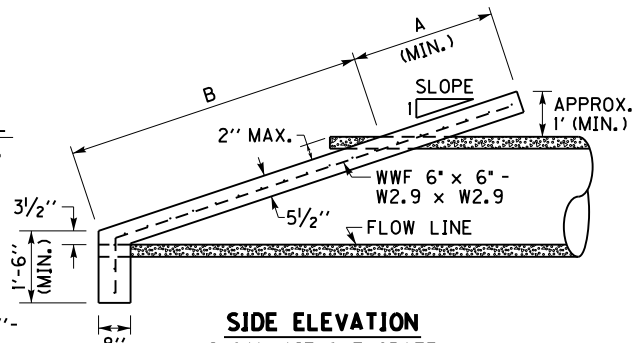


STA. 367+00 TO STA. 368+00

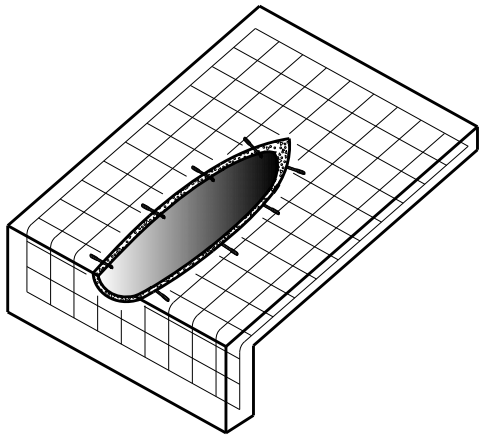
COUNTY OF	ITEM NO.	SHEET NO.



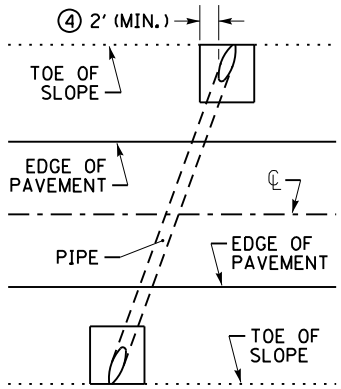
END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT



SIDE ELEVATION
SHOWN WITHOUT GRATE



ISOMETRIC VIEW
SHOWN WITH WOVEN WIRE REINFORCEMENT AND WEDGE ANCHORS



PLAN VIEW
SHOWN WHEN THE PIPE IS ON A SKEW ④

~ NOTES ~

1. FOR PIPES THAT RECEIVE THE SLOPED & MITERED CONCRETE HEADWALL, THE PIPE LENGTH SHALL BE MEASURED TO THE FURTHEST POINT ALONG THE MITERED END OF THE PIPE.
2. THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
3. THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING. HAND FINISHING AND/OR CUTTING MAY BE NECESSARY.
④ WHEN THE PIPE IS ON A SKEW, INSTALL THE HEADWALL AND MITER THE PIPE SO THAT THE CONCRETE SLOPE PAVING IS PERPENDICULAR TO THE ROADWAY. FOR HEADWALLS ON SKEWED PIPES, THE HEADWALL WIDTH, W, SHALL BE WIDENED, AS NEEDED, SO THAT THE OUTSIDE EDGE OF THE CONCRETE SLOPE PAVING IS A MINIMUM OF 2' FROM THE OUTER MOST EDGE OF THE PIPE.
5. THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. THE FINAL HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
6. WOVEN WIRE REINFORCEMENT (WWF 6"x6" - W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
7. DIMENSIONS AND CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL, INSTALLED ON A PIPE WITH SKEW = 0°.
8. AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7" LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.
⑨ THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
-24" DIAMETER PIPE ON GREATER THAN 30° SKEW
-30" DIAMETER PIPE ON GREATER THAN 15° SKEW
-PIPE WITH GREATER THAN 30" DIAMETER.
-ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
SEE SHEET 2 FOR GRATE DETAILS
10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) ④

PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
15"	3'	3'-7½"	5'-3"	0.74	4'	4'-8¾"	5'-3"	0.93	6'	6'-11¾"	5'-3"	1.29	NO
18"	3'	4'-5¾"	5'-6"	0.85	4'	5'-10"	5'-6"	1.05	6'	8'-7¼"	5'-6"	1.48	NO
24"	3'	6'-2½"	6'-0"	1.05	4'	8'-1"	6'-0"	1.32	6'	11'-11"	6'-0"	1.87	SEE ⑨
30"	3'	7'-10¾"	6'-6"	1.43	4'	10'-3¾"	6'-6"	1.80	6'	15'-2½"	6'-6"	2.28	SEE ⑨

••DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND LISTED FOR INFORMATIONAL PURPOSES ONLY••

BID ITEM AND UNIT TO BID: 24575ES610 HEADWALL (SLOPED & MITERED CONCRETE-FOR _ INCH PIPE) - EACH

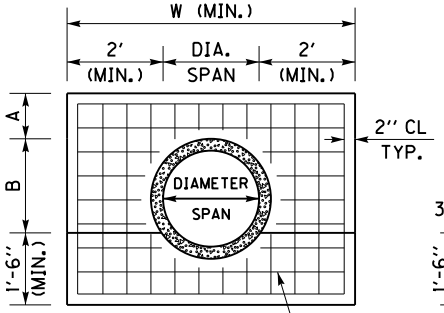
SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER

NOT TO SCALE

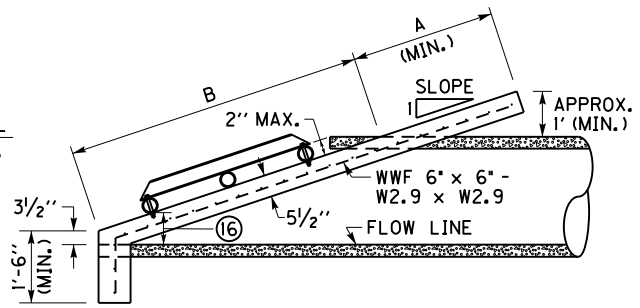
KENTUCKY DEPARTMENT OF HIGHWAYS

SLOPED & MITERED CONCRETE HEADWALL (SHEET 1 OF 2)

COUNTY OF	ITEM NO.	SHEET NO.



END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT

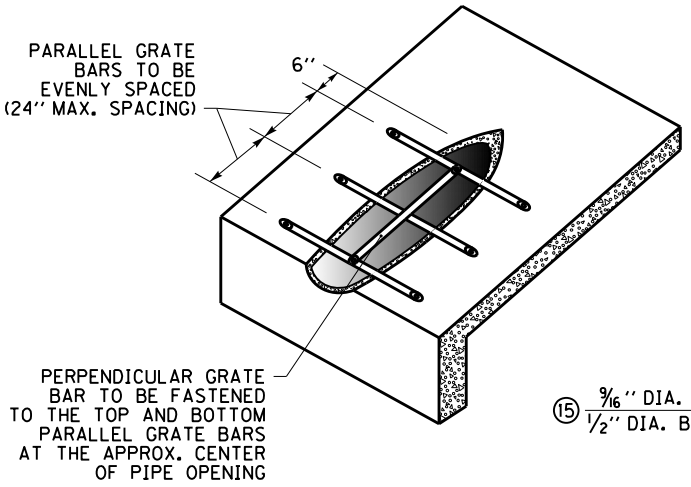


SIDE ELEVATION
SHOWN WITH GRATE

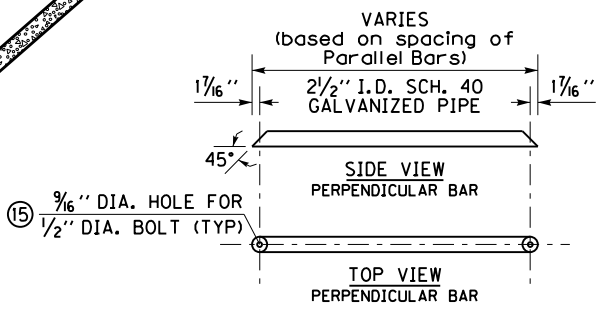
~ NOTES ~

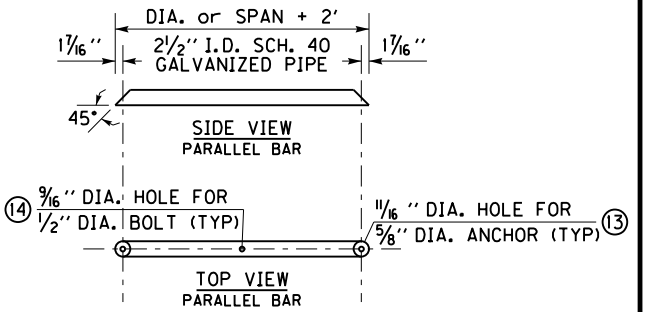
SEE SHEET 1 FOR NOTES 1 THRU 8

9. THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
-24" DIAMETER PIPE ON GREATER THAN 30° SKEW
-30" DIAMETER PIPE ON GREATER THAN 15° SKEW
-PIPE WITH GREATER THAN 30" DIAMETER.
-ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
11. THE PIPE USED TO CONSTRUCT THE GRATE SHALL BE STEEL, SCHEDULE 40, CONFORMING TO ASTM A53, AND GALVANIZED IN ACCORDANCE WITH AASHTO M 111 AFTER FABRICATION.
12. ANY RAW METAL EXPOSED BY FIELD CUTTING AND/OR DRILLING SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND.
13. FASTEN PARALLEL BARS TO HEADWALL WITH 5/8" DIA. x 4½" LENGTH STEEL WEDGE ANCHORS, MINIMUM EMBEDMENT = 2¾" HOLE SIZE AND DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE.
14. CENTER BOLT HOLE SHALL ONLY BE DRILLED IN THE TOP AND BOTTOM PARALLEL BARS.
15. FASTEN THE PERPENDICULAR BAR TO THE TOP AND BOTTOM PARALLEL BARS WITH ½" DIA. x 4" LENGTH HEX HEAD BOLTS, HEX HEAD NUTS, & FLAT WASHERS.
16. THE BOTTOM PARALLEL BAR IS TO BE PLACED SO THAT IT IS APPROX. 6" ABOVE THE FLOWLINE OF THE PIPE.



ISOMETRIC VIEW
SHOWING HEADWALL WITH GRATE





PIPE FOR GRATE DETAILS
SEE NOTE 9 TO DETERMINE IF GRATE IS REQUIRED

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) ④													
PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
36"	3'	9'-7½"	7'-0"	1.51	4'	12'-6½"	7'-0"	1.91	6'	18'-6"	7'-0"	2.42	YES
42"	3'	11'-4"	7'-6"	1.76	4'	14'-9¼"	7'-6"	2.23	6'	21'-9½"	7'-6"	3.19	YES

••DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND LISTED FOR INFORMATIONAL PURPOSES ONLY••

BID ITEM AND UNIT TO BID: 24575ES610 HEADWALL (SLOPED & MITERED CONCRETE-FOR _ INCH PIPE) - EACH

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

NOT TO SCALE

KENTUCKY DEPARTMENT OF HIGHWAYS

SLOPED & MITERED CONCRETE HEADWALL (SHEET 2 OF 2)

FIGURE 1

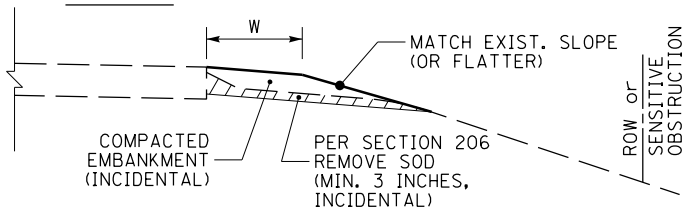


FIGURE 2

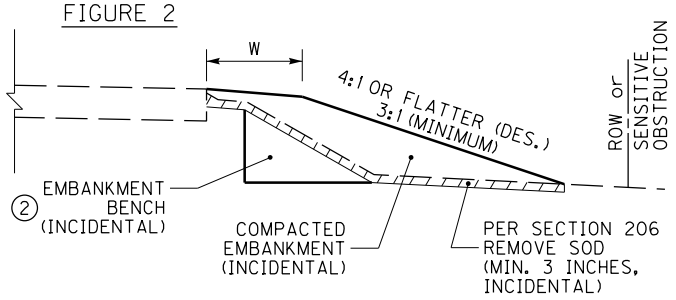


FIGURE 3

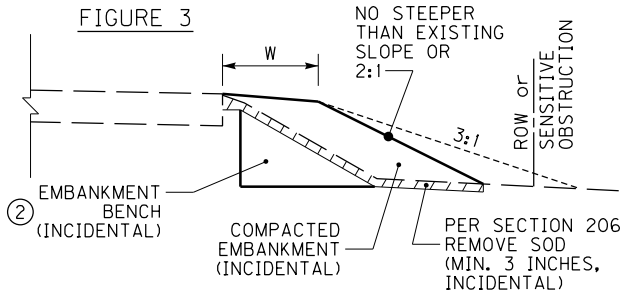


FIGURE 4

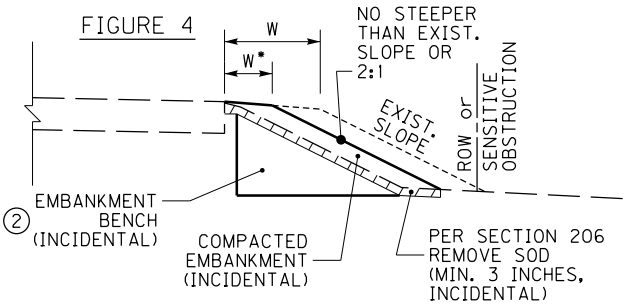


FIGURE 5

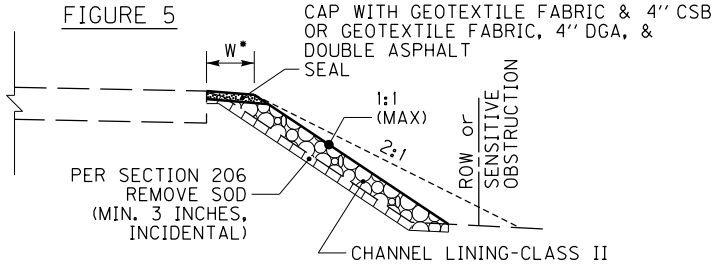
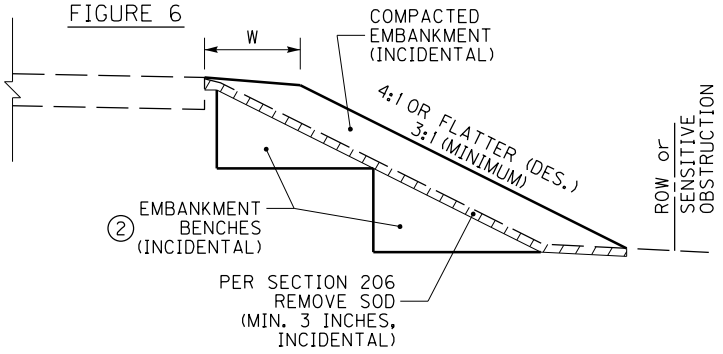


FIGURE 6



~ NOTES ~

BID ITEM AND UNIT TO BID:
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

KENTUCKY DEPARTMENT OF HIGHWAYS

DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS (SHEET 1 OF 2)

FIGURE 7

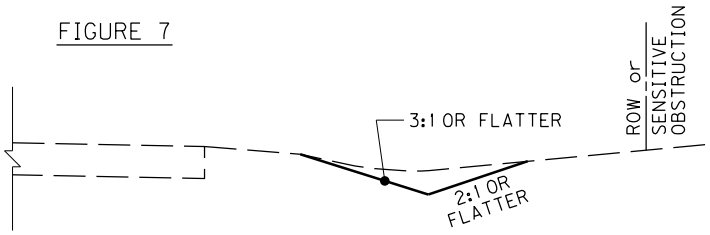


FIGURE 8

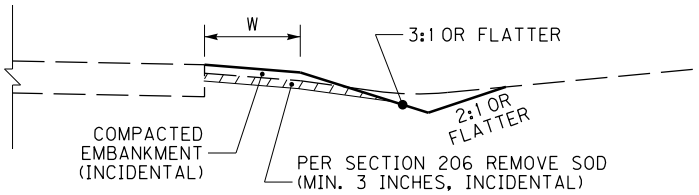


FIGURE 9

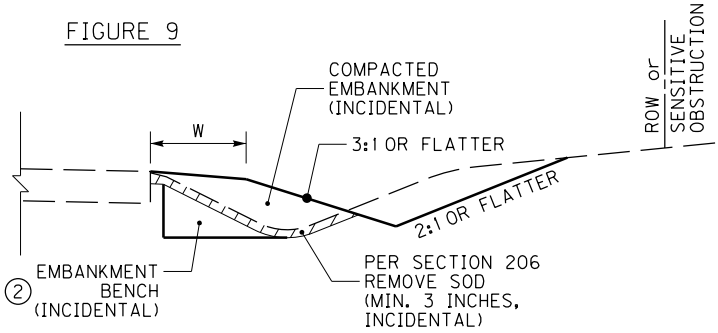


FIGURE 10

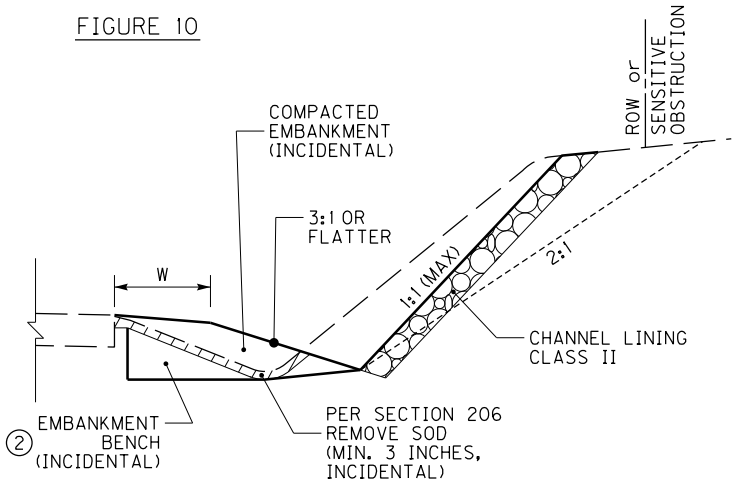
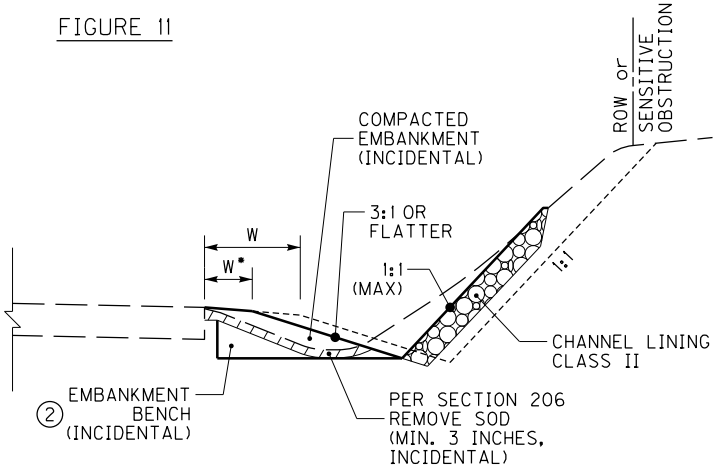


FIGURE 11



~ NOTES ~

BID ITEM AND UNIT TO BID:
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 DIMENIONS. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE RE-USED ELSEWHERE ON THE PROJECT, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR THE INTENDED RE-USE.
10. AS SHOWN IN FIGURE 8, IN SOME SITUATIONS, THE DITCH AND SHOULDER MAY ONLY NEED MINOR REGRADING AND/OR RESHAPING. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE USED TO RESHAPE THE EARTH SHOULDER, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR SHOULDERING. IF THE MATERIAL IS NOT SUITABLE, ADDITIONAL EARTH MATERIAL MAY BE REQUIRED.
11. AS SHOWN IN FIGURE 9, IN MOST SITUATIONS, REGRADING AND RESHAPING THE ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS WILL RESULT IN MOVING THE DITCH FURTHER AWAY FROM THE ROADWAY. IT IS DESIRED THAT DITCH FORESLOPES BE 3:1 OR FLATTER AND DITCH BACKSLOPES BE 2:1 OR FLATTER.
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.

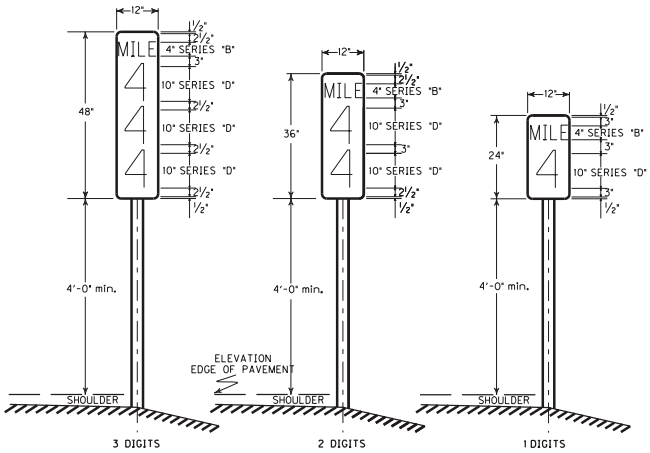
NOT TO SCALE

KENTUCKY DEPARTMENT OF HIGHWAYS

DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS (SHEET 2 OF 2)

COUNTY OF	ITEM NO.	SHEET NO.

MILEPOST MARKERS



TYPICAL SIGN PANEL DIMENSIONS AND MILEPOST LOCATIONS

MILE POST NUMBER	STATION NUMBER * ____ BOUND LANE (S)

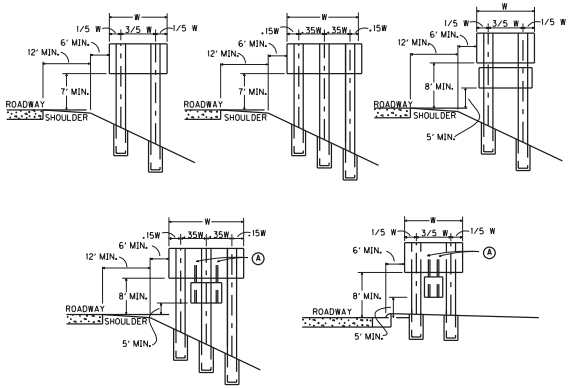
MILE POST NUMBER	STATION NUMBER * ____ BOUND LANE (S)

NOTE: STATION NUMBERS ARE GIVEN FOR NOTED DIRECTION OF TRAVEL ONLY. CORRESPONDING MILEPOST MARKERS FOR OTHER DIRECTION SHOULD BE PLACED DIRECTLY OPPOSITE THOSE FOR WHICH STATION NUMBERS ARE GIVEN.

IN JEFFERSON COUNTY, FINAL LOCATION OF MILEPOST MARKERS SHALL BE VERIFIED BY TRIMARC. NOTIFY TRIMARC AT LEAST TWO WEEKS PRIOR TO BEGINNING WORK ON THIS ITEM:

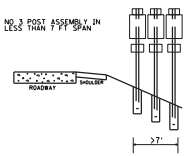
901 WEST MAIN STREET
LOUISVILLE, KY 40202
502-587-6624
270-307-7456

PANEL SIGNS

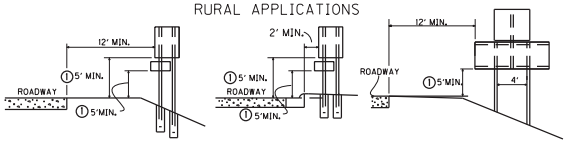


Ⓐ ATTACHMENT OF SECONDARY SIGN TO MAJOR SIGN IS TO BE MADE WITH TWO (2) 3" X 3" X 3/16" ANGLES OF SUFFICIENT LENGTH TO EXTEND FROM THE LOWER EDGE OF THE SECONDARY SIGN TO AT LEAST THREE FEET UP THE BACK OF THE MAJOR SIGN. A MINIMUM OF ONE POST CLIP PER FOOT SHALL BE USED IN ATTACHING EXTRUSIONS TO EACH ANGLE.

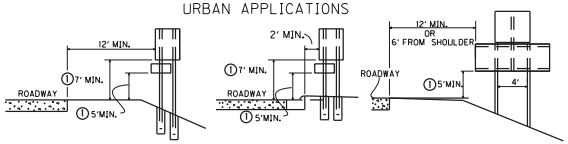
SHEETING SIGNS



RURAL APPLICATIONS



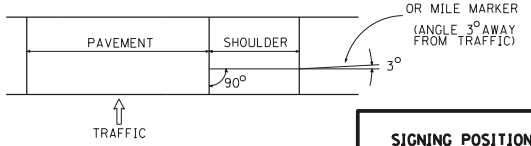
URBAN APPLICATIONS



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.

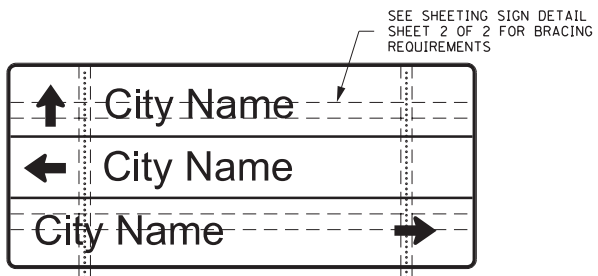
① NOT TO EXCEED 8' IN URBAN AREAS AND 6' IN RURAL AREAS UNLESS SPECIFIED BY THE ENGINEER

ORIENTATION ANGLE

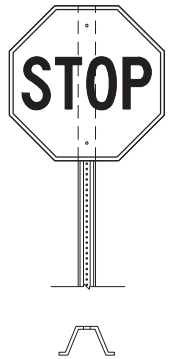


SIGNING POSITIONING DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.



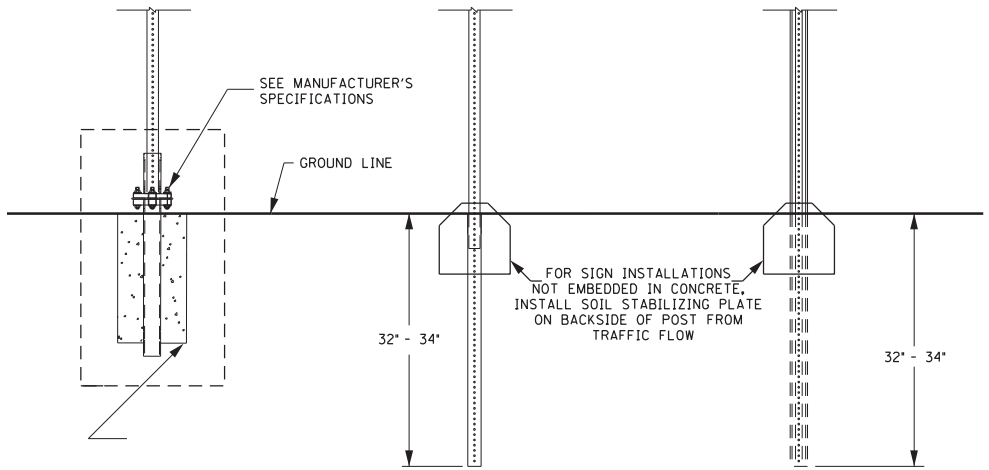
PLAN VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

TRAFFIC FLOW

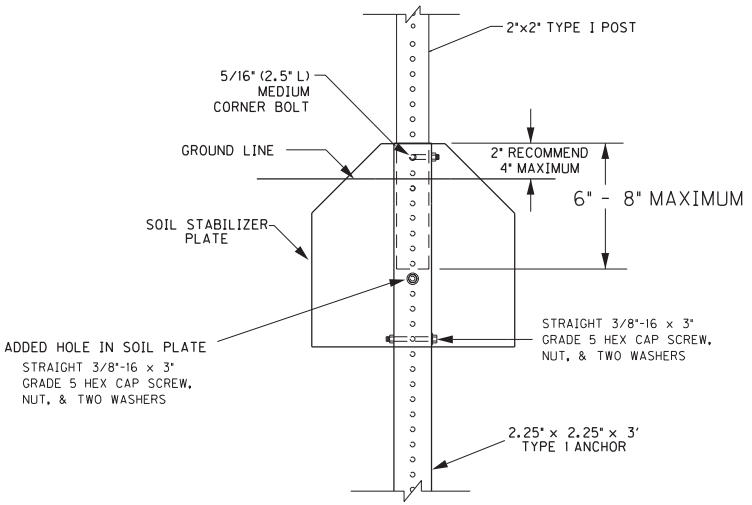
PLAN VIEW
NOT TO SCALE



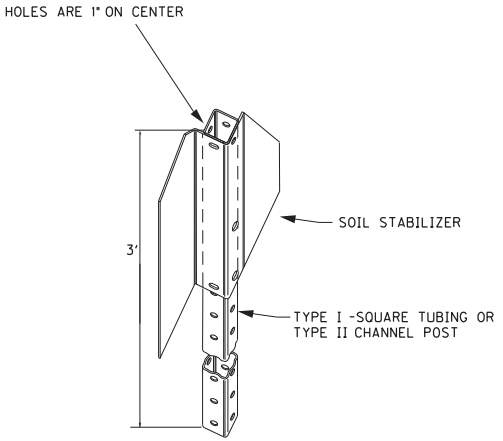
TYPE I
SQUARE TUBING POST
WITH TYPE "D" SUPPORT

TYPE I
SQUARE TUBING POST
WITH SOIL STABILIZER

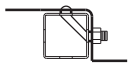
TYPE II
CHANNEL POST
WITH SOIL STABILIZER



SOIL STABILIZER DETAIL
FOR TYPE I POST



SOIL STABILIZER DETAIL



TRAFFIC FLOW

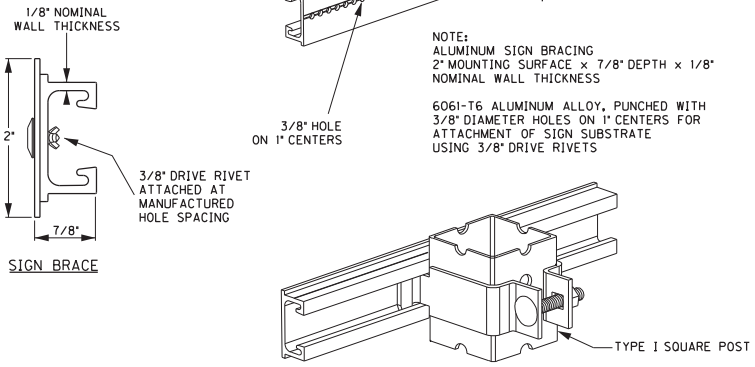
PLAN VIEW
NOT TO SCALE

NOT TO SCALE

SHEETING SIGN DETAIL
SHEET 1 OF 2

COUNTY OF	ITEM NO.	SHEET NO.

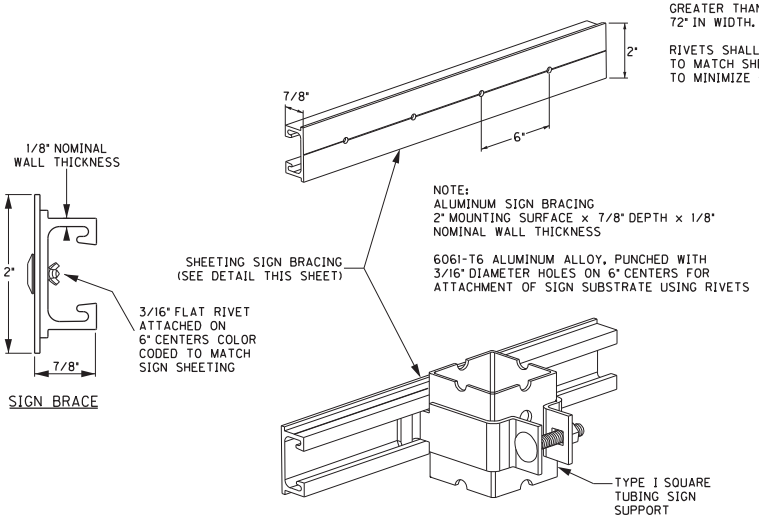
FOR ATTACHMENT OF SIGNS
LESS THAN 72" IN WIDTH
USING MANUFACTURED 3/8" HOLES
ACCORDING TO 2004 STANDARD
HIGHWAY SIGNS BLANK
STANDARDS
PGS 7-1 THRU 7-6



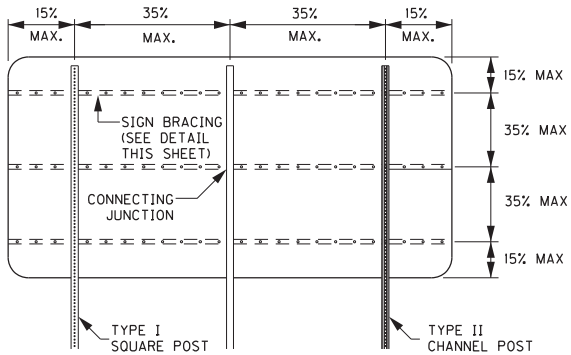
SQUARE POST CLAMP & BRACE

FOR ATTACHMENT OF SIGNS
GREATER THAN, OR EQUAL TO,
72" IN WIDTH.

RIVETS SHALL BE COLOR CODED
TO MATCH SHEETING IN ORDER
TO MINIMIZE GLARE FROM RIVETS



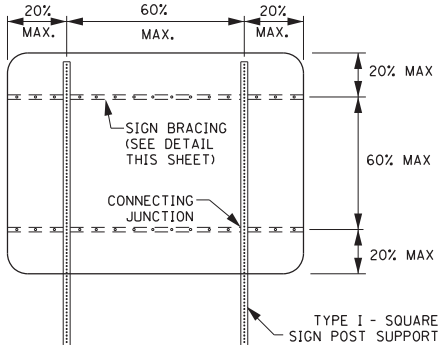
SQUARE POST CLAMP & BRACE



3 POST - BRACING DIAGRAM

NOTE:
1. MAXIMUM AREA
PER CONNECTING
JUNCTION = 16 SQ. FT.

2. BRACING SHOULD NOT BE
SPLICED WITHIN 6" OF A BRACE
TO POST JUNCTION.



2 POST - BRACING DIAGRAM

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

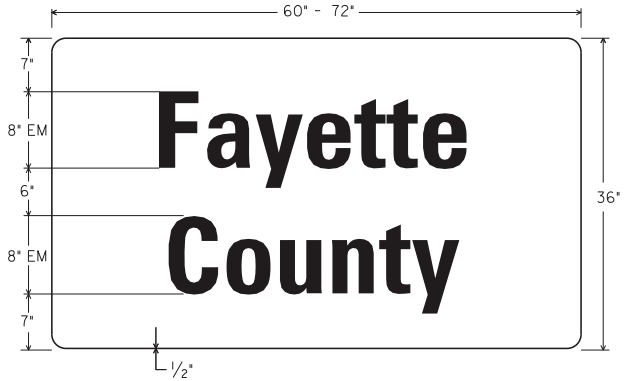
NOT TO SCALE

SHEETING SIGN DETAIL

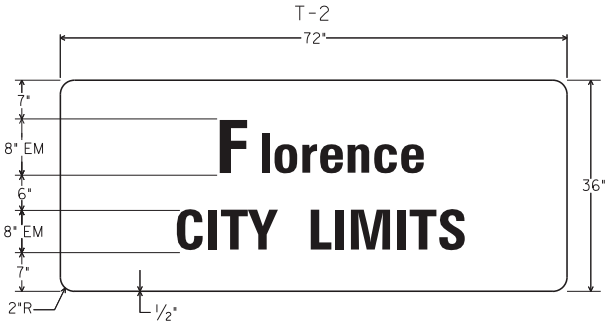
SHEET 2 OF 2

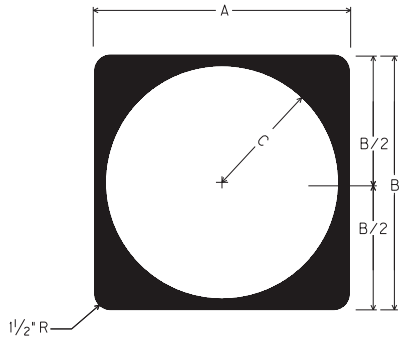
COUNTY OF	ITEM NO.	SHEET NO.

T-1

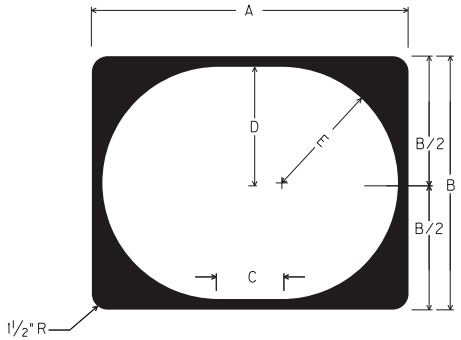


T-2





M1-5 (1 OR 2 DIGIT)



M1-5 (3 OR 4 DIGIT)

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

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

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

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

S-1



NOT TO SCALE

TYPICAL SIGNS

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: _____ **Contractor: _____**

Section Engineer: _____ **District & County: _____**

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

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

Printed Section Engineer's Representative_____ & Date_____

Signature Section Engineer's Representative_____& Date_____

Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

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

Printed Bailey Bridge Yard Representative_____ & Date_____

Signature Bailey Bridge Yard Representative_____& Date_____

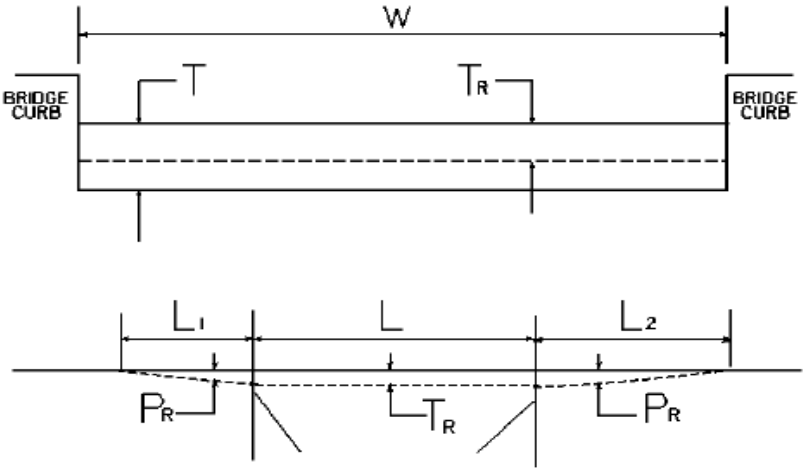
Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

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

Completed Form Submitted to Section Engineer Date: _____ By: _____

CONSTRUCTION DETAIL FOR BRIDGE WITHIN LIMITS OF PAVING PROJECT



W = bridge width curb to curb **T** = thickness of existing bituminous overlay **L** = length of bridge

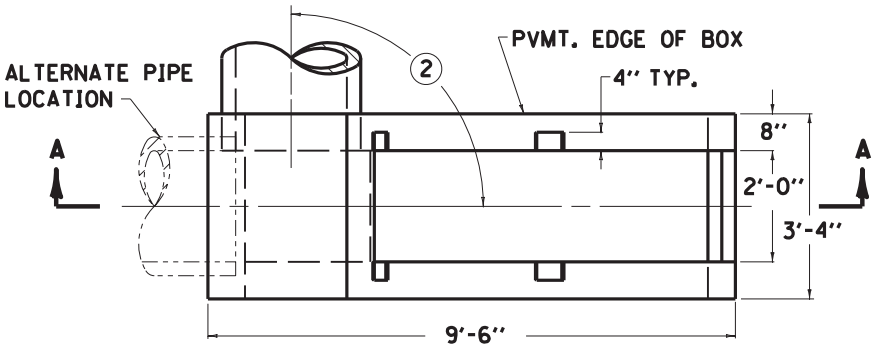
L_1 & L_2 = length of approach pavement to be removed

T_R = thickness to be removed and replaced on bridge **P_R** = thickness to be removed and replaced on pavement

Note: L_1 & L_2 lengths shall be determined by using a transition rate of 100 ft / inch of thickness

BRIDGE NO	MP	W (ft)	T (in)	L_1(ft)	L_2(ft)	T_R (in)	L (ft)	P_R (in)
B00018N	0.000	23.00	0.00	0.00	100.00	0.00	172.50	1.00

COUNTY OF	ITEM NO.	SHEET NO.



PLAN VIEW

NOTES

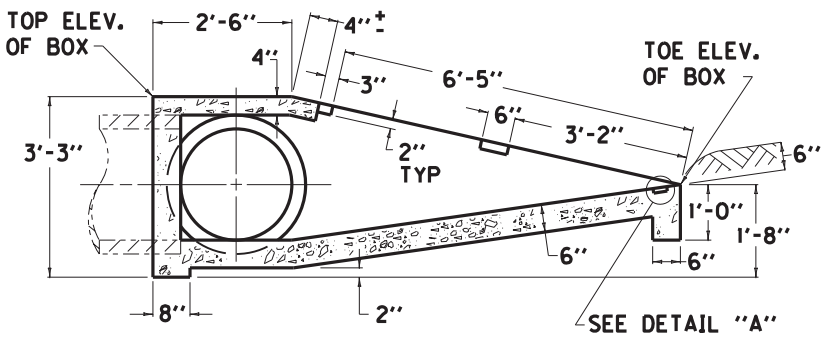
ITEM CODE	BID ITEM	UNIT
1726	SAFETY BOX INLET-18 INCH SDB-1	EACH
1727	SAFETY BOX INLET-24 INCH SDB-1	EACH

THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.

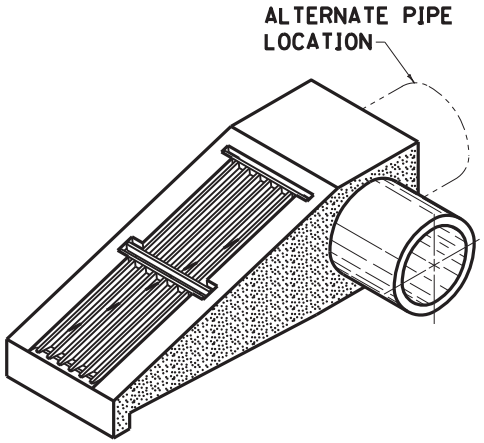
(1) TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.

(2) SKEW OF BOX SHALL VARY TO FIT EXISTING FIELD CONDITIONS.

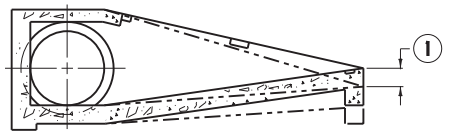
APPROXIMATE QUANTITIES			
CLASS "A" CONC.	GRATE	LBS. STRUCTURAL STEEL	
CUBIC YARDS	NUMBER	EACH GRATE	TOTAL POUNDS
1.44	1	145	298
	2	153	



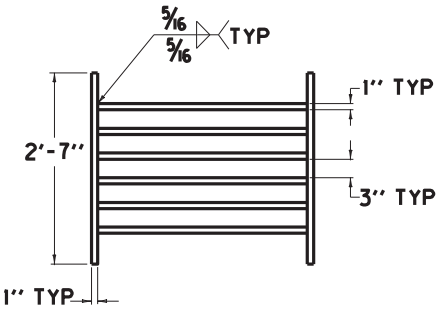
SECTION A-A



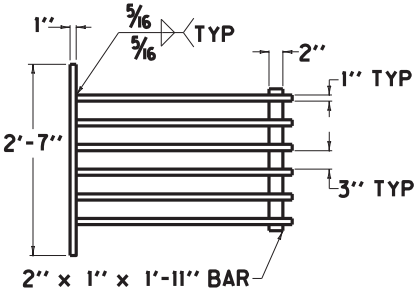
ISOMETRIC VIEW



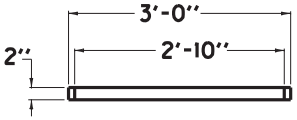
SECTIONAL VIEW



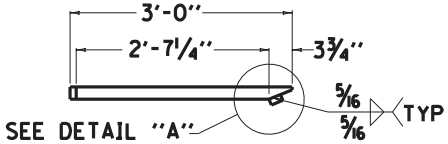
GRATE NO. 1
PLAN VIEW



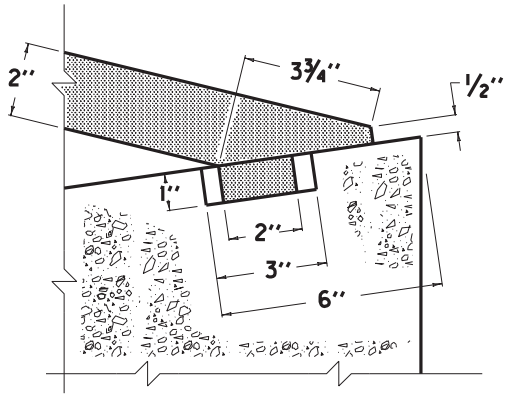
GRATE NO. 2
PLAN VIEW



GRATE NO. 1
SIDE ELEVATION



GRATE NO. 2
SIDE ELEVATION



DETAIL "A"

KENTUCKY
DEPARTMENT OF HIGHWAYS

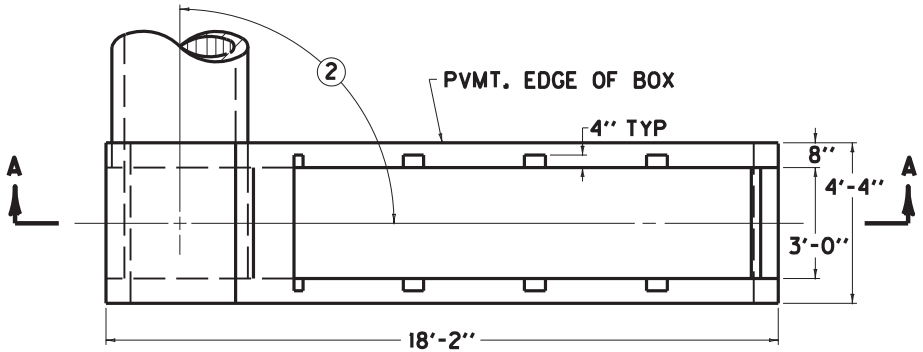
SAFETY TYPE BOX INLET (18" OR 24")

APPROVED _____ PROJECT ENGINEER

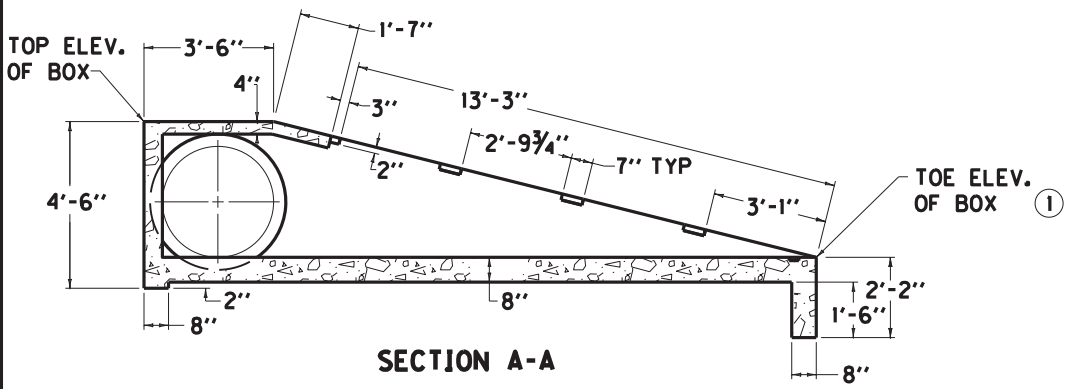
06-04-2008 DATE

COUNTY OF	ITEM NO.	SHEET NO.

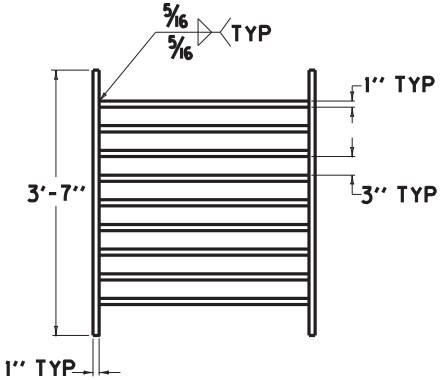
WARREN COUNTY
HSIP 5073 (005)



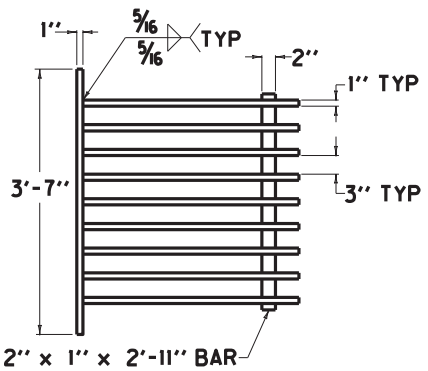
PLAN VIEW



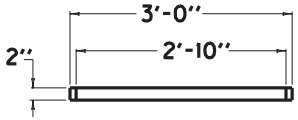
SECTION A-A



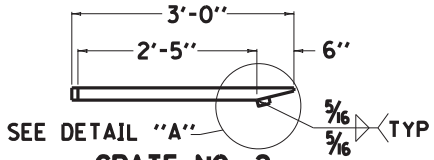
GRATE NO. 1
PLAN VIEW



GRATE NO. 2
PLAN VIEW



GRATE NO. 1
SIDE ELEVATION



GRATE NO. 2
SIDE ELEVATION

NOTES

ITEM CODE	BID ITEM	UNIT
23044NS710	SAFETY BOX INLET-36 INCH SDB-1	EACH

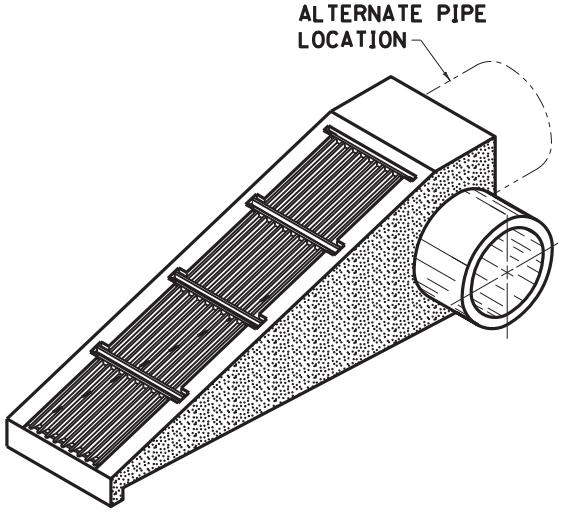
THE UNIT BID FOR EACH STRUCTURE SHALL INCLUDE ALL CONCRETE, STRUCTURAL STEEL GRATING, EXCAVATION, LABOR AND INCIDENTALS NECESSARY FOR ITS CONSTRUCTION AS DETAILED ON THIS SHEET.

(1) TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.

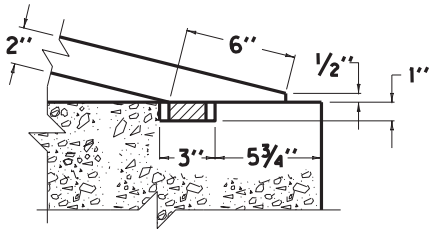
(2) SKEW OF BOX SHALL VARY TO FIT EXISTING FIELD CONDITIONS.

3. ALL QUANTITIES ARE FOR ONE HEADWALL.

APPROXIMATE QUANTITIES					
CLASS "A" CONC.	GRATE	NO. OF GRATES REQ'D.	LBS.		
			STRUCTURAL STEEL		REINF. STEEL
CUBIC YARDS	NUMBER		EACH GRATE		
4.51	1	3	222	896	261
	2	1	230		



ISOMETRIC VIEW



DETAIL "A"

SHEET 1 OF 2

KENTUCKY
DEPARTMENT OF HIGHWAYS

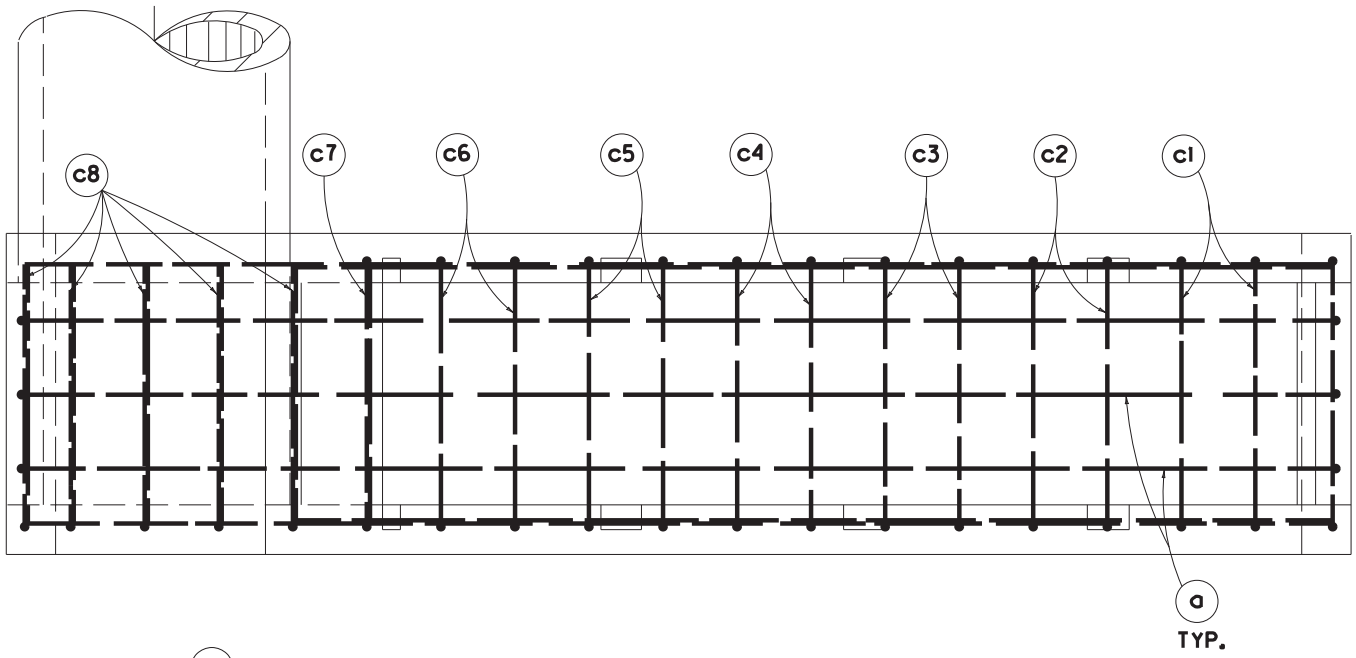
SAFETY TYPE
BOX INLET
(36")

APPROVED _____ PROJECT ENGINEER _____ DATE 06-04-2018

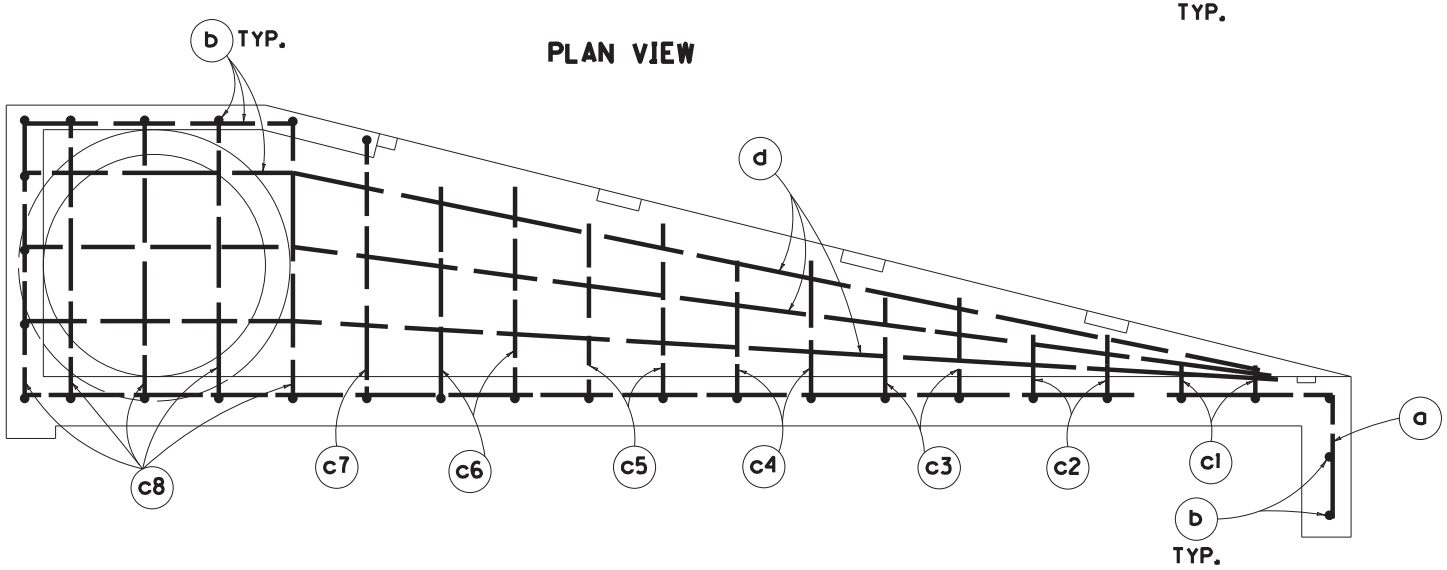
Contract ID: 204000
Page 141 of 294

COUNTY OF	ITEM NO.	SHEET NO.

WARREN COUNTY
HSIP 5073 (005)



PLAN VIEW

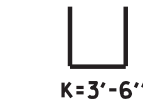


ELEVATION VIEW

NOTES

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

BENT BAR SHAPES



K=3'-6"

BARS (c)



K=1'-8"

BARS (a)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
36"						
a	4	5	19	6	1	8
b	4	16	3	6		
c1	4	2	5	0	3	6
c2	4	2	5	10	3	6
c3	4	2	6	10	3	6
c4	4	2	7	10	3	6
c5	4	2	8	10	3	6
c6	4	2	9	10	3	6
c7	4	1	11	0	3	6
c8	4	5	11	6	3	6
d	4	6	13	4		

SHEET 2 OF 2

KENTUCKY
DEPARTMENT OF HIGHWAYS

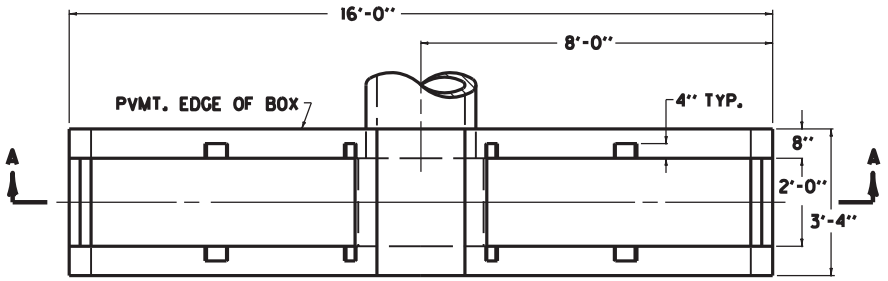
BILL OF REINFORCEMENT SAFETY TYPE BOX INLET (36")

APPROVED _____ PROJECT ENGINEER

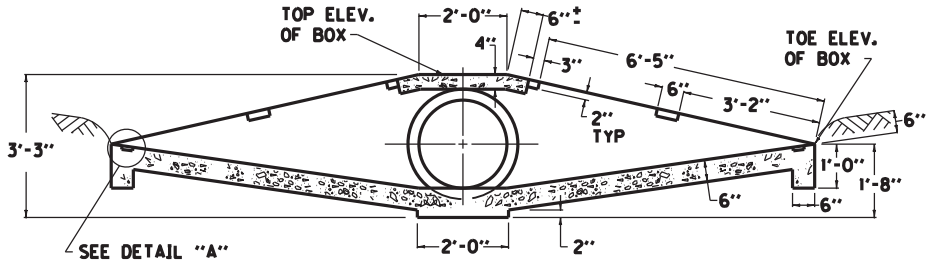
06-04-2008 DATE

Contract ID: 204000
Page 142 of 294

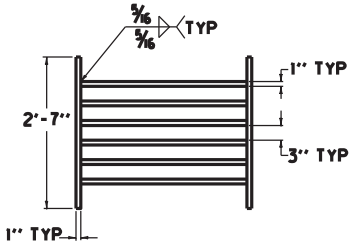
COUNTY OF	ITEM NO.	SHEET NO.



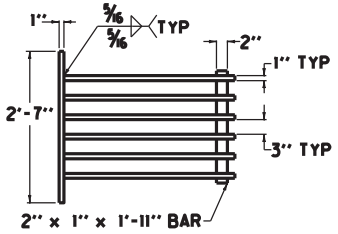
PLAN VIEW



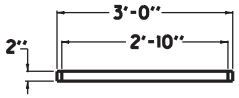
SECTION A-A



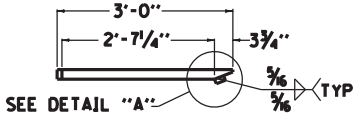
GRATE NO. 1
PLAN VIEW



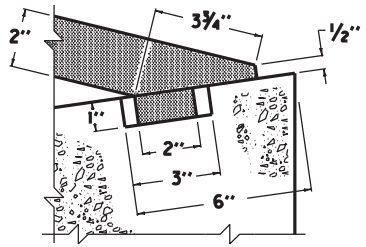
GRATE NO. 2
PLAN VIEW



GRATE NO. 1
SIDE ELEVATION



GRATE NO. 2
SIDE ELEVATION



DETAIL "A"

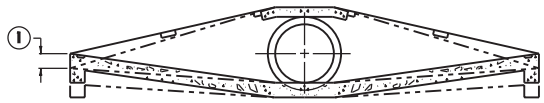
NOTES

ITEM CODE	BID ITEM	UNIT
1728	SAFETY BOX INLET-18 IN DBL SDB-5	EACH
1729	SAFETY BOX INLET-24 IN DBL SDB-5	EACH

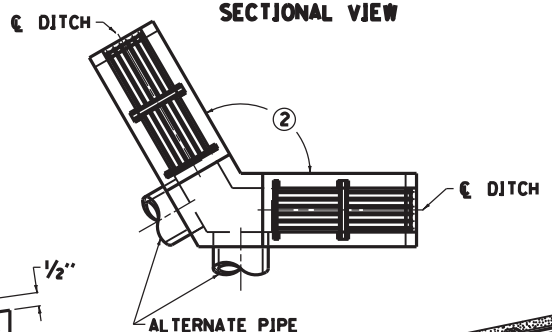
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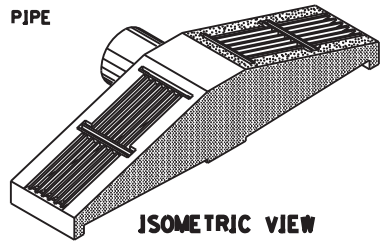
(1) TOE OF BOX SHALL BE RAISED OR LOWERED TO FIT EXISTING FIELD CONDITIONS.

(2) ANGLE BETWEEN BOX WALLS MAY VARY TO FIT EXISTING FIELD CONDITIONS.



SECTIONAL VIEW





ISOMETRIC VIEW

APPROXIMATE QUANTITIES			
CLASS "A" CONC.	GRATE	LBS. STRUCTURAL STEEL	
CUBIC YARDS	NUMBER	EACH GRATE	TOTAL POUNDS
2.07	1	145	596
	2	153	

N/A

DBL SAFETY BOX INLET DETAIL SHEET

MicroStation v8.11.7.443
E-SHEET NAME:
USER: Patrick.Stone
DATE PLOTTED: September 24, 2013
FILE NAME: C:\USERS\PATRICK.STONE\APPDATA\LOCAL\MICROSOFT\WINDOWS\TEMPORARY INTERNET FILES\CONTENT.OUTLOOK\YO843LNA\SAFETY BOX.DGN

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2020.*

SUPPLEMENTAL SPECIFICATIONS

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

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

11E

SPECIAL NOTE FOR BORING AND JACKING STEEL PIPE WITHOUT CARRIER PIPE

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

1.0 DESCRIPTION. Bore and jack steel pipe. Use this note when no carrier pipe will be encased.

2.0 MATERIALS.

2.1 Pipe. Provide plain end steel pipe with a specific minimum yield strength, SMYS, of at least 35,000 psi and tensile strength of 60,000 psi per API-5L grade B material. The steel pipe supplied shall be manufactured by the seamless, electric-weld, submerged-arc weld or gas metal-arc well process as specified in API –5L. Certification of 35,000 psi SMYS shall be furnished by the supplier through the Contractor to the Engineer to retain 3 copies.

MINIMUM WALL THICKNESS FOR STEEL PIPE	
Nominal Diameter (Inches)	Wall Thickness (Inches)
18 or less	0.375
24	0.500
30	0.500
36	0.532
42	0.625

2.2 Grout. Conform to Subsection 601.03.03.

2.3 High Grade Bentonite. Conform to the following:

API 13A Section 4		
Requirement	Specification	Result
Viscometer Dial Reading at 600 rpm	30, minimum	40
Yield Point/Plastic Viscosity Ratio	3, maximum	3.00 maximum
Filtrate Volume	15 cm3, maximum	14.50 maximum
Residue greater than 75 micrometers	4.0 wt percent maximum	1.0-1.5 %
Moisture	10.0 wt percent maximum	9.0-9.5%

3.0 CONSTRUCTION. Perform the following:

1. Locate a suitable pit and obtain the Engineer's approval.
2. Excavate the pit or trenches for the BORE AND JACK operation and for placing the end joints of pipe, when required. Securely sheet and brace the pits or trenches to prevent caving, where necessary.

3. When installing pipe under railroads, highways, streets, or other facilities by Bore and Jack, perform construction without interfering with the facility operation or weakening the roadbed or structure.
4. Place excavated material near the top of the working pit and dispose of it as required. Use water or other fluids with the boring operation to lubricate the cuttings. Do not perform jetting.
5. In unconsolidated soil formations, use a gel-forming collodial drilling fluid with at least 10 percent of high grade bentonite to consolidate excavated material, seal the walls of the hole, and lubricate subsequent removal of material and immediate pipe installation.
6. Ensure that the diameter of the excavation conforms to the outside diameter of the pipe as closely as possible.
7. Pressure grout voids that develop during the installation operation and that the Engineer determines are detrimental to the Work.
8. To force the pipe through the roadbed into the bored space, use a jack with a head constructed to apply uniform pressure around the ring of the pipe, which shall be square cut.
9. Set the pipe to be jacked on guides, braced together to properly support the pipe section and to direct it to the proper line and grade.
10. When the installation is made by concurrent boring and jacking, solidly weld all joints. Ensure the weld is strong enough to withstand the forces exerted from the boring and jacking operations as well as the vertical loading imposed on the pipe after installation and that it provides a smooth, non-obstructing joint in the interior of the pipe.
11. When the pipe is installed in open trench, bed and backfill according to Section 701.
12. The line and grade from the pipe's final position, as shown on plans, may vary no more than 2 percent in lateral alignment and one percent in vertical grade. Ensure that the final grade of the flow line is in the direction indicated on the Plans.
13. Use a cutting edge around the head end. Extend it a short distance beyond the pipe end with inside angles or lugs to keep the cutting edge from slipping back into the pipe.
14. Once the pipe installation begins, proceed with the operation without interruption to prevent the pipe from becoming firmly set in the embankment.
15. Remove and replace pipe damaged in jacking operations.
16. After completing the installation, backfill the excavated pits and trenches with flowable fill according to Section 601.03.03 B) 5 a) if the pit is in median area where it will have pavement over it.

4.0 MEASUREMENT. The Department will measure the completed length of Bore and Jacked pipe through the flowline from end to end in linear feet. The Department will not measure pressure grouting voids or removal and replacement of pipe damaged in jacking operations for payment and will consider it incidental to Bore and Jack. When abandoning a bore hole due to mechanical malfunction, improper alignment, or other problems due to construction operations, the Department will not measure the backfill and relocation for payment and will consider it incidental to this item of work. When abandoning a bore hole due to an unforeseen physical obstruction or situation, the Department will measure the work according to a negotiated supplemental agreement.

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

11E

Code	Pay Item	Pay Unit
----	Bore and Jack, Size Pipe	Linear Foot

The Department will consider payment as full compensation for all materials, earthwork, shoring, pipe and work required under this section.

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 Standard Specifications for Road and Bridge Construction, current edition.

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

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

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

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

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

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

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

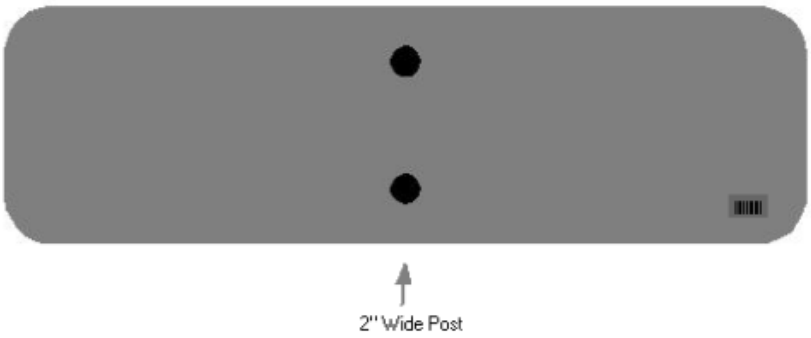
The installation of the permanent sign will be measured in accordance to Section 715.

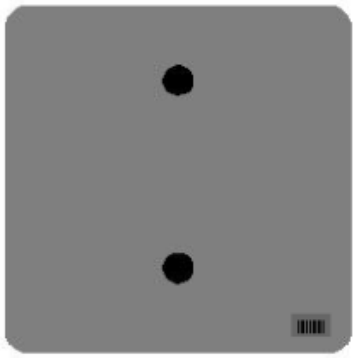
5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
24631EC	Barcode Sign Inventory	Each

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

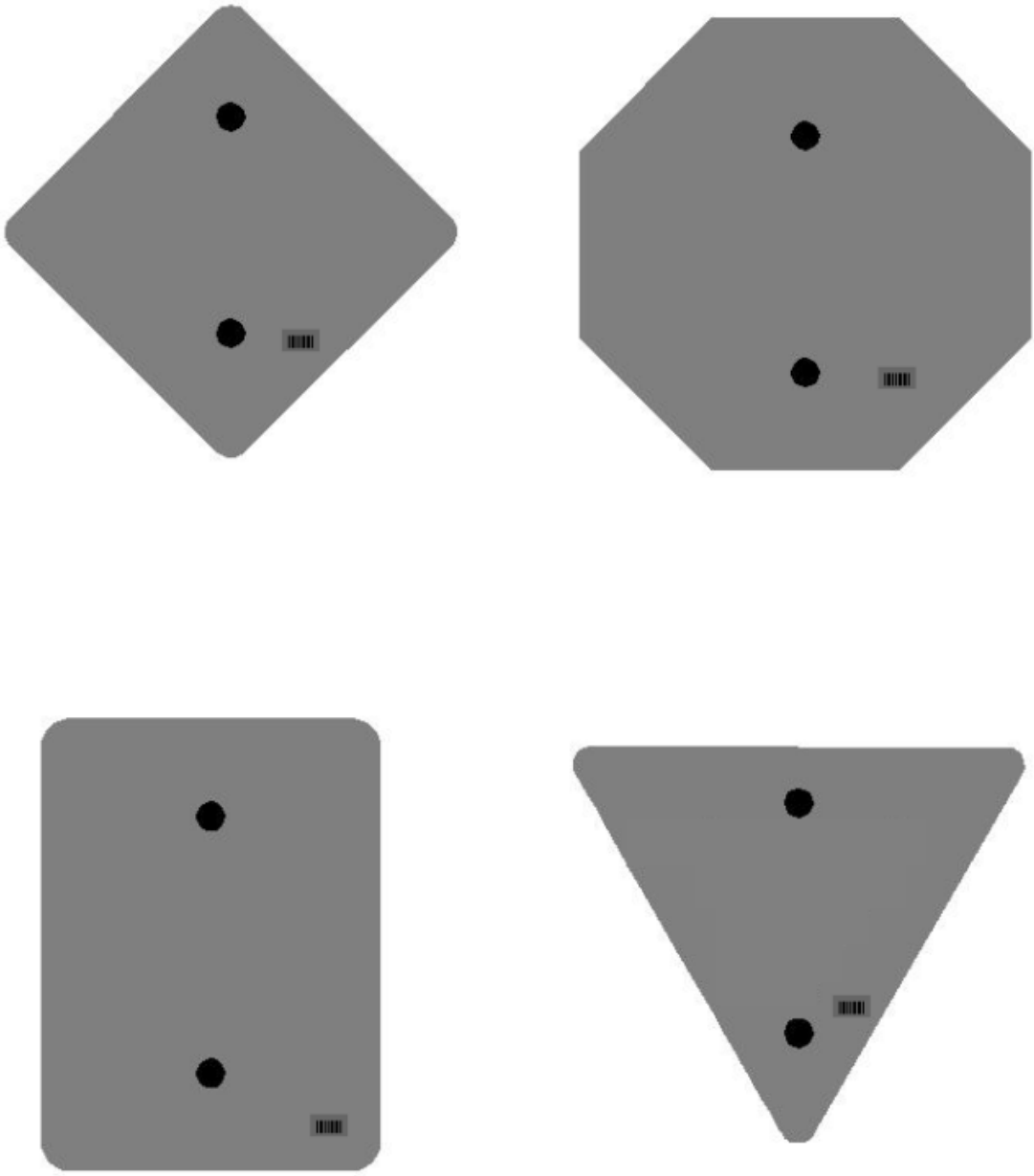
One Sign Post



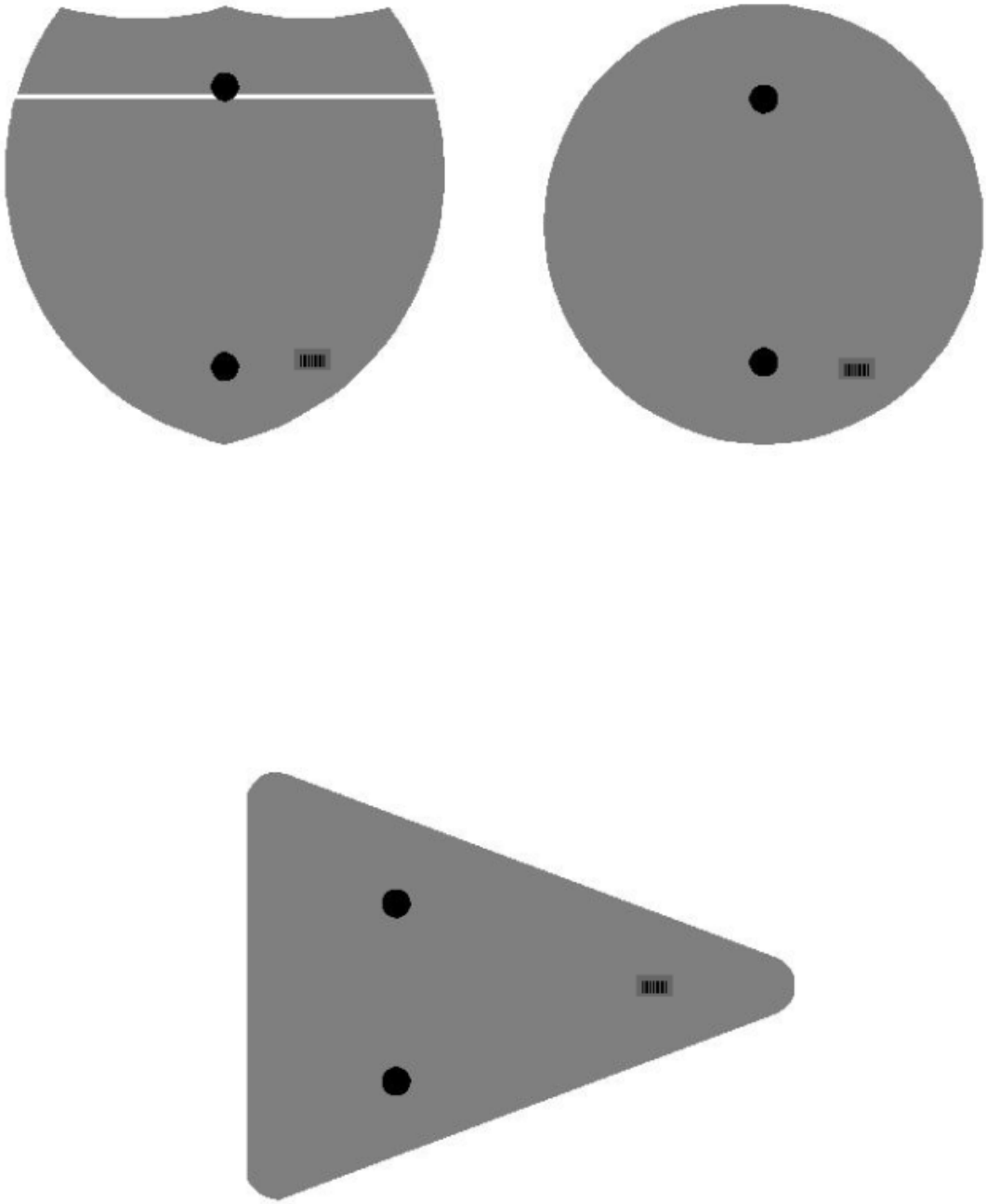




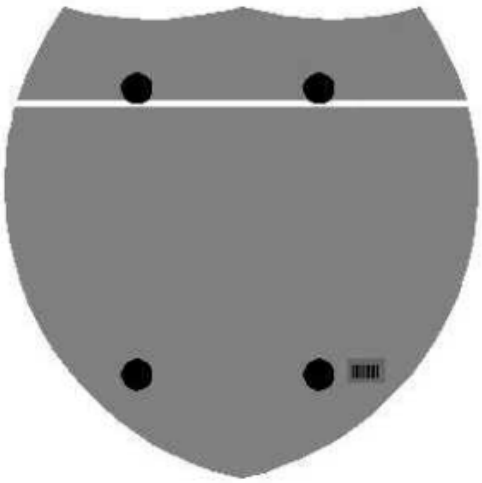
One Sign Post



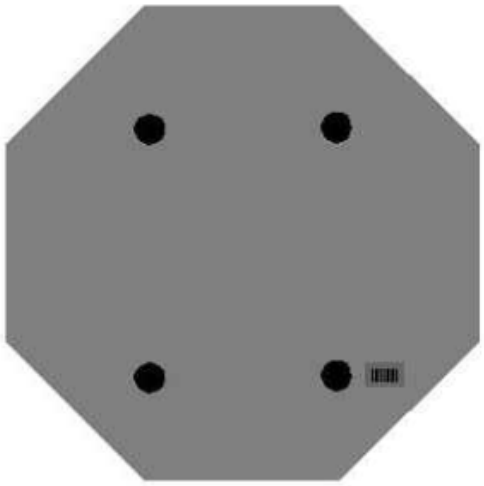
One Sign Post



Double Sign Post



Interstate
Shield

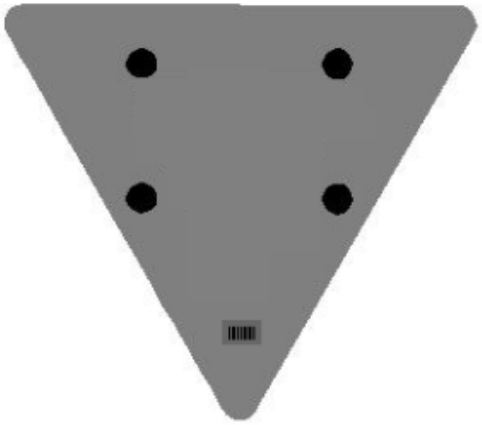


48" Stop

2 Post Signs







2020 STANDARD DRAWINGS THAT APPLY

ROADWAY

~ BARRIERS ~

TYPICAL BARRIER INSTALLATIONS

TYPICAL GUARDRAIL INSTALLATIONS RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS RBI-002-07
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1 ..... RBI-004-06

GUARDRAIL HARDWARE

STEEL BEAM GUARDRAIL (W-BEAM) RBR-001-13
GUARDRAIL COMPONENTS RBR-005-11
STEEL GUARDRAIL POSTS RBR-015-06
GUARDRAIL SYSTEM TRANSITION RBR-018
GUARDRAIL END TREATMENT TYPE 1 ..... RBR-020-07
DELINEATORS FOR GUARDRAIL RBR-005-01

~ DRAINAGE ~

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12" – 24" PIPE) RDI-001-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE RDI-020-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE RDI-021-01
PIPE BEDDING, TRENCH CONDITION RDI-025-06
PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE RDI-026-01
EROSION CONTROL BLANKET SLOPE INSTALLATION RDI-040-01

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

~ FENCES AND GATES ~

WOVEN WIRE FENCE

FENCING DETAILS RFW-001-06
WOVEN WIRE FENCE TYPE 1 ..... RFW-005-08
WOVEN WIRE FENCE TYPE 2 ..... RFW-006-07

~ GENERAL ~

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS RGX-001-06
TYPICAL EMBANKMENT FOUNDATION BENCHES RGX-010-04
ONE POINT PROCTER FAMILY OF CURVES RGX-200-01

Standard Drawings That Apply
Page 2 of 2

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT RPM-110-07

TRAFFIC

~ PERMANENT ~

RUMBLE STRIPS

SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS TPR-115
EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS TPR-120

~ TEMPORARY ~

TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAY TTC-100-05
SHOULDER CLOSURE TTC-135-03

DEVICES

PAVEMENT CONDITION WARNING SIGNS TTD-125-03

STRIPING OPERATIONS

MOBILE OPERATION FOR PAINT STRIPING CASE I TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II TTS-105-02

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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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 contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(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 administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:

    a. withholding payments to the contractor under the contract until the contractor complies; and/or
    b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

a) The date of leaving office or termination of employment; or
b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

"General Decision Number: KY20200040 08/28/2020

Superseded General Decision Number: KY20190040

State: Kentucky

Construction Type: Highway

Counties: Allen, Ballard, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren and Webster Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 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 $10.80 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 2020. 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	01/03/2020
1	01/10/2020
2	01/31/2020
3	08/14/2020
4	08/28/2020

BRIN0004-002 06/01/2017

BALLARD, BUTLER, CALDWELL, CARLISLE, CRITTENDEN, DAVIESS, EDMONSON, FULTON, GRAVES, HANCOCK, HENDERSON, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, MCLEAN, MUHLENBERG, OHIO, UNION, and WEBSTER COUNTIES

	Rates	Fringes

BRICKLAYER
Ballard, Caldwell, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, and McCracken Counties.....$ 30.50 15.16
Butler, Edmonson, Hopkins, Muhlenberg, and Ohio Counties.....$ 26.80 12.38
Daviess, Hancock, Henderson, McLean, Union, and Webster Counties.....$ 30.00 15.16

BRTN0004-005 06/01/2017

ALLEN, CALLOWAY, CHRISTIAN, LOGAN, SIMPSON, TODD, TRIGG, and WARREN COUNTIES

	Rates	Fringes
BRICKLAYER	$ 26.80	12.38

CARP0357-002 04/01/2019

	Rates	Fringes
CARPENTER	$ 29.25	19.23
Diver	$ 44.25	19.23
PILEDRIVERMAN	$ 29.50	19.23

ELEC0369-006 05/28/2019

BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 32.44	17.22

ELEC0429-001 01/01/2020

ALLEN & SIMPSON COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 27.72	13.48

ELEC0816-002 01/01/2020

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 33.58	25.5%+7.25

Cable spicers receive $.25 per hour additional.

ELEC1701-003 06/01/2018

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 31.04	15.74

Cable spicers receive $.25 per hour additional.

ELEC1925-002 01/01/2019

FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):

	Rates	Fringes
CABLE SPLICER	$ 25.80	12.16
ELECTRICIAN	$ 25.20	13.74

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* ENGI0181-017 07/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	$ 33.95	17.25
GROUP 2	$ 31.09	17.25
GROUP 3	$ 31.54	17.25
GROUP 4	$ 30.77	17.25

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross

Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points;& Whirley Oiler

GROUP 3 -All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling equals or exceeds 150 ft. - $1.00 above Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0070-005 06/01/2020

BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);
EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden)

	Rates	Fringes
IRONWORKER		
Structural; Ornamental; Reinforcing; Precast Concrete Erectors	$ 30.42	23.15

IRON0103-004 08/01/2018

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);
CALDWELL COUNTY (Northeastern third, including the Township of Creswell);
CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);
CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);
MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir)

	Rates	Fringes
Ironworkers:.....	$ 28.66	22.435

IRON0492-003 05/01/2018

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES
BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);
CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);
EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);
MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood)

	Rates	Fringes
Ironworkers:.....	$ 26.11	14.02

IRON0782-006 05/01/2018

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES
CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);
CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);
CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told)

	Rates	Fringes
Ironworkers:		
Projects with a total contract cost of $20,000,000.00 or above.....	$ 28.79	24.17
All Other Work.....	$ 27.20	22.75

LABO0189-005 07/01/2018

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	$ 23.07	14.21
GROUP 2.....	$ 23.32	14.21
GROUP 3.....	$ 23.37	14.21
GROUP 4.....	$ 23.97	14.21

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0189-006 07/01/2018

ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 23.07	14.21
GROUP 2	$ 23.32	14.21
GROUP 3	$ 23.37	14.21
GROUP 4	$ 23.97	14.21

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler;

Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0561-001 07/01/2018

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 22.71	15.00
GROUP 2	$ 22.96	15.00
GROUP 3	$ 23.01	15.00
GROUP 4	$ 23.61	15.00

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter;

Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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PAIN0032-002 09/01/2018

BALLARD COUNTY

	Rates	Fringes
Painters:		
Bridges	$ 33.56	16.13
All Other Work	$ 31.86	16.13

Spray, Blast, Steam, High & Hazardous (Including Lead Abatement) and All Epoxy - $1.00 Premium

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PAIN0118-003 06/01/2014

EDMONSON COUNTY:

	Rates	Fringes
Painters:		
Brush & Roller	$ 18.50	11.97
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning	$ 19.50	11.97

PAIN0156-006 04/01/2015

DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES

	Rates	Fringes
Painters:		
BRIDGES		
GROUP 1	$ 27.60	12.85
GROUP 2	$ 27.85	12.85
GROUP 3	$ 28.60	12.85
GROUP 4	$ 29.60	12.85
ALL OTHER WORK:		
GROUP 1	$ 26.45	12.85
GROUP 2	$ 26.70	12.85

GROUP 3	$ 27.45	12.85
GROUP 4	$ 28.45	12.85

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast; Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

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PAIN0500-002 06/01/2018

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

	Rates	Fringes
Painters:		
Bridges	$ 27.75	13.60
All Other Work	$ 21.50	13.60

Waterblasting units with 3500 PSI and above - $.50 premium
Spraypainting and all abrasive blasting - $1.00 premium
Work 40 ft. and above ground level - $1.00 premium

PLUM0184-002 07/01/2018

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN and TRIGG COUNTIES

	Rates	Fringes
Plumber; Steamfitter	$ 35.06	18.18

PLUM0502-004 08/01/2020

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN

	Rates	Fringes
Plumber; Steamfitter	$ 36.92	20.78

PLUM0633-002 07/01/2017

DAVIESS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:

	Rates	Fringes
PLUMBER/PIPEFITTER	$ 31.47	16.80

TEAM0089-003 04/01/2019

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES

	Rates	Fringes
Truck drivers:		
Zone 1:		
Group 1	$ 20.82	21.96
Group 2	$ 21.00	21.96
Group 3	$ 21.08	21.96
Group 4	$ 21.10	21.96

GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic; Single Axle Dump; Flat Bed; All Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 3 - Mixer All Types

GROUP 4 - Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker; Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle

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TEAM0215-003 04/01/2019

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO & WEBSTER COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1	$ 22.45	21.96
Group 2	$ 22.68	21.96
Group 3	$ 22.75	21.96
Group 4	$ 22.76	21.96

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors; Mixer All Types

GROUP 4: Euclid and other heavy earth moving equipment; Low Boy; Articulator Cat; 5 Axle Vehicle; Winch and A- Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker

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TEAM0236-001 04/01/2019

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN,TODD & TRIGG COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1	$ 20.82	21.96
Group 2	$ 21.00	21.96
Group 3	$ 21.00	21.96
Group 4	$ 20.10	21.96
Group 5	$ 21.08	21.96

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Drivers of Distributors

GROUP 4: Euclid and other heavy earth moving equipment; Low Boy; Articulator Cat; Five Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier

GROUP 5: Mixer All Types

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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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 to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
12.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director
Office of Federal Contract Compliance Programs
61 Forsyth Street, SW, Suite 7B75
Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the **"covered area"** is Warren County.

PART IV

INSURANCE

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

PART V

BID ITEMS

PROPOSAL BID ITEMS

204000

Report Date 8/31/20

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	1,820.00	TON		$	
0020	00100		ASPHALT SEAL AGGREGATE	424.00	TON		$	
0030	00103		ASPHALT SEAL COAT	50.70	TON		$	
0040	00190		LEVELING & WEDGING PG64-22	564.00	TON		$	
0050	00212		CL2 ASPH BASE 1.00D PG64-22	3,719.00	TON		$	
0060	00301		CL2 ASPH SURF 0.38D PG64-22	5,640.00	TON		$	
0070	02676		MOBILIZATION FOR MILL & TEXT (Warren Co KY 234)	1.00	LS		$	
0080	02677		ASPHALT PAVE MILLING & TEXTURING	50.00	TON		$	
0090	10020NS		FUEL ADJUSTMENT	15,223.00	DOLL	$1.00	$	$15,223.00
0100	10030NS		ASPHALT ADJUSTMENT	36,590.00	DOLL	$1.00	$	$36,590.00
0110	24970EC		ASPHALT MATERIAL FOR TACK NON-TRACKING	26.00	TON		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0120	02014		BARRICADE-TYPE III	4.00	EACH		$	
0130	02159		TEMP DITCH	19,056.00	LF		$	
0140	02160		CLEAN TEMP DITCH	9,528.00	LF		$	
0150	02237		DITCHING	167.00	LF		$	
0160	02259		FENCE-TEMP	4,400.00	LF		$	
0170	02268		REMOVE & REPLACE FENCE	4,400.00	LF		$	
0180	02483		CHANNEL LINING CLASS II	548.00	TON		$	
0190	02562		TEMPORARY SIGNS	470.00	SQFT		$	
0200	02575		DITCHING AND SHOULDERING	2,450.00	LF		$	
0210	02650		MAINTAIN & CONTROL TRAFFIC (Warren Co KY 234)	1.00	LS		$	
0220	02697		EDGELINE RUMBLE STRIPS	76,222.00	LF		$	
0230	02701		TEMP SILT FENCE	19,056.00	LF		$	
0240	02703		SILT TRAP TYPE A	32.00	EACH		$	
0250	02704		SILT TRAP TYPE B	32.00	EACH		$	
0260	02705		SILT TRAP TYPE C	32.00	EACH		$	
0270	02706		CLEAN SILT TRAP TYPE A	32.00	EACH		$	
0280	02707		CLEAN SILT TRAP TYPE B	32.00	EACH		$	
0290	02708		CLEAN SILT TRAP TYPE C	32.00	EACH		$	
0300	02726		STAKING (Warren Co KY 234)	1.00	LS		$	
0310	03240		BASE FAILURE REPAIR	505.00	SQYD		$	
0320	05950		EROSION CONTROL BLANKET	5,000.00	SQYD		$	
0330	05952		TEMP MULCH	102,797.00	SQYD		$	
0340	05953		TEMP SEEDING AND PROTECTION	76,714.00	SQYD		$	
0350	05963		INITIAL FERTILIZER	5.00	TON		$	
0360	05964		MAINTENANCE FERTILIZER	7.90	TON		$	
0370	05985		SEEDING AND PROTECTION	153,428.00	SQYD		$	
0380	05992		AGRICULTURAL LIMESTONE	95.10	TON		$	
0390	06427		TRENCHING	76,068.00	LF		$	

204000

PROPOSAL BID ITEMS

Report Date 8/31/20

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0400	06510		PAVE STRIPING-TEMP PAINT-4 IN	90,522.00	LF		$	
0410	06514		PAVE STRIPING-PERM PAINT-4 IN	143,000.00	LF		$	
0420	06568		PAVE MARKING-THERMO STOP BAR-24IN	170.00	LF		$	
0430	20257NC		SITE PREPARATION (LT STA 124+00 TO 131+00)	1.00	LS		$	
0440	20257NC		SITE PREPARATION (LT STA 162+50 TO 165+50)	1.00	LS		$	
0450	20257NC		SITE PREPARATION (LT STA 189+00 TO 193+50)	1.00	LS		$	
0460	20257NC		SITE PREPARATION (LT STA 216+00 TO 219+00)	1.00	LS		$	
0470	20257NC		SITE PREPARATION (LT STA 222+00 TO 224+00)	1.00	LS		$	
0480	20257NC		SITE PREPARATION (LT STA 236+00 TO 239+50)	1.00	LS		$	
0490	20257NC		SITE PREPARATION (LT STA 257+00 TO 259+00)	1.00	LS		$	
0500	20257NC		SITE PREPARATION (LT STA 263+00 TO 267+00)	1.00	LS		$	
0510	20257NC		SITE PREPARATION (LT STA 272+00 TO 274+00)	1.00	LS		$	
0520	20257NC		SITE PREPARATION (LT STA 339+00 TO 341+50)	1.00	LS		$	
0530	20257NC		SITE PREPARATION (LT STA 344+00 TO 346+50)	1.00	LS		$	
0540	20257NC		SITE PREPARATION (LT STA 361+00 TO 362+50)	1.00	LS		$	
0550	20257NC		SITE PREPARATION (LT STA 367+00 TO 368+00)	1.00	LS		$	
0560	20257NC		SITE PREPARATION (RT STA 124+00 TO 131+00)	1.00	LS		$	
0570	20257NC		SITE PREPARATION (RT STA 177+00 TO 179+00)	1.00	LS		$	
0580	20257NC		SITE PREPARATION (RT STA 188+50 TO 195+00)	1.00	LS		$	
0590	20257NC		SITE PREPARATION (RT STA 222+00 TO 224+00)	1.00	LS		$	
0600	20257NC		SITE PREPARATION (RT STA 241+00 TO 242+00)	1.00	LS		$	
0610	20257NC		SITE PREPARATION (RT STA 249+50 TO 251+50)	1.00	LS		$	
0620	20257NC		SITE PREPARATION (RT STA 273+00 TO 274+00)	1.00	LS		$	
0630	20257NC		SITE PREPARATION (RT STA 344+00 TO 346+50)	1.00	LS		$	
0640	20257NC		SITE PREPARATION (RT STA 48+00 TO 51+00)	1.00	LS		$	
0650	20257NC		SITE PREPARATION (RT STA 53+50 TO 57+00)	1.00	LS		$	
0660	20257NC		SITE PREPARATION (RT STA 62+00 TO 64+00)	1.00	LS		$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT

204000

PROPOSAL BID ITEMS

Report Date 8/31/20

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0670	00462		CULVERT PIPE-18 IN	660.00	LF		$	
0680	00464		CULVERT PIPE-24 IN	35.00	LF		$	
0690	01310		REMOVE PIPE	75.00	LF		$	
0700	01585		REMOVE DROP BOX INLET	1.00	EACH		$	
0710	01643		JUNCTION BOX-24 IN	2.00	EACH		$	
0720	01726		SAFETY BOX INLET-18 IN SDB-1	1.00	EACH		$	
0730	01728		SAFETY BOX INLET-18 IN DBL SDB-5	2.00	EACH		$	
0740	02625		REMOVE HEADWALL	27.00	EACH		$	
0750	02690		SAFELOADING	30.00	CUYD		$	
0760	23126EN		BORE AND JACK PIPE-18 IN	252.00	LF		$	
0770	24575ES610		HEADWALL (SLOPED AND MITERED CONCRETE FOR 18 INCH PIPE)	25.00	EACH		$	
0780	24575ES610		HEADWALL (SLOPED AND MITERED CONCRETE FOR 24 INCH PIPE)	2.00	EACH		$	

Section: 0004 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0790	06406		SBM ALUM SHEET SIGNS .080 IN	1,110.60	SQFT		$	
0800	06410		STEEL POST TYPE 1	3,360.00	LF		$	
0810	21373ND		REMOVE SIGN	26.00	EACH		$	
0820	24631EC		BARCODE SIGN INVENTORY	319.00	EACH		$	

Section: 0005 - GUARDRAIL

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0830	02367		GUARDRAIL END TREATMENT TYPE 1	11.00	EACH		$	
0840	02381		REMOVE GUARDRAIL	550.00	LF		$	

Section: 0006 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0850	02568		MOBILIZATION	1.00	LS		$	
0860	02569		DEMOBILIZATION	1.00	LS		$	