



Purchasing Department
140 Stonewall Avenue West, Ste 204
Fayetteville, GA 30214
Phone: 770-305-5420
www.fayettecountyga.gov

April 9, 2021

**Subject: Invitation to Bid #1951-B: Redwine Road & Starrs Mill School Complex
Multi-Use Path**

Gentlemen/Ladies:

Fayette County, Georgia invites you to submit a bid for multi-use path construction. You are invited to submit a bid in accordance with the information contained herein.

Questions concerning this invitation to bid should be addressed to Sherry White in writing via email to swhite@fayettecountyga.gov or fax to (770) 719-5544. Questions will be accepted until 3:00 p.m., Friday, April 30, 2021.

Purchasing Department office hours are Monday through Friday 8:00 a.m. to 5:00 p.m. The office telephone number is (770) 305-5420.

Please return your response to the following address:

Fayette County Government
Purchasing Department
140 Stonewall Avenue West, Suite 204
Fayetteville, Georgia 30214
Attention: Contracts Administrator

Bid Number: 1951-B

Bid Name: Redwine Road & Starrs Mill School Complex Multi-Use Path

Your envelope *must* be sealed, and should show your company's name and address.

Bids will be received at the above address until 12:00 p.m., Wednesday, May 5, 2021 in the Purchasing Department, Suite 204. For bids that you may drop off in person, there will be a large metal parcel drop box located outside the front door of the Purchasing Department, Suite 204, in the county complex at 140 Stonewall Avenue West, Fayetteville, Georgia. You must place your bid in the drop box no later than 12:00 p.m. on Wednesday, May 5, 2021.

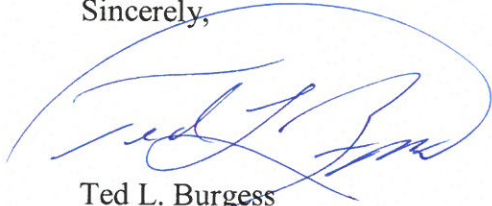
Bids must be signed to be considered. Late bids cannot be considered. Faxed bids or emailed bids cannot be considered. A virtual bid opening will be held at 3:00 p.m. on that day. You may view the virtual bid opening on Livestream by clicking:

<http://new.livestream.com/accounts/4819394?query=fayette%20county&cat=account>.

If you download this invitation to bid from the county's web site, it will be your responsibility to check the web site for any addenda that might be issued for this solicitation. The county cannot not be responsible for a vendor not receiving information provided in any addendum.

Thank you for participating in the solicitation process.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ted L. Burgess", is written over a large, light blue oval. The signature is fluid and cursive.

Ted L. Burgess
Director of Purchasing

**INVITATION TO BID
FOR
REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH**

GDOT PI # 0012624

**FAYETTE COUNTY, GEORGIA
ITB# 1951-B**

100% GEORGIA CONGRESSIONAL DISTRICT #3
100% within Fayette County

Net Length of Path 1.53 miles
Net Length of Bridges 0.00 miles
Net Length of Project 1.53 miles
Net Length of Exceptions 1.23 miles
Gross Length of Project 2.76 miles

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Checklist of Documents to Return

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

(Please return this checklist and the documents listed below with your submittal)

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)	_____
Bid Bond*	_____
Project Pricing Sheet (4 pages)*	_____
Exceptions, if any	_____
Company Information form	_____
Letter certifying 3 years of existence & no contract default	_____
Contractor Experience form	_____
Federal Aid Certification	_____
Non-Collusion Certification	_____
Anti-Lobbying Certification	_____
Certification – Suspension & Debarment	_____
DBE Goals	_____
Signed addenda, if any are issued	_____
References form	_____
GDOT Prequalification Contractors & Registered Subcontractors Table {Due prior to county issuing a Notice of Award}	_____

*Failure to submit this document will make the bid **nonresponsive** and not eligible for award consideration.

COMPANY NAME: _____

**Fayette County Board of Commissioners
Redwine Road & Starrs Mill School Complex Multi-Use Path
ITB# 1951-B**

**GDOT PI 0012624
2017 SPLOST No. 17TAH**

INTRODUCTION

Fayette County is soliciting Bids from Georgia Department of Transportation (GDOT) prequalified Contractors experienced with path construction, including, but not limited to drainage improvements, grading, signal installation, and paving. The project is along the southern end of Redwine Road in Fayette County. The approximate limits are from the intersection of Foreston Place with Redwine Road (southern termini) to the intersection of Quarters Road and Birkdale Drive with Redwine Road (northern termini). A portion of the project is inside the City limits of Peachtree City.

The purpose of the project is to construct a 10-ft wide (typical) asphalt path along the eastern side of Redwine Road. The path will be used by pedestrians, bicycles, golf carts, etc. and will connect with existing path segments and cross several intersecting side streets. The project also includes construction and installation of a pedestrian hybrid beacon at proposed Redwine Road crosswalk.

This project is jointly funded with Fayette County Special Purpose Local Option Sales Tax (SPLOST) money and Surface Transportation Block Grant – Urban (STBG) funds. All requirements associated with federal-aid projects shall be followed by the Contractor. Although GDOT retains ultimate responsibility for ensuring federal requirements are satisfied, the project is being locally-let by Fayette County and Fayette County will provide construction oversight.

Fayette County has acquired all necessary fee-simple right-of-way and construction easements for this project.

This project was previously advertised for bid by Fayette County in September 2020 but not awarded due to an error in the Disadvantaged Business Enterprise (DBE) goal. The goal has been increased to the correct amount, 15 percent, in this invitation to bid.

FAYETTE COUNTY GENERAL TERMS AND CONDITIONS

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

1. **Definitions:** The term “contractor” as used herein and elsewhere in these Terms and Conditions shall be used synonymously with the term “successful bidder.” The term “county” shall mean Fayette County, Georgia.
2. **Bid is Offer to Contract:** Each bid constitutes an offer to become legally bound to a contract with the county, incorporating the invitation to bid and the bidder’s bid. The binding offer includes compliance with all terms, conditions, special conditions, specifications, and requirements stated in the invitation to bid, except to the extent that a bidder takes written exception to such provisions. All such terms, conditions, special conditions, specifications, and requirements will form the basis of the contract. The bidder should take care to answer all questions and provide all requested information, and to note any exceptions in the bid submission. Failure to observe any of the instructions or conditions in this invitation to bid may result in rejection of the bid.
3. **Binding Offer:** Each bid shall constitute a firm offer that is binding for sixty (60) days from the date of the bid opening, unless the bidder takes exception to this provision in writing.
4. **Bidder’s Questions:** The Fayette County Purchasing Department must receive questions about this invitation to bid in writing at least six days before the scheduled bid opening, excluding Saturdays, Sundays, and holidays. The county will post answers to questions and/or other information concerning the invitation to bid in the form of an addendum on the county’s website at www.fayettecountyga.gov. It is the responsibility of the prospective bidder to check the website for any addenda issued for this invitation to bid.
5. **References:** Include with your bid a list of three (3) jobs that your company has done that are of the same or similar nature to the work described in this invitation to bid, on the form provided. Include all information as requested on the form.
6. **Bid Submission:** Submit your bid, along with any addenda issued by the county, in a sealed opaque envelope with the following information written on the outside of the envelope:
 - a. The bidder’s company name,
 - b. The bid number, which is **#1951-B**, and
 - c. The bid name, which is **Redwine Road & Starrs Mill School Complex Multi-Use Path**

Mail or deliver one (1) original bid, signed in ink by a company official authorized to make a legal and binding offer, and a copy on a flash drive, to:

Fayette County Government
Purchasing Department
140 Stonewall Avenue West, Suite 204
Fayetteville, GA 30214

Attention: Contracts Administrator

You may submit bids in person, by U.S. mail, or by a commercial carrier. Do not submit bids by

facsimile, e-mail, or other electronic means. Once submitted, all bids become the property of Fayette County.

7. **Bid Preparation Costs:** The bidder shall bear all costs associated with preparing the bid.
8. **Late Bids:** Bids not received by the time and date of the scheduled bid opening will not be considered, unless the delay is a result of action or inaction by the county.
9. **More than One Bid:** Do not submit alternate bids or options, unless requested or authorized by the county in the Invitation to Bid. If a responder submits more than one bid without being requested or authorized to do so, the county may disqualify the bids from that responder, at the county's option.
10. **Bid Corrections or Withdrawals:** The bidder may correct a mistake, or withdraw a bid, before the bid opening by sending written notification to the Director of Purchasing. Bids may be withdrawn after the bid opening only with written authorization from the Director of Purchasing.
11. **Defects or Irregularities in Bids:** The county reserves the right to waive any defect or irregularity in any bid received. In case of an error in extension of prices or totals in the bid, the unit prices shall govern.
12. **Prices Held Firm:** Prices quoted shall be firm for the period of the contract, unless otherwise specified in the bid. All prices for commodities, supplies, equipment, or other products shall be quoted FOB Destination, Fayette County or job site.
13. **Brand Name:** If items in this invitation for bid have been identified, described or referenced by a brand name or trade name description, such identification is intended to be descriptive, but not restrictive and is to indicate the quality and characteristics of products that may be offered. Alternative products may be considered for award if clearly identified in the bid. Items offered must meet required specifications and must be of a quality which will adequately serve the use and purpose for which intended.
14. **Bidder Substitutions:** Bidders offering substitutions or deviations from specifications stated in the invitation to bid, shall list such substitutions or deviations on the "Exceptions to Specifications" sheet provided, or on a separate sheet to be submitted with the bid. The absence of such list shall indicate that the bidder has taken no exception to the specifications. The evaluation of bids and the determination as to equality and acceptability of products or services offered shall be the responsibility of the county.
15. **Samples:** When the county requires samples as part of the bid and vendor selection process, bidders must provide requested samples within the time allotted, and at no cost to the county unless otherwise specified. Any goods provided under contract shall conform to the sample submitted. The county will return samples only at the bidder's request, and at the bidder's expense, if they are not destroyed by testing.
16. **Non-Collusion:** By responding to this invitation to bid, the bidder represents that the bid is not made in connection with any competing bidder, supplier, or service provider submitting a separate response to this invitation to bid, and is in all respects fair and without collusion or fraud.

17. **Bid Evaluation:** Award will be made to the lowest responsive, responsible bidder, taking into consideration payment terms, vendor qualifications and experience, quality, references, any exceptions listed, and/or other factors deemed relevant in making the award. The county may make such investigation as it deems necessary to determine the ability of the bidder to perform, and the bidder shall furnish to the county all information and data for this purpose as the county may request. The county reserves the right to reject any bid item, any bid, or all bids, and to re-advertise for bids.
18. **Determination of Lowest Bidder:** If the Invitation to Bid includes a base bid and alternates, the low bid will be determined based on the sum of the base bid and any alternates selected by the Owner.
19. **Payment Terms and Discounts:** The County's standard payment terms are Net 30. Any deviation from standard payment terms must be specified in the resulting contract, and both parties must agree on such deviation. Cash discounts offered will be a consideration in awarding the bid, but only if they give the county at least 15 days from receipt of invoice to pay. For taking discounts, time will be computed from the date of invoice acceptance by the County, or the date a correct invoice is received, whichever is the later date. Payment is deemed made, for the purpose of earning the discount, on the date of the check.
20. **Trade Secrets – Confidentiality:** If any person or entity submits a bid or proposal that contains trade secrets, an affidavit shall be included with the bid or proposal. The affidavit shall declare the specific included information which constitutes trade secrets. Any trade secrets must be either (1) placed in a separate envelope, clearly identified and marked as such, or (2) at a minimum, marked in the affidavit or an attached document explaining exactly where such information is, and otherwise marked, highlighted, or made plainly visible. See O.C.G.A. § 50-18-72 (A)(34).
21. **Trade Secrets – Internal Use:** In submitting a bid, the bidder agrees that the county may reveal any trade secret materials contained in the bid to all county staff and officials involved in the selection process, and to any outside consultant or other third parties who may assist in the selection process. The bidder agrees to hold harmless the county and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the bidder has designated as a trade secret.
22. **Ethics – Disclosure of Relationships:** Before a proposed contract in excess of \$10,000.00 is recommended for award to the Board of Commissioners or the County Administrator, or before the County renews, extends, or otherwise modifies a contract after it has been awarded, the contractor must disclose certain relationships with any County Commissioner or County Official, or their spouse, mother, father, grandparent, brother, sister, son or daughter related by blood, adoption, or marriage (including in-laws). A relationship that must be reported exists if any of these individuals is a director, officer, partner, or employee, or has a substantial financial interest in the business, as described in Fayette County Ordinance Chapter 2, Article IV, Division 3 (Code of Ethics).

If such relationship exists between your company and any individual mentioned above, relevant information must be presented in the form of a written letter to the Director of Purchasing. You must include the letter with any bid, proposal, or price quote you submit to the Purchasing Department.

In the event that a contractor fails to comply with this requirement, the County will take action as appropriate to the situation, which may include actions up to and including rejection of the bid or

offer, cancellation of the contract in question, or debarment or suspension from award of a County contract for a period of up to three years.

23. **Contract Execution & Notice to Proceed:** After the Board of Commissioners makes an award, all required documents are received by the county, and the contract is fully executed with signature of both parties, the county will issue a written Notice to Proceed. The county shall not be liable for payment of any work done or any costs incurred by any bidder prior to the county issuing the Notice to Proceed.
24. **Unavailability of Funds:** This contract will terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the county under the contract.
25. **Insurance:** The successful bidder shall procure and maintain the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:
 - a. **General Liability Insurance:** \$1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.
 - b. **Automobile Liability Insurance:** \$1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.
 - c. **Worker's Compensation & Employer's Liability Insurance:** Workers Compensation as required by Georgia statute.

Before a contract with the successful bidder is executed, the successful bidder shall provide Certificates of Insurance for all required coverage. The successful offeror can provide the Certificate of Insurance after award of the contract, but must be provided prior to execution of the contract document by both parties. The certificate shall list an additional insured as follows:

Fayette County, Georgia
140 Stonewall Avenue West
Fayetteville, GA 30214

26. **Bid Bond:** You must include a bid bond with your bid, equal to five percent (5%) of the total amount bid. Bid bonds shall be provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
27. **Performance and Payment Bonds:** Prior to execution of a contract, the successful bidder shall submit performance and payment bonds each equal to 100 percent of the contract value, provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
28. **Building Permits:** Work performed for the county requiring building permits by licensed contractors will not have permit fees assessed, although any re-inspection fees for disapproved inspections will be the responsibility of the contractor prior to final inspections and the Certificate of Occupancy or Certificate of Completion being issued.

29. **Unauthorized Performance:** The county will not compensate the contractor for work performed unless the work is authorized under the contract, as initially executed or as amended.
30. **Assignment of Contract:** Assignment of any contract resulting from this invitation to bid will not be authorized, except with express written authorization from the county.
31. **Indemnification:** The contractor shall defend, indemnify and save the county and all its officers, agents and employees harmless from all suits, actions, or other claims of any character, name and description brought for or on account of any damages, losses, or expenses to the extent caused by or resulting from the negligence, recklessness, or intentionally wrongful conduct of the contractor or other persons employed or utilized by the contractor in the performance of the contract. The contractor shall pay any judgment with cost which may be obtained against the county growing out of such damages, losses, or expenses.
32. **Severability:** The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.
33. **Delivery Failures:** If the contractor fails to deliver contracted goods or services within the time specified in the contract, or fails to replace rejected items in a timely manner, the county shall have authority to make open-market purchases of comparable goods or services. The county shall have the right to invoice the contractor for any excess expenses incurred, or deduct such amount from monies owed the contractor. Such purchases shall be deducted from contracted quantities.
34. **Substitution of Contracted Items:** The contractor shall be obligated to deliver products awarded in this contract in accordance with terms and conditions specified herein. If a contractor is unable to deliver the products under the contract, it shall be the contractor's responsibility to obtain prior approval of the ordering agency to deliver an acceptable substitute at the same price quoted in the contractor's original bid. In the event any contractor consistently needs to substitute or refuses to substitute products, the County reserves the right to terminate the contract or invoke the "Delivery Failures" clause stated herein.
35. **Inspection and Acceptance of Deliveries:** The county reserves the right to inspect all goods and products delivered. The county will decide whether to accept or reject items delivered. The inspection shall be conclusive except with respect to latent defects, fraud, or such gross mistakes as shall amount to fraud. Final inspection resulting in acceptance or rejection of the products will be made as soon as practicable, but failure to inspect shall not be construed as a waiver by the county to claim reimbursement or damages for such products which are later found to be in non-conformance with specifications. Should public necessity demand it, the county reserves the right to use or consume articles delivered which are substandard in quality, subject to an adjustment in price to be determined by the Purchasing Director.
36. **Termination for Cause:** The county may terminate the contract for cause by sending written notice to the contractor of the contractor's default in the performance of any term of this agreement. Termination shall be without prejudice to any of the county's rights or remedies by law.

37. **Termination for Convenience:** The county may terminate the contract for its convenience at any time with 10 days' written notice to the contractor. In the event of termination for convenience, the county will pay the contractor for services performed. The county will compensate partially completed performance based upon a signed statement of completion submitted by the contractor, which shall itemize each element of performance completed.
38. **Force Majeure:** Neither party shall be deemed to be in breach of the contract to the extent that performance of its obligations is delayed, restricted, or prevented by reason of any act of God, natural disaster, act of government, or any other act or condition beyond the reasonable control of the party in question.
39. **Governing Law:** This agreement shall be governed in accordance with the laws of the State of Georgia. The parties agree to submit to the jurisdiction in Georgia, and further agree that any cause of action arising under this agreement shall be required to be brought in the appropriate venue in Fayette County, Georgia.
40. **Access to Records:** The contractor will allow access by the federal grantor agency, the county, the Federal Emergency Management Agency, the United States Comptroller General, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to this contract for the purpose of making audits, examinations, excerpts, and transcriptions.
41. **Records Retention:** The contractor shall retain all records pertaining to the contract for three years after the county makes final payments to the contractor, and all other pending matters are closed.
42. **Breach of Contract:** In the event that the contractor or a subcontractor should violate or breach contract terms, upon discovery of such violation or breach the county will notify the contractor in writing. The contractor or subcontractor shall be entitled to cure the breach within ten (10) days and provide evidence of such cure. If the contractor fails to cure the violation or breach within the ten-day time, the county shall be entitled to all available remedies, including termination of the contract, or the requirement that a subcontractor be dismissed from performing work under the contract. The county shall be entitled to any and all damages permissible by law.
43. **GDOT Standard Specifications Incorporated:** The GDOT Standard Specifications Construction of Transportation Systems, 2013 Edition, and applicable special provisions and supplemental specifications apply to any contract resulting from this solicitation.
44. **Small, Minority, & Women's Business Enterprise Opportunities:** If the contract is with a prime Contractor, and subcontracts are to be let, the Contractor shall take the affirmative steps listed below:
- a. Place qualified small and minority businesses and women's business enterprises on solicitation lists;
 - b. Assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - c. Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - d. Establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and

- e. Use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
45. **Breach of Contract:** In the event that the contractor or a subcontractor should violate or breach contract terms, upon discovery of such violation or breach the county will notify the contractor in writing. The contractor or subcontractor shall be entitled to cure the breach within ten (10) days and provide evidence of such cure. If the contractor fails to cure the violation or breach within the ten-day time, the county shall be entitled to all available remedies, including termination of the contract, or the requirement that a subcontractor be dismissed from performing work under the contract. The county shall be entitled to any and all damages permissible by law.
46. **Title VI Notice:** The Fayette County Board of Commissioners, in accordance with Title VI of the Civil Rights Act of 1964 and 78 Stat. 252, 42 USC 2000d-42 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, part 21, Nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.
47. **Preconstruction Conference:** There shall be a preconstruction conference for this project with, at a minimum, Fayette County, Contractor, selected DBE firms, GDOT Area Engineer, and the GDOT Project Manager.
48. **Testing and Suppliers:** All testing shall meet the requirements outlined in the GDOT sampling, Testing and inspection guide. Contractors shall use suppliers on the appropriate GDOT Qualified Products List.
49. **Standardized Changed Condition Clauses:**
- a. *Differing site conditions.*
 - i. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
 - ii. Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipate profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.
 - iii. No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.

b. *Suspensions of work ordered by the engineer.*

- i. If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
- ii. Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.
- iii. No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
- iv. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

c. *Significant changes in the character of work.*

- i. The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.
- ii. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.
- iii. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
- iv. The term "significant change" shall be construed to apply only to the following circumstances:
 1. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction;
or

2. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

FAYETTE COUNTY PROJECT-SPECIFIC TERMS AND CONDITIONS

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

- A. **Reference and Incorporation of GDOT Specifications** - Unless noted otherwise in this Invitation to Bid (ITB), the Georgia Department of Transportation's (GDOT's) *Standard Specifications Construction of Transportation Systems*, most recent edition, shall dictate the work and contractual requirements for this project. The Bidder is responsible for being familiar with and understanding the requirements set forth therein. Fayette County is owner of the project and shall serve as the administrator of the Contract in lieu of "The Department."

For purposes of this ITB document and the incorporated GDOT specifications, "The Department" refers to the State of Georgia's Department of Transportation.

- B. **Schedule** – Time is of the essence. The project shall be completed within 274 days of the Contractor receiving a Notice to Proceed from Fayette County. Contract time is measured on a Calendar Day basis and includes County Holidays and weekends.
- C. **County Holidays** – The Contractor shall not work on a County Holiday unless written approval is provided by Fayette County at least three days prior to the Holiday. Upcoming County Holidays are:

5/31/2021	11/25/2021	12/31/2021
7/5/2021	11/26/2021	1/17/2022
9/6/2021	12/23/2021	
11/11/2021	12/24/2021	

- D. **Prequalification of Bidders** – The Prime Contractor and/or subcontractors to the Prime, should be prequalified with the Georgia Department of Transportation (GDOT) in the following work area classes:

<u>Class</u>	<u>Description</u>
150	Traffic Control
310	Graded Aggregate Construction
400	Hot Mix Asphaltic Concrete Construction
441	Miscellaneous Concrete
550	Storm Drain Pipe
647	Traffic Signal Installation

Furthermore, the Prime Contractor shall be prequalified in at least one of the following classes: 310, 400, 441 or 550. Documentation demonstrating appropriate Prime Contractor prequalification shall be included with the bid package.

Prior to issuing a Notice of Award, the Prime Contractor shall provide to Fayette County, for review and approval, the list of subcontractors to be used on the project and the provide documentation of their status as a prequalified contractor or registered subcontractor for each of the required work area classes that are not satisfied by the Prime. GDOT's Form DOT 485 shall be used to for submitting subcontractor approval requests.

Failure by the Prime Contractor to provide the appropriate project team information (e.g., DOT Form 485) within 30 calendar days of a request from Fayette County may disqualify the bid.

- E. **Section 102 – Bidding Requirements and Conditions** – This section of the GDOT Specifications are removed in their entirety from this ITB.
- F. **Section 103 – Award and Execution of Contract** – This section of the GDOT Specifications are removed in their entirety from this ITB.
- G. **Section 105.05 Cooperation by Contractor** – The Contractor will be supplied with two hardcopy sets and one portable document file (PDF) copy of the approved Plans and Contract assemblies including Special Provisions. The Contractor shall always keep one hard copy set on the project site.
- H. **Section 105.09 Authority and Duties of the Resident Engineer** – The Resident Engineer shall be designated by Fayette County.
- I. **Section 105.10 Duties of the Inspector** – Inspectors may be employed by Fayette County or the Georgia Department of Transportation.
- J. **Section 106.11 Field Laboratory** – A field laboratory is not required.
- K. **Contractor Staging** – No staging area is provided by Fayette County for the project beyond the acquired right of way and easements for the project. Contractor staging shall not interfere with traffic on County or Peachtree City roads.
- L. **Permits and Licenses** – Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor unless otherwise stated in the Contract Documents.
- M. **Contractor Supervision and Work Coordination** – The Contractor shall supervise and direct the work. He/she shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, including traffic control. The Contractor shall employ and maintain onsite a qualified supervisor or superintendent who will be designated in writing by the Contractor as the Contractor's site representative. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall always be present on the site as required to perform adequate supervision and coordination of the work.
- N. **Workmanship Guarantee** – The Contractor shall warranty and guarantee all materials supplied, equipment furnished, and work performed to be free from defects (resulting from faulty materials supplied or workmanship) for a period of eighteen (18) months from the date of Substantial Completion.

The Owner shall give notice of observed defects with reasonable promptness and the Contractor shall have 45 days to address the issue(s). If the Contractor fails to make such repairs, adjustments, or other work that may be made necessary by such defects, the Owner may do so

and charge the Contractor the cost thereby incurred. If different guarantees or warranties are required in the technical specifications for specific items, then the more stringent (i.e., longer) apply.

- O. **Special Allowance** – Due to the nature of the project and the potential for unforeseen conditions, it is anticipated that some additional work or modification to the scope may be required. A \$90,000.00 Allowance is to be included in the Base Bid, to be used to cover Claims (Section 105.13) or Extra Work (Section 109.05). The procedures for submitting such requests are documented in the referenced Sections. If approved, the amount of the Claim or Extra Work will be deducted from the Allowance. Requests greater than the amount available in the Allowance category will require approval from the Fayette County Board of Commissioners. Any allowance remaining unused at the end of the project will be deducted from the Contract amount by a Supplemental Agreement.
- P. **Q&A** – the following information was provided in response to questions received during the September 2020 advertisement for this project. It is provided below to assist bidders with the evaluation and pricing of this project:
1. **Fencing** – the 534 feet of special design fence is the total of both fence types that are to be installed: 3-rail PVC and 2-rail wood. There are 434 feet of new 3-rail PVC and 90 feet of new 2-rail wood. All the reset fence (593 feet) is 3-rail PVC fencing. The total linear feet of the new and reset fence does not exactly match the removed fence quantity due to minor changes associated with the new fence alignment.
 2. **Landscape/Irrigation Allowance** – a standard average allowance of \$10,200 is provided for each of the five subdivision entrances. All work for this line item shall be pre-approved with an agreed-upon cost for each location. Actual payment for each entrance may be more or less than the assumed average allowance but the total cost for all approved landscaping and irrigation work shall not exceed \$51,000 without a contract modification.
 3. **Infiltration Trench** – The detail on sheet 05-002 should be used for the completion of the infiltration trench work (4" sand filter, 6" perforated underdrain, trench filled with 1/5-2.5" diameter clean stone, protective layer of filter fabric and 2" pea gravel filter layer).
 4. **Sheet 6-001 Class B concrete** – The class B concrete is for the repaving work where the landscaped island at Carnoustie Way (approximate station 220+80) is being modified.
 5. **Sheet 6-002 Drop Inlets** – There are 36 total drop inlet structures, three of which (B-4, B-6 and CC-0) are double grate structures. These are counted as double rather than creating a separate line item for them.
 6. **Surface and Groundwater Management** – GDOT standard specifications should be followed for construction means and methods associated with water damming, pumping, etc. for water management within the work area.
 7. **Environmental Permits** – The Contractor is not responsible for getting any permits associated with wetlands or roadway work. They have been secured by Fayette County.

BIDDER QUALIFICATIONS

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

In addition to other requirements specified within the Bid Package, bidders shall meet the following minimum qualifications in order to be considered responsive and responsible. The bidder shall provide sufficient documentation to demonstrate these qualifications are satisfied. Minimum submittal requirements are indicated in italics.

1. Company contact information. *Provide a completed "Company Information Form".*
2. Identify the project team. The Prime Contractor and/or Subcontractors shall be GDOT prequalified in GDOT work class areas as defined elsewhere in these Fayette County Terms & Conditions. *Provide a completed "GDOT Prequalification Contractors and Registered Subcontractors Table." Identify the Contractor's Project Manager and Field Supervisor.*
3. The Prime Contractor shall have been in business under the present company name for a minimum of three (3) years and shall not have been declared in default on any construction contract within that time. *Provide a letter on company letterhead and signed by the President/CEO certifying this information.*
4. The Contractor and/or the designated Subcontractors shall have, within the past five years, successfully completed at least three transportation projects that included path construction, traffic signal installation, or similar roadwork. *Provide a completed "Contractor Experience Form" demonstrating the requested experience.*

COMPANY INFORMATION FORM

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

COMPANY

Company Name: _____

Physical Address: _____

Mailing Address (if different): _____

AUTHORIZED REPRESENTATIVE

Signature: _____

Printed or Typed Name: _____

Title: _____

Email Address: _____

Phone Number: _____ Fax Number: _____

PROJECT CONTACT PERSON

Name: _____

Title: _____

Office Number: _____ Cell Number: _____

Email Address: _____

GDOT PREQUALIFICATION CONTRACTORS AND REGISTERED SUBCONTRACTORS TABLE

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

Work Class	Description	GDOT Vendor Name	GDOT Vendor ID
150	Traffic Control		
310	Graded Aggregate Construction		
400	Hot Mix Asphaltic Concrete Construction		
441	Miscellaneous Concrete		
550	Storm Drain Pipe		
647	Traffic Signal Installation		

The Prime Contractor shall be Prequalified, at a minimum, in Work Class 310, 400, 441 or 550.

Subcontractor may be used to satisfy the other Work Classes. List the subcontractors, as known at the time of bid, and their work class qualification or registration.

Prior to issuing the Notice of Award, and within 30 days of a request from Fayette County, the Prime Contractor shall provide to Fayette County, for review and approval, a list of all subcontractors to be used on the project. Include documentation of their status as a prequalified contractor or registered subcontractor for each of the required work area classes that are not satisfied by the Prime.

Failure by the Prime Contractor to provide the appropriate project team information (e.g., DOT Form 485) within 30 calendar days of a request from Fayette County may disqualify the bid.

List below any other subcontractors, by name and address, that may be used on the project for work in areas beyond those identified above.

GDOT's Form DOT 485 shall be used to request subcontractor approval prior to the NTP and to request a change to a subcontractor over the course of the project, if needed.

CONTRACTOR EXPERIENCE FORM

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

Project 1

Project Name	
Project Location	
Owner Name	
Owner Telephone & Email	
Date of Award	
Date of Completion	
Contract Amount (\$)	
Project Description	

Project 2

Project Name	
Project Location	
Owner Name	
Owner Telephone & Email	
Date of Award	
Date of Completion	
Contract Amount (\$)	
Project Description	

CONTRACTOR EXPERIENCE FORM - continued

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

Project 3

Project Name	
Project Location	
Owner Name	
Owner Telephone & Email	
Date of Award	
Date of Completion	
Contract Amount (\$)	
Project Description	

**CERTIFICATION
SUSPENSION AND DEBARMENT**

#1951-B Redwine Road & Starrs Mill School Complex Multi-Use Path

- (1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals, (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- (2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- (3) This certification is a material representation of fact relied upon by Fayette County, Georgia. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Federal Government and Fayette County, Georgia, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- (4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

ANTI-LOBBYING CERTIFICATION

#1951-B REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned _____ certifies, to the best of his or her knowledge, that:

1. 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 an 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.
2. 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 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.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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 (as amended by the Lobbying Disclosure Act of 1995). 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.

The Contractor, _____ certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

REFERENCES

#1951-B Redwine Road & Starrs Mill School Complex Multi-Use Path

Please list three (3) references for current or recent customers who can verify the quality of service your company provides. Projects of similar size and scope are preferable.

1. **Government/Company Name** _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

2. **Government/Company Name** _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

3. **Government/Company Name** _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

COMPANY NAME _____

PERFORMANCE BOND

Bond Number: _____

Amount: \$ _____

State of Georgia

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name of Contractor)_____
(Address of Contractor)

A _____, hereinafter called Principal, and

(Name of Surety)_____
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto FAYETTE COUNTY, GEORGIA, 140 STONEWALL AVENUE, FAYETTEVILLE, GA 30214 hereinafter called OWNER, in total aggregate penal sum of:

_____ Dollars (\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, the Principal and Surety bind themselves and each of their heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

THIS CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, _____ a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the contract not increasing the contract price more than 20 percent so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, or the Contract shall include any alteration, addition, extension, or the modification of any character whatsoever.

IN WITNESS WHEREOF, this instrument is executed in four counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

ATTEST:

Secretary
(SEAL)

Principal

Witness as to Principal

BY: _____

(Address)

ATTEST:

(Surety)

Witness to Surety

Attorney in Fact

Address

Address

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended), be authorized to transact business in the state, and have a registered agent in the state where project is located. All BONDS signed by an agent must be accompanied by a certified copy of the authority to act for the Surety at the time of the signing of this bond.

PAYMENT BOND

Bond Number: _____

Amount: \$ _____

State of Georgia

KNOW ALL PERSONS BY THESE PRESENTS: that

(Name of Contractor)_____
(Address of Contractor)

A _____, hereinafter called Principal, and

(Name of Surety)_____
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto FAYETTE COUNTY, GEORGIA, 140 STONEWALL AVENUE, FAYETTEVILLE, GA 30214, hereinafter called OWNER, and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of:

_____ Dollars (\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, the Principal and Surety bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THIS CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any

mechanic or materialman lienholder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) Unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: The PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, if furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration on one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the Contract as so amended. The term "Amendment", wherever used in this SURETY BOND and whether referring to this BOND, the contract shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in four counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20____.

ATTEST:

(Principal) Secretary
(SEAL)

Principal

Witness as to Principal

BY: _____

(Address)

ATTEST:

(Surety)

Witness to Surety

Attorney in Fact

BY: _____

Address

Address

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended), be authorized to transact business in the state, and have a registered agent in the state where project is located. All BONDS signed by an agent must be accompanied by a certified copy of the authority to act for the Surety at the time of the signing of this bond.

“BIDDER QUALIFICATIONS”

NOTICE TO ALL BIDDERS

ALL BIDDERS SUBMITTING BIDS IN EXCESS OF \$2,000,000
SHALL BE PRE-QUALIFIED WITH THE GEORGIA DEPARTMENT OF
TRANSPORTATION (GDOT).

ALL BIDDERS SUBMITTING BIDS \$2,000,000
OR LESS SHALL BE REGISTERED SUBCONTRACTORS OR PRE-QUALIFIED
WITH THE GDOT.

SUBCONTRACTORS SHALL BE PRE-QUALIFIED OR
REGISTERED WITH THE GDOT.

IF CONSTRUCTION WORK INVOLVES WELDED STRUCTURES,
SUCH AS BRIDGES, THE MANUFACTURER OF THE
STRUCTURE SHALL BE ON THE GDOT QPL LIST 60.

FAYETTE COUNTY

BOARD OF COMMISSIONERS

PLAN AND PROFILE OF PROPOSED

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

MULTI-USE PATH

FAYETTE COUNTY

FEDERAL ROUTE * N/A

STATE ROUTE * N/A

P.J.NO. 0012624

BEGIN SEGMENT 3

REDWINE MULTI-USE PATH LEFT

STA. 299+75.00

N 1229741.9844

E 2191075.8151

NOTE :THIS PROJECT CONTAINS POST CONSTRUCTION BMPS.

NOTE :

ALL REFERENCES IN THIS DOCUMENT,WHICH INCLUDES ALL PAPERS,WRITINGS,

DOCUMENTS,DRAWINGS,OR PHOTOGRAPHS USED,OR TO BE USED IN CONNECTION

WITH THIS DOCUMENT,TO "STATE HIGHWAY DEPARTMENT OF GEORGIA","STATE

HIGHWAY DEPARTMENT","GEORGIA STATE HIGHWAY DEPARTMENT","HIGHWAY

DEPARTMENT",OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE

STATE HIGHWAY DEPARTMENT OF GEORGIA,AND SHALL BE DEEMED TO MEAN

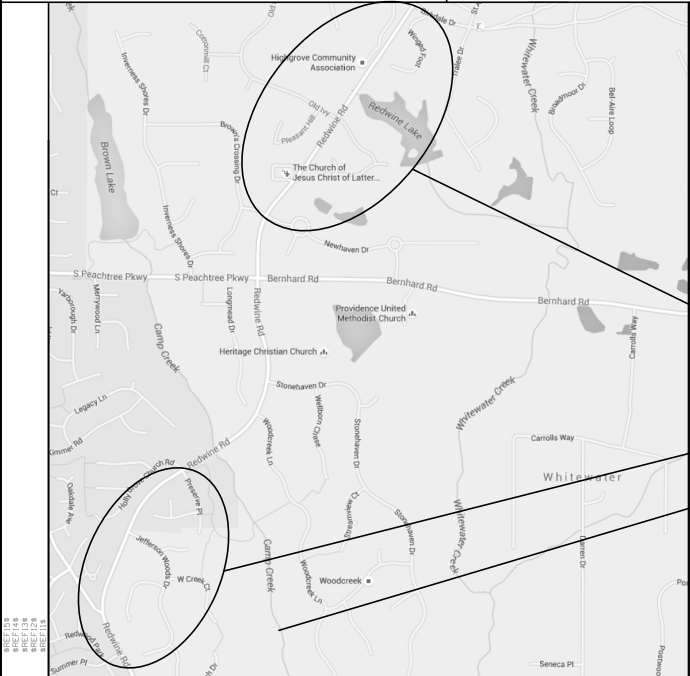
THE DEPARTMENT OF TRANSPORTATION.

NOTE :

ANY NOTE SEEKING APPROVAL FROM A GDOT OFFICE

SHALL MEAN AND REFER TO THE FAYETTE COUNTY

PUBLIC WORKS DEPARTMENT.



LOCATION SKETCH - N.T.S.

DESIGN DATA:

SPEED DESIGN (PATH): 18 MPH

POSTED SPEED (ROAD): 45 MPH

MIDPOINT COORDINATES
MID POINT SEGMENT 1 STA. 117+65.34 N 1220522.0495 E 2186182.8088
MID POINT SEGMENT 2 STA. 222+96.50 N 1228148.7056 E 2190066.2461

LAND LOTS: 19,20,3,2,1

LAND DISTRICTS: 6

FUNCTIONAL CLASS:

SHARED-USE PATH

THIS PROJECT IS 100% IN

FAYETTE COUNTY AND IS

100% IN CONG.DIST.NO.3.

PROJECT DESIGNATION:EXEMPT

THIS PROJECT HAS BEEN PREPARED

USING THE HORIZONTAL GEORGIA

COORDINATE SYSTEM OF 1984 (NAD

1983)194 WEST ZONE,AND THE NORTH

AMERICAN VERTICAL DATUM (NAD)

OF 1988.

PROJECT TO BE CONSTRUCTED AS PER GEORGIA DEPARTMENT

OF TRANSPORTATION STANDARD SPECIFICATIONS,2013 EDITION,AS

APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION AND

AS MODIFIED BY CONTRACT DOCUMENTS.

THE DATA,TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANY WAY

INDICATED THEREBY,WHETHER BY DRAWINGS OR NOTES,OR IN ANY OTHER MANNER,ARE BASED UPON

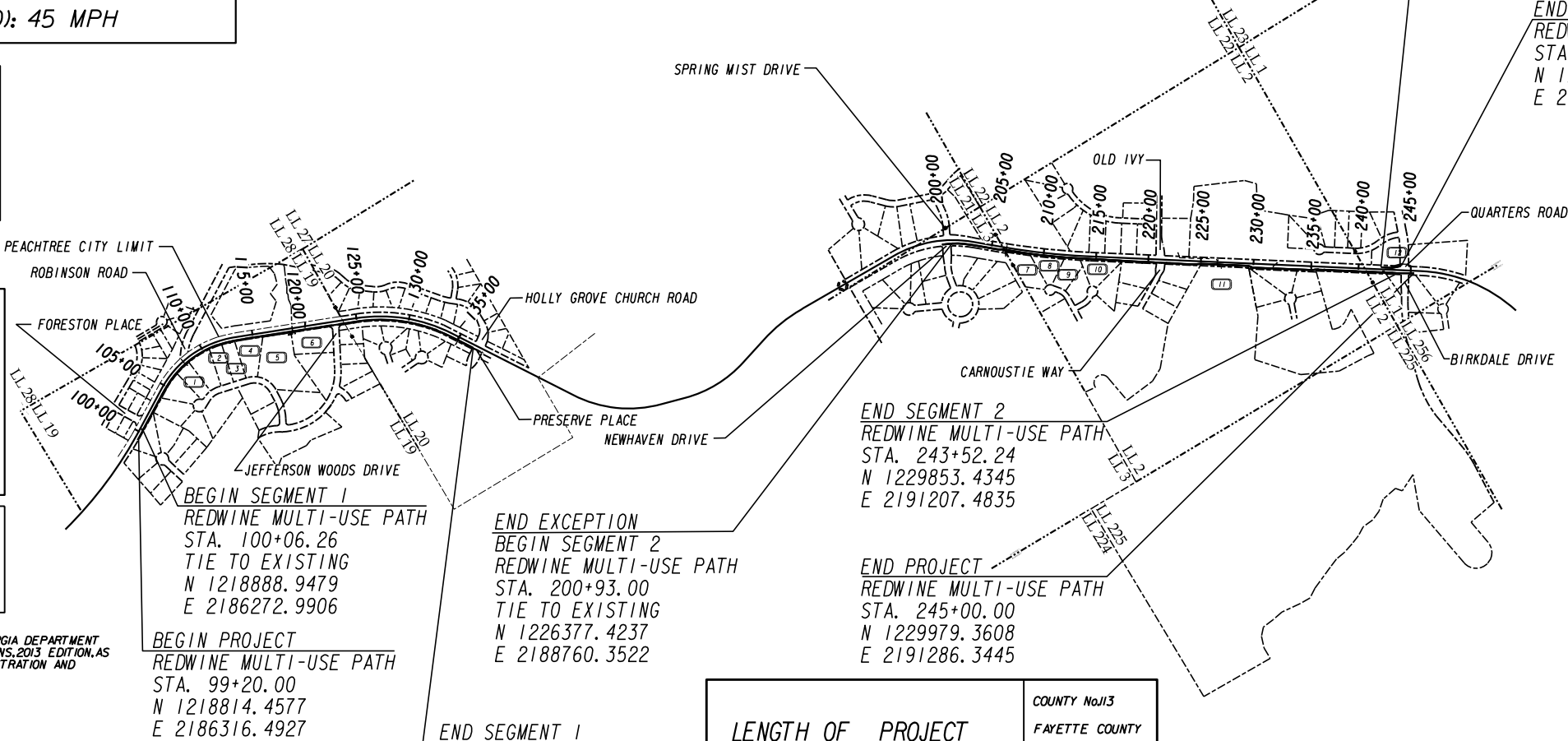
FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS.HOWEVER,THE

SAME ARE SHOWN AS INFORMATION ONLY,ARE NOT GUARANTEED,AND DO NOT BIND THE DEPARTMENT

OF TRANSPORTATION IN ANY WAY.THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO

SUBSECTIONS 102.04,102.05,AND 104.03 OF THE SPECIFICATIONS.

FAYETTE COUNTY



END SEGMENT 2

REDWINE MULTI-USE PATH

STA. 243+52.24

N 1229853.4345

E 2191207.4835

END PROJECT

REDWINE MULTI-USE PATH

STA. 245+00.00

N 1229979.3608

E 2191286.3445

END EXCEPTION

BEGIN SEGMENT 2

REDWINE MULTI-USE PATH

STA. 200+93.00

TIE TO EXISTING

N 1226377.4237

E 2188760.3522

END SEGMENT 1

BEGIN EXCEPTION

REDWINE MULTI-USE PATH

STA. 136+18.18

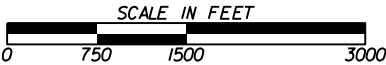
TIE TO EXISTING

N 1221974.1833

E 2187241.5608

LENGTH OF PROJECT

	COUNTY No.13 FAYETTE COUNTY
	MILES
NET LENGTH OF PATH	1.53
NET LENGTH OF BRIDGES	0.00
NET LENGTH OF PROJECT	1.53
NET LENGTH OF EXCEPTIONS	1.23
GROSS LENGTH OF PROJECT	2.76



Heath & Lineback Engineers

INCORPORATED

2390 CANTON ROAD, BUILDING 200

MARIETTA, GEORGIA 30066-5393

(770)424-1668

PREPARED BY:

DESIGN

DATE

PUBILC WORKS DIRECTOR

PLANS COMPLETED 08-19-2019

REVISIONS

DRAWING No.

01-001

DRAWING NO.		DESCRIPTION	
01-001		COVER	
02-001		INDEX	
03-001		REVISION SUMMARY	
04-001 TO 04-002		GENERAL NOTES	
05-001 TO 05-002		TYPICAL SECTIONS	
06-001 TO 06-003		SUMMARY QUANTITIES	
07-001		QUANTITIES (AMENDMENT)	
08-001		QUANTITIES (CONSTRUCTION)	
13-001 TO 13-016		CONSTRUCTION PLANS	
15-001 TO 15-009		MAINLINE PROFILE	
21-001 TO 21-007		DRAINAGE AREA MAP	
22-001 TO 22-008		DRAINAGE PROFILES	
23-001 TO 23-025		CROSS SECTIONS	
24-000 TO 24-016		UTILITY PLANS	
26-001 TO 26-016		SIGNING AND MARKING PLANS	
27-001 TO 27-002		SIGNAL PLANS	
31-001 TO 31-004		RETAINING WALL ENVELOPES	
44-001 TO 44-003		UTILITY RELOCATION PLANS	
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[illegible]

[illegible]

HL & L **Heath & Lineback Engineers**
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

PROJECT GENERAL NOTES

1. THE FOLLOWING UTILITIES HAVE FACILITIES ON THE PROJECT AREA:
TELEPHONE
Charter

WATER
Fayette County Water
- ELECTRICAL
Coweta EMC

CABLE
Comcast Cable
- GAS
Atlanta Gas Light

*UTILITIES WERE LOCATED BASED ON INFORMATION RECEIVED FROM INDIVIDUAL UTILITY COMPANIES.
2. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITY FACILITIES" MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION.

3. COMCAST UNDERGROUND ABANDONED. CONTRACTOR SHALL VERIFY AT ALL CONFLICT LOCATIONS WITH COMCAST BEFORE CONSTRUCTION.

4. RIGHT-OF-WAY MARKERS IN RESIDENTIAL LAWN AND DEVELOPED COMMERCIAL AREAS SHALL BE PLACED FLUSH WITH THE FINISHED SURFACE.

5. THERE IS NO KNOWN SUITABLE PLACE TO BURY EXISTING CONSTRUCTION DEBRIS WITHIN THE PROJECT'S LIMITS.THE CONTRACTOR SHALL PROVIDE AN ENVIRONMENTALLY APPROVED SITE AS SHOWN IN GA. SPECIFICATION 201 TO DISPOSE OF EXISTING CONSTRUCTION DEBRIS AT NO ADDITIONAL COST TO FAYETTE COUNTY.

6. ALL BORROW AND WASTE SITES FOR THIS PROJECT SHALL BE ENVIRONMENTALLY APPROVED PRIOR TO CONSTRUCTION ACTIVITIES OCCURRING IN THEM. ALL COMMON FILL OR EXCESS MATERIAL DISPOSED OUTSIDE THE PROJECT RIGHT OF WAY SHALL BE PLACED IN EITHER A PERMITTED SOLID WASTE FACILITY, A PERMITTED INERT WASTE LANDFILL OR IN AN ENGINEERED FILL. SEE SECTION 201 OF THE STANDARD SPECIFICATION AND SUPPLEMENTS THERETO FOR ADDITIONAL INFORMATION.

7. ALL STORM DRAIN PIPES ARE TO BE COMPLETELY CLEANED OF ALL SILT AND DEBRIS AT THE COMPLETION OF CONSTRUCTION.

8. PERFORATED UNDERDRAIN SHALL BE PLACED IN AREAS WHERE WET CONDITIONS EXIST IN THE SUBGRADE AS DIRECTED BY THE ENGINEER.

9. STRUCTURES, TREES, SHRUBS AND OTHER PLANT MATERIAL THAT FALL WITHIN THE RIGHT-OF-WAY AND EASEMENT LIMITS, BUT OUTSIDE THE LIMITS OF CONSTRUCTION, SHALL NOT BE DISTURBED UNLESS DIRECTED BY THE ENGINEER.

10. ALL EXISTING PIPE NO LONGER IN USE SHALL BE REMOVED UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER. REMOVAL OF PIPE SHALL BE INCLUDED IN PRICE BID FOR "GRADING COMPLETE".

11. ALL CONCRETE WALLS SHALL HAVE ANTI-GRAFFITI COATING ON ALL EXPOSED FACES. COST FOR THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE WALLS.

12. ALL WHEEL CHAIR RAMPS WITHIN THE INTERSECTION RADIi ARE TO BE CONSTRUCTED USING 8 INCH CONCRETE. THE COST FOR ADA RAMPS SHALL BE INCLUDED IN THE PRICE BID FOR 8 INCH CONCRETE SIDEWALK.

13. IF THE CONTRACTOR DISTURBS ITEMS LABELED NOT TO BE DISTURBED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE ITEM IN KIND AT NO ADDITIONAL COST.

14. THIS PROJECT CONTAINS POST CONSTRCUCTION STORMWATER (PERMANENT) BMP'S.

15. IF POST CONSTRUCTION BMP CANNOT BE BUILT WITHIN THE TOLERANCES ALLOWED,THE CONSTRUCTION PROJECT MANAGER SHALL NOTIFY THE OFFICE OF PROGRAM DELIVERY PROJECT MANAGER AND AREA ENGINEER. MODIFICATIONS MUST BE APPROVED BY THE GDOT OFFICE OF DESIGN POLICY AND SUPPORT PRIOR TO THE INSTALLATION.

16. AN N.O.I (NOTICE OF INTENT) IS REQUIRED FOR THIS PROJECT.

17. THE CONTRACTOR SHALL NOT STAGE ANY EQUIPMENT OR MATERIALS WITHIN ESA BUFFERS EXCEPT AS ALLOWED IN THE TABLE ON DRAWING 51-003.

18. ALL DRIVEWAYS THAT ARE TO BE RECONSTRUCTED SHALL BE PLACED IN KIND I.E ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE, AND AGGREGATE SURFACE COURSE FOR DIRT DRIVES. DRIVEWAY RELOCATIONS ARE SHOWN FROM THE BEST AVAILABLE DATA. THE CONTRACTOR SHALL CONSTRUCT NEW DRIVEWAYS TO MATCH THE ACTUAL FIELD LOCATION OF EXISTING DRIVEWAYS OR AS LOCATED IN THE PLANS. RESIDENTIAL DRIVES SHALL BE 14 FEET WIDE AT THE THROAT UNLESS NOTED OTHERWISE IN THE PLANS. COMMERCIAL DRIVES SHALL BE 24 FEET WIDE UNLESS NOTED OTHERWISE IN THE PLANS. THE CONTRACTOR SHALL OBTAIN THE APPROVAL FROM THE ENGINEER PRIOR TO MAKING ANY REVISIONS TO LOCATION, WIDTH, AND/OR NUMBER OF DRIVES TO BE CONSTRUCTED.ALL DRIVES ARE TO BE PAVED TO THE R/W OR TIE-IN POINT, WHICHEVER IS GREATER.

- RESIDENTIAL ASPHALT

-RECYCLED ASPH CONC 12.5MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LBS/SY)
-6 INCHES OF GRADED AGGREGATE BASE
- COMMERCIAL ASPHALT

-RECYCLED ASPH CONC 12.5MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 LBS/SY)
-220 LBS/SY 19MM SUPERPAVE
-6 INCHES OF GRADED AGGREGATE BASE
- RESIDENTIAL CONCRETE

-6 INCHES OF CONCRETE VALLEY GUTTER
- COMMERCIAL CONCRETE

-8 INCHES OF CONCRETE VALLEY GUTTER
-8 INCHES OF GRADED AGGREGATE BASE



Know what's below.
Call before you dig.

19. CONSTRUCT FENCE AS SHOWN IN THE PLANS. NEW FENCE SHALL BE REPLACE IN KIND AND SHALL BE INSTALLED PER GA SPECIFICATION 643, AND ALL APPLICABLE FENCE AND GATE CONSTRUCTION STANDARDS AND DETAILS.

Pipe Culvert Material Alternates

TYPE OF INSTALLATION			PIPE TYPE									
			CONCRETE	STEEL			ALLUMINUM	THERMOPLASTIC				
			REINFORCED CONCRETE AASHTO M-170	CORRUGATED STEEL ALUMINUM COATED (TYPE 2) AASHTO M-36	CORRUGATED STEEL PLAIN ZINC COATED AASHTO M-36	POLYMER COATED STEEL AASHTO M-245	CORRUGATED ALUMINUM AASHTO M-196	CORRUGATED HDPE AASHTO M-252	CORRUGATED SMOOTH LINED HDPE TYPE "S" AASHTO M-294	CORRUGATED SMOOTH LINED POLYPROPYLENE AASHTO M-330	PVC CORRUGATED SMOOTH INTERIOR ASTM F-949	PVC Profile Wall Drain Pipe AASHTO M-304
S T O R M D R A I N	NON-TRAVEL BEARING (OUTSIDE ROADBED)	INTERSTATE	X									
		NON INTERSTATE	X					X	X	X	X	
	TRAVEL BEARING (INSIDE ROADBED)	GRADE ≤ 10%	ADT < 1,500	X					X	X	X	X
			1,500 < ADT < 5,000	X					X	X	X	X
			5,000 < ADT < 15,000	X					X	X	X	X
			ADT > 15,000 & INTERSTATES	X								
		GRADE > 10%							X	X	X	X
	SIDE DRAIN		X						X	X	X	X
PERMANENT SLOPE DRAIN			X	X	X	X		X	X	X	X	
PERFORATED UNDERDRAIN			X	X		X	X	X	X	X	X	

NOTES:

1. ALLOWABLE MATERIALS ARE INDICATED BY AN "X".
2. STRUCTURAL REQUIREMENT OF STORM DRAIN PIPE WILL BE IN ACCORDANCE WITH GEORGIA STANDARD 1030-D OR 1030-P, WHICHEVER IS APPLICABLE, AND THE STANDARD SPECIFICATIONS.
3. GRADED AGGREGATE BACKFILL SHALL BE USED IN CROSS DRAIN APPLICATIONS FOR ALL PLASTIC PIPES (AASHTO M-294, HDPE PIPE; AASHTO M-304, PVC PIPE; ASTM F949, PVC PIPE).
4. USE THE ALLOWABLE MATERIALS CHART UNLESS NOTED OTHERWISE IN THE PLANS.
5. THE CONTRACTOR SHALL PROVIDE ADDITIONAL STORM SEWER CAPACITY CALCULATIONS IF A PIPE MATERIAL OTHER THAT CONCRETE IS SELECTED.
6. CROSS DRAIN AND STORM DRAIN PIPE:
UNLESS NOTED OTHERWISE IN THE PLANS, THE PIPE SIZES SPECIFIED FOR CROSS DRAIN PIPE AND STORM DRAIN PIPE ARE BASED ON A MANNING'S "N" DESIGN VALUE OF 0.012. ALTERNATE PIPE MATERIALS WITH MANNING'S N DESIGN VALUES LESS THAN OR EQUAL TO 0.012 MAY BE USED AS NOTED IN THE ALLOWABLE PIPE MATERIALS CHART.
THE CONTRACTOR MAY, AT HIS OWN EXPENSE, SUBMIT OTHER DESIGNS CONSIDERING ALTERNATIVE PIPE MATERIALS WITH MANNING'S N DESIGN VALUES GREATER THAN 0.012 TO THE PROJECT ENGINEER FOR APPROVAL. THE SUBMITTED DESIGN SHALL BE STAMPED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER.
7. SIDE DRAIN PIPE AND UNDER DRAIN PIPE:
ALTERNATE PIPE MATERIALS MAY BE USED AS NOTED IN THE ALLOWABLE PIPE MATERIALS CHART. SIDE DRAIN PIPE IS NORMALLY DESIGNED USING A MANNING'S N VALUE FOR CORRUGATED METAL PIPE. SUBMISSION OF ALTERNATE DESIGNS WITH LESSER FRICTION COEFFICIENTS IS NOT REQUIRED.



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REVISION DATES

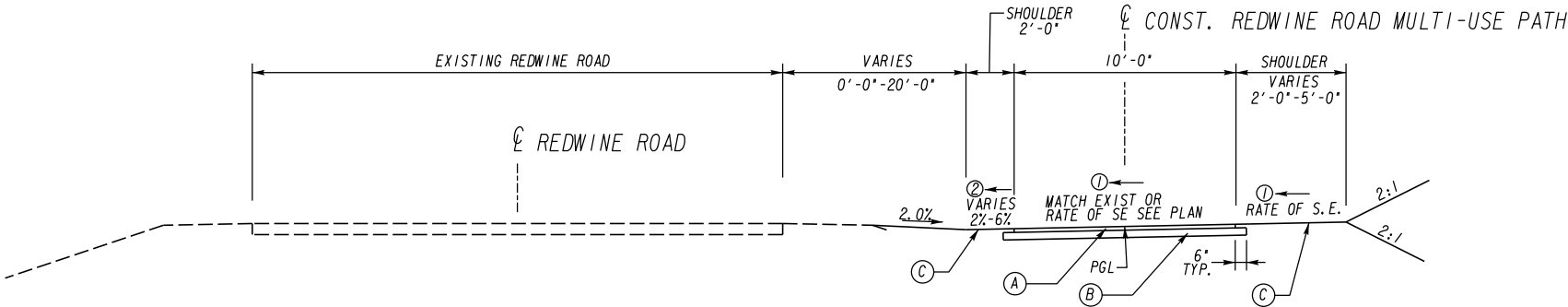
FAYETTE COUNTY

GENERAL NOTES

REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

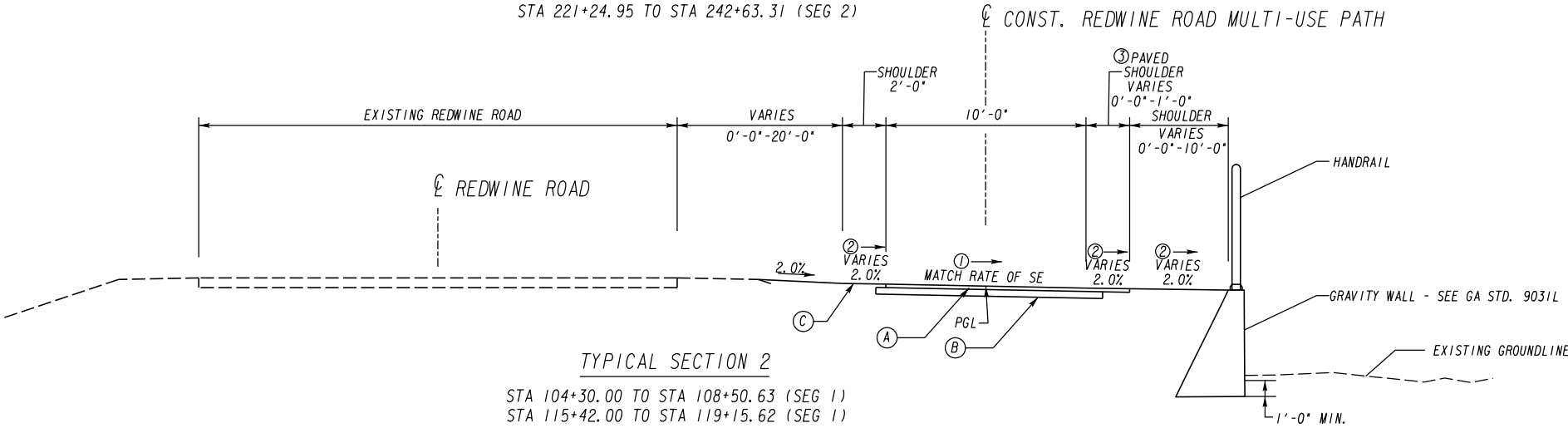
CHECKED:		DATE:		DRAWING No.	
BACKCHECKED:		DATE:		04-001	
CORRECTED:		DATE:			
VERIFIED:		DATE:			

GENERAL NOTES - STANDARD SIGNS			<table><tr><th colspan="7">Environmental Resources Impact Table</th></tr><tr><td colspan="7">These resources and the restrictions listed are governed by state and federal law.</td></tr><tr><th rowspan="2">Resource Name (from Section A of the ECT)</th><th colspan="3">Location</th><th rowspan="2">Permitted Construction Activity (from Section A of the ECT)</th><th rowspan="2">Special Provision (from Section B of the ECT)</th><th rowspan="2">Comments (from Section C of the ECT, comments only)</th></tr><tr><th>Beginning STA</th><th>Ending STA</th><th>Side</th></tr><tr><td>Intermittent Stream (IS) 1</td><td>118+03</td><td>118+91</td><td>Right</td><td>32 linear feet/0.003 acre of permament impact</td><td>N/A</td><td>The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource.</td></tr><tr><td>IS 1 Buffer</td><td>117+77</td><td>119+16</td><td>Right</td><td>Activites within 50 ft of the proposed culvert are exempt</td><td>N/A</td><td>The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. 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Resource Name (from Section A of the ECT)	Location			Permitted Construction Activity (from Section A of the ECT)	Special Provision (from Section B of the ECT)	Comments (from Section C of the ECT, comments only)	Beginning STA	Ending STA	Side	Intermittent Stream (IS) 1	118+03	118+91	Right	32 linear feet/0.003 acre of permament impact	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource.	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Wetland (W/L) 2	118+47	119+33	Right	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	W/L 3	117+36	119+09	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	IS 4	225+75	226+63	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	IS 4 Buffer	225+54	226+63	Left	None	SP 150.11A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	Perennial Stream (PS) 5	226+63	227+04	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	PS 5 Buffer	226+44	104+77	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	W/L 6	225+61	227+13	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource	Open Water (OW) 7	225+54	227+17	Right	260 square feet/0.006 acre of permanent impact	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. 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W/L 8	226+61	226+85	Right	495 square feet/ 0.01 acre of the permanent impact	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource.	404 Permits and Variances (from Section D of the ECT)			Expiration dates (if applicable) Contact GDOT OES 6 months prior to expiration, if work will extend beyond this date.				Notice of Intent (NOI) for NPDES			Fayette County and Construction Contractor will submit a NOI to the NPDES General Permit following award of the contract but prior to construction.				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W/L 3	117+36	119+09	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource																																																																																																																														
IS 4	225+75	226+63	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource																																																																																																																														
IS 4 Buffer	225+54	226+63	Left	None	SP 150.11A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource																																																																																																																														
Perennial Stream (PS) 5	226+63	227+04	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource																																																																																																																														
PS 5 Buffer	226+44	104+77	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource																																																																																																																														
W/L 6	225+61	227+13	Left	None	N/A	The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource																																																																																																																														
Open Water (OW) 7	225+54	227+17	Right	260 square feet/0.006 acre of permanent impact	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource.																																																																																																																														
OW 7 Buffer	225+33	227+41	Right	Activites within 50 ft of the proposed culvert are exempt	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource.																																																																																																																														
W/L 8	226+61	226+85	Right	495 square feet/ 0.01 acre of the permanent impact	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource per the final construction plans. The contractor shall ensure that no construction-related activities (such as the use of easements, staging, construction, vehicular use, borrow or waste activities, sediment basins, and trailer placement), oter than those shown on the approved plans, occur within the boundary of this resource.																																																																																																																														
404 Permits and Variances (from Section D of the ECT)			Expiration dates (if applicable) Contact GDOT OES 6 months prior to expiration, if work will extend beyond this date.																																																																																																																																	
Notice of Intent (NOI) for NPDES			Fayette County and Construction Contractor will submit a NOI to the NPDES General Permit following award of the contract but prior to construction.																																																																																																																																	
Section 404 Nationwide Permit 14 (NWP 14)			A NWP 14 shall be obtained from the USACE for the proposed impacts to IS 1, OW 7, and W/L 8 (no compensatory mitigation required)																																																																																																																																	
<div>1. ALL STANDARD HIGHWAY SIGNS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND THE GEORGIA SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISIONS.</div> <div>2. SIGN ERECTION STATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION. NO SIGN LOCATION SHALL BE CHANGED BY THE CONTRACTOR OR BY THE PROJECT ENGINEER WITHOUT PRIOR APPROVAL FROM THE OFFICE OF TRAFFIC OPERATIONS.</div> <div>3. ALL STANDARD HIGHWAY SIGNS SHALL BE ERECTED AT A HEIGHT OF 7 FEET ABOVE THE NORMAL EDGE OF PAVEMENT TO THE BOTTOM OF THE SIGN OR ASSEMBLY. IF SIDEWALK IS PROPOSED OR EXISTING, THE SIGNS SHALL BE ERECTED AT A HEIGHT OF 7 FEET ABOVE THE SIDEWALK.</div> <div>4a. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON INTERSTATE HIGHWAYS SHALL BE 32 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S). UNLESS SPECIFIED OTHERWISE IN THE PLANS. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON RAMPS SHALL BE 2 FEET FROM THE NORMAL EDGE OF PAVED SHOULDER, OR EDGE OF GRADED SHOULDER WHEN PRESENT.</div> <div>4b. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON ALL OTHER ROADWAYS SHALL BE 6 FEET FROM THE EDGE OF THE PAVED SHOULDER OR 12 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S), WHICHEVER IS GREATER. THE HORIZONTAL CLEARANCE IN NON-MOUNTABLE CURB SECTIONS SHALL BE AT LEAST 2 FEET FROM THE CURB FACE TO THE NEARER EDGE OF THE SIGN(S).</div> <div>4c. WHEN GUARDRAIL IS PRESENT OR BEING PROPOSED, SIGNS SHALL BE POSTED AN UNSTIPULATED DISTANCE BEHIND GUARDRAIL.</div> <div>5. SINGLE PLATE, HORIZONTAL RECTANGULAR SIGNS OVER 48 INCHES IN WIDTH SHALL BE MOUNTED ON TWO POSTS WITH 2 EACH 2 INCH x ½ INCH x (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAPS. THE STRAPS SHALL BE FLUSH WITH THE BACK OF THE SIGN WITH ONE EACH ACROSS THE TOP AND BOTTOM OF THE SIGN. THE CENTERLINE OF EACH POST SHALL BE INSET ¼TH OF THE SIGN WIDTH FROM THE EDGE OF THE SIGN. SIGN PLATE BOLT HOLES SHALL BE ⅝ INCH DIAMETER, DRILLED OR PUNCHED, AS SHOWN ON THE SIGN PLATE DETAILS.</div> <div>6. EACH 42 OR 48 INCH WIDE X 18 OR 24 INCH HIGH SIGN REQUIRES ONE 2 INCH x ½ INCH X (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAP LOCATED IN THE CENTER OF THE SIGN AND FLUSH WITH THE BACK OF THE SIGN.</div> <div>7. SIGN ASSEMBLIES SHALL BE MOUNTED ON ALUMINUM OR GALVANIZED STEEL STRAP FRAMES. FOR DETAILS AND STRAP SPECIFICATIONS REFER TO SIGN ASSEMBLY-TYPICAL FRAMING DETAILS.</div> <div>8. TYPE 9 (HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL STANDARD HIGHWAY SIGNS REQUIRING REFLECTORIZED BACKGROUNDS EXCEPT AS SPECIFIED BELOW OR SPECIFIED OTHERWISE IN THE PLANS. EITHER CLASS 1 OR CLASS 2 ADHESIVE BACKING IS PERMISSIBLE.</div> <div>9. TYPE 11 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL RED SERIES SIGNS (RI-1, RI-2, RI-3P, R5-1, RI-4A, R5-1B).</div> <div>10. TYPE 11 (VERY HIGH INTENSITY) FLUORESCENT YELLOW REFLECTIVE SHEETING SHALL BE USED FOR ALL WARNING SIGNS.</div> <div>11. TYPE 11 (VERY HIGH INTENSITY) FLUORESCENT YELLOW GREEN REFLECTIVE SHEETING SHALL BE USED FOR SCHOOL ZONE (S1-1, S2-1, S3-1, S4-3, AND THE TOP PORTION OF THE S5-1) SIGNS. ALL REGULATORY SIGNS WITHIN THE SCHOOL ZONE SHALL HAVE TYPE 9 (VERY HIGH INTENSITY) REFLECTIVE SHEETING.</div> <div>12. A 1/2 INCH MINIMUM AIR SPACE SHALL BE REQUIRED BETWEEN ALL SIGN PLATES WITHIN AN ASSEMBLY.</div> <div>13. WHERE SIGNS WITHIN AN ASSEMBLY EXTEND BELOW THE STANDARD MOUNTING HOLES ON THE POST(S), ADDITIONAL 3/8 INCH DIAMETER HOLE(S), DRILLED OR PUNCHED, SHALL BE REQUIRED TO PROPERLY MOUNT THE ASSEMBLY.</div>			<div>14. ALL INTERSTATE, U.S., AND GEORGIA SHIELDS REQUIRING ALT, BUS, CONN, LOOP, OR SPUR SHALL USE 4 INCH SERIES "D" LETTERS. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, FOR DETAILS.</div> <div>15. FOR DETAILS OF SPECIAL DESIGN HIGHWAY SIGNS, SEE DETAILS OF MISCELLANEOUS SIGNS.</div> <div>16. REFER TO PLAN SHEETS FOR LOCATION OF THE DISTRICT ENGINEERS OFFICE TO BE SHOWN ON ALL R552-1 (LIMITED ACCESS) SIGNS IN THIS PROJECT, IF ANY.</div> <div>17. THE CONTRACTOR WILL, AS REQUESTED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER, BE REQUIRED TO REMOVE ANY EXISTING SIGNS THAT ARE DUPLICATED OR ARE CONTRARY TO THESE SIGN PLANS.</div>																																																																																																																																	



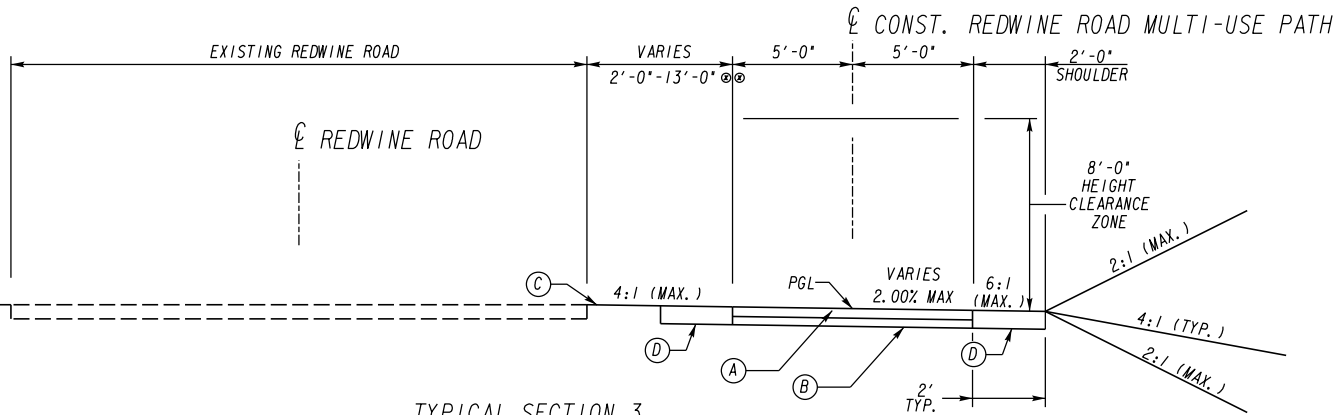
TYPICAL SECTION 1

SEGMENTS 1 AND 2
STA 100+06.26 TO STA 104+30.00 (SEG 1)
STA 108+50.63 TO STA 115+42.00 (SEG 1)
STA 119+15.62 TO STA 120+14.00 (SEG 1)
STA 200+93.00 TO STA 205+80.00 (SEG 2)
STA 208+10.00 TO STA 218+32.64 (SEG 2)
STA 221+24.95 TO STA 242+63.31 (SEG 2)



TYPICAL SECTION 2

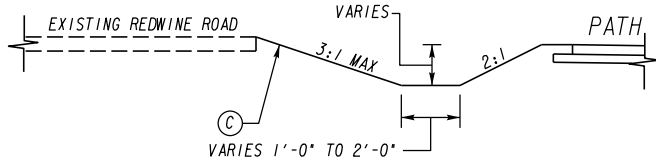
STA 104+30.00 TO STA 108+50.63 (SEG 1)
STA 115+42.00 TO STA 119+15.62 (SEG 1)
STA 124+00.00 TO STA 124+60.00 (SEG 1)
STA 205+80.00 TO STA 208+10.00 (SEG 2)



TYPICAL SECTION 3

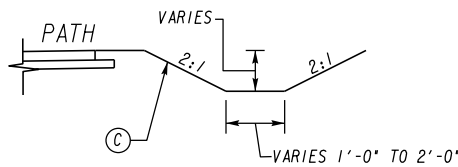
SEGMENT 1 WITHIN PEACHTREE CITY LIMITS
STA 122+72.75 TO STA 124+00.00 (SEG 1)
STA 124+60.00 TO STA 136+18.18 (SEG 1)

NOTE: ALL VEGETATION WITHIN 4' OF THE TRAIL SHALL BE REMOVED TO PROVIDE CLEAR ZONE WITHIN PEACHTREE CITY.



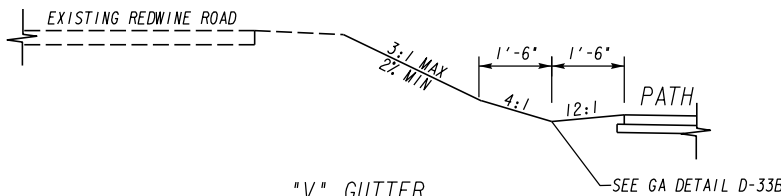
DITCH DETAIL 1

STA 110+68.74 TO STA 116+09.00 (SEG 1)
STA 201+51.00 TO STA 204+75.00 (SEG 2)
STA 222+00.00 TO STA 224+00.00 (SEG 2)
STA 230+02.00 TO STA 234+00.00 (SEG 2)
STA 237+10.00 TO STA 241+75.00 (SEG 2)



DITCH DETAIL 2

STA 124+60.00 TO STA 134+00.00 (SEG 1)
STA 205+30.00 TO STA 206+00.00 (SEG 2)
STA 207+50.00 TO STA 208+10.00 (SEG 2)
STA 228+00.00 TO STA 229+40.00 (SEG 2)



"V" GUTTER
DITCH DETAIL 3

STA 100+06.26 TO STA 104+10.00 (SEG 1)
STA 116+10.62 TO STA 119+70.00 (SEG 1)
STA 214+75.00 TO STA 217+95.00 (SEG 2)

NOTES:

- SEE CONSTRUCTION PLANS FOR CROSS SLOPE TRANSITIONS.
- SEE CROSS SECTIONS FOR SLOPE TRANSITIONS.
- 1 FT SHOULDER TO BE PAVED FOR WALLS 1 & 2 SHOULDER WIDTH. A MINIMUM OF 1-FT AT HAND RAILING.

REQUIRED PAVEMENT:

- RECYCLED ASPH CONC 9.5MM SUPERPAVE, TYPE 1, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LBS/SY)
- GR AGGR BASE CRS, INCL MATL (4 INCH)
- SOD, BERMUDA TIFWAY
- GR AGGR BASE CRS, INCL MATL (6 INCH)
- CONC HEADER CURB, 10 IN, TP 4- GA STD 9032B
- CONCRETE CURB & GUTTER 8" X 24" TP 2



Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

N. T. S.

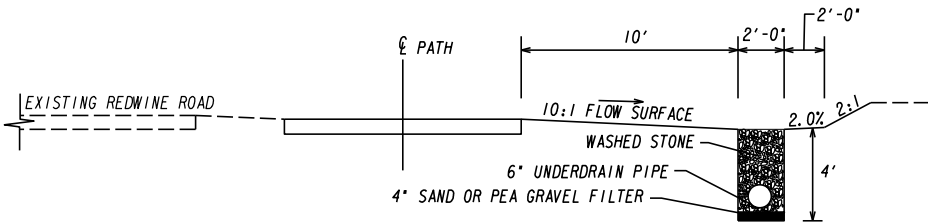
REVISION DATES

FAYETTE COUNTY

TYPICAL SECTIONS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

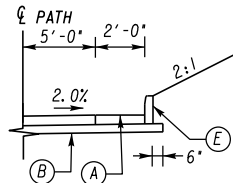
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

05-001



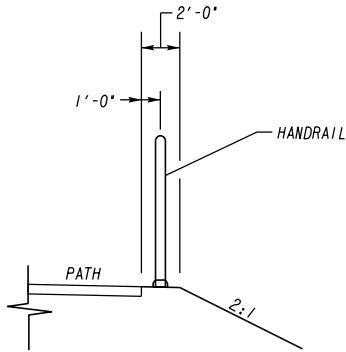
INFILTRATION DETAIL 1 - SEE PLANS FOR LOCATIONS

STA 224+75.00 TO STA 226+00.00 (SEG 2)
STA 226+50.00 TO STA 228+00.00 (SEG 2)



HEADER CURB DETAIL

STA 208+10.00 TO STA 213+50.00 (SEG 2)



SHOULDER DETAIL AT FENCE SECTION

WHERE DROP IS MORE THAN 4'-0"
HANDRAIL SHOULD FLARE AT ENDS TO A
MINIMUM OF 2' FROM EDGE OF TRAIL

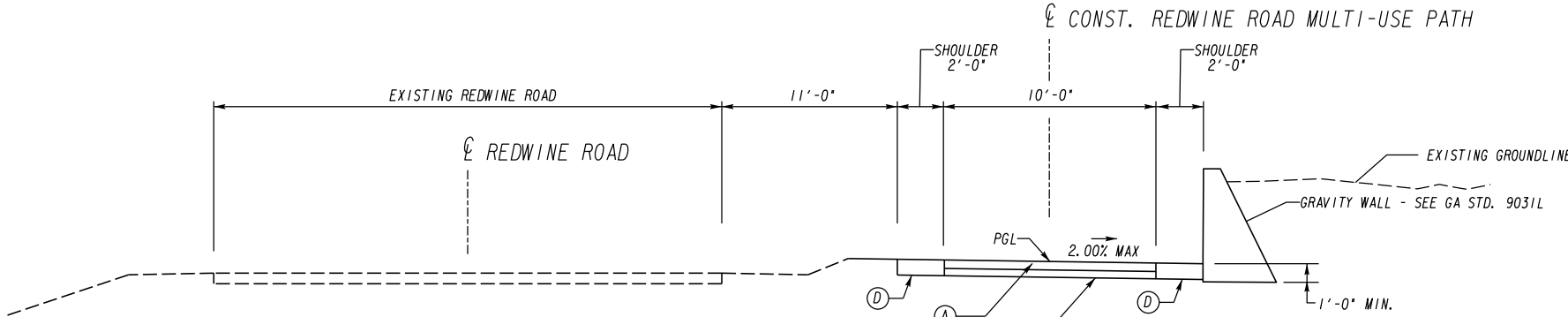
STA 132+75.00 TO STA 134+20.00 (SEG 1)
STA 205+25.00 TO STA 205+80.00 (SEG 2)

NOTES:

- SEE CONSTRUCTION PLANS FOR CROSS SLOPE TRANSITIONS.
- SEE CROSS SECTIONS FOR SLOPE TRANSITIONS.

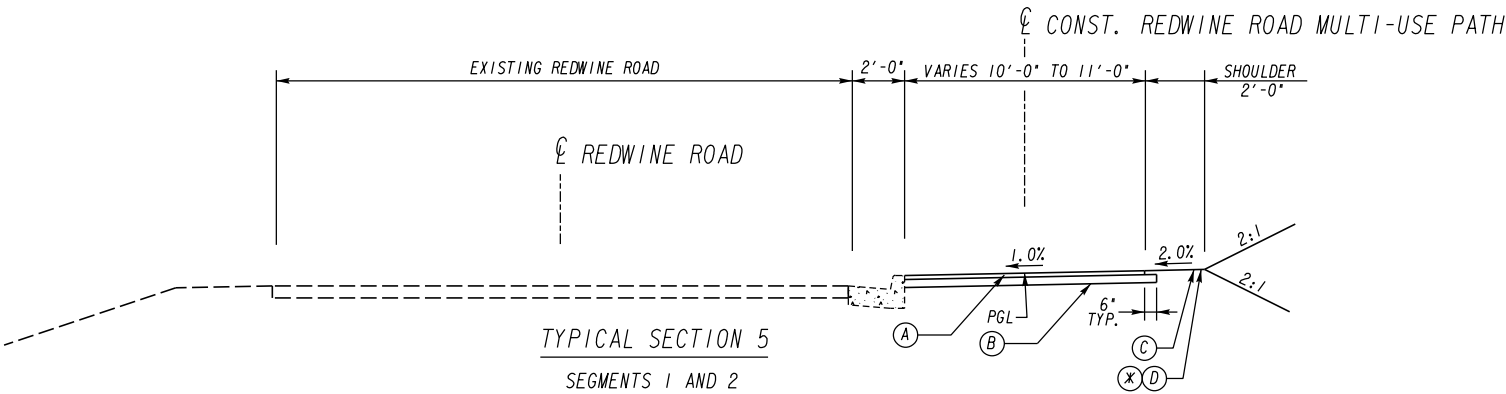
REQUIRED PAVEMENT:

- RECYCLED ASPH CONC 9.5MM SUPERPAVE, TYPE 1, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME (220 LBS/SY)
- GR AGGR BASE CRS, INCL MATL (4 INCH)
- SOD, BERMUDA TIFWAY
- GR AGGR BASE CRS, INCL MATL (6 INCH)
- CONC HEADER CURB, 10 IN, TP 4- GA STD 9032B
- CONCRETE CURB & GUTTER 8" X 24" TP 2



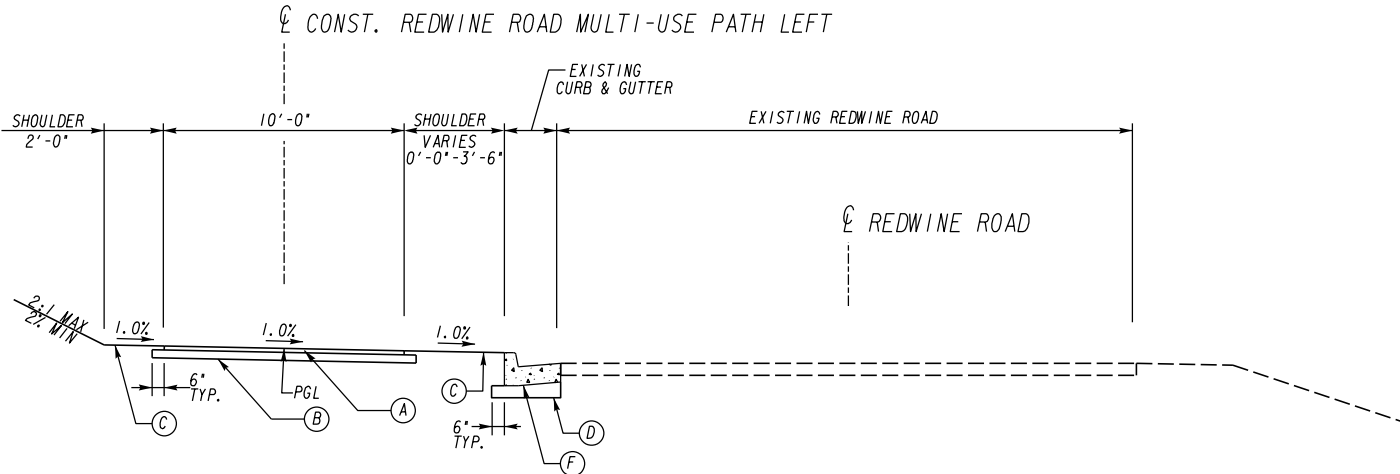
TYPICAL SECTION 4

STA 124+00.00 TO STA 124+60.00 (SEG 1)



TYPICAL SECTION 5

SEGMENTS 1 AND 2
STA 120+14.00 TO STA 122+72.75 (SEG 1)
STA 218+32.64 TO STA 221+24.95 (SEG 2)
STA 242+63.31 TO STA 243+51.42 (SEG 2)



TYPICAL SECTION 6

STA 300+10.05 TO STA 301+66.55 (SEG 3)

ROADWAY

TRAFFIC CONTROL - 0012624	
TOTAL	1 LS

GPS DATA COLLECTION & SUBMITTAL	
TOTAL	1 LS

GRADING COMPLETE - 0012624	
TOTAL	1 LS

CONCRETE SIDEWALK, 8 IN	
TOTAL	240 SY

CONCRETE HEADER CURB, 10 IN, TP 4	
TOTAL	540 LF

FENCE, SPECIAL DESIGN - 0012624	
TOTAL	524 LF

REMOVE FENCE - ALL TYPES & SIZES	
TOTAL	1153 LF

RESET FENCE - ALL TYPES & SIZES	
TOTAL	593 LF

RIGHT OF WAY MARKERS	
TOTAL	14 EA

GALV STEEL PIPE HANDRAIL, 2 IN, ROUND	
TOTAL	1225 LF

CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	
TOTAL	152 LF

CONCRETE V GUTTER	
TOTAL	1100 LF

SURFACING QUANTITIES		UNIT	TOTALS
ITEMS			
REQUIRED PAVEMENT			
GR AGGR BASE CRS, INCL MATL		TN	2282
RECYC ASP CON 9.5 MM SUPERPAVE, TP 1, GPI OR BLEND 1 INCL BIT & HL DRIVEWAY (TRENCH CUT)		TN	955
RECYC ASP CON 12.5 MM SUPERPAVE, GPI OR GP 2, INCL BIT & HL CLASS B CONCRETE		TN	4
		CY	26

SUMMARY OF QUANTITIES

GRASSING

GRASSING			MULCH	FERTILIZER MIXED GRADE	FERTILIZER NITROGEN CONTENT	AGRICULTURAL LIME
ITEM	UNIT	QUANTITY	TN	TN	LB	TN
PERMANENT GRASSING	AC	4	12	2.4	200	12
TEMPORARY GRASSING	AC	2	6	0.4	0	0
DISTURBED AREAS	AC	5.67	54	1.2	0	0
TOTAL			73	4	200	12

SOD. BERMUDA TIFWAY	
TOTAL	6387 SY

EROSION

CONSTRUCTION EXIT	
TOTAL	2 EA

MAINTENANCE OF CONSTRUCTION EXIT	
TOTAL	2 EA

CONSTRUCT & REMOVE SILT CONTROL GATE, TP 3	
TOTAL	2 EA

CONSTRUCT & REMOVE RIP RAP CHK DAMS, STONE PLAIN RIP RAP/ SAND BAGS	
TOTAL	31 EA

MAINTENANCE OF CHECK DAMS - ALL TYPES	
TOTAL	2970 LF

CONSTRUCT & REMOVE INLET SEDIMENT TRAP	
TOTAL	41 EA

MAINTENANCE OF TEMP SILT FENCE, TP C	
TOTAL	171 LF

MAINTENANCE OF TEMP SILT FENCE, TP A	
TOTAL	4222 LF

MAINTENANCE OF SILT CONTOL GATE, TP 3	
TOTAL	2 EA

MAINTENANCE OF INLET SEDIMENT TRAP	
TOTAL	41 EA

WATER QUALITY MONITORING AND SAMPLING	
TOTAL	3 EA

WATER QUALITY INSPECTION	
TOTAL	18 MO

TEMP SILT FENCE, TYP A	
TOTAL	8444 LF

TEMP SILT FENCE, TYP C	
TOTAL	342 LF

EROSION

STN DUMPED RIP RAP, TP 3, 18 IN	
TOTAL	163 SY

*QUANTITY INCLUDES 51-SERIES RIP RAP CHART & DITCH RIP RAP

STN DUMPED RIP RAP, TP 1, 24 IN	
TOTAL	52 SY

PLASTIC FILTER FABRIC	
TOTAL	215 SY

BARRIER FENCE (ORANGE), 4 FT	
TOTAL	373 LF

EROSION CONTROL MATS, SLOPES	
TOTAL	4222 SY

CONSTRUCT & REMOVE FABRIC CHK DAM - TP C SILT FENCE	
TOTAL	2505 LF

CONSTRUCT & REMOVE RETROFIT-SLOTTED BOARD DAM W/STONE FILTER	
TOTAL	6 EA

CONSTRUCT & REMOVE ROCK FILTER DAMS	
TOTAL	6 EA

MAINTENANCE OF RETROFIT-SLOTTED BOARD DAM W/STONE FITLER	
TOTAL	6 EA

MAINTENANCE OF ROCK FILTER DAM	
TOTAL	6 EA

WALL

SUMMARY OF WALL QUANTITIES

LOCATION	CLASS B CONCRETE, RETAINING WALL	
	CY	
GRAVITY WALL NO. 1	80	
GRAVITY WALL NO. 2	111	
GRAVITY WALL NO. 3	14	
GRAVITY WALL NO. 4	98	

* FOR WALL CONSTRUCTION ONLY



REVISION DATES

FAYETTE COUNTY

SUMMARY QUANTITIES
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 06-001
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SUMMARY OF QUANTITIES
DRAINAGE

Structure No.	Location	Station	Offset	Side Drain Pipe		Storm Drain Pipe				SAFETY END SECTION 1122	FLARED END SECTION 1120	MANHOLE STD 1011A	CATCH BASIN 1033D & 1034D	DROP INLET GA DETAIL D-33			DROP INLET GA STANDARD 1019A			JUNCTION BOX	ADJUST JUNCTION BOX TO GRADE			
				18"	30"	18"	24"	30"	54"	18"	18"	Each	ADDTL DEPTH (ft) CLASS 1	Each	ADDTL DEPTH (ft)	Each	TYPE	ADDTL DEPTH (ft)	Each	TYPE	ADDTL DEPTH (ft)	Each	GA STD. 9031U	GA STD. 9031U
				H 1:1.0	H 1:1.0	H 1:1.0	H 1:1.0	H 1:1.0	H 1:1.0	Each	Each													
A-1	Redwine Road Multi-Use Path	100+17.26	6.26' LT	28.78								1												
A-1A	Redwine Road Multi-Use Path	100+50.00	6.24' LT	47												1	V							
A-2	Redwine Road Multi-Use Path	101+00.00	6.24' LT	46.06												1	V							
A-3	Redwine Road Multi-Use Path	101+50.00	6.24' LT	47												1	V							
A-4	Redwine Road Multi-Use Path	102+00.00	6.24' LT	47.06												1	V							
A-5	Redwine Road Multi-Use Path	102+50.00	6.24' LT	46.94												1	V							
A-6	Redwine Road Multi-Use Path	103+00.00	6.24' LT	47												1	V							
A-7	Redwine Road Multi-Use Path	103+50.00	6.24' LT	47.15												1	V							
A-8	Redwine Road Multi-Use Path	104+00.00	6.24' LT	197.67												1	V							
A-9	Redwine Road Multi-Use Path	105+58.91	1.89' LT	151.62								1												
A-10	Redwine Road Multi-Use Path	107+57.43	5.20' LT				12.51					1												
A-11	Redwine Road Multi-Use Path	108+50.00	6.24' LT	89.06												1	V							
A-12	Redwine Road Multi-Use Path	107+59.80	7.04' RT																					
B-1	Redwine Road Multi-Use Path	116+05.36	9.74' LT	91.77															1	C				
B-2	Redwine Road Multi-Use Path	117+00.00	6.24' LT	57.03												1	V							
B-3	Redwine Road Multi-Use Path	117+00.00	6.24' LT	68.65												1	V							
B-3A	Redwine Road Multi-Use Path	118+21.63	6.24' LT	7.03												1	V							
B-4	Redwine Road Multi-Use Path	118+62.96	6.24' LT	36.93												2	V							
B-5	Redwine Road Multi-Use Path	119+00.00	6.24' LT	13.24												1	V							
B-6	Redwine Road Multi-Use Path	120+10.87	6.24' LT	106.63															2	C				
B-7	Redwine Road Multi-Use Path	118+42.66	6.73' LT						13.97			1	2.82											
B-8	Redwine Road Multi-Use Path	118+19.72	7.00' RT																					
D-1	Redwine Road Multi-Use Path	134+05.95	20.73' RT	46.7							1													
D-3	Redwine Road Multi-Use Path	134+54.54	28.42' RT									1	0.17											
D-4	Redwine Road Multi-Use Path	134+55.83	05.89' LT																					1
AA-1	Redwine Road Multi-Use Path	204+73.63	9.47' LT	46.36															1	C				
AA-2	Redwine Road Multi-Use Path	205+15.15	11.15' RT							1														
BB-2	Redwine Road Multi-Use Path	206+14.93	4.74' RT						7.76															
BB-3	Redwine Road Multi-Use Path	206+14.87	11.00' RT																					
CC-1	Redwine Road Multi-Use Path	210+50.00	5.56' RT	147.58														1	D					
CC-2	Redwine Road Multi-Use Path	212+00.00	5.63' RT	97.11														1	D					
CC-3	Redwine Road Multi-Use Path	213+00.00	5.63' RT	44.74														1	D					
CC-4	Redwine Road Multi-Use Path	213+00.00	5.38' RT	123.64														1	D					
CC-12	Redwine Road Multi-Use Path	214+75.32	2.13' RT	95.06								1												
CC-13	Redwine Road Multi-Use Path	215+75.32	2.53' RT	94.89								1												
CC-14	Redwine Road Multi-Use Path	216+75.18	2.43' RT	19.24								1												
CC-7B	Redwine Road Multi-Use Path	216+59.45	2.42' RT	47.19								1												
CC-8	Redwine Road Multi-Use Path	217+50.00	6.36' LT	43.74										1	V									
CC-9	Redwine Road Multi-Use Path	217+55.00	6.36' LT	5.6														2	A					
CC-10	Redwine Road Multi-Use Path	218+05.25	1.44' LT																			1		
CC-5	Redwine Road Multi-Use Path	214+75.00	6.36' LT	4.6										1	V									
CC-6	Redwine Road Multi-Use Path	215+75.00	6.36' LT	4.91										1	V									
CC-7	Redwine Road Multi-Use Path	216+75.00	6.36' LT	4.81																				
CC-7A	Redwine Road Multi-Use Path	216+59.17	6.36' LT	5.17														1	A					
CC-11	Redwine Road Multi-Use Path	217+00.00	11.47' RT	5.67														1	A					
DD-2A	Redwine Road Multi-Use Path	225+21.78	15.97' RT	9.71														1	A					
DD-1	Redwine Road Multi-Use Path	223+57.56	11.58' LT	119.82														1	C					
DD-2	Redwine Road Multi-Use Path	225+21.71	2.76' RT	87.21								1												
DD-3	Redwine Road Multi-Use Path	226+13.92	2.35' RT	16.95								1	1.12											
DD-5	Redwine Road Multi-Use Path	226+19.50	2.11' RT		17.39							1	2.24											
DD-6	Redwine Road Multi-Use Path	227+00.00	0.31' RT		55.35							1	0.97											
DD-13	Redwine Road Multi-Use Path	228+04.43	2.17' RT		99.47							1	0.69											
DD-7	Redwine Road Multi-Use Path	230+03.25	11.32' LT		192.6													1	C					
DD-8	Redwine Road Multi-Use Path	231+45.15	2.77' LT		138.22							1	0.17											
DD-10	Redwine Road Multi-Use Path	234+36.63	2.21' LT		286.5													1	C		0.36			
DD-11	Redwine Road Multi-Use Path	237+11.79	10.38' LT		271.02													1	C					
DD-9	Redwine Road Multi-Use Path	231+01.29	18.96' LT		17.87							1	1.22											
DD-12	Redwine Road Multi-Use Path	228+09.35	13.23' RT		8.51													1	C					
DD-6A	Redwine Road Multi-Use Path	227+00.57	15.94' RT		12.15													1	A					
EE-1	Redwine Road Multi-Use Path	299+69.02	0.18' RT				78.75											1	C					
EE-2	Redwine Road Multi-Use Path	300+70.69	3.33' RT				54.86						1											
EE-3	Redwine Road Multi-Use Path	301+78.07	3.33' RT				46.32						1											
FF-1		241+79.93	9.18' LT		20.64													1	A					
Total:				2847	521	180	13	8	14	1	1	16	9	2	0	18	0	0	21	0	1	1		1



HL Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES

REVISION DATES			FAYETTE COUNTY				
			SUMMARY QUANTITIES REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH				
			CHECKED:		DATE:		DRAWING No. 06-002
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		

SUMMARY OF QUANTITIES

DRAINAGE

Infiltration Trench					
No.	Location		Length (ft)	Width (ft)	Depth (ft)
1	STA 224+75.00 TO STA 226+00.00		125	2	4
2	STA 226+50.00 TO STA 228+00.00		150	2	4

* INCLUDES STONE,
PERFORATED PIPE,
& GEOTEXTILE

CONC SPILLWAY, TP 1	
TOTAL	1 EA

FLOWABLE FILL	
TOTAL	2 CY

BOX CULVERT

CLASS AA CONCRETE	
TOTAL	16 CY

BAR REINF STEEL	
TOTAL	2721 LB

FOUND BK FILL MATL, TP 11	
TOTAL	30 CY

MISCELLANEOUS

LANDSCAPING WITH IRRIGATION	
TOTAL	1 LS

TRAFFIC SIGNAL INSTALLATION NO - PED HYBRID BEACON	
TOTAL	1 LS

MARKING

TRAFFIC STRIPE		STRIPING TOTALS
ITEMS	UNIT	
THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	468
THERMOPLASTIC SOLID TRAF STRIPING, 8 IN, WHITE	LF	870
THERMOPLASTIC TRAF STRIPING, WHITE	SY	112

UTILITY RELOCATIONS & ADJUSTMENTS

RELOCATE EXIST FIRE HYDRANT	
TOTAL	1 EA

ADJUST WATER VALVE BOX TO GRADE	
TOTAL	3 EA

SIGNS

Signs							Type 7 Post
Road Name	Station	Sign Code	Size (in)		TP1/TP11	No. Post	Length (ft)
			Width	Height			
Redwine Road Multi-Use Path	122+01	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	122+74	R1-1	36	36	9.00	1.00	13.00
Redwine Road Multi-Use Path	123+03	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	135+99	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	200+96	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	220+25	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	221+27	R1-1	36	36	9.00	1.00	13.00
Redwine Road Multi-Use Path	221+54	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	235+78	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	236+37	R1-1	36	36	9.00	1.00	13.00
Redwine Road Multi-Use Path	236+63	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	238+40	W11-15	36	36	9.00	1.00	14.00
		W16-9P	24	12	2.00	-	-
Redwine Road Multi-Use Path	241+58	R10-6	24	36	6.00	1.00	13.00
Redwine Road Multi-Use Path	242+04	W11-15	36	36	9.00	1.00	14.00
		W16-7P	24	12	2.00	-	-
Redwine Road Multi-Use Path	242+23	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path	243+14	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path Left	299+97	R1-1	18	18	2.25	1.00	11.50
Redwine Road Multi-Use Path Left	300+16	W11-15	36	36	9.00	1.00	14.00
		W16-7P	24	12	2.00	-	-
Redwine Road Multi-Use Path Left	300+64	R10-6	24	36	6.00	1.00	13.00
Redwine Road Multi-Use Path Left	301+47	R1-1	18	18	2.25	1.00	11.50
Redwine Road	154+85	W11-15	36	36	9.00	1.00	14.00
		W16-9P	24	12	2.00	-	-
Redwine Road Multi-Use Path	-	R10-23	24	30	5.00	-	-
Redwine Road Multi-Use Path	-	R10-3E(L)	9	15	0.94	-	-
Redwine Road Multi-Use Path	-	R1-9A	90	24	15.00	-	-
Redwine Road Multi-Use Path	-	R1-9A	90	24	15.00	-	-
Redwine Road Multi-Use Path	-	R10-23	24	30	5.00	-	-
Redwine Road Multi-Use Path	-	R10-3E(R)	9	15	0.94	-	-
Total=						152	259



REVISION DATES

FAYETTE COUNTY

SUMMARY QUANTITIES
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 06-003
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

REF10#
REF09#
REF08#
REF07#
REF06#

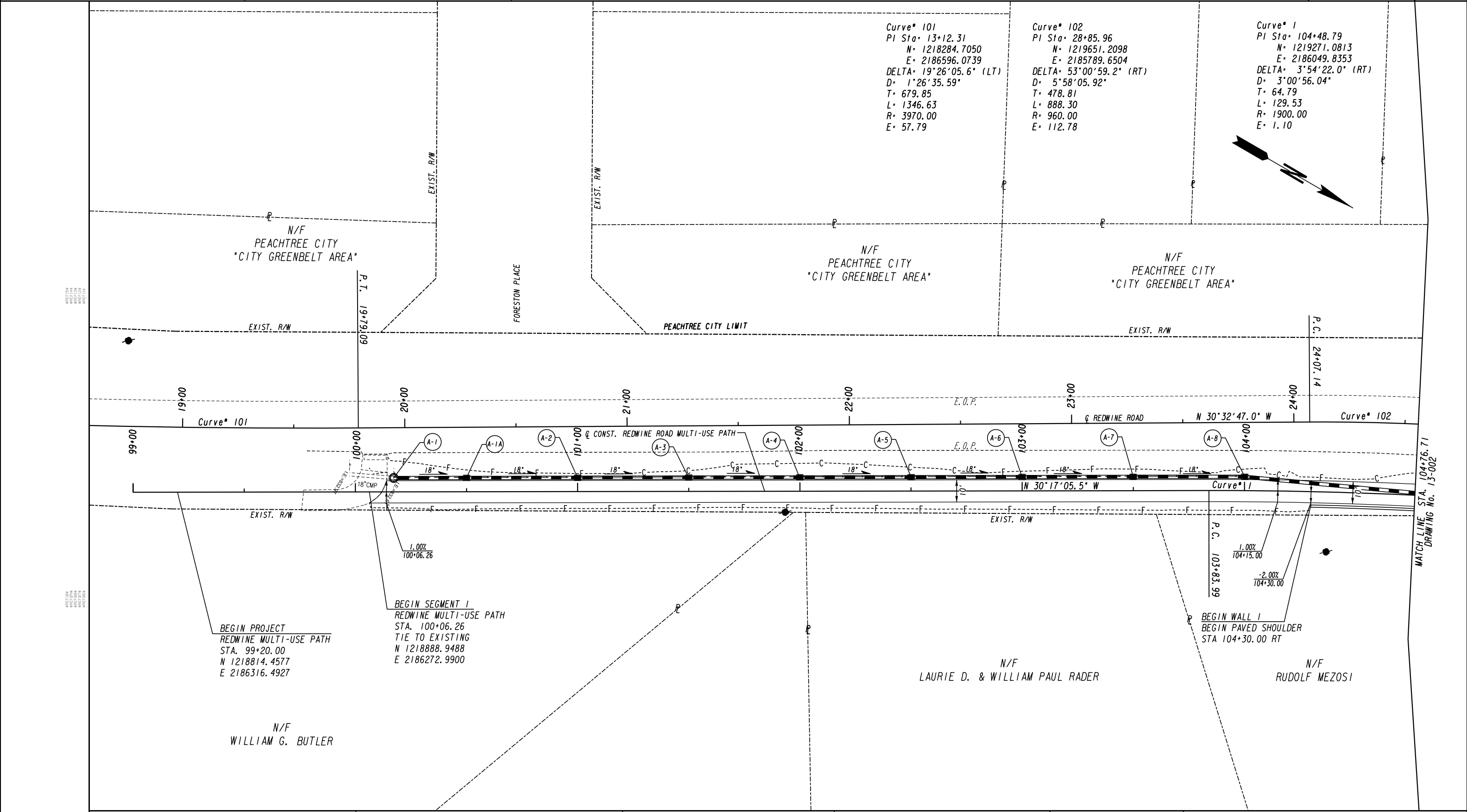
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HL **Heath & Lineback Engineers**
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES			FAYETTE COUNTY		
			QUANTITIES (AMENDMENT) REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH		
			CHECKED:		DATE:
			BACKCHECKED:		DATE:
			CORRECTED:		DATE:
			VERIFIED:		DATE:
			DRAWING No.		
			07-001		

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7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 13-001
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5°58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

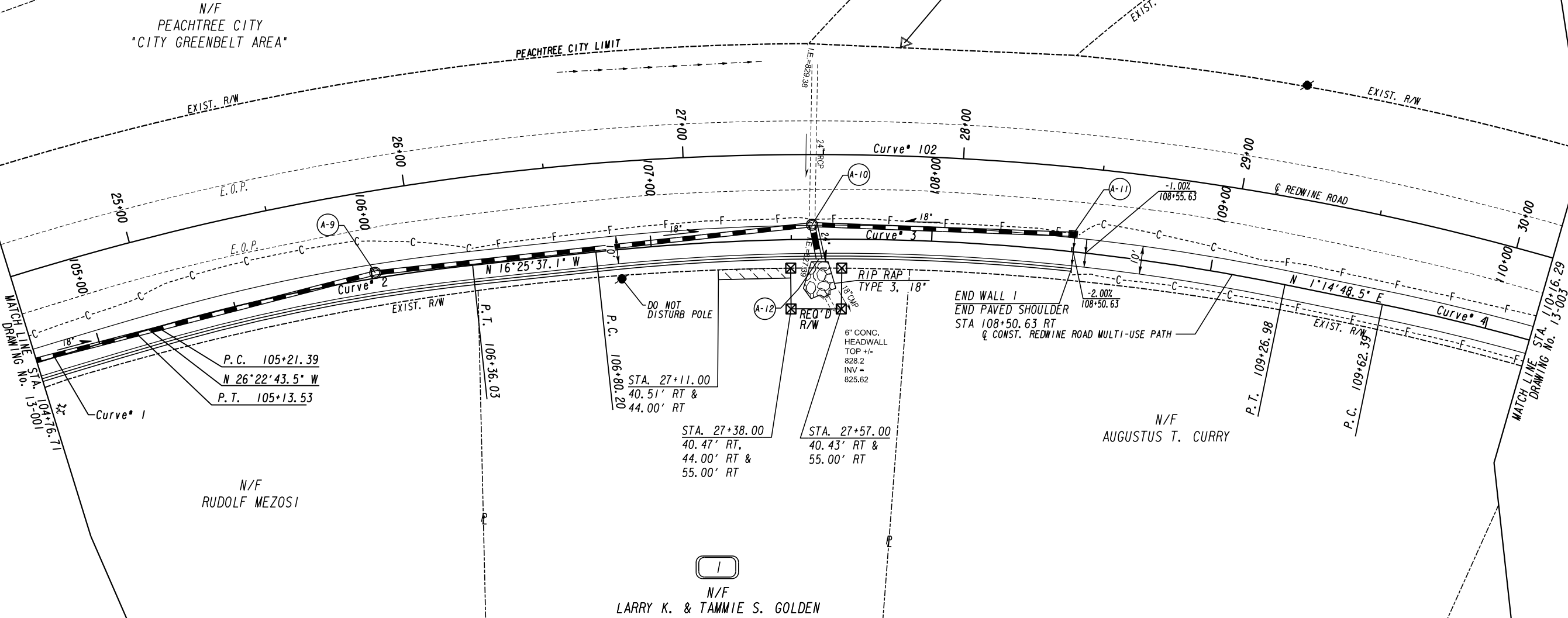
Curve* 1
PI Sta= 104+48.79
N= 1219271.0813
E= 2186049.8353
DELTA= 3°54'22.0" (RT)
D= 3°00'56.04"
T= 64.79
L= 129.53
R= 1900.00
E= 1.10

Curve* 2
PI Sta= 105+78.85
N= 1219387.6598
E= 2185992.0141
DELTA= 9°57'06.5" (RT)
D= 8°40'52.24"
T= 57.46
L= 114.64
R= 660.00
E= 2.50

Curve* 3
PI Sta= 108+04.58
N= 1219604.4398
E= 2185928.0984
DELTA= 17°40'25.5" (RT)
D= 7°09'43.10"
T= 124.37
L= 246.77
R= 800.00
E= 9.61

CONTROL POINT *23 REBAR & RED CAP
N= 1219580.0211
E= 2185870.2828
ELEV= 835.70

Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

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REVISION DATES

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

DRAWING No.
13-002

7/31/2015 GPLN

Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5'58"05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97

Curve* 5
PI Sta= 111+03.05
N= 1219903.8476
E= 2185946.9636
DELTA= 10°03'44.2" (RT)
D= 95°29'34.68"
T= 5.28
L= 10.54
R= 60.00
E= 0.23

Curve* 6
PI Sta= 111+14.09
N= 1219914.2747
E= 2185950.6679
DELTA= 4°28'59.5" (LT)
D= 95°29'34.68"
T= 2.35
L= 4.69
R= 60.00
E= 0.05

Curve* 7
PI Sta= 112+34.36
N= 1220030.4115
E= 2185981.9490
DELTA= 6°40'20.1" (RT)
D= 4°46'28.73"
T= 69.95
L= 139.74
R= 1200.00
E= 2.04

Curve* 8
PI Sta= 113+61.41
N= 1220148.5635
E= 2186029.0795
DELTA= 2°43'56.0" (LT)
D= 57°17'44.81"
T= 2.38
L= 4.77
R= 100.00
E= 0.03

Curve* 9
PI Sta= 113+86.56
N= 1220172.3382
E= 2186037.2727
DELTA= 3°34'49.6" (RT)
D= 57°17'44.81"
T= 3.13
L= 6.25
R= 100.00
E= 0.05

CONTROL POINT *24 REBAR & RED CAP
N= 1220158.1711
E= 2185981.4830
ELEV= 823.36

N/F
ASHTON PARK COMMUNITY ASSOCIATION, INC

2
N/F
KAREN C. VAN HORN

3
N/F
TIMOTHY J. & CHERYL MURPHY

4
N/F
MARIA CASTILLO

5
N/F
KEVIN W. VOGEL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

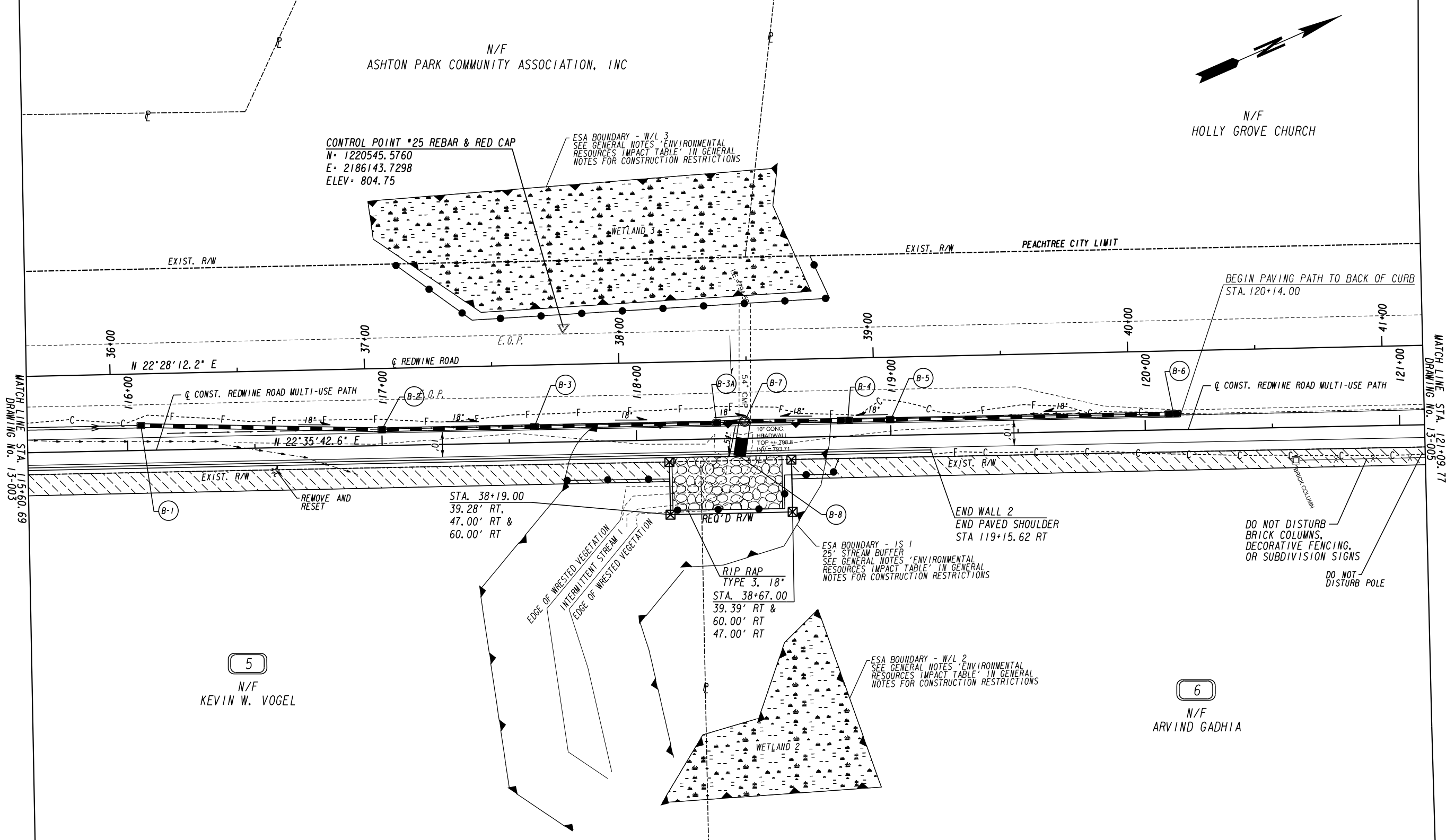
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REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

HL Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 13-003
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
---C---F---

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.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

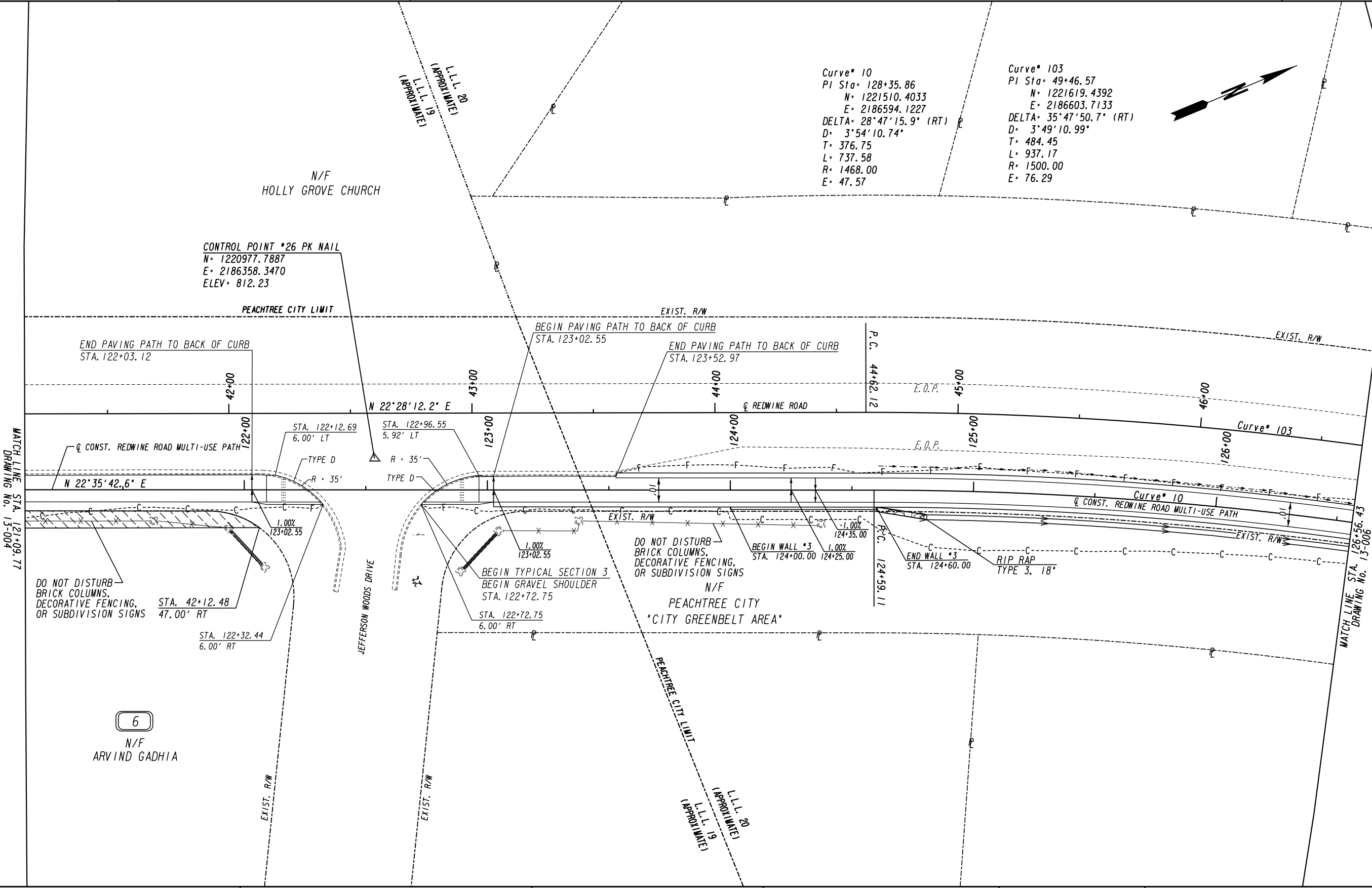
Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 13-004
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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---C---F---

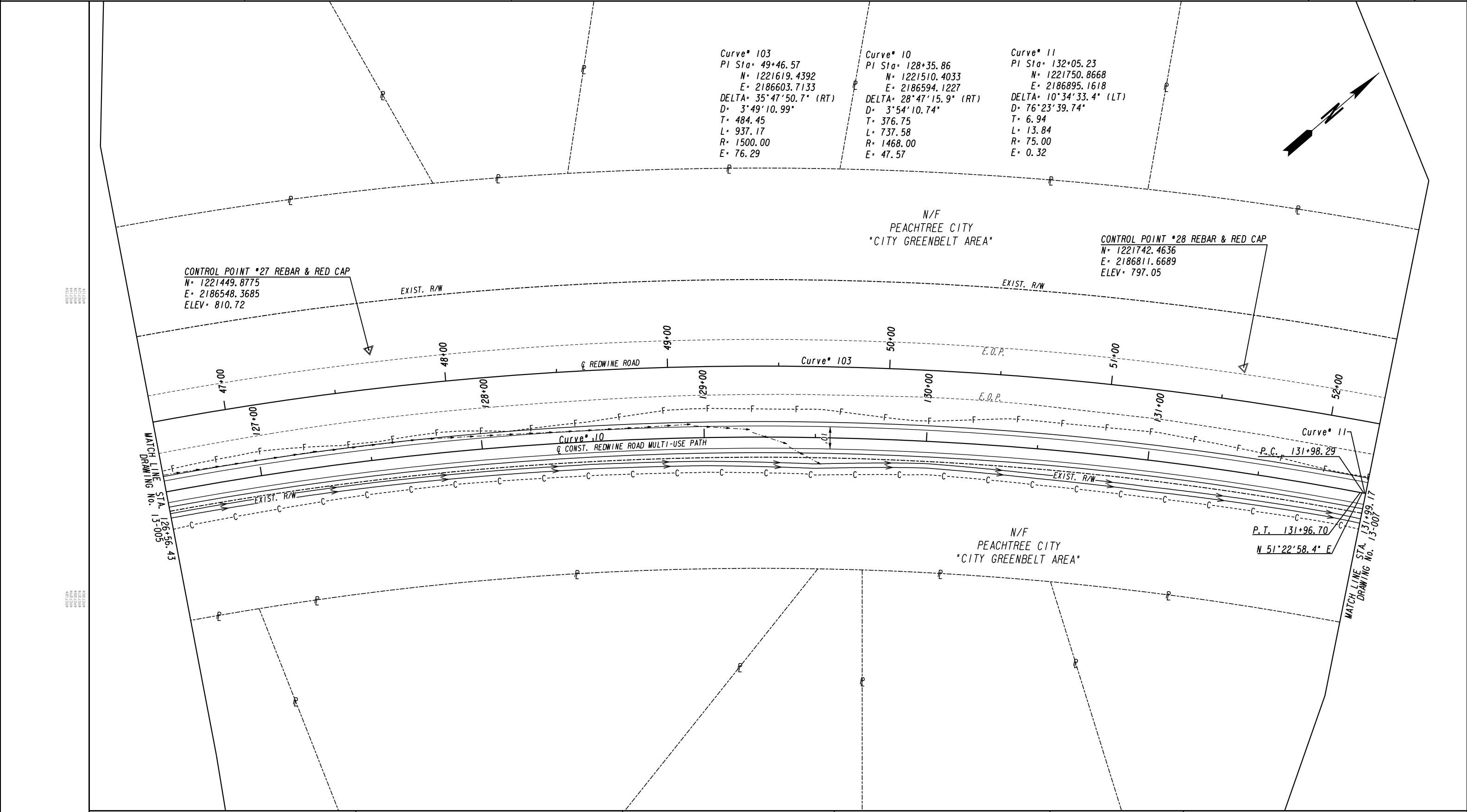
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END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES	

FAYETTE COUNTY CONSTRUCTION PLAN REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH		
CHECKED:	DATE:	DRAWING No. 13-005
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

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REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:

BACKCHECKED: DATE:

CORRECTED: DATE:

VERIFIED: DATE:

DRAWING No.
13-006

7/31/2015

GPLN

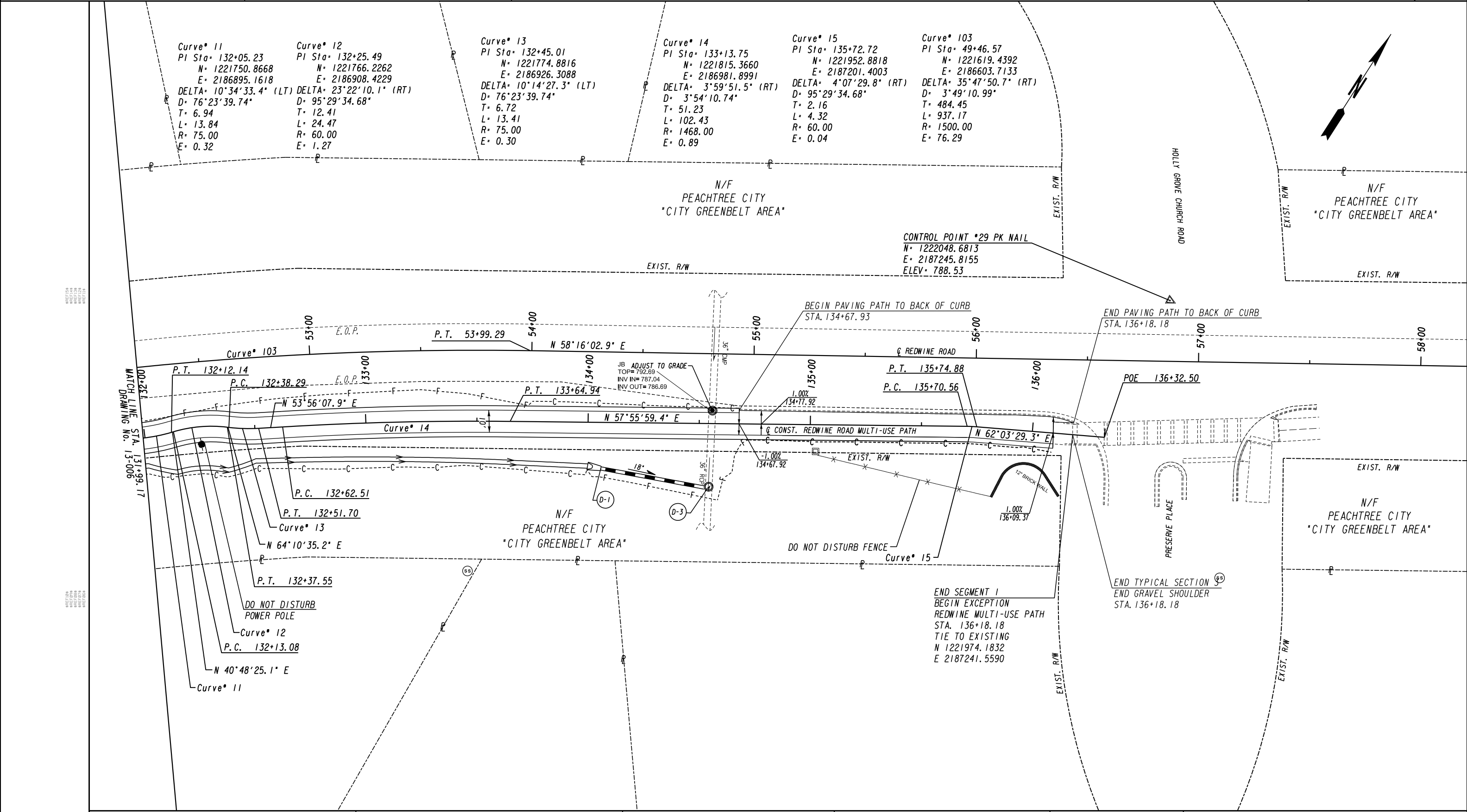
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7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0 20 40 80

REVISION DATES






FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

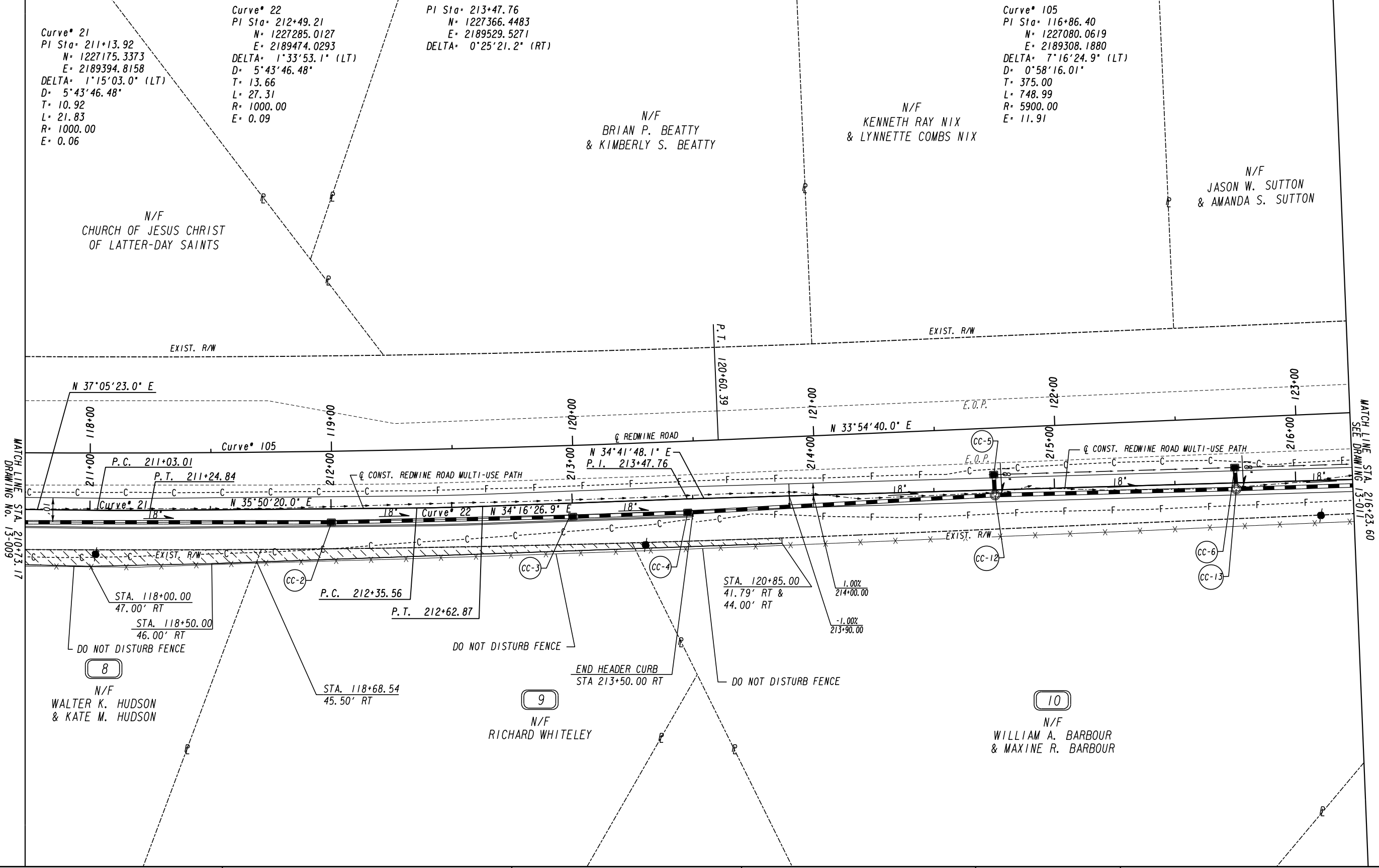
DRAWING No.
13-007



PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES	-----E-----	BEGIN LIMIT OF ACCESS.....BLA	 HL Heath & Lineback Engineers INCORPORATED 2390 CANTON ROAD, BUILDING 200 MARIETTA, GEORGIA 30066-5393 (770)424-1668	 SCALE IN FEET	REVISION DATES		FAYETTE COUNTY CONSTRUCTION PLAN REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH						
	-----C-----F-----	END LIMIT OF ACCESS.....ELA							CHECKED:		DATE:		DRAWING No. 13-008
	---C---F---	LIMIT OF ACCESS							BACKCHECKED:		DATE:		
		REQ'D R/W & LIMIT OF ACCESS			---III---III---				CORRECTED:		DATE:		
		ORANGE BARRIER FENCE			---●---●---				VERIFIED:		DATE:		
	ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---▽---▽---											



DRAWING No.
3-009



7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

REVISION DATES	

FAYETTE COUNTY CONSTRUCTION PLAN REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH	
CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.	
13-010	

Curve* 23
PI Sta= 221+51.22
N= 1228028.7722
E= 2189984.3548
DELTA= 5°03'05.1" (LT)
D= 57°17'44.81"
T= 4.41
L= 8.82
R= 100.00
E= 0.10

Curve* 24
PI Sta= 221+65.70
N= 1228041.4271
E= 2189991.3968
DELTA= 5°48'34.2" (RT)
D= 57°17'44.81"
T= 5.07
L= 10.14
R= 100.00
E= 0.13

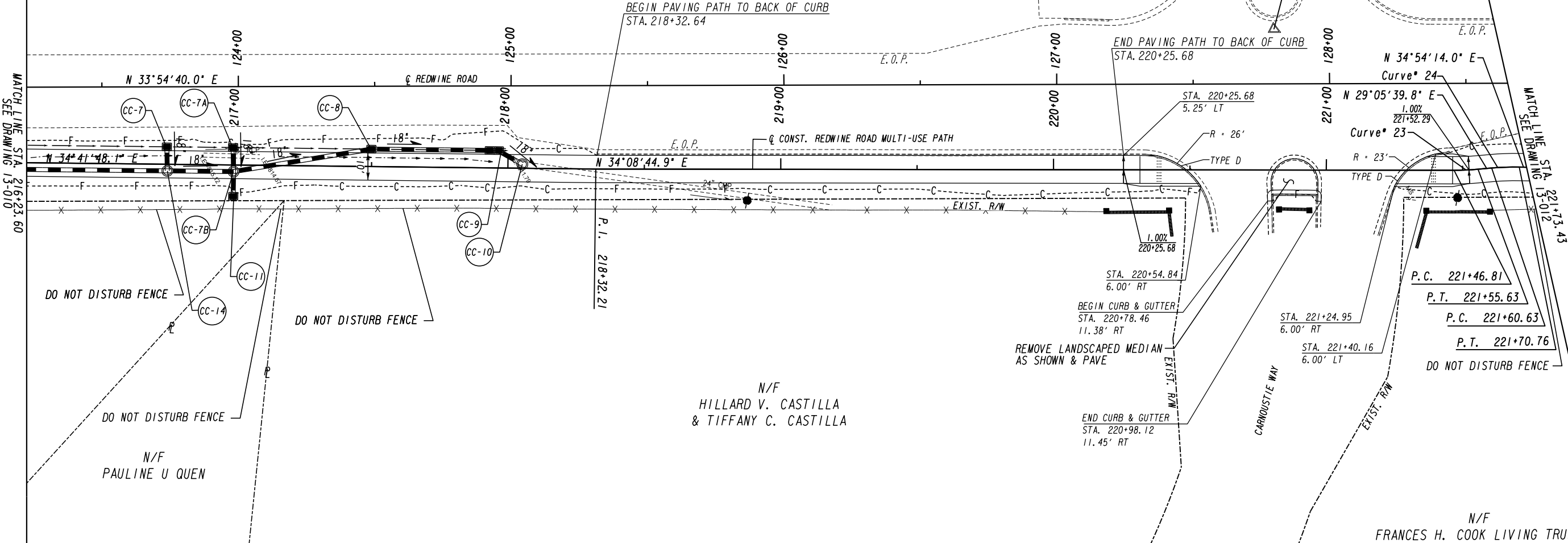
PI Sta= 218+32.21
N= 1227764.7513
E= 2189805.2912
DELTA= 0°33'03.3" (LT)

N/F
JASON W. SUTTON
& AMANDA S. SUTTON

N/F
CHRISTOPHER L. FIERBAUGH

N/F
SELDON PROPERTIES LLC

CONTROL POINT *5 PK NAIL
N= 1227999.4160
E= 2189902.0638
ELEV= 806.80



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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|||||

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(770)424-1668

SCALE IN FEET
0 20 40 80

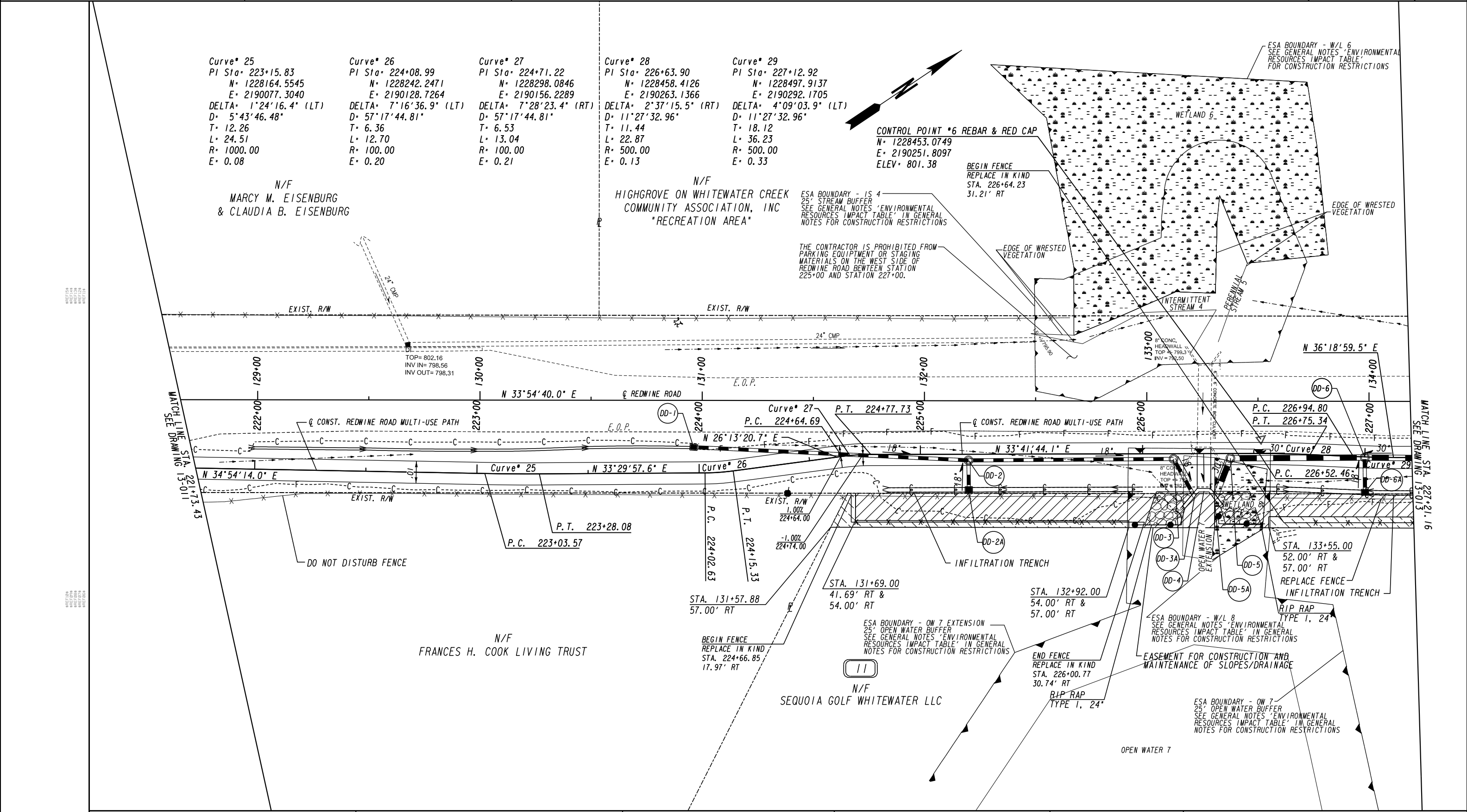
REVISION DATES		

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No.
13-011

7/31/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

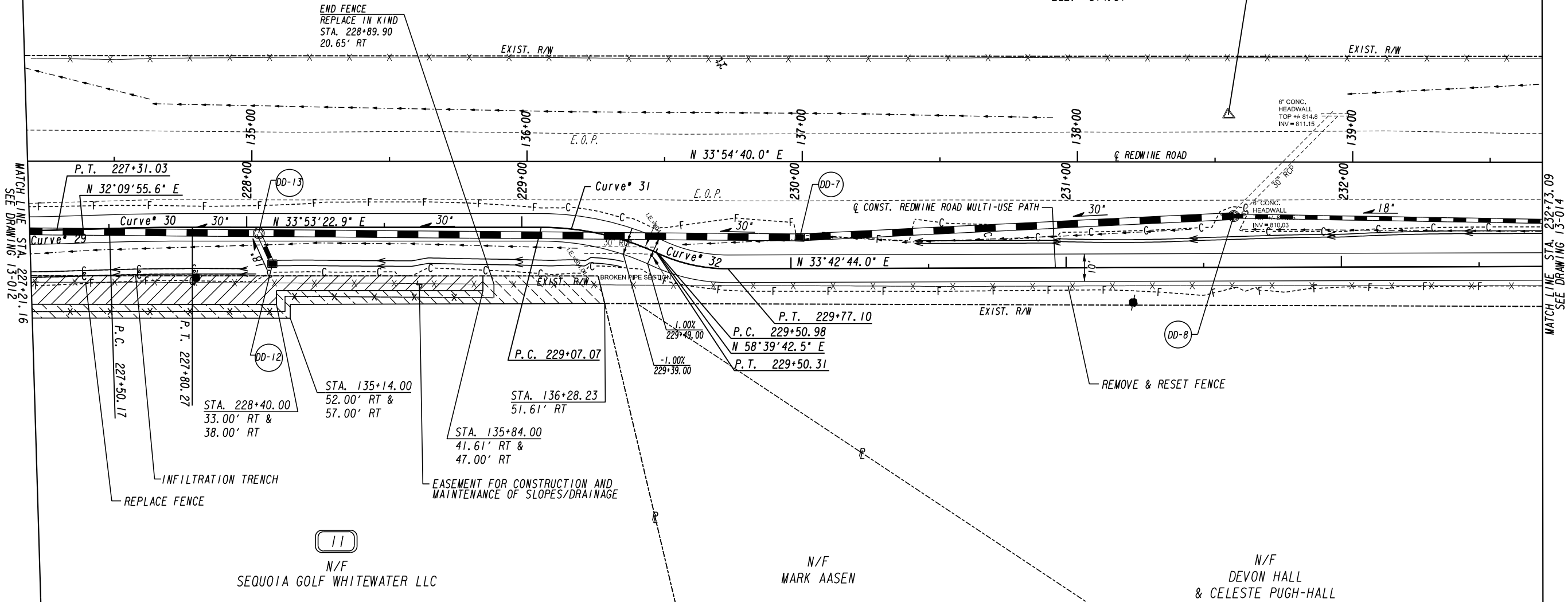
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REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

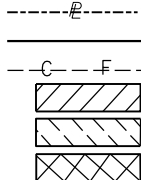
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E= 2190292.1705	E= 2190320.0217	E= 2190411.3626	E= 2190442.0286
DELTA= 4°09'03.9" (LT)	DELTA= 1°43'27.2" (RT)	DELTA= 24°46'19.6" (RT)	DELTA= 24°56'58.5" (LT)
D= 11°27'32.96"	D= 5°43'46.48"	D= 57°17'44.81"	D= 95°29'34.68"
T= 18.12	T= 15.05	T= 21.96	T= 13.27
L= 36.23	L= 30.09	L= 43.24	L= 26.13
R= 500.00	R= 1000.00	R= 100.00	R= 60.00
E= 0.33	E= 0.11	E= 2.38	E= 1.45

N/F
HIGHGROVE ON WHITEWATER CREEK
COMMUNITY ASSOCIATION, INC
"RECREATION AREA"

CONTROL POINT *7 REBAR & RED CAP
N= 1228890.1034
E= 2190504.2012
ELEV= 814.91



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



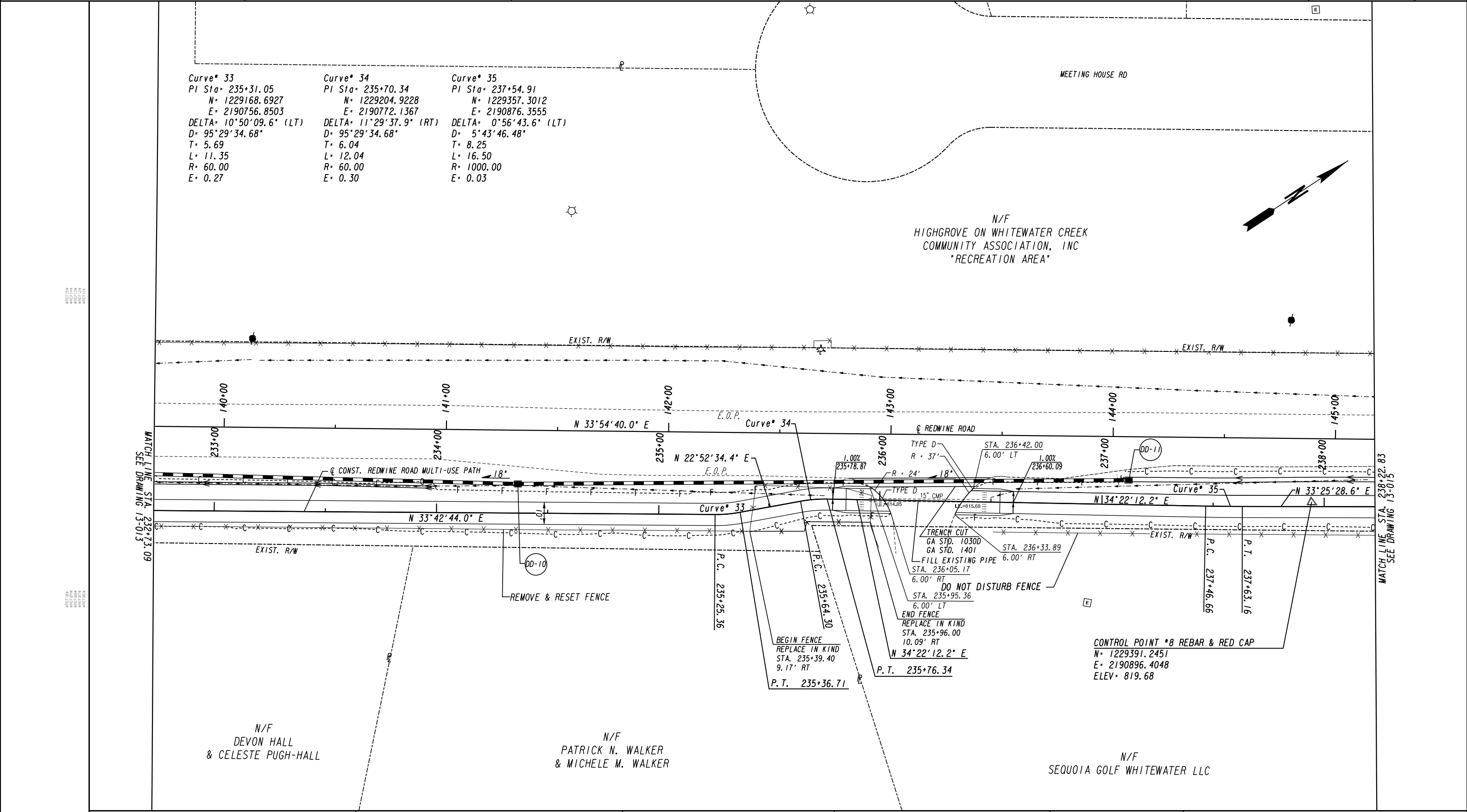
Heath & Lineback Engineers
INCORPORATED
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MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	13-013
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
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2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

20

40

80

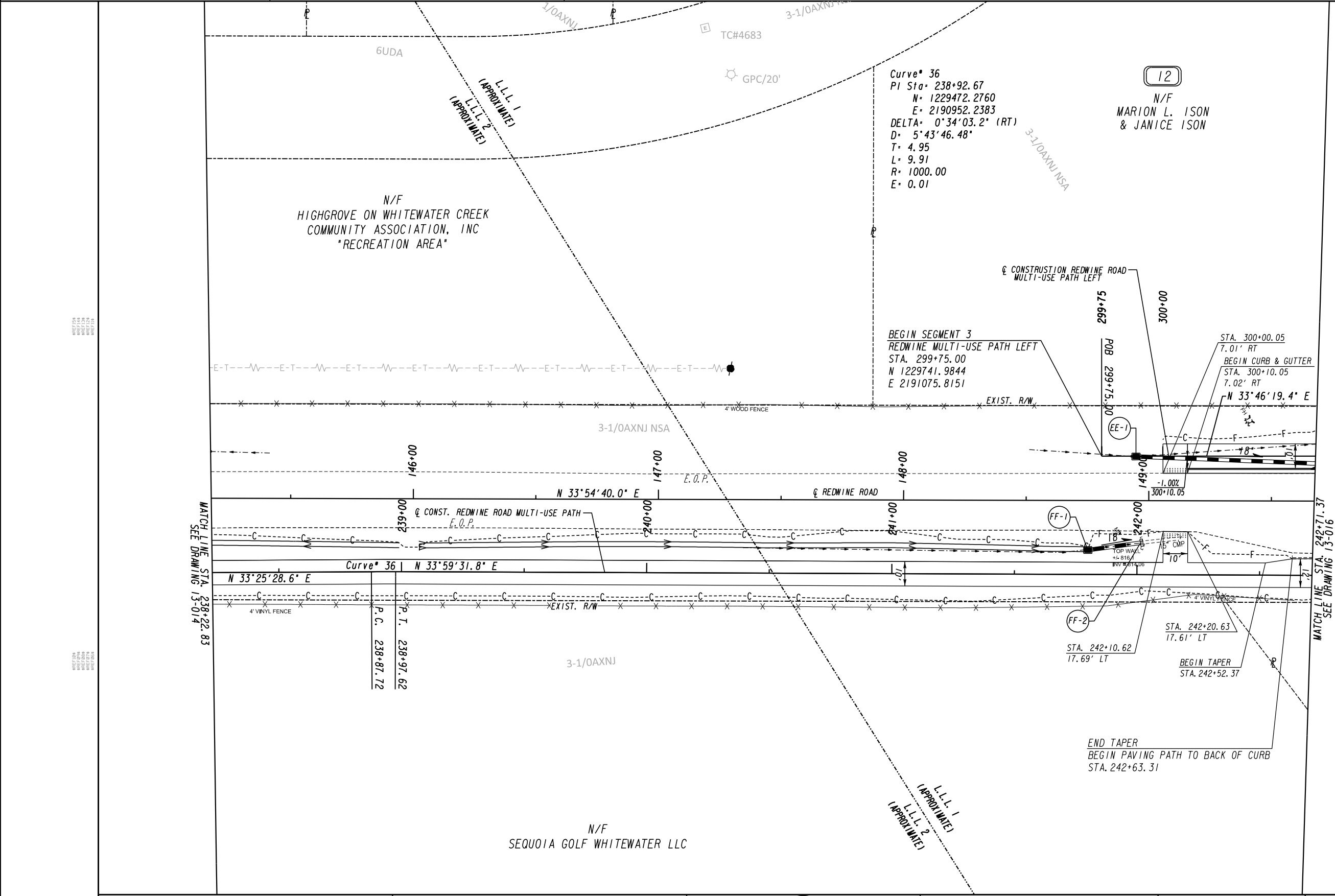
REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

DRAWING No.
13-014



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
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2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

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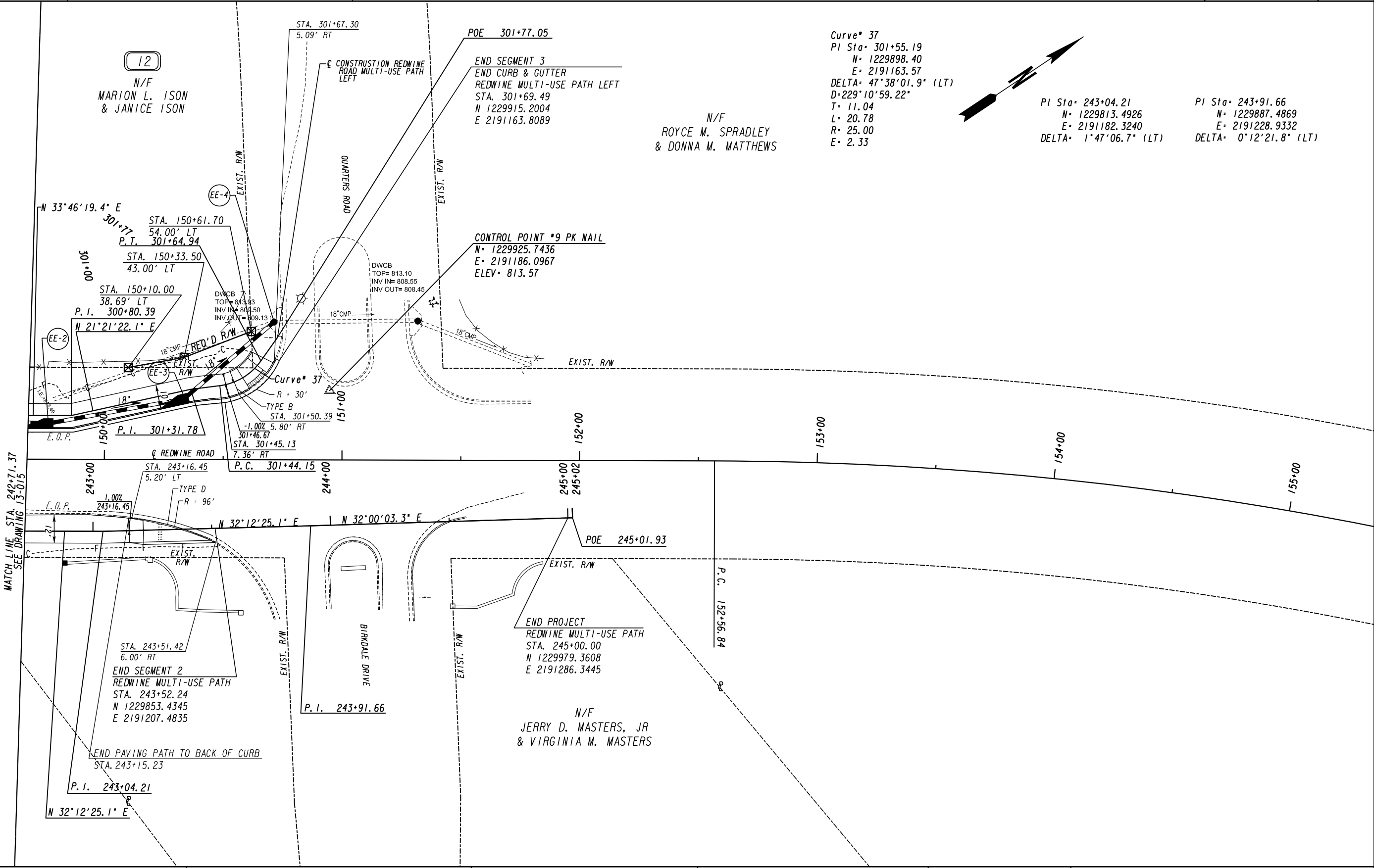
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REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 13-015
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



7/31/2015

GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

HEATH & LINEBACK ENGINEERS
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(770)424-1668

SCALE IN FEET

0

20

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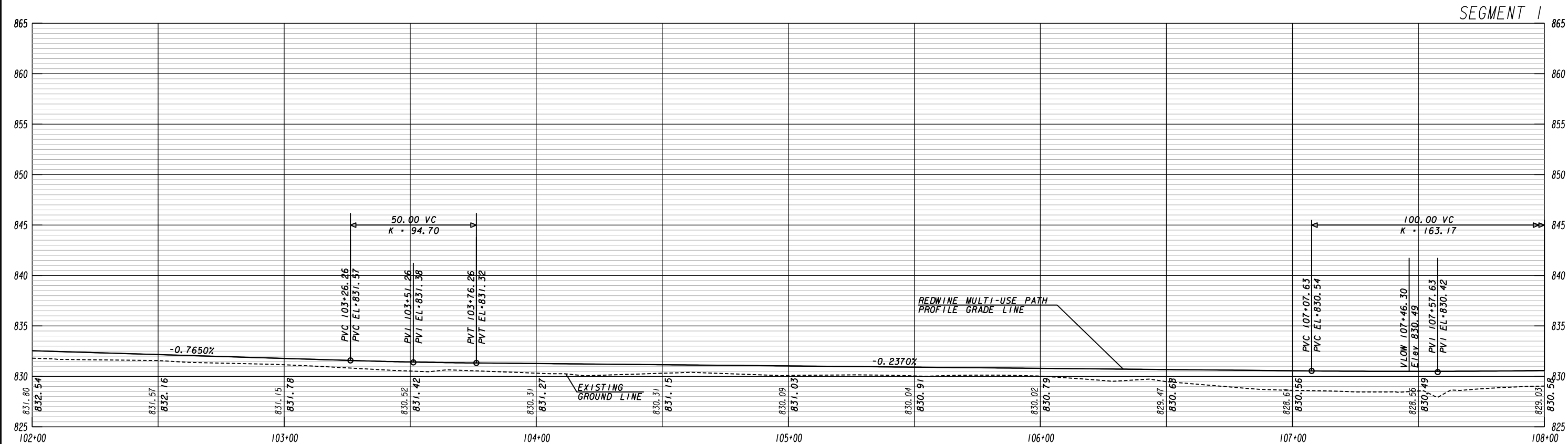
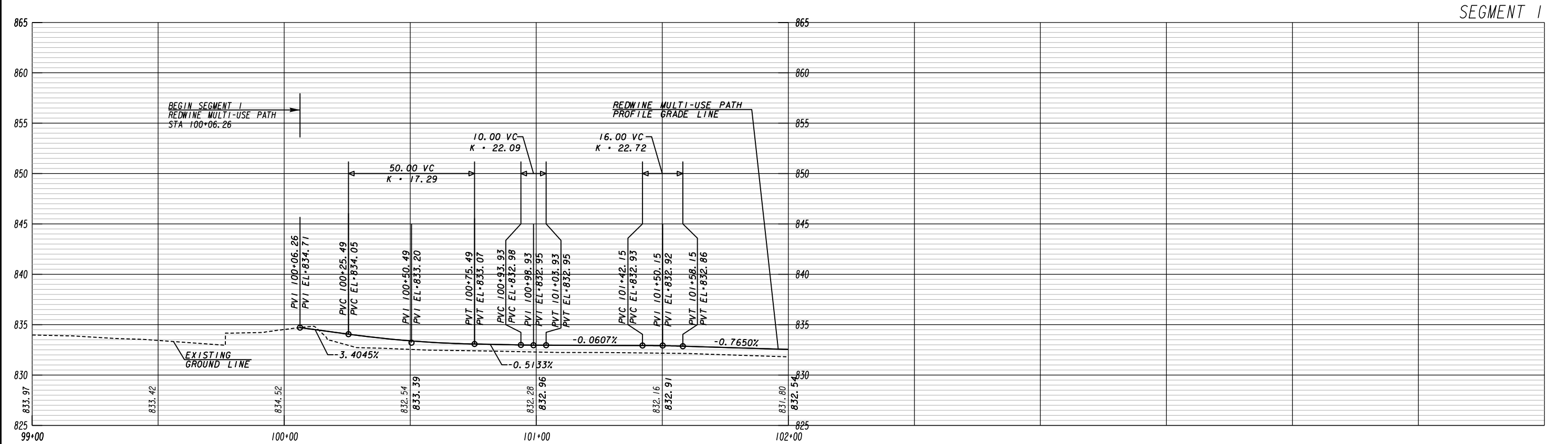
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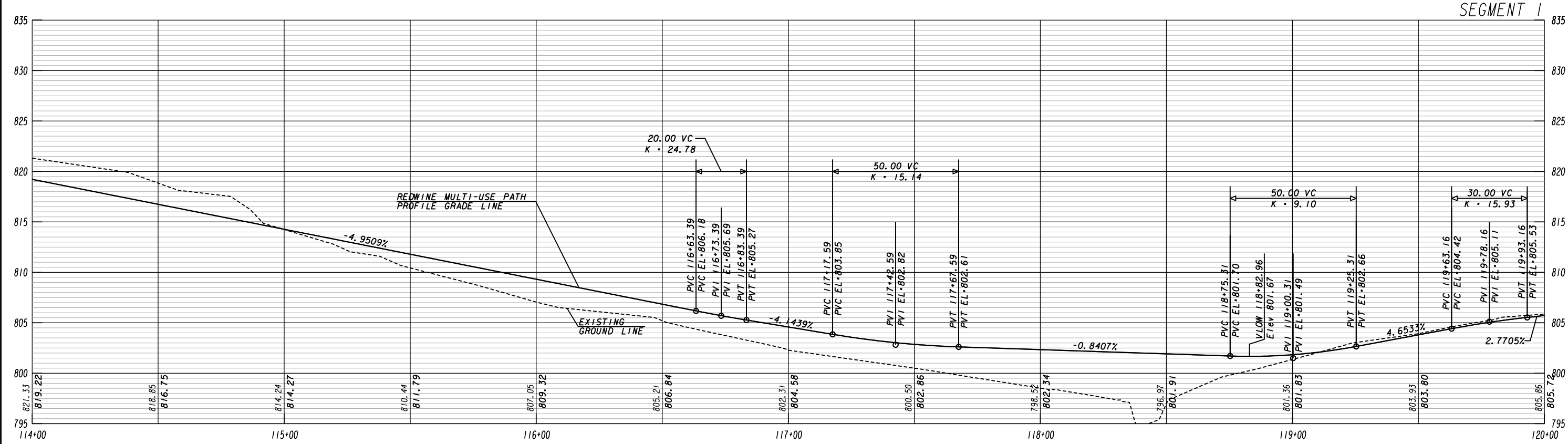
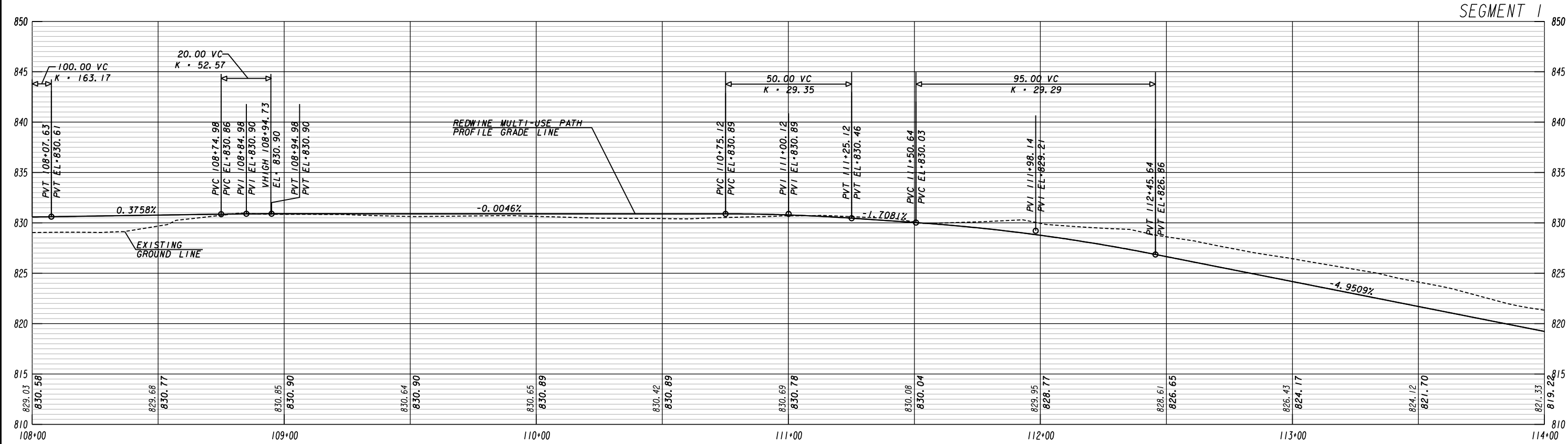
REVISION DATES

FAYETTE COUNTY
CONSTRUCTION PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE: DRAWING No.
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CORRECTED: DATE:
VERIFIED: DATE:

13-016



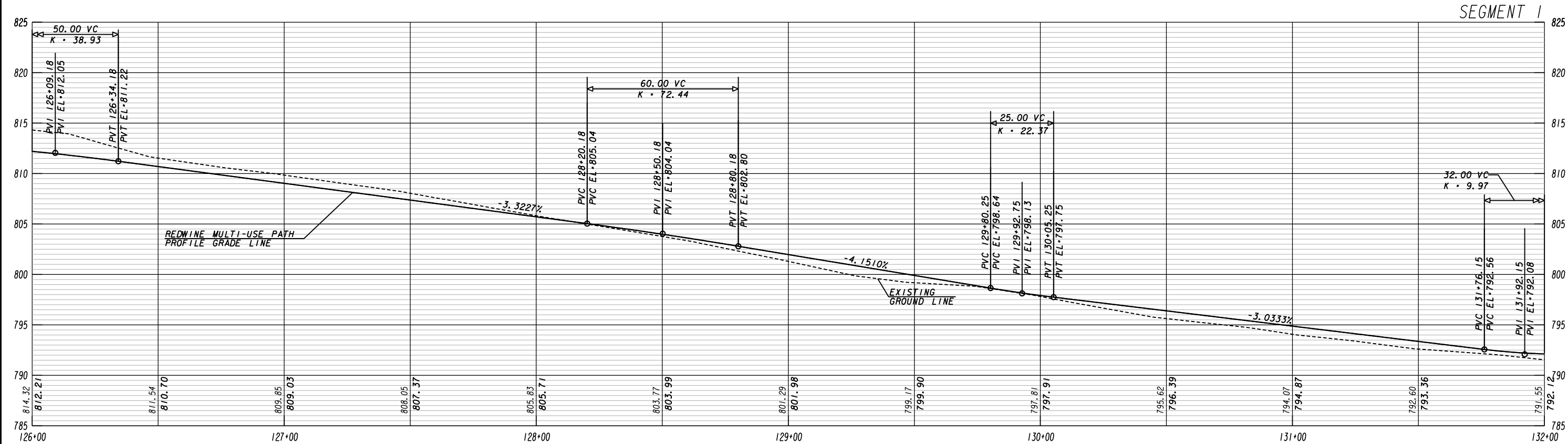
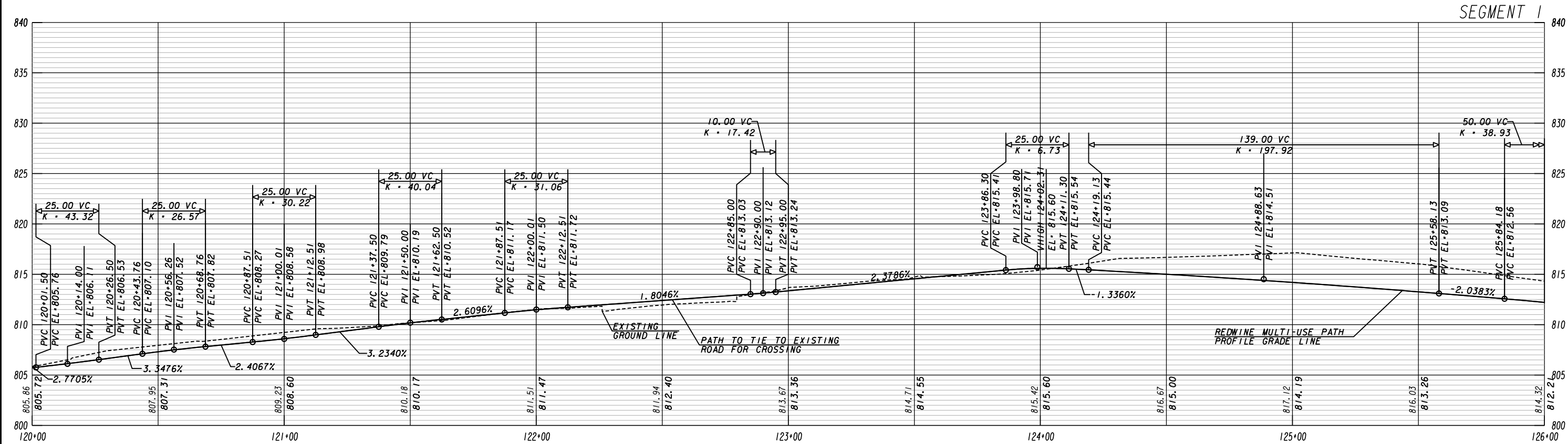




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HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

REVISION DATES			FAYETTE COUNTY		
			MAINLINE PROFILE		
			REDWINE ROAD & STARRS MILL SCHOOL		
			COMPLEX MULTI-USE PATH		
CHECKED:		DATE:	DRAWING No.		
BACKCHECKED:		DATE:	15-002		
CORRECTED:		DATE:			
VERIFIED:		DATE:			

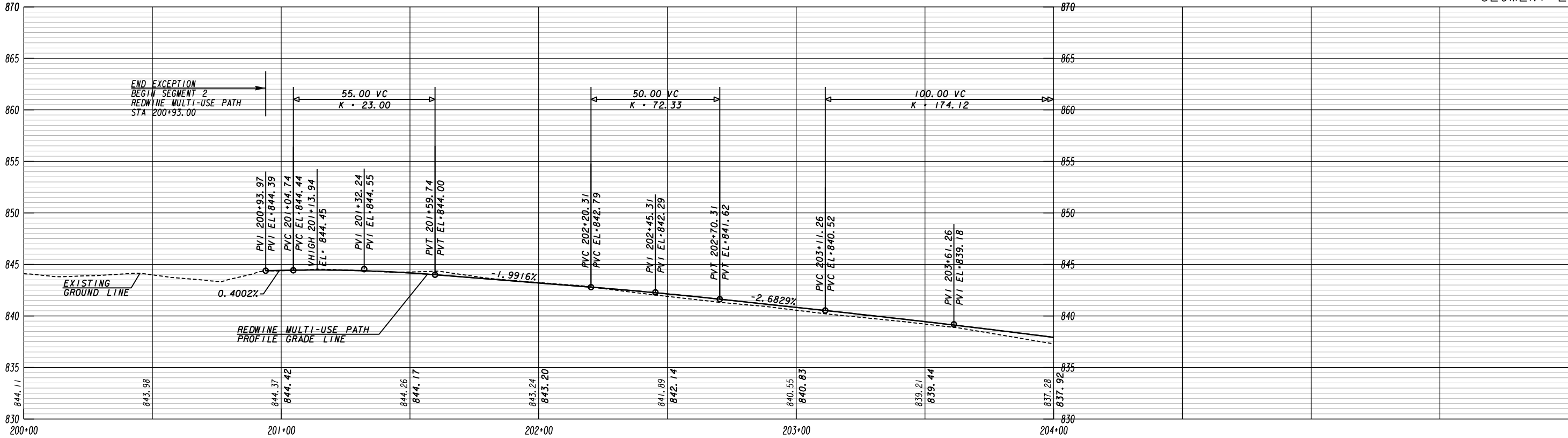


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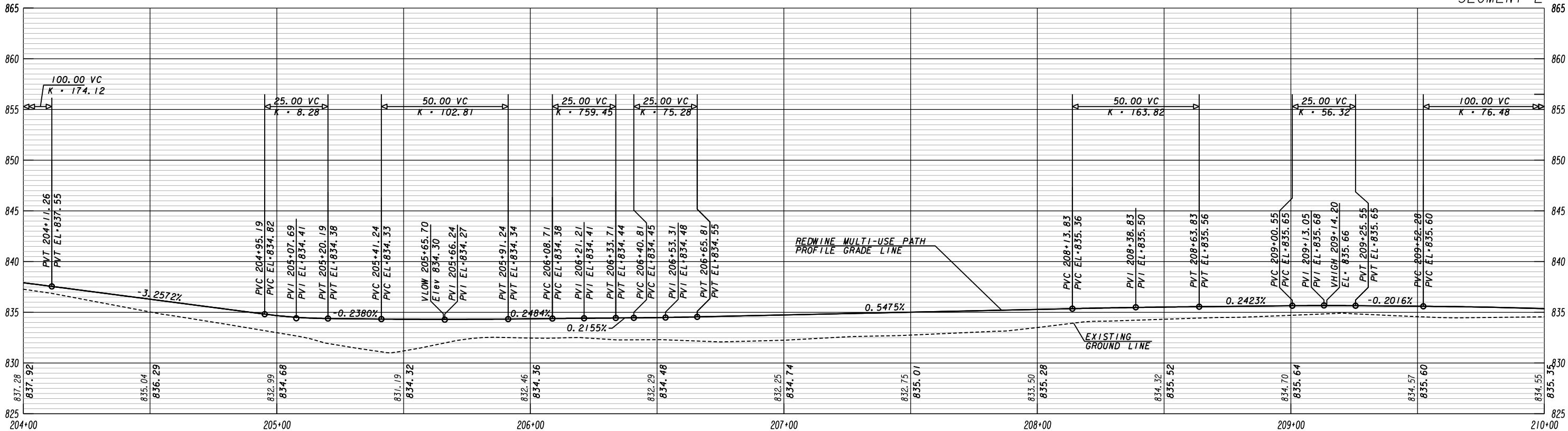
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

REVISION DATES			FAYETTE COUNTY			
			MAINLINE PROFILE			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	DRAWING No. 15-004
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			CORRECTED:		DATE:	
			VERIFIED:		DATE:	

SEGMENT 2



SEGMENT 2

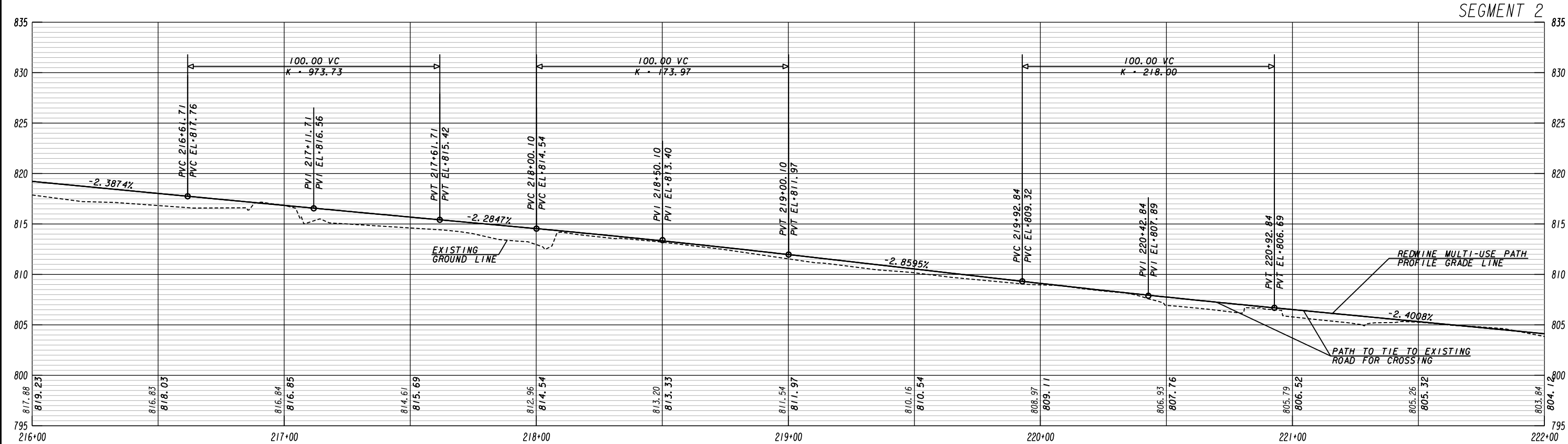
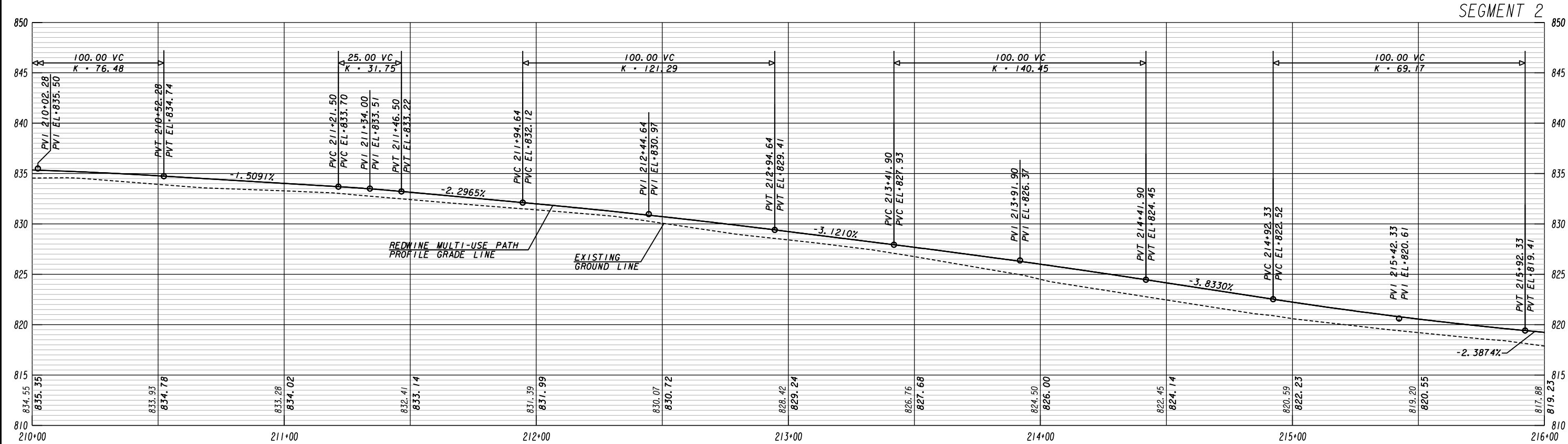




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(770)424-1668

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

REVISION DATES			FAYETTE COUNTY		
			MAINLINE PROFILE		
			REDWINE ROAD & STARRS MILL SCHOOL		
			COMPLEX MULTI-USE PATH		
CHECKED:		DATE:	DRAWING No.		
BACKCHECKED:		DATE:	15-005		
CORRECTED:		DATE:			
VERIFIED:		DATE:			

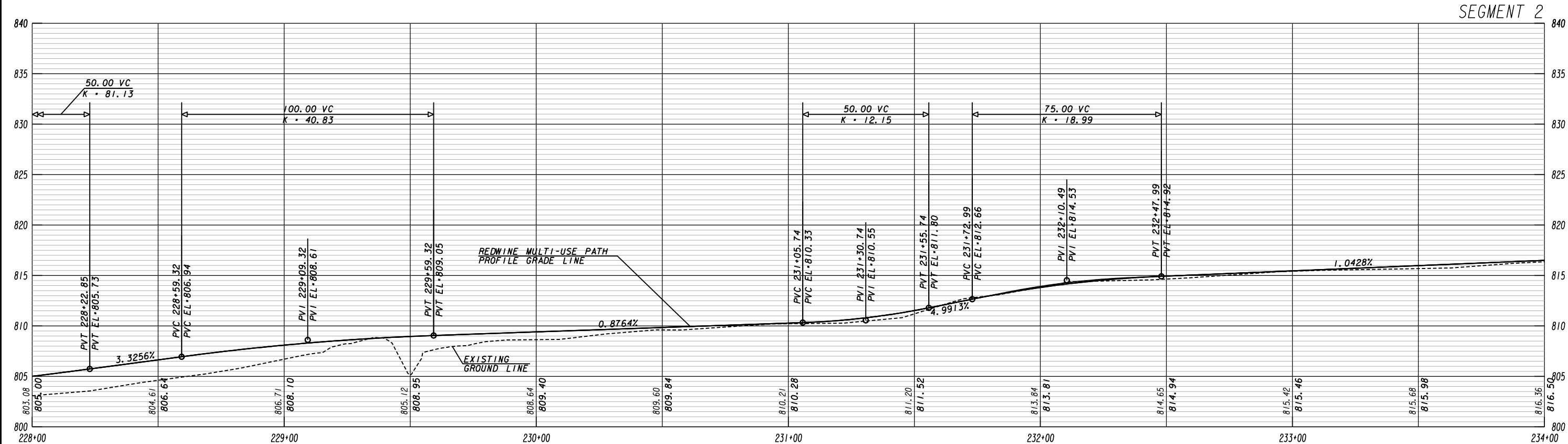
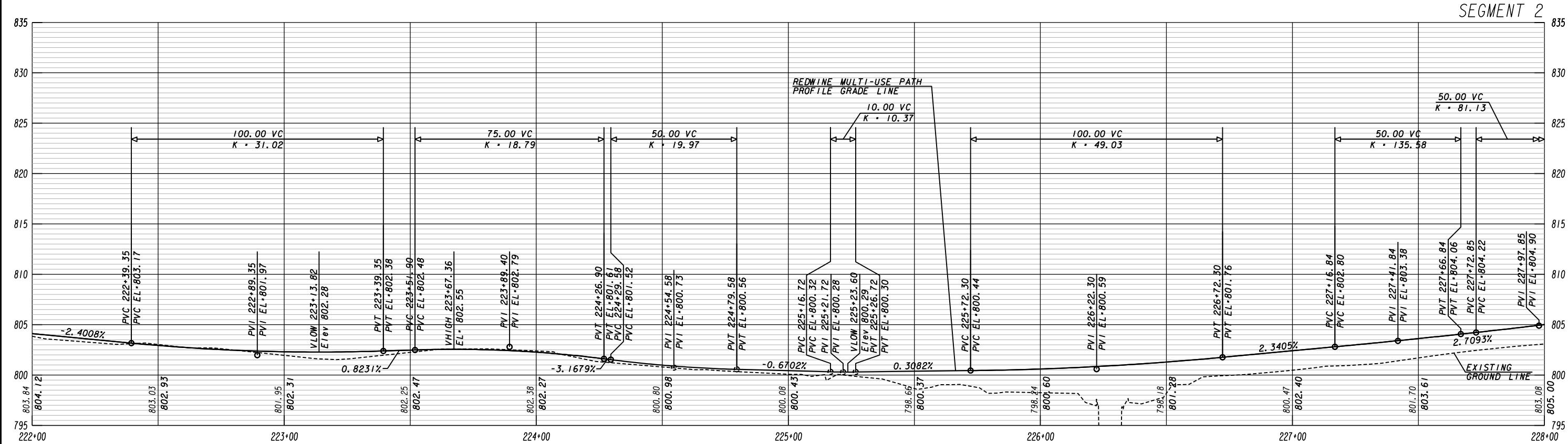




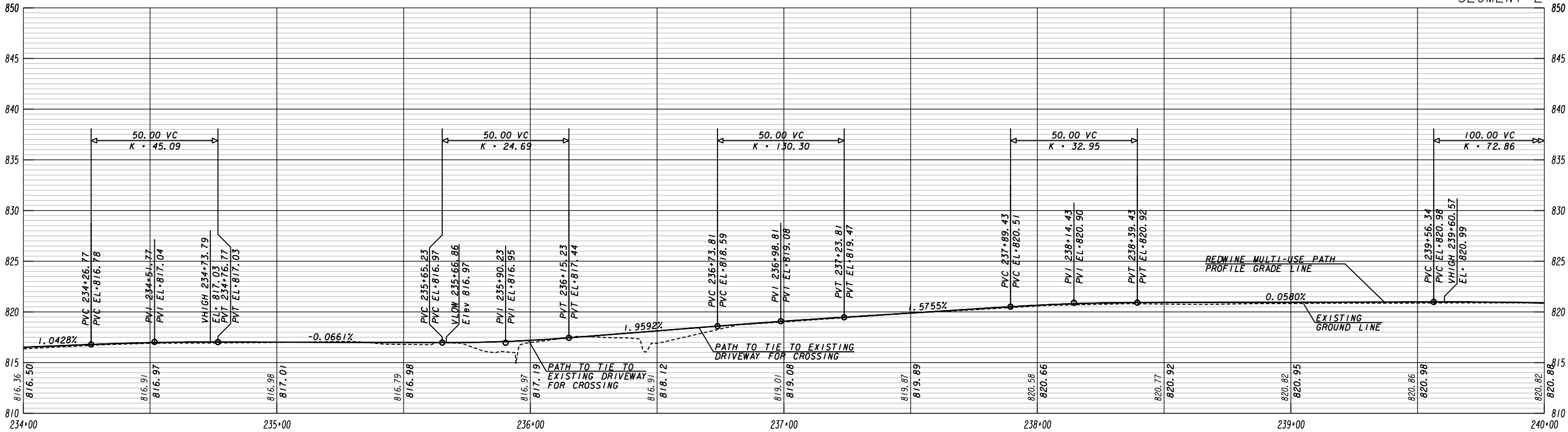
HEATH & LINEBACK ENGINEERS
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2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

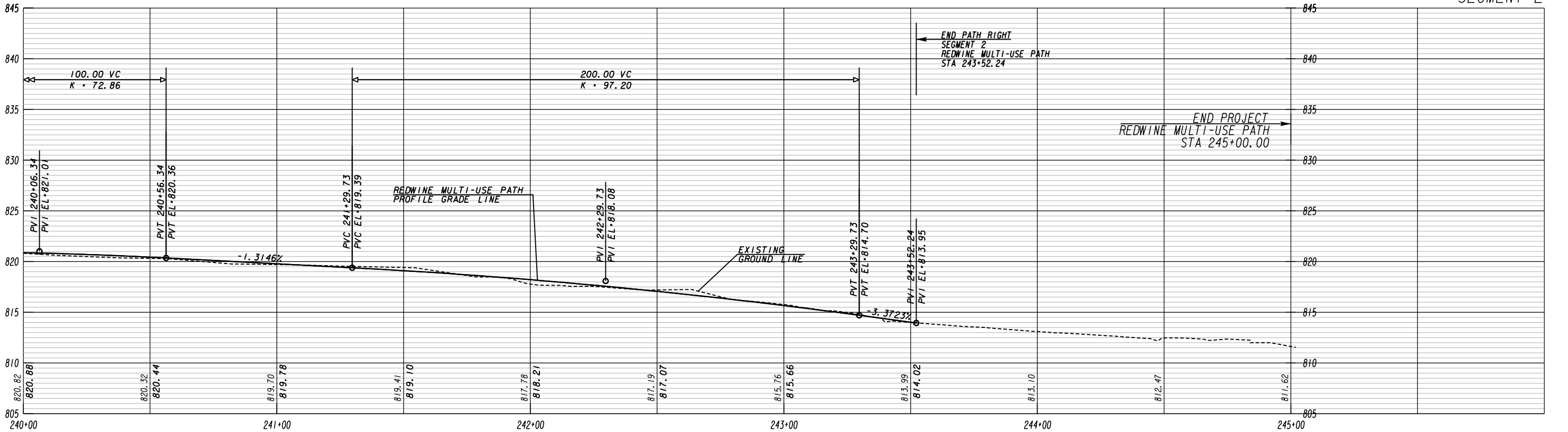
REVISION DATES			FAYETTE COUNTY			
			MAINLINE PROFILE			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
CHECKED:		DATE:	BACKCHECKED:	DATE:	DRAWING No.	
CORRECTED:		DATE:	VERIFIED:	DATE:	15-006	



SEGMENT 2



SEGMENT 2



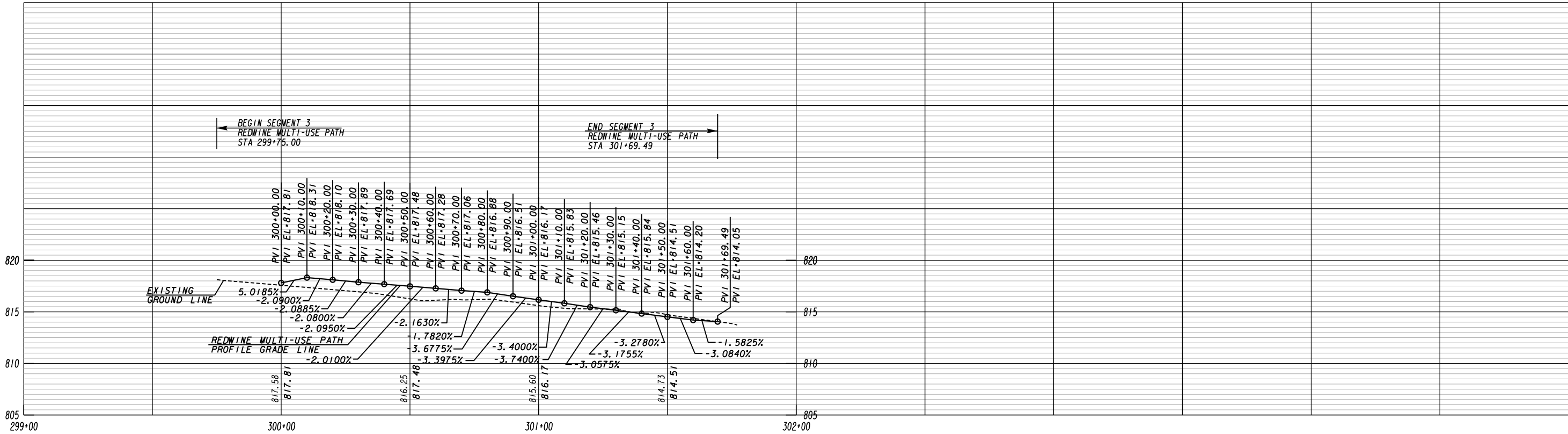


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MARIETTA, GEORGIA 30066-5393
(770)424-1668

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

REVISION DATES			FAYETTE COUNTY		
			MAINLINE PROFILE		
			REDWINE ROAD & STARRS MILL SCHOOL		
			COMPLEX MULTI-USE PATH		
CHECKED:		DATE:	DRAWING No.		
BACKCHECKED:		DATE:	15-008		
CORRECTED:		DATE:			
VERIFIED:		DATE:			

SEGMENT 3



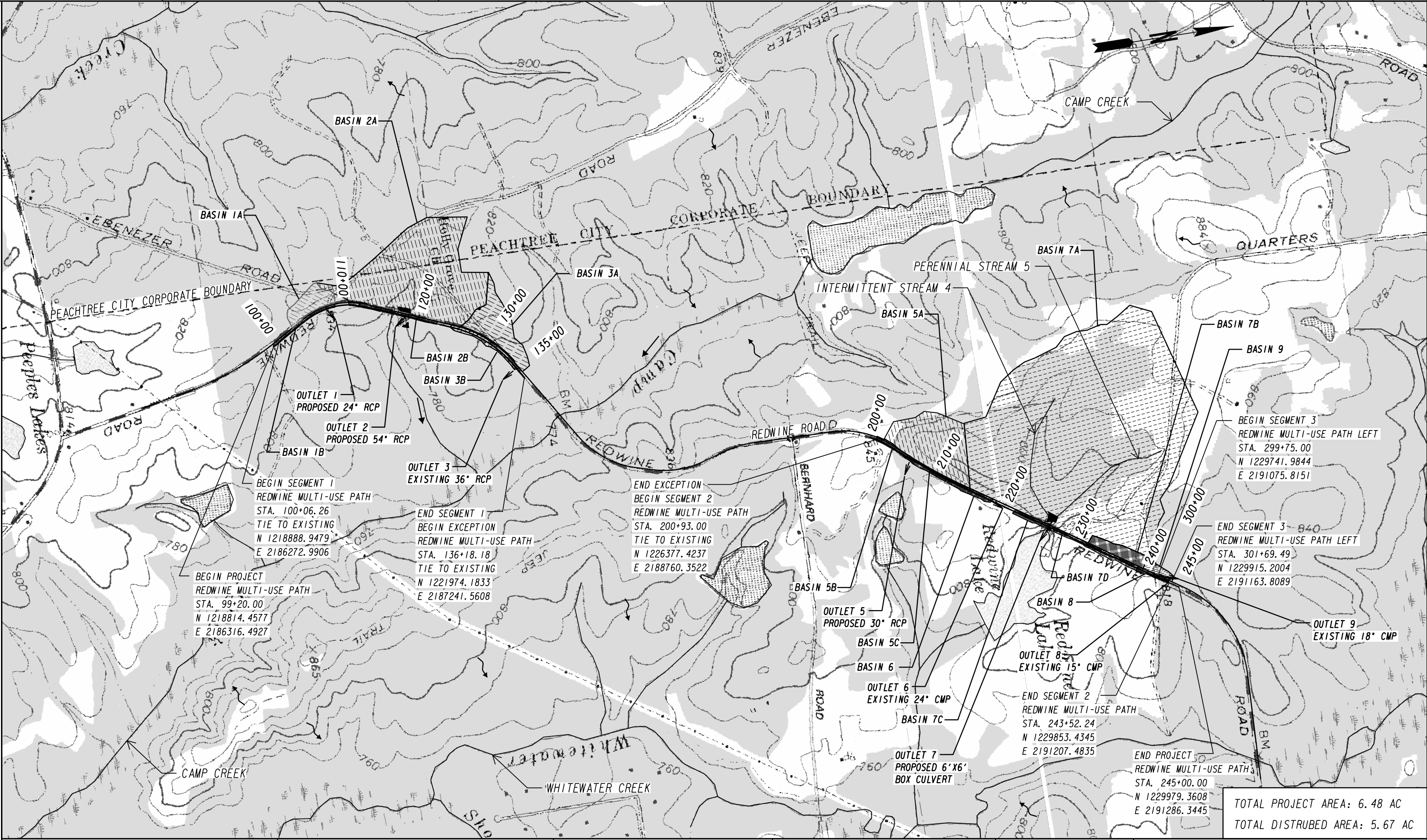
*SEGMENT 3 ELEVATIONS ARE DETERMINED BY EXISTING EDGE OF PAVEMENT. SEE TYPICAL SECTION 5 FOR CONSTRUCTION.



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HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

REVISION DATES			FAYETTE COUNTY			
			MAINLINE PROFILE			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
CHECKED:		DATE:		DRAWING No.		
BACKCHECKED:		DATE:		15-009		
CORRECTED:		DATE:				
VERIFIED:		DATE:				



7/31/2015
GPLN

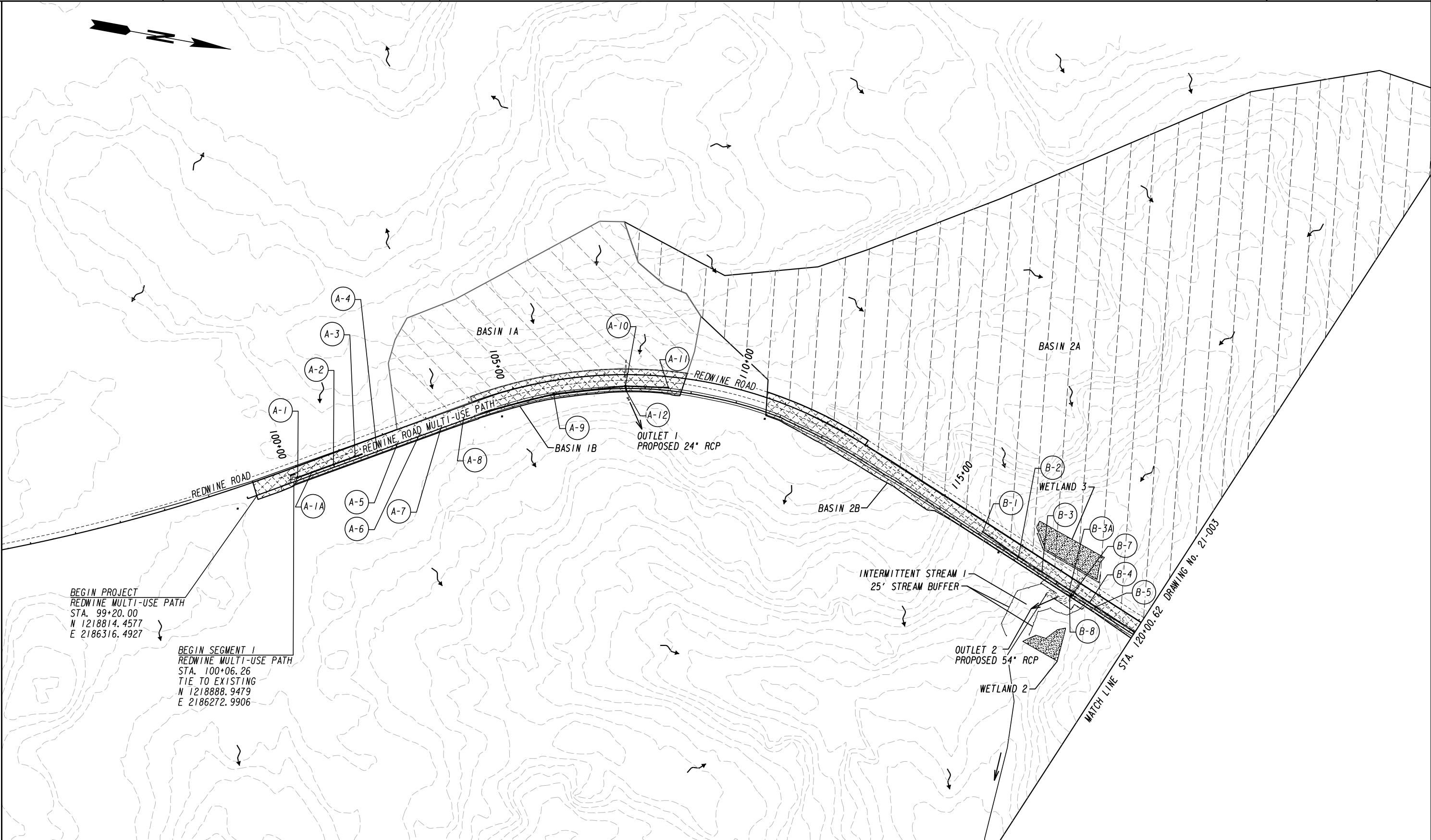
Heath & Lineback Engineers
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MARIETTA, GEORGIA 30066-5393
(770)424-1668

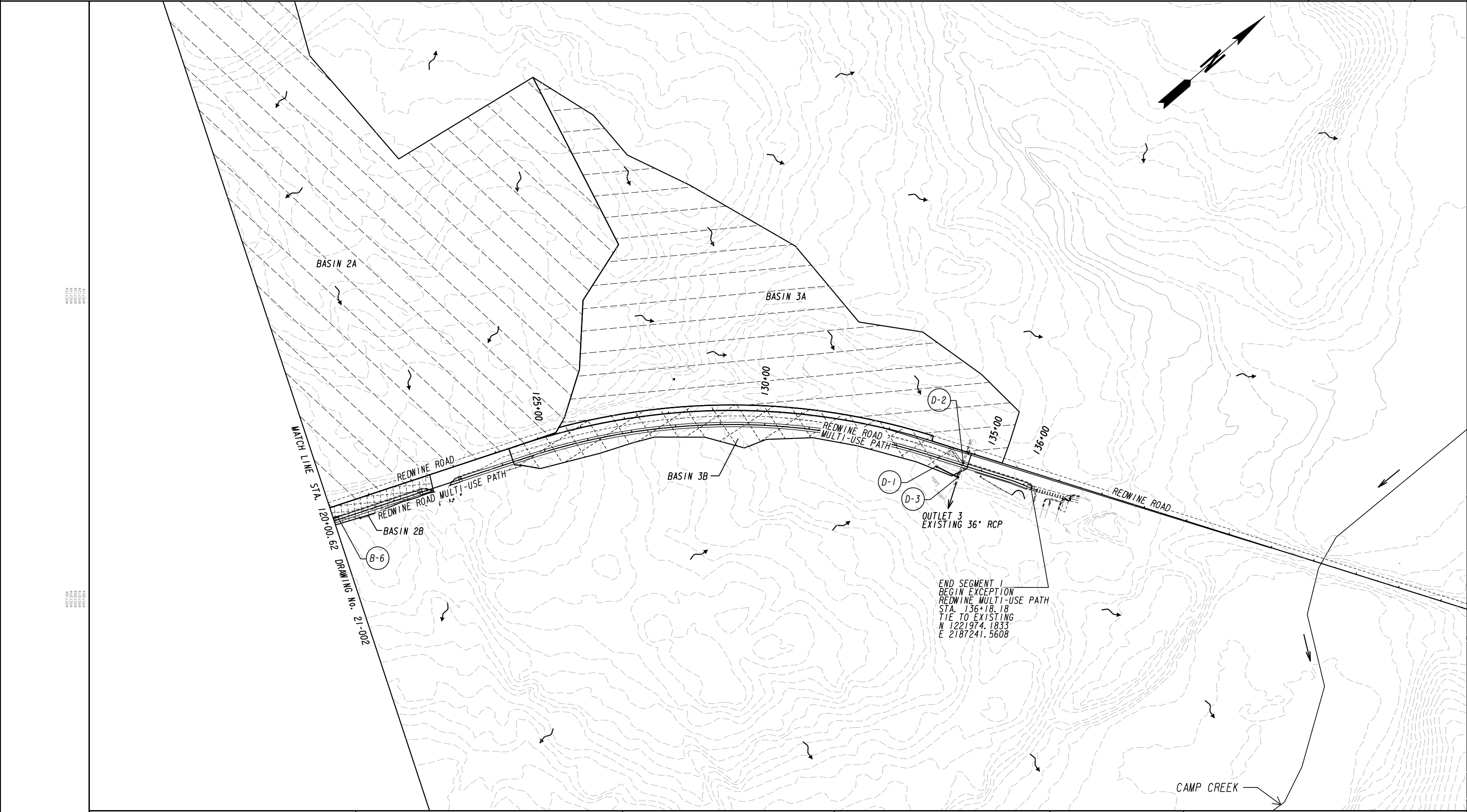
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REVISION DATES	

FAYETTE COUNTY DRAINAGE AREA MAP REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH	
CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.
21-001





7/31/2015

GPLN

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SCALE IN FEET

0 100 200 400

REVISION DATES		

FAYETTE COUNTY

DRAINAGE AREA MAP

REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

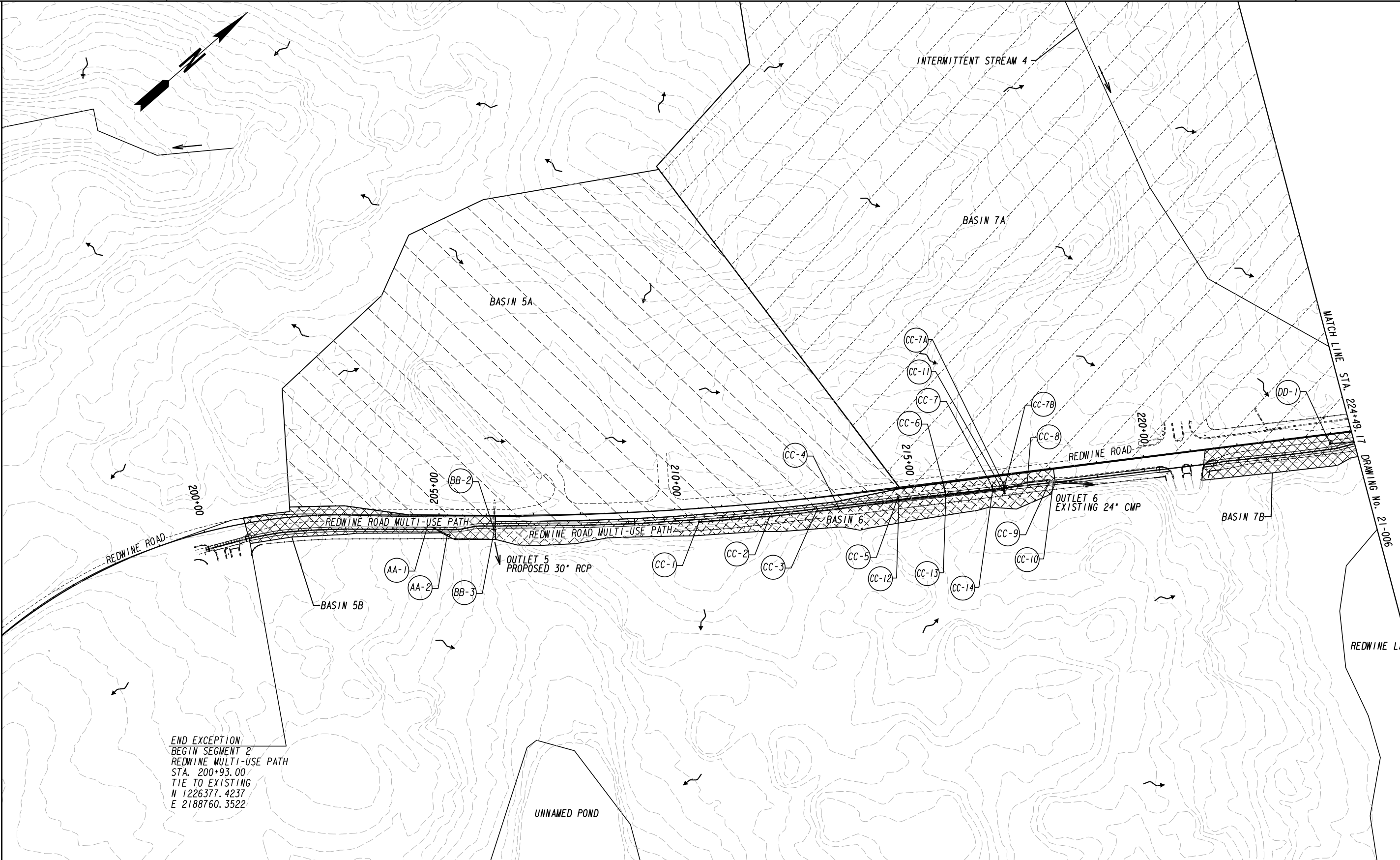
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BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

BASIN NO.	OUTFALL LOCATION AND DESCRIPTION				DISTURBED AREA	TOTAL AREA (ac)	EXISTING RUNOFF COEFFICIENT			EXISTING RUNOFF (CFS)			PROPOSED RUNOFF COEFFICIENT			PROPOSED RUNOFF (CFS)			PRE - HEADWATER ELEV.		PRE - VELOCITY (FPS)		POST - HEADWATER ELEV.		POST - VELOCITY (FPS)	
	ROAD	STATION	OFFSET	STRUCTURE TYPE			C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀
1A	REDWINE ROAD	107+09.84	7.00' RT	PROP. 24" RCP	0.50	3.75	0.30	0.33	0.34	5.75	7.07	8.19	0.30	0.33	0.34	5.77	7.10	8.22	830.73	830.86	9.55	9.69	830.71	830.84	13.33	13.59
1B	REDWINE ROAD	107+09.84	7.00' RT	PROP. 24" RCP	0.68	0.92	0.56	0.61	0.64	4.07	4.98	5.77	0.80	0.87	0.91	5.42	6.65	7.70	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A
2A	REDWINE ROAD	118+40.34	7.00' RT	PROP 54" RCP	0.68	38.80	0.48	0.52	0.54	82.34	101.31	117.49	0.48	0.53	0.55	82.34	101.31	117.49	799.66	800.39	12.30	12.78	799.17	799.89	6.98	7.68
2B	REDWINE ROAD	118+40.34	7.00' RT	PROP 54" RCP	0.87	1.15	0.53	0.57	0.60	4.12	5.06	5.85	0.48	0.53	0.55	6.53	8.00	9.27	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A
3A	REDWINE ROAD	134+54.27	32.62' RT	EXIST. 36" CMP	0.00	8.13	0.44	0.48	0.50	21.06	25.84	29.94	0.44	0.48	0.50	21.06	25.84	29.94	789.99	790.23	4.11	4.52	789.99	790.23	4.11	4.52
3B	REDWINE ROAD	134+05.95	20.73' RT	PROP 18"RCP	1.09	1.65	0.58	0.63	0.66	4.34	5.30	6.15	0.68	0.75	0.78	7.38	9.06	10.48	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A

Structure #	Location	Description	Total Area (ac)	Skew Angle (DD MM SS)	POST - Composite Runoff Coefficient	POST - Flood Discharge	POST - Velocities
					C ₁₀	(cfs) Q ₁₀	(fps) V ₁₀
A-1A	100+50.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.79	0.27	3.17
A-2	101+00.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.75	0.25	2.79
A-3	101+50.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.75	0.25	3.00
A-4	102+00.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.74	0.25	3.59
A-5	102+50.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.74	0.25	3.98
A-6	103+00.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.74	0.25	4.02
A-7	103+50.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.74	0.25	3.61
A-8	104+00.00, 6.24' LT	GA. DETAIL D-33B	0.04	N/A	0.75	0.26	3.72
A-11	108+50.00, 6.24' LT	GA. DETAIL D-33B	0.05	N/A	0.78	0.30	2.60
B-2	117+00.00, 6.24' LT	GA. DETAIL D-33B	0.08	N/A	0.78	0.49	8.83
B-3	117+60.00, 6.24' LT	GA. DETAIL D-33B	0.05	N/A	0.78	0.32	5.81
B-3A	118+31.63, 6.24' LT	GA. DETAIL D-33B	0.06	N/A	0.76	0.36	5.91
B-4	118+82.96, 6.24' LT	GA. DETAIL D-33B	0.06	N/A	0.78	0.34	4.75
B-5	119+00.00, 6.24' LT	GA. DETAIL D-33B	0.10	N/A	0.79	0.60	4.75
B-6	120+10.87, 6.24' LT	GA. DETAIL 1019A	0.20	N/A	0.86	1.35	6.63

Structure #	Location	Description	Total Area (ac)	Skew Angle (DD MM SS)	POST - Composite Runoff Coefficient	POST - Flood Discharge	POST - Velocities
					C ₂₅	(cfs) Q ₂₅	(fps) V ₂₅
B-1	116+05.36, 9.74' LT	GA. STD. 1019A	0.59	N/A	0.79	4.05	9.26

SEGMENT I



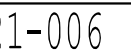
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BEGIN SEGMENT 2
REDWINE MULTI-USE PATH
STA. 200+93.00
TIE TO EXISTING
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E 2188760.3522



Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES			FAYETTE COUNTY DRAINAGE AREA MAP REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH			
			CHECKED:	DATE:	DRAWING No.	
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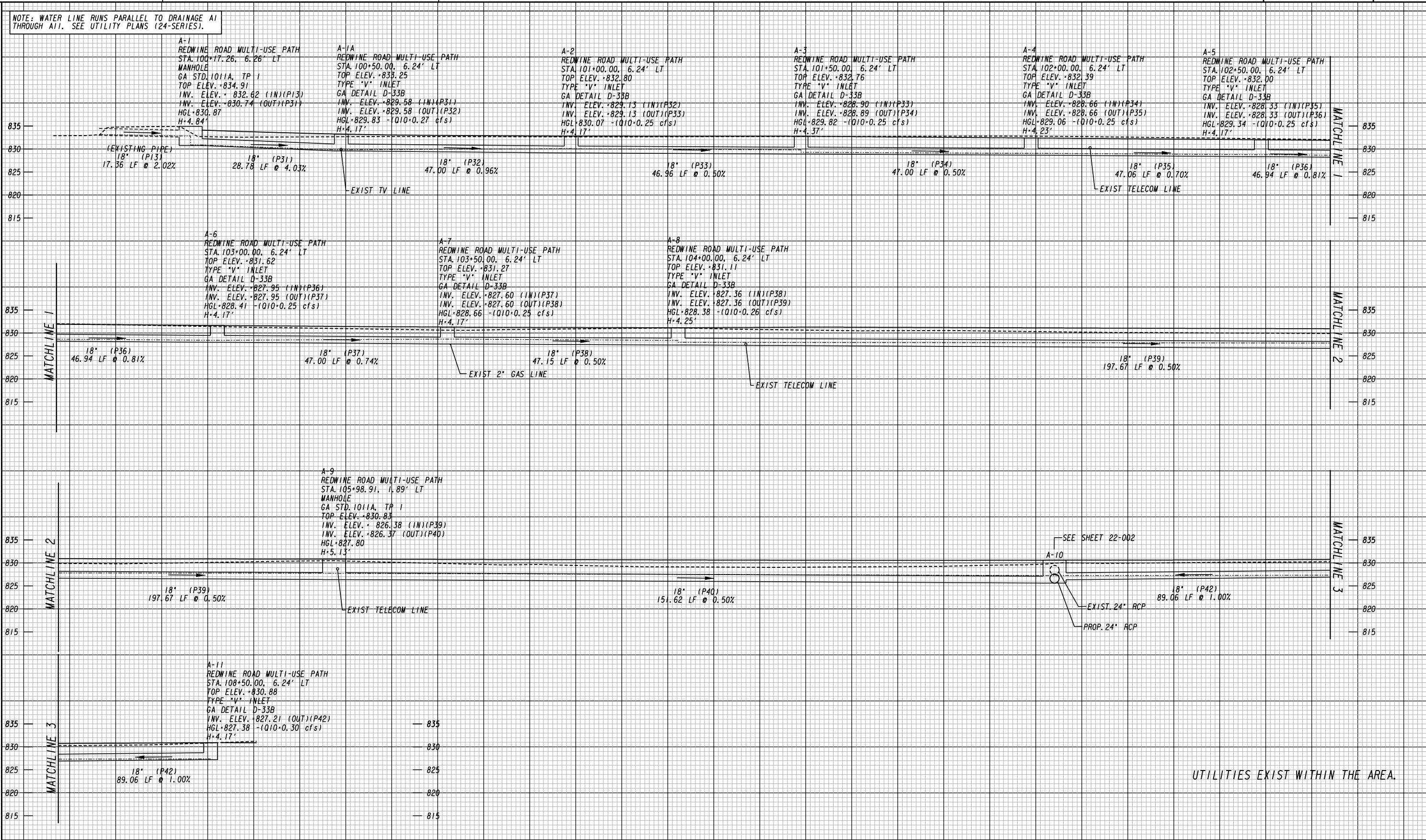


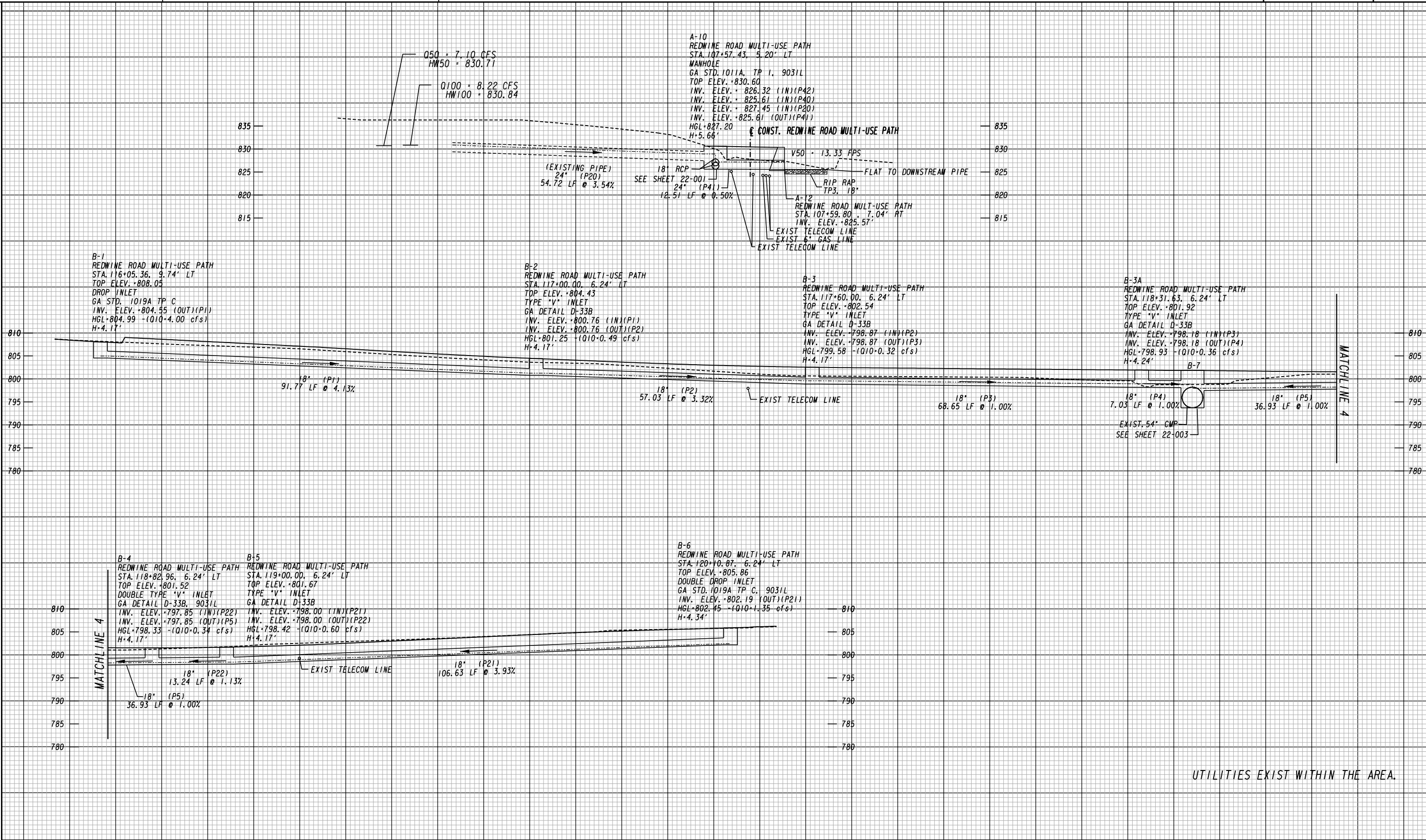
BASIN NO.	OUTFALL LOCATION AND DESCRIPTION				DISTURBED AREA	CONTRIBUTING AREA (ac)	EXISTING RUNOFF COEFFICIENT			EXISTING RUNOFF (CFS)			PROPOSED RUNOFF COEFFICIENT			PROPOSED RUNOFF (CFS)			PRE - HEADWATER ELEV.		PRE - VELOCITY (FPS)		POST - HEADWATER ELEV.		POST - VELOCITY (FPS)	
	ROAD	STATION	OFFSET	STRUCTURE TYPE			C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀
5A	REDWINE ROAD	206+10.84	18.48' RT	30" RCP	0.66	15.10	0.41	0.45	0.47	23.86	29.37	34.14	0.41	0.45	0.47	23.86	29.37	34.14	831.87	832.35	12.47	12.91	831.07	831.56	6.07	6.95
6	REDWINE ROAD	218+05.96	5.40' LT	EXIST. 24" CMP	0.68	1.17	0.39	0.42	0.44	2.46	3.06	3.59	0.53	0.58	0.60	5.78	7.06	8.20	812.74	812.84	5.09	5.29	813.43	813.65	6.30	6.56
7A	REDWINE ROAD	226+27.57	15.66' RT	PROP. 6'X6' BOX CULVERT	1.52	146.93	N/A	N/A	N/A	141.00	164.00	188.00	N/A	N/A	N/A	141.00	164.00	188.00	797.29	797.75	12.21	12.65	797.20	797.66	12.70	13.14
7B	REDWINE ROAD	231+62.50	18.97' LT	EXIST. 30" RCP	0.27	2.62	0.42	0.46	0.48	4.35	5.40	6.31	0.42	0.46	0.48	4.35	5.40	6.31	812.19	812.28	7.37	7.70	812.22	812.28	7.65	7.85
7C	REDWINE ROAD	233+26.36	19.42' RT	18" RCP	0.14	0.69	0.49	0.53	0.56	2.08	2.57	3.01	0.61	0.67	0.69	2.59	3.21	3.75	N/A	N/A	N/A	N/A	795.54	795.64	5.03	5.24
7D	REDWINE ROAD	226+32.30	20.57' RT	18" RCP	0.00	1.66	0.51	0.56	0.58	4.20	5.24	6.14	0.64	0.69	0.72	5.09	6.33	7.42	N/A	N/A	N/A	N/A	794.64	794.74	6.59	6.81
8	REDWINE ROAD	242+02.58	13.07' LT	EXIST. 15" CMP	0.27	0.36	0.50	0.55	0.57	0.86	1.06	1.24	0.63	0.69	0.72	1.53	1.89	2.19	814.62	814.66	3.89	4.04	N/A	N/A	N/A	N/A
9	REDWINE ROAD	242+85.55	54.77' LT	EXIST. 18" CMP	0.14	1.18	0.34	0.37	0.39	2.17	2.67	3.10	0.37	0.40	0.41	2.34	2.88	3.34	810.01	810.09	4.96	5.17	810.05	810.14	5.05	5.26


Structure #	Location	Description	Total Area (ac)	Skew Angle (DD MM SS)	POST - Composite Runoff Coefficient	POST - Flood Discharge	POST - Velocities
					C ₁₀	(cfs) Q ₁₀	(fps) V ₁₀
CC-1	210+50.00, 5.63' RT	GA. STD. 1019A	0.12	N/A	0.61	0.58	3.97
CC-2	212+00.00, 5.63' RT	GA. STD. 1019A	0.16	N/A	0.62	0.78	5.92
CC-3	213+00.00, 5.63' RT	GA. STD. 1019A	0.13	N/A	0.68	0.71	6.84
CC-4	213+50.00, 5.38' RT	GA. STD. 1019A	0.05	N/A	0.73	0.32	7.14
CC-5	214+75.00, 6.36' LT	GA. DETAIL D-33B	0.12	N/A	0.74	0.70	3.36
CC-6	215+75.00, 6.36' LT	GA. DETAIL D-33B	0.11	N/A	0.22	0.61	3.23
CC-7	216+75.00, 6.36' LT	GA. DETAIL D-33B	0.08	N/A	0.13	0.51	3.07
CC-8	217+50.00, 6.36' LT	GA. DETAIL D-33B	0.08	N/A	0.22	0.46	3.81
CC-9	217+95+00, 6.36' LT	GA. DETAIL D-33B	0.06	N/A	0.25	0.34	4.55
EE-2	300+70.69, 3.33' RT	GA. STD. 1033D	0.40	N/A	0.50	1.57	7.76
EE-3	301+78.07, 3.33' RT	GA. STD. 1033D	0.12	N/A	0.61	0.68	8.89
EE-4	301+75.17, 13.49' LT	GA. STD. 10334D	0.58	N/A	0.55	2.51	3.77

Structure #	Location	Description	Total Area (ac)	Skew Angle (DD MM SS)	POST - Composite Runoff Coefficient	POST - Flood Discharge	POST - Velocities
					C ₂₅	(cfs) Q ₂₅	(fps) V ₂₅
AA-1	204+73.63, 9.47' LT	GA. STD. 1019A	0.39	N/A	0.79	2.90	6.19
CC-11	217+00.00, 11.47' RT	GA. STD. 1019A	0.05	N/A	0.75	3.72	2.00
DD-1	223+97.56, 11.58' LT	GA. STD. 1019A	0.32	N/A	0.59	0.40	4.76
DD-2A	225+21.78, 15.97' RT	GA. STD. 1019A	0.25	N/A	0.48	1.44	0.90
DD-6A	227+00.57, 15.94' RT	GA. STD. 1019A	0.18	N/A	0.65	1.51	0.90
DD-12	228+09.35, 13.23' RT	GA. STD. 1019A	0.19	N/A	0.95	1.61	4.13
DD-7	230+03.25, 11.32' LT	GA. STD. 1019A	1.07	N/A	0.60	5.98	8.76
DD-11	237+11.79, 10.38' LT	GA. STD. 1019A	0.27	N/A	0.55	1.40	4.36
EE-1	299+89.02, 0.18' RT	GA. STD. 1019A	0.72	N/A	0.58	2.10	5.76
FF-1	241+79.93, 9.18' LT	GA. STD. 1019A	0.38	N/A	0.28	0.14	4.92

SEGMENT 2







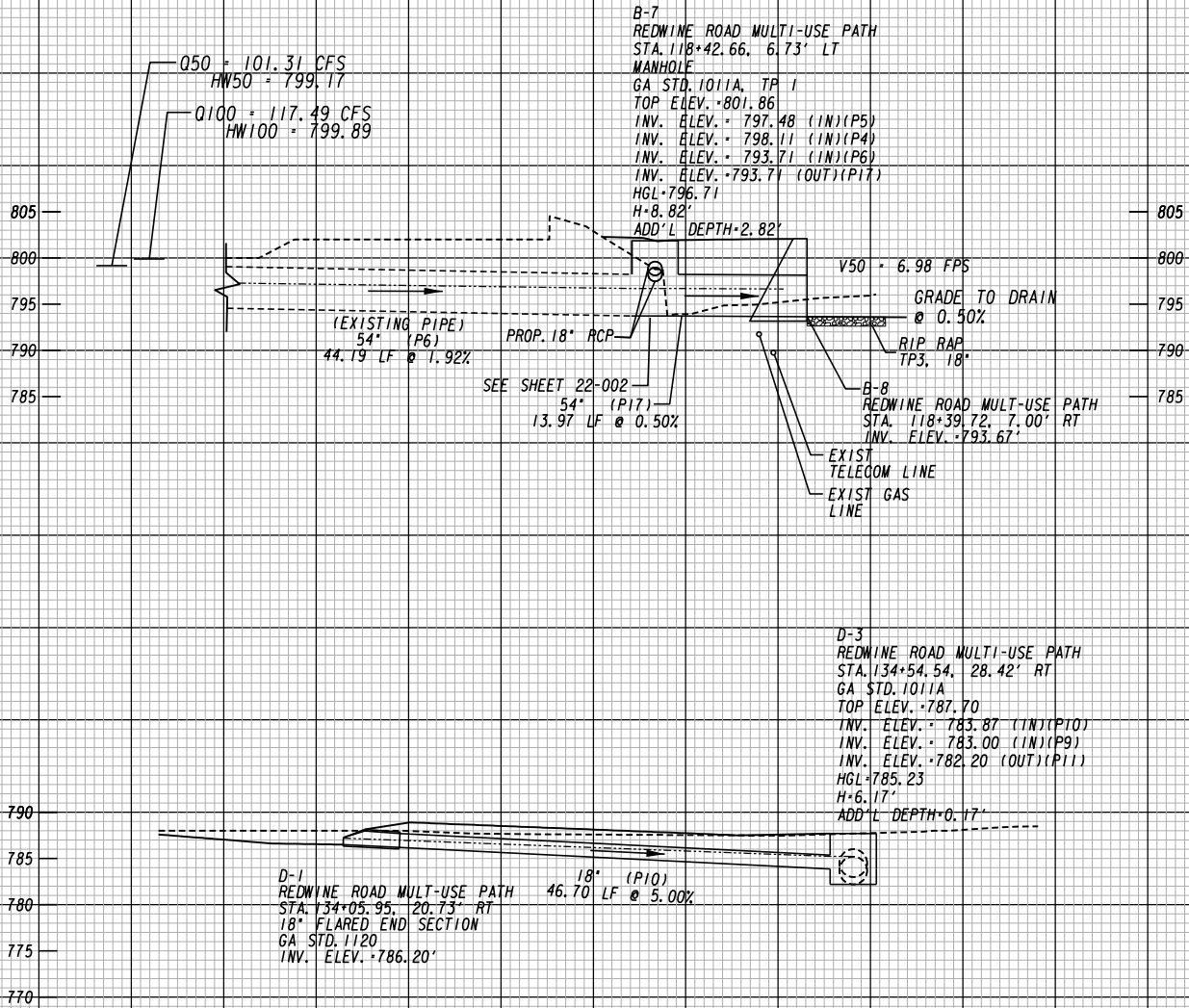
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SCALE:
1 INCH = 10' VERT.
1 INCH = 10' HORIZ.

REVISION DATES	

FAYETTE COUNTY DRAINAGE PROFILES	
REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH	
CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.	
22-002	



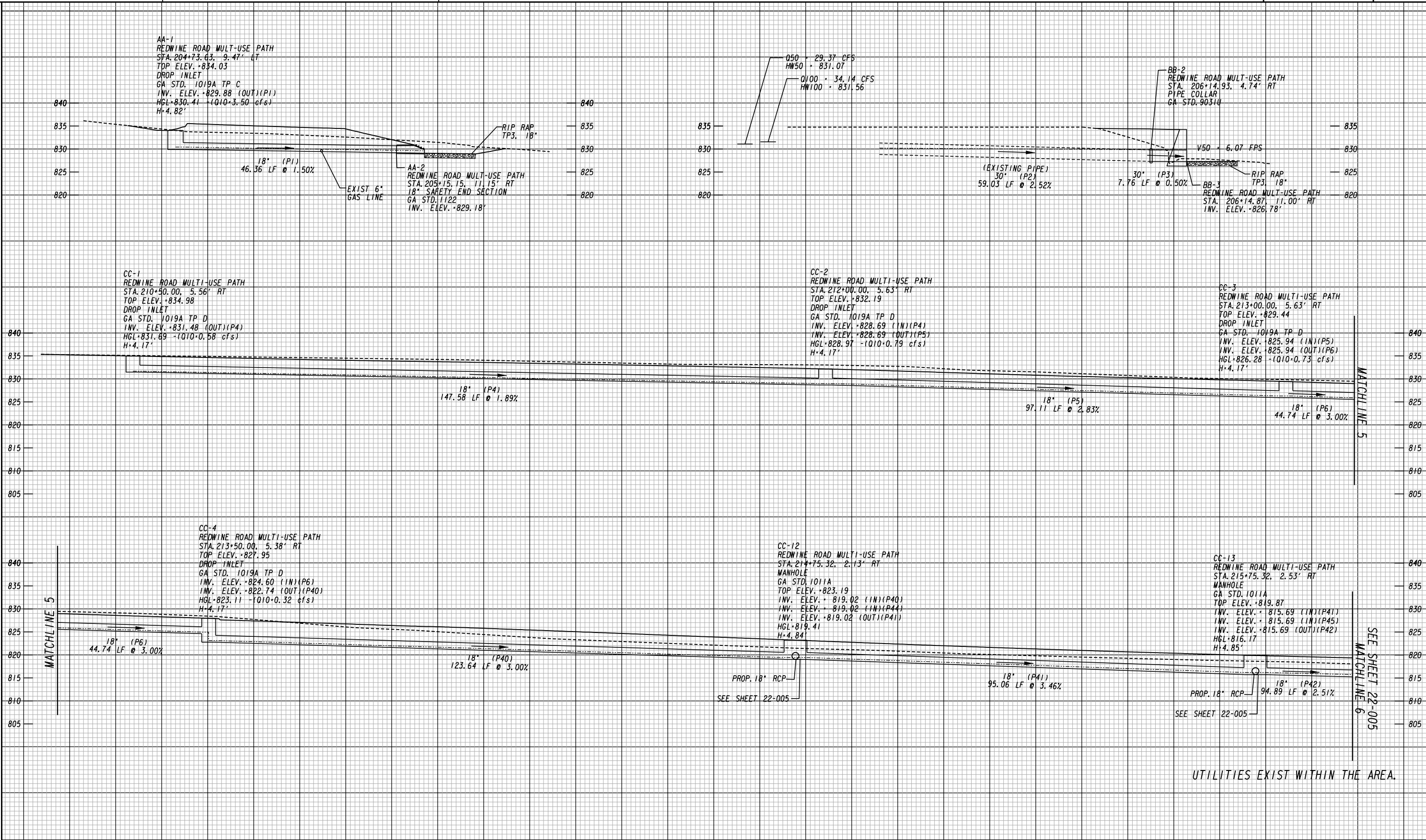
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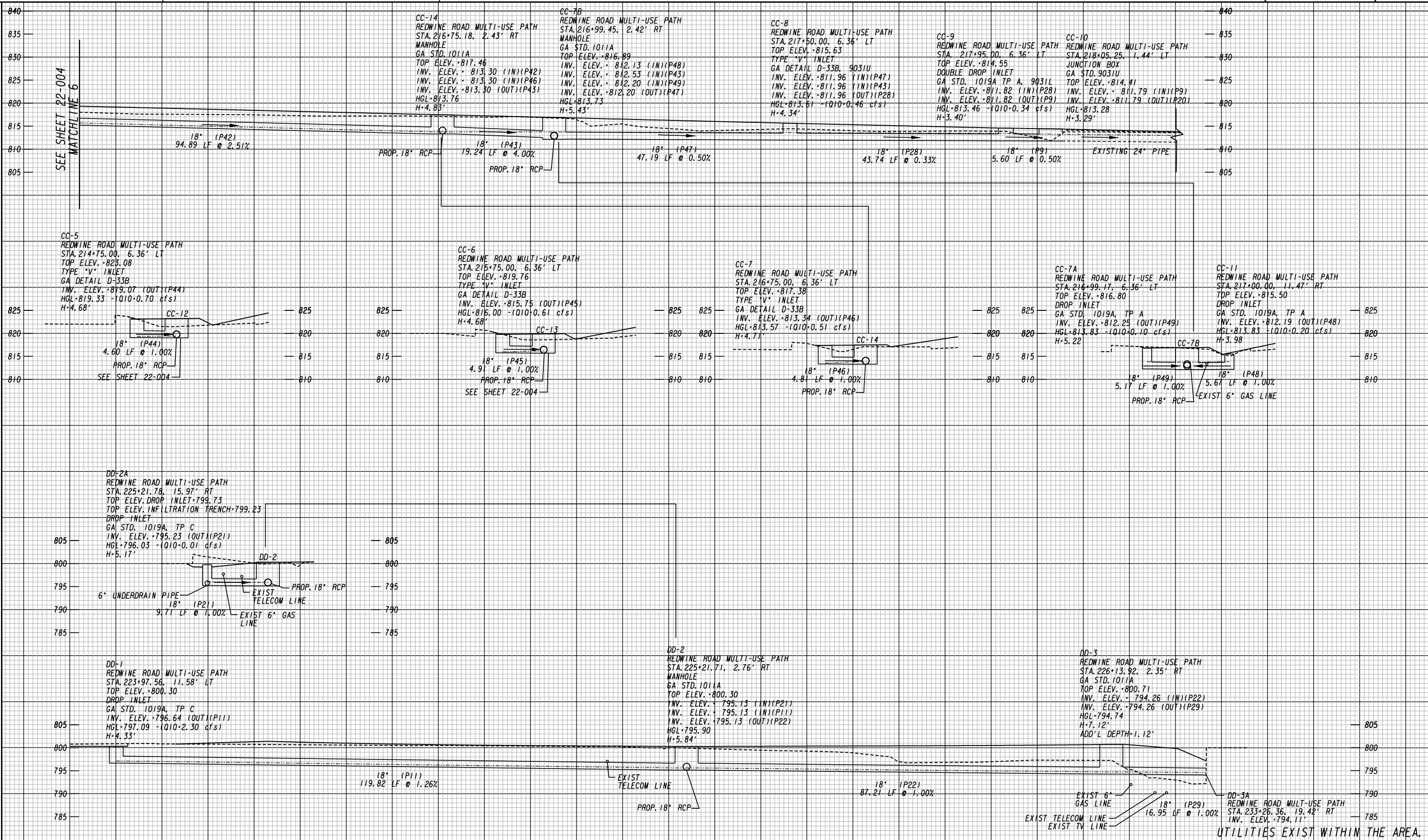


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REVISION DATES			FAYETTE COUNTY DRAINAGE PROFILES REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH			
			CHECKED:	DATE:	DRAWING No.	
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FAYETTE COUNTY
GEORGIA



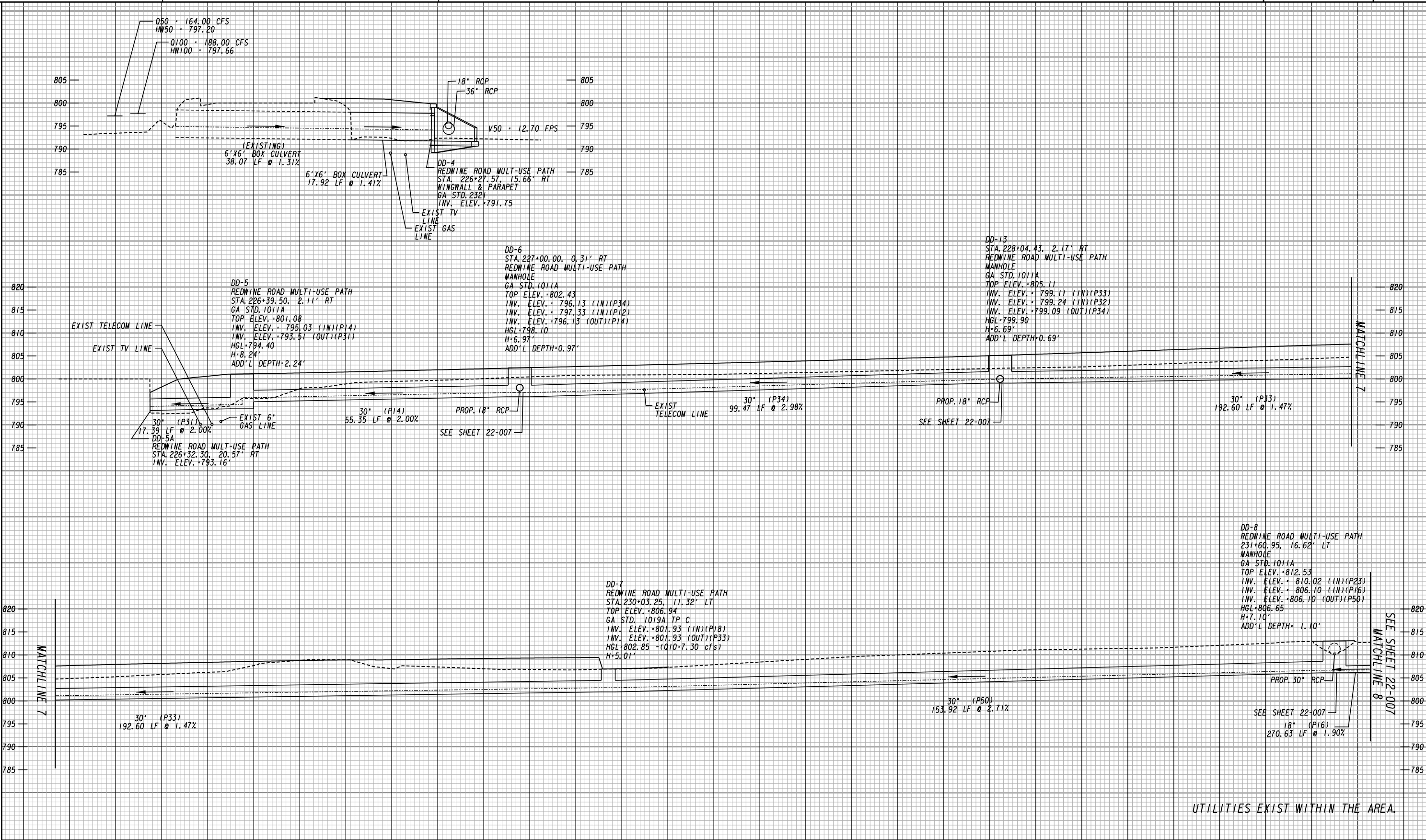
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REVISION DATES	

FAYETTE COUNTY DRAINAGE PROFILES REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH	
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DRAWING No.	
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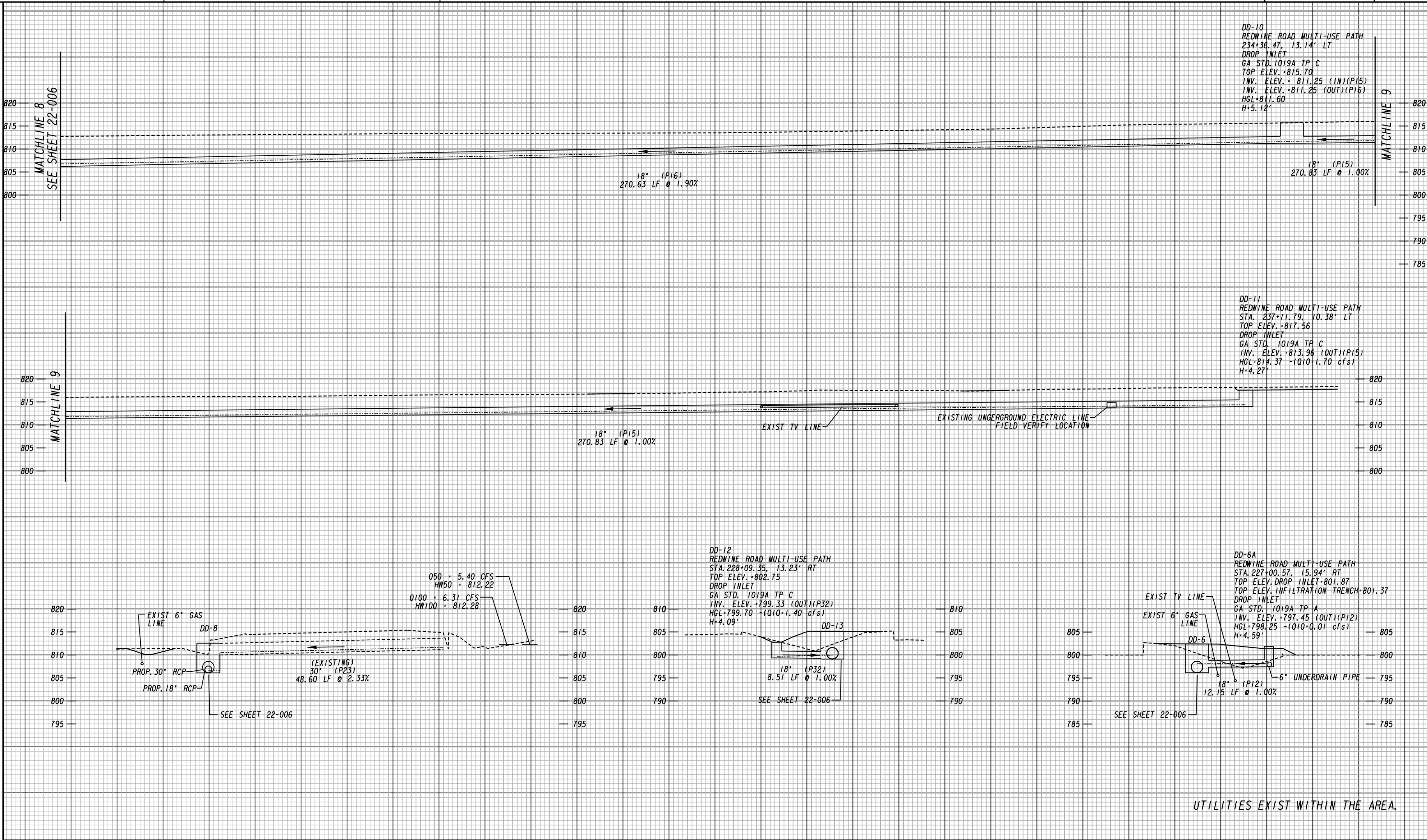
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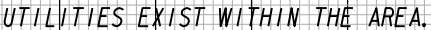
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REVISION DATES	

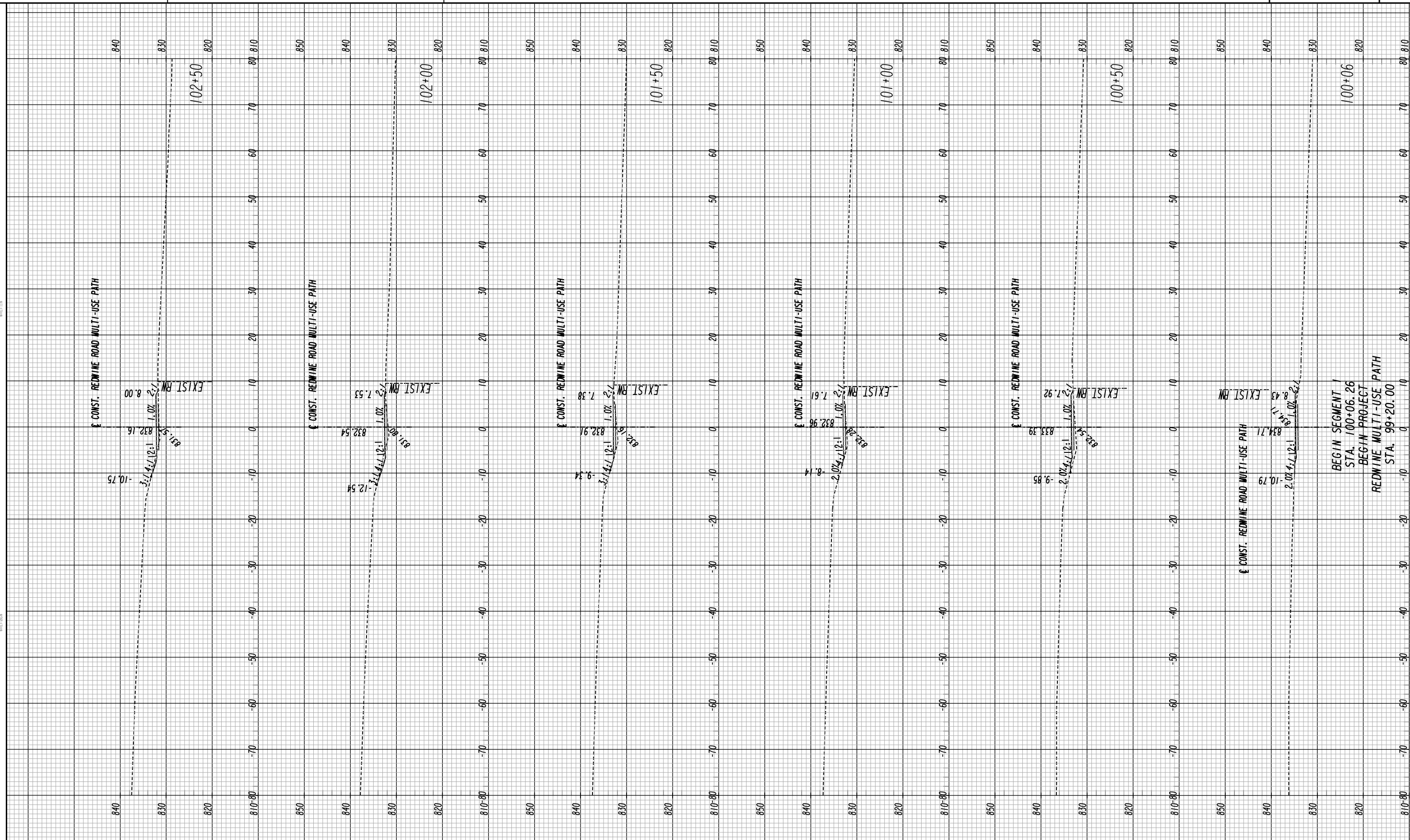
FAYETTE COUNTY
DRAINAGE PROFILES
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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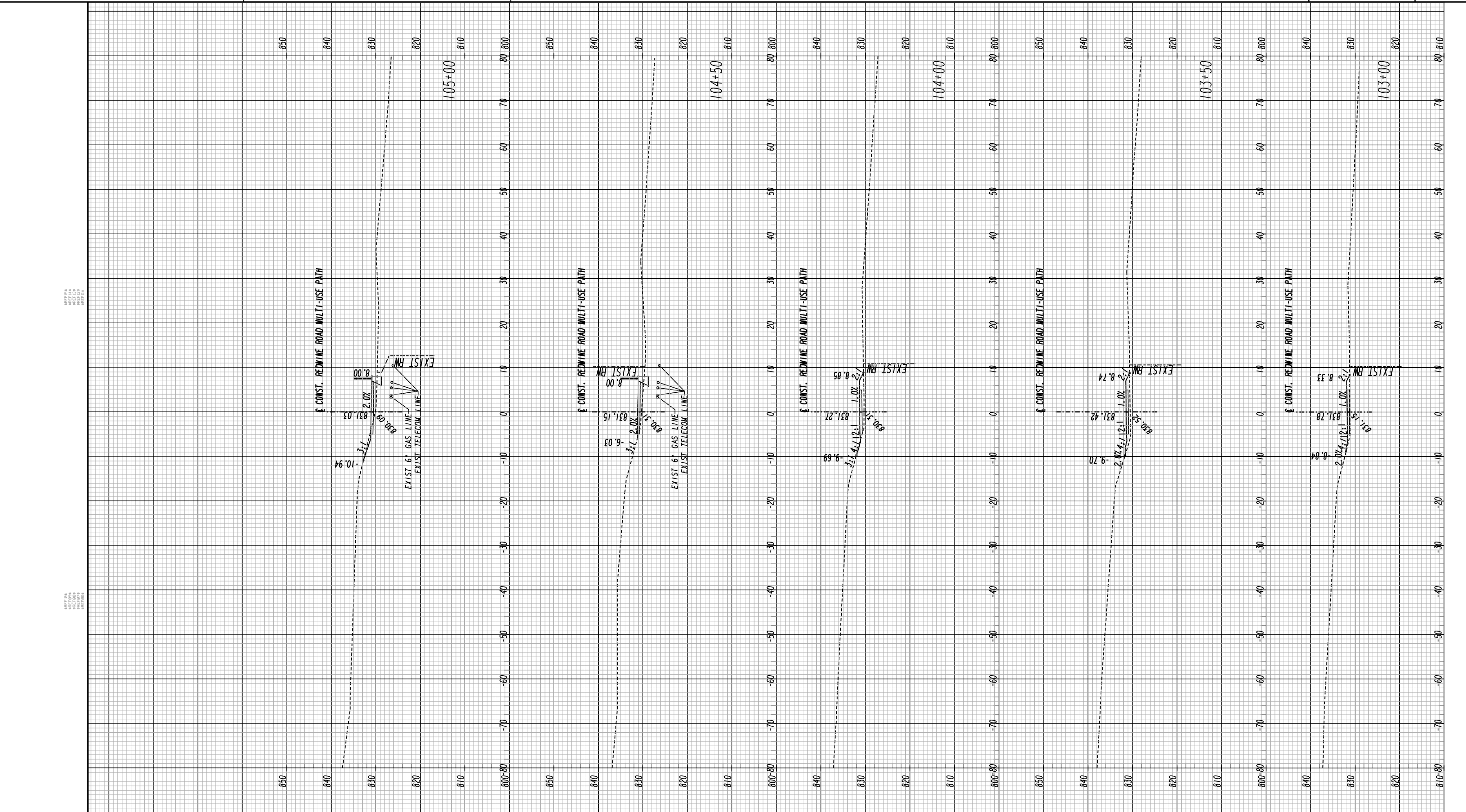
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					DRAWING No.
					22-008



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REVISION DATES			FAYETTE COUNTY			
			CROSS SECTIONS			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	
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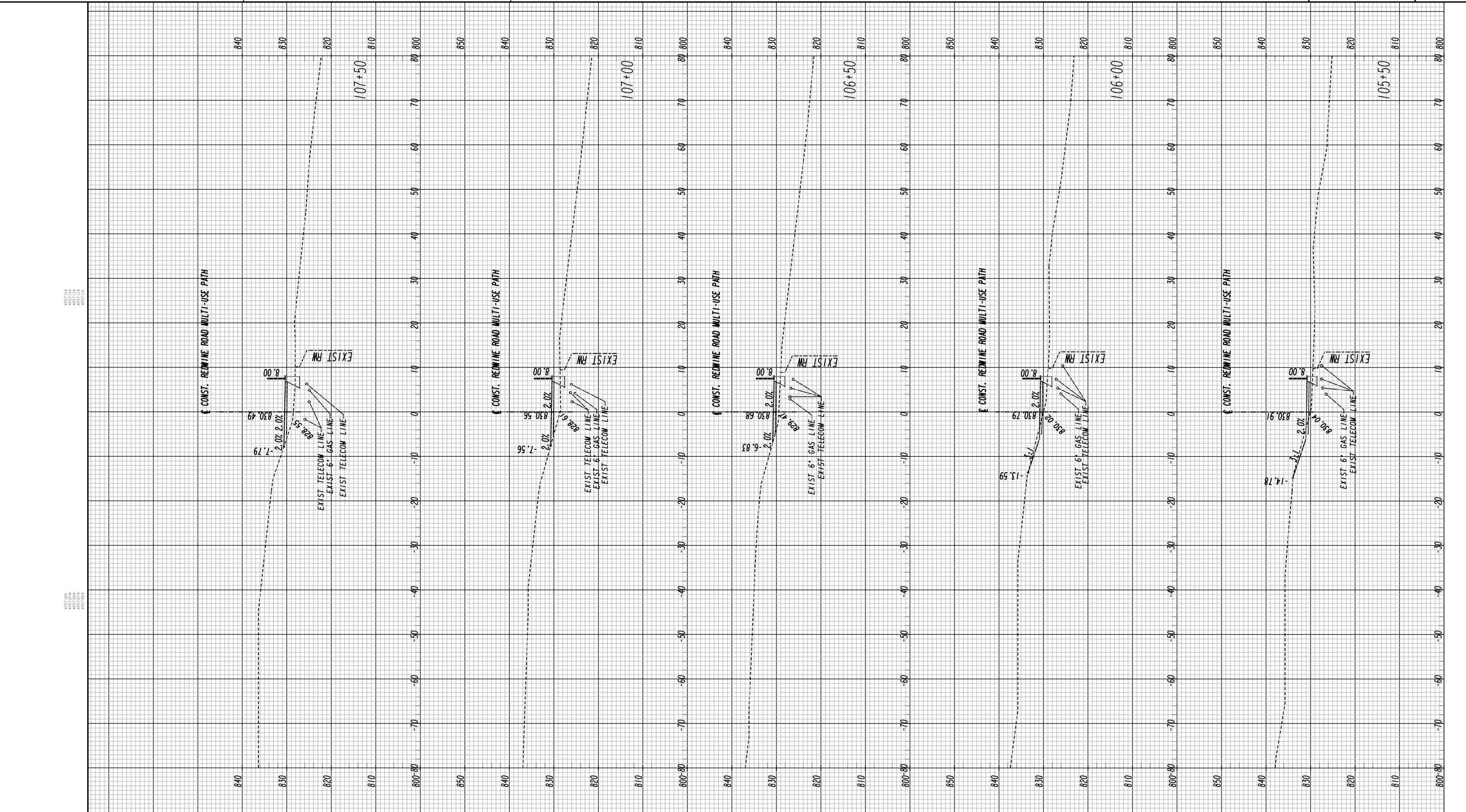
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SCALE:
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REVISION DATES	

FAYETTE COUNTY CROSS SECTIONS REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH	
CHECKED:	DATE:
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DRAWING No.	
23-002	



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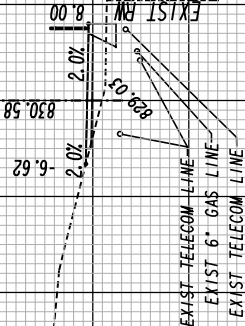


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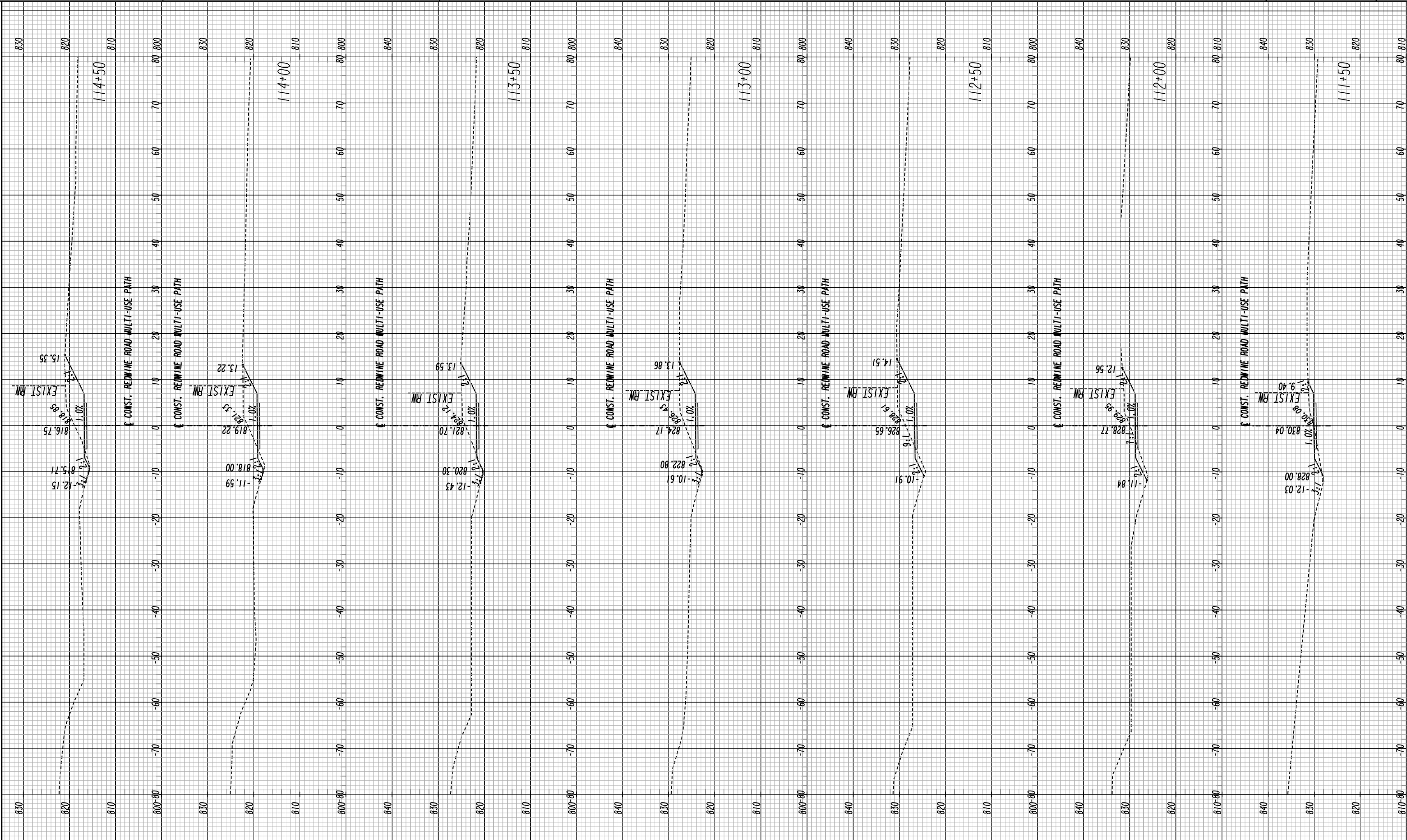
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REVISION DATES		

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DRAWING No.
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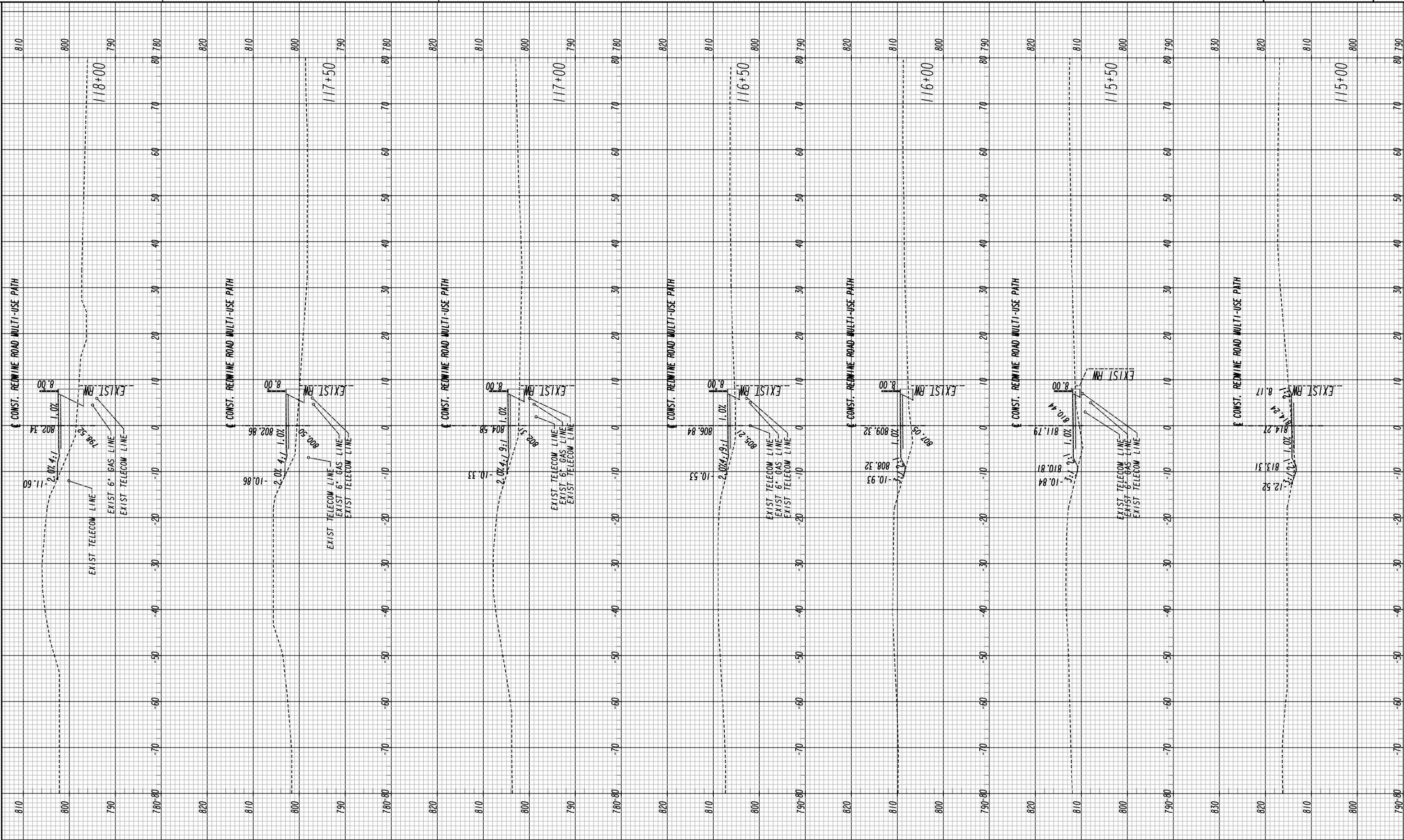


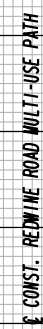


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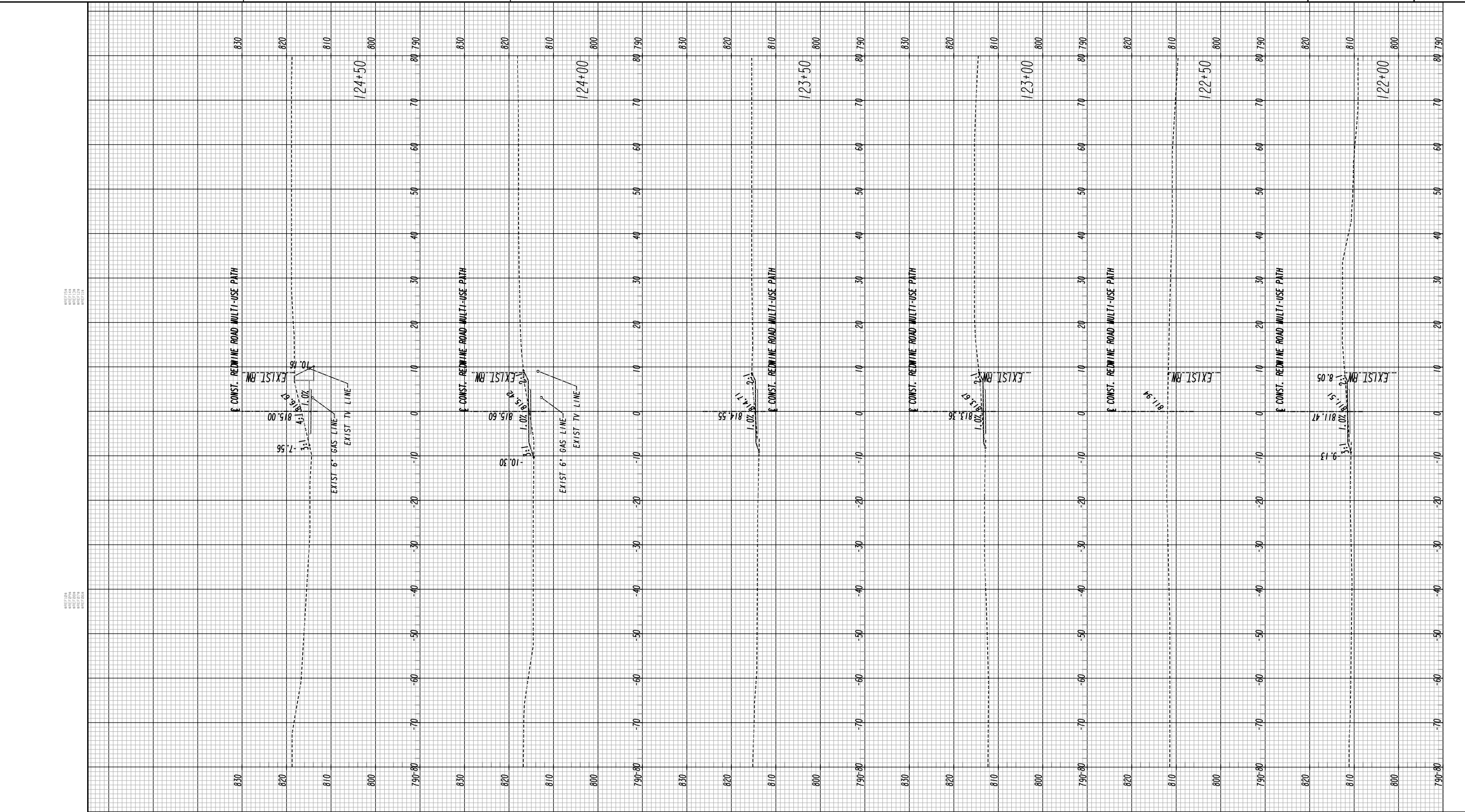


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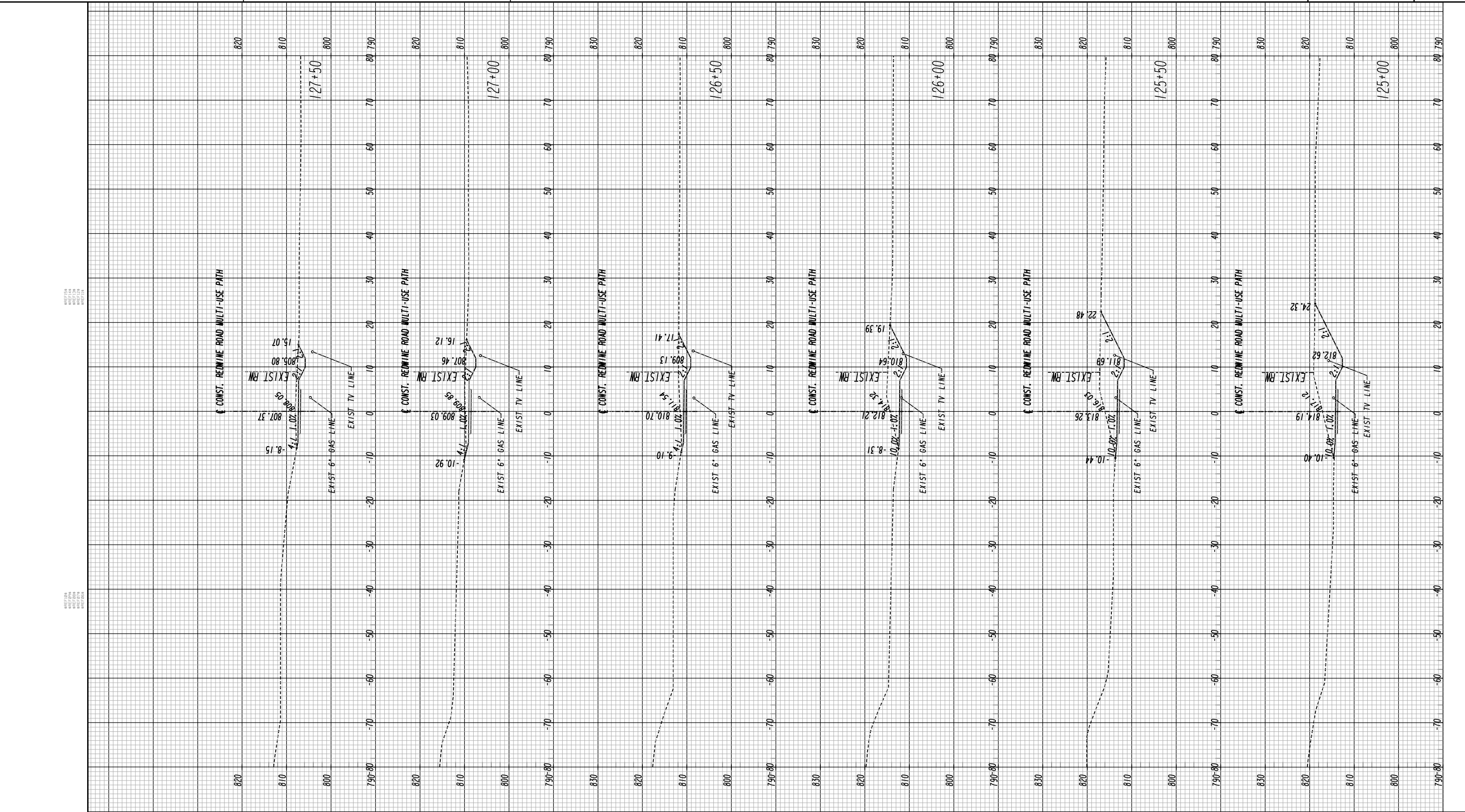
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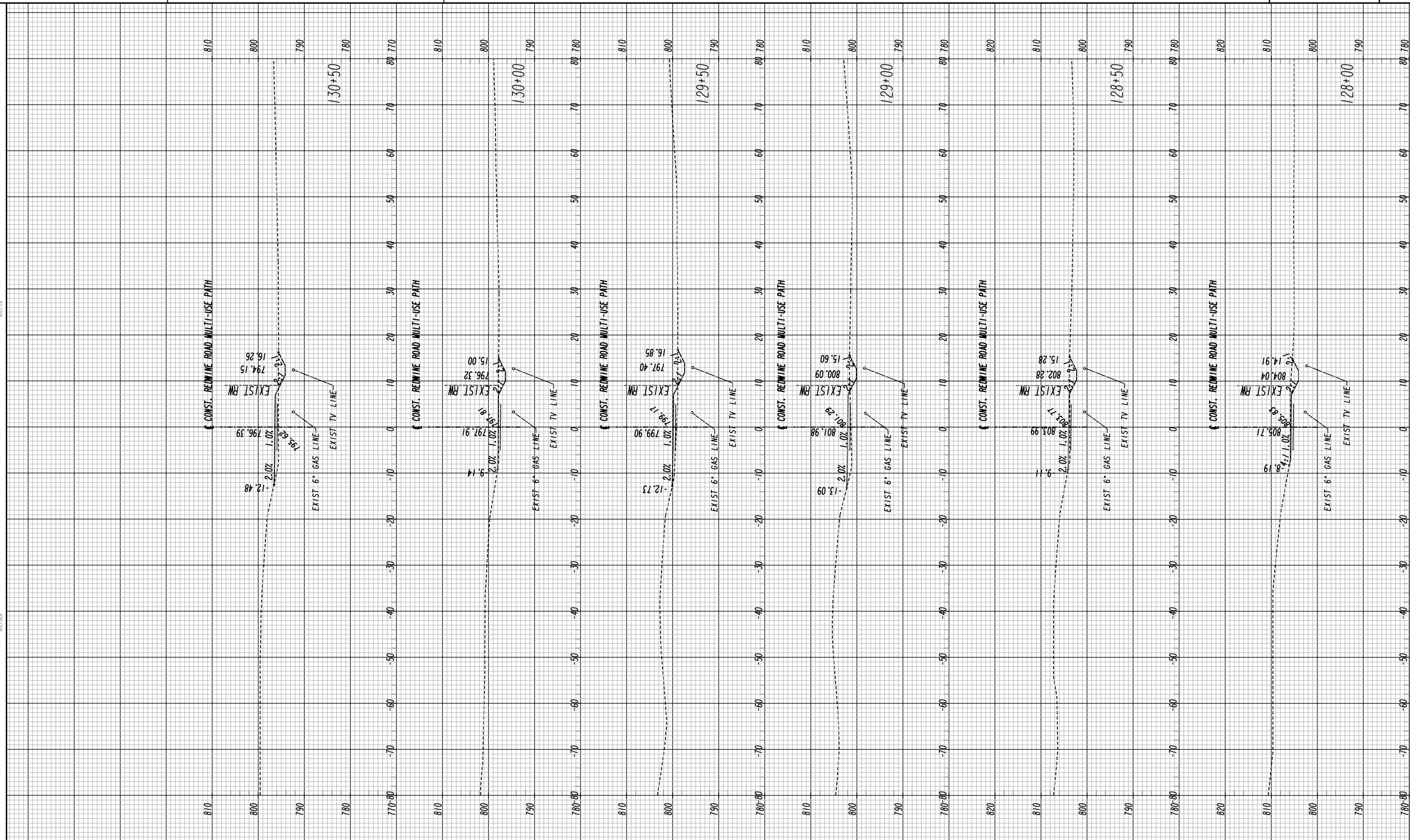
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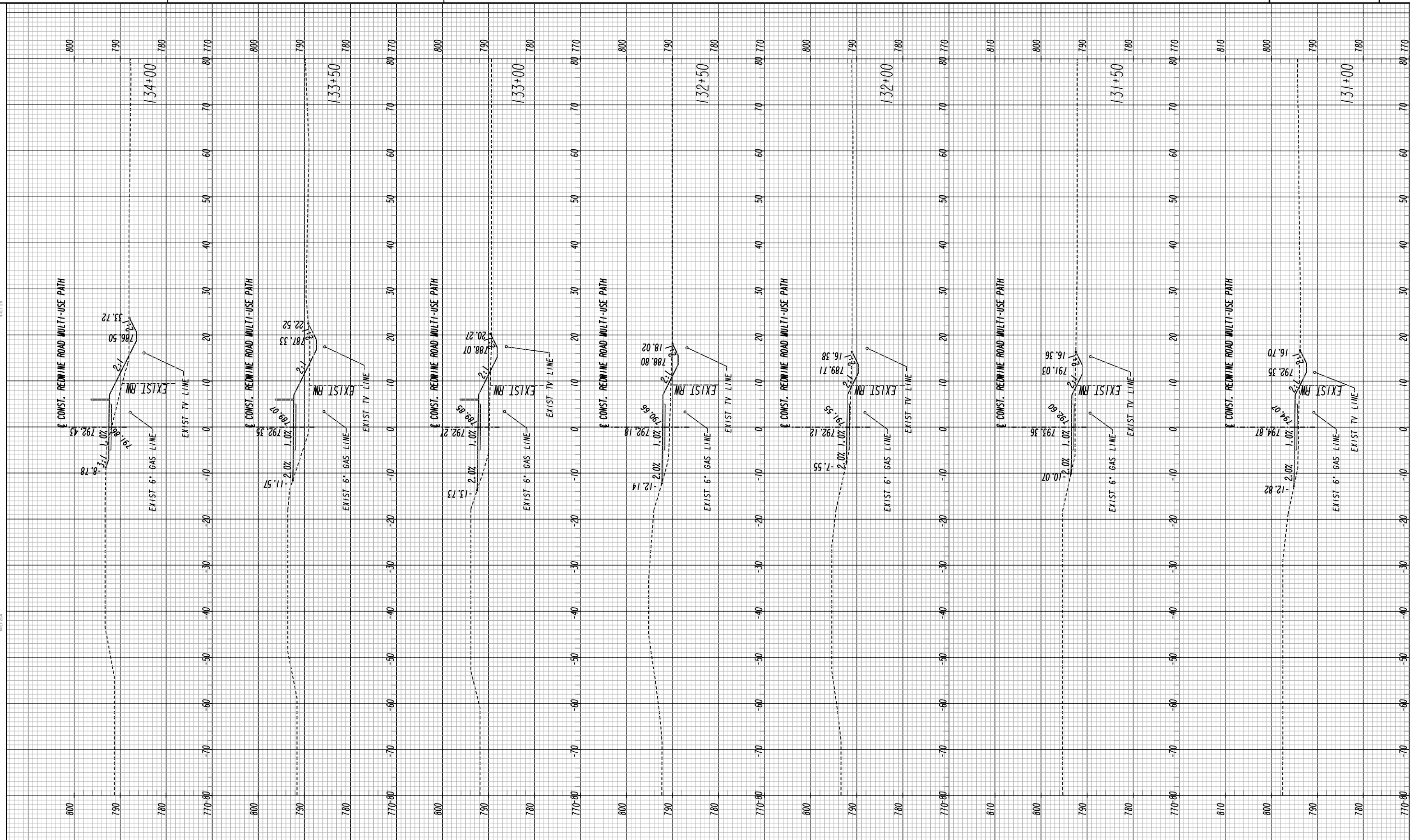
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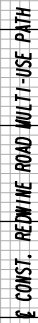
REVISION DATES

FAYETTE COUNTY
CROSS SECTIONS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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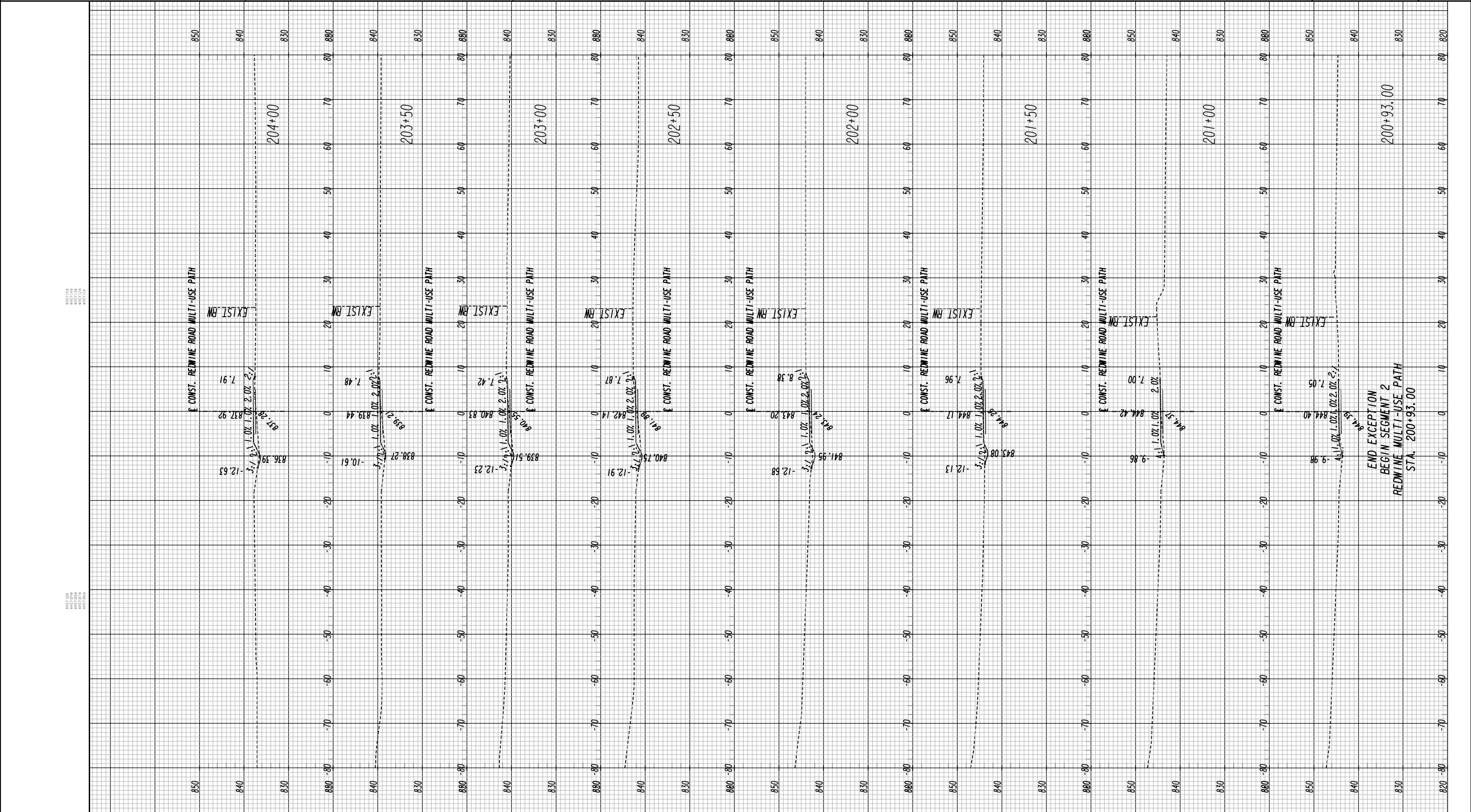



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REVISION DATES

FAYETTE COUNTY			
CROSS SECTIONS			
REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH			
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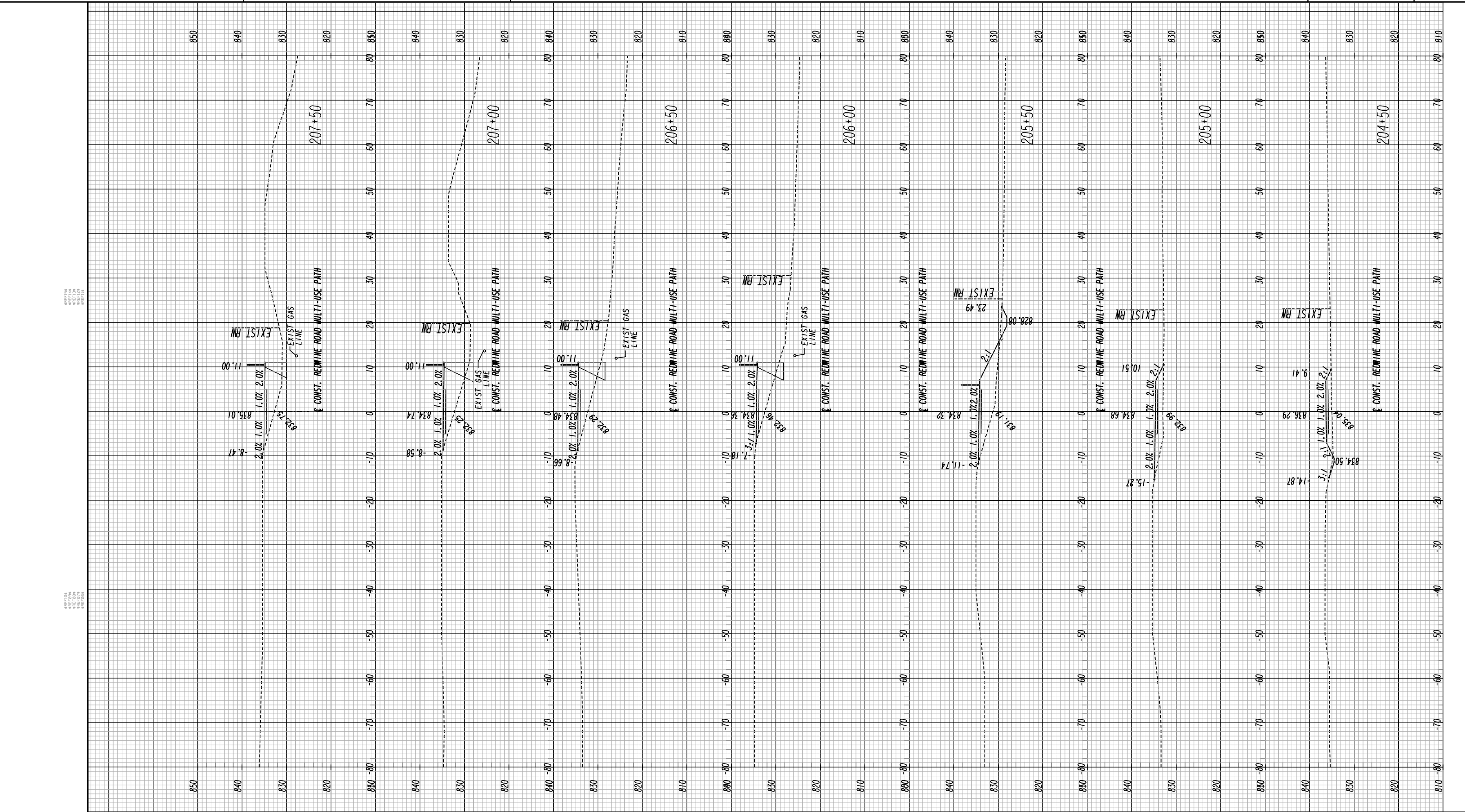




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REVISION DATES			FAYETTE COUNTY			
			CROSS SECTIONS			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:	DATE:	DRAWING No.	
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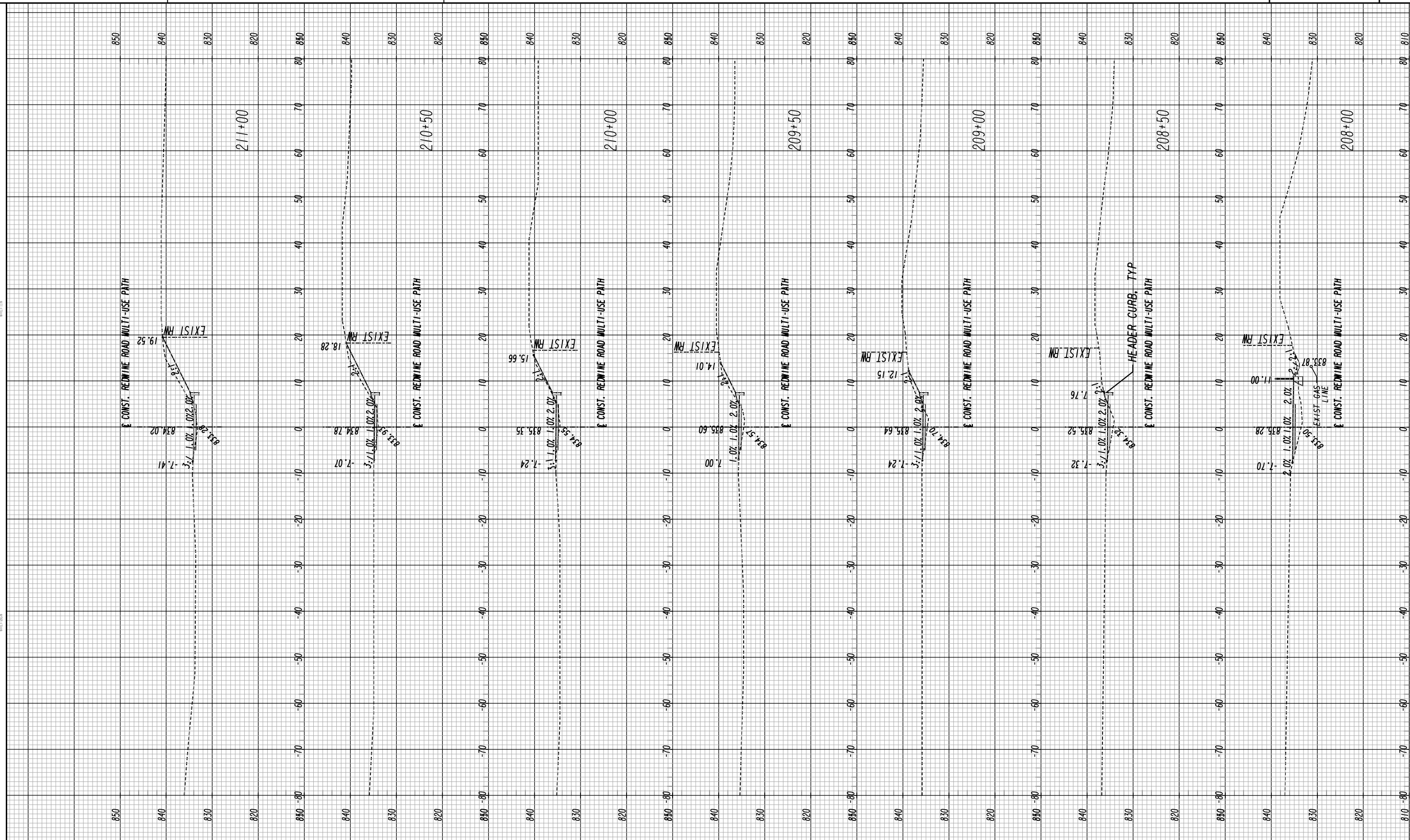
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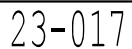
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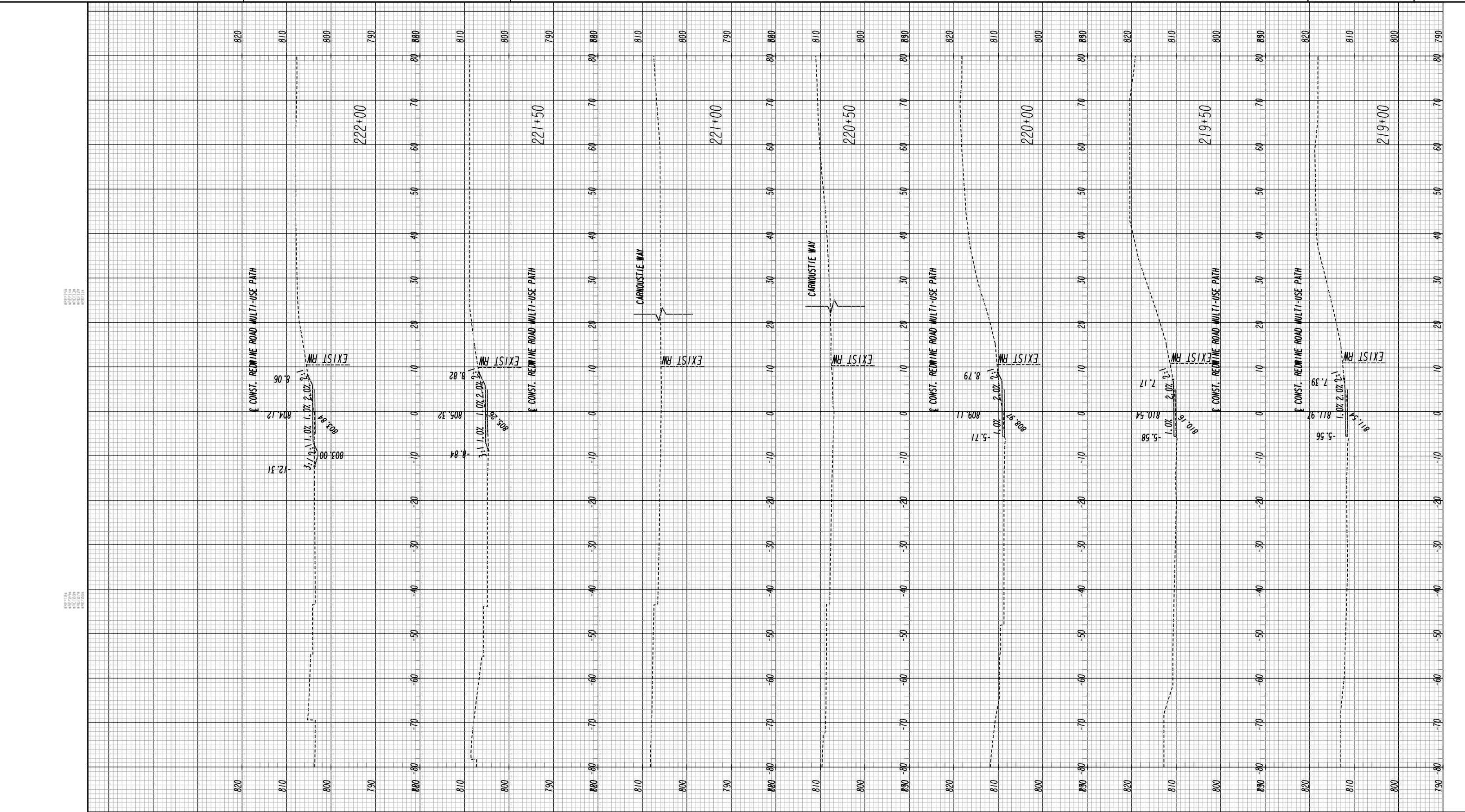
FAYETTE COUNTY
CROSS SECTIONS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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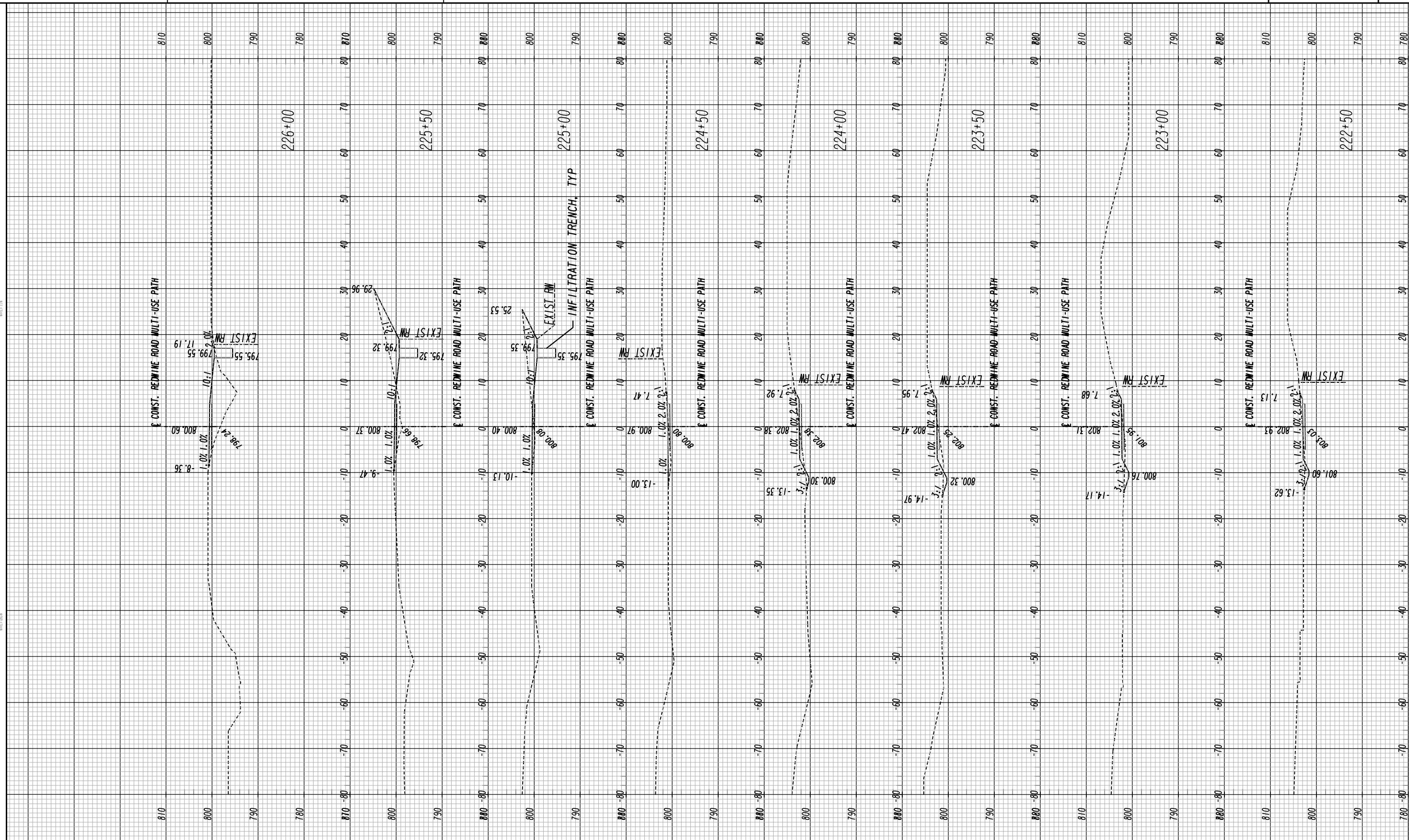
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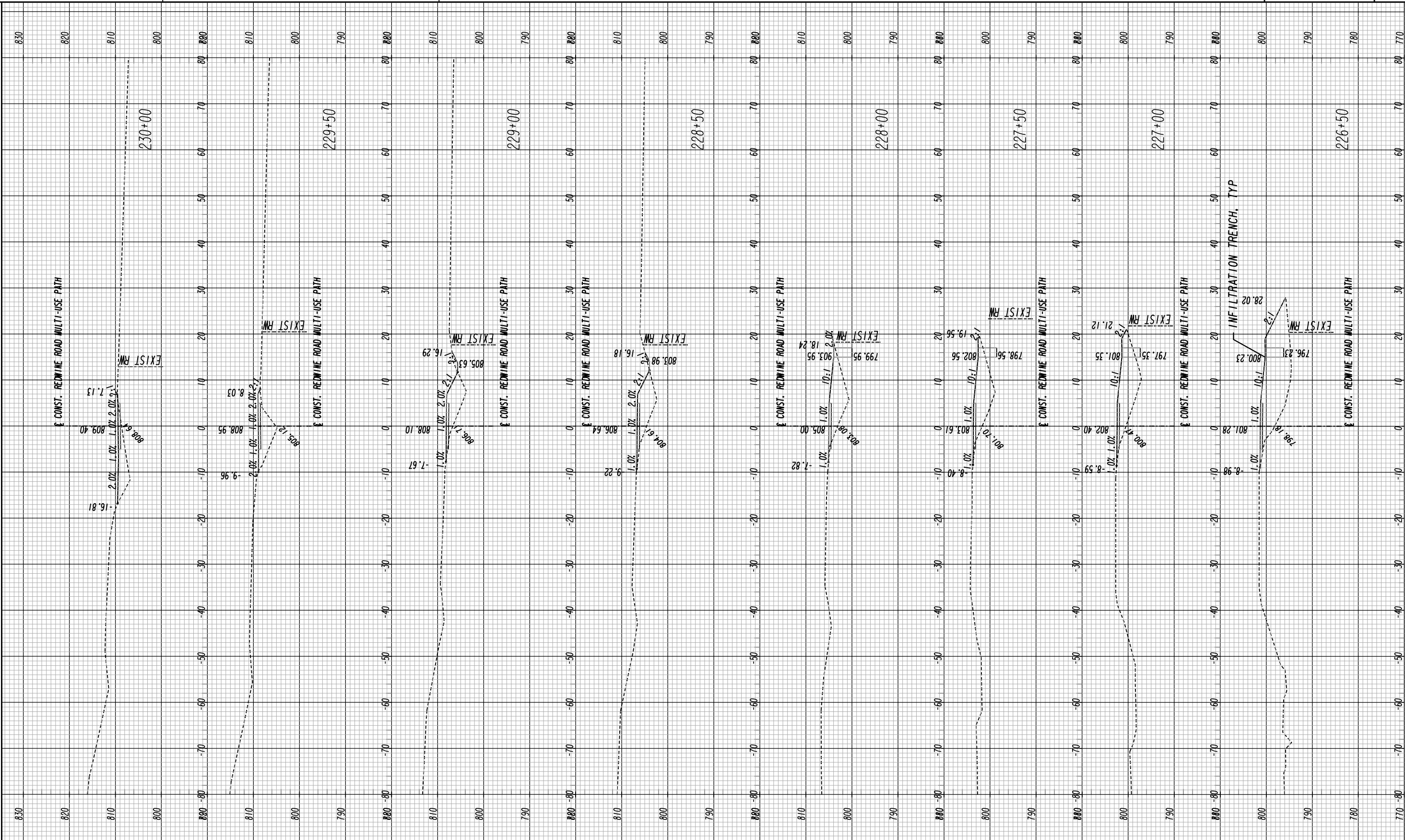
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SCALE:
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REVISION DATES		

FAYETTE COUNTY CROSS SECTIONS REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH		
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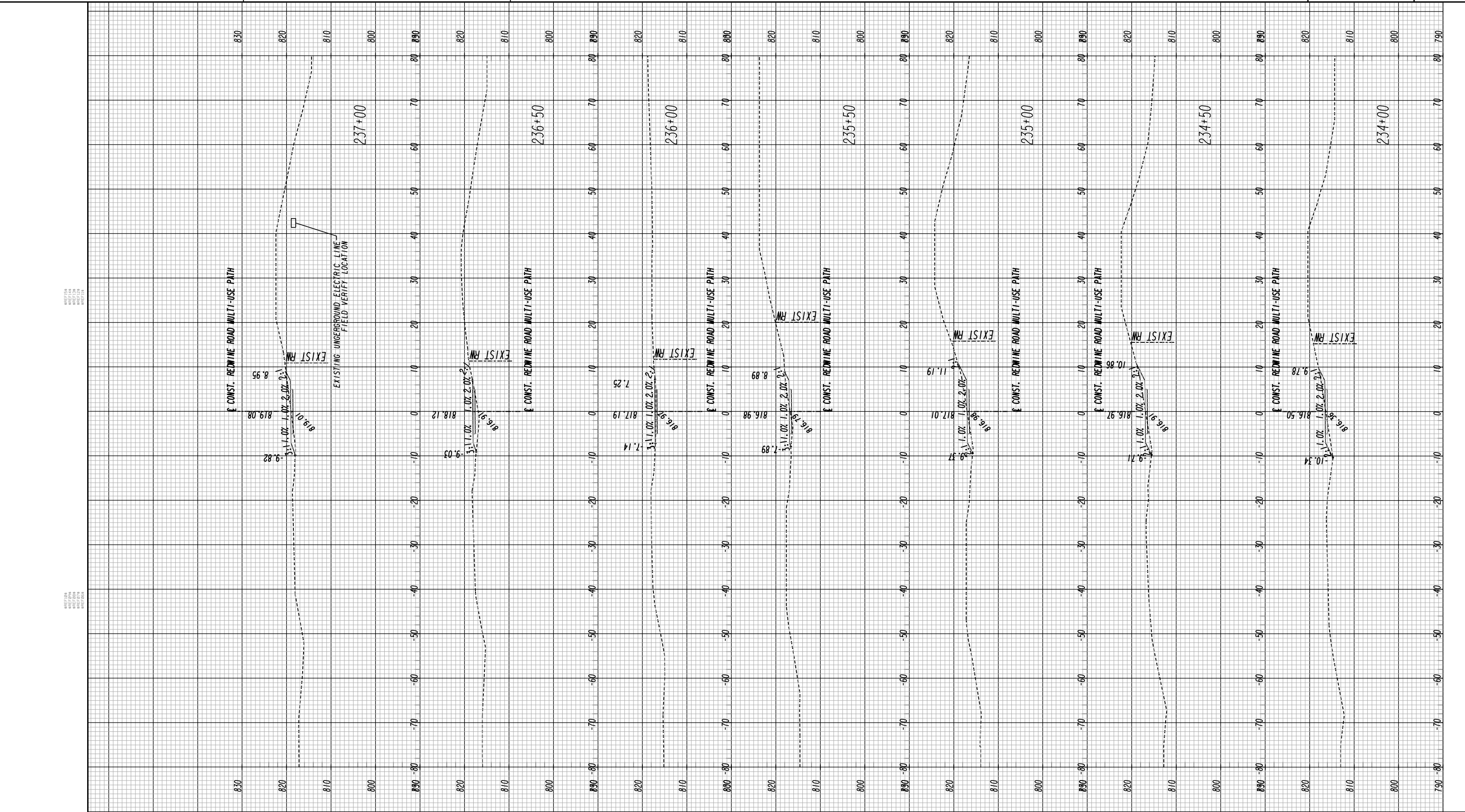






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REVISION DATES			FAYETTE COUNTY			
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			CHECKED:		DATE:	DRAWING No. 23-021
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SCALE:
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REVISION DATES	

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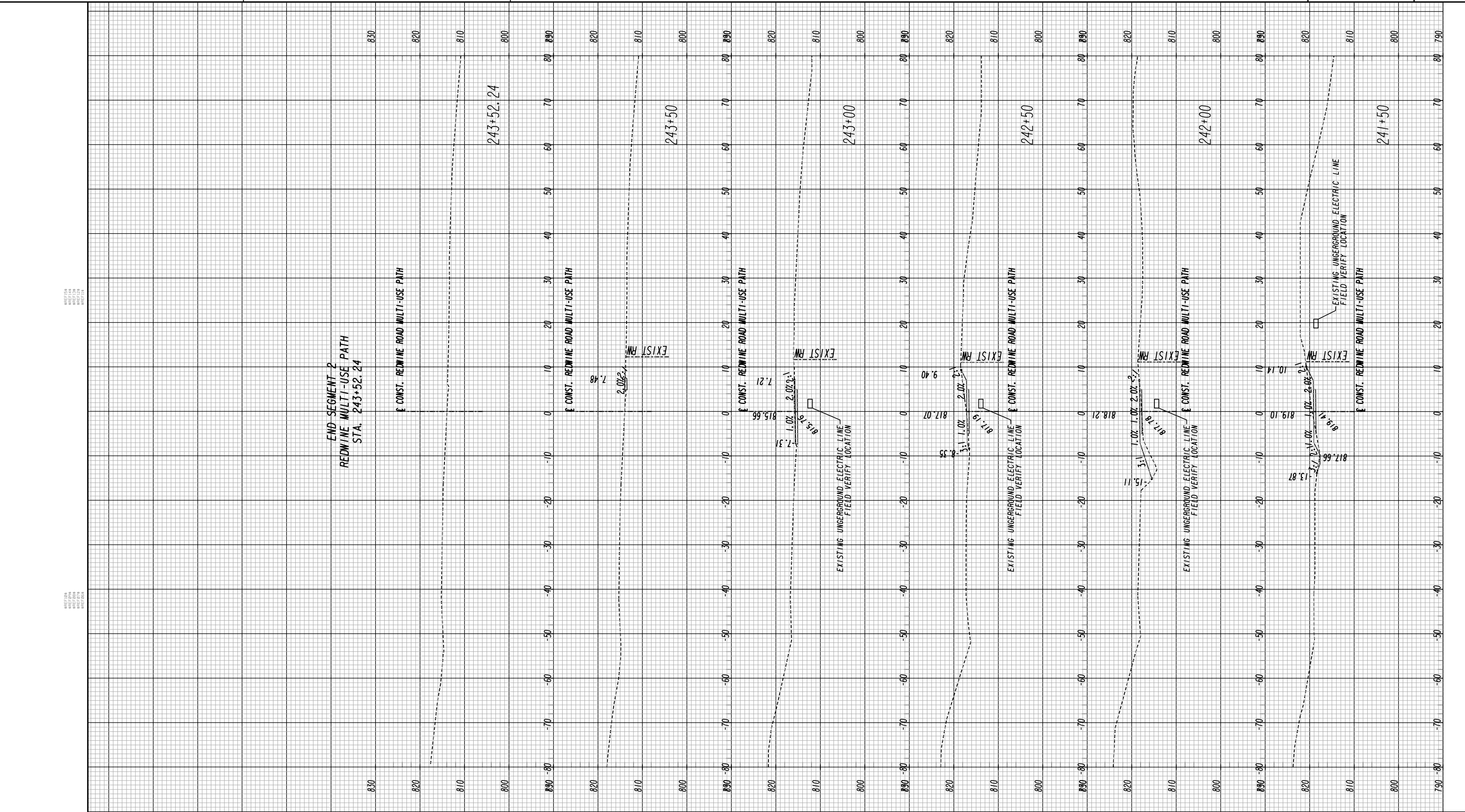
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REVISION DATES			FAYETTE COUNTY				
			CROSS SECTIONS				
			REDWINE ROAD & STARRS MILL SCHOOL				
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			VERIFIED:		DATE:		



7/31/2015
GPLN

7/31/2015
GPLN

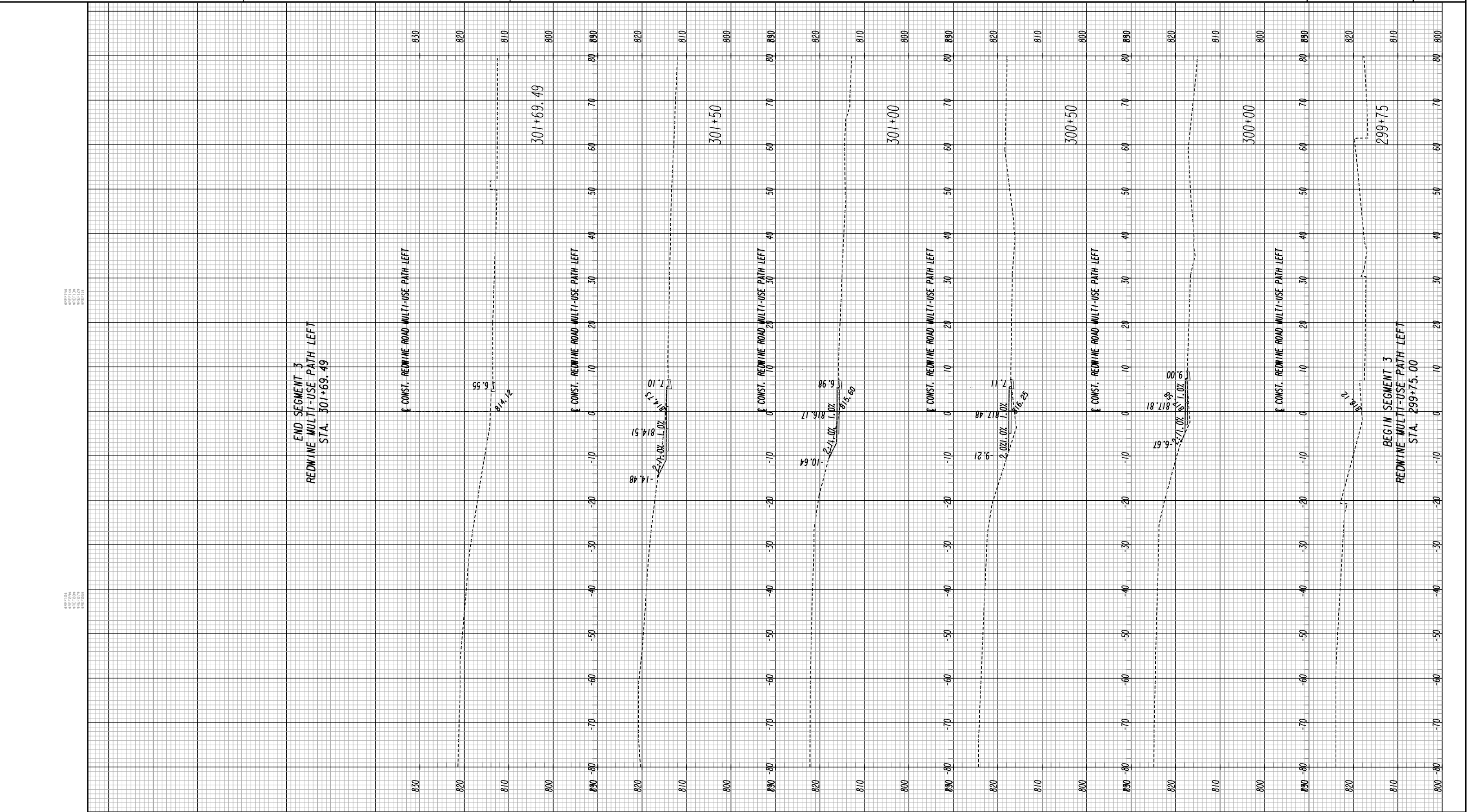

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393



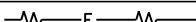
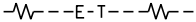
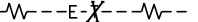
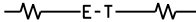
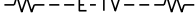
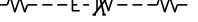
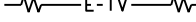
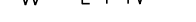





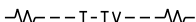
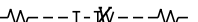
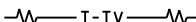

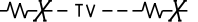

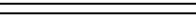
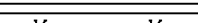
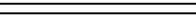
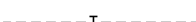


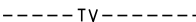
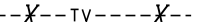
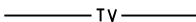
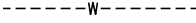
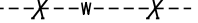
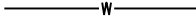
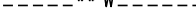








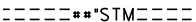

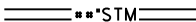


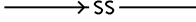

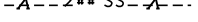




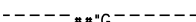
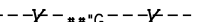

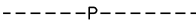
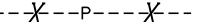
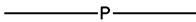
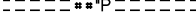
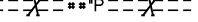










SCALE:
1 INCH = 10' VERT.
1 INCH = 10' HORIZ.




































































































































































REVISION DATES	

FAYETTE COUNTY CROSS SECTIONS REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
23-024



UTILITY LINECODES				
	EXISTING	TO BE REMOVED	PROPOSED	TYPE OF UTILITY
OVERHEAD				ELECTRIC
				ELECTRIC/TELECOMMUNICATIONS
				ELECTRIC/CABLE TV
				ELECTRIC/TELECOMMUNICATIONS/CABLE TV
				GUY WIRE
				TELECOMMUNICATIONS
				TELECOMMUNICATIONS/CABLE TV
UNDERGROUND				CABLE TV
				ELECTRIC
				TELECOMMUNICATIONS
				CABLE TV
				WATER
				WATER FOR LABELED PIPE SIZES
				NON-POTABLE WATER
				NON-POTABLE WATER FOR LABELED PIPE SIZES
				STEAM
				STEAM FOR LABELED PIPE SIZES
				SANITARY SEWER WITH FLOW DIRECTION
				SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES
				SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION
				GAS
				GAS FOR LABELED PIPE SIZES
				PETROLEUM
				PETROLEUM FOR LABELED PIPE SIZES

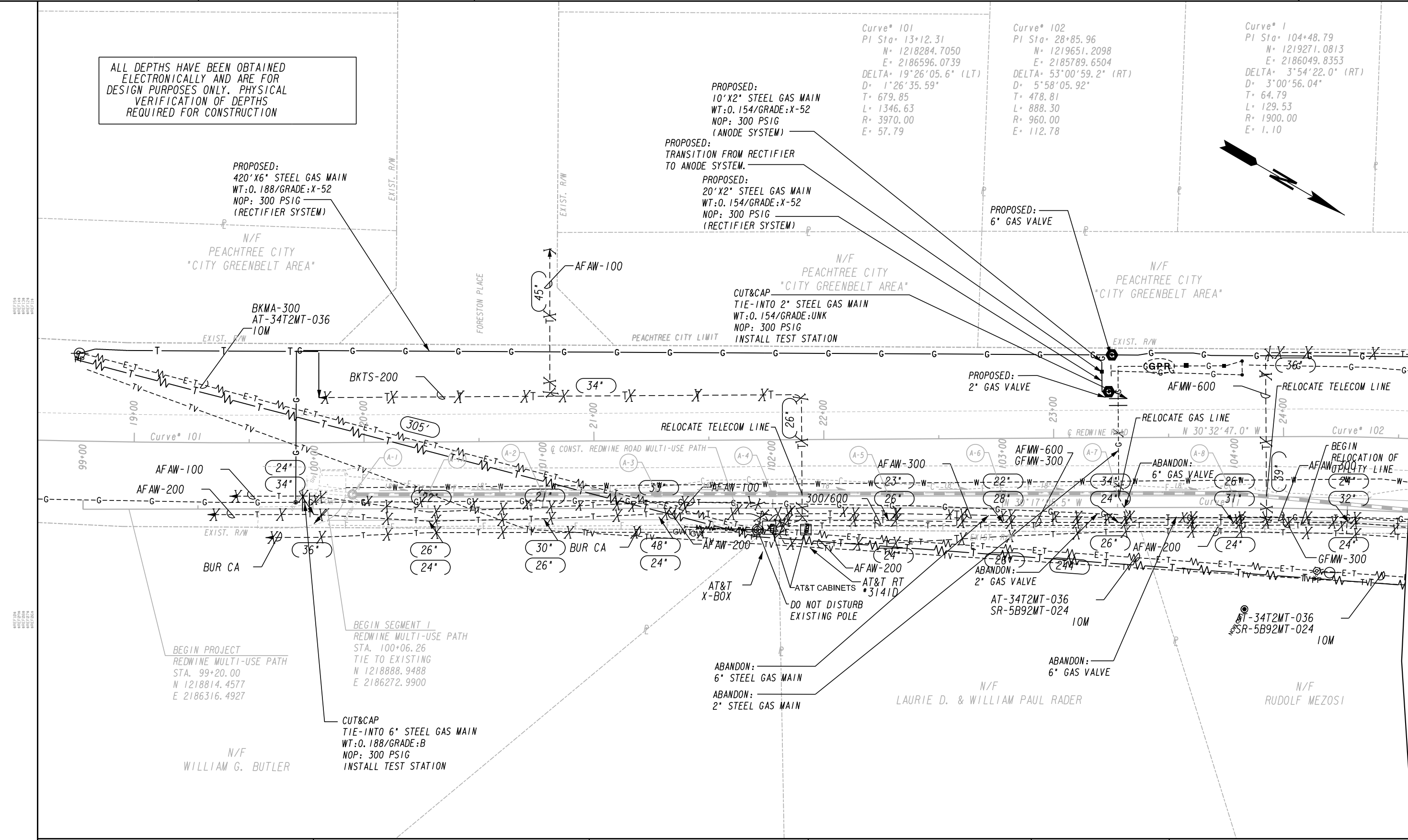
UTILITY SYMBOLS									
EXISTING				PROPOSED			TEMPORARY		
EXISTING	PROPOSED	TEMPORARY		EXISTING	PROPOSED	TEMPORARY	EXISTING	PROPOSED	TEMPORARY
			UTILITY POLE/GUY POLE						FIRE HYDRANT ASSEMBLY (INCLUDES ASSOCIATED VALVE)
			LIGHT POLE						BACKFLOW PREVENTER
			GUY ANCHOR						PRESSURE INDICATOR VALVE
			MARKER						AIR RELEASE VALVE
			SPLICE BOX						WELL
			CABINET						WATER VAULT
			VENT						WATER VALVE MARKER
			ELECTRIC MANHOLE						STAND PIPE
			HAND HOLE						CLEANOUT
			TRANSFORMER						SANITARY SEWER MANHOLE
			ELECTRIC METER						AIR RELEASE VALVE
			ELECTRIC BOX						GREASE TRAP
			TELECOMMUNICATIONS MANHOLE						SANITARY SEWER FORCE MAIN VALVE
			TELECOMMUNICATIONS PEDESTAL						GAS VALVE
			SUBSCRIBER LOOP CARRIER (aka "SLICK")						GAS METER
			PHONE BOOTH						GAS MANHOLE
			CABLE TV PEDESTAL						GAS PRESSURE REGULATOR
			CABLE TV MANHOLE						GAS VAULT
			WATER VALVE						GAS TEST STATION
			WATER METER						PETROLEUM VALVE
			WATER MANHOLE						

GEORGIA811

Utilities Protection Center, Inc.

Know what's below.
Call before you dig.

ALL DEPTHS HAVE BEEN OBTAINED
ELECTRONICALLY AND ARE FOR
DESIGN PURPOSES ONLY. PHYSICAL
VERIFICATION OF DEPTHS
REQUIRED FOR CONSTRUCTION



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
UTILTY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

DRAWING No.
24-001

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5°58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

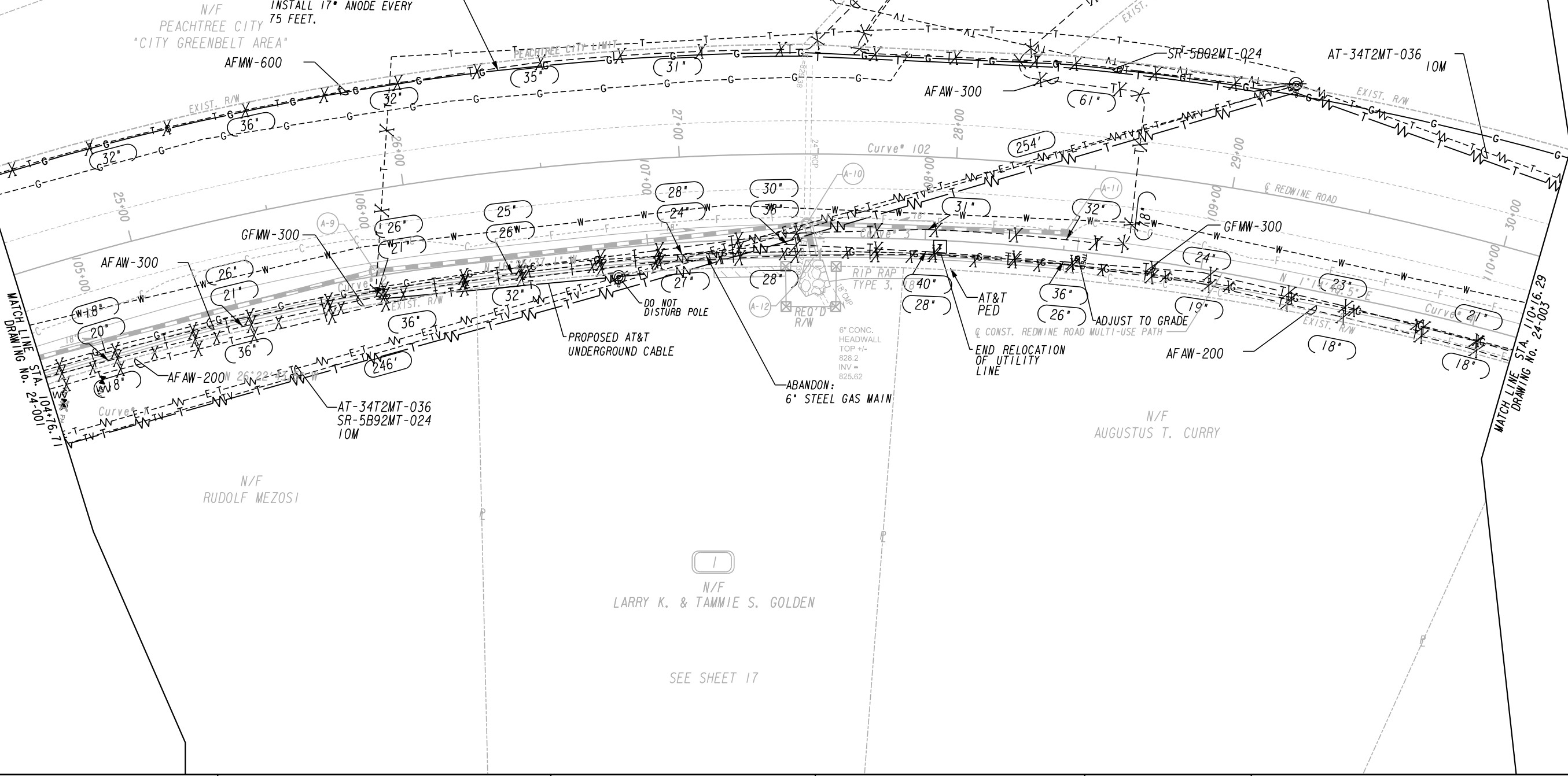
Curve* 1
PI Sta= 104+48.79
N= 1219271.0813
E= 2186049.8353
DELTA= 3°54'22.0" (RT)
D= 3°00'56.04"
T= 64.79
L= 129.53
R= 1900.00
E= 1.10

Curve* 2
PI Sta= 105+78.85
N= 1219387.6598
E= 2185992.0141
DELTA= 9°57'06.5" (RT)
D= 8°40'52.24"
T= 57.46
L= 114.64
R= 660.00
E= 2.50

Curve* 3
PI Sta= 108+04.58
N= 1219604.4398
E= 2185928.0984
DELTA= 17°40'25.5" (RT)
D= 7°09'43.10"
T= 124.37
L= 246.77
R= 800.00
E= 9.61

Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 660.00
E= 1.97

PROPOSED:
1945'X6" STEEL GAS MAIN
WT:0.188/GRADE:X-52
NOP: 300 PSIG
NOTE:
INSTALL 17" ANODE EVERY
75 FEET.



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

HEATH & LINEBACK ENGINEERS

SCALE IN FEET
0 20 40 60 80

REVISION DATES

NO.	DATE	DESCRIPTION

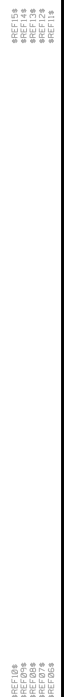
FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

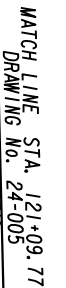
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DATE:
DATE:
DATE:

DRAWING No.
24-002

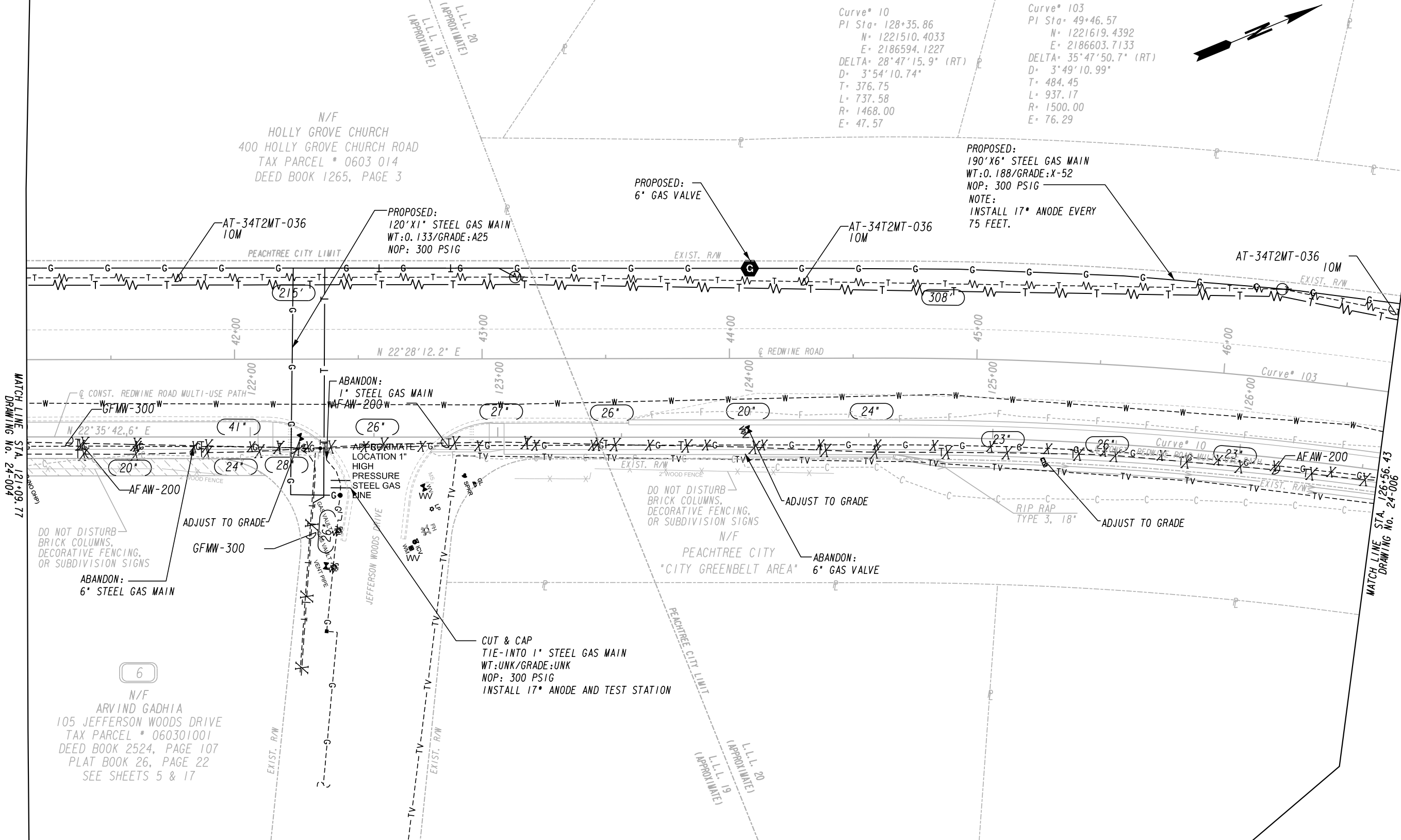
7/31/2015 GPLN



REVISION DATES			FAYETTE COUNTY		
			UTILITY PLANS		
			REDWINE ROAD & STARRS MILL SCHOOL		
			COMPLEX MULTI-USE PATH		
			CHECKED:		DATE:
			BACKCHECKED:		DATE:
			CORRECTED:		DATE:
			VERIFIED:		DATE:
			DRAWING No.		
			24-003		



24-004



PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

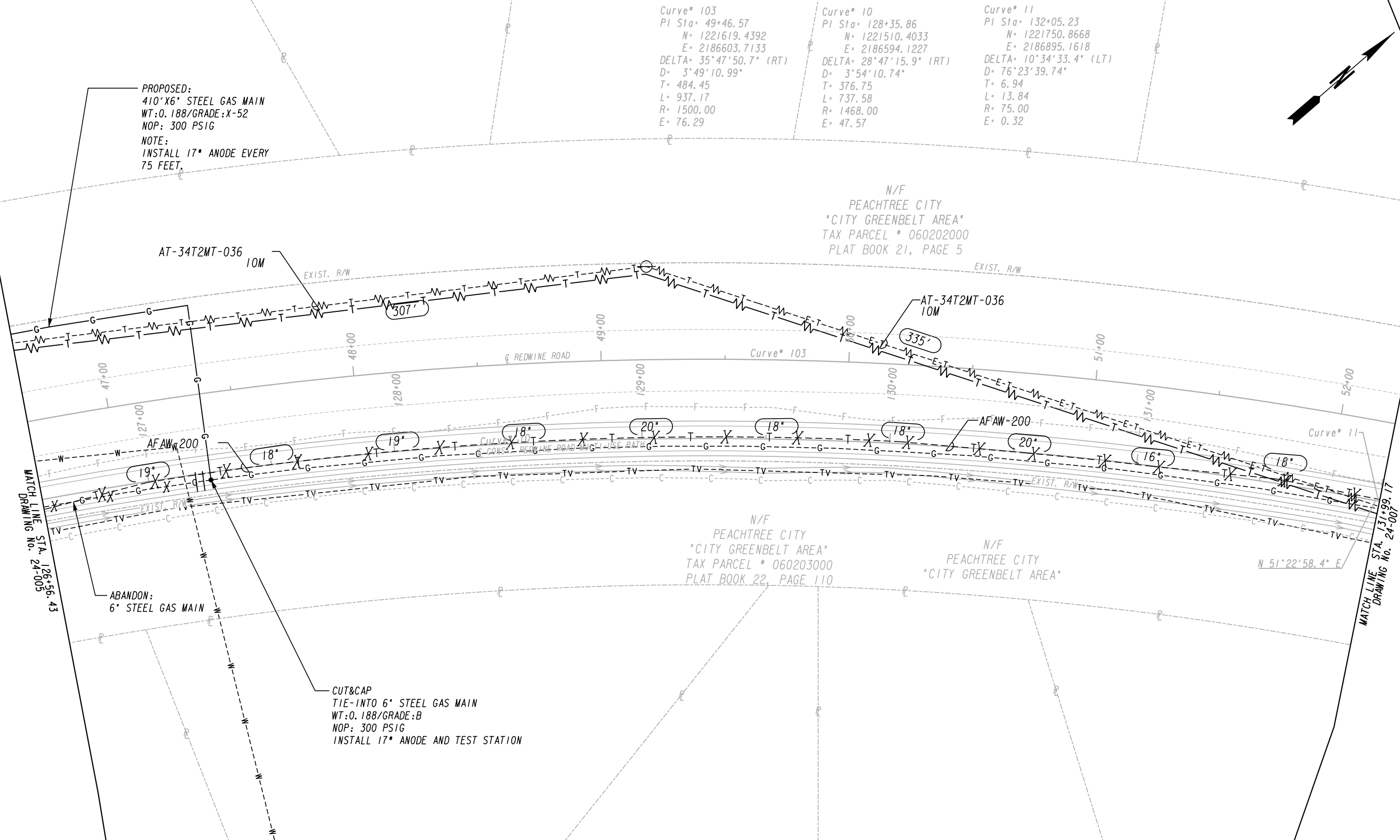
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BACKCHECKED: DATE:

CORRECTED: DATE:

VERIFIED: DATE:

DRAWING No.
24-005



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

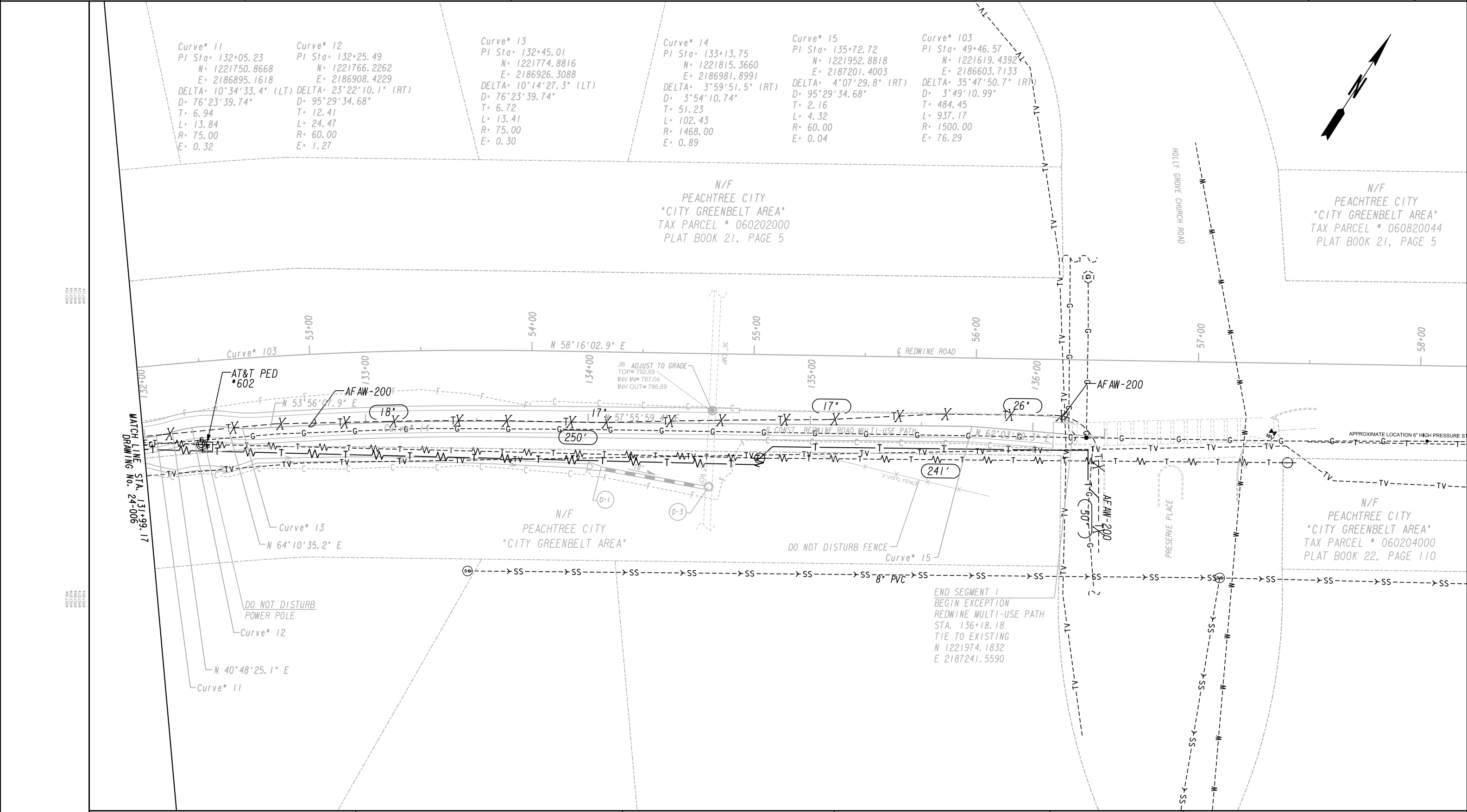
FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 24-006
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

7/31/2015

GPLN

0012624-24-006.dgn
0012624-24-006.dgn
0012624-24-006.dgn
0012624-24-006.dgn



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES

NO.	DATE	DESCRIPTION

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:

DRAWING No.
24-007

BACKCHECKED: DATE:

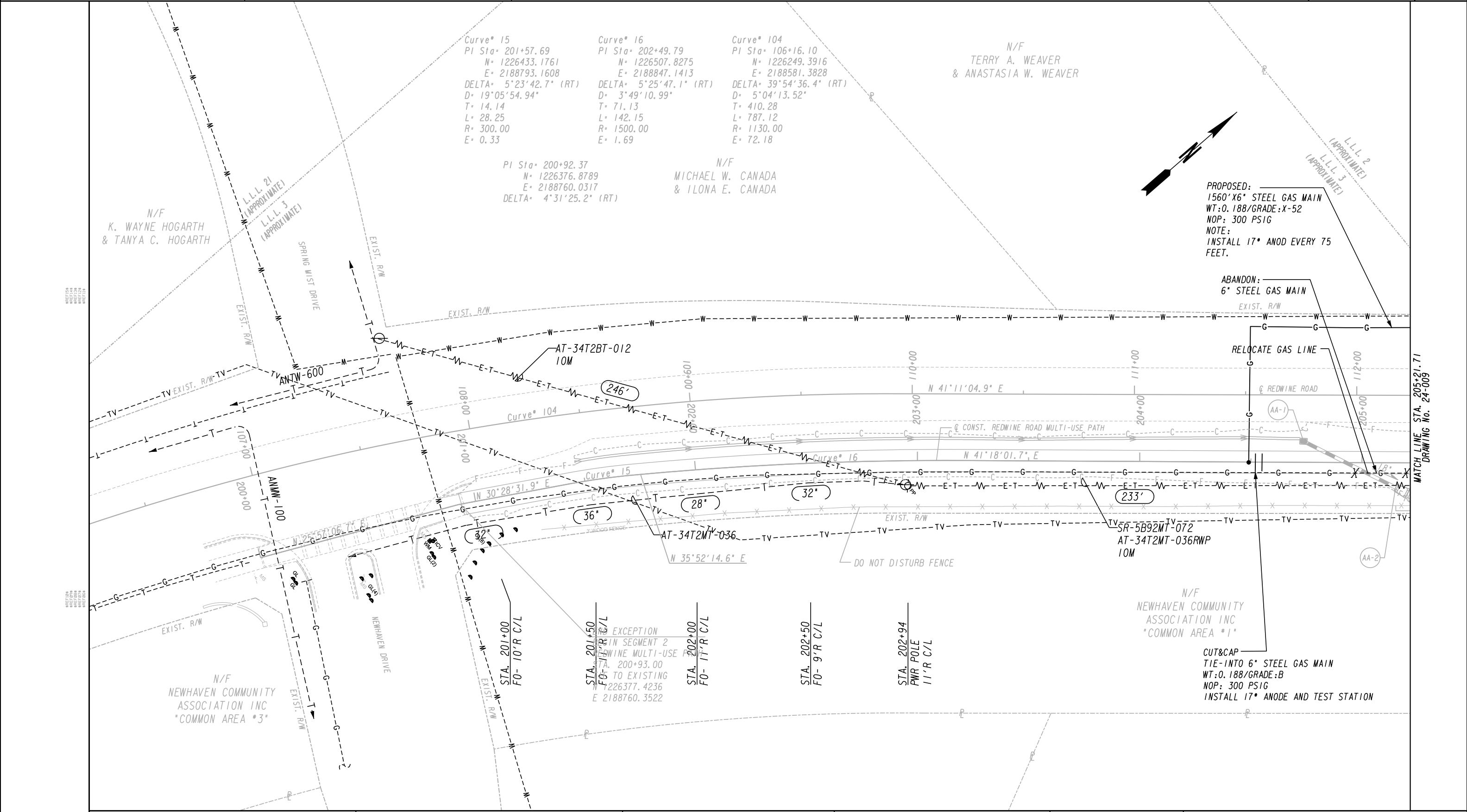
CORRECTED: DATE:

VERIFIED: DATE:

7/31/2015

GPLN

INSET 10A
INSET 10B
INSET 10C
INSET 10D
INSET 10E
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INSET 10G
INSET 10H
INSET 10I
INSET 10J
INSET 10K
INSET 10L
INSET 10M
INSET 10N
INSET 10O
INSET 10P
INSET 10Q
INSET 10R
INSET 10S
INSET 10T
INSET 10U
INSET 10V
INSET 10W
INSET 10X
INSET 10Y
INSET 10Z



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

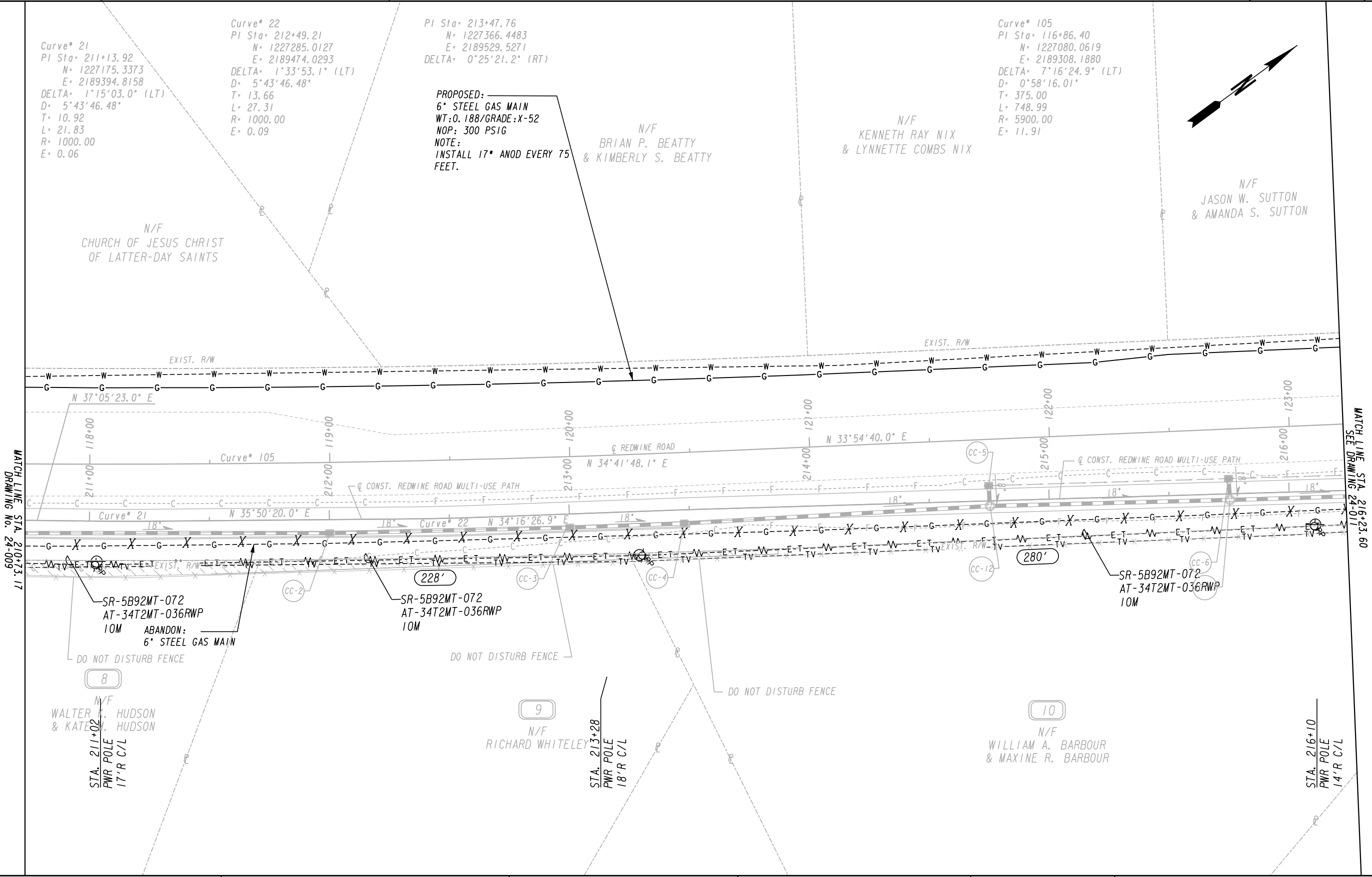
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REVISION DATES	

FAYETTE COUNTY UTILITY PLANS REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH			
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BACKCHECKED:	DATE:	24-008	
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VERIFIED:	DATE:		



24-009



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

NO.	DATE	DESCRIPTION

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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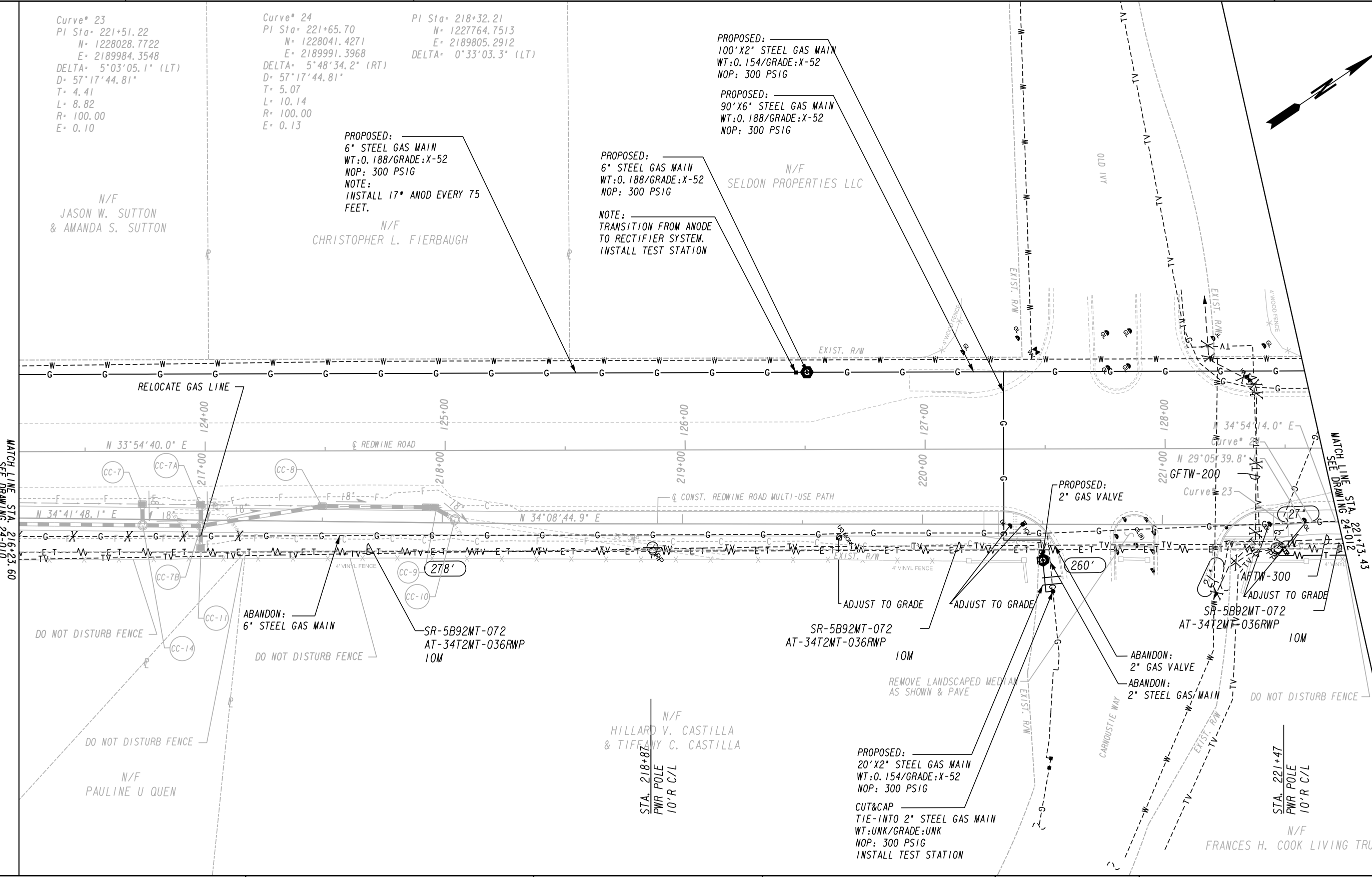
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DRAWING No.
24-010

7/31/2015

GPLN

INSTR 009
INSTR 008
INSTR 007
INSTR 006
INSTR 005
INSTR 004
INSTR 003
INSTR 002
INSTR 001



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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-C-F-

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES			

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DATE:

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

DRAWING No.
24-011

Curve* 25
PI Sta* 223+15.83
N* 1228164.5545
E* 2190077.3040
DELTA* 1°24'16.4" (LT)
D* 5°43'46.48"
T* 12.26
L* 24.51
R* 1000.00
E* 0.08

Curve* 26
PI Sta* 224+08.99
N* 1228242.2471
E* 2190128.7264
DELTA* 7°16'36.9" (LT)
D* 57°17'44.81"
T* 6.36
L* 12.70
R* 100.00
E* 0.20

Curve* 27
PI Sta* 224+71.22
N* 1228298.0846
E* 2190156.2289
DELTA* 7°28'23.4" (RT)
D* 57°17'44.81"
T* 6.53
L* 13.04
R* 100.00
E* 0.21

Curve* 28
PI Sta* 226+63.90
N* 1228458.4126
E* 2190263.1366
DELTA* 2°37'15.5" (RT)
D* 11°27'32.96"
T* 11.44
L* 22.87
R* 500.00
E* 0.13

Curve* 29
PI Sta* 227+12.92
N* 1228497.9137
E* 2190292.1705
DELTA* 4°09'03.9" (LT)
D* 11°27'32.96"
T* 18.12
L* 36.23
R* 500.00
E* 0.33

N/F
MARCY M. EISENBURG
& CLAUDIA B. EISENBURG

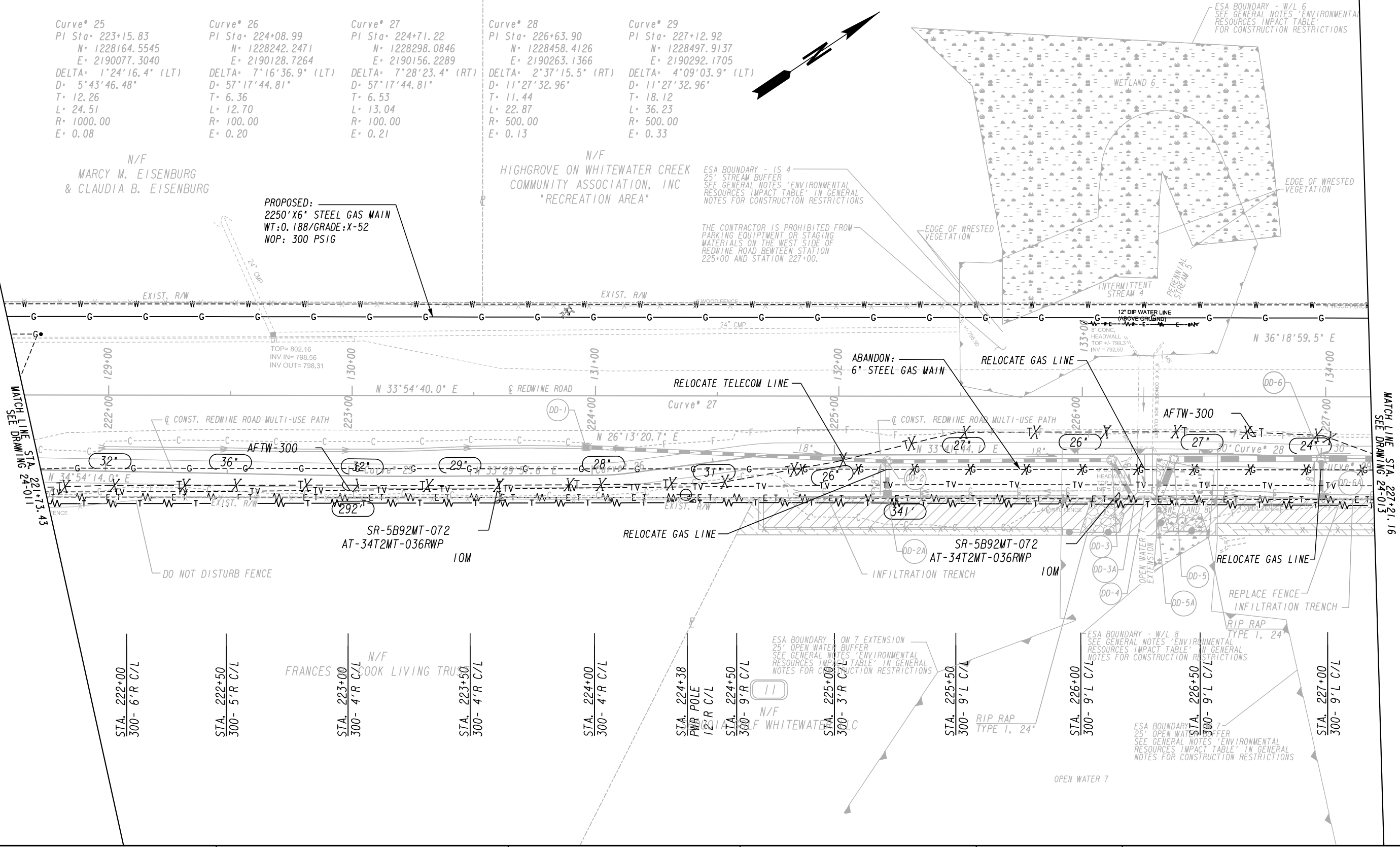
N/F
HIGHGROVE ON WHITEWATER CREEK
COMMUNITY ASSOCIATION, INC
"RECREATION AREA"

PROPOSED:
2250'X6" STEEL GAS MAIN
WT:0.188/GRADE:X-52
NOP: 300 PSIG

ESA BOUNDARY - IS 4
25' STREAM BUFFER
SEE GENERAL NOTES 'ENVIRONMENTAL
RESOURCES IMPACT TABLE' IN GENERAL
NOTES FOR CONSTRUCTION RESTRICTIONS

THE CONTRACTOR IS PROHIBITED FROM
PARKING EQUIPMENT OR STAGING
MATERIALS ON THE WEST SIDE OF
REDWINE ROAD BETWEEN STATION
225+00 AND STATION 227+00.

ESA BOUNDARY - W/L 6
SEE GENERAL NOTES 'ENVIRONMENTAL
RESOURCES IMPACT TABLE' IN GENERAL
NOTES FOR CONSTRUCTION RESTRICTIONS



MATCH LINE STA. 221+73.43
SEE DRAWING 24-011

MATCH LINE STA. 227+21.16
SEE DRAWING 24-013

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
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REVISION DATES

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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DRAWING No.
24-012

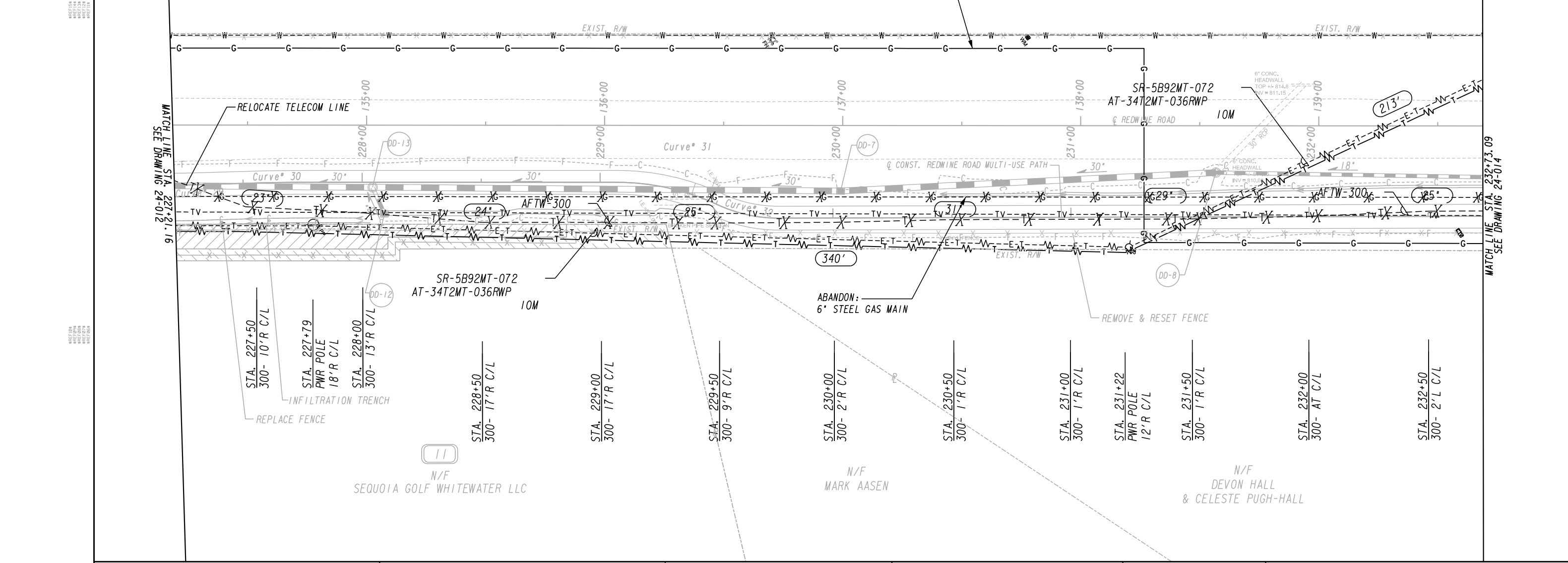
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PI Sta= 227+12.92	PI Sta= 227+65.22	PI Sta= 229+29.03	PI Sta= 229+64.25
N= 1228497.9137	N= 1228542.1997	N= 1228678.1823	N= 1228696.8555
E= 2190292.1705	E= 2190320.0217	E= 2190411.3626	E= 2190442.0286
DELTA= 4°09'03.9" (LT)	DELTA= 1°43'27.2" (RT)	DELTA= 24°46'19.6" (RT)	DELTA= 24°56'58.5" (LT)
D= 11°27'32.96"	D= 5°43'46.48"	D= 57°17'44.81"	D= 95°29'34.68"
T= 18.12	T= 15.05	T= 21.96	T= 13.27
L= 36.23	L= 30.09	L= 43.24	L= 26.13
R= 500.00	R= 1000.00	R= 100.00	R= 60.00
E= 0.33	E= 0.11	E= 2.38	E= 1.45

N/F
HIGHGROVE ON WHITEWATER CREEK
COMMUNITY ASSOCIATION, INC
"RECREATION AREA"

PROPOSED:
65'X6" STEEL GAS MAIN
WT:0.188/GRADE:X-52
NOP: 300 PSIG

MATCH LINE STA. 227+21.16
SEE DRAWING 24-012

MATCH LINE STA. 232+73.09
SEE DRAWING 24-014



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

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REVISION DATES

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

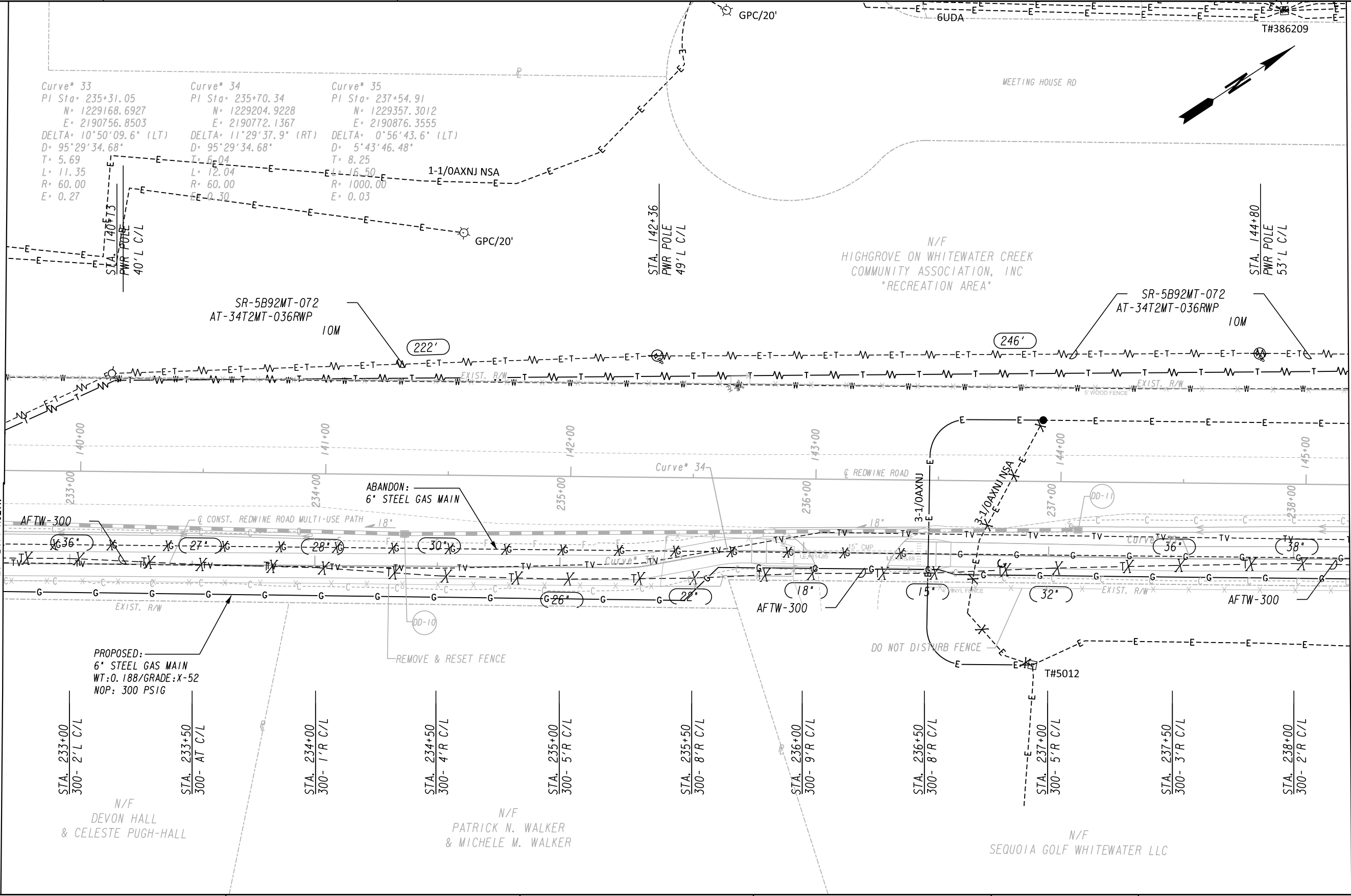
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24-013

7/31/2015

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INSET 10I
INSET 10J
INSET 10K
INSET 10L
INSET 10M
INSET 10N
INSET 10O
INSET 10P
INSET 10Q
INSET 10R
INSET 10S
INSET 10T
INSET 10U
INSET 10V
INSET 10W
INSET 10X
INSET 10Y
INSET 10Z



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
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LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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HEATH & LINEBACK ENGINEERS
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
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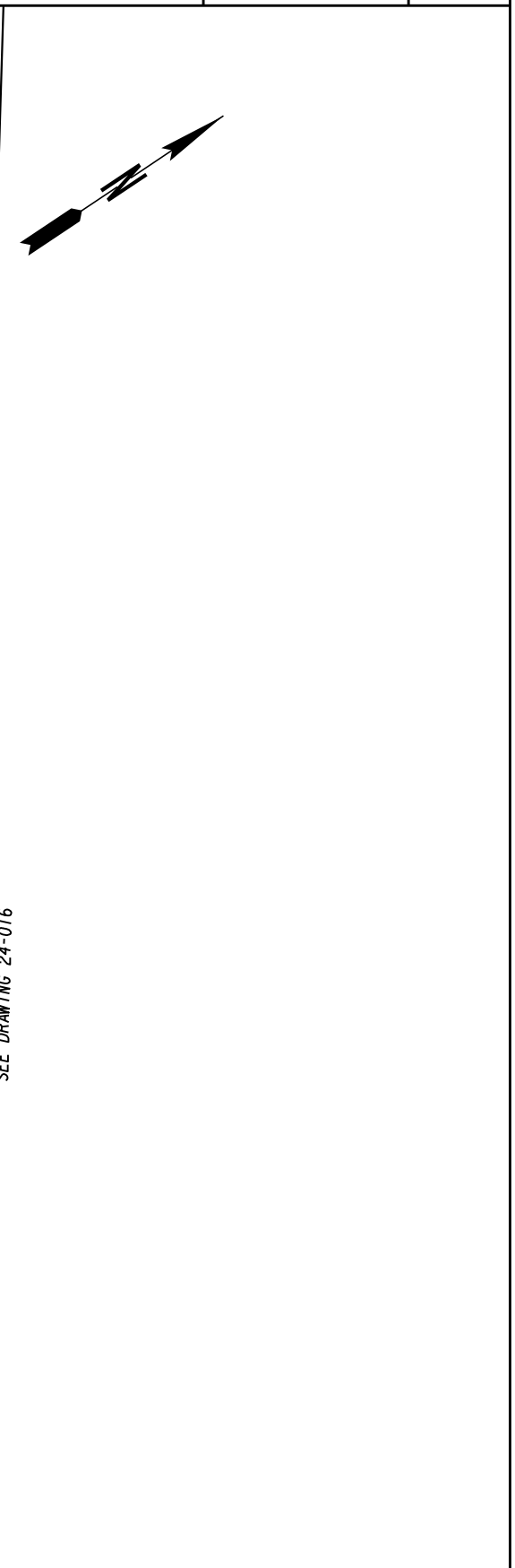
REVISION DATES

FAYETTE COUNTY
UTILITY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

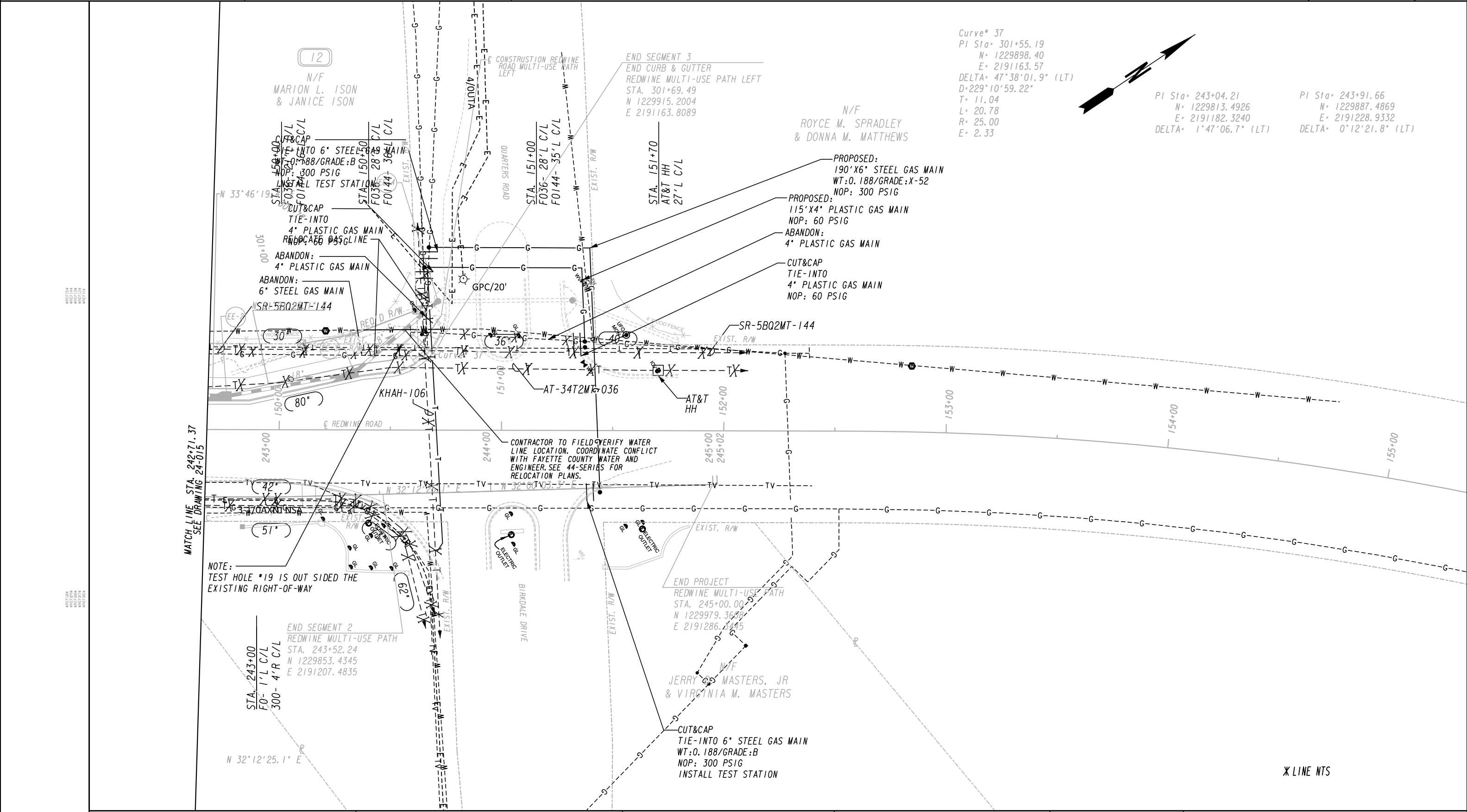
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DRAWING No.
24-014

7/31/2015 GPLN



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BACKCHECKED:	DATE:	
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PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
UTILTY PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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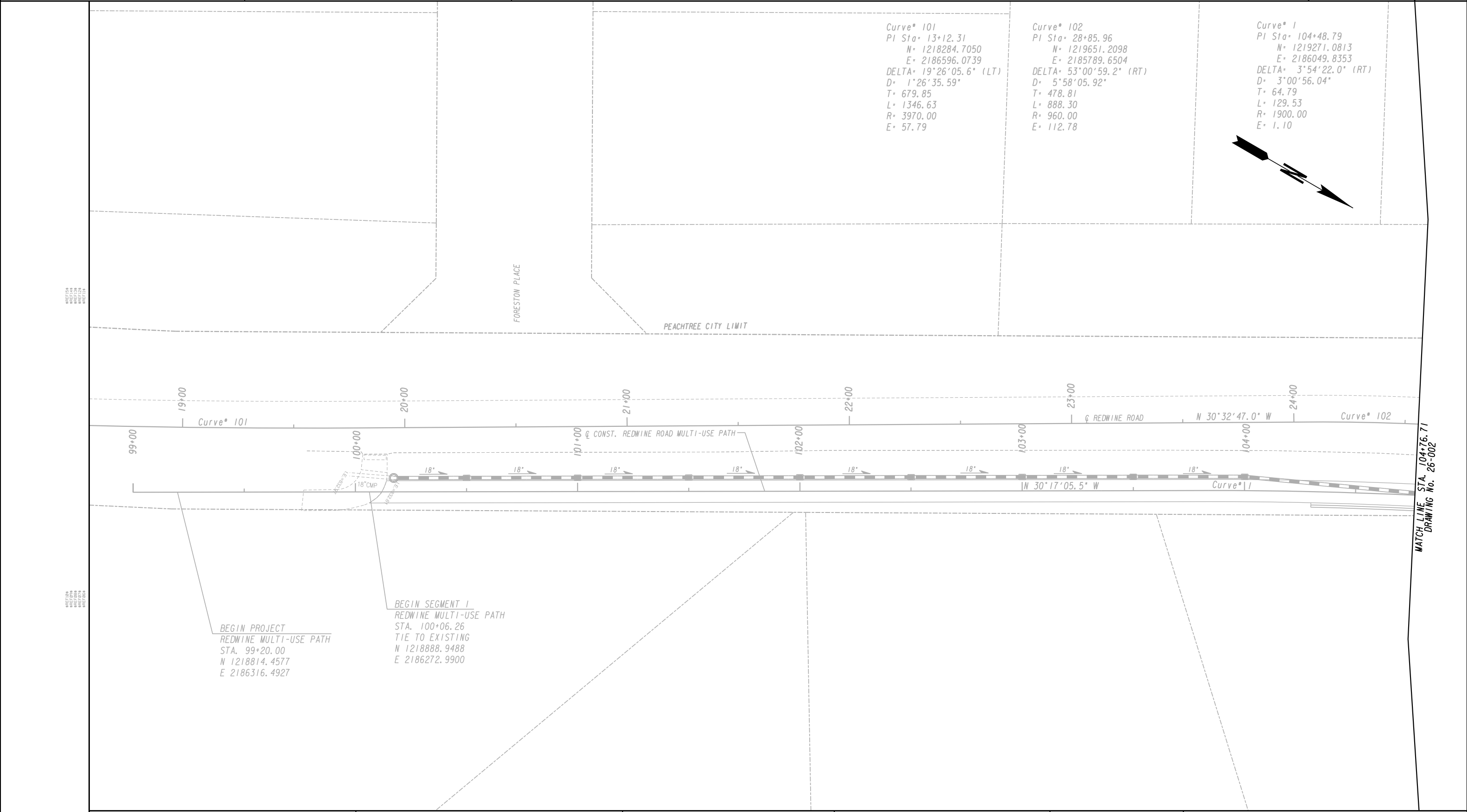
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DRAWING No.
24-016

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

7/31/2015 GPLN



PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

NO.	DATE	DESCRIPTION

FAYETTE COUNTY

SIGNING AND MARKING PLANS

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

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BACKCHECKED: DATE: 26-001

CORRECTED: DATE:

VERIFIED: DATE:



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
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REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

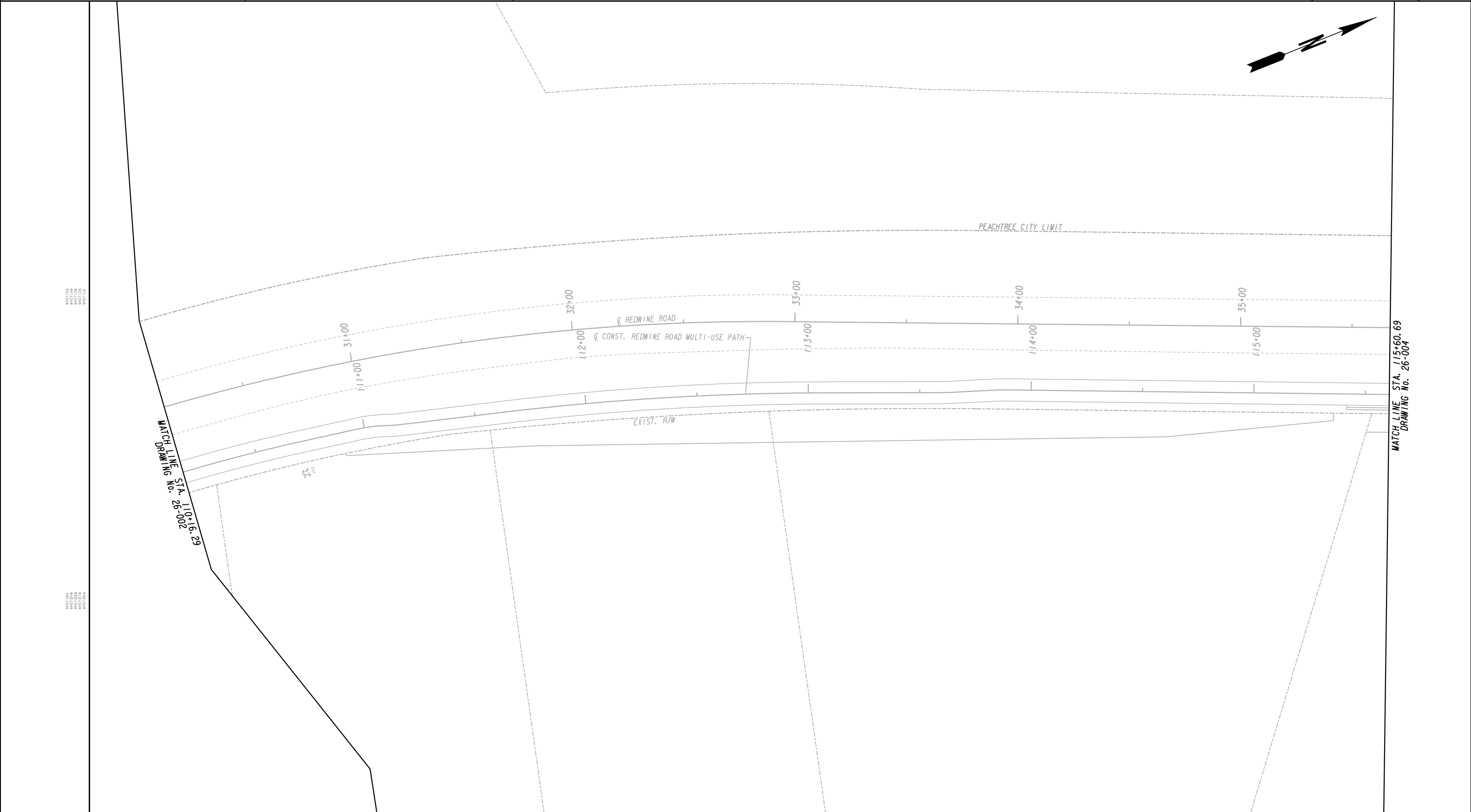
Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
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REVISION DATES		

FAYETTE COUNTY
SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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7/31/2015

GPLN

HEATH & LINEBACK ENGINEERS
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5395
(770)424-1668

PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

HEATH & LINEBACK ENGINEERS
INCORPORATED

2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5395
(770)424-1668

SCALE IN FEET

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REVISION DATES

FAYETTE COUNTY

SIGNING AND MARKING PLANS

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

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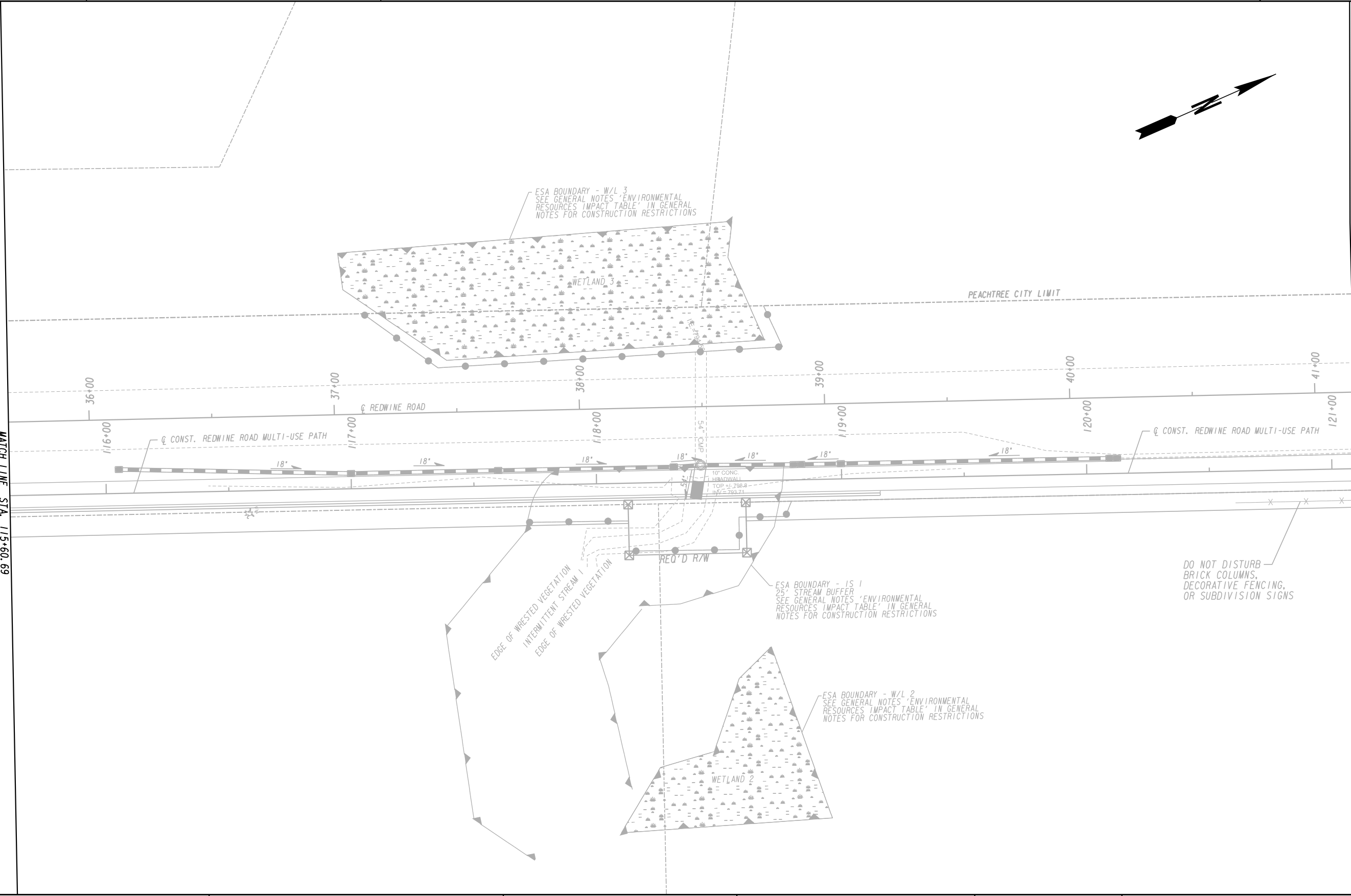
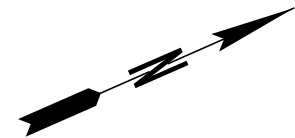
DATE:

DRAWING No.

26-003

MATCH LINE STA. 115+60.69
DRAWING No. 26-003

MATCH LINE STA. 121+09.77
DRAWING No. 26-005



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
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REVISION DATES

FAYETTE COUNTY
SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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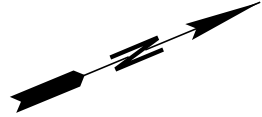
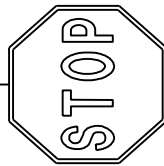
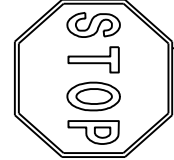
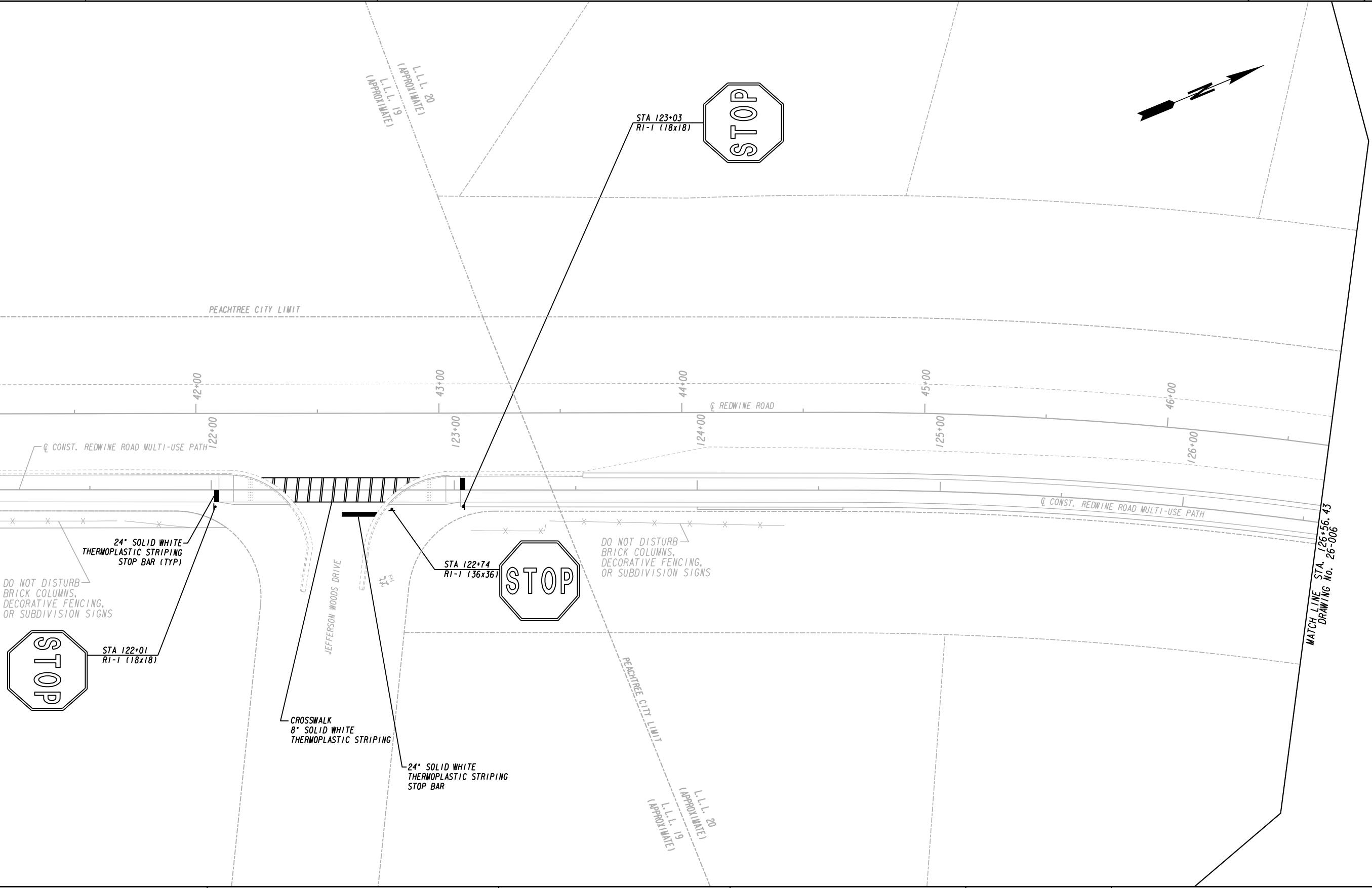
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DRAWING No.
26-004

7/31/2015 GPLN

MATCH LINE STA. 121+09.77
DRAWING No. 26-004

MATCH LINE STA. 126+56.43
DRAWING No. 26-005



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET


REVISION DATES

FAYETTE COUNTY
SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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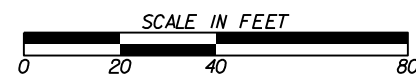


MATCH LINE STA. 131+99.17
DRAWING No. 26-007

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HL & **Heath & Lineback Engineers**
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES

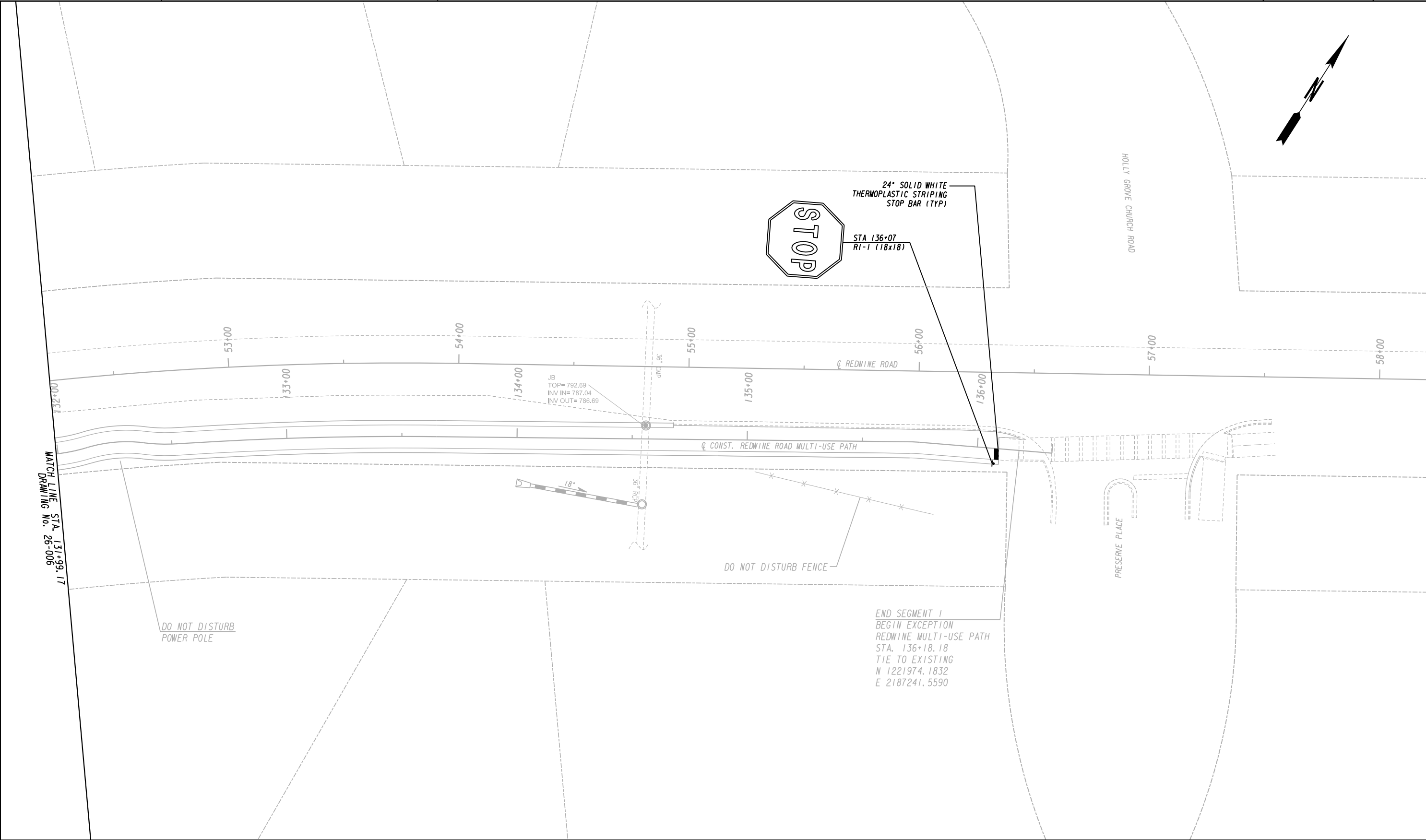
FAYETTE COUNTY

SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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DRAWING No.

26-006



7/31/2015

GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

0204080

SCALE IN FEET

REVISION DATES		

FAYETTE COUNTY

SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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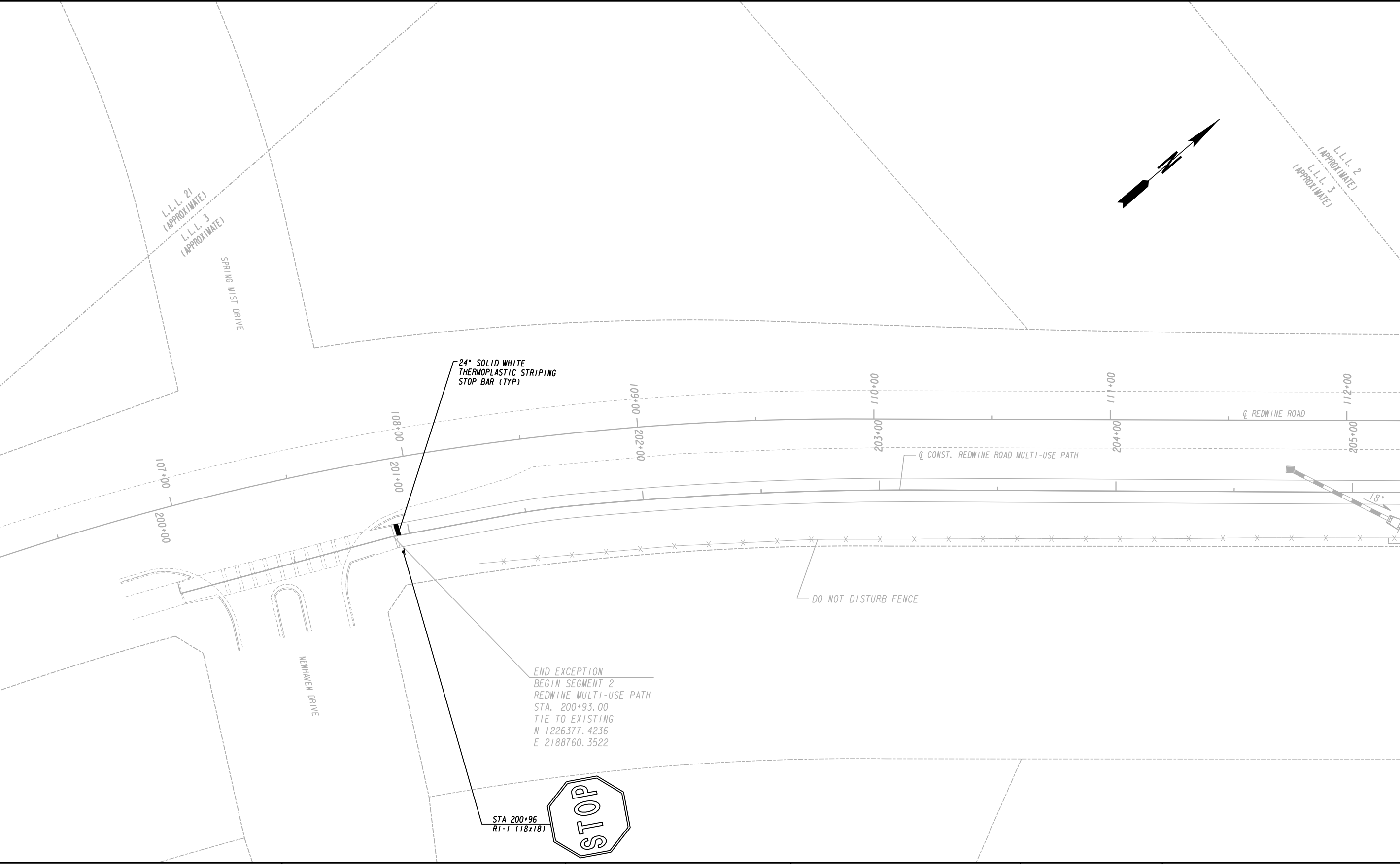
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DRAWING No.

26-007



PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

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END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

FAYETTE COUNTY

SIGNING AND MARKING PLANS

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

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DRAWING No.

26-008



7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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HEATH & LINEBACK ENGINEERS
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

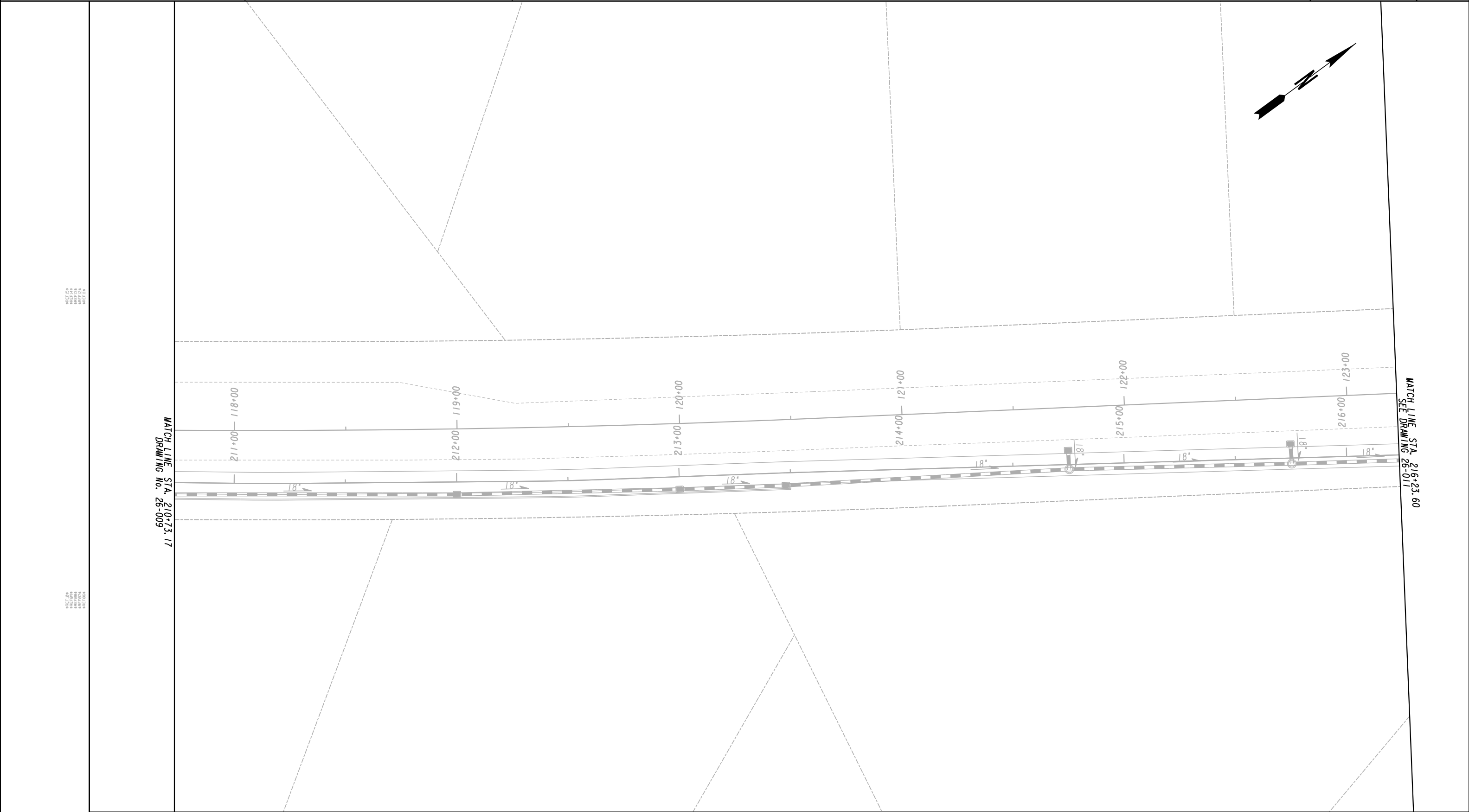
SCALE IN FEET

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REVISION DATES

FAYETTE COUNTY
SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 26-009
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



7/31/2015

GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
GEORGIA

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

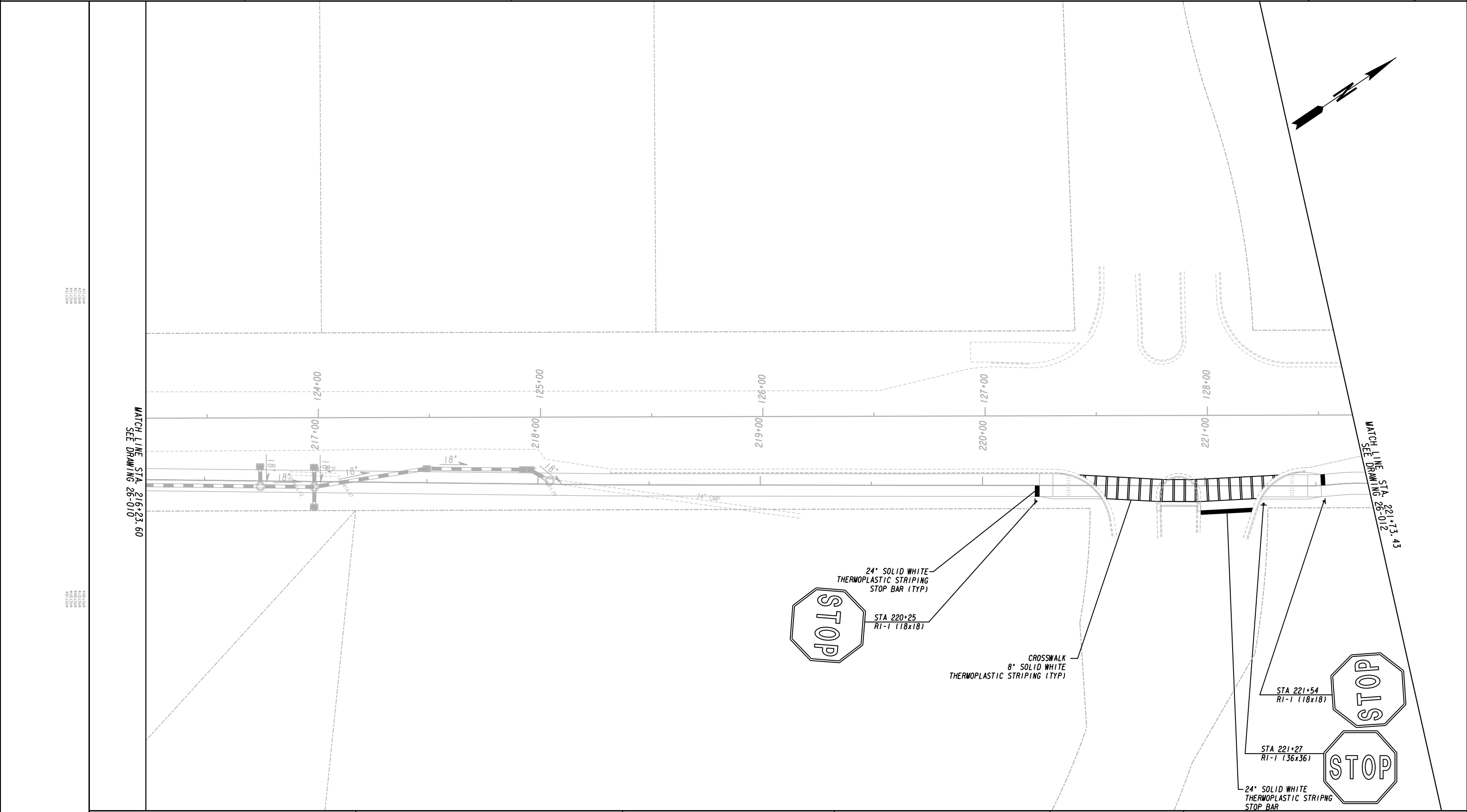
SCALE IN FEET

REVISION DATES

FAYETTE COUNTY

SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 26-010
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

20

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REVISION DATES

FAYETTE COUNTY

SIGNING AND MARKING PLANS

REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:

BACKCHECKED: DATE:

CORRECTED: DATE:

VERIFIED: DATE:

DRAWING No.

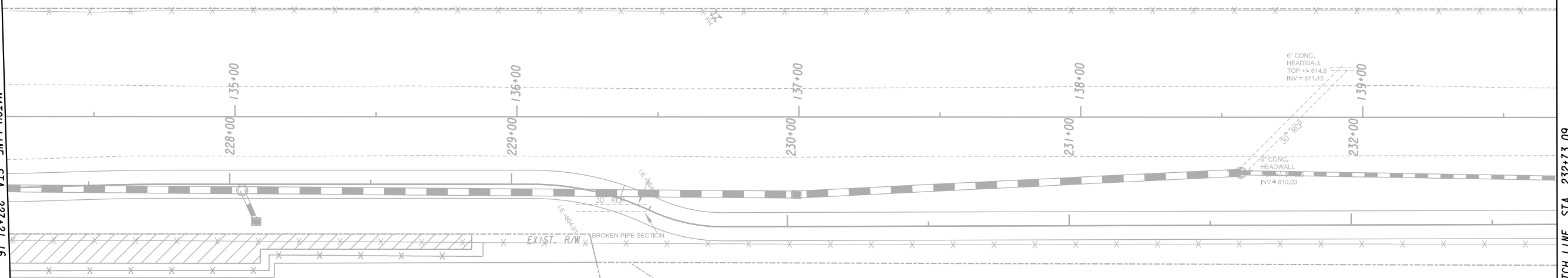
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REVISION DATES			FAYETTE COUNTY		
			SIGNING AND MARKING PLANS		
			REDWINE ROAD & STARRS MILL SCHOOL		
			COMPLEX MULTI-USE PATH		
			CHECKED:	DATE:	DRAWING No. 26-012
			BACKCHECKED:	DATE:	
			CORRECTED:	DATE:	
			VERIFIED:	DATE:	


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\$REF08\$
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\$REF06\$

MATCH LINE STA. 227+21.16
SEE DRAWING 26-012

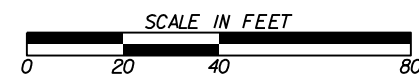


MAUCHLINE STA. 252+15.03
SEE DRAWING 26-014

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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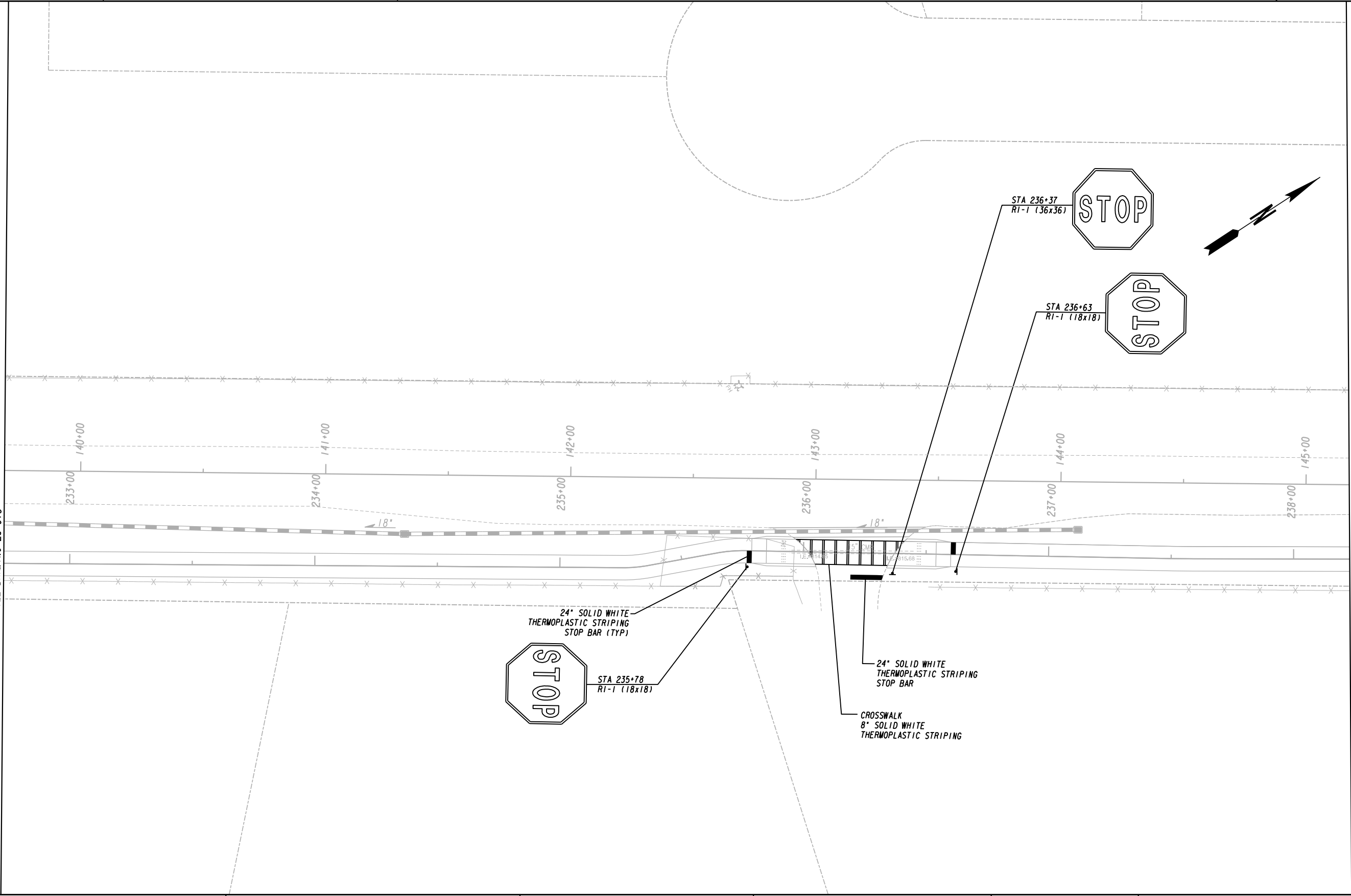
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LIMIT OF ACCESS	—
REQ'D R/W & LIMIT OF ACCESS	—
ORANGE BARRIER FENCE	—
ESA - ENV. SENSITIVE AREA	—
(SEE ERIT TABLE)	



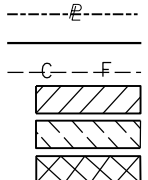
REVISION DATES			FAYETTE COUNTY		
			SIGNING AND MARKING PLANS		
			REDWINE ROAD & STARRS MILL SCHOOL		
			COMPLEX MULTI-USE PATH		
			CHECKED:		DATE:
			BACKCHECKED:		DATE:
			CORRECTED:		DATE:
			VERIFIED:		DATE:
			DRAWING No.		
			26-013		

MATCH LINE STA. 232+73.09
SEE DRAWING 26-013

MATCH LINE STA. 238+22.83
SEE DRAWING 26-015



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



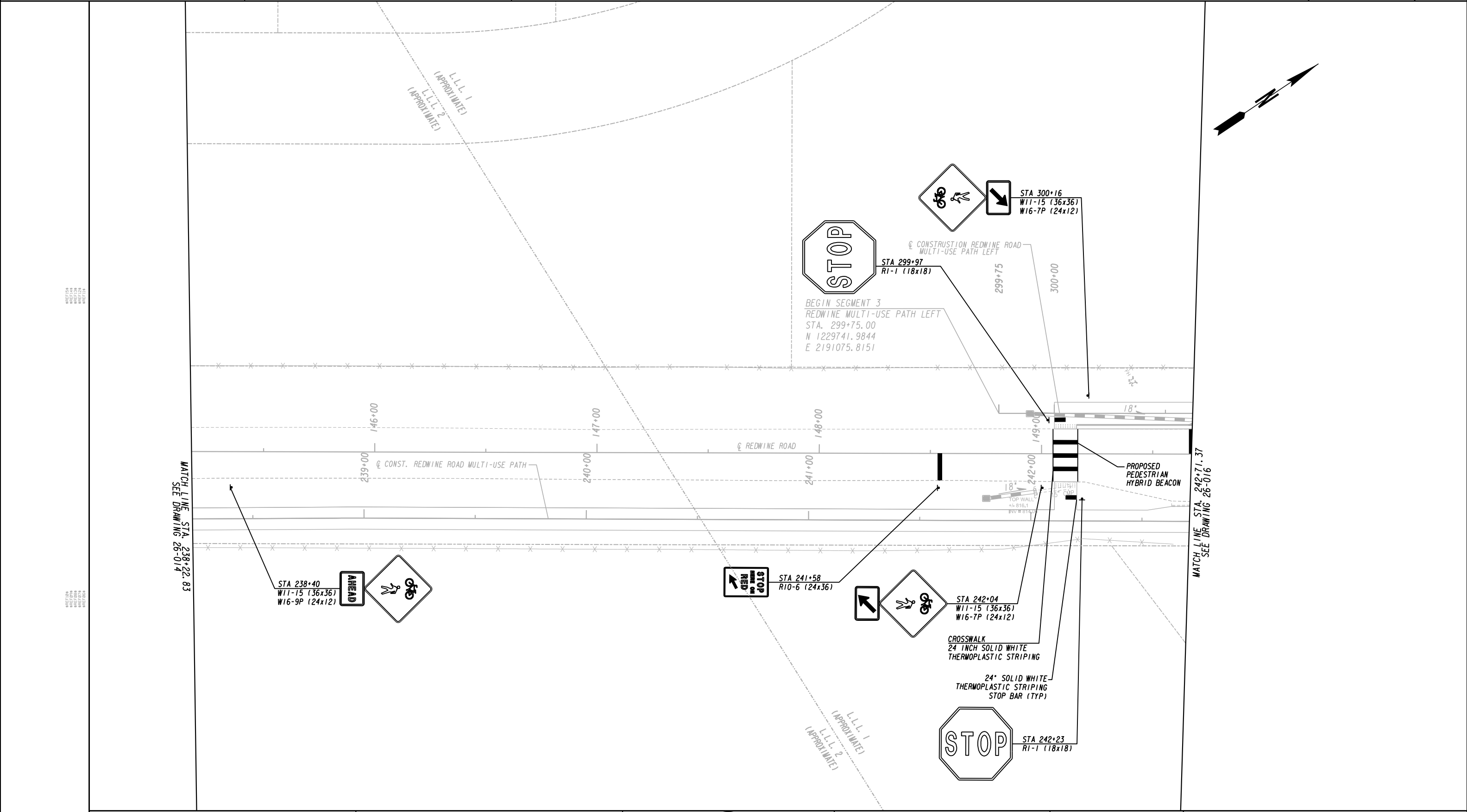
FAYETTE COUNTY
INCORPORATED



Heath & Lineback Engineers
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES			FAYETTE COUNTY			
			SIGNING AND MARKING PLANS			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
CHECKED:	DATE:		BACKCHECKED:	DATE:		DRAWING No.
CORRECTED:	DATE:		VERIFIED:	DATE:		26-014



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
GEORGIA

HL

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

REVISION DATES	

FAYETTE COUNTY
SIGNING AND MARKING PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:

DATE:

BACKCHECKED:

DATE:

CORRECTED:







DATE:

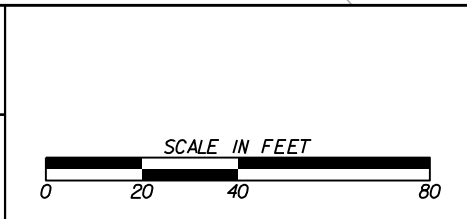
VERIFIED:

DATE:

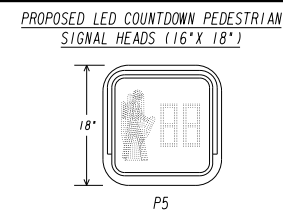
DRAWING No.
26-015



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LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	



REVISION DATES			FAYETTE COUNTY			
			SIGNING AND MARKING PLANS			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	
						DRAWING No.
						26-016

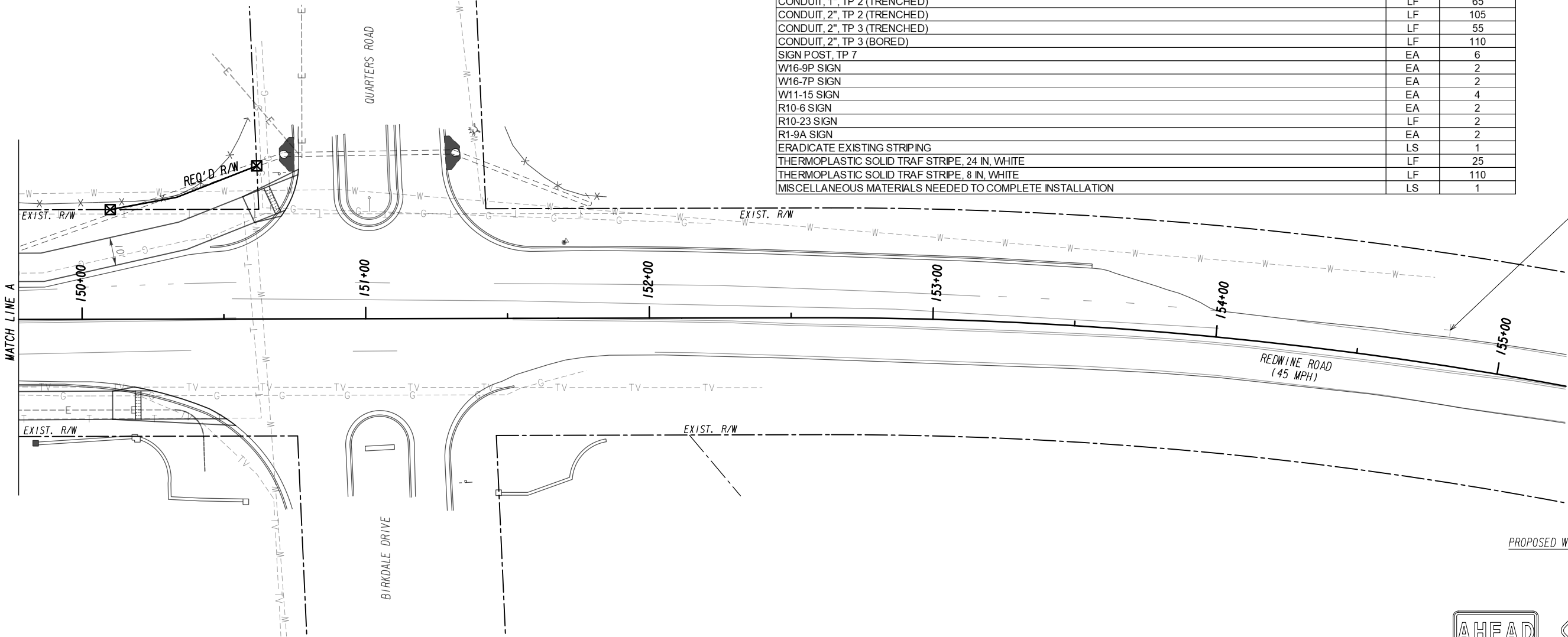
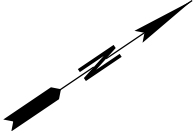


INSTALL (BY COWETA-FAYETTE EMC):
-3' TIMBER PEDESTAL
-MOUNTED POWER METER AND
LOCKING POWER DISCONNECT
-GRS RISER (2)1'



CHECKED:		DATE:		DRAWING No. 27-00
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

LIST OF MATERIALS - SEE LUMP SUM PAY ITEM 647-1000 IN PAY ITEM QUANTITIES (BELOW)	UNIT	QUANTITY
CONTROLLER CABINET ASSEMBLIES	-	-
A. CONTROLLER UNIT, MODEL 2070 LX (Preferred)	EA	1
F. SWITCH PACK (Load Switch)	EA	2
G. DC ISOLATOR	EA	2
K. 2010 SIGNAL MONITOR, TYPE B (ETHERNET) (Preferred)	EA	1
332 PREFABRICATED CONTROLLER CABINET BASE	EA	1
PREFABRICATED CABINET WORK PADS	EA	2
PC642-200 (OR EQUIVALENT), SURGE PROTECTOR	EA	1
LOOP/PED LEAD-IN WIRE (SHIELDED, TWISTED/1000 FT); 3 PAIR, 18 AWG	REEL	1
SIGNAL CABLE (14 AWG); 7 CONDUCTOR, PER 1000 FT.	REEL	1
3-SECTION, 12" BEACON HEAD LED - , YELLOW HOUSING w/ BLACK FRONT, PLASTIC	EA	5
1-SECTION, 16" x 18" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, FULL HAND/MAN OVERLAP	-	-
9" HIGH, Numbers & 12" Symbols	EA	2
PEDESTRIAN PUSHBUTTONS STATIONS, w/BUTTONS and SIGNS:	-	-
9" x 15", R10-3e, (L)eft or (R)ight, Countdown	EA	2
BACK PLATE FOR ONE-WAY, 3-SECTION, 12" BEACON HEAD, ABS PLASTIC, BLACK w/ RETROREFLECTIVE STRIP	EA	5
HARDWARE FOR MAST ARM MOUNTING	EA	5
HARDWARE FOR PEDESTAL POLE, TOP POST MOUNTING, ONE-WAY BRACKET ASSEMBLY	EA	2
PEDESTAL POLE & SQUARE BASE	EA	2
PULL BOX, PB-2	EA	3
CONDUIT, 1", TP 2 (TRENCHED)	LF	65
CONDUIT, 2", TP 2 (TRENCHED)	LF	105
CONDUIT, 2", TP 3 (TRENCHED)	LF	55
CONDUIT, 2", TP 3 (BORED)	LF	110
SIGN POST, TP 7	EA	6
W16-9P SIGN	EA	2
W16-7P SIGN	EA	2
W11-15 SIGN	EA	4
R10-6 SIGN	EA	2
R10-23 SIGN	LF	2
R1-9A SIGN	EA	2
ERADICATE EXISTING STRIPING	LS	1
THERMOPLASTIC SOLID TRAF STRIPE, 24 IN. WHITE	LF	25
THERMOPLASTIC SOLID TRAF STRIPE, 8 IN. WHITE	LF	110
MISCELLANEOUS MATERIALS NEEDED TO COMPLETE INSTALLATION	LS	1



W16-9P
(24' x 12')



W11-15
(36' x 36')

PROPOSED WARNING SIGNS

PROPERTY AND EXISTING R/W LINE

PROPOSED VEHICULAR SIGNAL HEAD
W/ BACKPLATE

PROPOSED PEDESTRIAN SIGNAL HEAD

POWER SERVICE POINT

GEORGIA811

Utilities Protection Center, Inc

Know what's below.
Call before you dig.

FAYETTE COUNTY

HEATH & LINEBACK ENGINEERS INCORPORATED

2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393

DATE SUBMITTED: 12/05/18

SCALE IN FEET

0

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40

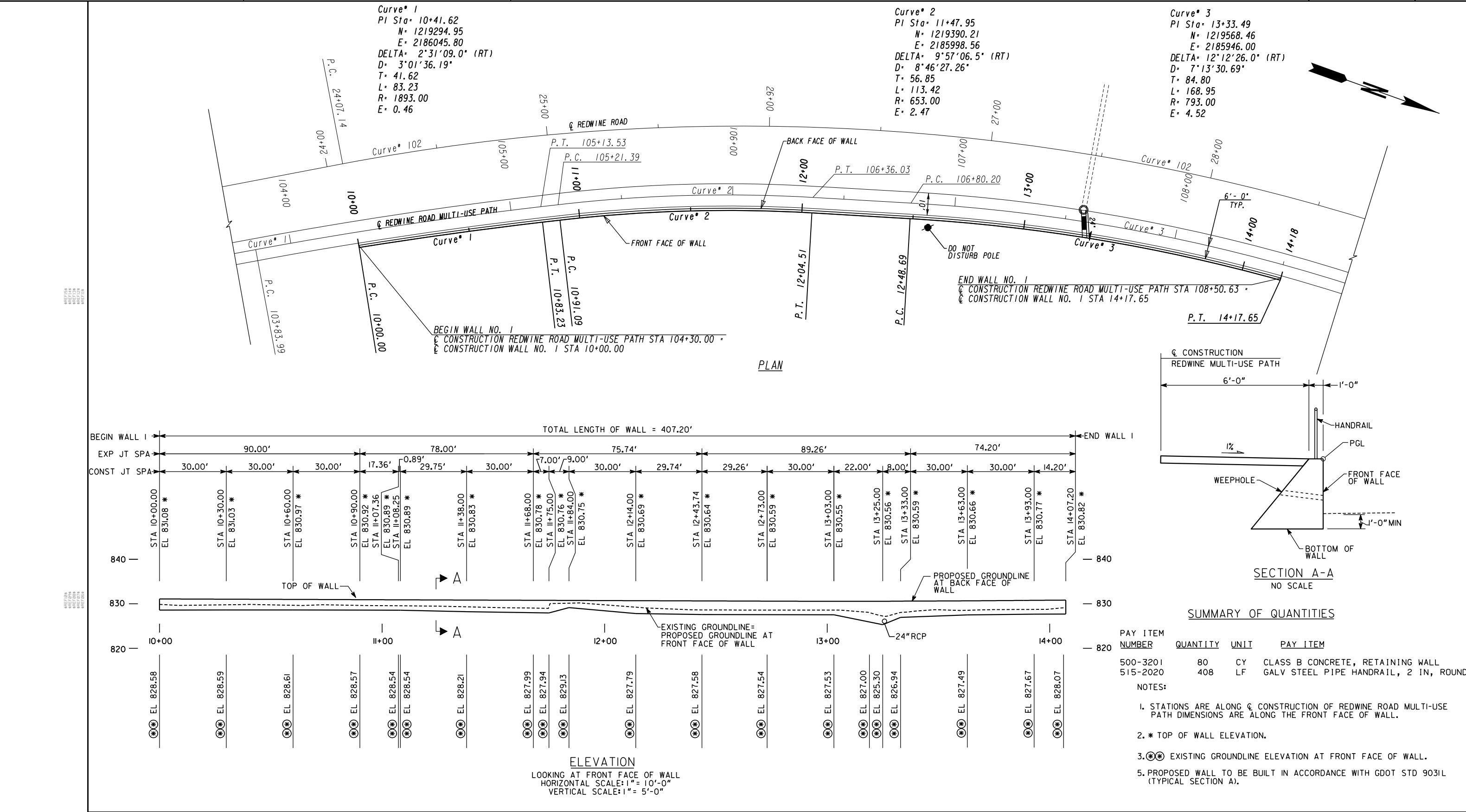
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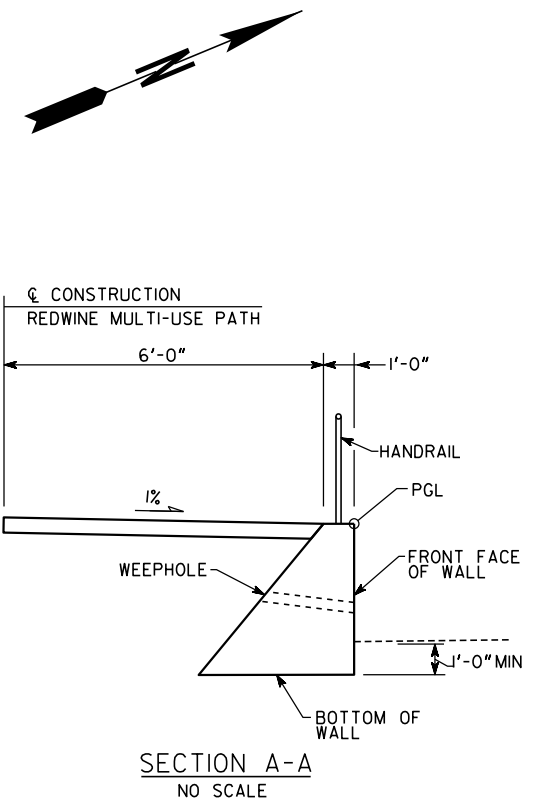
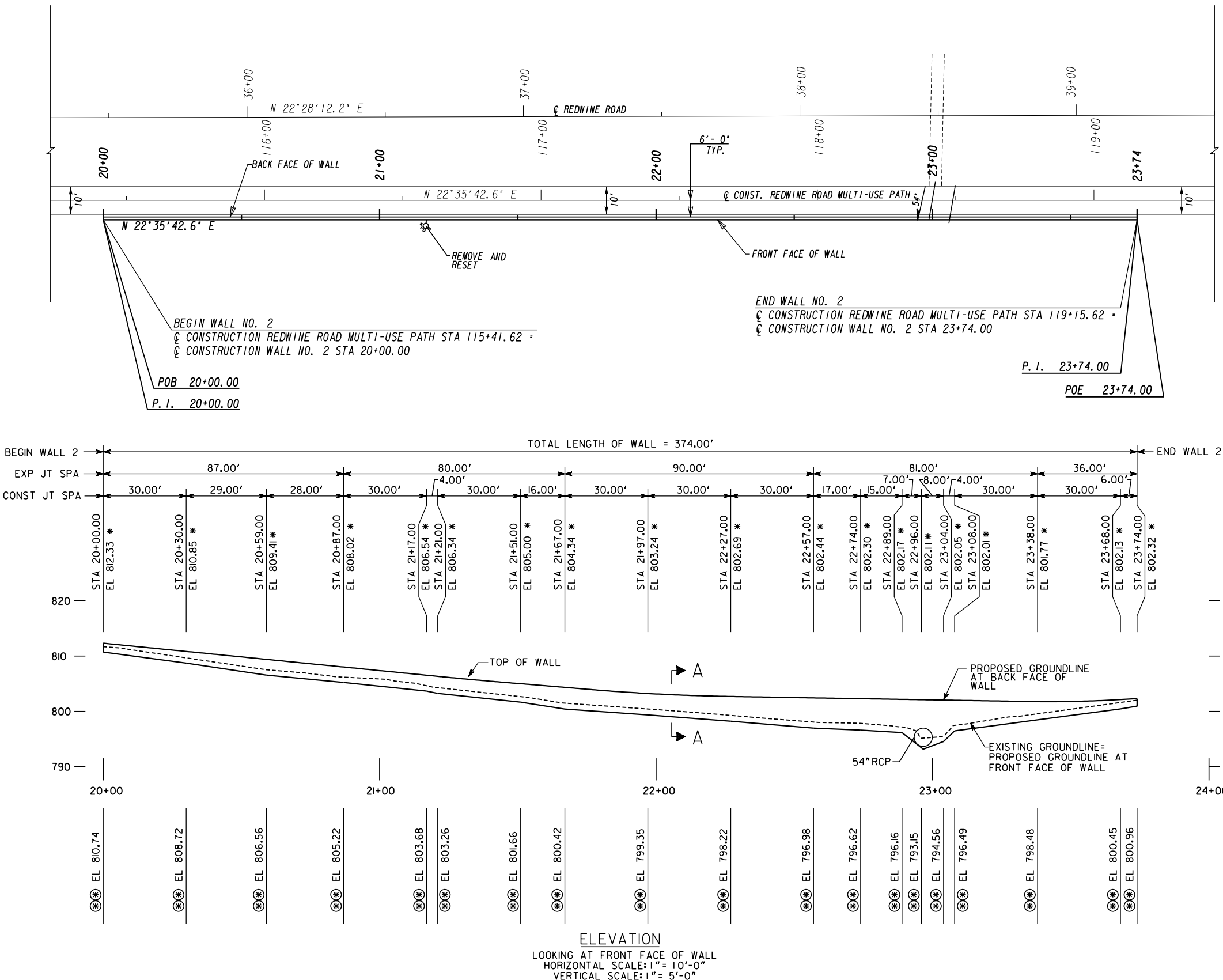
REVISION DATES

FAYETTE COUNTY
SIGNAL PLANS
REDWINE ROAD & BIRKDALE DRIVE
HAWK SIGNAL PLAN

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

27-002

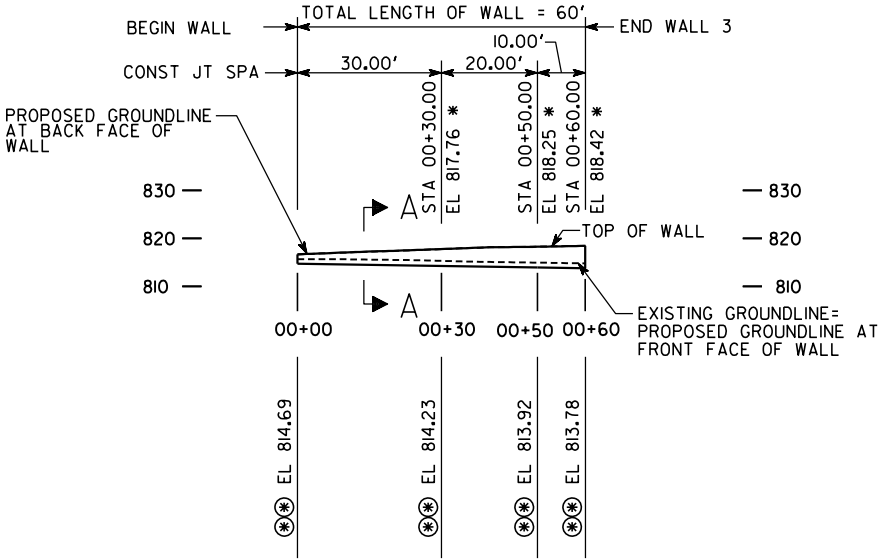
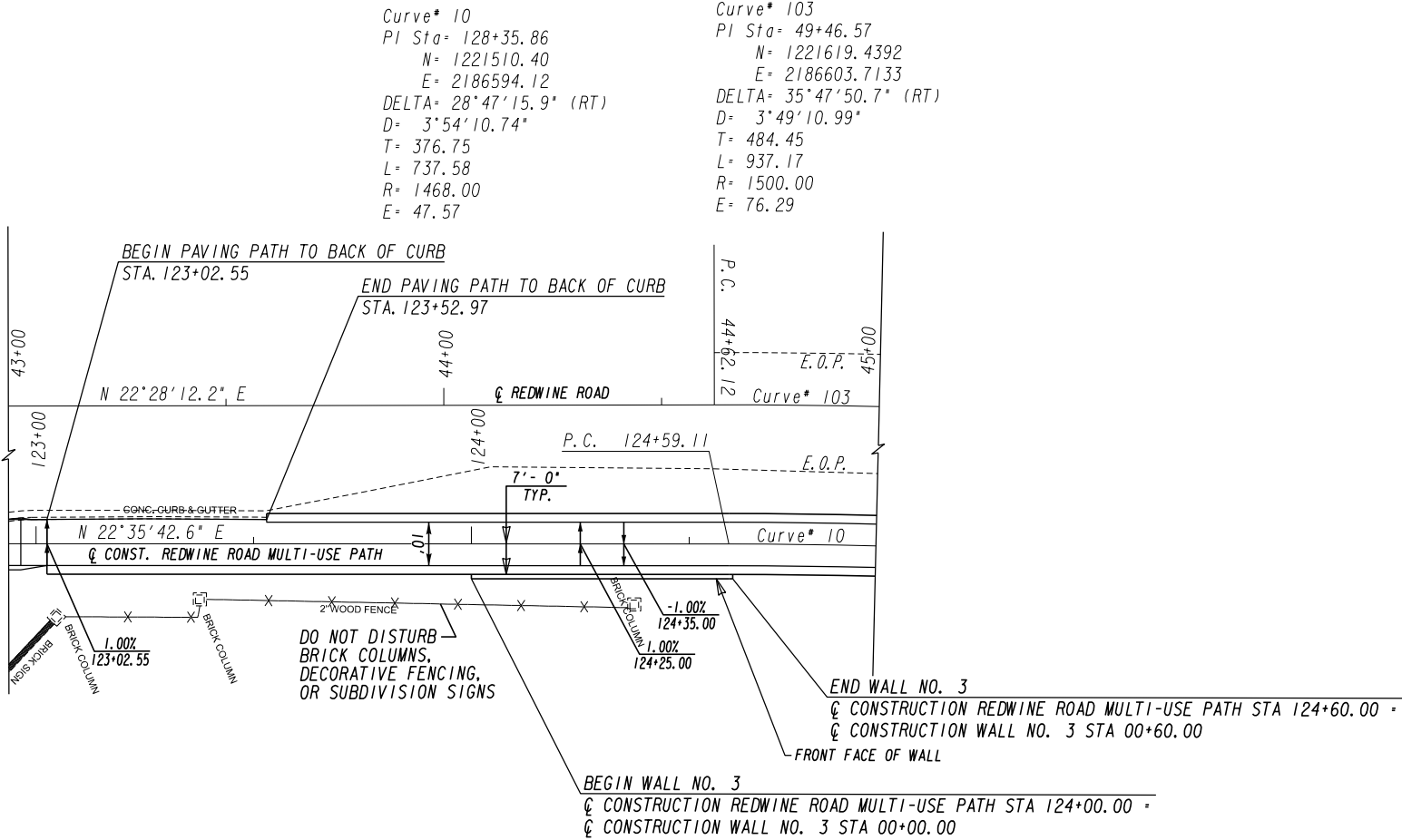




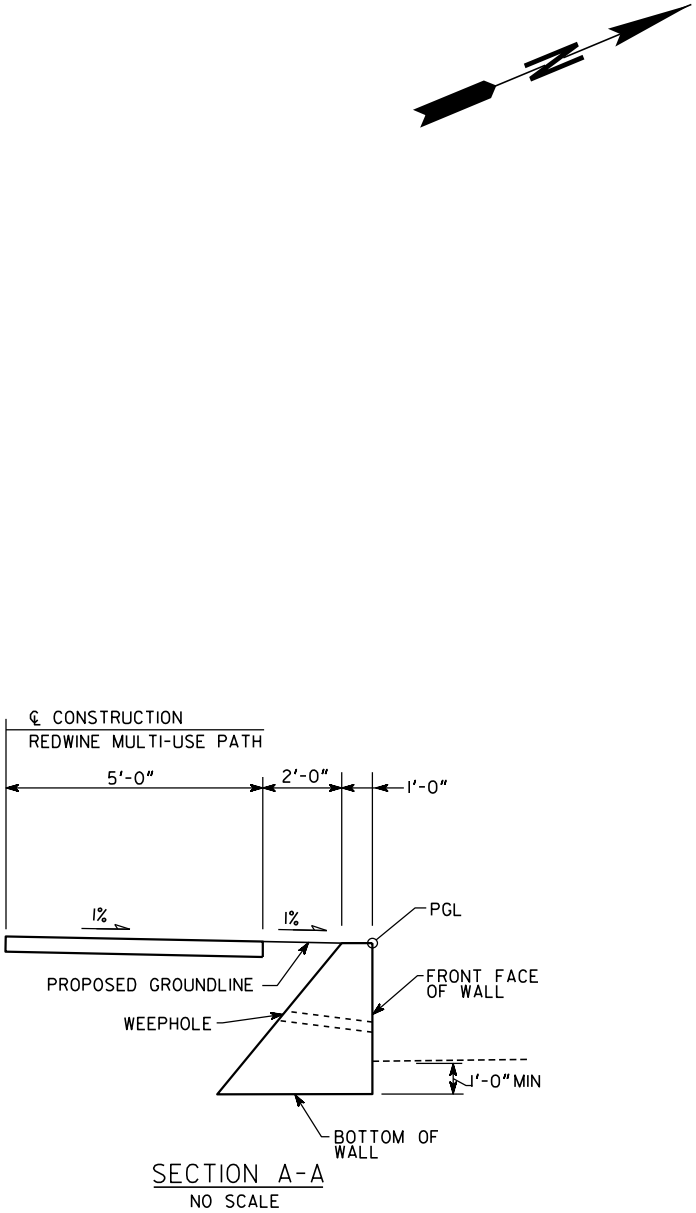
SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-3201	111	CY	CLASS B CONCRETE, RETAINING WALL
515-2020	374	LF	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND

- NOTES:
- STATIONS ARE ALONG & CONSTRUCTION OF REDWINE ROAD MULTI-USE PATH DIMENSIONS ARE ALONG THE FRONT FACE OF WALL.
 - * TOP OF WALL ELEVATION.
 - ⊗⊗⊗ EXISTING GROUNDLINE ELEVATION AT FRONT FACE OF WALL.
 - PROPOSED WALL TO BE BUILT IN ACCORDANCE WITH GDOT STD 9031L (TYPICAL SECTION A).



ELEVATION
LOOKING AT FRONT FACE OF WALL
HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-3201	14	CY	CLASS B CONCRETE, RETAINING WALL

- NOTES:
1. STATIONS ARE ALONG • CONSTRUCTION OF REDWINE ROAD MULTI-USE PATH DIMENSIONS ARE ALONG THE FRONT FACE OF WALL.
 2. * TOP OF WALL ELEVATION.
 3. ⊗ ⊗ ⊗ EXISTING GROUNDLINE ELEVATION AT FRONT FACE OF WALL.
 4. PROPOSED WALL TO BE BUILT IN ACCORDANCE WITH GDOT STD 9031L (TYPICAL SECTION A).



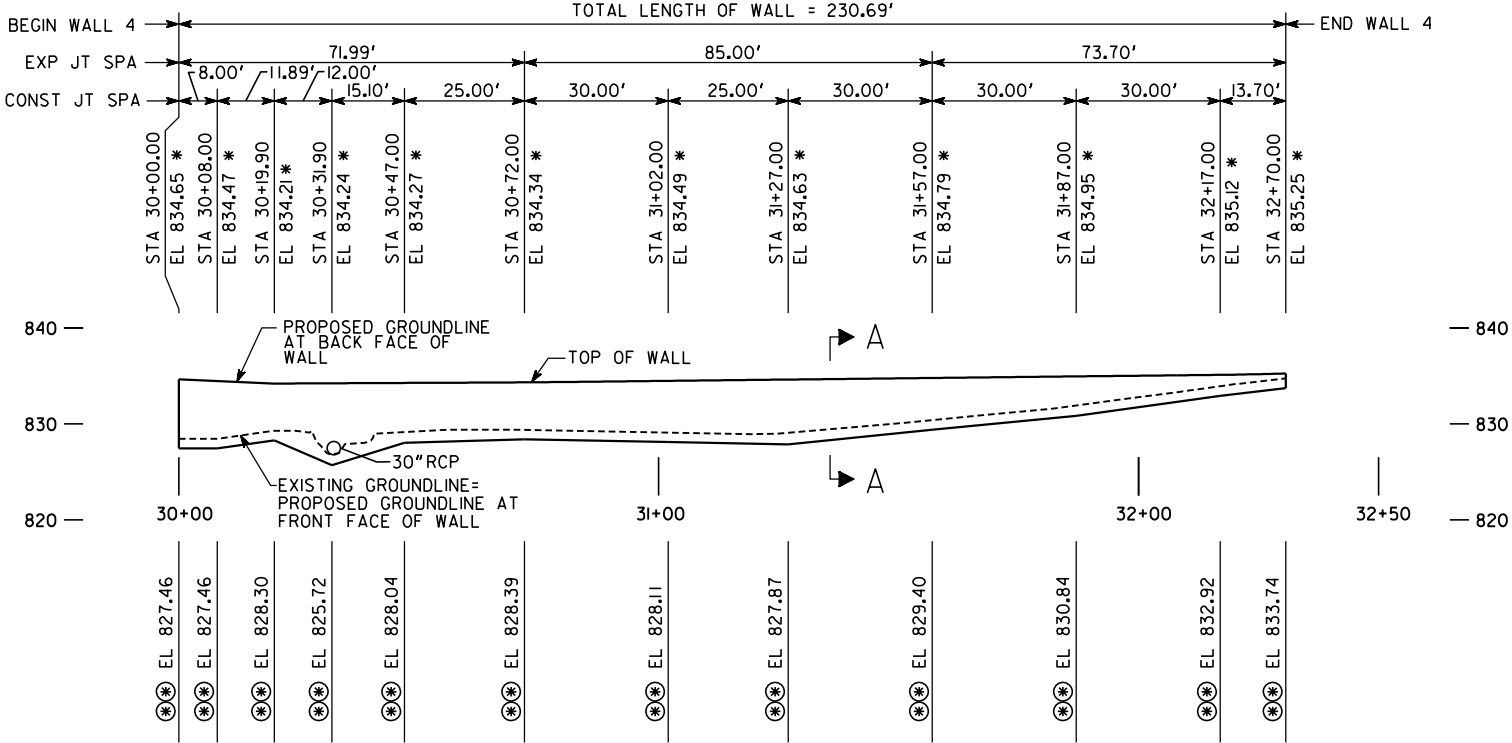
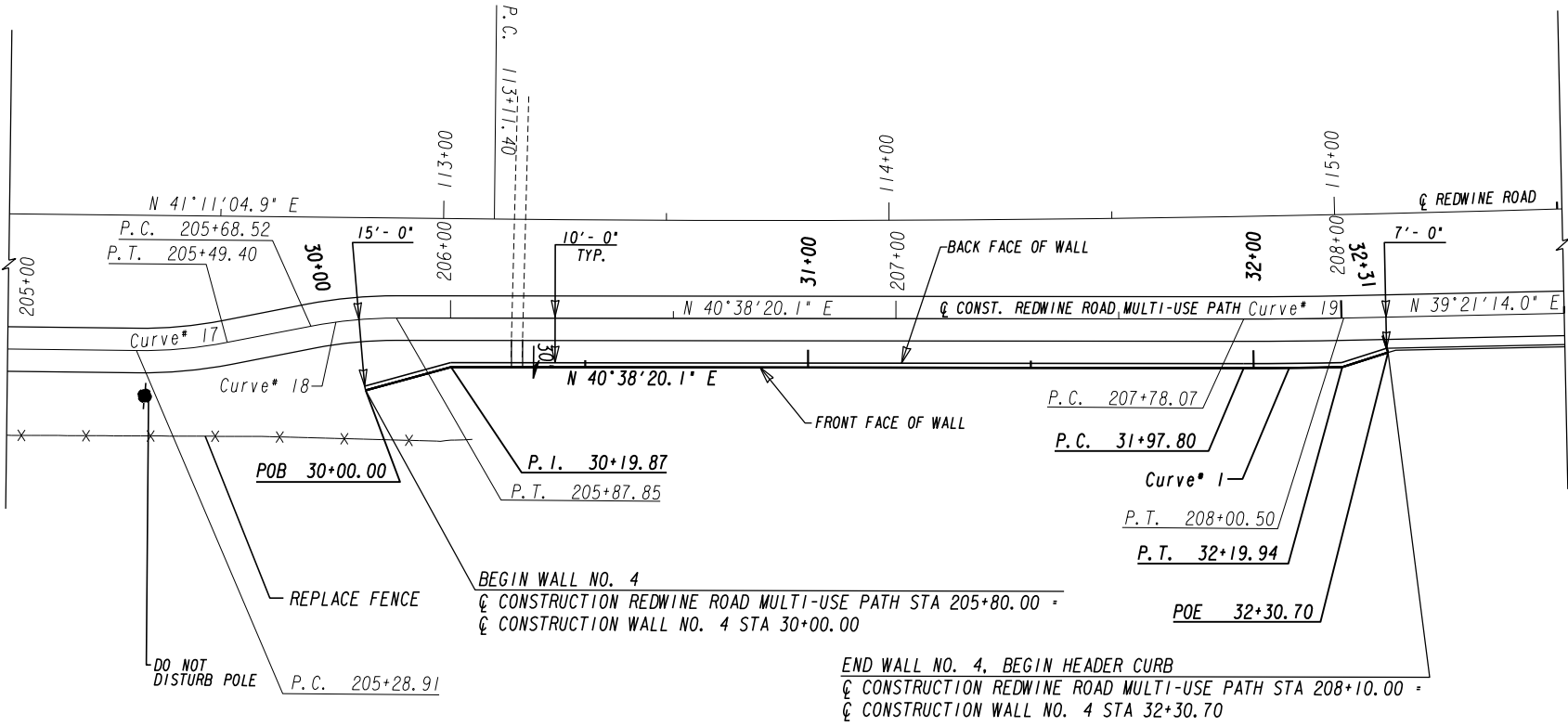
HL Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668



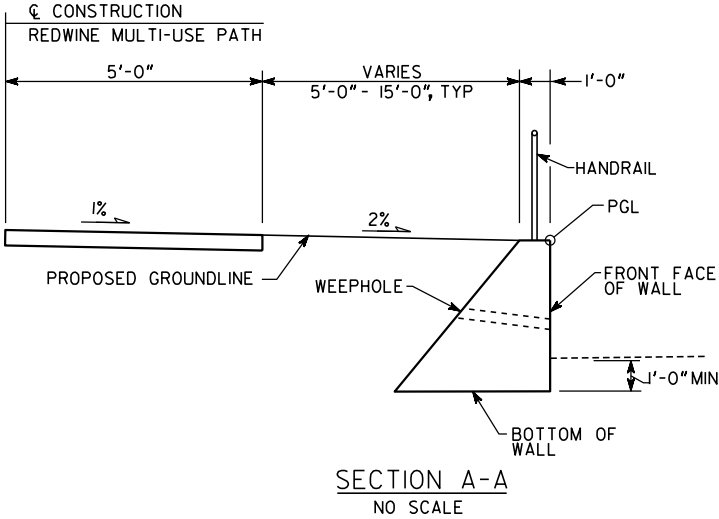
REVISION DATES

FAYETTE COUNTY
RETAINING WALL ENVELOPES
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	31-003
CORRECTED:	DATE:	
VERIFIED:	DATE:	



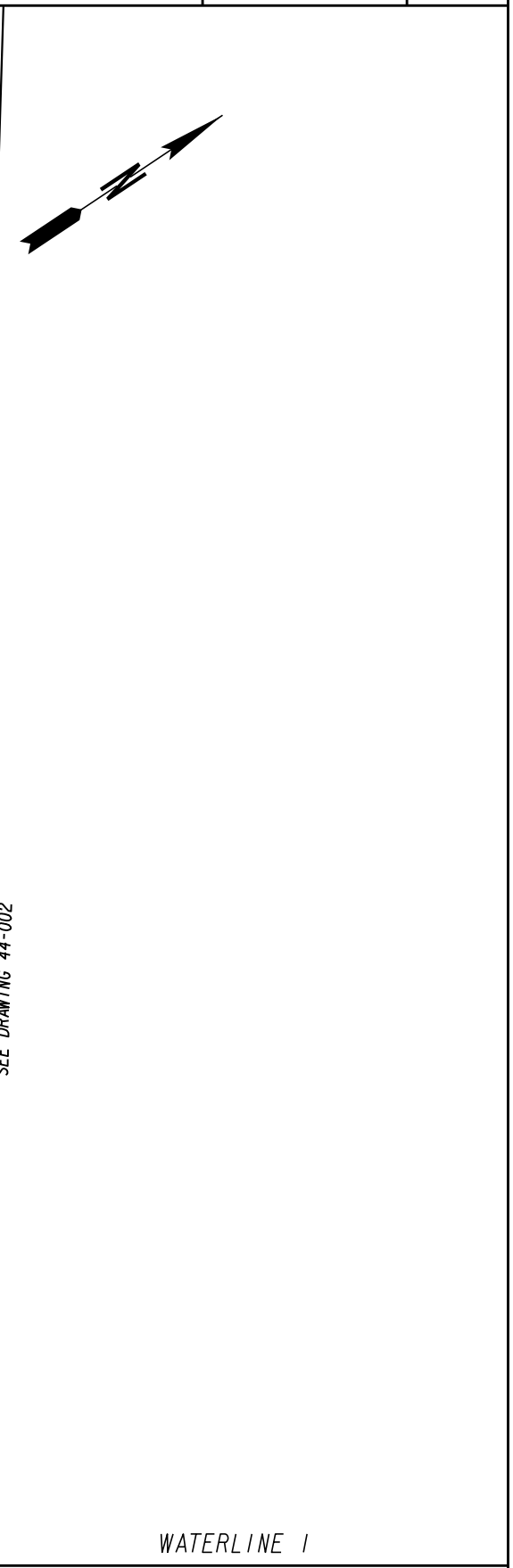
ELEVATION
LOOKING AT FRONT FACE OF WALL
HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



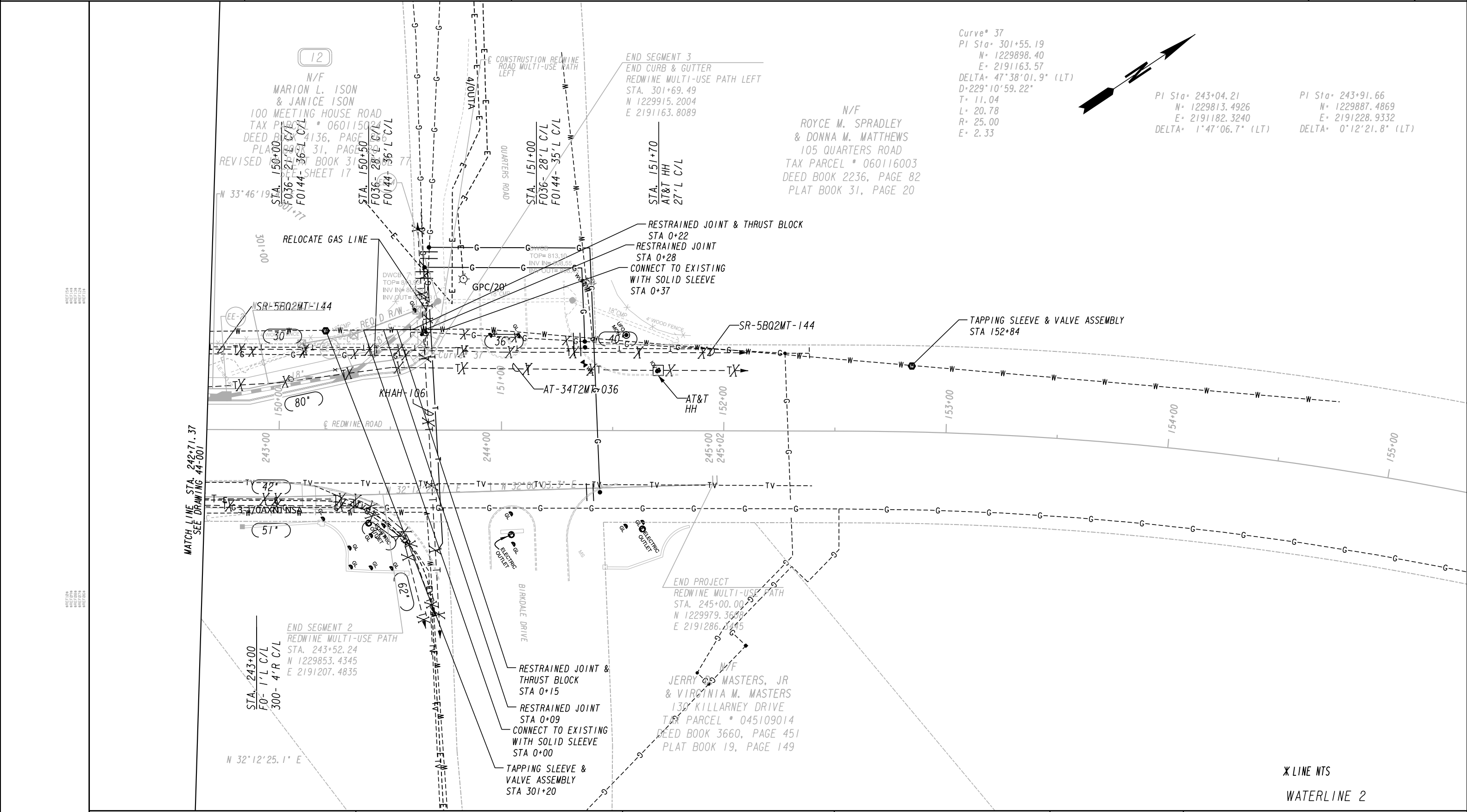
SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-3201	98	CY	CLASS B CONCRETE, RETAINING WALL
515-2020	231	LF	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND

- NOTES:
- STATIONS ARE ALONG & CONSTRUCTION OF REDWINE ROAD MULTI-USE PATH DIMENSIONS ARE ALONG THE FRONT FACE OF WALL.
 - * TOP OF WALL ELEVATION.
 - 3.000 EXISTING GROUNDLINE ELEVATION AT FRONT FACE OF WALL.
 - PROPOSED WALL TO BE BUILT IN ACCORDANCE WITH GDOT STD 9031L (TYPICAL SECTION A).



14-001



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
GEORGIA

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5395
(770)424-1668

SCALE IN FEET

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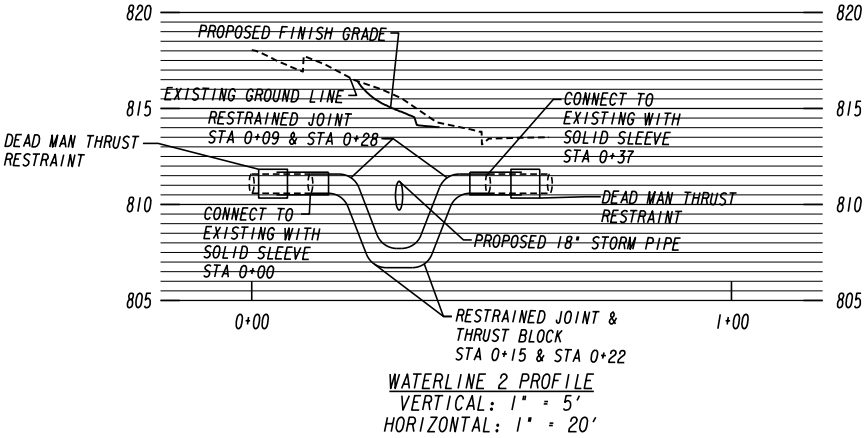
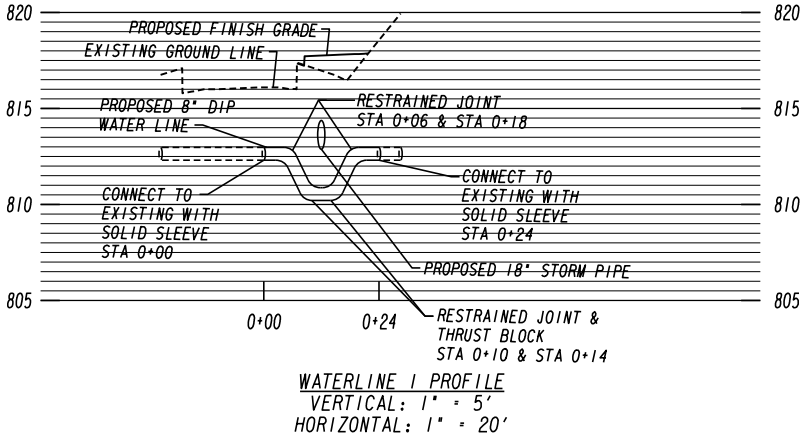
REVISION DATES

FAYETTE COUNTY
UTILITY RELOCATION PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:
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CORRECTED: DATE:
VERIFIED: DATE:

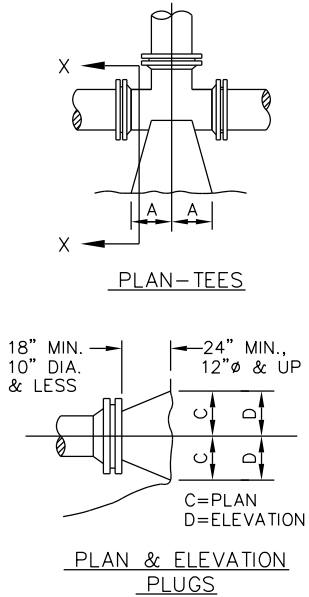
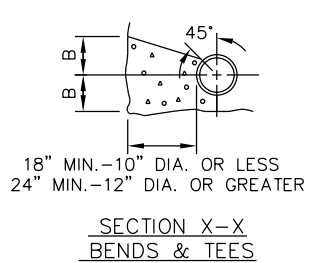
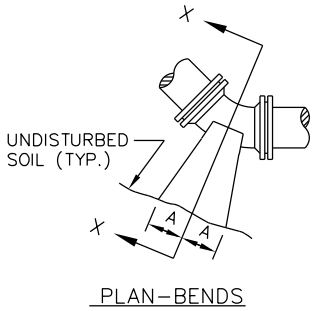
DRAWING No.
44-002

7/31/2015 GPLN



NOTE:
ROD THE 45 DEGREE BENDS AND SOLID SLEEVE TO A DEAD MAN THRUST RESTRAINT. MEGALUGS AND RESTRAINED JOINT GASKETS ARE TO BE UTILIZED AND RATED TO MATCH PIPE RATING.

- NOTES:
1. CONTRACTOR TO FIELD VERIFY ALL TIE-IN LOCATIONS.
 2. ALL PIPES SHALL BE INSTALLED BY OPENCUT.
 3. CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES.
 4. ALL WATER TAPS TO BE PERFORMED BY FAYETTE COUNTY WATER SYSTEM (FCWS) APPROVED CONTRACTOR.
 5. CONTRACTOR TO NOTIFY FCWS 48 HOURS PRIOR TO CONSTRUCTION.
 6. ALL WORK MUST CONFORM TO FCWS SPECIFICATIONS.
 7. PROTECT EXISTING SEWER, WATER, GAS, AND TELECOMMUNICATION FACILITIES THAT ARE TO REMAIN.
 8. MAINTAIN AT LEAST 3' OF COVER ON ALL WATER LINES UNLESS NOTED OTHERWISE.
 9. ALL VALVE COVERS AND MANHOLE LIDS TO BE RAISED TO FINISH GRADE.
 10. VALID UTILITY CONTRACTORS LICENCE REQUIRED FOR ALL WATER LINE INSTALLATION.
 11. WATER LINES ARE MOST LIKELY LEAD JOINT. USE CAUTION WHEN WORKING ON OR AROUND THESE LINES.
 12. THE ENGINEER HAS MADE ALL POSSIBLE ATTEMPTS TO LOCATE EXISTING UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD-VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION AND TO NOTE ANY CONFLICTS. ANY DAMAGE TO UTILITIES INCURRED DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 13. MINIMUM SEPARATION DISTANCES FOR WATER LINES FROM:
A: STORM SEWERS - 12" VERTICAL
B: GAS LINES - 12" VERTICAL
 14. D.I.P. WITH MECHANICAL JOINT ENDS MAY BE SUBSTITUTED WHERE SEPARATION DISTANCES BETWEEN THE WATER LINE AND STORM SEWER CANNOT BE MAINTAINED. PIPE MUST BE LAID SUCH THAT FULL SECTIONS OF PIPE ARE CENTERED ON THE POINT OF CROSSING AND EXTEND A DISTANCE OF 10' ON EACH SIDE OF THE POINT OF CROSSING.
 15. PAVEMENT PATCHING AND RESURFACING MUST BE COMPLETED WITHIN FIVE DAYS AFTER COMPLETION OF TRENCHING ACTIVITIES. SMALL PATCH AREAS CAN BE MAINTAINED WITH TEMPORARY PAVEMENT PATCHING OR CABG STONE UNTIL PERMANENT PATCHING IS COMPLETE.
 16. CONTRACTOR SHALL MAINTAIN SERVICE EXCEPT SHORT PERIODS FOR TIE-INS. COORDINATE WITH WATER, GAS, SEWER, POWER, AND TELECOMMUNICATION UTILITY COMPANIES.
 17. COST OF BENDS, FITTINGS, THRUST RESTRAINTS, VALVE BOXES, VALVE BOX PROTECTORS, TRENCH MATERIAL, AND BEDDING MATERIAL SHALL BE INCLUDED IN PRICE BID FOR PIPE.
 18. ALL DUCTILE IRON PIPES (DIP) SHALL BE CLASS 250.



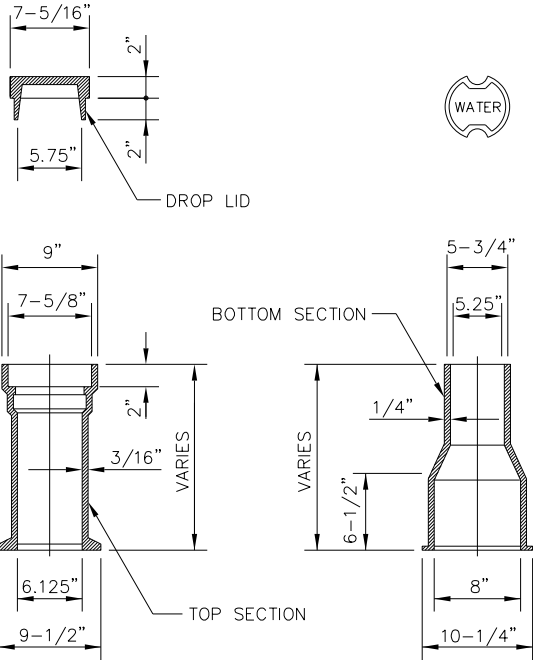
PIPE SIZE	90° BEND		45° BEND		22-1/2° BEND		11-1/4° BEND		TEE		PLUG	
	A	B	A	B	A	B	A	B	A	B	C	D
4"	18"	12"	10"	13"	7"	10"	7"	10"	12"	14"	13"	6"
6"	18"	12"	10"	13"	7"	10"	7"	10"	12"	14"	19"	9"
8"	24"	18"	13"	18"	10"	12"	10"	12"	16"	18"	25"	11"
10"	28"	22"	15"	22"	12"	15"	12"	15"	20"	22"	31"	14"
12"	32"	28"	19"	28"	14"	18"	14"	18"	22"	28"	37"	17"
16"	54"	38"	30"	36"	18"	36"	18"	36"	36"	42"	54"	24"

2000 PSF SOIL (SAND & GRAVEL WITH CLAY)

NOTES:

1. BASED ON 200 PSI STATIC PRESSURE PLUS AWWA WATER HAMMER ALLOWANCE.
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
3. THRUST BLOCKS TO BE USED AT ALL LINES OPERATING UNDER PRESSURE.
4. KEEP ALL PIPING JOINTS CLEAR OF CONCRETE THRUST BLOCKS.

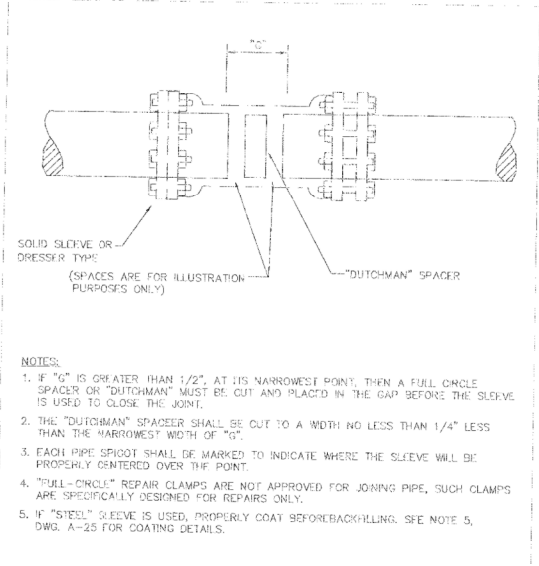
THRUST BLOCKING DETAIL
NOT TO SCALE



NOTES:

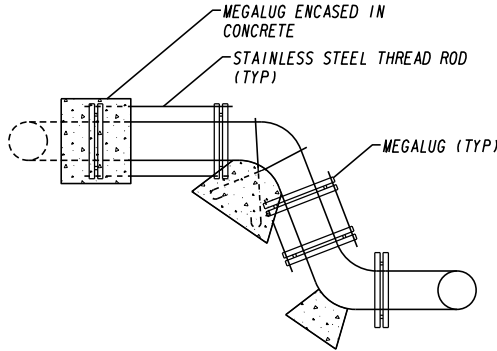
1. LID CASTING TO BE TYLER MANUFACTURE NO. 6850-SERIES, 5-1/4" DROP LID OR APPROVED EQUAL.
2. BODY CASTING TO BE TYLER MANUFACTURE NO. 6855-SERIES, 5-1/4" SHAFT, SLIP OR SCREW TYPE, OR APPROVED EQUAL.
3. THIS VALVE BOX ACCOMODATES 4" THRU 12" VALVES.

STANDARD THREE PIECE VALVE BOX
NOT TO SCALE
WL002



- NOTES:
1. IF "G" IS GREATER THAN 1/2", AT ITS NARROWEST POINT, THEN A FULL CIRCLE SPACER OR "DUTCHMAN" MUST BE CUT AND PLACED IN THE GAP BEFORE THE SLEEVE IS USED TO CLOSE THE JOINT.
 2. THE "DUTCHMAN" SPACER SHALL BE CUT TO A WIDTH NO LESS THAN 1/4" LESS THAN THE NARROWEST WIDTH OF "G".
 3. EACH PIPE SPIGOT SHALL BE MARKED TO INDICATE WHERE THE SLEEVE WILL BE PROPERLY CENTERED OVER THE POINT.
 4. "FULL-CIRCLE" REPAIR CLAMPS ARE NOT APPROVED FOR JOINING PIPE, SUCH CLAMPS ARE SPECIFICALLY DESIGNED FOR REPAIRS ONLY.
 5. IF "STEEL" SLEEVE IS USED, PROPERLY COAT BEFOREBACKFILLING. SEE NOTE 5, DWG. A-25 FOR COATING DETAILS.

PIPE JOINING USING SOLID SLEEVE
NOT TO SCALE



TYPICAL VERTICAL RESTRAINT
NOT TO SCALE



H&L Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES

FAYETTE COUNTY

UTILITY RELOCATION PLANS
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 44-003
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



LOCATION SKETCH - N.T.S.

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

PRIMARY PERMITTEE

FAYETTE COUNTY PUBLIC WORKS DEPARTMENT
115 McDonough Rd.
Fayetteville, Georgia 30214
Phone: (770) 461-3142
Email: publicworks@fayettecountyga.gov

PROJECT TO BE CONSTRUCTED AS PER GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 2013 EDITION, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION AND AS MODIFIED BY CONTRACT DOCUMENTS.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

24 HOUR CONTACT:

Name

Street Address

City, State Zip

Phone Number

Email Address

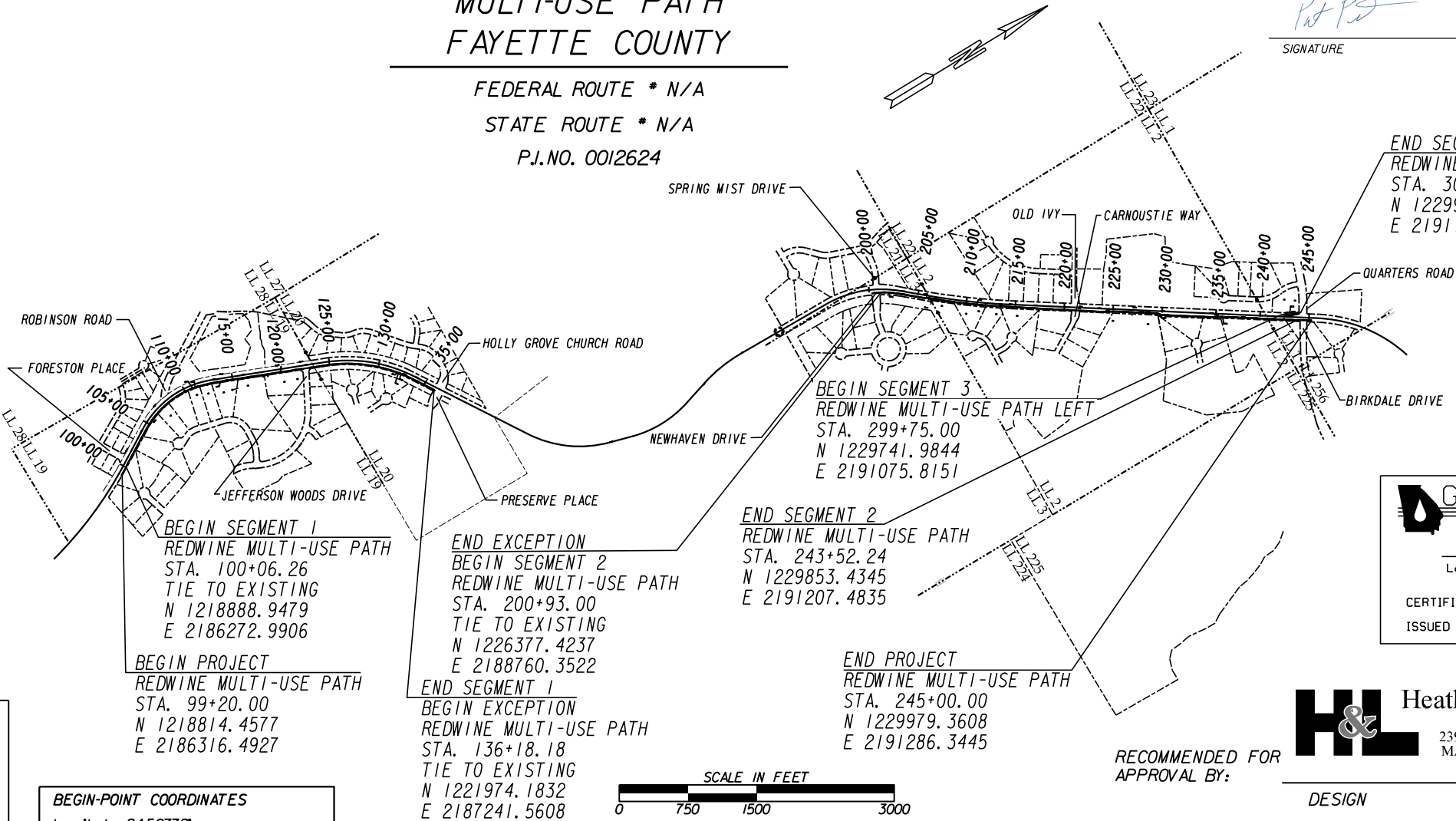
Contractor shall complete the information in this box.

BEGIN-POINT COORDINATES
Longitude: -84.52778°
Latitude: 33.35020°
MID-POINT COORDINATES SEGMENT 1
Longitude: -84.52823°
Latitude: 33.35489°
MID-POINT COORDINATES SEGMENT 2
Longitude: -84.51560°
Latitude: 33.37589°
END-POINT COORDINATES
Longitude: -84.51162°
Latitude: 33.38093°

FAYETTE COUNTY
BOARD OF COMMISSIONERS

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH
MULTI-USE PATH
FAYETTE COUNTY

FEDERAL ROUTE * N/A
STATE ROUTE * N/A
P.J. NO. 0012624



"I certify that this Erosion, Sedimentation and Pollution Control Plan has been prepared in accordance with Part IV, of the General NPDES Permit No. GARI00002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document 'Manual for Erosion and Sediment Control in Georgia' (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GARI00002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GARI00002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

"I certify under penalty of law that this plan was prepared after a site visit to the location described herein by myself or my authorized agent, under my direct supervision."

SIGNATURE
03-06-2020
DATE

END SEGMENT 3
REDWINE MULTI-USE PATH LEFT
STA. 301+69.49
N 1229915.2004
E 2191163.8089



MIDPOINT COORDINATES
MID POINT SEGMENT 1
STA. 117+65.34
N 1220522.0495 E 2186182.8088
MID POINT SEGMENT 2
STA. 222+96.50
N 1228148.7056 E 2190066.2461

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

PATRICK PETERS
Level II Certified Design Professional

CERTIFICATION NUMBER 0000064868
ISSUED 06/01/2019 EXPIRES 06/01/2022

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

RECOMMENDED FOR
APPROVAL BY:

DESIGN



PLANS COMPLETED 08-19-2019				
REVISIONS				
DATE	ENTITY REQUESTING REVISION(S)	DRAWING NUMBER(S)	SIGNATURE	GSWCC LEVEL II CERT.*
- -				
- -				
- -				
- -				
- -				
- -				



Georgia Soil and Water Conservation Commission
EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

SWCD: Towaliga SWCD - Region IV

Project Name: edwine Rd & Starrs Mill School Complex Multi-Use Pat Address: Redwine Road

City/County: Fayette County Date on Plans: 8/19/2019

Name & Email of Person Filling Out Checklist: Patrick Peters, ppeters@heath-lineback.com

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
51-001	Y	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
50-001	Y	2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)
50-001	Y	3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
50-001	Y	4 Provide the name, address, email address, and phone number of primary permittee.
53-001	Y	5 Note total and disturbed acreage of the project or phase under construction.
50-001	Y	6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
50-001	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
51-002	Y	8 Description of the nature of construction activity.
50-001	Y	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
53-001	Y	10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
50-001	Y	11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 21 of the permit.
50-001	Y	12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 20 of the permit.*
50-001	Y	13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on Part IV.D.6.c.(3) page 37 of permit as applicable.*
51-004	Y	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation." in accordance with Part IV.A.5. page 26 of the permit.*
51-003	Y	15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wired vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
51-003	Y	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
51-002	Y	17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
51-002	Y	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."
51-002	Y	19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
51-002	Y	20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
51-002	Y	21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
51-003	Y	22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment."
51-003	N/A	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan."
51-003	Y	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited."
51-002	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.
51-003	Y	26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed."
51-003	Y	27 Description of practices to provide cover for building materials and building products on site."
51-002-004	Y	28 Description of the practices that will be used to reduce the pollutants in storm water discharges."

51-002	Y	29 Description and chartor timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).				
51-004	Y	30 Provide complete requirements of inspections and record keeping by the primary permittee.*				
51-004	Y	31 Provide complete requirements of sampling frequency and reporting of sampling results.*				
51-004	Y	32 Provide complete details for retention of records as per Part IV.F. of the permit.*				
51-004	Y	33 Description of analytical methods to be used to collect and analyze the samples from each location.*				
51-004	Y	34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*				
51-004, 55-001	Y	35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.*				
51-002	Y	36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*				
50-001; 53-001; 54-ALL; 55-001	Y	37 Graphic scale and North arrow.				
53-ALL	Y	38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: <table><tr><td>Existing Contours</td><td>USGS 1": 2000' Topographical Sheets</td></tr><tr><td>Proposed Contours</td><td>1": 400' Centerline Profile</td></tr></table>	Existing Contours	USGS 1": 2000' Topographical Sheets	Proposed Contours	1": 400' Centerline Profile
Existing Contours	USGS 1": 2000' Topographical Sheets					
Proposed Contours	1": 400' Centerline Profile					
51-003	N/A	39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org .				
N/A	N	40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*				
53-ALL; 54-ALL	Y	41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.				
53-ALL; 55-001	Y	42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.				
53-ALL	Y	43 Delineation and acreage of contributing drainage basins on the project site.				
55-001	Y	44 Delineate on-site drainage and off-site watersheds using USGS 1": 2000' topographical sheets.				
50-004; 53-007	Y	45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.				
53-ALL	Y	46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.				
51-002	Y	47 Soil series for the project site and their delineation.				
54-ALL	Y	48 The limits of disturbance for each phase of construction.				
51-003	Y	49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.				
54-ALL	Y	50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.				
52-ALL; 56-ALL	Y	51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.				
51-002	Y	52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.				

*If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the * checklist items would be N/A. Effective January 1, 2019

ESPCP GENERAL NOTES

The escape of sediment from the project site shall be prevented by the installation of erosion and sediment control measures and practices prior to land-disturbing activities.

Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective control, additional erosion and sedimentation control measures shall be implemented to control or treat the sediment source.

ESPCP ALTERATIONS

This Erosion, Sedimentation, and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161-Control of Soil Erosion and Sedimentation of the contract.

The Contractor, the Certified Design Professional, and the WECS shall carefully evaluate this plan prior to commencing land-disturbing activities. Amendments/revisions to the ESPCP which have a significant effect on BMPs with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC Level-II Certified Design Professional. Additional BMPs may be added per Special Provision 16-Contract of Soil Erosion and Sedimentation.

CONSTRUCTION SCHEDULE AND SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted after the project is awarded along with the NOI. A copy of the construction schedule shall be maintained at the project site.

Construction Schedule

Month	1-3	3-6	6-9	9-12	12-15	15-18
Install Temporary Erosion Control Measures						
Maintenance of Temporary Erosion Control Measures						
Perform Construction Activities						
Establish Permanent Vegetation						
Remove Temporary Erosion Control Measures						

The project budget includes sufficient funds for the payment of construction exits. The Contractor is responsible for establishing at least one (1) construction exit per the specifications of the construction exit detail included in this ESPCP to minimize or eliminate the vehicle tracking of dirt, soils, and sediments off site. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

Stage 1: Work in this stage includes clearing and grubbing and installing Initial BMPs.

- A. Initial BMPs: Install the following BMPs prior to construction
 1. Install orange barrier fence.
 2. Install perimeter silt fence as shown on Stage I plans prior to clearing and grubbing operations.
 3. Place Slotted Board Dams, Rock Dams, Silt Gates and Check Dams as shown on the Stage I plans
 4. Contractor is responsible for establishing construction exits.
- B. Intermediate BMPs: N/A
- C. Final BMPs: N/A

Stage 2:

- A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until Final BMPs can be installed.
3. Place temporary grassing and mulch as needed.
4. Install mulch and temporary grassing as shown on the Stage 2 plans.
C. Final BMPs: N/A

Stage 3:

- A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.

SITE STABILIZATION AND VEGETATION PLANTING SCHEDULE

The EPD General NPDES GARI00002 permit states that any disturbed area where construction activities have temporarily or permanently ceased shall be stabilized within 14 days of such cessation or as soon as practicable if precluded by adverse weather conditions. However in special cases, the Project Engineer may require the contractor to perform stabilization more often than 14 days.

Disturbed areas shall be stabilized with suitable material listed in the current edition of the Department's Standard Specifications (or Special Provisions) Sections 161, 163, 700, or 711 on the basis of when construction activities are expected to resume.

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizing, liming, and mulching rates for this project can be found in Section 700 of the current edition of the Department's Standard Specifications (or Special Provisions) and other applicable contract documents or landscaping plans.

WASTE DISPOSAL

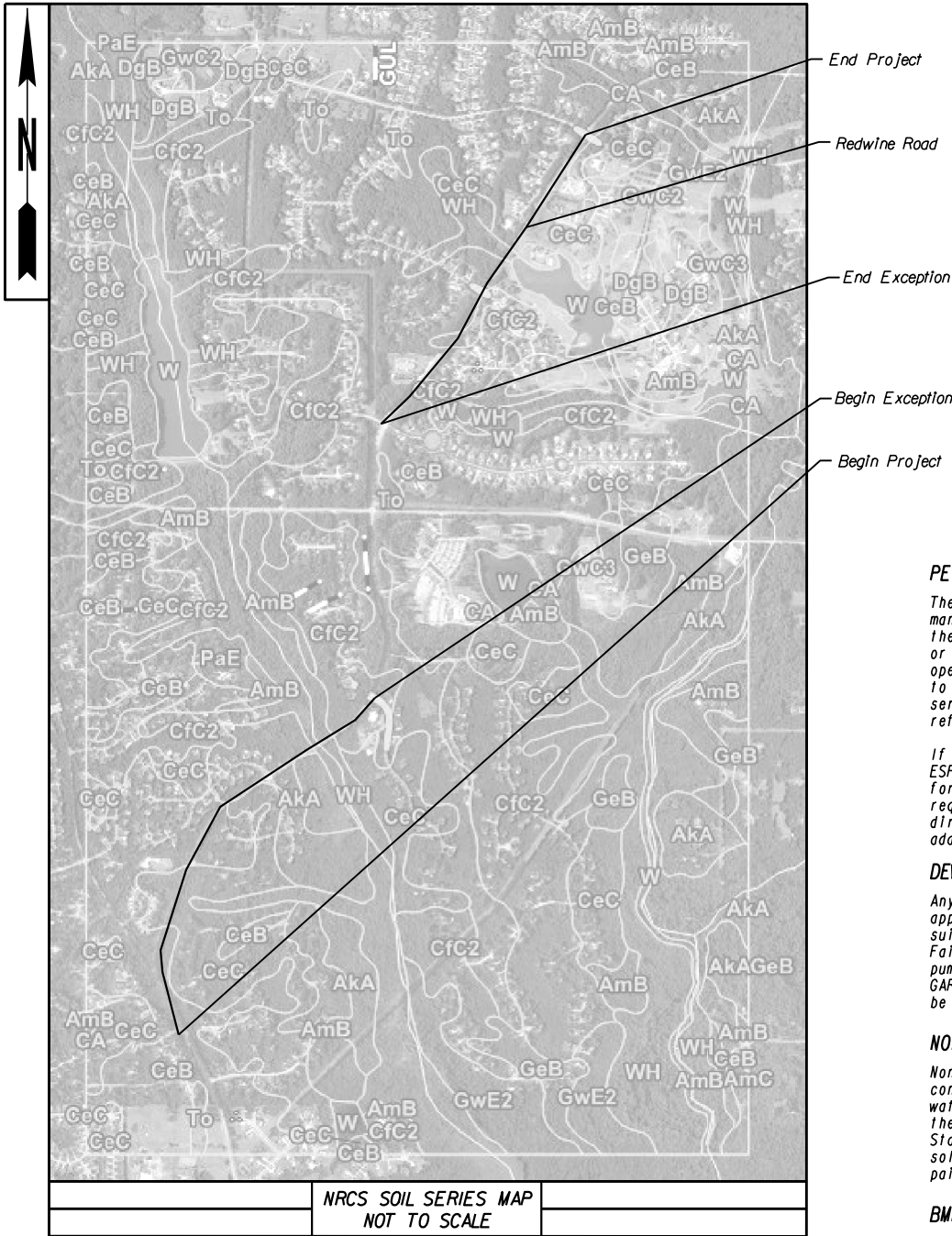
Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

DESCRIPTION OF NATURE OF CONSTRUCTION ACTIVITY

The proposed project is the addition of a 10' multi-use path along the existing roadway of Redwine Road in Fayette County, Georgia.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:



Due to the size and scope of this project and the nature of soil series maps, it is not reasonably practical to delineate the precise locations of the above listed soils on the construction plans. The NRCS soil survey and soil series maps for the project site are also available online at <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AkA	Alltavista sandy loam, 0 to 3 percent slopes	93.3	3.6%
AmB	Appling sandy loam, 2 to 6 percent slopes	217.9	8.4%
AmC	Appling sandy loam, 6 to 10 percent slopes	0.0	0.0%
CA	Cartecay loam, 0 to 2 percent slopes, frequently flooded	21.8	0.8%
CeB	Cecil sandy loam, 2 to 5 percent slopes	878.6	33.9%
CeC	Cecil sandy loam, 6 to 10 percent slopes	275.9	10.6%
CfC2	Cecil sandy clay loam, 6 to 10 percent slopes, eroded	409.2	15.8%
DgB	Davidson loam, 2 to 6 percent slopes	39.3	1.5%
GeB	Gwinnett sandy loam, 2 to 6 percent slopes	48.3	1.9%
GwC2	Gwinnett sandy clay loam, 6 to 10 percent slopes, eroded	46.3	1.8%
GwC3	Gwinnett sandy clay loam, 6 to 10 percent slopes, severely eroded	16.6	0.6%
GwE2	Gwinnett sandy clay loam, 10 to 25 percent slopes, eroded	62.4	2.4%
PaE	Pacolet sandy loam, 10 to 25 percent slopes	10.6	0.4%
To	Toccoa sandy loam, 0 to 2 percent slopes, occasionally flooded	26.5	1.0%
W	Water	84.1	3.2%
WH	Wehadkee soils, 0 to 2 percent slopes, frequently flooded	364.8	14.1%
Totals for Area of Interest		2,595.5	100.0%

PETROLEUM STORAGE, SPILLS AND LEAKS

These plans expressly delegate the responsibility of proper on-site hazardous material management to the Contractor. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up, and disposal of any petroleum product, or other hazardous material, leaks or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCC addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

DEWATERING AND PUMPING ACTIVITIES

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag, or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of pumped discharges. The contractor shall prepare sampling plans in accordance with the current GARI00002 NPDES permit by utilizing a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

NONSTORMWATER DISCHARGES

Nonstormwater discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents. The NPDES does not authorize the discharge of soaps or solvents used in vehicle and equipment washing or the discharge of wastewater containing stucco, paint, oils, curing compounds, and other construction materials.

BMP INSTALLATION AND MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 161, 163, 165, 700, 711, and other contract documents for installation and maintenance measures.

SEDIMENT STORAGE

The site has a total disturbed area of 5.67 acres. The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

Location	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd³)	Total Storage Volume Provided (yd³)	Ditch Checks (Cd-F)		Ditch Checks (Cd-S)		Inlet Sediment Traps Curb Inlet (SD-F)		Silt Gates (Rt-B5g3)		Rock Filter Dams (Rd)		Silt Fence (TP C)		Silt Fence (TP A)		J-Hooks		Diversion
					# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	Length of Fence (ft)	Total Volume (yd³)	Length of Fence (ft)	Total Volume (yd³)	# of Devices	Total Volume (yd³)	
Outfall 1	4.68	0.50	62.01	65.72	0.00	0.00	0.00	0.00	9.00	9.33	1.00	1.04	0.00	0.00	0.00	0.00	886.78	32.84	9.00	22.50	3.75
Outfall 2	39.95	0.68	76.92	320.79	46.00	112.70	0.00	0.00	9.00	9.33	0.00	0.00	1.00	72.00	227.57	38.12	1245.64	46.13	17.00	42.50	38.80
Outfall 3	9.78	1.09	110.85	223.43	14.00	48.10	25.00	89.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1376.91	51.00	14.00	35.00	8.13
Outfall 5	16.04	0.66	62.44	271.77	35.00	109.11	1.00	3.71	1.00	1.04	0.00	0.00	2.00	72.00	0.00	0.00	1374.52	50.91	14.00	35.00	15.11
Outfall 6	1.17	0.68	78.18	170.83	20.00	105.25	0.00	0.00	11.00	11.41	1.00	1.04	0.00	0.00	0.00	0.00	894.49	33.13	8.00	20.00	0.00
Outfall 7	151.90	1.52	156.11	551.46	40.00	360.44	0.00	0.00	6.00	6.22	1.00	1.04	3.00	108.00	0.00	0.00	1235.36	45.75	12.00	30.00	149.57
Outfall 8	0.36	0.27	24.12	82.86	6.00	53.04	0.00	0.00	0.00	0.00	1.00	1.04	0.00	0.00	0.00	0.00	574.43	21.28	3.00	7.50	0.00
Outfall 9	1.18	0.14	74.84	26.07	2.00	11.37	0.00	0.00	3.00	3.11	1.00	1.04	0.00	0.00	0.00	0.00	170.00	6.30	1.70	4.25	0.06
Sheet Flow 1	0.50	0.13	33.50	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.00	1.56	0.00	0.00	0.00
TOTAL DISTURBED AREA (AC)=		5.67																			

To prevent runoff from bypassing inlet sediment traps, a temporary sump shall be installed around all Inlet sediment traps that are not located in a low point or an excavated sump. Construct temporary sumps in accordance with Construction Detail D-24C. Temporary sumps shall be installed in a manner that ensures stormwater does not bypass the Inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

OUTFALL 9: The total sediment storage volume provided in Outfall 9 is less than the required 67 CY of sediment storage per acre. The disturbed area within Basin 9 is 0.14 Ac, accounting for only 11.76% of the basin total of 1.18 Ac. The majority of the water flows through natural contour towards an existing cross pipe and remains undisturbed. The disturbed area within this Basin will be treated with grassing and mulch as needed to control sediment runoff.

SHEET FLOW 1: The total sediment storage volume provided in Sheet Flow 1 is less than the required 67 CY of sediment storage per acre. The disturbed area is 0.13 Ac, accounting for only 26% of the basin total of 0.50 Ac. The majority of the water flows through natural contour towards an existing cross pipe and remains undisturbed. The disturbed area within this Basin will be treated with grassing and mulch as needed to control sediment runoff.

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPs:

No alternative or additional BMPs will be used on this project.

READY MIX CHUTE WASH DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of Portland cement concrete is prohibited on this site.

In accordance with Standard Specification 107: Legal Regulations and Responsibility to the Public, only the discharge chute utilized in the delivery of Portland cement concrete may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travelled way, including shoulders, for a wash-down pit. The pit shall be large enough to store all wash-down water without overtopping. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above it shall be graded to match the elevation of the surrounding areas. Alternate wash-down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash-down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down pit that includes the following: (1) a location away from any storm drain, stream, or river, (2) access to the vehicle being used for wash down, (3) sufficient volume for wash-down water, and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable, the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

OTHER CONTROLS

If the Contractor elects to store building material, building products, construction waste, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials on the site, the Contractor shall provide an appropriate covering to minimize the exposure of those materials or products to precipitation and stormwater to minimize the discharge of pollutants. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of the specific material or product poses little risk to stormwater contamination or is intended for outdoor use.

The Contractor shall follow this ESPCP and ensure and demonstrate compliance with all applicable State and/or local regulations for waste disposal, sanitary sewer and septic systems, and petroleum storage.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

POSTCONSTRUCTION BMPs FOR STORMWATER MANAGEMENT

All permanent postconstruction BMPs are shown in the construction plans and in the ESPCP plan. The postconstruction BMPs for this project consist of infiltration trenches, vegetation, riprap at pipe outlets for velocity dissipation and outlet stabilization, slope stabilization matting, riprap and concrete ditch lining where necessary. The postconstruction BMPs will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

CHANNEL PROTECTION

All channels may be stabilized with permanent grassing.

STATE-WATER BUFFER IMPACTS

State-water buffers, as defined by O.C.G.A. 12-7-1, are impacted by this project.

Non-exempt activities shall not be conducted within the 25- or 50-foot undisturbed stream buffers as measured from the point of the wredsted vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits.

The Contractor is not authorized to enter into stream buffers, except as described in the table below:

State-Water ID# or Name	Location of Buffered Streams and State Waters**			Stream Type (Warm/Cold Water)*	Buffer Variance Required? (Yes/No)
	Roadway Alignment	Begin Station and Offset	End Station and Offset		
Intermittent Stream (IS) 1	Redwine Road Multi-Use Path	STA 117+73, 7' RT STA 117+82, 5' LT	STA 118+74, 7' RT STA 118+76, 6' LT	Warm	No
Open Water (OW) 7	Redwine Road Multi-Use Path	STA 225+94, 22' RT STA 225+94, 3' LT	STA 226+58, 26' RT STA 226+58, 2' LT	Warm	No
The contractor is allowed to extend the culvert and construct slopes.					

Unless noted otherwise, utility companies will be submitting the required permits/variances in conjunction with the impacts caused by their activities. If utility impacts are covered by the Department's stream buffer variance, this shall be noted in the buffer-variance-required column.

* Warm water streams have a 25-foot minimum buffer as measured from the wredsted vegetation. Cold Water streams have a 50-foot buffer as measured from the wredsted vegetation.

**Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

The following is a summary of project outfalls within 1 mile and within the watershed of an identified impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

Outfall ID # and Location (Station and Offset)	Reach Name	Location of the Impaired Stream Segment as Indicated in the 305b/303d List	Criteria Violated (Bio F Bio M)	Potential Cause (NP UR)	Category (4a, 4b, or 5)	Numeric waste load allocation (WLA) for sediment*
Outfall 3, STA 134+35, 33' RT Outfall 5, STA 206+10.84, 18.48' RT Outfall 6, STA 218+05.96, 5.40' LT Outfall 7, STA 226+28.37, 12.49' RT Outfall 8, STA 242+02.58, 13.07' LT Outfall 9, STA 242+85.55, 54.77' LT	Whitewater Creek	Headwaters to Lees Lake	Bio F	UR	4a	N/A
TMDLs completed Bio F (2003), FC (2013).						

* If the TMDL Implementation Plan establishes a specific numeric waste load allocation that applies to the project discharge(s) to the Impaired Stream Segment, then the Certified Design Professional must incorporate that allocation into the Erosion, Sedimentation and Pollution Control Plan and implement all necessary measures to meet that allocation. See Appendix I for additional required BMPs for this project.

SILT FENCE INSTALLATION WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J-hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the immediately upgradient J hook. J Hooks shall be paid for as silt fence items per linear foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

RIPRAP OUTLET PROTECTION

Structure #, Outfall ID#, or Station and Offset	Pipe Diameter	Q ₂₅	V ₅₀	Tailwater Condition (TW<0.5 Do TW>0.5 Do)	Width at Drainage Structure	Apron Length	Downstream Width	Average Stone Diameter	Apron Thickness	Riprap Type	Quantity
	Do (ft)	(ft³/s)	(ft/s)		W1=3Do (ft)	La (ft)	W2=Do+La (ft)	d ₅₀ (ft)	D (ft)	(Type 3 or Type 1)	(yd³)
A-12	2.0	5.8	13.33	TW>0.5 Do	6.00	9.5	11.50	1.20	1.50	Type 3	12*
B-8	4.5	82.3	6.98	TW>0.5 Do	13.50	19	23.50	1.20	1.50	Type 3	100*
AA-2	1.5	2.9	6.19	TW<0.5 Do	4.50	9	10.50	1.20	1.50	Type 3	8
BB-3	2.5	23.9	6.07	TW>0.5 Do	7.50	11	13.50	1.20	1.50	Type 3	28*
DD-4	6.0	141.0	12.7	TW>0.5 Do	18.00	38	44.00	2.00	2.00	Type 1	52*

*Quantity adjusted to meet field condition



Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

NTS

REVISION DATES

FAYETTE COUNTY
ESPCP GENERAL NOTES
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:		DATE:		DRAWING No. 51-003
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

RETENTION OF RECORDS

The Department will retain all records related to the implementation of this ESPCP in accordance with Part IV.F of the General Permit GARI00002.

SAMPLING LOCATIONS AND GENERAL NOTES

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.

The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

Note: The Total Site Area is 6.48 acres.											Representative Sampling Scheme				
SAMPLING INFORMATION											OUTFALL CHARACTERISTICS				
Primary Sampled Feature	Location (Station and Offset)	Name of Receiving Water	Applicable Construction Stage for Sampling	Sampling Type (Outfall or Receiving water)	Drainage Area for Receiving Water (mi ²)	Upstream Disturbed Area (acres)	Warm or Cold Water Stream	Appendix B NTU Value (Outfall Sampling only)	Allowable NTU Increase (Receiving water sampling only)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (Rise/Run)	Soil Erosion Index	Represented Outfall Drainage Basins
2	118+39.72, 7.00' RT	Camp Creek	All	Outfall	5.90	N/A	Warm	150	N/A	Crosspipe Outfall	New Path-Fill	0.68	0.0250	7	3,6,8,9
5	206+10.84, 18.48' RT	Unnamed Pond	All	Outfall	0.03	0.66	Warm	75	N/A	Crosspipe Outfall	New Path-Fill	0.66	0.0606	7	1
7	226+28.37, 12.49' RT	Redwine Lake/Whitewater Shoal Creek	All	Receiving	0.34	1.52	Warm	N/A	25	Crosspipe Outfall	New Path-Fill	1.52	0.0266	7	N/A

The primary sampled features specified should be used as the initial sampling locations. An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.

INSPECTIONS AND REPORTING

As the primary permittee, the Department must retain the design professional who prepared the ESDCP, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days of installation over the entire Infrastructure project. Alternatively, for linear Infrastructure projects, the permittee must retain either of these personnel to inspect the initial sediment storage requirements and perimeter control BMPs for the initial segment, as defined by Part IV.A.5. of the current GAR00002 Permit, within 7 days of installation and all sediment basins within the entire linear Infrastructure project within 7 days of installation. The inspecting design professional shall report the results to the primary permittee within 7 days, and the permittee must correct all deficiencies within 2 business days of receipt of the inspection report, unless on-site weather conditions are such that more time is required. Additionally, the Department's Construction Project Engineer will be responsible for all subsequent 7 day inspections for all new BMP installations.

ALL other inspections shall be documented on the appropriate Department inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection and reporting requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

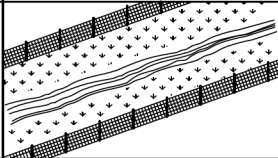
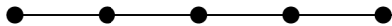
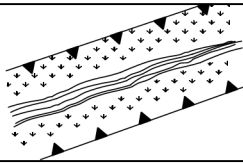

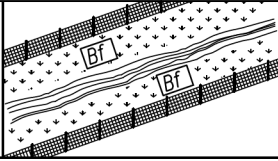
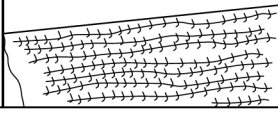

Whenever the Department finds that a BMP has failed or is deficient beyond routine maintenance and has resulted in sediment deposition into waters of the State, the Contractor shall take reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be corrected by the close of the next business day from the time of discovery. A repair requiring a new or replacement BMP or significant repair must be operational by no later than 7 days from the time of discovery. If the repair time within 7 days is infeasible, the Contractor and the Department shall schedule the BMP repair to be operational as soon as practical after the 7 day time frame.


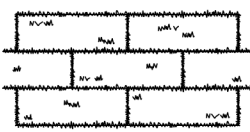

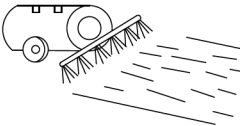
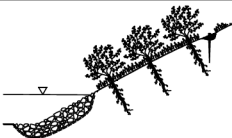

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures. Sampling locations are provided in the Sampling Location table herein.



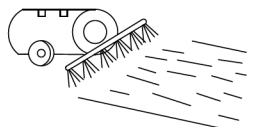

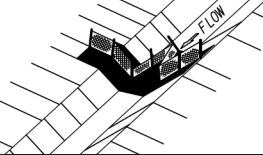

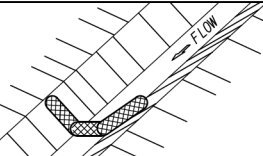

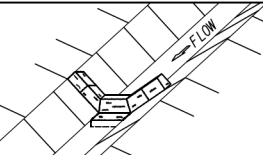

<div>7/31/2015</div> <div>GPLN</div> <div>AREC DBA</div> <div>AREC DBA</div> <div>AREC DBA</div> <div>REF FILEL</div>			<div></div> <div><div>HL</div><div>Heath & Lineback Engineers</div><div>INCORPORATED</div><div>2390 CANTON ROAD, BUILDING 200</div><div>MARIETTA, GEORGIA 30066-5393</div><div>(770)424-1668</div></div>	<div>NTS</div>	REVISION DATES			FAYETTE COUNTY			
					ESPCP GENERAL NOTES						
					REDWINE ROAD & STARRS MILL SCHOOL						
					COMPLEX MULTI-USE PATH						
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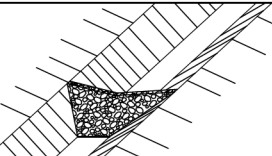



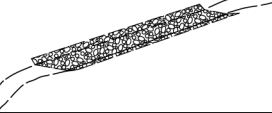
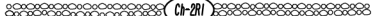
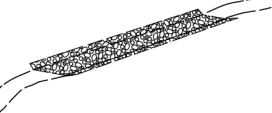
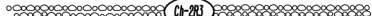
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
	ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
	LINE CODE  ORANGE BARRIER FENCE		
ESA	ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
	LINE CODE  ESA-25' (OR 50')STREAM BUFFER, ETC.		
<div>Bf</div>	BUFFER ZONE		A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.
	SYMBOL <div>Bf</div>		
<div>Ds1</div>	MULCH SECTION 163		THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING. MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	SYMBOL <div>Ds1</div>		
<div>Ds2</div>	TEMPORARY GRASSING SECTION 163, 700		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST. TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	SYMBOL <div>Ds2</div>		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700		THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON. PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	SYMBOL <div>Ds3</div>		
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700, 890		THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION. SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS. THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	PATTERN 		
F1-Co	FLOCCULANTS COAGULANTS SECTION 163, 700, 895		FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION. ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPs WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPs! FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
	SYMBOL <div>F1-Co</div> POLYACRYLAMIDE		
Sb	STREAMBANK STABILIZATION SECTION 702		STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS. STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.
	PATTERN 		

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ss	SLOPE STABILIZATION CONSTRUCTION DETAIL D-35 SECTION 716		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS. SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP) OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS. NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.
		PATTERN 	
Tac	TACKIFIERS SECTION 163, 700, 895		TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH. TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN ON THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING. REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR CRITERIA.
		SYMBOL  POLYACRYLAMIDE	
Cd-F	FABRIC CHECK DAM CONSTRUCTION DETAIL D-24D SECTION 171		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAD PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS. THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Fs	COMPOST FILTER SOCK CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OR BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Hb	BALED STRAW CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLASH PAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Cd-S	STONE CHECK DAM OR SANDBAG CHECK DAM GA. STD 1031 SECTION 163.603		STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE. SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Ch-1	VEGETATED CHANNEL STABILIZATION SECTION 700		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.
		LINE CODE 	
Ch-2R1	CHANNEL STABILIZATION RIP-RAP, TYPE 1 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	
Ch-2R3	CHANNEL STABILIZATION RIP-RAP, TYPE 3 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. 'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-271	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-2 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-272	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-4 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-273	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-6 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-274	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-8 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-275	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-10 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-276	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-12 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-3	CONCRETE CHANNEL STABILIZATION CONSTRUCTION DETAIL D-10, D-49 SECTION 441		CHANNELS ARE LINED WITH CONCRETE FOR VELOCITIES >/- 10 fps. THIS ITEM CONSISTS OF CONSTRUCTING A 4' THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 'Dp' RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		'Dp' SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN. RIP-RAP SHOULD BE USED TO DISSIPATE ENERGY DOWNSTREAM OF CONCRETE LINED CHANNELS.
Co	CONSTRUCTION EXIT CONSTRUCTION DETAIL D-41 SECTION 163,800		A CONSTRUCTION EXIT IS A STONE STABILIZED PAD THAT REDUCES OR ELIMINATES THE TRANSPORT OF MUD FROM CONSTRUCTION AREAS ONTO PUBLIC ROADS BY EQUIPMENT OR RUNOFF. BEST USED AT ACCESS POINTS, I.e. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MINIMUM 20' WIDE, 50' LONG, 6" THICK, AND REQUIRES A GEOTEXTILE UNDERLINER. ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2%, A FULL WIDTH DIVERSION RIDGE 6" TO 8" HIGH WITH 3:1 SLOPES SHALL BE CONSTRUCTED APPROXIMATELY 15' UPSTREAM OF PAVED AREA. A TIRE WASHING AREA TO REMOVE MUD MAY ALSO BE REQUIRED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS.
	SYMBOL		ALL CONSTRUCTION EXIT REQUIREMENTS ARE INCLUDED IN THE PRICE OF THE CONSTRUCTION EXIT.
Dc-A	STREAM DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0 - 2.5 fps.
	LINE CODE		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.

NOTE:

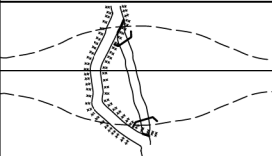
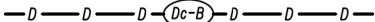
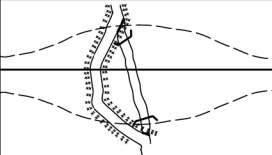
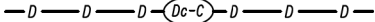
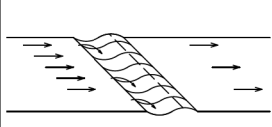
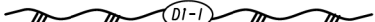
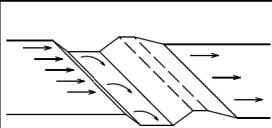
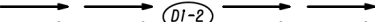
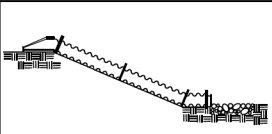

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

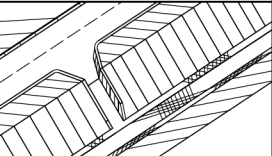
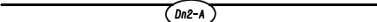
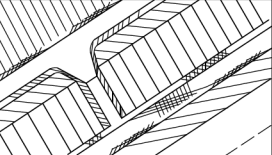
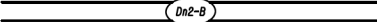
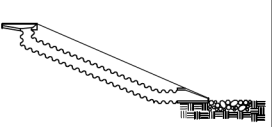
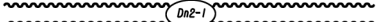
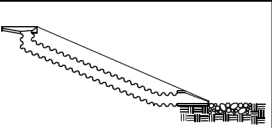
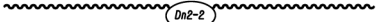


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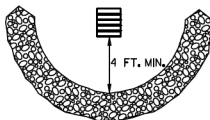







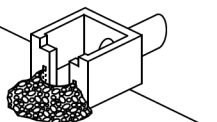

REVISION DATES		FAYETTE COUNTY			
		EROSION CONTROL LEGEND			
		REDWINE ROAD & STARRS MILL SCHOOL			
		COMPLEX MULTI-USE PATH			
CHECKED:		DATE:		DRAWING No.	
BACKCHECKED:		DATE:		52-003	
CORRECTED:		DATE:			
VERIFIED:		DATE:			

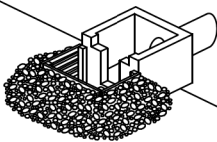



CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dc-B	STREAM DIVERSION CHANNEL GEOTEXTILE ONLY		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 2.5 - 9.0 fps.
	SECTION 163	LINE CODE 	THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
Dc-C	STREAM DIVERSION CHANNEL RIP-RAP & GEOTEXTILE		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIP-RAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 9.0 - 13.0 fps.
	SECTION 163	LINE CODE 	THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
D1-1	DIVERSION BERM		A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS *Dn1*OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.
	CONSTRUCTION DETAIL D-47 SECTION 205	LINE CODE 	
D1-2	DIVERSION CHANNEL		A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO DIVERT OFFSITE RUNOFF AWAY FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE RUNOFF SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION.
	SECTION 205	LINE CODE 	REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE ESPCP. RUNOFF FROM DISTURBED AREAS WITHIN THE PROJECT AREA SHALL NOT BE ALLOWED TO CONVERGE WITH OFFSITE RUNOFF WITHIN THIS DIVERSION.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE FLEXIBLE		A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 350 FEET ON 0% - 2% GRADES, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A CORRUGATED 10". THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'.
	CONSTRUCTION DETAIL D-19 SECTION 163	LINE CODE 	THE OUTLET AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dn2-A	PERMANENT DOWNDRAIN STRUCTURE CONCRETE		A CONCRETE FLUME TYPE "A" IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OTHER CRITERIA).
	DETAIL D-9 SECTION 441	LINE CODE 	
Dn2-B	PERMANENT DOWNDRAIN STRUCTURE CONCRETE		A CONCRETE FLUME TYPE "B" IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	DETAIL D-9 SECTION 441	LINE CODE 	
Dn2-1	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP1, 9017J TP1,		CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	DETAIL D-26 TP1 SECTION 576, 577	LINE CODE 	
Dn2-2	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP2, 9017J TP2,		CONCRETE DRAIN INLET AND METAL PIPE IS USED TO DRAIN CURB, IN A SAG, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	DETAIL D-26 TP2 SECTION 576, 577	LINE CODE 	

NOTE:


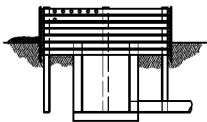





- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

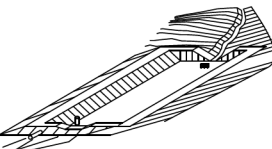
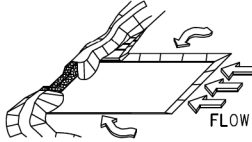
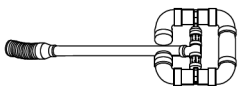
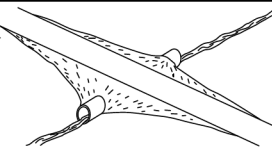
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Fr	FILTER RING CONSTRUCTION DETAIL D-46 SECTION 163		A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE INLETS AND POST-CONSTRUCTION POND OUTLETS. IT REDUCES RUNOFF VELOCITY AND HELPS PREVENT SEDIMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION ON USAGE.
	SYMBOL 		
Rd	ROCK FILTER DAM CONSTRUCTION DETAIL D-43 SECTION 163, 603		ROCK FILTER DAMS ARE CONSTRUCTED OF TYPE 3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 50 ACRES OR LESS. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING ROCK FILTER DAMS. THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL BANKS. ROCK FILTER DAMS SHOULD BE USED IN DITCHES PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, OPEN-WATERS, OR OTHER ESAs.
	SYMBOL 		
Rd-B	STONE FILTER BERM CONSTRUCTION DETAIL D-50 SECTION 163, 603		STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF TYPE-3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE FILTER BERMS. STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A COMMON LOW AREA WHERE PERIMETER SILT FENCE ALONE MAY BE INSUFFICIENT. THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM. AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEDIMENT TRAP IS NOT APPLICABLE.
	LINE CODE 		
Rp	RIP-RAP SECTION 603		RIP-RAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END ROLLS. RIP-RAP TYPE-1 SHOULD BE PLACED ON TOP OF A GEOTEXTILE UNDERLINER AT A MINIMUM 24" THICKNESS OR AS INDICATED ON THE PLANS. RIP-RAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTFALLS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIP-RAP AT OUTFALLS.
	PATTERN 		
Rt-P	RETROFITTING PERFORATED HALF-ROUND PIPE CONSTRUCTION DETAIL D-44 SECTION 163		A PERFORATED HALF-ROUND PIPE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRES TOTAL DRAINAGE AREA. SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL 		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
<div>Rt-B</div>	RETROFITTING SLOTTED BOARD DAM CONSTRUCTION DETAIL D-45 SECTION 163		A SLOTTED BOARD DAM CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5' - 1.0' SPACING TO SERVE AS A TEMPORARY SEDIMENT FILTER. PERMANENT STORMWATER DETENTION POND OUTLET: -DRAINAGE AREA UP TO 100 ACRES -DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA ROADWAY DRAINAGE STRUCTURE: -OPEN END PIPES, WINGED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 30 ACRES REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR DESIGN CRITERIA.
	SYMBOL <div>Rt-B</div>		
<div>Rt-Sg1</div> <div>Rt-Sg2</div> <div>Rt-Sg3</div>	RETROFITTING SILT CONTROL GATES CONSTRUCTION DETAIL D-20 SECTION 163	 FRONT VIEW	A SILT CONTROL GATE CONSISTS OF BOARDS WITHOUT SPACING AND FILTER FABRIC TO BE USED FOR TEMPORARY SEDIMENT STORAGE ON ROADWAY PROJECTS AT THE INLET OF STRUCTURES WITH A DRAINAGE AREA UP TO 50 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL GATES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA. DO NOT USE SILT GATES IN STATE WATERS. Rt-Sg1=TYPE 1: USED ON BOX CULVERTS Rt-Sg2=TYPE 2: USED ON STRAIGHT HEADWALLS Rt-Sg3=TYPE 3: USED ON FLARED END SECTIONS AND TAPERED HEADWALLS
SYMBOL <div>Rt-Sg1</div> <div>Rt-Sg2</div> <div>Rt-Sg3</div>			
<div>SdI-NS</div>	SEDIMENT BARRIER (NON-SENSITIVE) SILT FENCE TYPE A CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-A SILT FENCE IS TYPICALLY USED IN NON-ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS LESS THAN 10'. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
	LINE CODE <div>A — A — A — SdI-NS — A — A — A —</div>		
<div>SdI-S</div>	SEDIMENT BARRIER (SENSITIVE) SILT FENCE TYPE C CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-C SILT FENCE IS TYPICALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS 10' AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-C SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
	LINE CODE <div>C — C — C — SdI-S — C — C — C —</div>		

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd1-BB	SEDIMENT BARRIER BRUSH BARRIER CONSTRUCTION DETAIL D-24B SECTION 201		THIS ITEM CONSISTS OF INTERMINGLED BRUSH, LOGS, ETC. SO AS NOT TO FORM A SOLID DAM. CONSTRUCTED AT THE TOE OF FILL SLOPES ONLY DURING THE CLEARING AND GRUBBING OPERATION. THE BARRIER SHOULD BE USED AT THE TOE OF FILL SLOPES ON GRADING PROJECTS IN RURAL AREAS WHERE SUFFICIENT RIGHT OF WAY OR EASEMENT IS AVAILABLE (10 FEET OR MORE). THE BARRIER SHOULD RUN ROUGHLY PERPENDICULAR TO THE FLOW OF WATER WHERE THIS DOES NOT CONFLICT WITH RIGHT-OF-WAY OR EASEMENT LIMITS. THEY WILL NOT BE PLACED IN WETLANDS.
	LINE CODE * * * Sd1-BB * * *		TYPICALLY NOT SHOWN ON PLANS. PAYMENT FOR THIS ITEM IS INCLUDED IN THE CLEARING AND GRUBBING COST. NO SEPARATE PAYMENT SHALL BE MADE.
Sd2-B	INLET SEDIMENT TRAP (BAFFLE BOX) CONSTRUCTION DETAIL D-42 SECTION 163		BAFFLE BOX INLET SEDIMENT TRAP USED FOR INLETS RECEIVING HIGH FLOW RATE AND/OR VELOCITY. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES 7 cfs AND GREATER.
	SYMBOL Sd2-B		
Sd2-Bg	INLET SEDIMENT TRAP (BLOCK & GRAVEL) CONSTRUCTION DETAIL D-42 SECTION 163		BLOCK AND GRAVEL DROP INLET PROTECTION USED FOR WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. CAN BE USED AT CULVERT INLETS. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 5 - 7 cfs.
	SYMBOL Sd2-Bg		
Sd2-F	INLET SEDIMENT TRAP (FILTER FABRIC) CONSTRUCTION DETAIL D-42 SECTION 163	 OR  OR 	(a) A SEDIMENT BARRIER CONSISTING OF A PREFABRICATED FRAME WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (b) A SEDIMENT BARRIER CONSISTING OF A PERFORATED METAL STAND PIPE WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (c) TYPE C SILT FENCE WITH SUPPORTING FRAME CAN BE USED AS AN ALTERNATE TO INLET SEDIMENT TRAP FOR AREAS WITH SLOPES < 5%.
	SYMBOL Sd2-F		THIS ITEM IS USED TO PREVENT SILT FROM ENTERING THE PIPE SYSTEM. SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. RECOMMENDED FOR INLET RECEIVING FLOW RATES THAT RANGE FROM 0 - 4 cfs.
Sd2-G	INLET SEDIMENT TRAP (GRAVEL) CONSTRUCTION DETAIL D42 SECTION 163		GRAVEL DROP INLET PROTECTION USED WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. STONE AND GRAVEL ARE USED TO TRAP SEDIMENT. THE SLOPE TOWARD THE INLET SHALL BE NO MORE THAN 3:1. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 3 - 5 cfs.
	SYMBOL Sd2-G		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd3	TEMPORARY SEDIMENT BASIN CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BASIN CREATED BY EXCAVATING AN AREA, DAMMING CONCENTRATED FLOW, OR A COMBINATION OF BOTH. THE BASIN IS DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DRAINAGE AREA. THE DRAINAGE AREA SHOULD NOT EXCEED 150 ACRES. BASINS TYPICALLY CONSISTS OF A DAM, PRINCIPAL SPILLWAY, AND AN EMERGENCY SPILLWAY. A FLOATING SURFACE SKIMMER SHALL BE REQUIRED AS PART OF THE PRINCIPAL SPILLWAY UNLESS INFEASIBLE. SUFFICIENT RIGHT-OF-WAY OR EASEMENT IS NEEDED FOR BASIN CONSTRUCTION AND MAINTENANCE ACCESS.
	SYMBOL Sd3		SEDIMENT BASINS SHALL BE CONSIDERED ON ALL PROJECTS, BUT MAY NOT BE PRACTICAL. BASINS SHOULD BE LOCATED TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND UTILITIES. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Sd4-C	ROCK OUTLET TEMPORARY SEDIMENT TRAP CONSTRUCTION DETAIL D-53 SECTION 163		TEMPORARY POND WITH ROCK OUTLET DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER DRAINAGE AREA. DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. DISTINGUISHED FROM TEMPORARY SEDIMENT BASIN BY LACK OF PRINCIPAL SPILLWAY. MAXIMUM POND DEPTH FROM BOTTOM OF POND TO EMERGENCY SPILLWAY IS 4 FEET.
	SYMBOL Sd4-C		A TEMPORARY SEDIMENT BASIN SHALL BE EVALUATED PRIOR TO CONSIDERING A TEMPORARY SEDIMENT TRAP. A TEMPORARY SEDIMENT TRAP IS IDEAL FOR SMALL AREAS WITH NO UNUSUAL DRAINAGE FEATURES AND EFFECTIVE AGAINST COARSE SEDIMENT, BUT NOT AGAINST SILT OR CLAY PARTICLES THAT REMAIN SUSPENDED. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Sk	FLOATING SURFACE SKIMMER CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BUOYANT DEVICE THAT DRAINS WATER FROM THE SURFACE OF A TEMPORARY SEDIMENT BASIN AT A CONTROLLED FLOW RATE. THE INLET/ORIFICE SIZE IS DESIGNED TO DRAIN THE BASIN WITHIN 24 - 48 HOURS. THE SKIMMER INFORMATION SHALL BE PROVIDED IN CONJUNCTION WITH THE SEDIMENT BASIN INFORMATION IN PLANS. IF A SKIMMER IS INFEASIBLE, THE DESIGNER SHALL PROVIDE A WRITTEN JUSTIFICATION IN THE PLANS.
	SYMBOL Sk		SKIMMERS ARE ATTACHED TO A RISER WITHOUT PERFORATIONS AND ACTS AS THE PRIMARY SPILLWAY. THE SKIMMER BMP SYMBOL SHALL BE SHOWN IN CONJUNCTION WITH THE TEMPORARY SEDIMENT BASIN BMP SYMBOL WHEN APPLICABLE. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION.
Sr	TEMPORARY STREAM CROSSING SECTION 107		A TEMPORARY STRUCTURE INSTALLED ACROSS A FLOWING STREAM OR WATERCOURSE FOR USE BY CONSTRUCTION EQUIPMENT. THIS BMP PROVIDES A MEANS TO CROSS STREAMS OR WATERCOURSES WITHOUT MOVING SEDIMENT INTO STREAMS, DAMAGING THE STREAM BED OR CHANNEL, OR CAUSING FLOODING. THIS BMP SHOULD NOT BE USED ON STREAMS WITH DRAINAGE AREAS GREATER THAN ONE SQUARE MILE, UNLESS SPECIFICALLY DESIGNED TO ACCOMMODATE THE ADDITIONAL DRAINAGE AREA BY THE DESIGN PROFESSIONAL. A CERTIFICATION STATEMENT AND SIGNATURE SHALL ACCOMPANY THE DESIGN.
	SYMBOL Sr		THIS BMP SHALL BE DESIGNED ACCORDING TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". FOR CONTRACTOR'S USE ONLY!

NOTE:

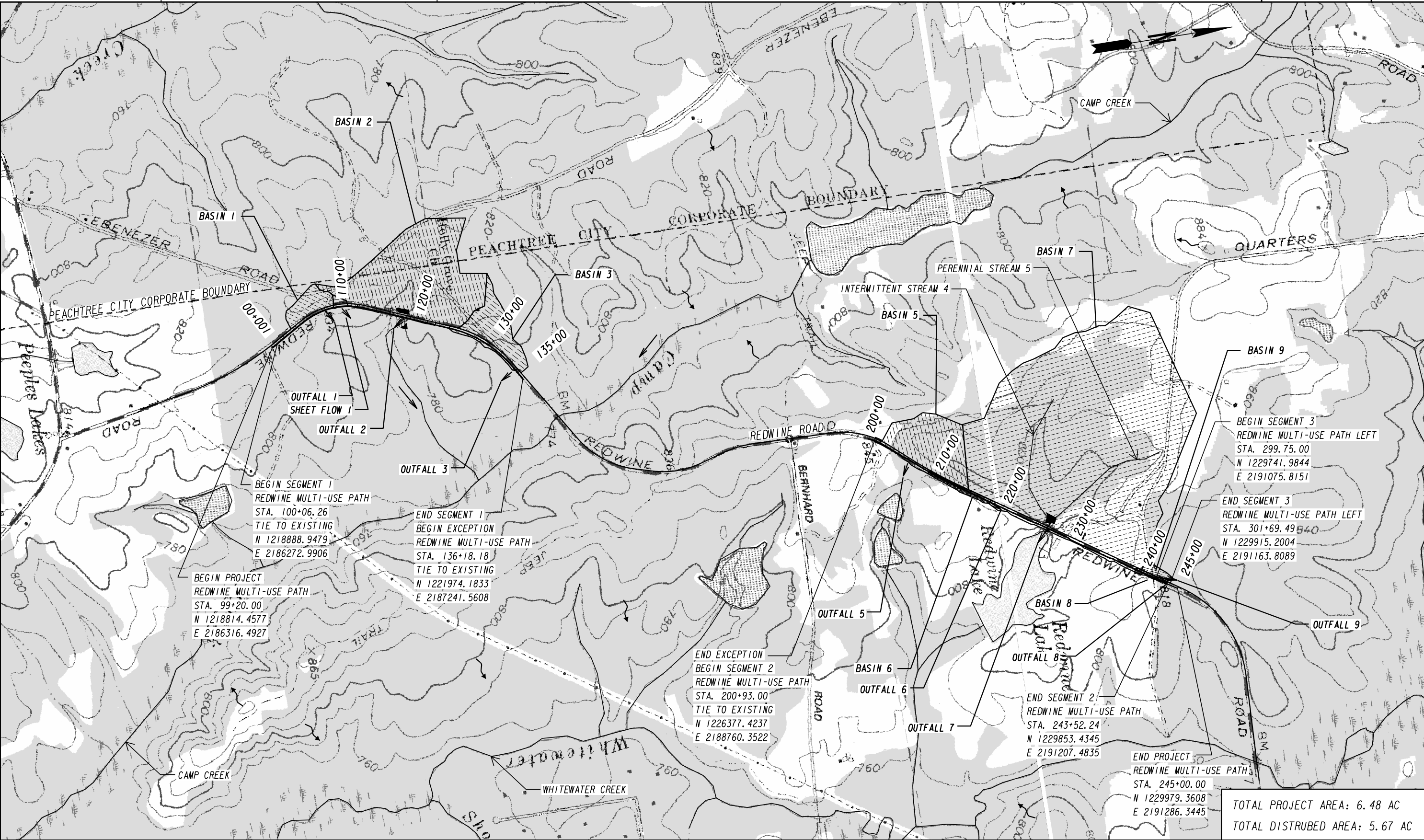
1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

<i>CODE</i>	<i>PRACTICE STD OR DETAIL SPEC. SECT.</i>	<i>DETAIL</i>	<i>DESCRIPTION</i>

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

NTS

REVISION DATES			FAYETTE COUNTY				
			EROSION CONTROL LEGEND REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH				
			CHECKED:		DATE:		DRAWING No. 52-007
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		



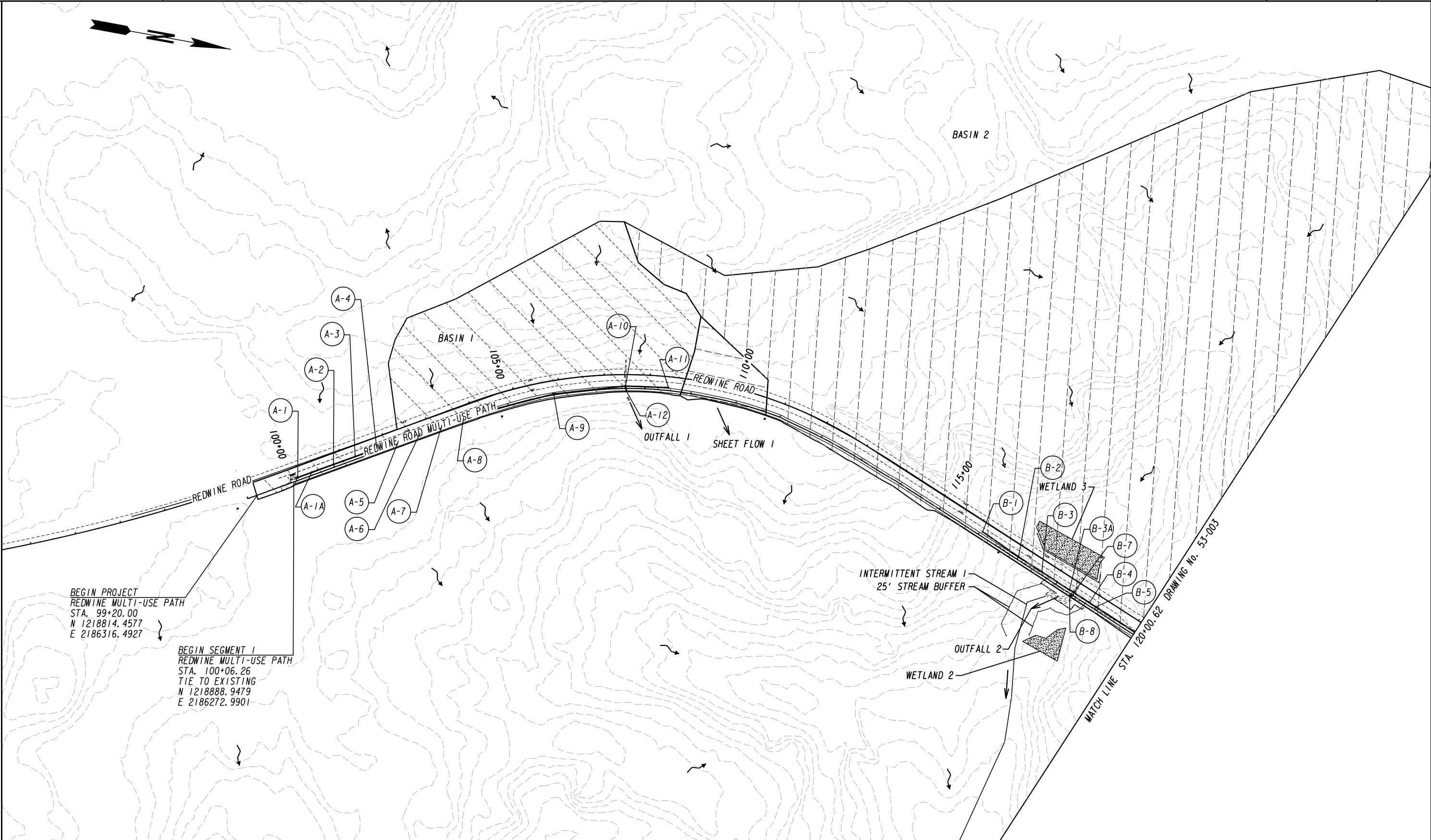


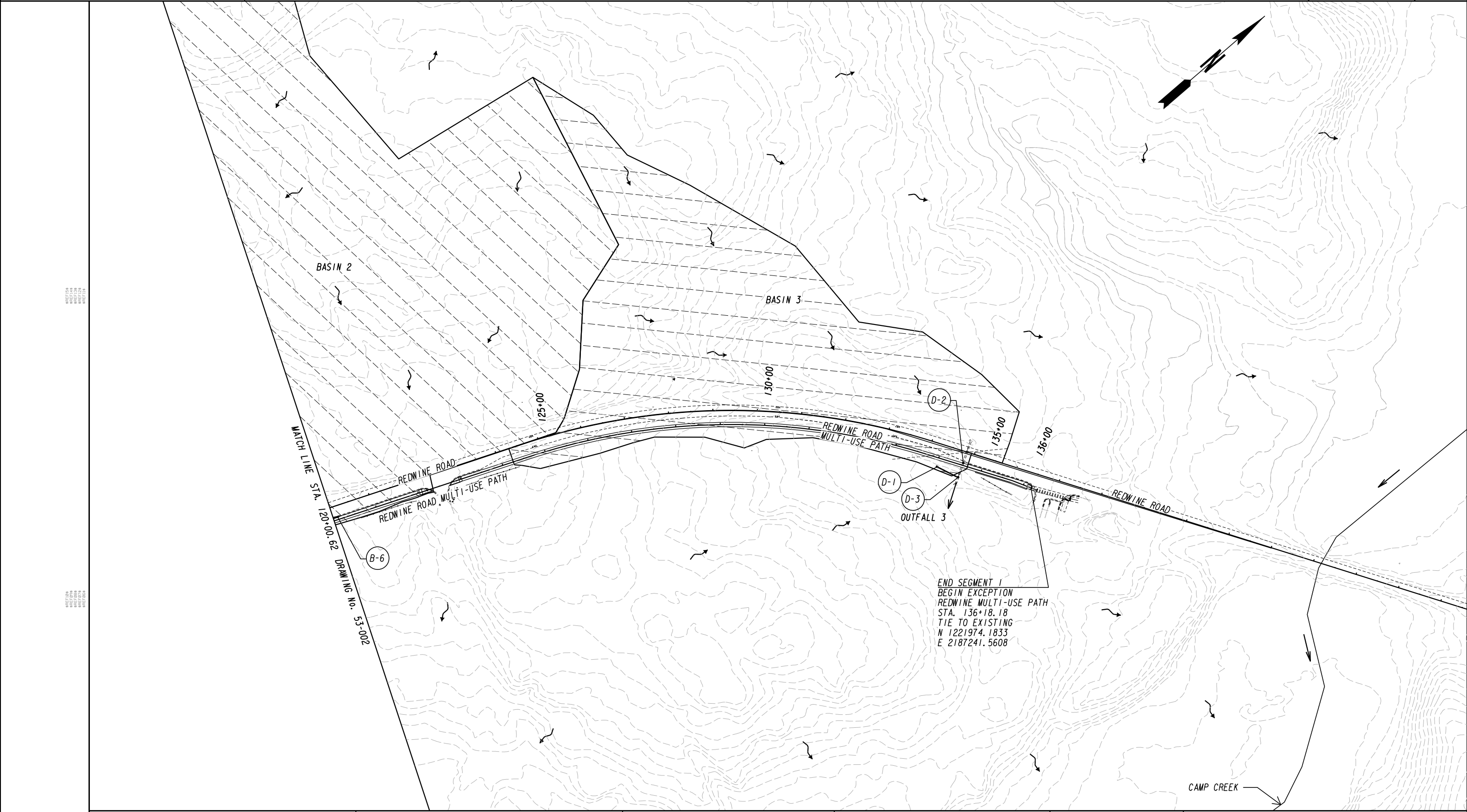
Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES			FAYETTE COUNTY			
			EROSION CONTROL DRAINAGE AREA MAP			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	DRAWING No. 53-001
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	

TOTAL PROJECT AREA: 6.48 AC
TOTAL DISTURBED AREA: 5.67 AC





BASIN NO.	OUTFALL LOCATION AND DESCRIPTION				DISTURBED AREA	TOTAL AREA (ac)	EXISTING RUNOFF COEFFICIENT			EXISTING RUNOFF (CFS)			PROPOSED RUNOFF COEFFICIENT			PROPOSED RUNOFF (CFS)			PRE - HEADWATER ELEV.		PRE - VELOCITY (FPS)		POST - HEADWATER ELEV.		POST - VELOCITY (FPS)	
	ROAD	STATION	OFFSET	STRUCTURE TYPE			C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀
1	REDWINE ROAD	107+09.84	7.00' RT	PROP. 24" RCP	0.50	4.68	0.35	0.39	0.40	8.55	10.51	12.18	0.40	0.43	0.45	9.54	11.73	13.60	830.73	830.86	9.55	9.69	830.71	830.84	13.33	13.59
2	REDWINE ROAD	118+40.34	7.00' RT	PROP. 54" RCP	0.68	39.95	0.48	0.52	0.54	85.04	104.62	121.33	0.48	0.53	0.55	86.20	106.06	123.00	799.66	800.39	12.30	12.78	799.17	799.89	6.98	7.68
3	REDWINE ROAD	134+54.27	32.62' RT	EXIST. 36" CMP	0.87	9.78	0.46	0.50	0.52	23.77	29.16	33.79	0.48	0.53	0.55	27.68	33.97	39.36	789.99	790.23	4.11	4.52	789.99	790.23	4.11	4.52

SHEET FLOW	SHEET FLOW LOCATION AND DESCRIPTION				DISTURBED AREA	CONTRIBUTING AREA (ac)	EXISTING RUNOFF COEFFICIENT			EXISTING RUNOFF (CFS)			PROPOSED RUNOFF COEFFICIENT			PROPOSED RUNOFF (CFS)			PRE - HEADWATER ELEV.		PRE - VELOCITY (FPS)		POST - HEADWATER ELEV.		POST - VELOCITY (FPS)	
	ROAD	STATION	OFFSET	STRUCTURE TYPE			C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	C ₂₅	C ₅₀	C ₁₀₀	(cfs) Q ₂₅	(cfs) Q ₅₀	(cfs) Q ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀	(ft) HW ₅₀	(ft) HW ₁₀₀	(fps) V ₅₀	(fps) V ₁₀₀
SF1	REDWINE ROAD	110+00	-	-	0.13	0.50	0.42	0.46	0.48	2.00	2.44	2.83	0.48	0.53	0.55	2.29	2.80	3.25	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A	N/ A

SEGMENT I



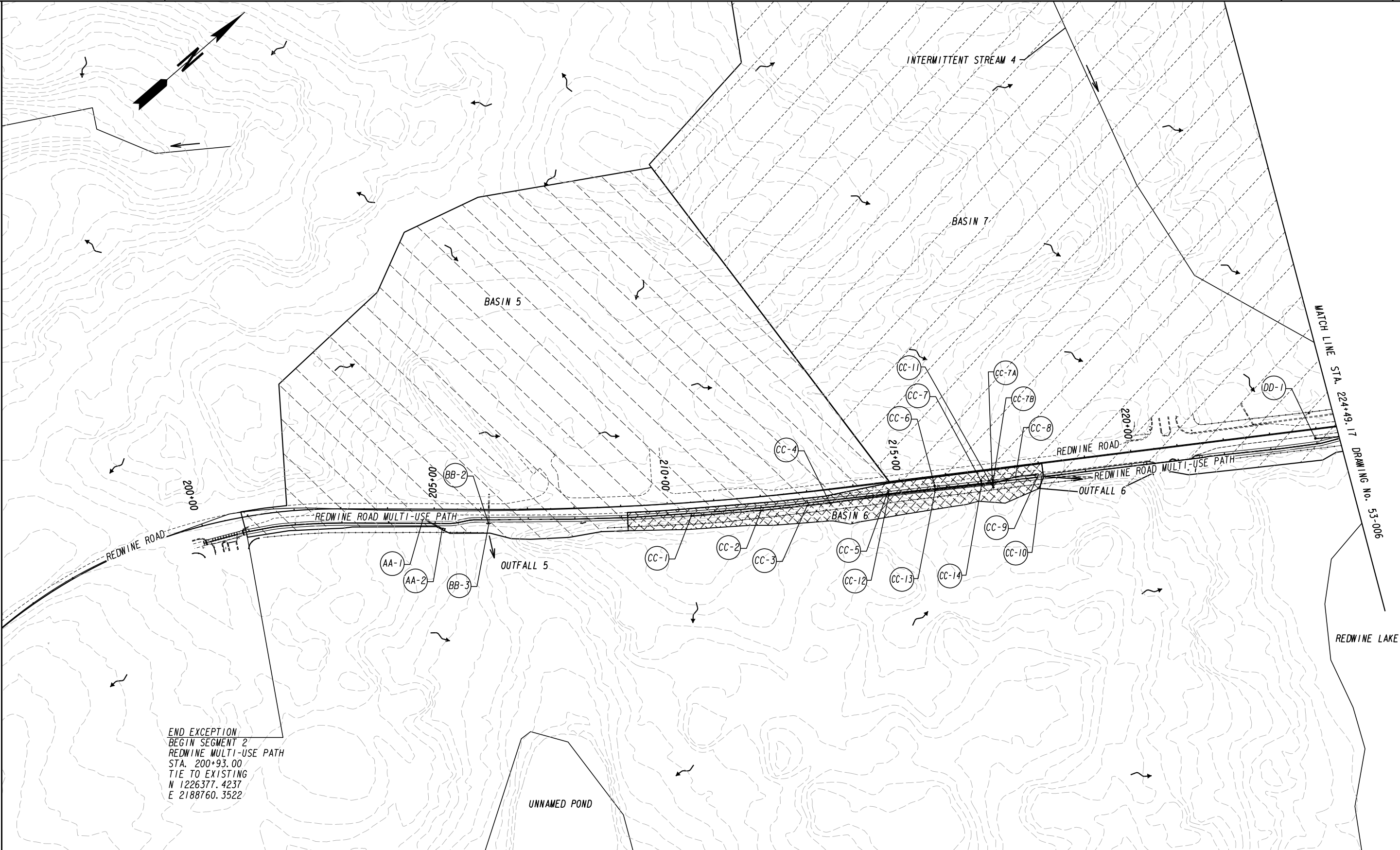
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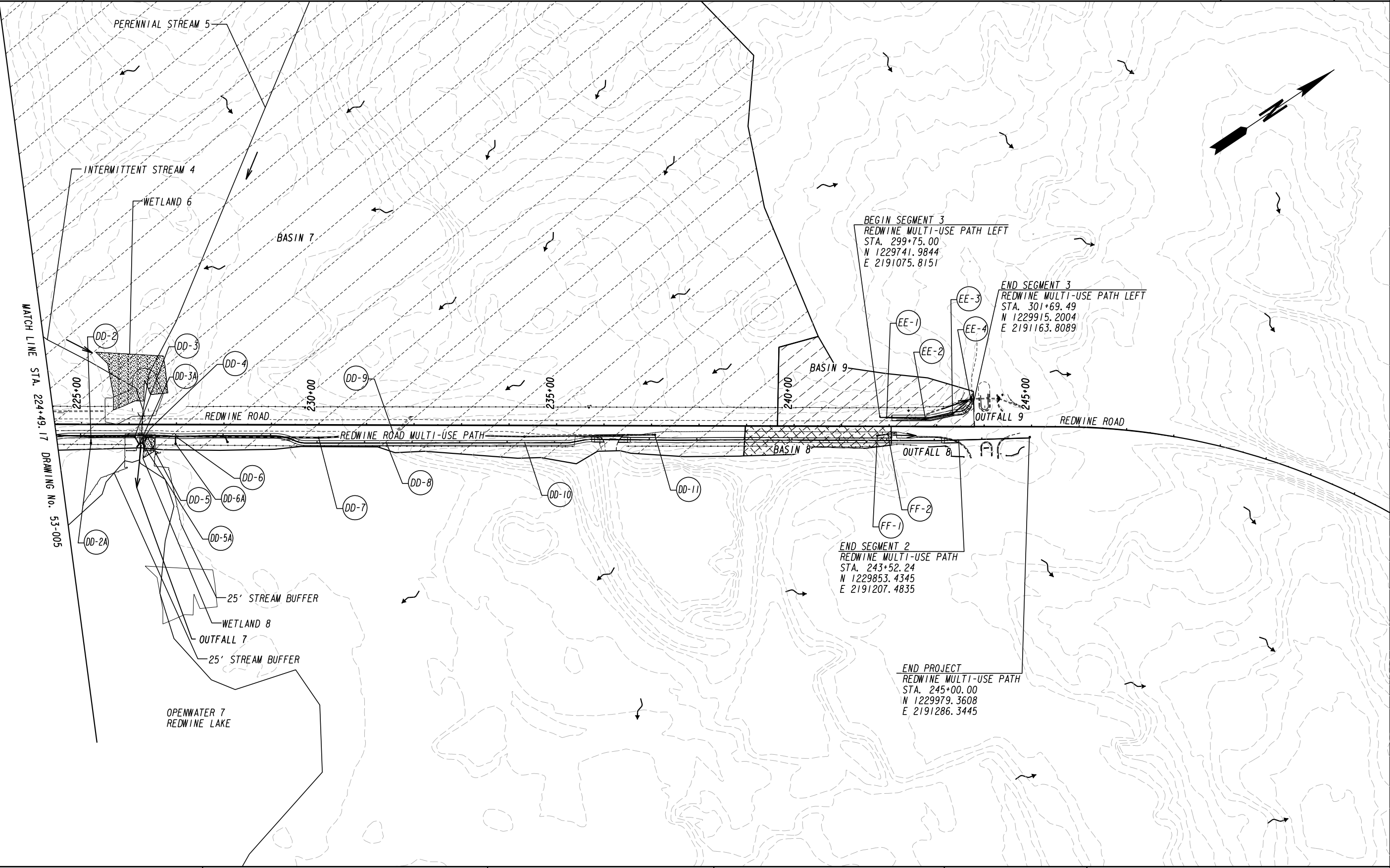
Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES

FAYETTE COUNTY
EROSION CONTROL DRAINAGE AREA MAP
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	53-004	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



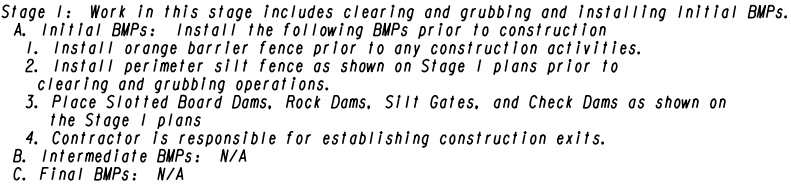


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SEGMENT 2


Heath & Lineback Engineers
 INCORPORATED
 2390 CANTON ROAD, BUILDING 200
 MARIETTA, GEORGIA 30066-5393
 (770) 424-1668

REVISION DATES			FAYETTE COUNTY			
			EROSION CONTROL DRAINAGE AREA MAP			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	DRAWING No. 53-007
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	



REVISION DATES			FAYETTE COUNTY			
			BMP LOCATION DETAILS - STAGE 1			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	DRAWING No. 54.1-001
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	

Curve* 102
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N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5°58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

Curve* 1
PI Sta= 104+48.79
N= 1219271.0813
E= 2186049.8353
DELTA= 3°54'22.0" (RT)
D= 3°00'56.04"
T= 64.79
L= 129.53
R= 1900.00
E= 1.10

Curve* 2
PI Sta= 105+78.85
N= 1219387.6598
E= 2185992.0141
DELTA= 9°57'06.5" (RT)
D= 8°40'52.24"
T= 57.46
L= 114.64
R= 660.00
E= 2.50

Curve* 3
PI Sta= 108+04.58
N= 1219604.4398
E= 2185928.0984
DELTA= 17°40'25.5" (RT)
D= 7°09'43.10"
T= 124.37
L= 246.77
R= 800.00
E= 9.61

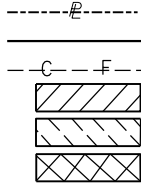
Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97

MATCH LINE
DRAWING NO. 54.1-001
STA. 104+16.71

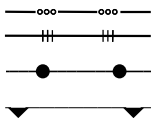
MATCH LINE
DRAWING NO. 54.1-003
STA. 110+16.29

Stage 1: Work in this stage includes clearing and grubbing and installing Initial BMPs.
A. Initial BMPs: Install the following BMPs prior to construction
1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage 1 plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage 1 plans
4. Contractor is responsible for establishing construction exits.
B. Intermediate BMPs: N/A
C. Final BMPs: N/A

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



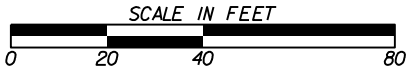
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



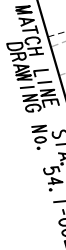
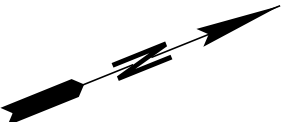


Heath & Lineback Engineers
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MARIETTA, GEORGIA 30066-5393
(770)424-1668





REVISION DATES				FAYETTE COUNTY			
				BMP LOCATION DETAILS - STAGE 1			
				REDWINE ROAD & STARRS MILL SCHOOL			
				COMPLEX MULTI-USE PATH			
CHECKED:		DATE:		DRAWING No.			
BACKCHECKED:		DATE:		54.1-002			
CORRECTED:		DATE:					
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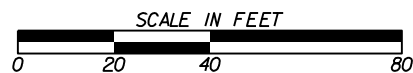
MAJCH LINE STA. 115+60.69
DRAWING No. 54.1-004

Stage 1: Work in this stage includes clearing and grubbing and installing initial BMPs.

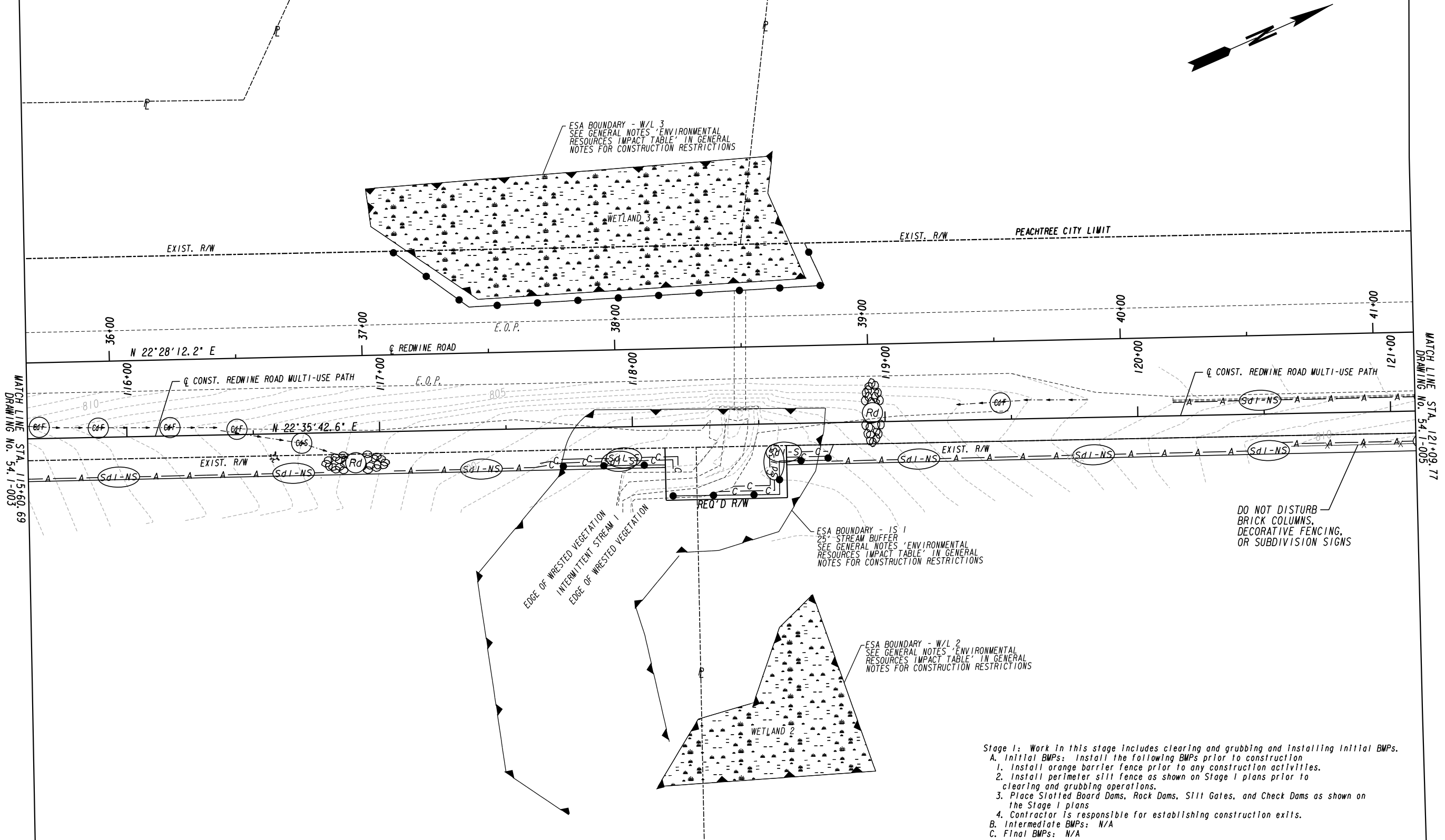
- A. Initial BMPs: Install the following BMPs prior to construction
 1. Install orange barrier fence prior to any construction activities.
 2. Install perimeter silt fence as shown on Stage 1 plans prior to clearing and grubbing operations.
 3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage 1 plans
 4. Contractor is responsible for establishing construction exits.
- B. Intermediate BMPs: N/A
- C. Final BMPs: N/A



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REVISION DATES			FAYETTE COUNTY			
			BMP LOCATION DETAILS - STAGE 1 REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	DRAWING No. 54.1-003
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	



MATCH LINE STA. 115+60.69
DRAWING No. 54.1-003

MATCH LINE STA. 121+09.77
DRAWING No. 54.1-005

Stage 1: Work in this stage includes clearing and grubbing and installing Initial BMPs.
A. Initial BMPs: Install the following BMPs prior to construction
1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage 1 plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage 1 plans
4. Contractor is responsible for establishing construction exits.
B. Intermediate BMPs: N/A
C. Final BMPs: N/A

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
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SCALE IN FEET

0

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REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 1

REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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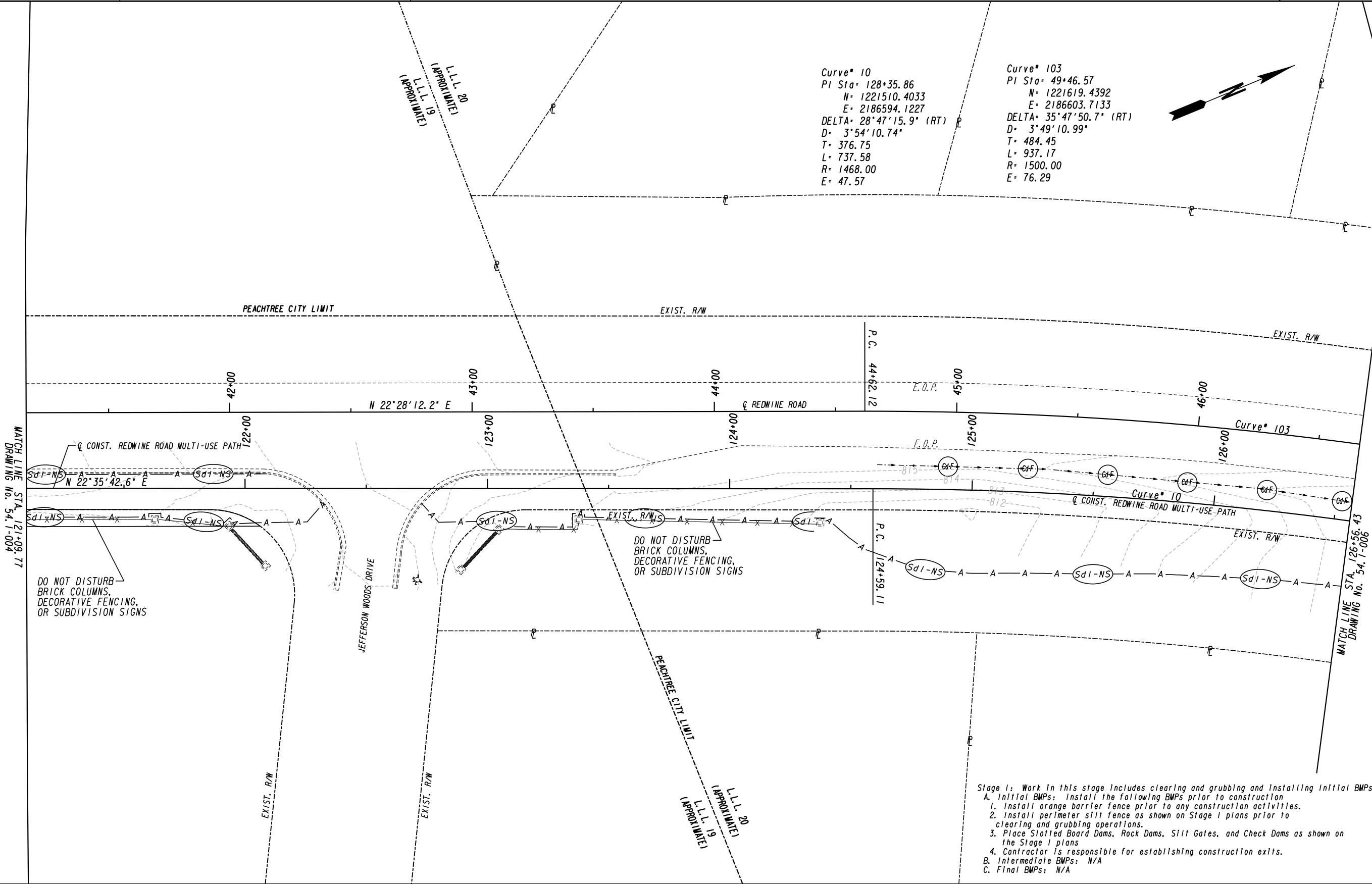
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DRAWING No.
54.1-004

7/31/2015
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WETLAND 100



7/31/2015

GPLN

7/31/2015

PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

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-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

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SCALE IN FEET

REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 1

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

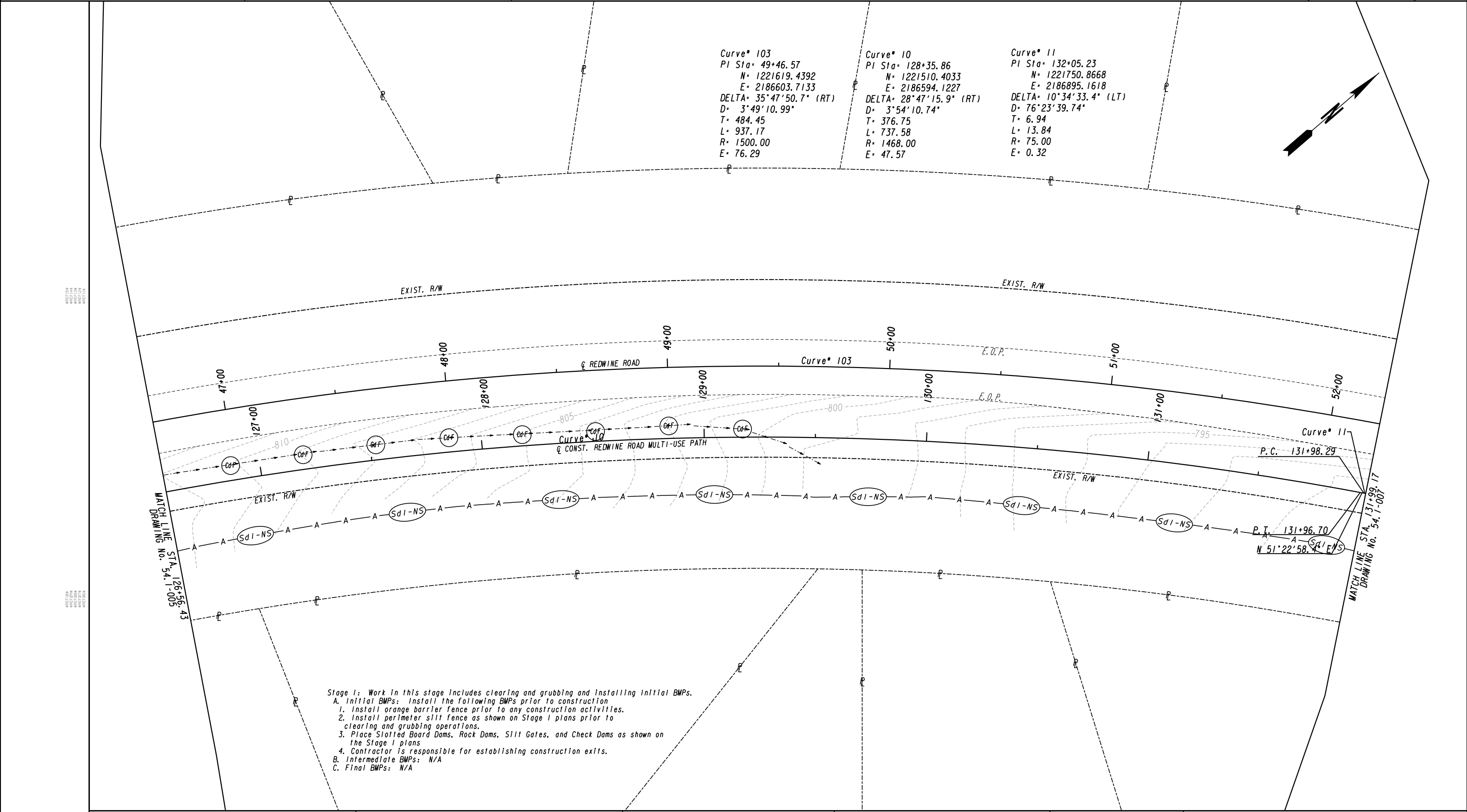
CHECKED: DATE:

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CORRECTED: DATE:

VERIFIED: DATE:

DRAWING No.
54.1-005



Stage 1: Work in this stage includes clearing and grubbing and installing Initial BMPs.

A. Initial BMPs: Install the following BMPs prior to construction.

1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage 1 plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage 1 plans
4. Contractor is responsible for establishing construction exits.

B. Intermediate BMPs: N/A

C. Final BMPs: N/A

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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||| |||

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SCALE IN FEET

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REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 1
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:
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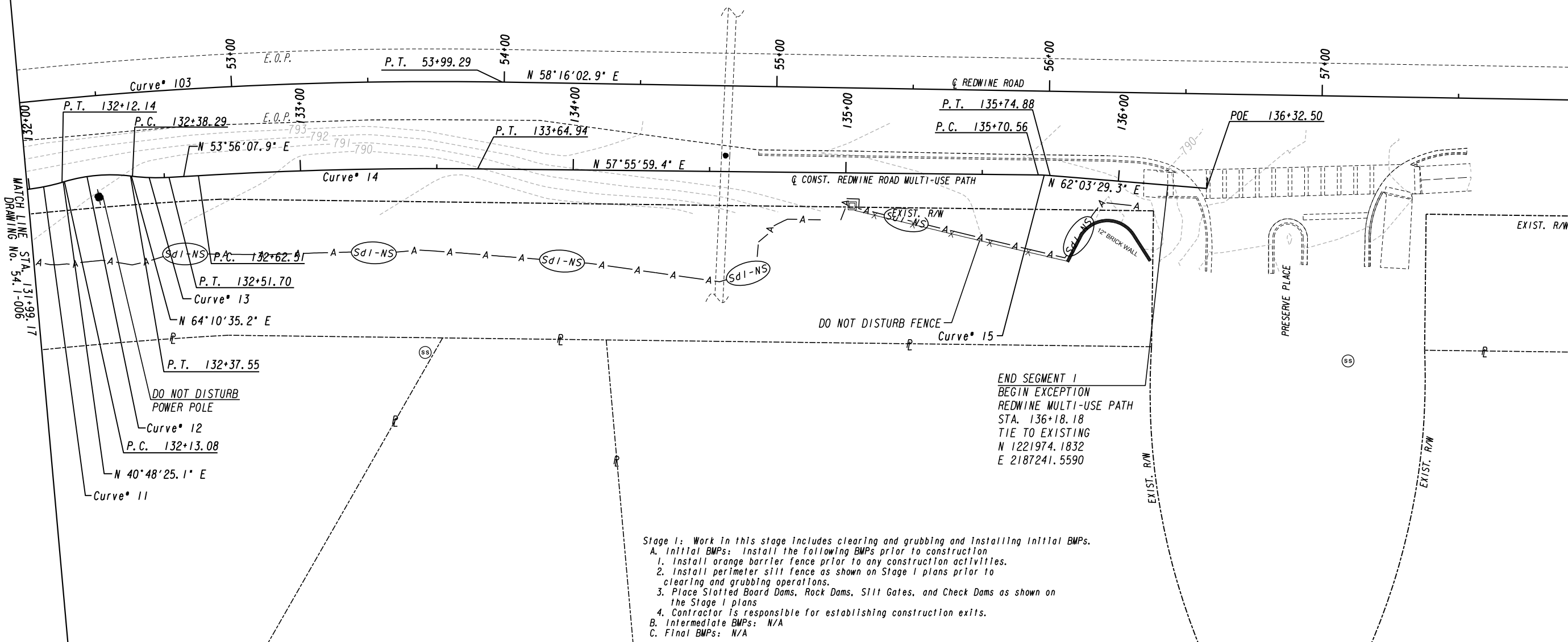
DRAWING No.
54.1-006

7/31/2015

GPLN

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0012624
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0012624

Curve* 11 PI Sta= 132+05.23 N= 1221750.8668 E= 2186895.1618 DELTA= 10°34'33.4" (LT) D= 76°23'39.74" T= 6.94 L= 13.84 R= 75.00 E= 0.32	Curve* 12 PI Sta= 132+25.49 N= 1221766.2262 E= 2186908.4229 DELTA= 23°22'10.1" (RT) D= 95°29'34.68" T= 12.41 L= 24.47 R= 60.00 E= 1.27	Curve* 13 PI Sta= 132+45.01 N= 1221774.8816 E= 2186926.3088 DELTA= 10°14'27.3" (LT) D= 76°23'39.74" T= 6.72 L= 13.41 R= 75.00 E= 0.30	Curve* 14 PI Sta= 133+13.75 N= 1221815.3660 E= 2186981.8991 DELTA= 3°59'51.5" (RT) D= 3°54'10.74" T= 51.23 L= 102.43 R= 1468.00 E= 0.89	Curve* 15 PI Sta= 135+72.72 N= 1221952.8818 E= 2187201.4003 DELTA= 4°07'29.8" (RT) D= 95°29'34.68" T= 2.16 L= 4.32 R= 60.00 E= 0.04	Curve* 103 PI Sta= 49+46.57 N= 1221619.4392 E= 2186603.7133 DELTA= 35°47'50.7" (RT) D= 3°49'10.99" T= 484.45 L= 937.17 R= 1500.00 E= 76.29
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Stage 1: Work in this stage includes clearing and grubbing and installing Initial BMPs.

A. Initial BMPs: Install the following BMPs prior to construction

1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage 1 plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage 1 plans
4. Contractor is responsible for establishing construction exits.

B. Intermediate BMPs: N/A

C. Final BMPs: N/A

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

20

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REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 1
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

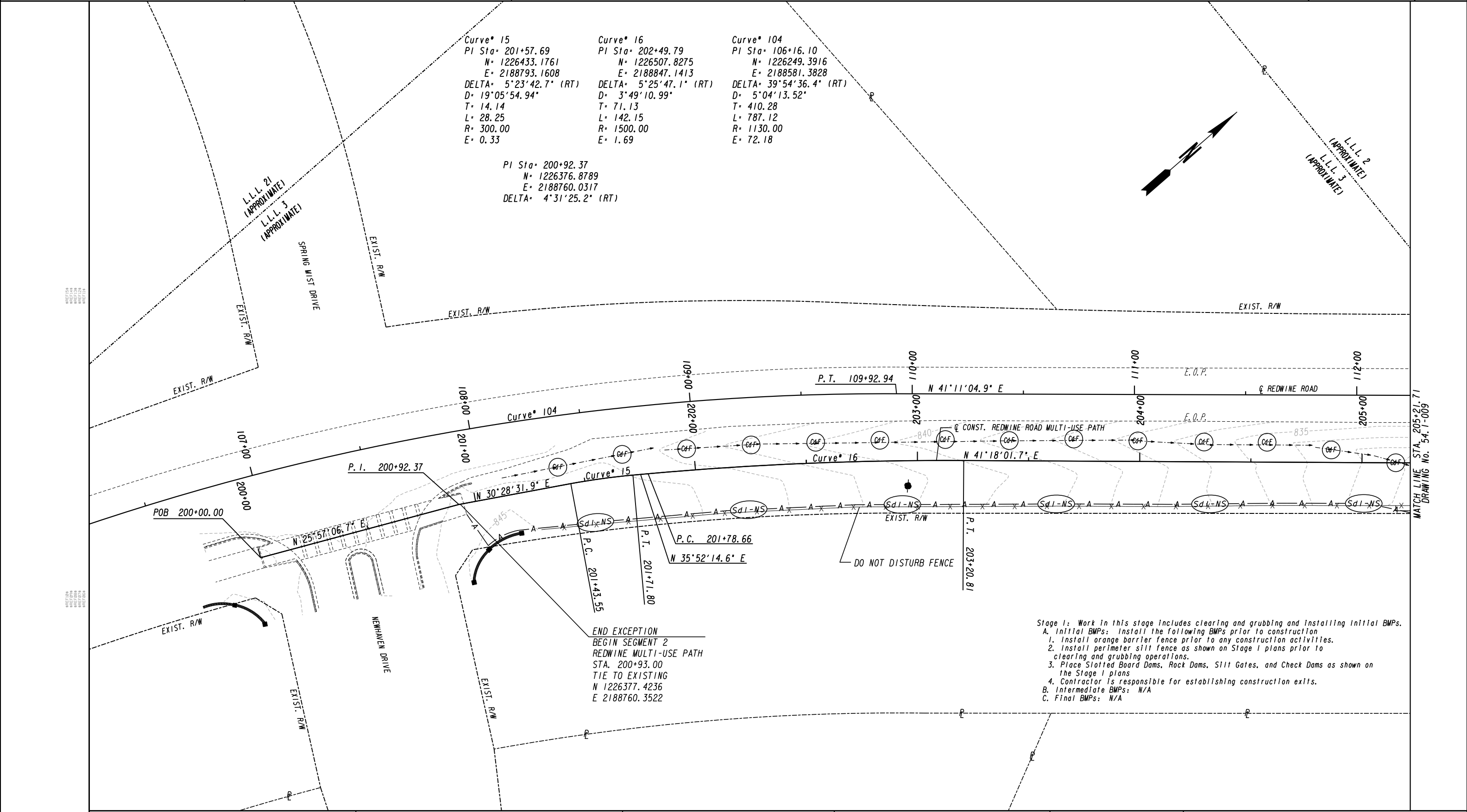
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DRAWING No.
54.1-007

7/31/2015

GPLN

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INSET 10Y
INSET 10Z



PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

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---C---F---

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
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(770)424-1668

SCALE IN FEET

REVISION DATES

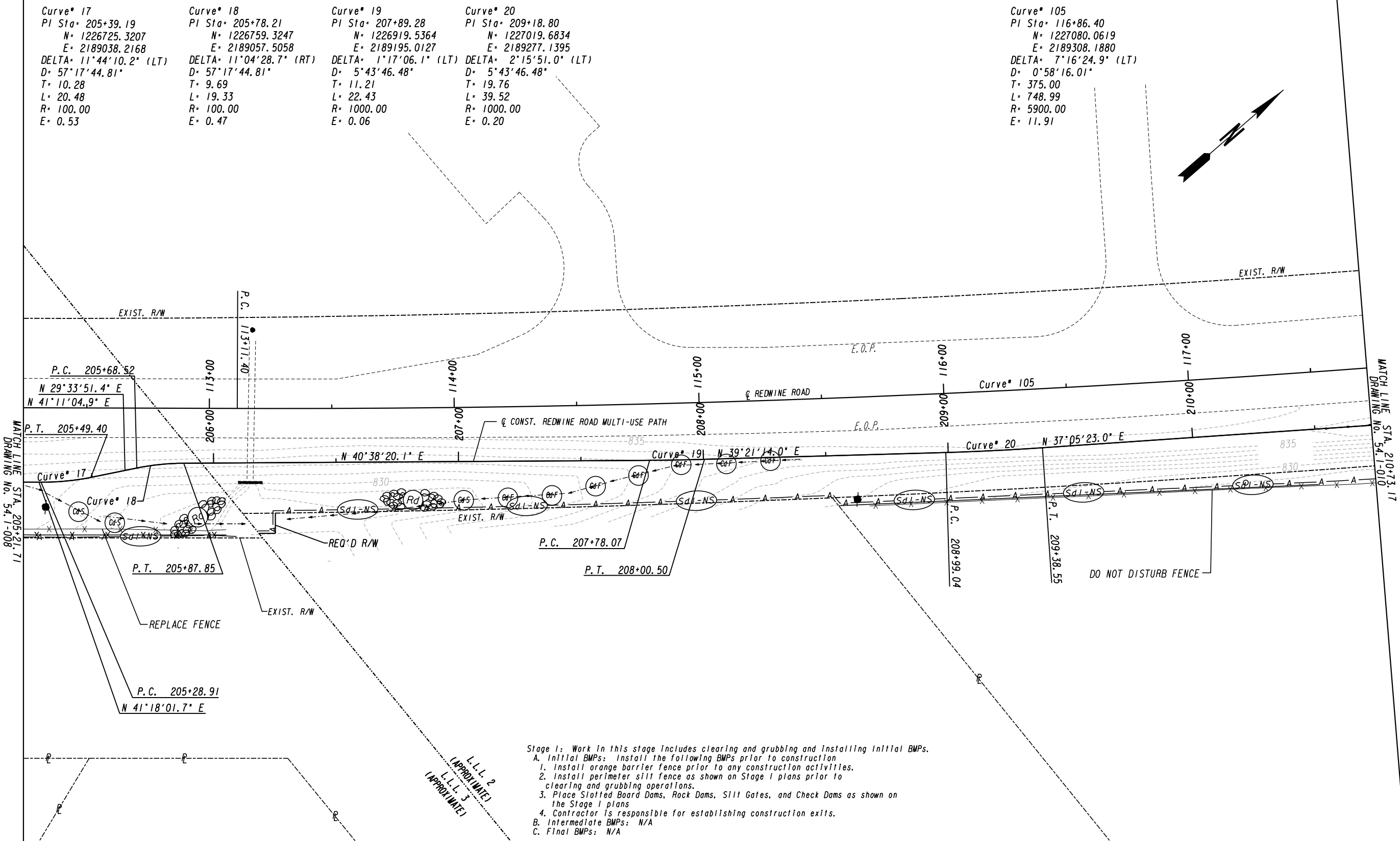
FAYETTE COUNTY

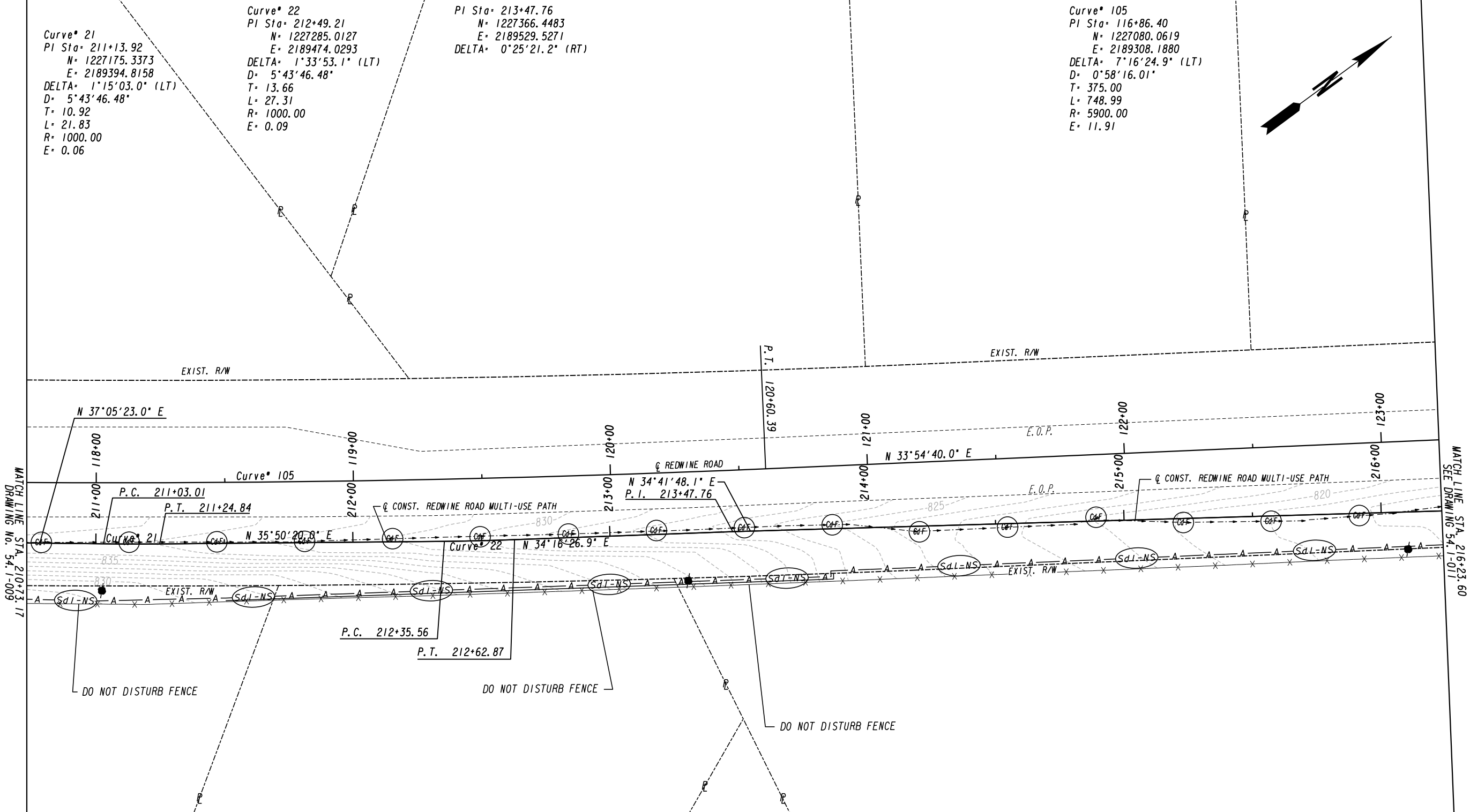
BMP LOCATION DETAILS - STAGE I

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.1-008
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	





PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
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MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

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REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE I
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:

BACKCHECKED: DATE:

CORRECTED: DATE:

VERIFIED: DATE:

DRAWING No.
54.1-010

7/31/2015

GPLN

INSET 10A

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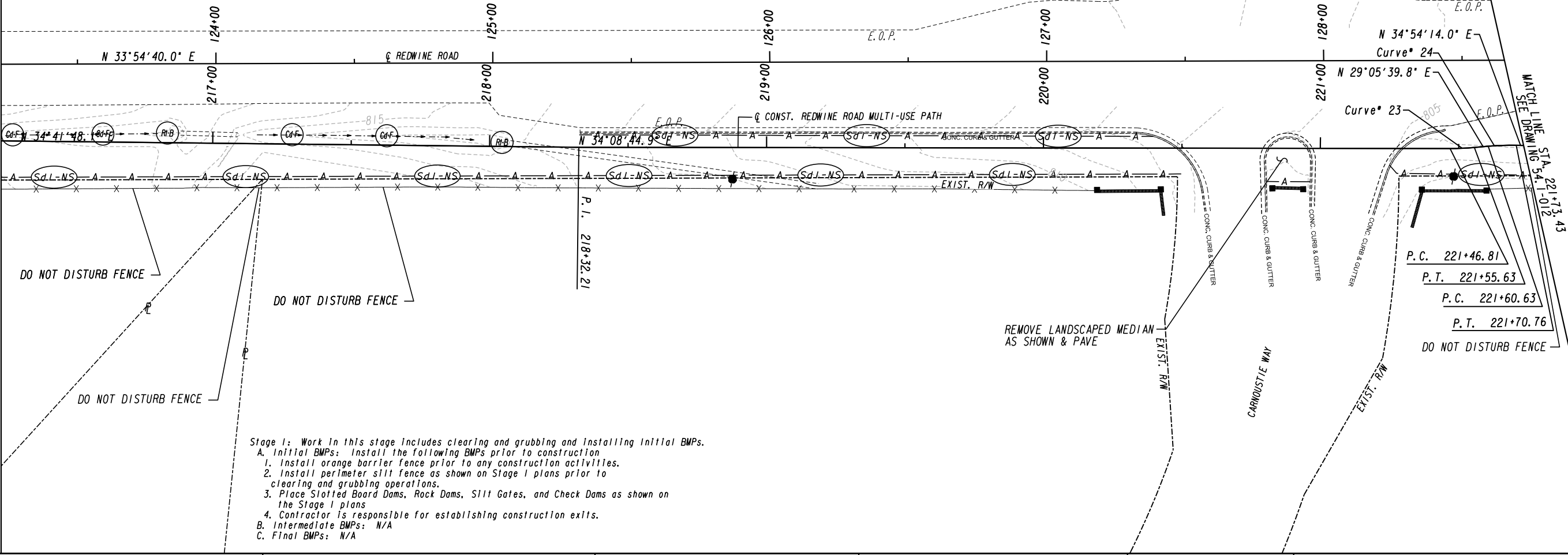
Curve* 23
PI Sta= 221+51.22
N= 1228028.7722
E= 2189984.3548
DELTA= 5°03'05.1" (LT)
D= 57°17'44.81"
T= 4.41
L= 8.82
R= 100.00
E= 0.10

Curve* 24
PI Sta= 221+65.70
N= 1228041.4271
E= 2189991.3968
DELTA= 5°48'34.2" (RT)
D= 57°17'44.81"
T= 5.07
L= 10.14
R= 100.00
E= 0.13

PI Sta= 218+32.21
N= 1227764.7513
E= 2189805.2912
DELTA= 0°33'03.3" (LT)

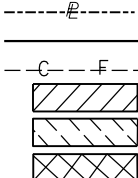
MATCH LINE STA. 216+23.60
SEE DRAWING 54.1-010

MATCH LINE STA. 221+73.43
SEE DRAWING 54.1-012

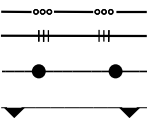


Stage I: Work in this stage includes clearing and grubbing and installing Initial BMPs.
A. Initial BMPs: Install the following BMPs prior to construction
1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage I plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage I plans
4. Contractor is responsible for establishing construction exits.
B. Intermediate BMPs: N/A
C. Final BMPs: N/A

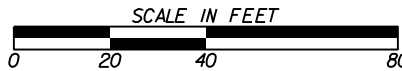
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
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REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



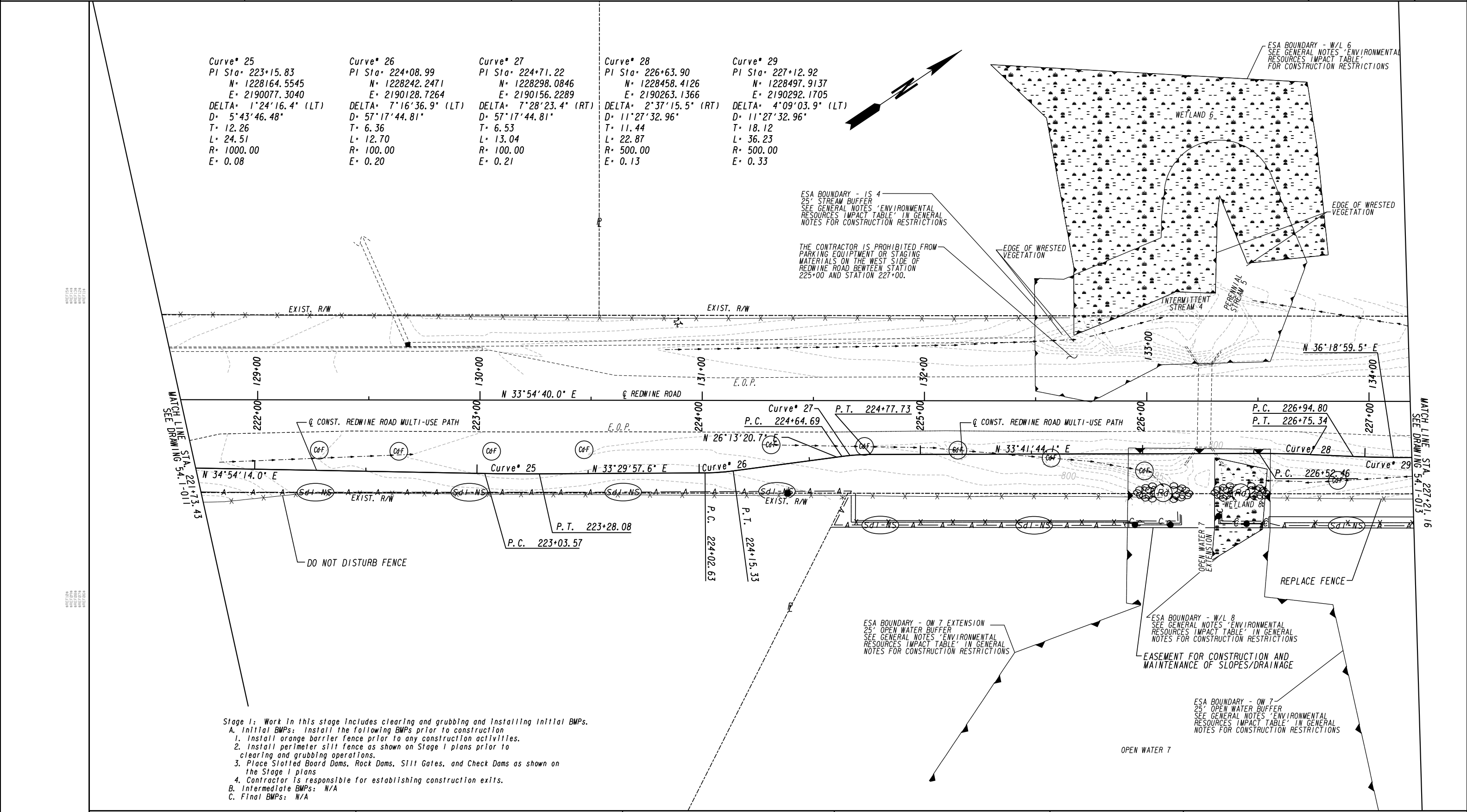
Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-3393
(770)424-1668



REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE I
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.1-011
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PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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BEGIN LIMIT OF ACCESS.....BLA
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LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
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REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE I
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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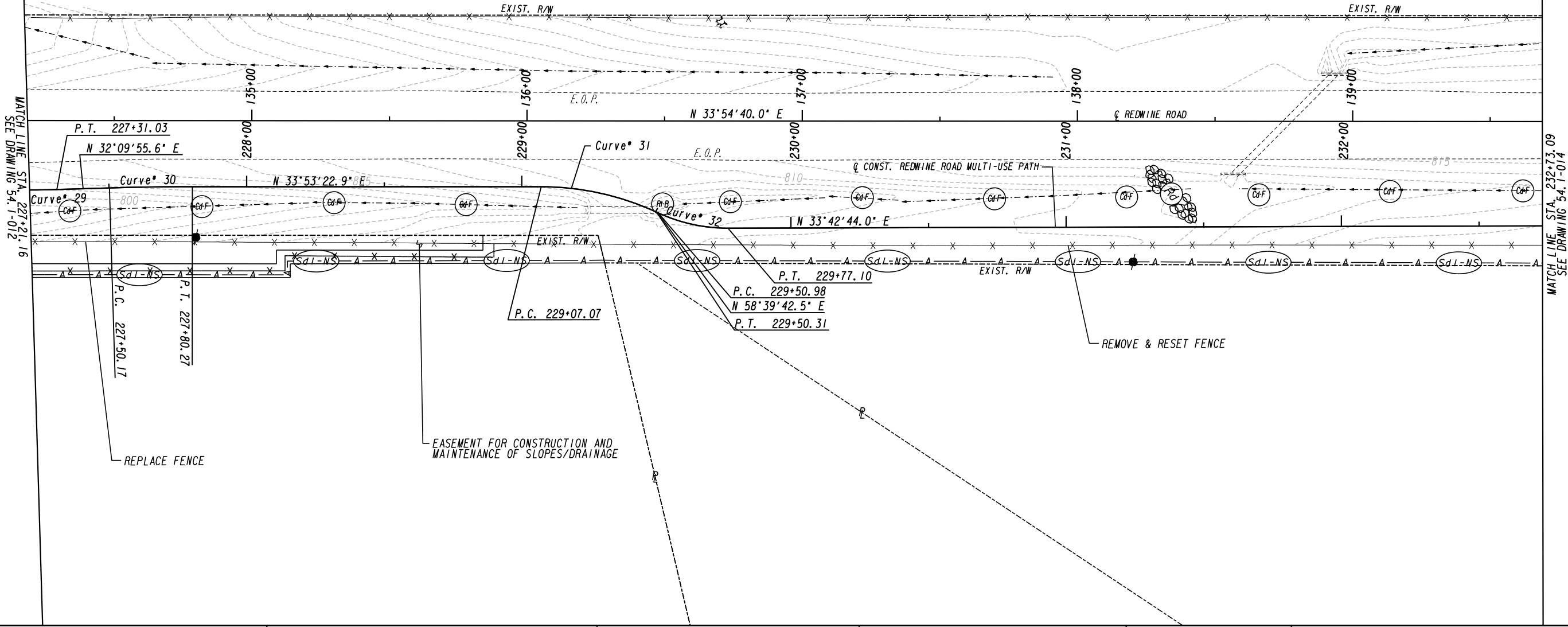
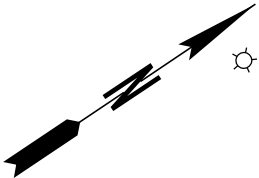
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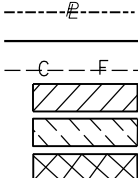
DRAWING No.
54.1-012

Curve* 29	Curve* 30	Curve* 31	Curve* 32
PI Sta= 227+12.92	PI Sta= 227+65.22	PI Sta= 229+29.03	PI Sta= 229+64.25
N= 1228497.9137	N= 1228542.1997	N= 1228678.1823	N= 1228696.8555
E= 2190292.1705	E= 2190320.0217	E= 2190411.3626	E= 2190442.0286
DELTA= 4°09'03.9" (LT)	DELTA= 1°43'27.2" (RT)	DELTA= 24°46'19.6" (RT)	DELTA= 24°56'58.5" (LT)
D= 11°27'32.96"	D= 5°43'46.48"	D= 57°17'44.81"	D= 95°29'34.68"
T= 18.12	T= 15.05	T= 21.96	T= 13.27
L= 36.23	L= 30.09	L= 43.24	L= 26.13
R= 500.00	R= 1000.00	R= 100.00	R= 60.00
E= 0.33	E= 0.11	E= 2.38	E= 1.45

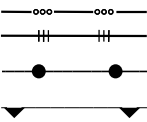
- Stage I: Work in this stage includes clearing and grubbing and installing initial BMPs.
- A. Initial BMPs: Install the following BMPs prior to construction
1. Install orange barrier fence prior to any construction activities.
 2. Install perimeter silt fence as shown on Stage I plans prior to clearing and grubbing operations.
 3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage I plans
 4. Contractor is responsible for establishing construction exits.
- B. Intermediate BMPs: N/A
- C. Final BMPs: N/A



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)





FAYETTE COUNTY
GEORGIA



Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5595
(770)424-1668



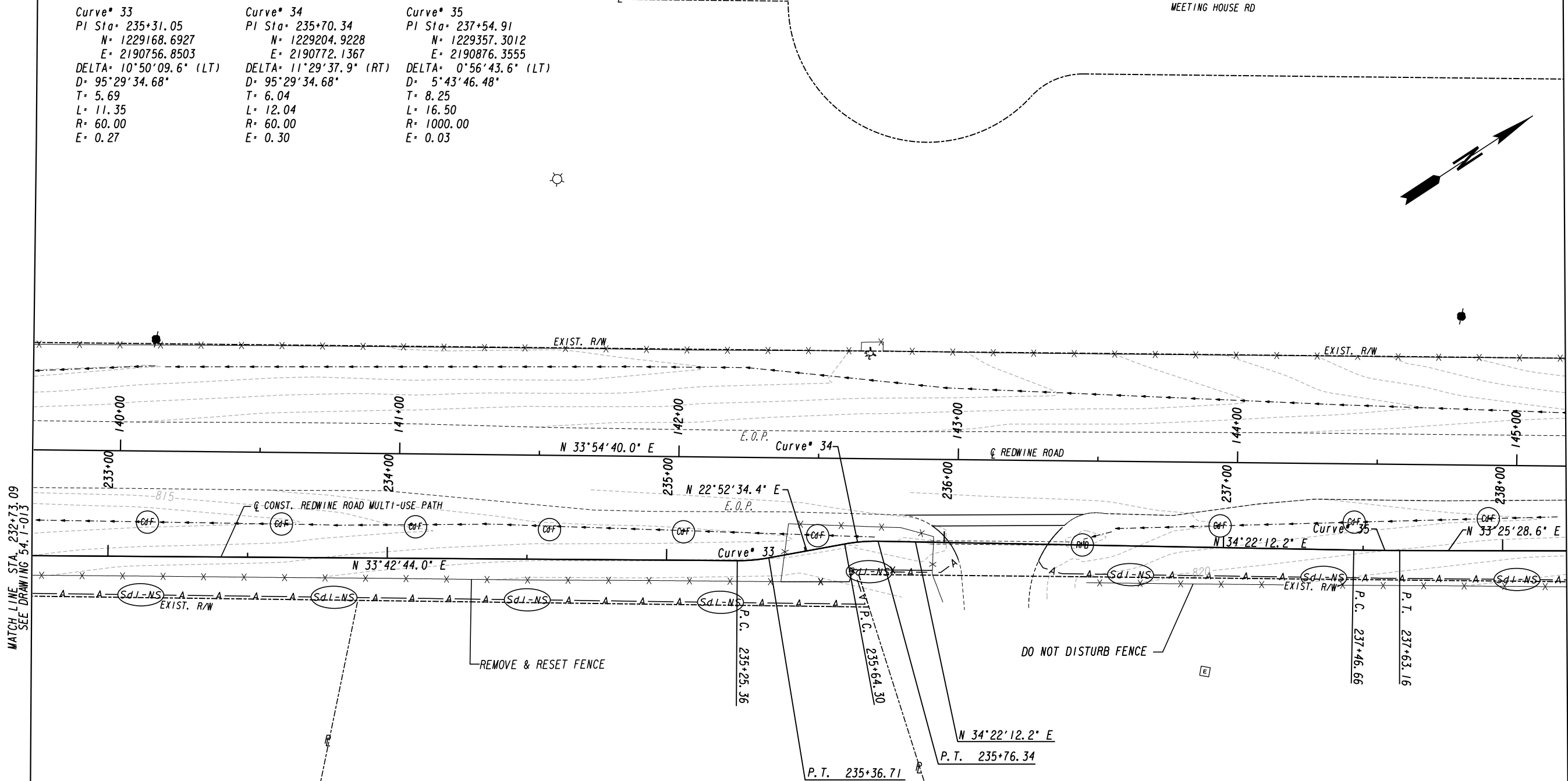
REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE I
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.

54.1-013



Stage I: Work in this stage includes clearing and grubbing and installing initial BMPs.

A. Initial BMPs: Install the following BMPs prior to construction.

1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage I plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage I plans.
4. Contractor is responsible for establishing construction exits.

B. Intermediate BMPs: N/A

C. Final BMPs: N/A

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

HEATH & LINEBACK ENGINEERS
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

20

40

60

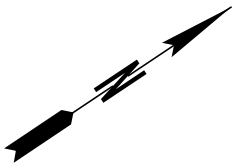
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REVISION DATES

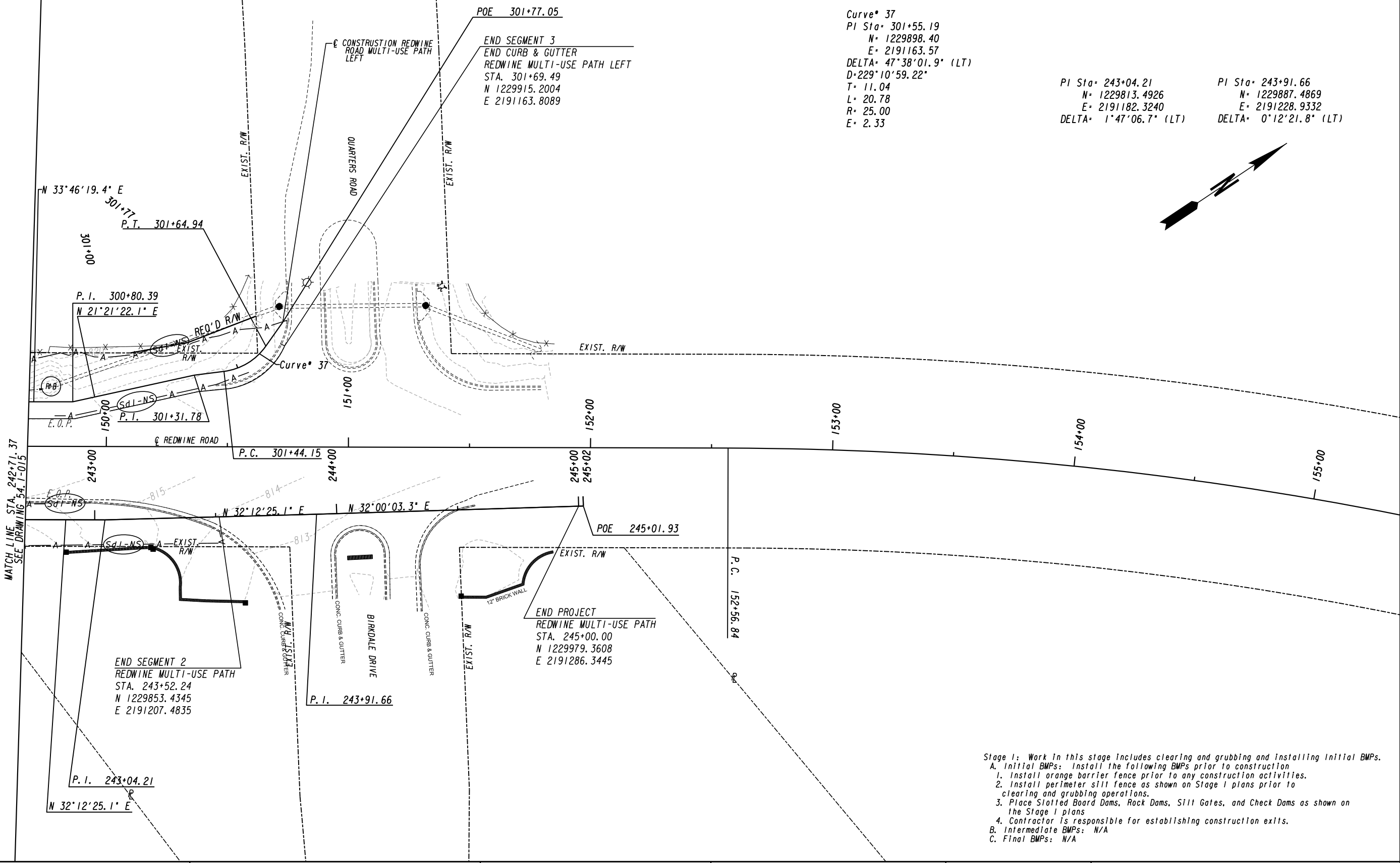
FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE I
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No.
54.1-014



- DRAWING No.
64.1-015



Stage 1: Work in this stage includes clearing and grubbing and installing Initial BMPs.

A. Initial BMPs: Install the following BMPs prior to construction

1. Install orange barrier fence prior to any construction activities.
2. Install perimeter silt fence as shown on Stage 1 plans prior to clearing and grubbing operations.
3. Place Slotted Board Dams, Rock Dams, Silt Gates, and Check Dams as shown on the Stage 1 plans
4. Contractor is responsible for establishing construction exits.

B. Intermediate BMPs: N/A

C. Final BMPs: N/A

7/31/2015

GPLN

0012624_54_1-016.dgn

PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

-----E-----

-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 1
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

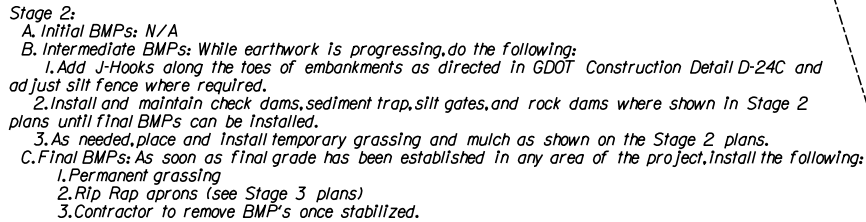
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BACKCHECKED: DATE:

CORRECTED: DATE:

VERIFIED: DATE:

DRAWING No.
54.1-016



REVISION DATES			FAYETTE COUNTY			
			BMP LOCATION DETAILS - STAGE 2			
			REDWINE ROAD & STARRS MILL SCHOOL			
			COMPLEX MULTI-USE PATH			
			CHECKED:		DATE:	DRAWING No. 54.2-001
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	

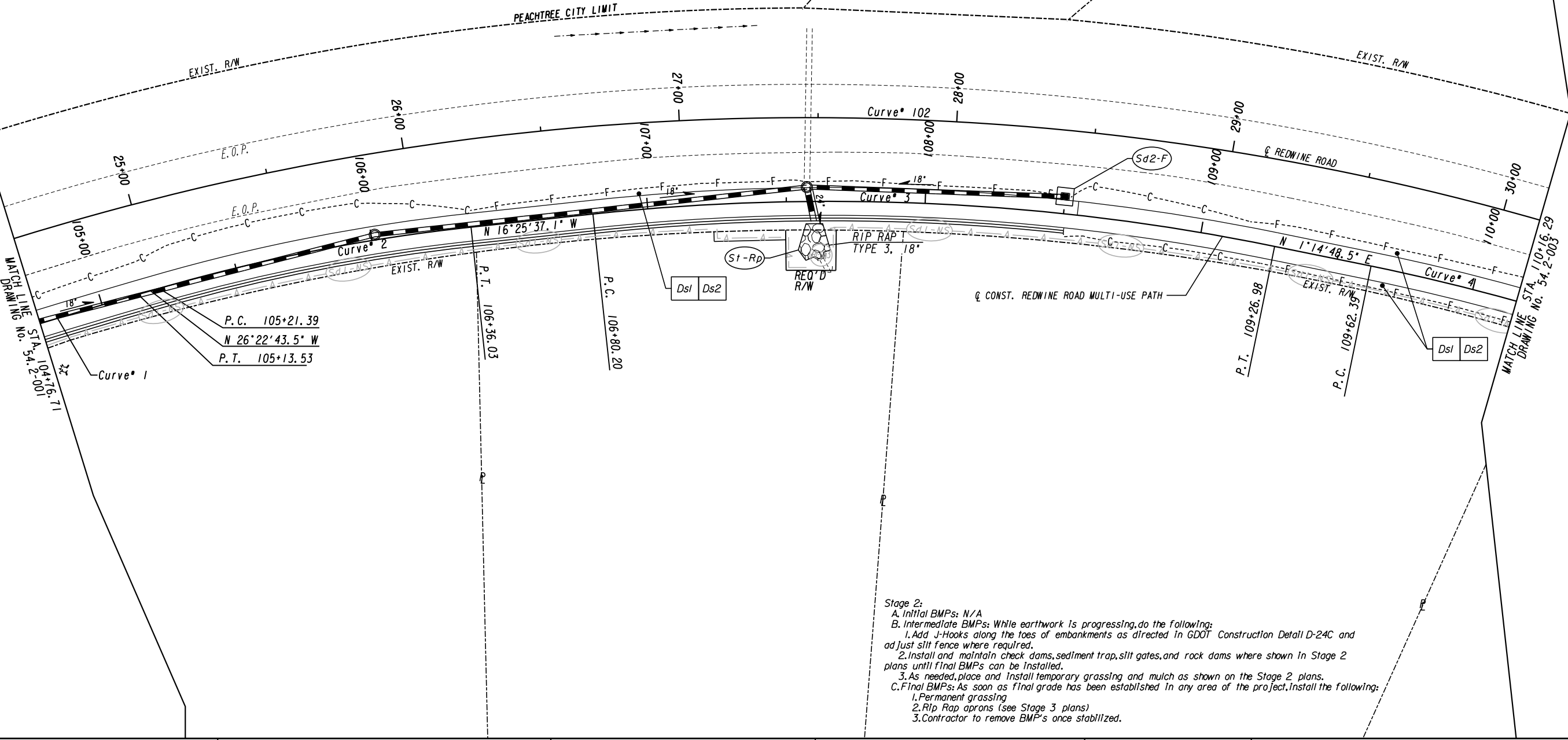
Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5°58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

Curve* 1
PI Sta= 104+48.79
N= 1219271.0813
E= 2186049.8353
DELTA= 3°54'22.0" (RT)
D= 3°00'56.04"
T= 64.79
L= 129.53
R= 1900.00
E= 1.10

Curve* 2
PI Sta= 105+78.85
N= 1219387.6598
E= 2185992.0141
DELTA= 9°57'06.5" (RT)
D= 8°40'52.24"
T= 57.46
L= 114.64
R= 660.00
E= 2.50

Curve* 3
PI Sta= 108+04.58
N= 1219604.4398
E= 2185928.0984
DELTA= 17°40'25.5" (RT)
D= 7°09'43.10"
T= 124.37
L= 246.77
R= 800.00
E= 9.61

Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97



Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

HEATH & LINEBACK ENGINEERS
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 60 80

REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

DRAWING No.
54.2-002

7/31/2015 GPLN

Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5'58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97

Curve* 5
PI Sta= 111+03.05
N= 1219903.8476
E= 2185946.9636
DELTA= 10°03'44.2" (RT)
D= 95°29'34.68"
T= 5.28
L= 10.54
R= 60.00
E= 0.23

Curve* 6
PI Sta= 111+14.09
N= 1219914.2747
E= 2185950.6679
DELTA= 4°28'59.5" (LT)
D= 95°29'34.68"
T= 2.35
L= 4.69
R= 60.00
E= 0.05

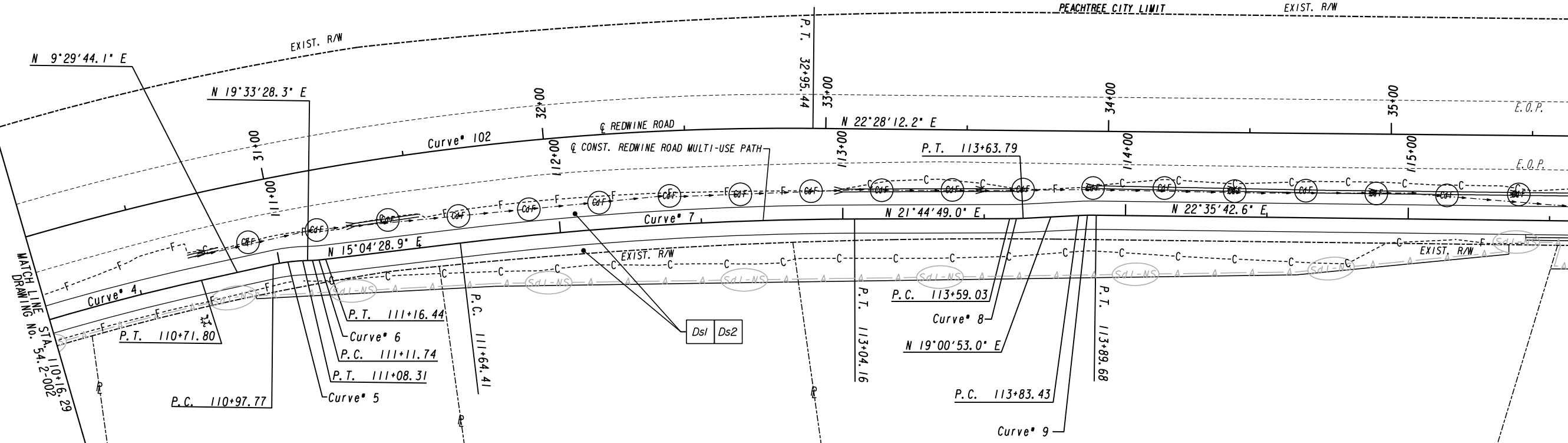
Curve* 7
PI Sta= 112+34.36
N= 1220030.4115
E= 2185981.9490
DELTA= 6°40'20.1" (RT)
D= 4°46'28.73"
T= 69.95
L= 139.74
R= 1200.00
E= 2.04

Curve* 8
PI Sta= 113+61.41
N= 1220148.5635
E= 2186029.0795
DELTA= 2°43'56.0" (LT)
D= 57°17'44.81"
T= 2.38
L= 4.77
R= 100.00
E= 0.03

Curve* 9
PI Sta= 113+86.56
N= 1220172.3382
E= 2186037.2727
DELTA= 3°34'49.6" (RT)
D= 57°17'44.81"
T= 3.13
L= 6.25
R= 100.00
E= 0.05

PEACHTREE CITY LIMIT

EXIST. R/W



Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
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3. Contractor to remove BMP's once stabilized.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

20

40

80

REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

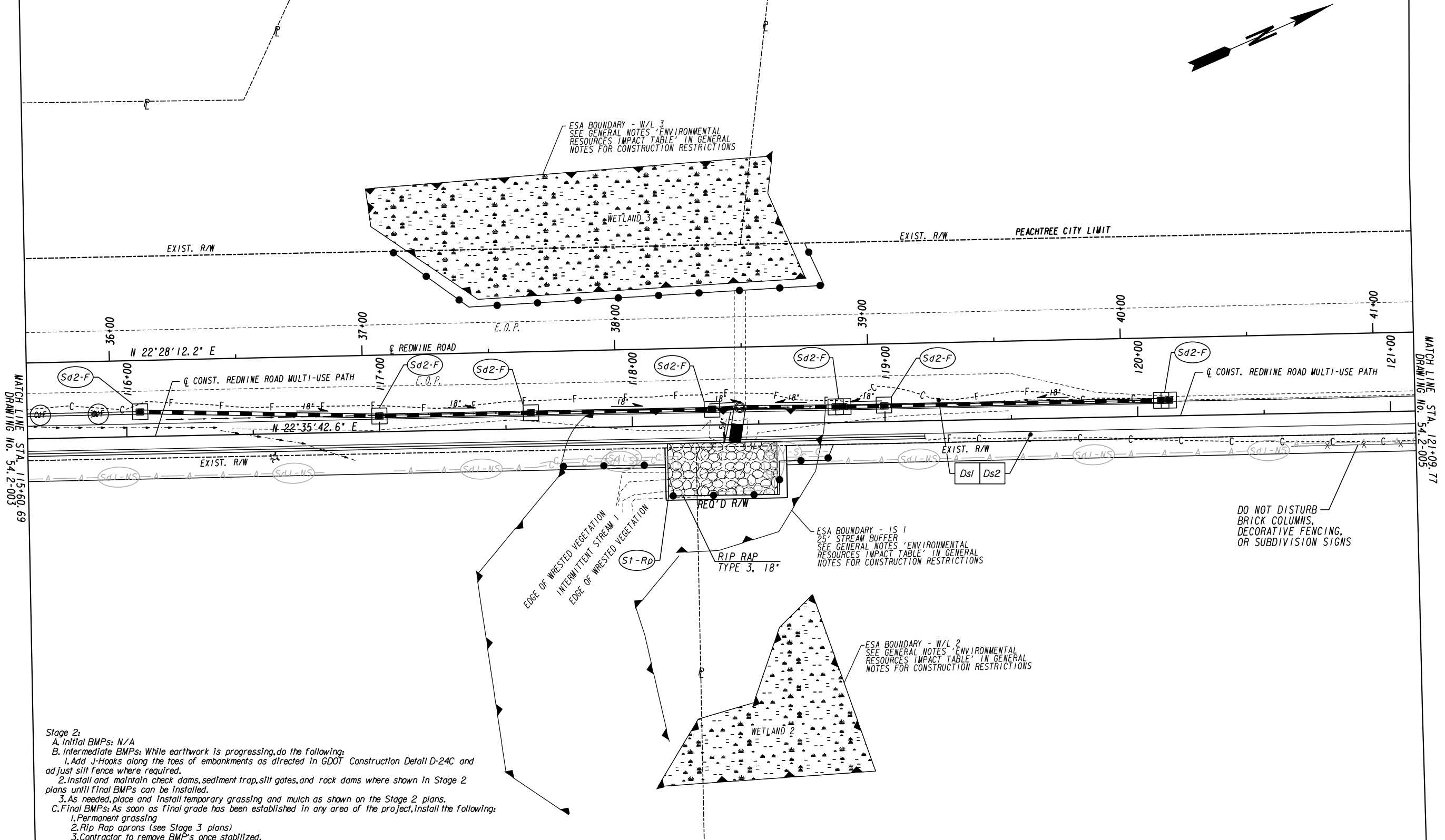
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CORRECTED: DATE:
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DRAWING No.
54.2-003

7/31/2015

GPLN

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PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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-----C-----F-----

.....BLA
.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

REVISION DATES

NO.	DATE	DESCRIPTION

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

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CORRECTED:
VERIFIED:

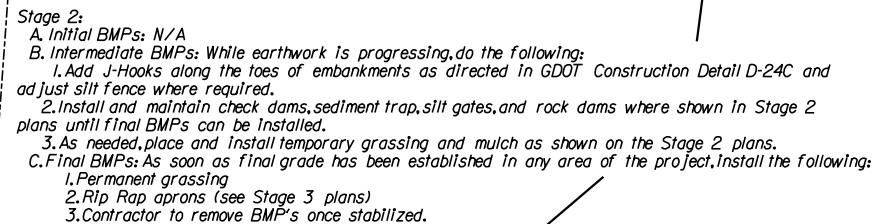
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DRAWING No.
54.2-004

7/31/2015

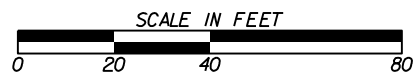
GPLN

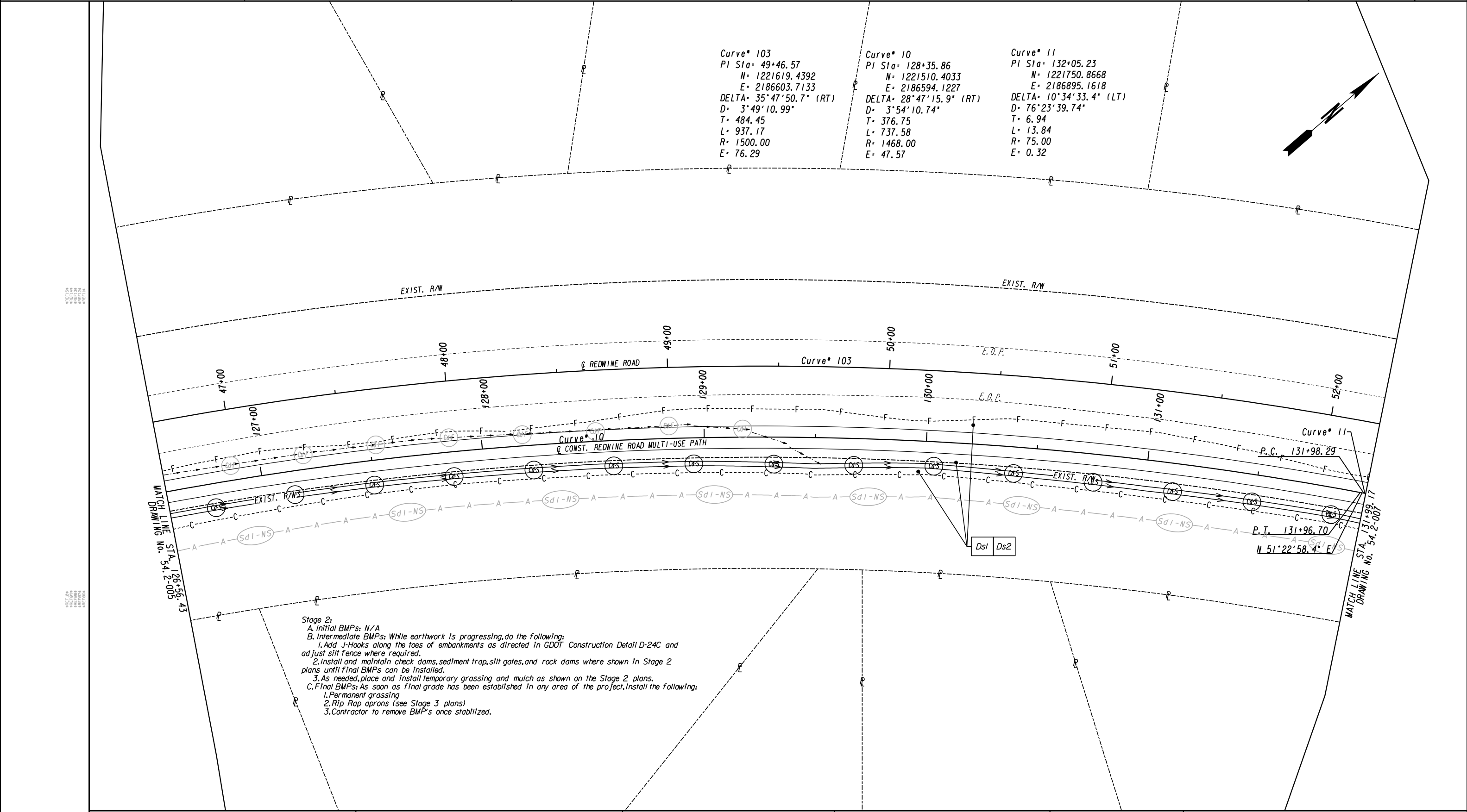
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REVISION DATES			FAYETTE COUNTY				
			BMP LOCATION DETAILS - STAGE 2 REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH				
			CHECKED:		DATE:		DRAWING No. 54.2-005
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS —
REQ'D R/W & LIMIT OF ACCESS —
ORANGE BARRIER FENCE —
ESA - ENV. SENSITIVE AREA —
(SEE ERIT TABLE)





7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0

20

40

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REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

DRAWING No.
54.2-006

Curve* 11
PI Sta= 132+05.23
N= 1221750.8668
E= 2186895.1618
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D= 76°23'39.74"
T= 6.94
L= 13.84
R= 75.00
E= 0.32

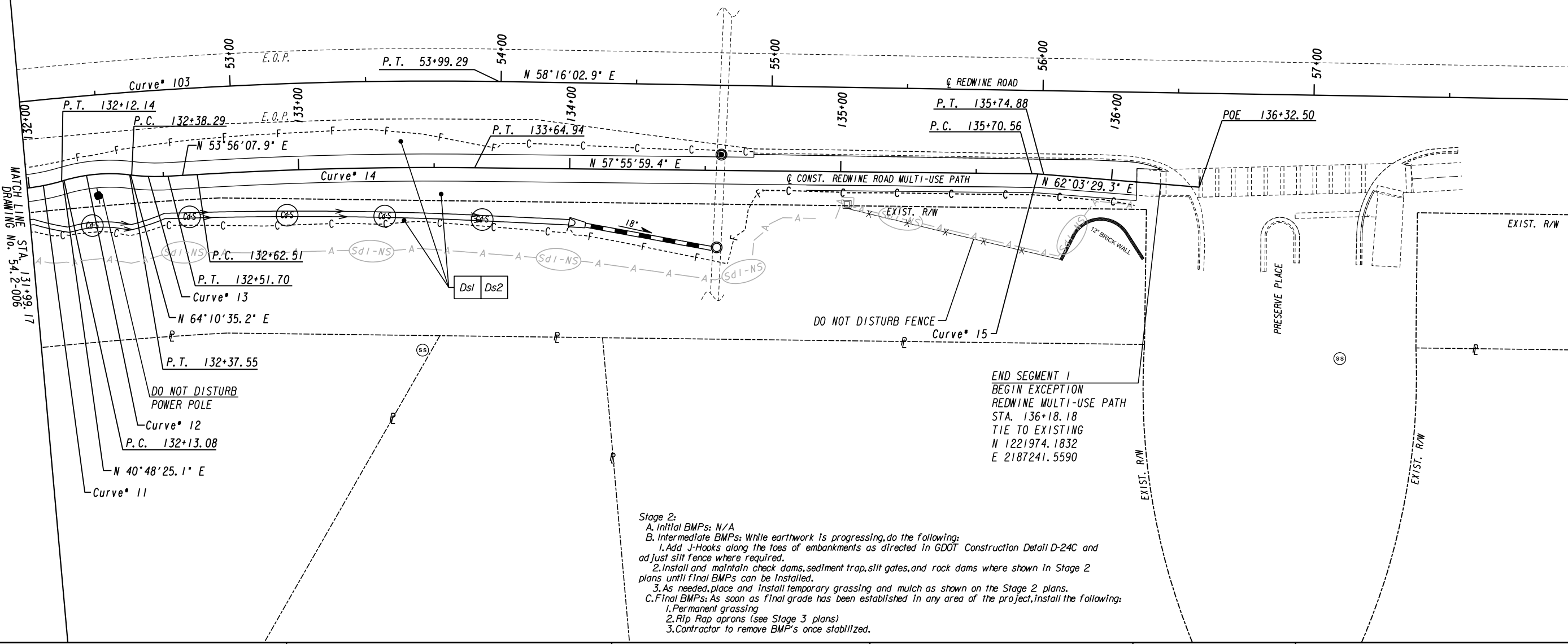
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PI Sta= 132+25.49
N= 1221766.2262
E= 2186908.4229
DELTA= 23°22'10.1" (RT)
D= 95°29'34.68"
T= 12.41
L= 24.47
R= 60.00
E= 1.27

Curve* 13
PI Sta= 132+45.01
N= 1221774.8816
E= 2186926.3088
DELTA= 10°14'27.3" (LT)
D= 76°23'39.74"
T= 6.72
L= 13.41
R= 75.00
E= 0.30

Curve* 14
PI Sta= 133+13.75
N= 1221815.3660
E= 2186981.8991
DELTA= 3°59'51.5" (RT)
D= 3°54'10.74"
T= 51.23
L= 102.43
R= 1468.00
E= 0.89

Curve* 15
PI Sta= 135+72.72
N= 1221952.8818
E= 2187201.4003
DELTA= 4°07'29.8" (RT)
D= 95°29'34.68"
T= 2.16
L= 4.32
R= 60.00
E= 0.04

Curve* 103
PI Sta= 49+46.57
N= 1221619.4392
E= 2186603.7133
DELTA= 35°47'50.7" (RT)
D= 3°49'10.99"
T= 484.45
L= 937.17
R= 1500.00
E= 76.29



Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

REVISION DATES

SCALE IN FEET

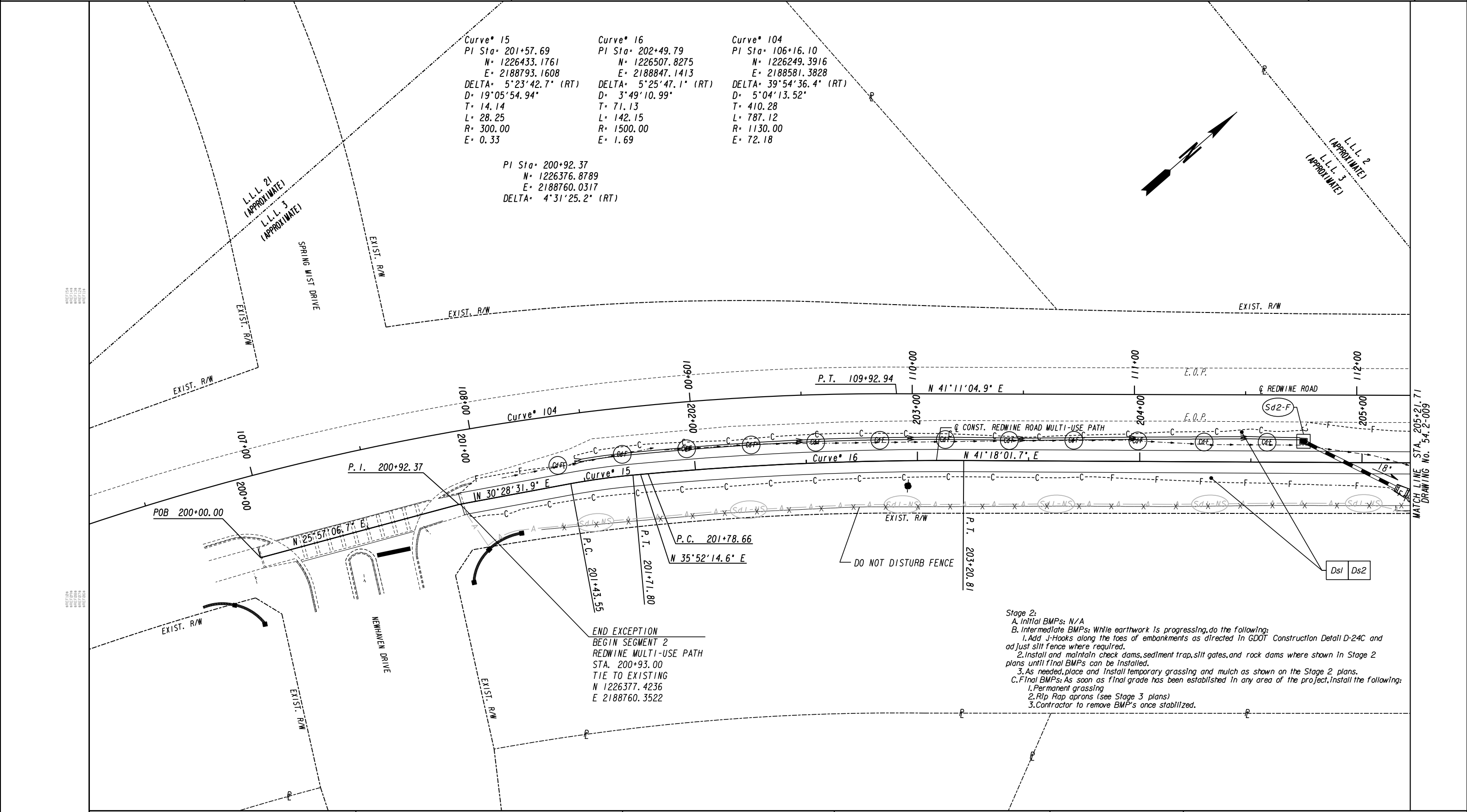
FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
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DATE:

DRAWING No.
54.2-007

7/31/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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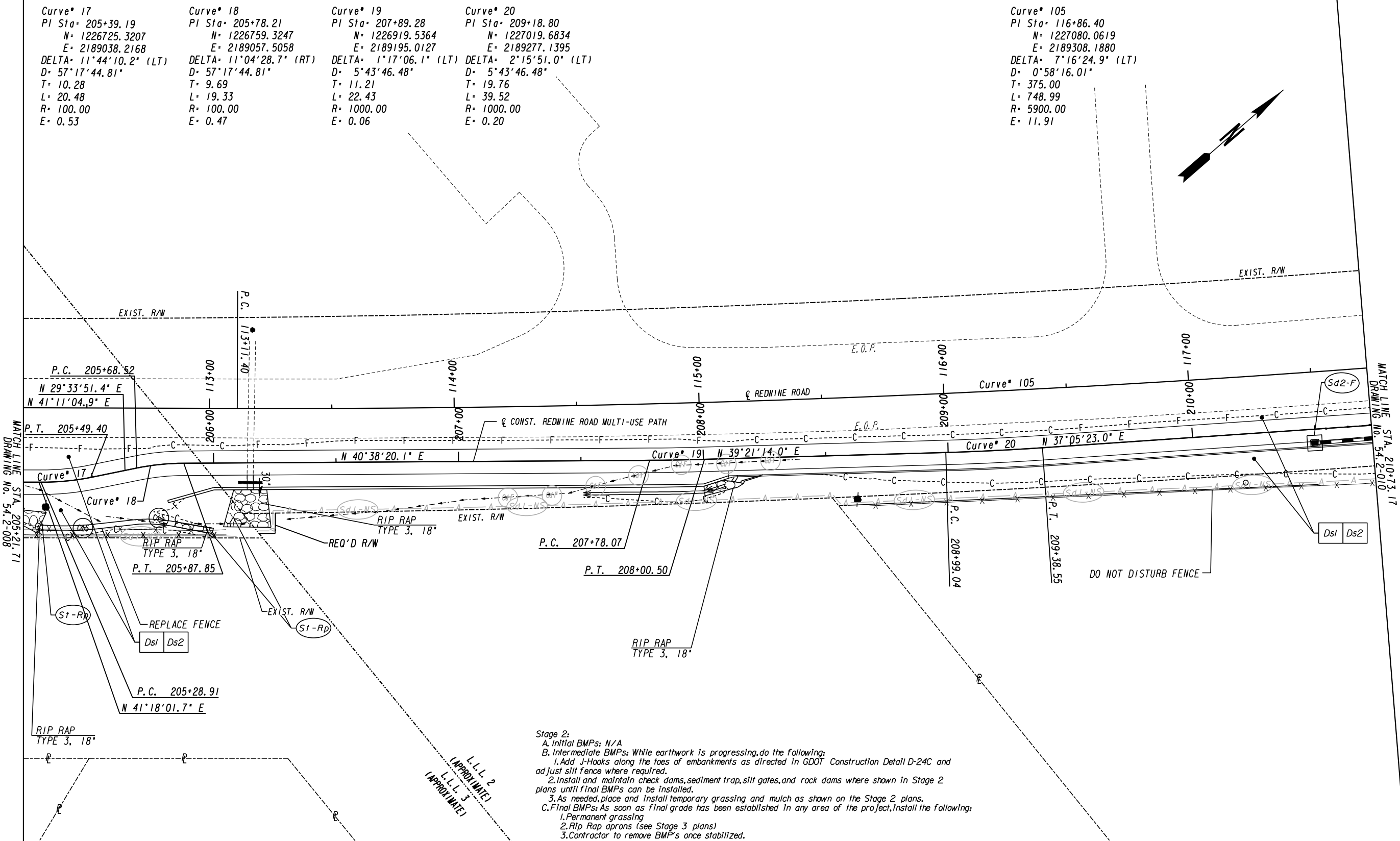
FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.2-008
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



Curve* 17
PI Sta= 205+39.19
N= 1226725.3207
E= 2189038.2168
DELTA= 11°44'10.2" (LT)
D= 57°17'44.81"
T= 10.28
L= 20.48
R= 100.00
E= 0.53

Curve* 18
PI Sta= 205+78.21
N= 1226759.3247
E= 2189057.5058
DELTA= 11°04'28.7" (RT)
D= 57°17'44.81"
T= 9.69
L= 19.33
R= 100.00
E= 0.47

Curve* 19
PI Sta= 207+89.28
N= 1226919.5364
E= 2189195.0127
DELTA= 1°17'06.1" (LT)
D= 5°43'46.48"
T= 11.21
L= 22.43
R= 1000.00
E= 0.06

Curve* 20
PI Sta= 209+18.80
N= 1227019.6834
E= 2189277.1395
DELTA= 2°15'51.0" (LT)
D= 5°43'46.48"
T= 19.76
L= 39.52
R= 1000.00
E= 0.20

Curve* 105
PI Sta= 116+86.40
N= 1227080.0619
E= 2189308.1880
DELTA= 7°16'24.9" (LT)
D= 0°58'16.01"
T= 375.00
L= 748.99
R= 5900.00
E= 11.91

Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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-----C-----F-----

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BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

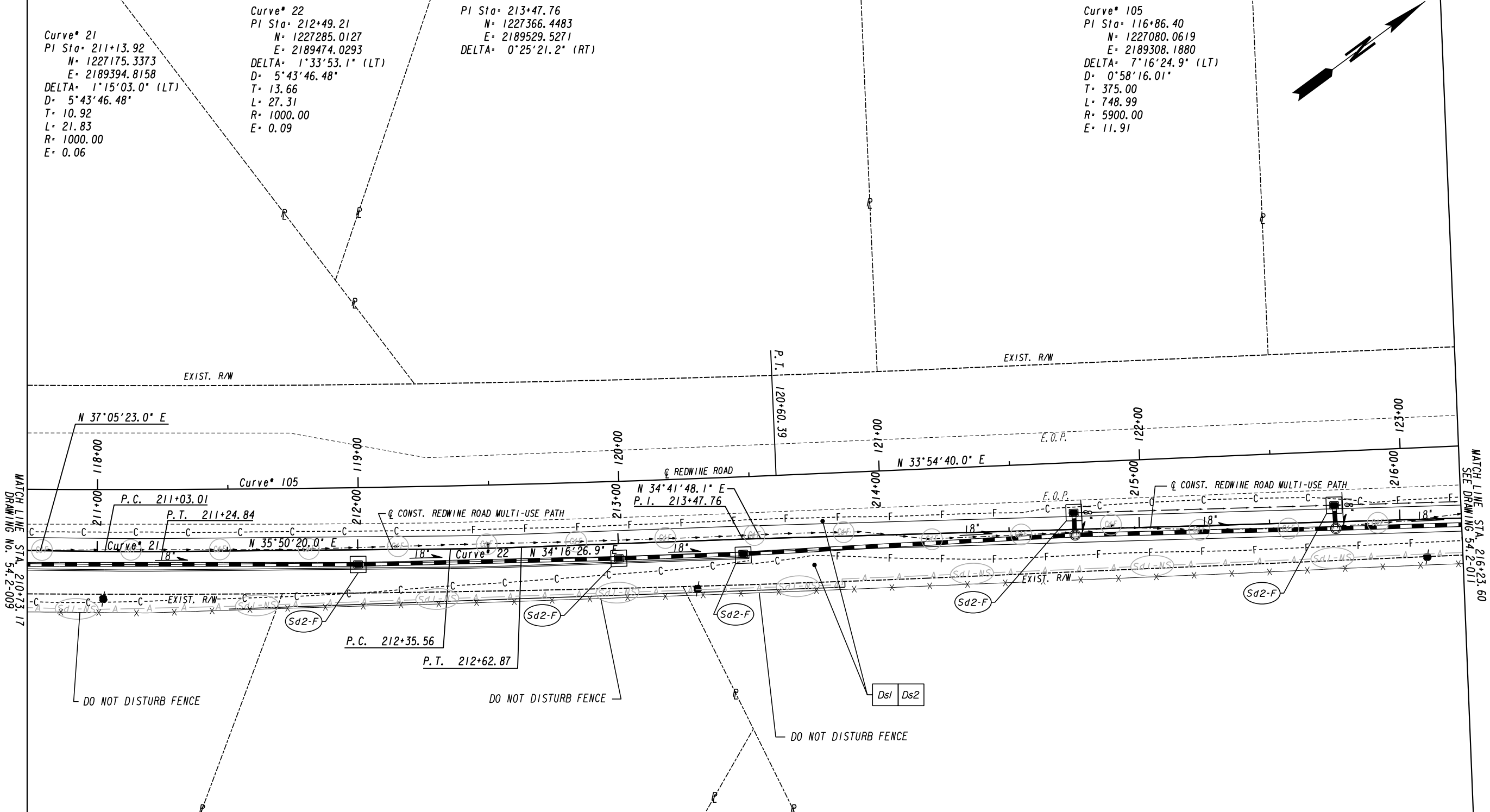
DATE:
DATE:
DATE:
DATE:

DRAWING No.
54.2-009

7/31/2015

GPLN

0012624_54_2-009.dgn
0012624_54_2-009.dgn
0012624_54_2-009.dgn
0012624_54_2-009.dgn



Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
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C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)


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MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 60 80

REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

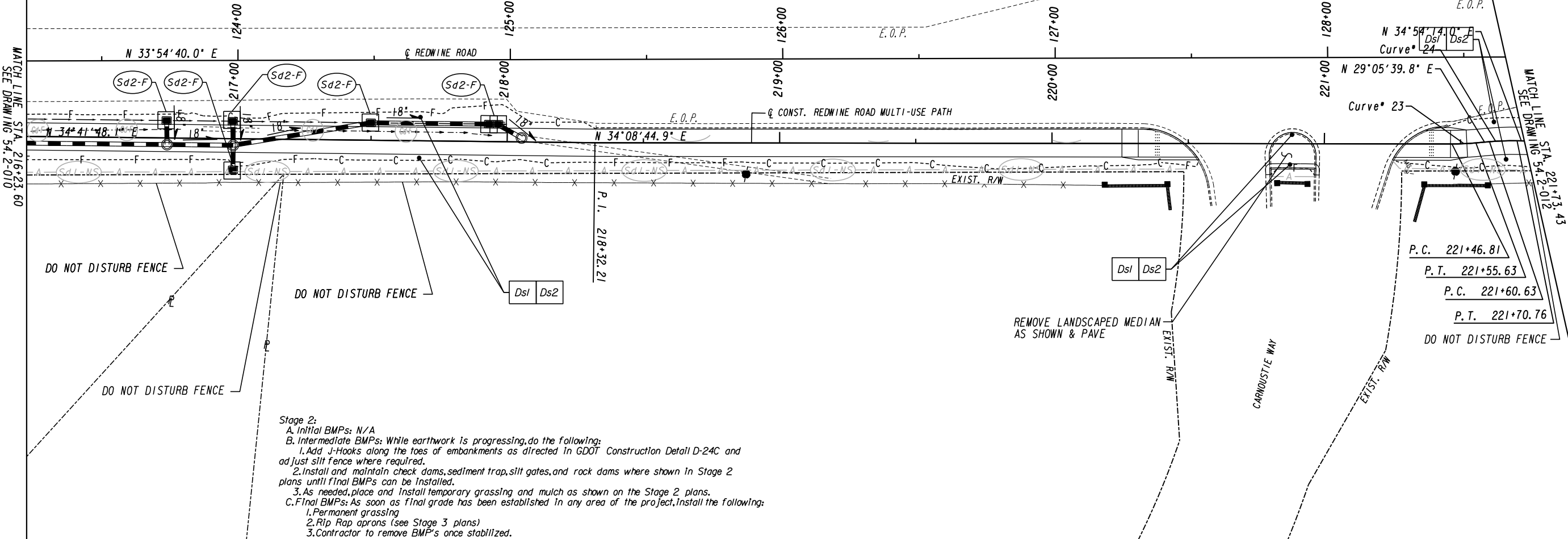
CHECKED: DATE: BACKCHECKED: DATE: CORRECTED: DATE: VERIFIED: DATE:

DRAWING No.
54.2-010

Curve* 23
PI Sta= 221+51.22
N= 1228028.7722
E= 2189984.3548
DELTA= 5°03'05.1" (LT)
D= 57°17'44.81"
T= 4.41
L= 8.82
R= 100.00
E= 0.10

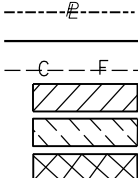
Curve* 24
PI Sta= 221+65.70
N= 1228041.4271
E= 2189991.3968
DELTA= 5°48'34.2" (RT)
D= 57°17'44.81"
T= 5.07
L= 10.14
R= 100.00
E= 0.13

PI Sta= 218+32.21
N= 1227764.7513
E= 2189805.2912
DELTA= 0°33'03.3" (LT)

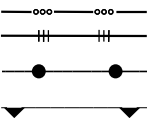


Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)





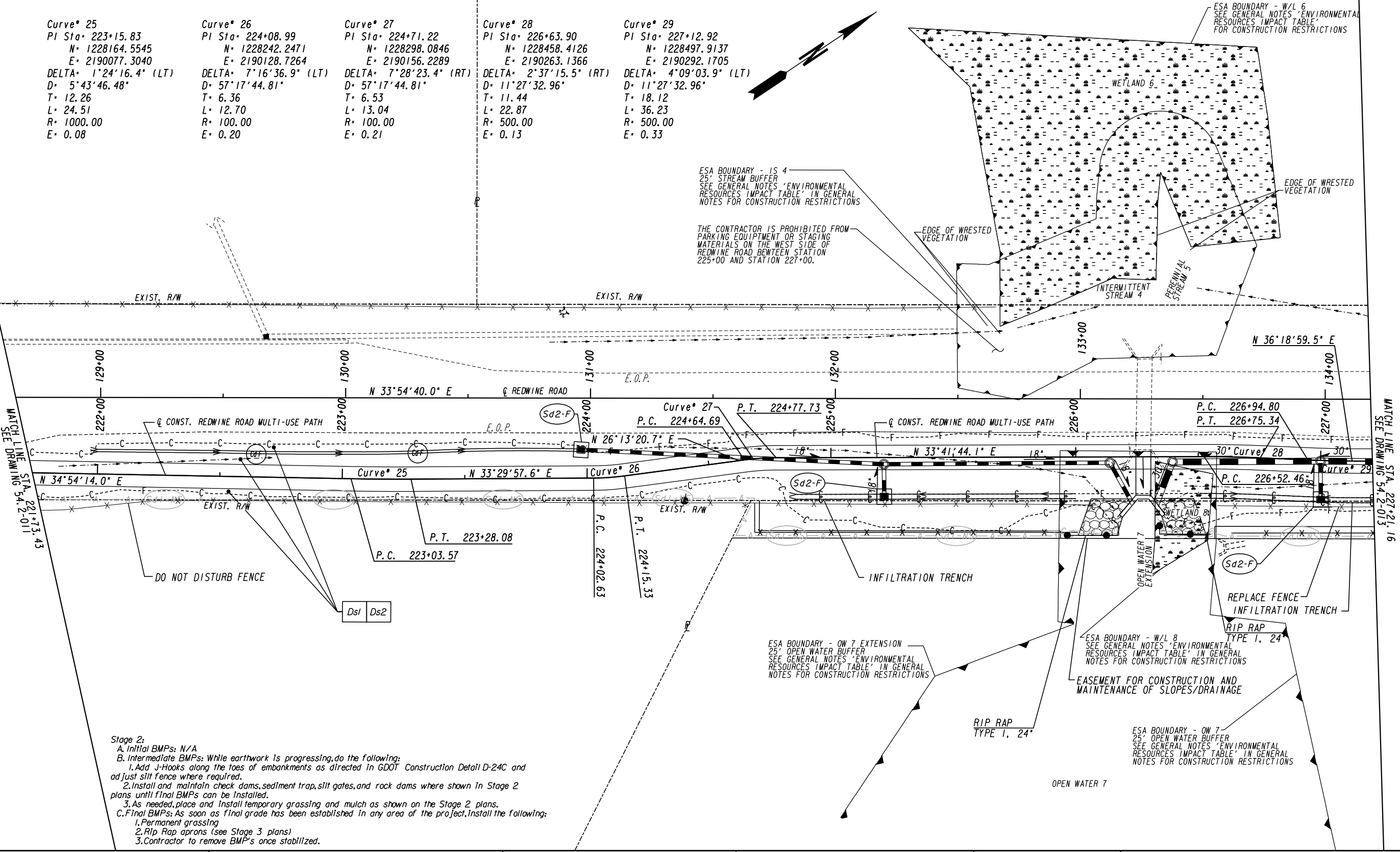
Heath & Lineback Engineers
INCORPORATED
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MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES

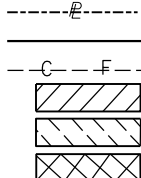
FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	54.2-011
CORRECTED:	DATE:	
VERIFIED:	DATE:	

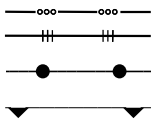


Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

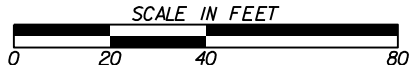
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



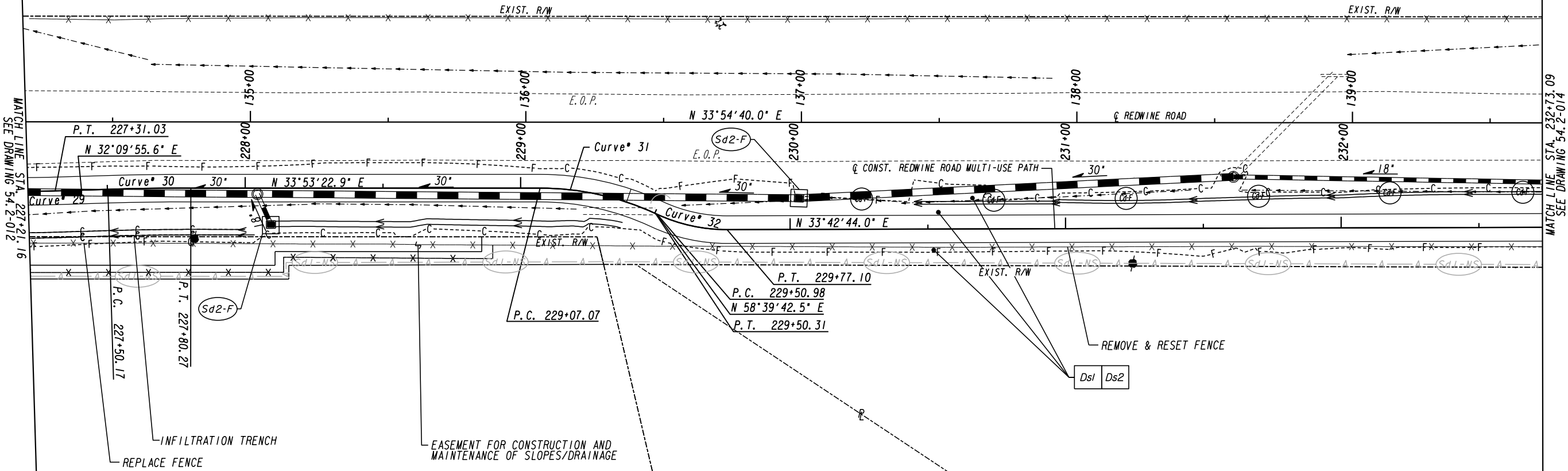
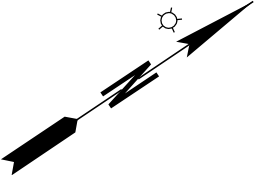
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MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES				FAYETTE COUNTY			
				BMP LOCATION DETAILS - STAGE 2			
				REDWINE ROAD & STARRS MILL SCHOOL			
				COMPLEX MULTI-USE PATH			
CHECKED:		DATE:		BACKCHECKED:		DATE:	
CORRECTED:		DATE:		VERIFIED:		DATE:	
				DRAWING No.			
				54.2-012			

Curve* 29	Curve* 30	Curve* 31	Curve* 32
PI Sta= 227+12.92	PI Sta= 227+65.22	PI Sta= 229+29.03	PI Sta= 229+64.25
N= 1228497.9137	N= 1228542.1997	N= 1228678.1823	N= 1228696.8555
E= 2190292.1705	E= 2190320.0217	E= 2190411.3626	E= 2190442.0286
DELTA= 4°09'03.9" (LT)	DELTA= 1°43'27.2" (RT)	DELTA= 24°46'19.6" (RT)	DELTA= 24°56'58.5" (LT)
D= 11°27'32.96"	D= 5°43'46.48"	D= 57°17'44.81"	D= 95°29'34.68"
T= 18.12	T= 15.05	T= 21.96	T= 13.27
L= 36.23	L= 30.09	L= 43.24	L= 26.13
R= 500.00	R= 1000.00	R= 100.00	R= 60.00
E= 0.33	E= 0.11	E= 2.38	E= 1.45

- Stage 2:
- A. Initial BMPs: N/A
 - B. Intermediate BMPs: While earthwork is progressing, do the following:
 - 1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
 - 2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
 - 3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
 - C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
 - 1. Permanent grassing
 - 2. Rip Rap aprons (see Stage 3 plans)
 - 3. Contractor to remove BMP's once stabilized.



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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(770)424-1668

SCALE IN FEET

REVISION DATES

FAYETTE COUNTY

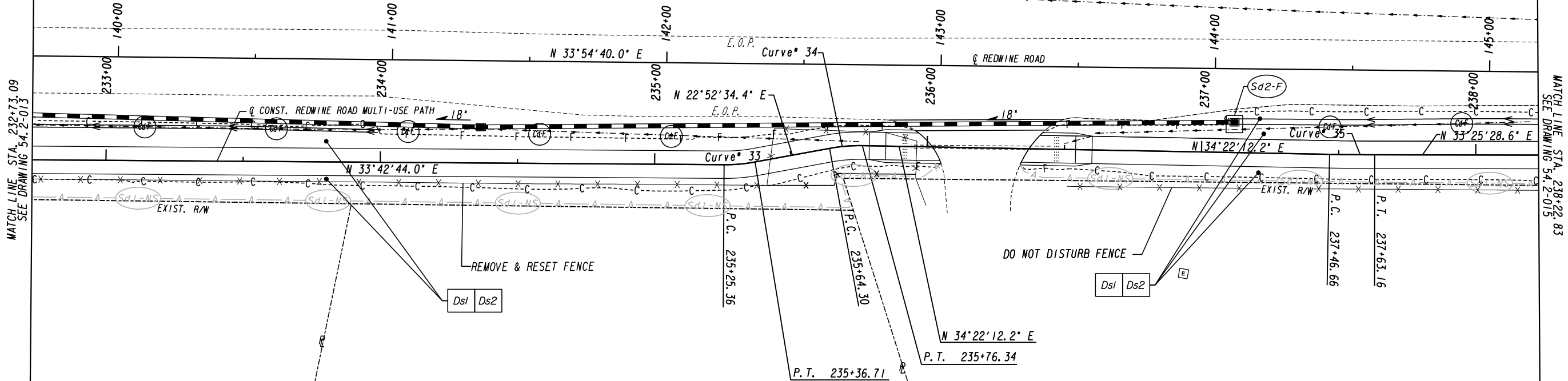
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.2-013
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

Curve* 33
PI Sta= 235+31.05
N= 1229168.6927
E= 2190756.8503
DELTA= 10°50'09.6" (LT)
D= 95°29'34.68"
T= 5.69
L= 11.35
R= 60.00
E= 0.27

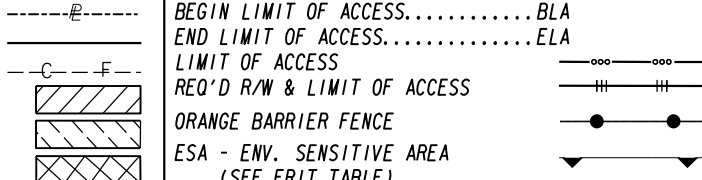
Curve* 34
PI Sta= 235+70.34
N= 1229204.9228
E= 2190772.1367
DELTA= 11°29'37.9" (RT)
D= 95°29'34.68"
T= 6.04
L= 12.04
R= 60.00
E= 0.30

Curve* 35
PI Sta= 237+54.91
N= 1229357.3012
E= 2190876.3555
DELTA= 0°56'43.6" (LT)
D= 5°43'46.48"
T= 8.25
L= 16.50
R= 1000.00
E= 0.03



Stage 2:
A. Initial BMPs: N/A
B. Intermediate BMPs: While earthwork is progressing, do the following:
1. Add J-Hooks along the toes of embankments as directed in GDOT Construction Detail D-24C and adjust silt fence where required.
2. Install and maintain check dams, sediment trap, silt gates, and rock dams where shown in Stage 2 plans until final BMPs can be installed.
3. As needed, place and install temporary grassing and mulch as shown on the Stage 2 plans.
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing
2. Rip Rap aprons (see Stage 3 plans)
3. Contractor to remove BMP's once stabilized.

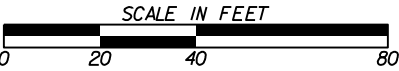
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



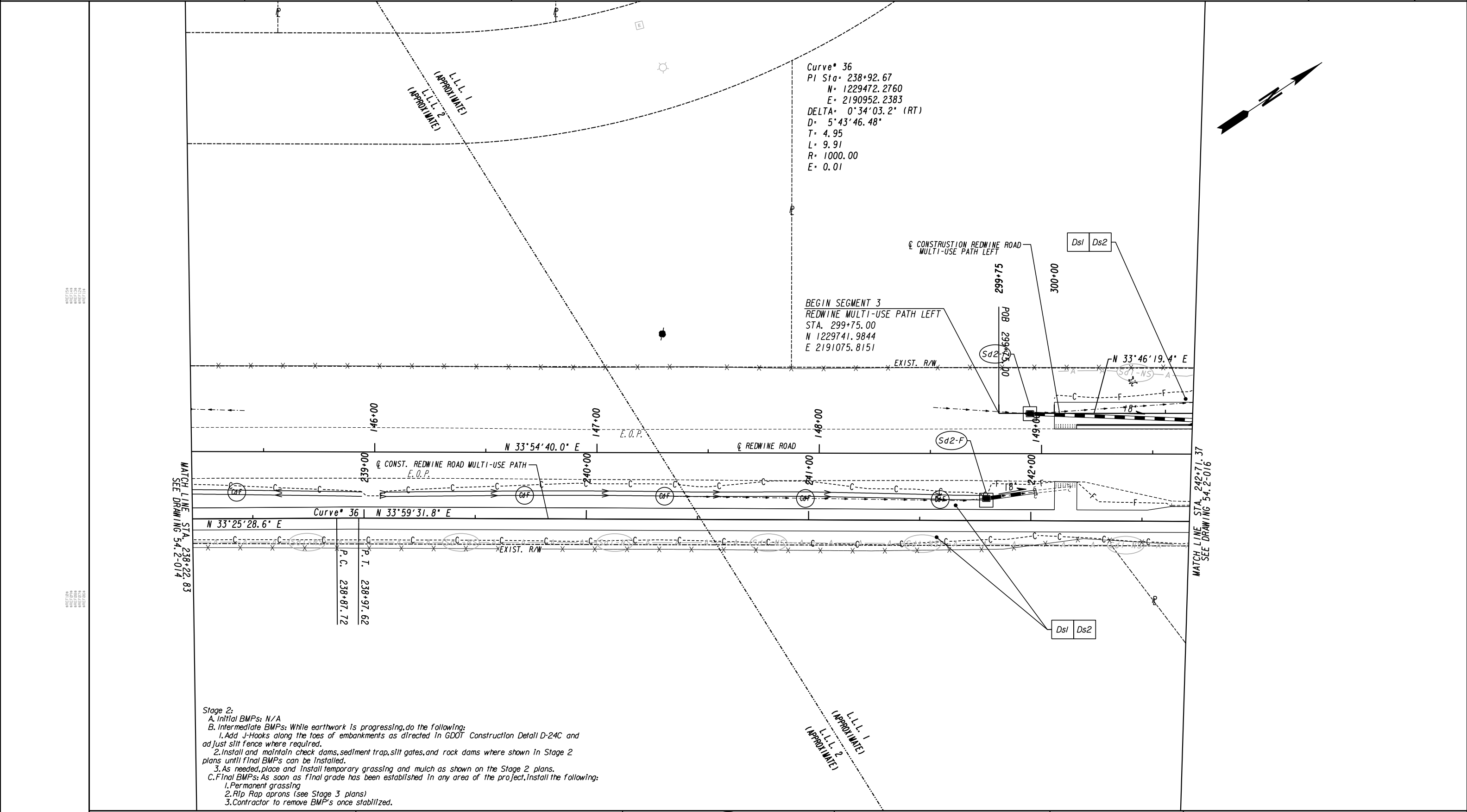
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



Heath & Lineback Engineers
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MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES		FAYETTE COUNTY			
		BMP LOCATION DETAILS - STAGE 2			
		REDWINE ROAD & STARRS MILL SCHOOL			
		COMPLEX MULTI-USE PATH			
CHECKED:	DATE:	BACKCHECKED:	DATE:	DRAWING No.	
CORRECTED:	DATE:	VERIFIED:	DATE:	54.2-014	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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-----C-----F-----

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

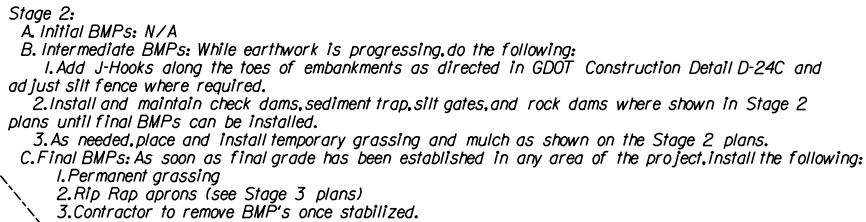
Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

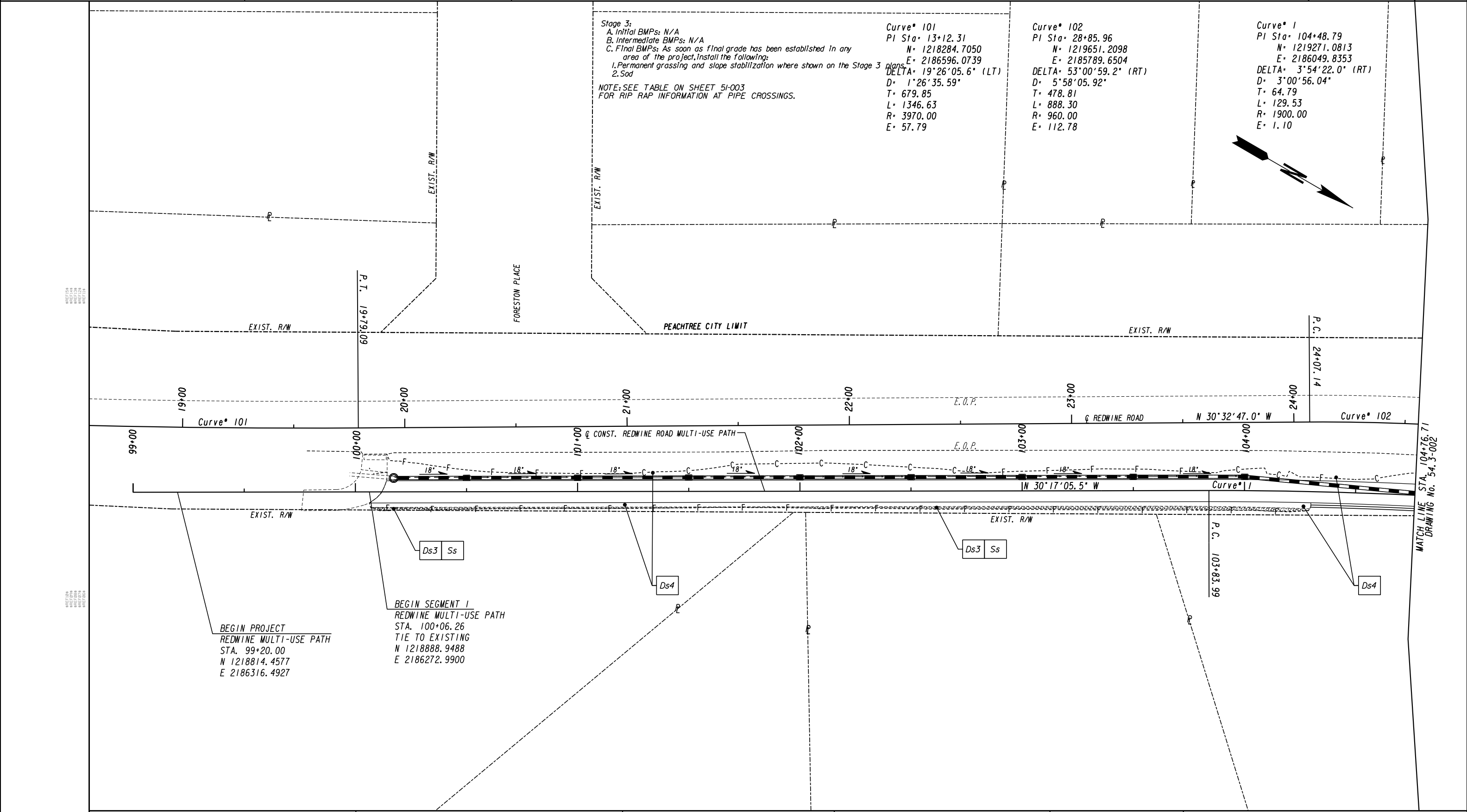
REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 2
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.2-015
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



REVISION DATES		FAYETTE COUNTY				
		BMP LOCATION DETAILS - STAGE 2 REDWINE ROAD & STARRS MILL SCHOOL COMPLEX MULTI-USE PATH				
		CHECKED:		DATE:		DRAWING No. 54.2-016
		BACKCHECKED:		DATE:		
		CORRECTED:		DATE:		
		VERIFIED:		DATE:		



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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FAYETTE COUNTY
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
0 20 40 80

REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE: BACKCHECKED: DATE: CORRECTED: DATE: VERIFIED: DATE:

DRAWING No.
54.3-001

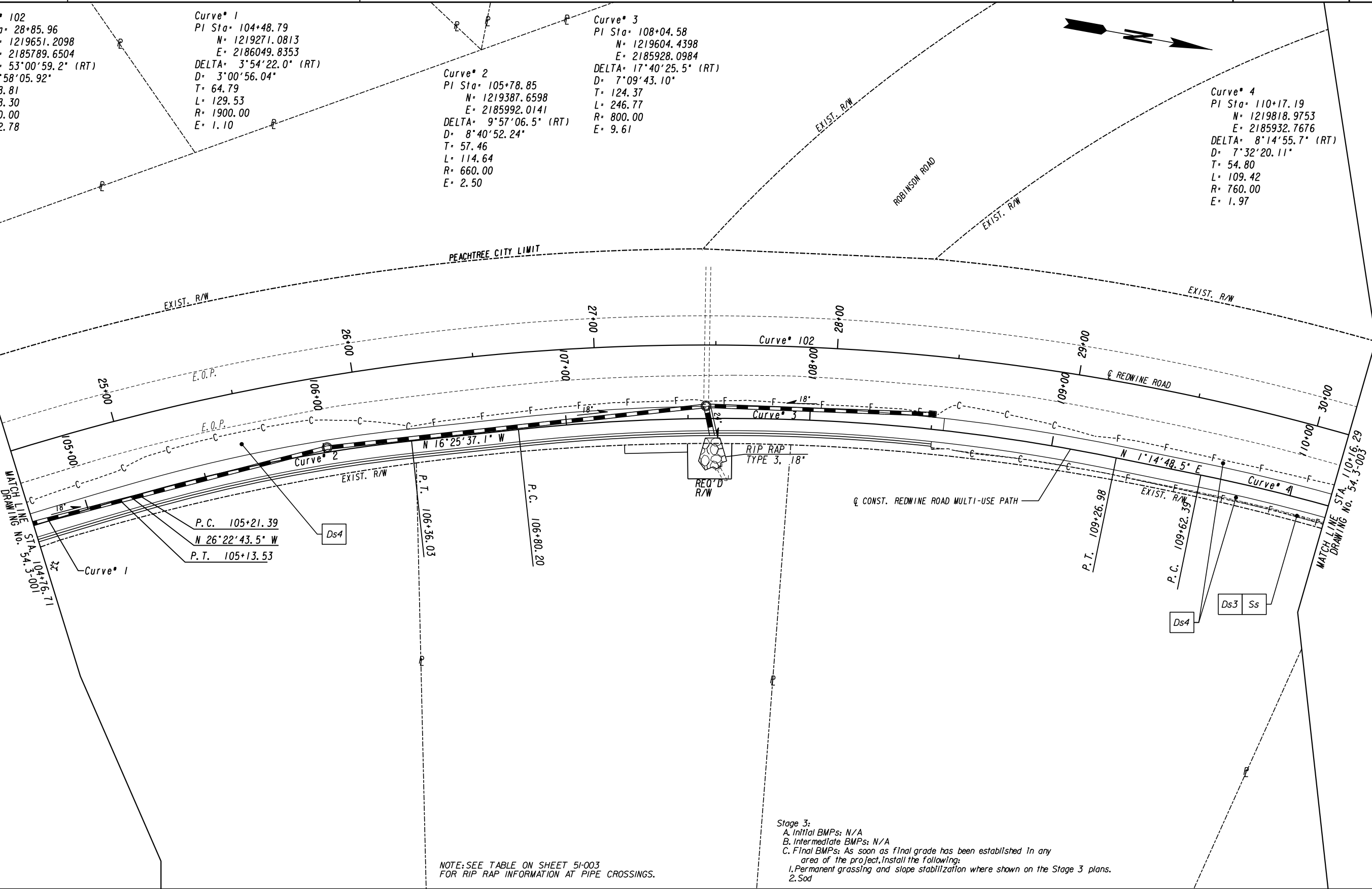
Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5°58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

Curve* 1
PI Sta= 104+48.79
N= 1219271.0813
E= 2186049.8353
DELTA= 3°54'22.0" (RT)
D= 3°00'56.04"
T= 64.79
L= 129.53
R= 1900.00
E= 1.10

Curve* 2
PI Sta= 105+78.85
N= 1219387.6598
E= 2185992.0141
DELTA= 9°57'06.5" (RT)
D= 8°40'52.24"
T= 57.46
L= 114.64
R= 660.00
E= 2.50

Curve* 3
PI Sta= 108+04.58
N= 1219604.4398
E= 2185928.0984
DELTA= 17°40'25.5" (RT)
D= 7°09'43.10"
T= 124.37
L= 246.77
R= 800.00
E= 9.61

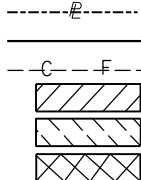
Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97



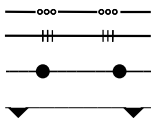
NOTE: SEE TABLE ON SHEET 54-003
FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



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REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	54.3-002
CORRECTED:	DATE:	
VERIFIED:	DATE:	

Curve* 102
PI Sta= 28+85.96
N= 1219651.2098
E= 2185789.6504
DELTA= 53°00'59.2" (RT)
D= 5'58'05.92"
T= 478.81
L= 888.30
R= 960.00
E= 112.78

Curve* 4
PI Sta= 110+17.19
N= 1219818.9753
E= 2185932.7676
DELTA= 8°14'55.7" (RT)
D= 7°32'20.11"
T= 54.80
L= 109.42
R= 760.00
E= 1.97

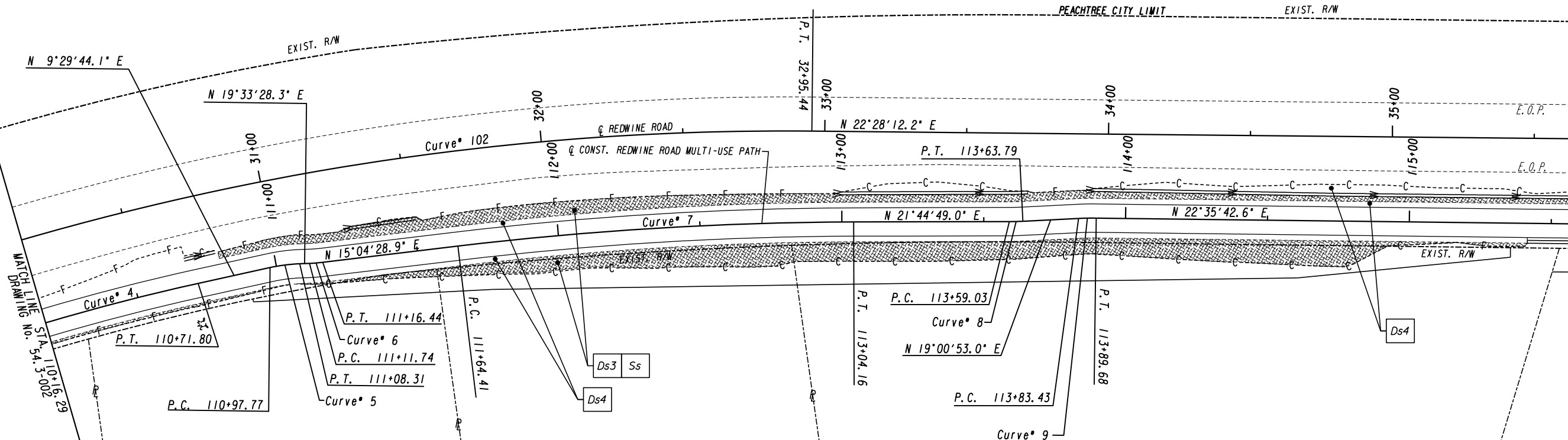
Curve* 5
PI Sta= 111+03.05
N= 1219903.8476
E= 2185946.9636
DELTA= 10°03'44.2" (RT)
D= 95°29'34.68"
T= 5.28
L= 10.54
R= 60.00
E= 0.23

Curve* 6
PI Sta= 111+14.09
N= 1219914.2747
E= 2185950.6679
DELTA= 4°28'59.5" (LT)
D= 95°29'34.68"
T= 2.35
L= 4.69
R= 60.00
E= 0.05

Curve* 7
PI Sta= 112+34.36
N= 1220030.4115
E= 2185981.9490
DELTA= 6°40'20.1" (RT)
D= 4°46'28.73"
T= 69.95
L= 139.74
R= 1200.00
E= 2.04

Curve* 8
PI Sta= 113+61.41
N= 1220148.5635
E= 2186029.0795
DELTA= 2°43'56.0" (LT)
D= 57°17'44.81"
T= 2.38
L= 4.77
R= 100.00
E= 0.03

Curve* 9
PI Sta= 113+86.56
N= 1220172.3382
E= 2186037.2727
DELTA= 3°34'49.6" (RT)
D= 57°17'44.81"
T= 3.13
L= 6.25
R= 100.00
E= 0.05



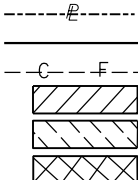
MATCH LINE STA. 110+16.29
DRAWING No. 54.3-002

MATCH LINE STA. 115+60.69
DRAWING No. 54.3-004

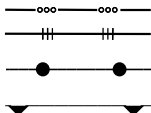
NOTE: SEE TABLE ON SHEET 54-003
FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any
area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

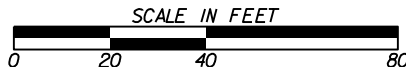




FAYETTE COUNTY
GEORGIA



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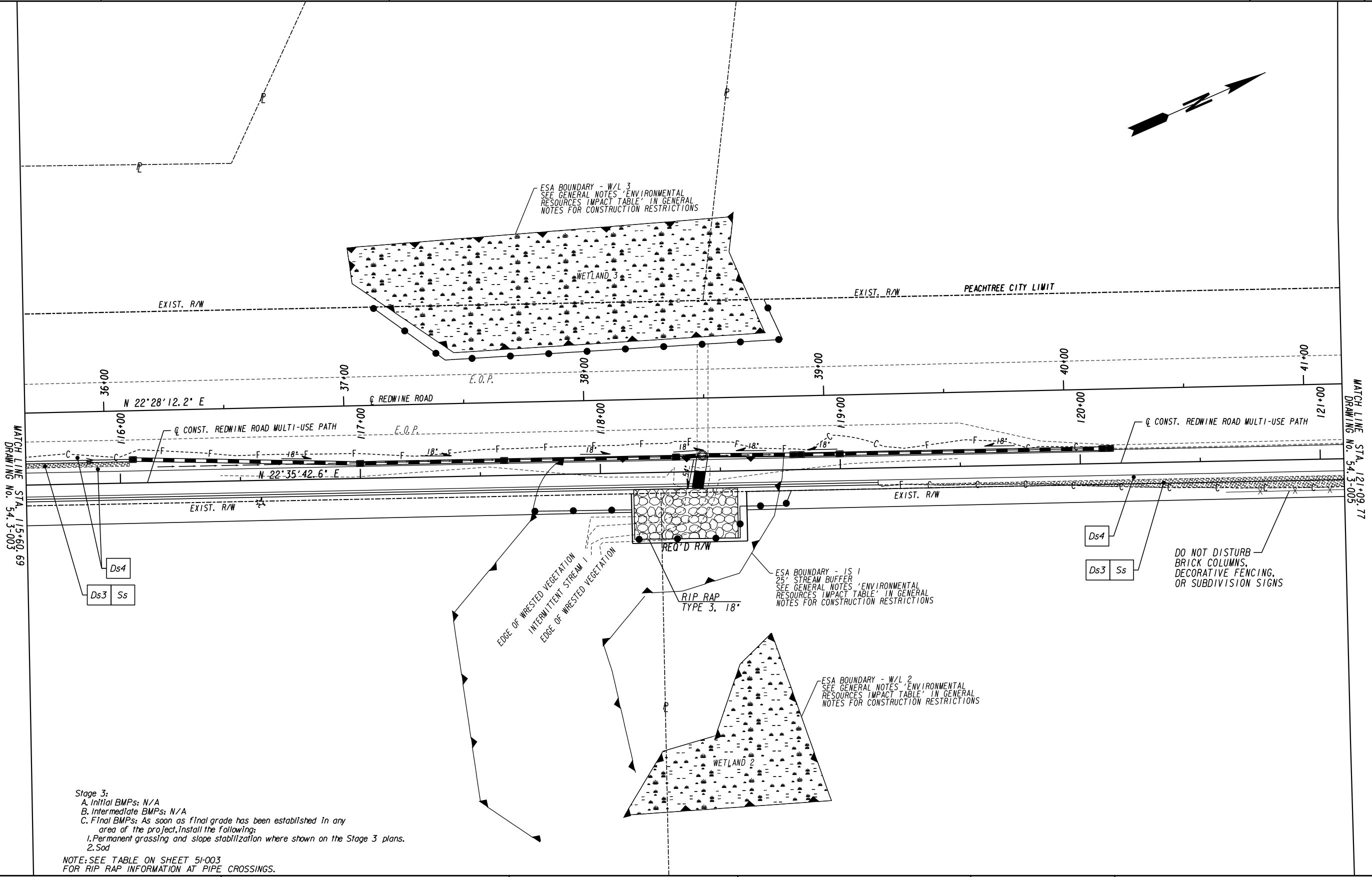


REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

54.3-003



Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod

NOTE: SEE TABLE ON SHEET 51-003 FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----
-----C-----F-----

.....BLA
.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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SCALE IN FEET

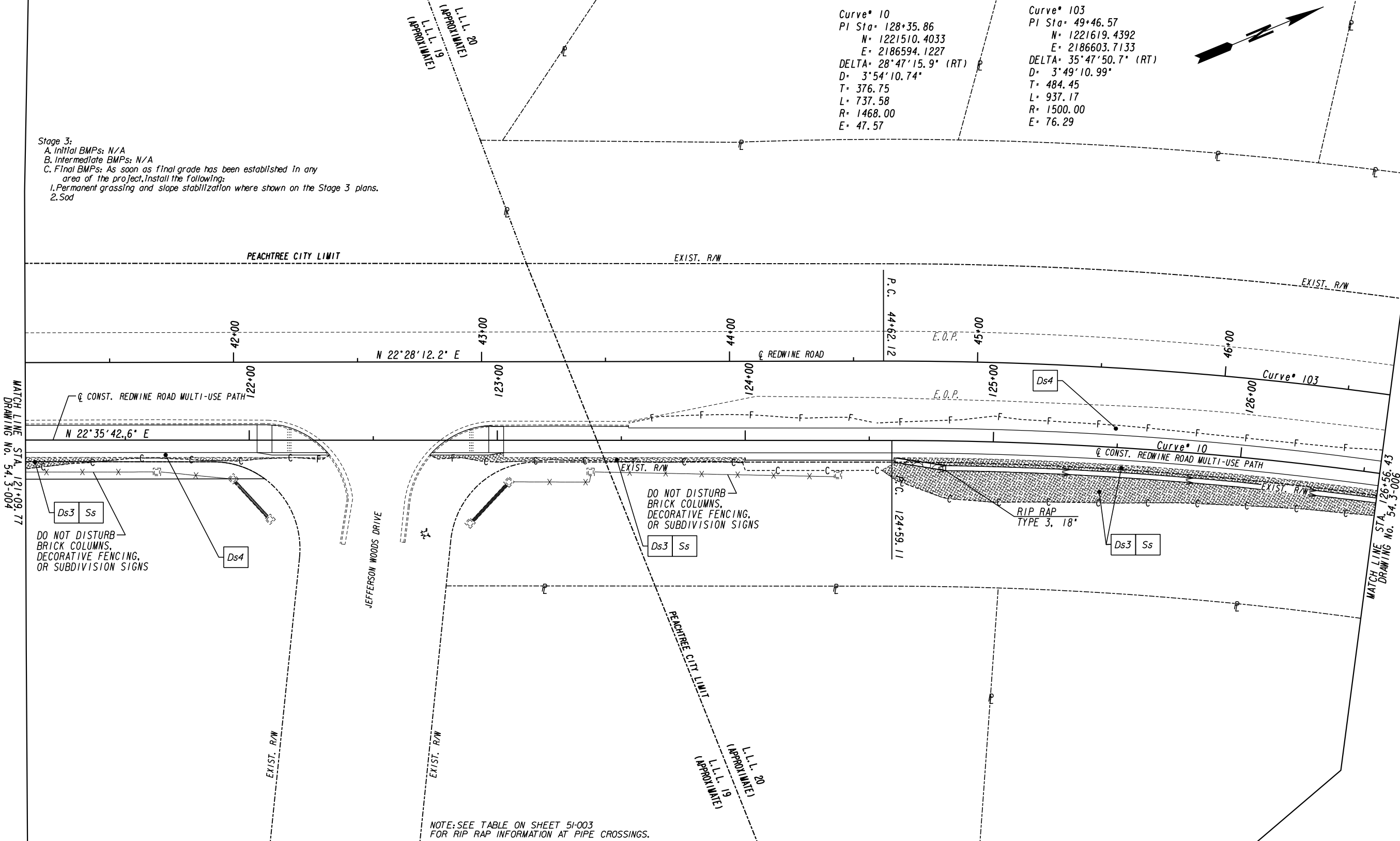
REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
BACKCHECKED:
CORRECTED:
VERIFIED:

DATE:
DATE:
DATE:
DATE:

DRAWING No.
54.3-004



PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

ORANGE BARRIER FENCE

ESA - ENV. SENSITIVE AREA

(SEE ERIT TABLE)

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SCALE IN FEET

REVISION DATES

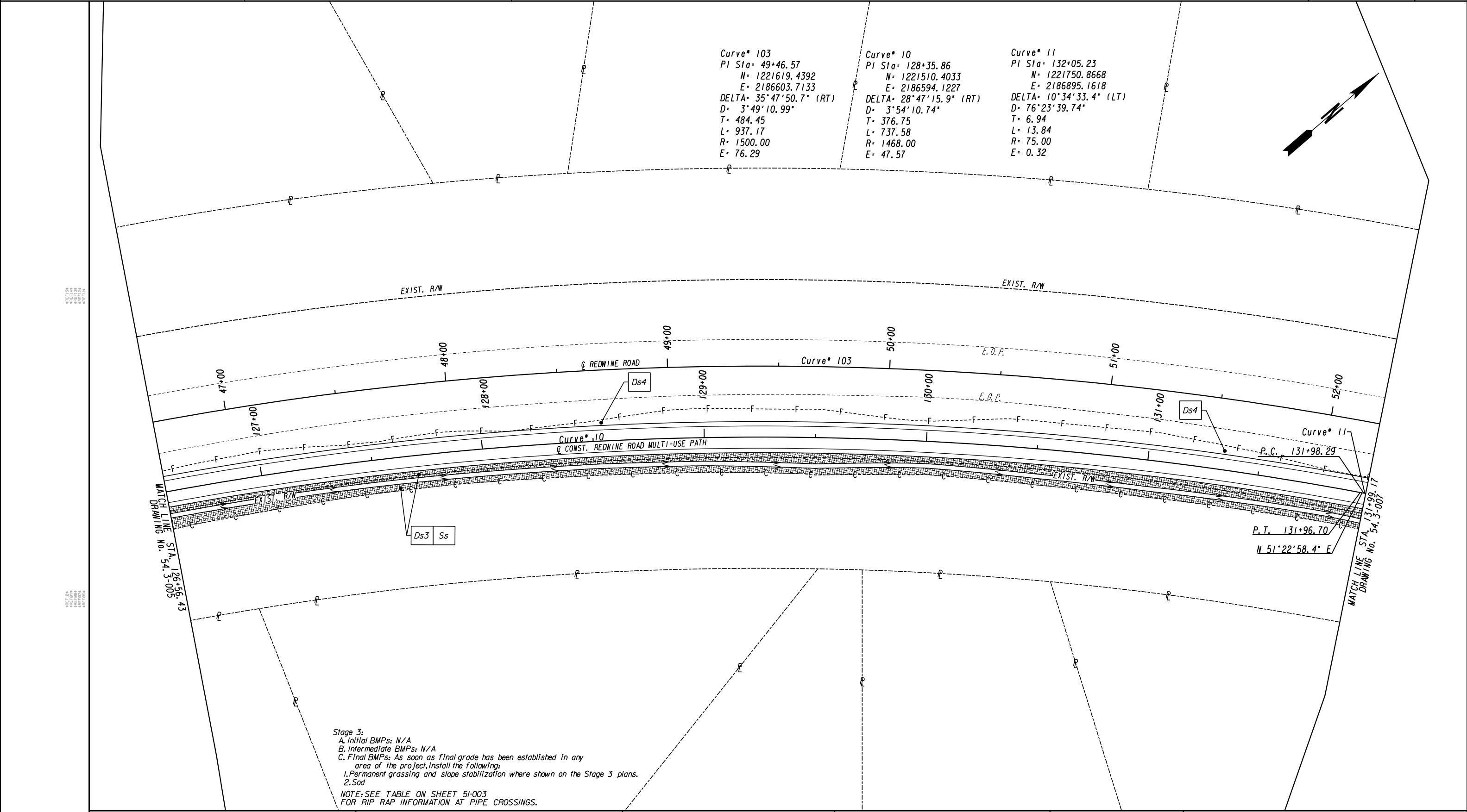
FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 3

REDWINE ROAD & STARRS MILL SCHOOL

COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.3-005
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



Curve* 103
PI Sta= 49+46.57
N= 1221619.4392
E= 2186603.7133
DELTA= 35°47'50.7" (RT)
D= 3°49'10.99"
T= 484.45
L= 937.17
R= 1500.00
E= 76.29

Curve* 10
PI Sta= 128+35.86
N= 1221510.4033
E= 2186594.1227
DELTA= 28°47'15.9" (RT)
D= 3°54'10.74"
T= 376.75
L= 737.58
R= 1468.00
E= 47.57

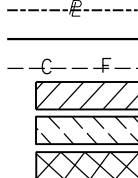
Curve* 11
PI Sta= 132+05.23
N= 1221750.8668
E= 2186895.1618
DELTA= 10°34'33.4" (LT)
D= 76°23'39.74"
T= 6.94
L= 13.84
R= 75.00
E= 0.32

MATCH LINE
DRAWING NO. 54.3-005
STA. 126+56.43

MATCH LINE
DRAWING NO. 54.3-007
STA. 131+99.17

Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod
NOTE: SEE TABLE ON SHEET 54-003 FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



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REVISION DATES				FAYETTE COUNTY			
				BMP LOCATION DETAILS - STAGE 3			
				REDWINE ROAD & STARRS MILL SCHOOL			
				COMPLEX MULTI-USE PATH			
CHECKED:		DATE:		DRAWING No.			
BACKCHECKED:		DATE:		54.3-006			
CORRECTED:		DATE:					
VERIFIED:		DATE:					

Curve* 11
PI Sta= 132+05.23
N= 1221750.8668
E= 2186895.1618
DELTA= 10°34'33.4" (LT)
D= 76°23'39.74"
T= 6.94
L= 13.84
R= 75.00
E= 0.32

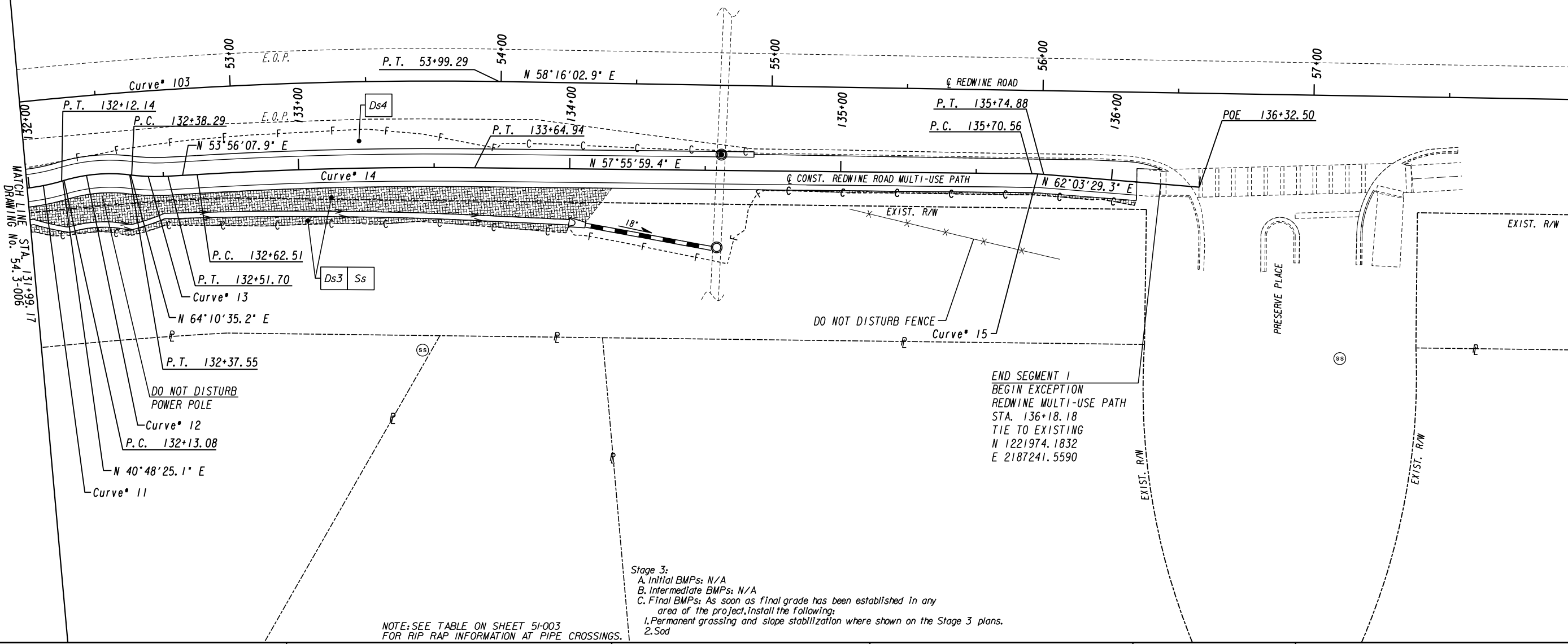
Curve* 12
PI Sta= 132+25.49
N= 1221766.2262
E= 2186908.4229
DELTA= 23°22'10.1" (RT)
D= 95°29'34.68"
T= 12.41
L= 24.47
R= 60.00
E= 1.27

Curve* 13
PI Sta= 132+45.01
N= 1221774.8816
E= 2186926.3088
DELTA= 10°14'27.3" (LT)
D= 76°23'39.74"
T= 6.72
L= 13.41
R= 75.00
E= 0.30

Curve* 14
PI Sta= 133+13.75
N= 1221815.3660
E= 2186981.8991
DELTA= 3°59'51.5" (RT)
D= 3°54'10.74"
T= 51.23
L= 102.43
R= 1468.00
E= 0.89

Curve* 15
PI Sta= 135+72.72
N= 1221952.8818
E= 2187201.4003
DELTA= 4°07'29.8" (RT)
D= 95°29'34.68"
T= 2.16
L= 4.32
R= 60.00
E= 0.04

Curve* 103
PI Sta= 49+46.57
N= 1221619.4392
E= 2186603.7133
DELTA= 35°47'50.7" (RT)
D= 3°49'10.99"
T= 484.45
L= 937.17
R= 1500.00
E= 76.29



Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod

NOTE: SEE TABLE ON SHEET 51-003 FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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SCALE IN FEET

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80

REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

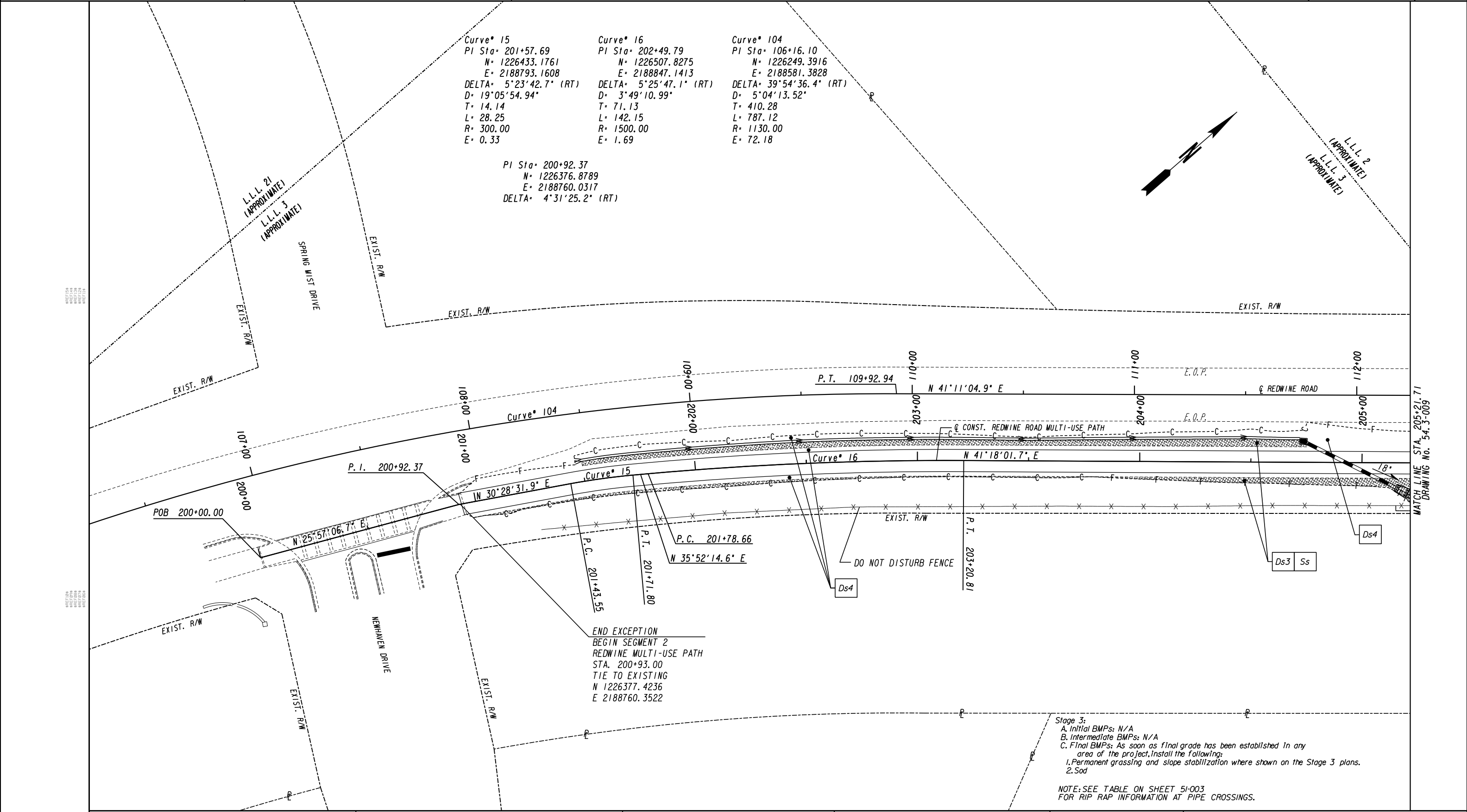
CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No.
54.3-007

7/31/2015

GPLN

INSET 10A
INSET 10B
INSET 10C
INSET 10D
INSET 10E
INSET 10F
INSET 10G
INSET 10H
INSET 10I
INSET 10J
INSET 10K
INSET 10L
INSET 10M
INSET 10N
INSET 10O
INSET 10P
INSET 10Q
INSET 10R
INSET 10S
INSET 10T
INSET 10U
INSET 10V
INSET 10W
INSET 10X
INSET 10Y
INSET 10Z



7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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SCALE IN FEET
0 20 40 80

REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

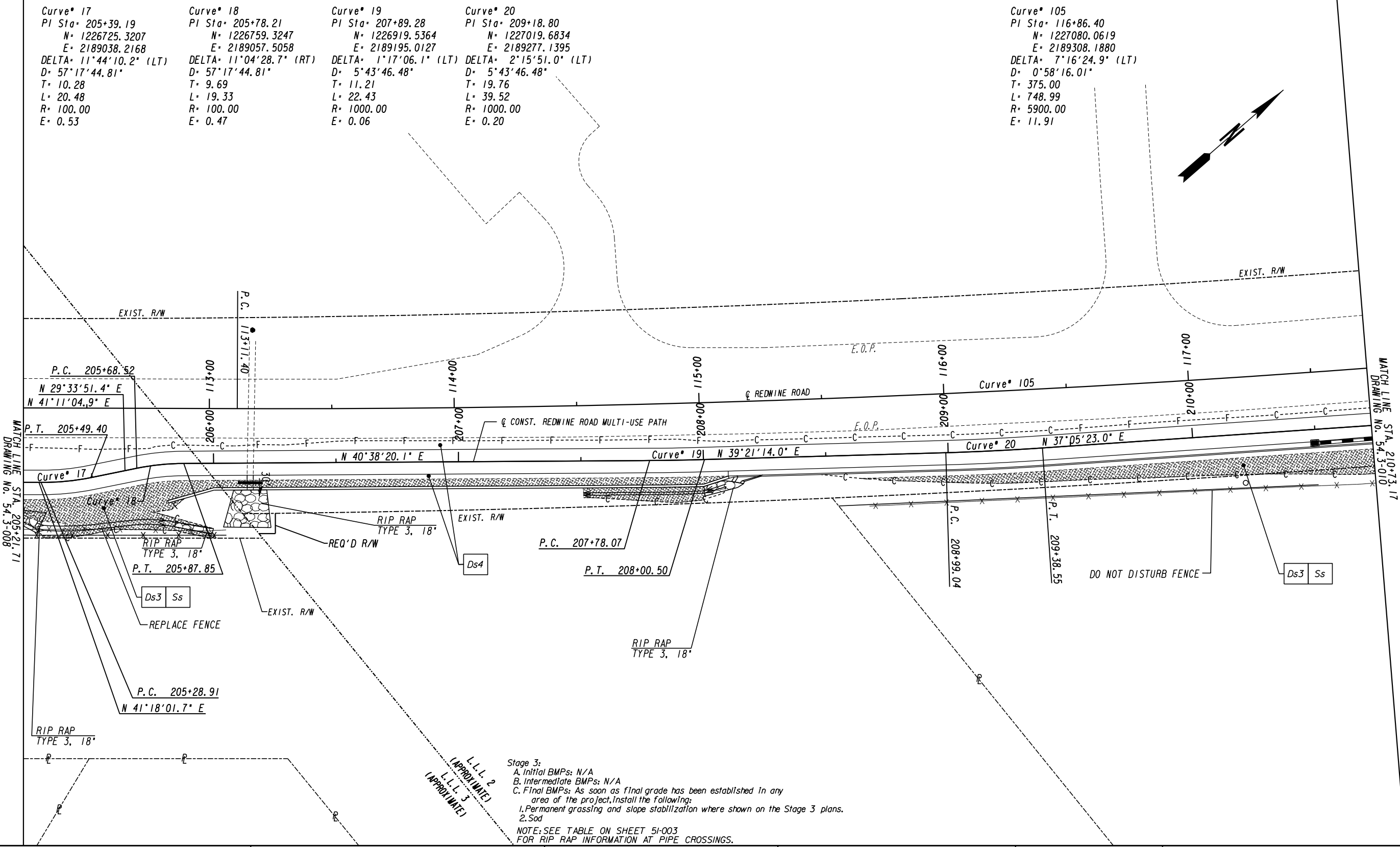
CHECKED: DATE:

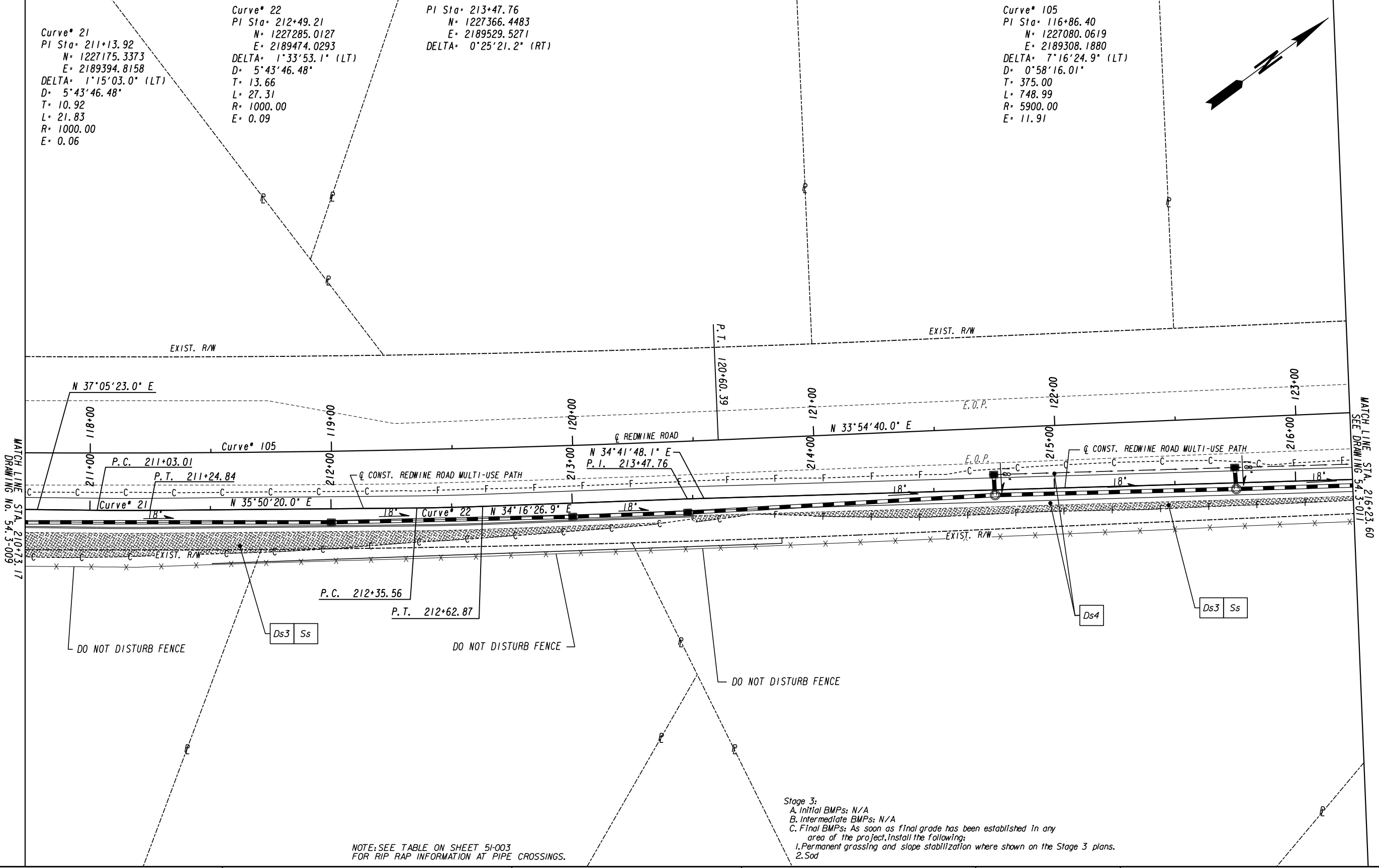
DRAWING No.
54.3-008

BACKCHECKED: DATE:

CORRECTED: DATE:

VERIFIED: DATE:





7/31/2015

GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---E---

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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SCALE IN FEET

REVISION DATES

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED: DATE: VERIFIED: DATE:

BACKCHECKED: DATE: CORRECTED: DATE:

DRAWING No.
54.3-010

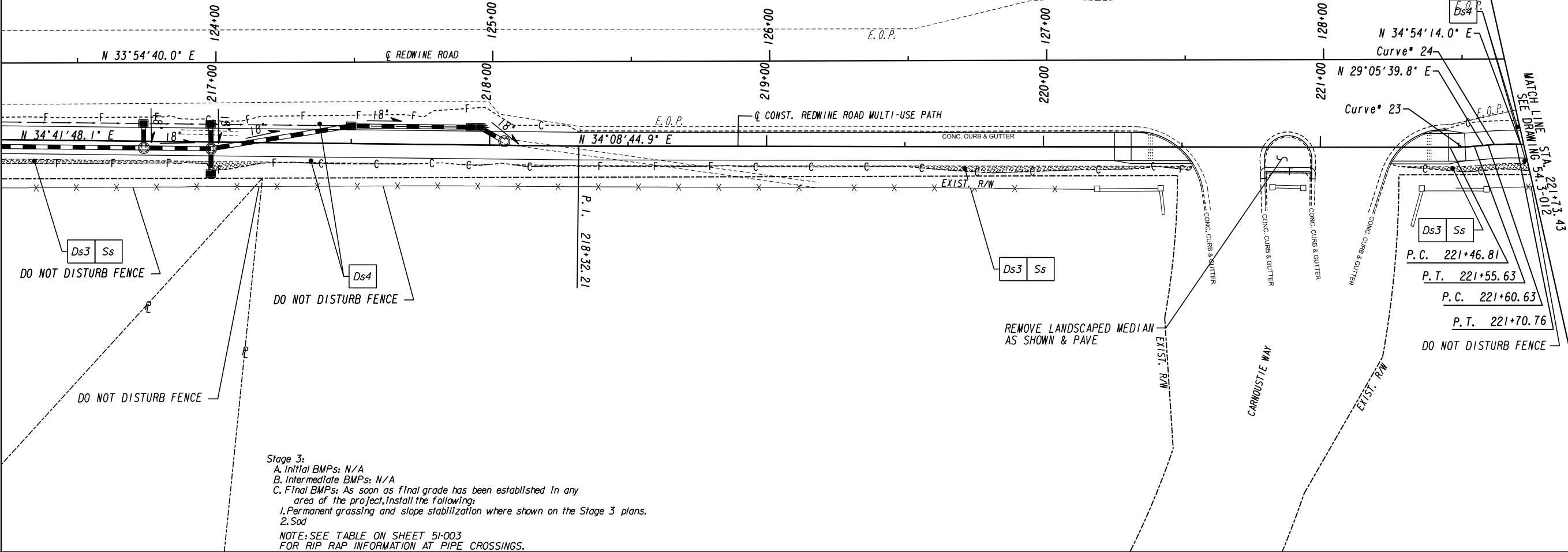
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PI Sta= 221+51.22
N= 1228028.7722
E= 2189984.3548
DELTA= 5°03'05.1" (LT)
D= 57°17'44.81"
T= 4.41
L= 8.82
R= 100.00
E= 0.10

Curve* 24
PI Sta= 221+65.70
N= 1228041.4271
E= 2189991.3968
DELTA= 5°48'34.2" (RT)
D= 57°17'44.81"
T= 5.07
L= 10.14
R= 100.00
E= 0.13

PI Sta= 218+32.21
N= 1227764.7513
E= 2189805.2912
DELTA= 0°33'03.3" (LT)

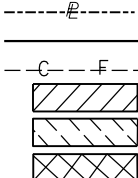
MATCH LINE
SEE DRAWING 54.3-010

MATCH LINE
SEE DRAWING 54.3-012

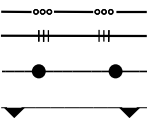


Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod
NOTE: SEE TABLE ON SHEET 51-003 FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



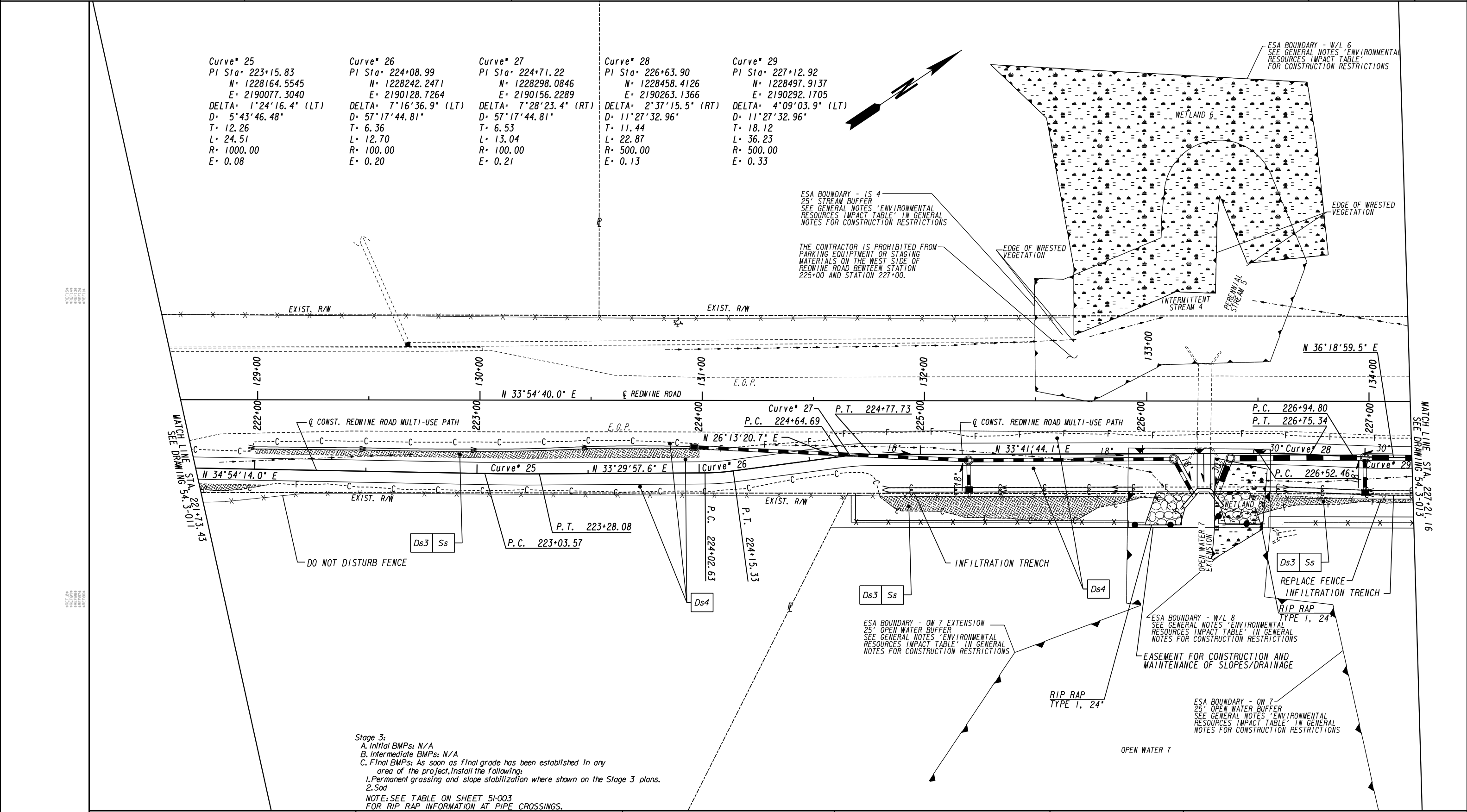
Heath & Lineback Engineers
INCORPORATED
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MARIETTA, GEORGIA 30066-5393
(770)424-1668



REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	54.3-011
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

-----E-----

---C---F---

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

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SCALE IN FEET

0 20 40 80

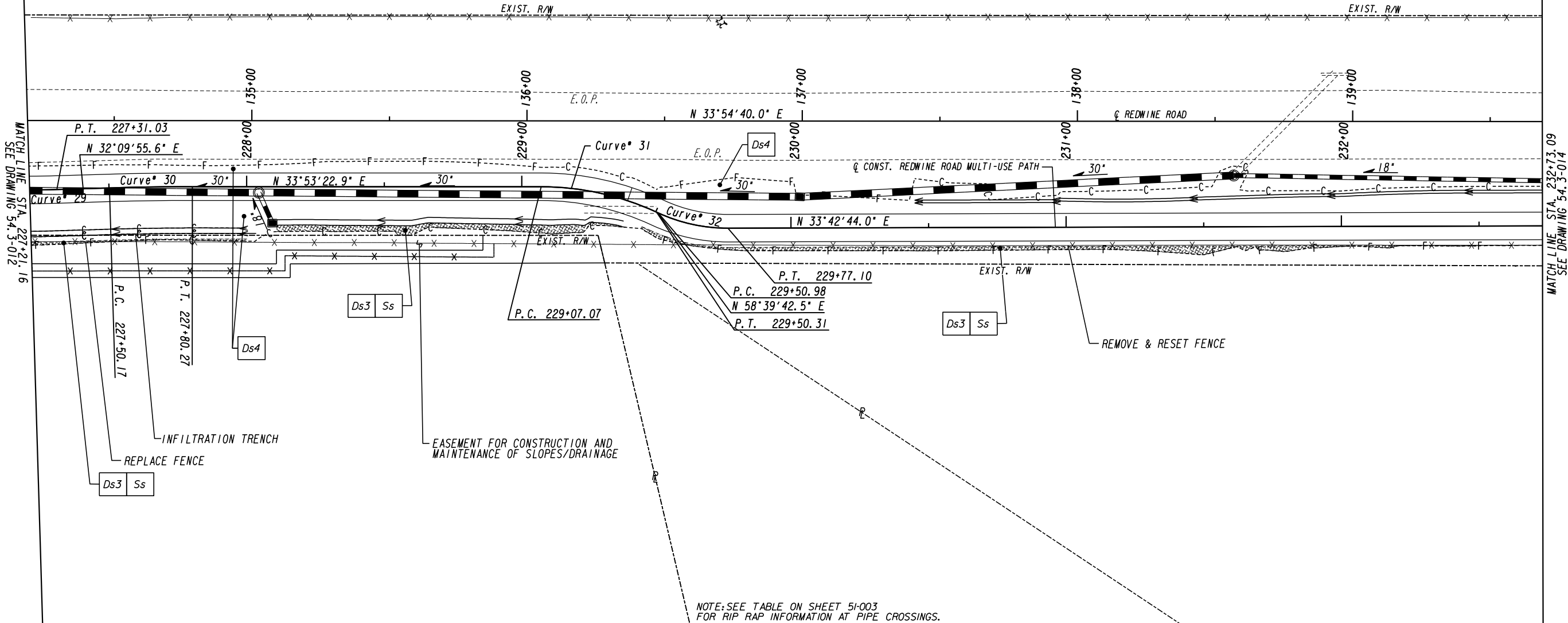
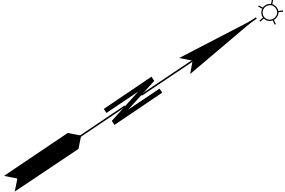
REVISION DATES	

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No. 54.3-012
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

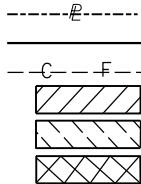
Curve* 29	Curve* 30	Curve* 31	Curve* 32
PI Sta= 227+12.92	PI Sta= 227+65.22	PI Sta= 229+29.03	PI Sta= 229+64.25
N= 1228497.9137	N= 1228542.1997	N= 1228678.1823	N= 1228696.8555
E= 2190292.1705	E= 2190320.0217	E= 2190411.3626	E= 2190442.0286
DELTA= 4°09'03.9" (LT)	DELTA= 1°43'27.2" (RT)	DELTA= 24°46'19.6" (RT)	DELTA= 24°56'58.5" (LT)
D= 11°27'32.96"	D= 5°43'46.48"	D= 57°17'44.81"	D= 95°29'34.68"
T= 18.12	T= 15.05	T= 21.96	T= 13.27
L= 36.23	L= 30.09	L= 43.24	L= 26.13
R= 500.00	R= 1000.00	R= 100.00	R= 60.00
E= 0.33	E= 0.11	E= 2.38	E= 1.45

Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod



NOTE: SEE TABLE ON SHEET 51-003
FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



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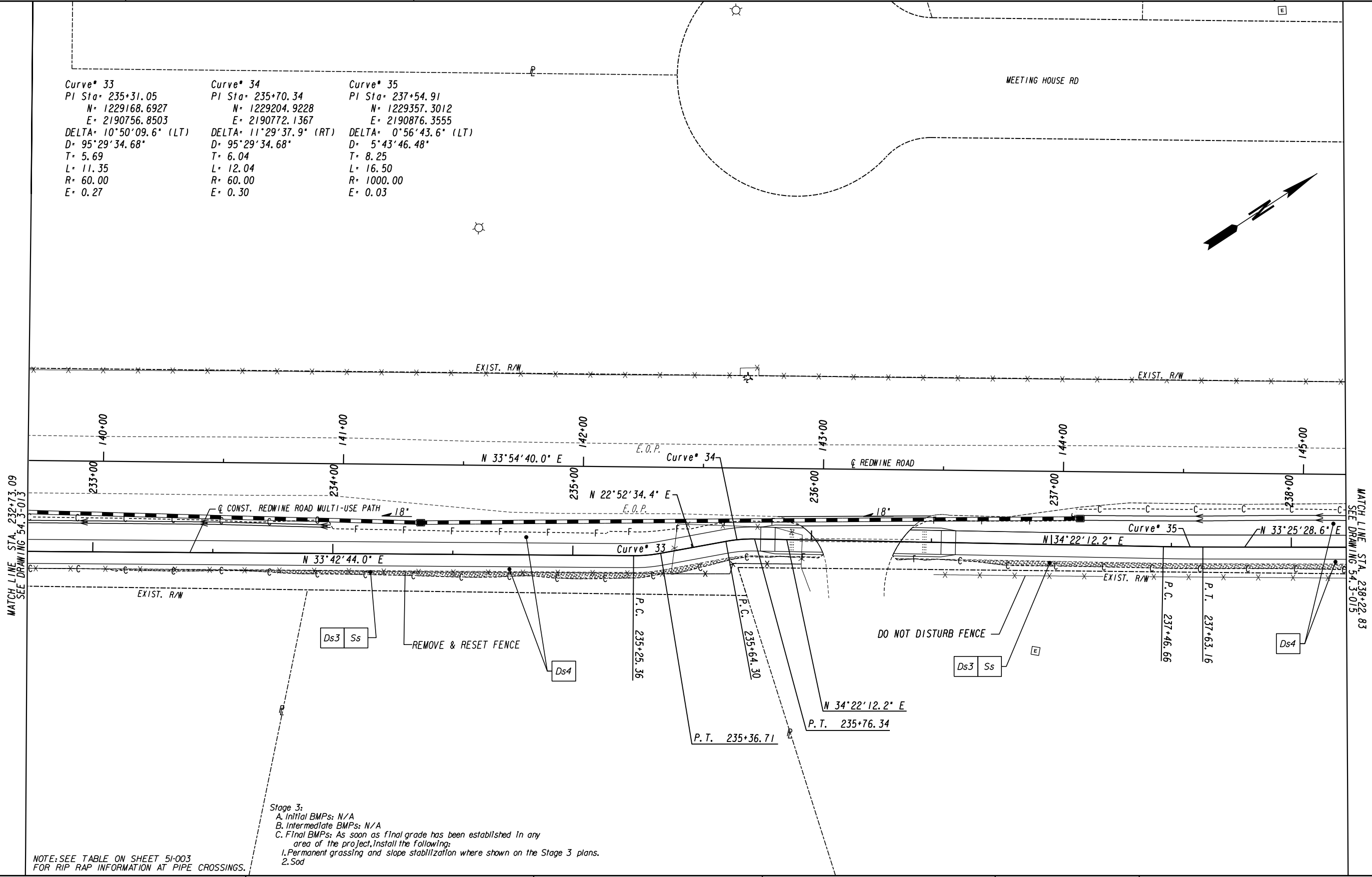


REVISION DATES

FAYETTE COUNTY
BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

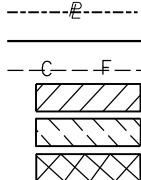
54.3-013



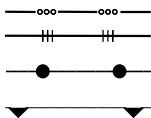
NOTE: SEE TABLE ON SHEET 51-003 FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

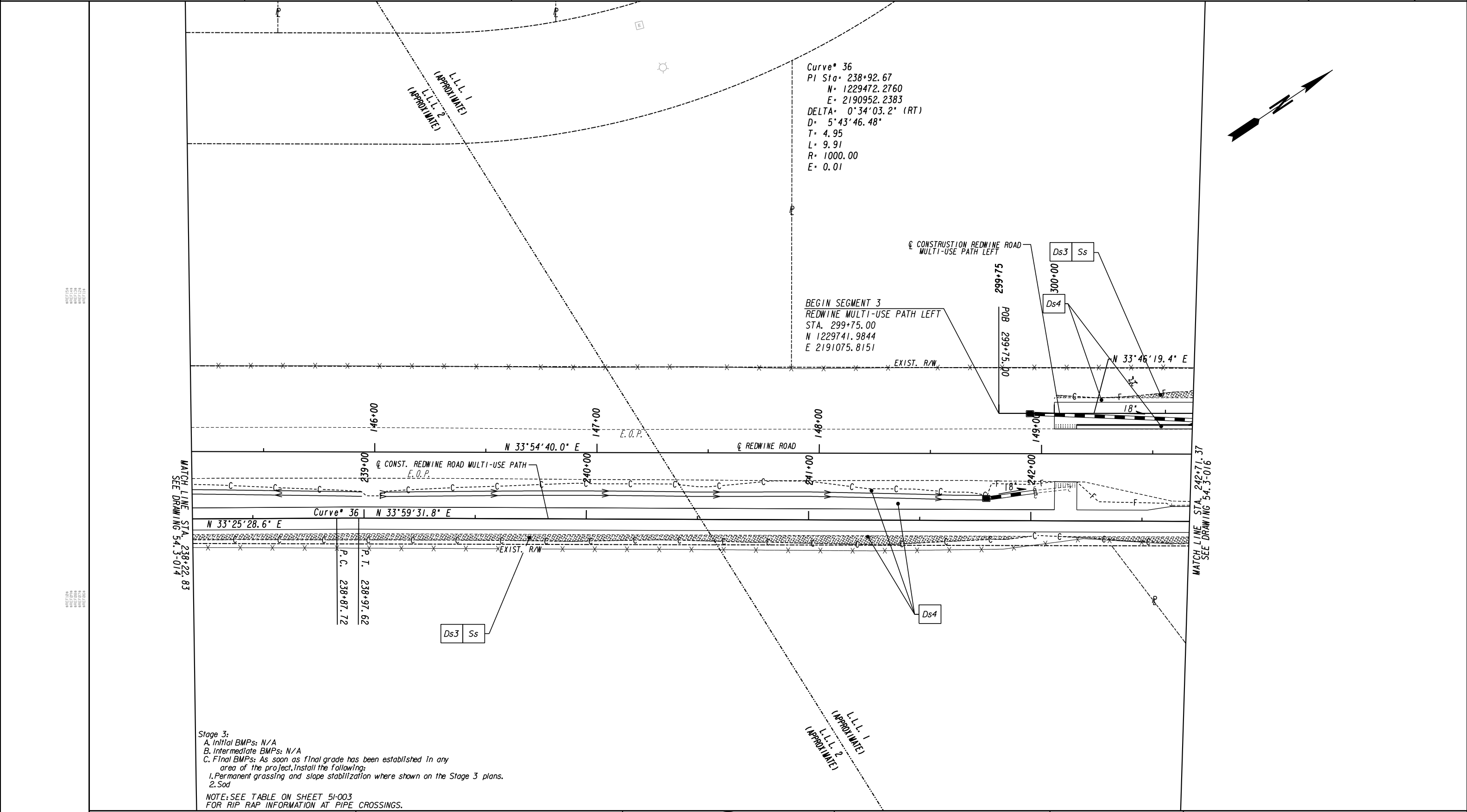


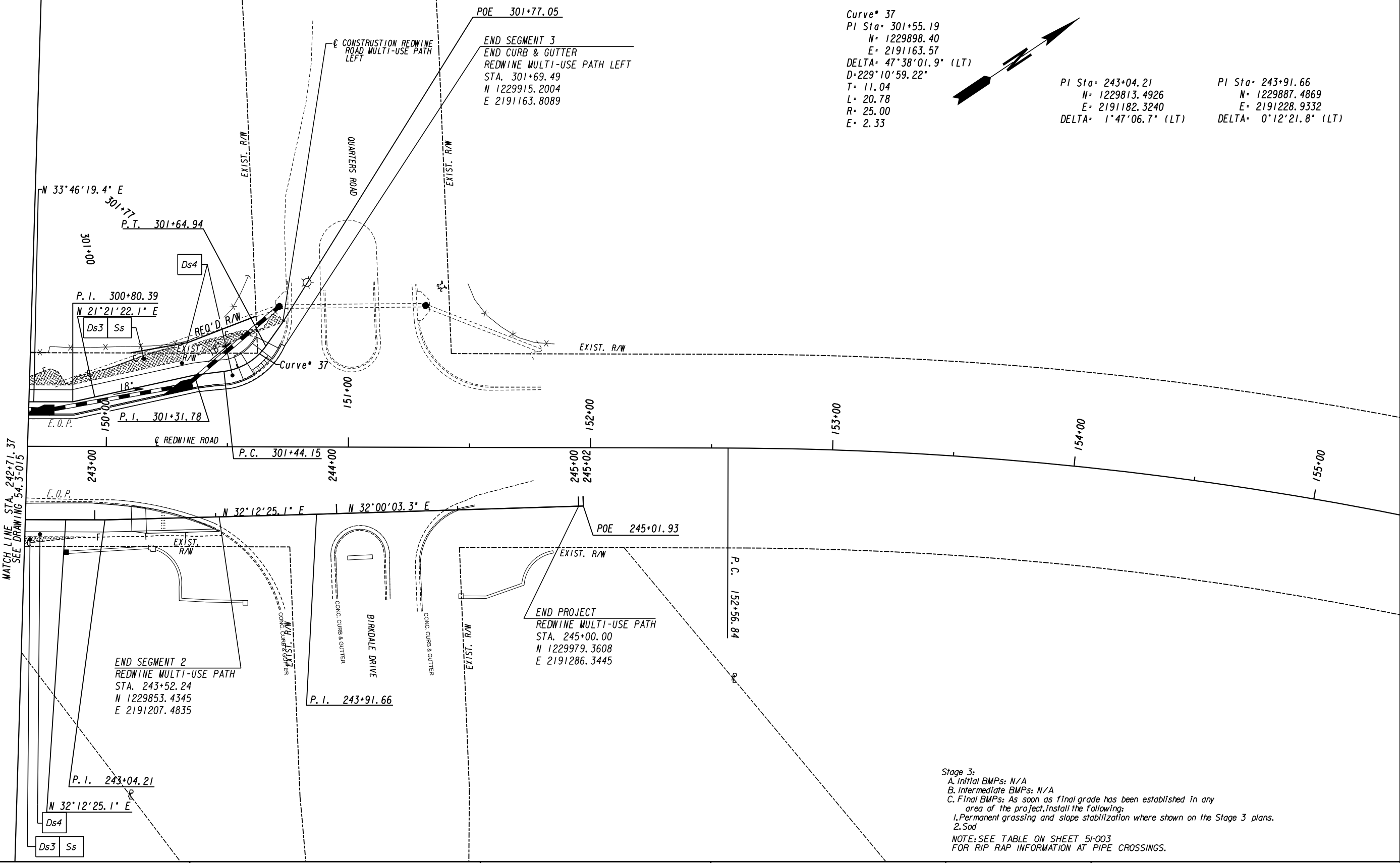


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MARIETTA, GEORGIA 30066-5393
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REVISION DATES		FAYETTE COUNTY			
		BMP LOCATION DETAILS - STAGE 3			
		REDWINE ROAD & STARRS MILL SCHOOL			
		COMPLEX MULTI-USE PATH			
CHECKED:	DATE:	BACKCHECKED:	DATE:	DRAWING No.	
CORRECTED:	DATE:	VERIFIED:	DATE:	54.3-014	





Curve* 37
PI Sta* 301+55.19
N* 1229898.40
E* 2191163.57
DELTA* 47°38'01.9" (LT)
D*229°10'59.22"
T* 11.04
L* 20.78
R* 25.00
E* 2.33

PI Sta* 243+04.21
N* 1229813.4926
E* 2191182.3240
DELTA* 1°47'06.7" (LT)

PI Sta* 243+91.66
N* 1229887.4869
E* 2191228.9332
DELTA* 0°12'21.8" (LT)

Stage 3:
A. Initial BMPs: N/A
B. Intermediate BMPs: N/A
C. Final BMPs: As soon as final grade has been established in any area of the project, install the following:
1. Permanent grassing and slope stabilization where shown on the Stage 3 plans.
2. Sod
NOTE: SEE TABLE ON SHEET 51-003 FOR RIP RAP INFORMATION AT PIPE CROSSINGS.

7/31/2015
GPLN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
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ORANGE BARRIER FENCE
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(SEE ERIT TABLE)

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Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET

0 20 40 80

REVISION DATES	

FAYETTE COUNTY

BMP LOCATION DETAILS - STAGE 3
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

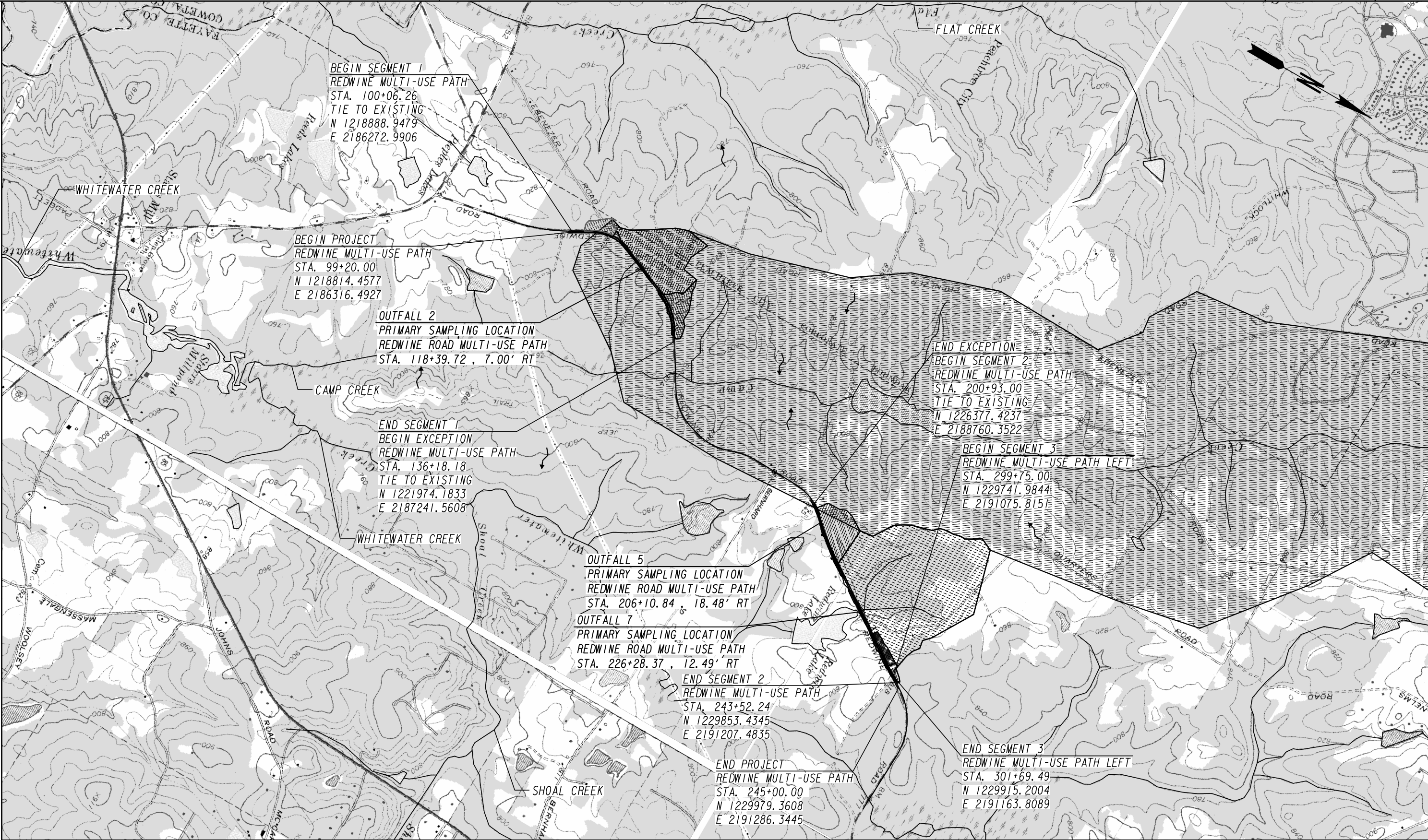
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PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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(SEE ERIT 4-)

Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

SCALE IN FEET
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REVISION DATES	

FAYETTE COUNTY
WATERSHED MAP SITE MONITORING PLAN
REDWINE ROAD & STARRS MILL SCHOOL
COMPLEX MULTI-USE PATH

CHECKED:
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DRAWING No.
55-001

Bidder: _____

Project Number 0012624		Fayette County Project Pricing Sheet Redwine Road & Starrs Mill School Complex Multi-Use Path				Revised: 3-29-21
Pay Item #	Item Description	Qty.	Unit	Unit Price	Total	
	Roadway					
150-1000	TRAFFIC CONTROL -	1	LS			
156-0100	GPS DATA COLLECTION AND SUBMITTAL	1	LS			
210-0100	GRADING COMPLETE -	1	LS			
441-0108	CONC SIDEWALK, 8 IN	240	SY			
441-5004	CONCRETE HEADER CURB, 10 IN, TP 4	540	LF			
515-2020	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND	1225	LF			
441-3999	CONCRETE V GUTTER	1100	LF			
441-6216	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	152	LF			
610-0300	REM FENCE -	1153	LF			
611-4890	RESET FENCE -	593	LF			
634-1200	RIGHT OF WAY MARKERS	14	EA			
643-8405	FENCE, SPECIAL DESIGN	524	LF			
				Sub Total		
	Pavement					
310-1101	GR AGGR BASE CRS, INCL MATL	2282	TN			
402-3100	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME	955	TN			
402-3113	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	4	TN			
500-3200	CLASS B CONCRETE	26	CY			
				Sub Total		
	Drainage					
441-0301	CONC SPILLWAY, TP 1	1	EA			
500-3002	CLASS AA CONCRETE	16	CY			
511-1000	BAR REINF STEEL	2721	LB			
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	2848	LF			
550-2300	SIDE DRAIN PIPE, 30 IN, H 1-10	521	LF			
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	180	LF			
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	13	LF			
550-1300	STORM DRAIN PIPE, 30 IN, H 1-10	8	LF			
550-1540	STORM DRAIN PIPE, 54 IN, H 1-10	14	LF			
550-3518	SAFETY END SECTION 18 IN, STORM DRAIN, 6:1 SLOPE	1	EA			

Project Number 0012624		Fayette County Project Pricing Sheet <i>Redwine Road & Starrs Mill School Complex Multi-Use Path</i>			Revised: 3-29-21
Pay Item #	Item Description	Qty.	Unit	Unit Price	Total
550-4118	FLARED END SECTION 18 IN, SIDE DRAIN	1	EA		
207-0203	FOUND BK FILL MATL, TP II	30	CY		
600-0001	FLOWABLE FILL	2	CY		
603-2181	STN DUMPED RIP RAP, TP 3, 18 IN	163	SY		
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	52	SY		
603-7000	PLASTIC FILTER FABRIC	215	SY		
611-8050	ADJUST MANHOLE TO GRADE	1	EA		
668-4300	STORM SEWER MANHOLE, TP 1	16	EA		
668-4311	STORM SEWER MANHOLE, TP 1, ADDL DEPTH, CL 1	9	LF		
668-1100	CATCH BASIN, GP 1	2	EA		
668-2100	DROP INLET, GP 1	39	EA		
668-2110	DROP INLET, GP 1, ADDL DEPTH	1	LF		
668-5000	JUNCTION BOX	1	EA		
999-0600	INFILTRATION TRENCH, STA NO - 224+75	1	LS		
999-0600	INFILTRATION TRENCH, STA NO - 226+50	1	LS		
				Sub Total	
	Erosion Control				
163-0232	TEMPORARY GRASSING	2	AC		
163-0240	MULCH	73	TN		
163-0300	CONSTRUCTION EXIT	2	EA		
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	2	EA		
163-0527	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS	31	EA		
163-0528	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	2505	LF		
163-0539	CONSTRUCT AND REMOVE RETROFIT-SLOTTED BOARD DAM W/STONE FILTER	6	EA		
163-0541	CONSTRUCT AND REMOVE ROCK FILTER DAMS	6	EA		
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	41	EA		
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	4222	LF		
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	171	LF		
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	2970	LF		
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	2	EA		
165-0096	MAINTENANCE OF RETROFIT-SLOTTED BOARD DAM W/ STONE FILTER	6	EA		

Bidder: _____

Project Number 0012624		Fayette County Project Pricing Sheet Redwine Road & Starrs Mill School Complex Multi-Use Path				Revised: 3-29-21
Pay Item #	Item Description	Qty.	Unit	Unit Price	Total	
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	2	EA			
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	41	EA			
165-0110	MAINTENANCE OF ROCK FILTER DAM	6	EA			
167-1000	WATER QUALITY MONITORING AND SAMPLING	3	EA			
167-1500	WATER QUALITY INSPECTIONS	18	MO			
171-0010	TEMPORARY SILT FENCE, TYPE A	8444	LF			
171-0030	TEMPORARY SILT FENCE, TYPE C	342	LF			
643-8200	BARRIER FENCE (ORANGE), 4 FT	373	LF			
700-9300	SOD	6387	SY			
700-6910	PERMANENT GRASSING	4	AC			
700-7000	AGRICULTURAL LIME	12	TN			
700-8000	FERTILIZER MIXED GRADE	4	TN			
700-8100	FERTILIZER NITROGEN CONTENT	200	LB			
716-2000	EROSION CONTROL MATS, SLOPES	4222	SY			
				Sub Total		
	Cost Estimate (Continued)					
	Signing & Marking					
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	152	SF			
636-2070	GALV STEEL POSTS, TP 7	259	LF			
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	468	LF			
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	870	LF			
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	112	SY			
				Sub Total		
	Walls					
	Gravity Wall 1					
500-3201	CLASS B CONCRETE, RETAINING WALL	80	CY			
	Gravity Wall 2					
500-3201	CLASS B CONCRETE, RETAINING WALL	111	CY			
	Gravity Wall 3					

Bidder: _____

Project Number 0012624		Fayette County Project Pricing Sheet Redwine Road & Starrs Mill School Complex Multi-Use Path				Revised: 3-29-21
Pay Item #	Item Description	Qty.	Unit	Unit Price	Total	
500-3201	CLASS B CONCRETE, RETAINING WALL	14	CY			
	Gravity Wall 4					
500-3201	CLASS B CONCRETE, RETAINING WALL	98	CY			
				Sub Total		
	Utility Relocations and Adjustments					
611-8140	Adjust Water Valve Box to Grade	3	EA			
660-1925	Water Main 8 in	33	LF			
670-1120	Water Main 12 in	56	LF			
660-1925	MJ Gate Valve 8-inch	1	EA			
660-1935	MJ Gate Valve 12-inch	2	EA			
500-3200	Class B Concrete (Thrust Block's)	29	CY			
670-9710	Relocate Exist Fire Hydrant	1	EA			
				Sub Total		
	Landscaping					
009-2000	Allowance for LANDSCAPING and/or IRRIGATION at S/D entrances	5	EA	\$10,200.00	\$51,000.00	
				Sub Total		
	Signal					
647-1000	TRAFFIC SIGNAL INSTALLATION NO - PEDESTRIAN HYBRID BEACON	1	LS			
				Sub Total		
	Fayette County Special Allowance					
NA	Allowance for claims or extra work	1	LS	\$90,000.00	\$90,000.00	
				Sub Total		
TOTAL PROJECT CONSTRUCTION =						

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

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

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

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

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

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

II. NONDISCRIMINATION

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

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

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6. Training and Promotion:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

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

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

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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

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

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SPECIAL PROVISION

Required Contract Provisions Federal-Aid Construction Contracts

1. *Subsection I.4 Selection of Labor; Delete the last sentence in the paragraph.*
2. *Subsections IV Davis Bacon and Related Act Provisions; Delete the first paragraph in its entirety and substitute the following:*

“This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts. The requirements apply to all projects located within the right-of-way of a roadway.”

12-15-2008

APPENDIX A
NOTICE TO CONTRACTORS
COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964
FOR
FEDERAL-AID CONTRACTS

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 will comply with the Regulations of the Department of Transportation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (Title 49, Code of Federal Regulations, Part 21, hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of the Contract.
2. Nondiscrimination: The Contractor, with regard to the work performed by it afterward and prior to completion of the contract work, will not discriminate on the ground of race, color, national origin, disability, sex, or age in the selection and retention of subcontracts including procurements of materials and leases of equipment. This will be done in accordance with Title VI of the Civil Rights Act of 1964 and other Non-Discrimination Authorities i.e., Section 504 of the 1973 Rehabilitation Act, the 1973 Federal-Aid Highway Act, the 1975 Age Discrimination Act, and the Americans with Disabilities Act of 1990. The Contractor will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when contract covers a program set forth in Appendix B of the Regulations. In addition, the Contractor will not participate either directly or indirectly in discrimination prohibited by 23 CFR 710.405 (b).
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 equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Contract and the Regulations relative to nondiscrimination on the ground of race, color, national origin, disability, sex or age.

4. Information and Reports: The Contractor will provide all information and reports required by the Regulations, or orders and instructions 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 Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the Department of Transportation shall impose such Contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- (a) withholding of payments to the Contractors under the Contract until the Contractor complies, and/or
- (b) Cancellation, termination or suspension of the Contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraph (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, orders or instruction issued pursuant thereto. The Contractor will take such action with respect to any subcontract or procurement as the Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as result of such direction, the Contractor may request the State to enter into such litigation to protect the interests of the State, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

FEDERAL REGISTER / VOL. 45, NO. 194 / FRIDAY, OCTOBER 3, 1980 / NOTICES**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246) (43 FR 14895)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered areas, are as follows:

GOALS FOR FEMALE PARTICIPATION

APPENDIX A
(43 FR 19473)

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of \$10,000. The goals are applicable to the contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally-assisted construction contract or subcontract. Area covered: Goals for Women apply nationwide.

Goals and timetables

Timetable		Goals (percent)
4-1-78	to 3-31-79	3.1
4-1-79	to 3-31-80	5.0
4-1-80	Until Further Notice	6.9

**GOALS FOR
MINORITY PARTICIPATION**

Appendix B-80

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or federally assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to each nonexempt contractor's total onsite construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or non-federally related project, contract or subcontract.

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Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4-5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the areas covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply with the applicable SMSA or EA goal contained in this appendix B-80.

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State	Goal (percent)
Georgia:	
035 Augusta, GA:	
SMSA Counties:	
0600 Augusta, GA-SC	27.2
GA Columbia; GA Richmond, SC Aiken;	
Non-SMSA Counties	32.-8
GA Burke; GA Emanuel; GA Glascock; GA Jefferson;	
GA Jenkins; GA Lincoln; GA McDuffie, GA Talferro;	
GA Warren; GA Wilkes; SC Allendale; SC Bamberg;	
SC Barnwell; SC Edgefield; SC McCormick;	
036 Atlanta, GA:	
SMSA Counties:	
0520 Atlanta, GA	21.2
GA Butts; GA Cherokee; GA Clayton; GA	
Cobb; GA DeKalb; GA Douglas; GA Fayette, GA	
Forsyth; GA Fulton; GA Gwinnett; GA Henry; GA	
Newton; GA Paulding; GA Rockdale; GA Walton	
Non-SMSA Counties	19.5
GA Banks; GA Barrow; GA Bartow; GA Carroll; GA Clarke;	
GA Coweta; GA Dawson; GA Elbert; GA Fannin;	
GA Floyd; GA Franklin; GA Gilmer; GA Gordon;	
GA Greene; GA Habersham; GA Hall; GA	
Haralson; GA Hart; GA Heard; GA Jackson; GA	
Jasper; GA Lamar; GA Lampkin; GA Madison;	
GA Morgan; GA Oconee, GA Oglethorpe; GA	
Pickins, GA Pike; GA Polk; GA Rabun; GA	
Spalding; GA Stephens; GA Towns; GA; Union; GA Upson	
White	
037 Columbus, GA:	
SMSA Counties:	
1800 Columbus, GA – AL	29.6
Al Russell; GA Chattahoochee; GA Columbus	

Non-SMSA Counties	31.6
Al Chambers; AJ Lee; GA Harris; GA Marion; GA Meriwether; GA Quitman; GA Schley; GA Stewart; GA Sumter; GA Talbot; GA Troup; GA Webster	
038 Macon, GA:	
SMSA Counties:	
4680 Macon, GA	27.5
GA Bibb; GA Houston; GA Jones; GA Twiggs	
Non-SMSA Counties	31.7
GA Baldwin; GA Bleckley; Crawford; GA Crisp; GA Dodge; GA Dooly; GA Hancock; GA Johnson; GA Laurens; GA Macon; GA Monroe; GA Peach; GA Pulaski; GA Putman; GA Taylor; GA Telfair; GA Treutlan; GA Washington; GA Wheeler; GA Wilcox; GA Wilkinson	
039 Savannah, GA:	
SMSA Counties:	
7520 Savannah, GA	30.6
GA Bryan; GA Chatham; GA Effingham	
Non-SMSA Counties	29.8
GA Appling; GA Atkinson; GA Bacon; GA Bulloch; GA Candler; GA Coffee; GA Evans; GA Jeff Davis; GA Liberty; GA Long; GA McIntosh; GA Montgomery; GA Screven; GA Tattnall; GA Toombs; GA Wayne; SC Beaufort; SC Hampton; SC Jasper	
040 Albany, GA:	
SMSA Counties:	
0120 Albany, GA	32.1
GA Dougherty; GA Lee	
Non-SMSA Counties	31.1
GA Baker; GA Ben Hill; GA Berrien; GA Brooks; GA Calhoun; GA Clay; GA Clinch; GA Colquitt; GA Cook; GA Decatur; GA Early; GA Echols; GA Grady; GA Irwin; GA Lanier; GA Lowndes; GA Miller; GA Mitchell; GA Randolph; GA Seminole; GA Terrell; GA Thomas; GA Tift; GA Turner; GA Worth	
Florida:	
041 Jacksonville FL:	
Non-SMSA Counties.....	22.2
GA Brantley; GA Camden; GA Charlton; GA Glynn; GA Pierce; GA Ware	

**DEPARTMENT OF TRANSPORTATION
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**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246) (43 FR 14895)**

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegated authority;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

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5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, nor the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minority and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing the notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

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- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc. prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organization, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and test to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc. such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete

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benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
DISADVANTAGED BUSINESS ENTERPRISE PROGRAM
CRITERIA FOR ACCEPTABILITY

The purpose of this special provision is to establish criteria for acceptability of DBE firms for work performed on this contract. The intent is to ensure all participation counted toward fulfillment of the DBE goals is (1) real and substantial, (2) actually performed by viable, independent DBE owned firms, and (3) in accordance with the spirit of the applicable laws and regulations.

The policy of the Georgia Department of Transportation is to ensure compliance with Title VI of the Civil Rights Act of 1964, 49 Code of Federal Regulations, Part 26 and related statutes and regulations in all program activities.

To this end the Georgia Department of Transportation shall not discriminate on the basis of race, color, sex or national origin in the award, administration and performance of any Georgia Department of Transportation assisted contract or in the administration of its Disadvantaged Business Enterprise Program. The Georgia Department of Transportation shall take all necessary and reasonable steps to ensure nondiscrimination.

The DBE Goal specified in the contract will be a percentage representing the DBE Race Conscious Participation. The Contractor will strive to achieve an additional percentage in his/her contracts for all projects during the course of the current State Fiscal Year, in order to meet the overall Georgia Department of Transportation DBE goal.

The DBE program applies to all Federal Aid projects regardless if a DBE Goal is established in the Contract or not. If no percentage goal is set forth in the proposal, the contractor may enter a proposed DBE participation. This voluntary DBE participation will count as race neutral DBE participation. Prime Contractor shall report race-neutral participation in accordance with the DBE Monthly Report requirements shown in this document.

Project DBE payments and commitments may not be transferred to or combined with another contract.

DEFINITIONS: For the purposes of this provision, the following definitions will apply:

Disadvantaged Business Enterprises (DBE) are firms Certified by the Georgia Unified Certification program that are for-profit small business concerns:

- 1) Which is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and
- 2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own the business.

Good Faith Efforts means efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Joint Venture means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

Socially and Economically Disadvantaged Individual means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is –

- (1) Any individual who the Department finds to be a socially and economically disadvantaged individual on a case-by-case basis.
- (2) Any individual in the following groups, members of which are reputably presumed to be socially and economically disadvantaged.
 - (i) “Black Americans,” which includes persons having origins, in any of the Black racial groups of Africa;
 - (ii) “Hispanic Americans,” which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - (iii) “Native Americans,” which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;

- (iv) “Asian-Pacific Americans,” which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (v) “Subcontinent Asian Americans,” which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (vi) Women;
- (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

(3) GDOT will presume that such persons are socially and economically disadvantaged only to the extent permitted by applicable federal law.

Race-conscious measure is one focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral measure is one being, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender-neutrality.

Joint Check is a two-party check written by a prime contractor, to a DBE firm and a regular dealer of material/supplies or another third party for items or services incorporated into a project. The prime contractor issues the check as payer to the DBE and the supplier jointly (to guarantee payment to the supplier) in payment for the material/supplies used by the DBE.

DBE DIRECTORY: A DBE directory or source list is available to facilitate identifying DBEs with capabilities relevant to general contracting requirements and to particular solicitations. The Department has made the directory electronically available to all bidders and proposers in their efforts to meet the DBE requirements. The directory or listing includes firms which the Department has certified to be eligible DBEs in accordance with 49 CFR Part 26.

GOAL FOR PARTICIPATION: If a percentage goal for DBE participation in this contract is set forth elsewhere in this proposal, the Contractor shall complete the DBE GOALS – Commitment List form included in the proposal.

The Contractor is encouraged to make every effort to achieve the goal set by the Department. However, if the Contractor cannot find sufficient DBE participants to meet the goal established by the Department, the Department may consider for award a proposal with less participation than the established goal in accordance with GDOT Standard Specification 102.07.H Failure to List Disadvantaged Business Enterprise (DBE) Participants, 49 Code of Federal Regulations 26.53 Good Faith Effort Procedures, and 49 CFR Appendix A to Part 26—Guidance Concerning Good Faith Efforts.

To be eligible for award of this contract, all bidders are required to submit the following information, as well as Good Faith Effort supporting documentation when applicable, to the Department by the close of business on the 3rd working day following opening of the bid as a matter of bidder responsibility

- i. The names and addresses of DBE firms committed to participate in the Contract;
- ii. A description of the work each DBE will perform; The Contractor shall provide information with their bid showing that each DBE listed by the Contractor is certified in the NAICS code(s) for the kind of work the DBE will be performing.
- iii. The dollar amount of participation for each DBE firm participating; Written documentation of the bidder's commitment to use a DBE subcontractor whose participation it submits to meet a contract goal;
- iv. Written confirmation from the DBE committed to participating in the contract, as provided in the prime contractor's commitment.
- v. If the contract goal is not met, evidence of good faith efforts must be provided.

Failure by a bidder to furnish the above information may subject the bid to disqualification. Also failure by the bidder to submit satisfactory evidence of good faith efforts may subject the bid to disqualification.

Award of a contract by the Department to a Prime Contractor who has listed DBE participants with the bid does not constitute final approval by the Department of the listed DBE. The Department reserves the right to approve or disapprove a Disadvantaged firm after a review of the Disadvantaged firm's proposal participation. Payment to the Contractor under the contract may be withheld until

final approval of the listed DBEs is granted by the Department.

If the Contractor desires to substitute a DBE in lieu of those listed in the proposal, a letter of concurrence shall be required from the listed DBE prior to approval of the substitution, unless this requirement is waived by the Department.

Agreements between bidder and a DBE promising not to provide Subcontracting quotations to other bidders are prohibited.

SUBLETTING DISCRIMINATION PROHIBITED: No person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against in connection with the award and performance of this contract on the grounds of race, color, sex or national origin.

The following assurance becomes a part of this contract and must be included in and made a part of each subcontract the prime contractor enters into with their subcontractors (49 CFR

26.13):

“The contractor, and/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 (breach) of this contract which may result in the termination of this contract or such other remedy as the Department deems appropriate”.

FAILURE TO ACHIEVE REQUIREMENTS: Periodic reviews shall be made by the Department to determine the extent of compliance with the requirements set forth in this provision. If the Contractor is found to be in noncompliance, further payments for any work performed may be withheld until corrective action is taken. If corrective action is not taken, it may result in termination of this contract. During the life of the contract, the contractor will be expected to demonstrate good faith efforts at goal attainment as provided by 49 CFR 26.

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the Department’s written consent to substitute and, unless the Department’s consent is provided the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE, in accordance with 49 CFR 26.53.

Participation will be counted toward fulfillment of the DBE goal as follows:

- (A) When a DBE participates in a contract, the Contractor counts only the value of

the work actually performed by the DBE toward DBE goals.

(1) Count the entire amount of the portion of a construction contract (or other contract not covered by paragraph (A) (2) of this section) performed by the DBE's own forces. Include the cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).

(2) Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, toward DBE goals, provided the Department determines the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.

(3) When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

(B) **Joint Venture:** When a DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract the DBE performs with own forces toward DBE goals.

(C) **Commercially Useful Function:** Count expenditures to a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function (CUF) on that contract.

(1) A DBE performs a commercially useful function when responsible for execution of the work of the contract and carrying out responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

a. Joint Check Agreement: All two-party checks written by a prime contractor, to a DBE firm and a third party must be approved by the Department prior to claiming DBE credit. After-the-fact requests may not be permitted toward the Goal.

- (2) A DBE does not perform a commercially useful function if their role is limited to being an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.
- (3) If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of their contract with their own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the Department will presume the DBE is not performing a commercially useful function.
- (4) When a DBE is presumed not to be performing a commercially useful function as provided in paragraph (C) (3) of this section, the DBE may present evidence to rebut this presumption.
- (5) The Department's decisions on commercially useful function matters are subject to review by the US DOT, but are not administratively appealable to the US DOT.

(D) **Trucking:** The following factors are to be used in determining whether a DBE trucking company is performing a commercially useful function:

- (1) The DBE must be responsible for the management and supervision of the entire trucking operation for which they are responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- (2) The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The DBE may lease trucks from another DBE firm, including an owner / operator who are certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provided on the contract.
- (5) The DBE may also lease trucks from a non-DBE and is entitled to credit only for the fee or commission it receives as a result of the lease arrangement. The

DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.

- (6) The DBE may lease trucks without drivers from a non-DBE bona-fide truck leasing agency. If the DBE leases trucks from a non-DBE truck leasing agency and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.
- (7) For purposes of this paragraph (D), a lease must indicate the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display a "leased to" sign with the name and identification number of the DBE.

(E) Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:

- (1) (i) If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals.
 - (ii) For purposes of this paragraph, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) (i) If the materials or supplies are obtained from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals. (ii) For purposes of this section, a regular dealer is a firm owning, operating, or maintaining a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

(A) To be a regular dealer, the firm must be an established, regular business engaging, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

(B) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this

paragraph (E)(2)(ii) if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

(C) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph (E)(2).

- (3) With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided you determine the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals, however.
- (4) You must determine the amount of credit awarded to a firm for the provision of materials and supplies (e.g., whether a firm is acting as a regular dealer or a transaction expeditor) on a contract-by-contract basis. Do not count the participation of a DBE subcontractor toward the prime contractor's DBE achievements until the amount being counted toward the goal has been paid to the DBE.
- (5) No participation will be counted not in compliance with Special Provision entitled "Criteria for Acceptability" which is a part of this contract or with any provisions included in 49 CFR Part 26.

- (6) If the contract amount overruns, the contractor will not be required to increase the dollar amount of DBE participation. Likewise, if the contract amount under runs, the contractor will not be allowed to under run the dollar amount of DBE participation except when the DBE subcontracted items themselves under run. Contractor must demonstrate Good Faith Effort in meeting the goal during commission of the contract.

REPORTS

- A. The contractor shall submit a “DBE Participation Report” on this contract monthly which shall include the following:
 1. The name of each DBE participating in the contract.
 2. A description of the work to be performed, materials, supplies, and services provided by each DBE.
 3. Whether each DBE is a supplier, subcontractor, owner/operator, or other.
 4. The dollar value of each DBE subcontract or supply agreement.
 5. The previous, current, and total-to-date payments to each DBE participating in the contract, minus any credits not allowed.
 6. Must include Contractor’s signature with the following statement: “I HEREBY CERTIFY THAT THE ABOVE STATEMENT IS TRUE AND CORRECT. SUPPORTING DOCUMENTATION IS ON FILE AND IS AVAILABLE FOR INSPECTION BY DEPARTMENT _____ PERSONNEL AT ANY TIME. ALL PARTICIPATION COUNTED TOWARD FULFILLMENT OF THE DBE GOAL IS (1) REAL AND SUBSTANTIAL; (2) ACTUALLY PERFORMED BY VIABLE, INDEPENDENT DBE OWNED FIRMS; AND (3) IN ACCORDANCE WITH THE SPIRIT OF APPLICABLE LAWS AND REGULATIONS”.
 7. The report shall be updated by the Prime Contractor whenever the approved DBE has performed a portion of the work that has been designated for the contract. Copies of this report should be transmitted promptly to the Engineer. Failure to submit the report within 30 calendar days following the end of the month may cause payment to the contractor to be withheld.

8. The Prime Contractor shall notify the Project Engineer at least 24 hours prior to the time the DBE commences working on the project. The DBE must furnish supervision of the DBE portion of the work, and the person responsible for this supervision must report to the Project Engineer when they begin work on the project. They must also inform the Project Engineer when their forces will be doing work on the project.

B. In order to comply with 49 CFR 26.11, the Prime Contractor shall submit documentation regarding all payments made from the Prime to all DBE subcontractors on federal aid projects in the form of copies of cancelled checks or bank electronic fund transfer (EFT) receipts which validate said payments made on the DBE Monthly Participation Reports. This information shall be required monthly and submitted with the DBE Monthly Participation Report.

C. Failure to respond within the time allowed in the request will be grounds for withholding all payments on all Contracts.

SUBSTITUTION OF DBEs: The Contractor shall make reasonable efforts to replace a DBE Subcontractor unable to perform work for any reason with another DBE. The Department shall approve all substitutions of Subcontractors in order to ensure the substitute firms are eligible DBEs.

When a DBE subcontractor is terminated, or fails to complete its work on the contract for any reason, the prime contractor must make good faith efforts to find another DBE subcontractor to substitute for the original DBE. These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal. The good faith efforts shall be documented by the contractor. If the recipient requests documentation under this provision, the contractor shall submit the documentation within 7 days, which may be extended for an additional 7 days if necessary at the request of the contractor, and the recipient shall provide a written determination to the contractor stating whether or not good faith efforts have been demonstrated.

CERTIFICATION OF DBEs: To ensure the DBE Program benefits only firms owned and controlled by Disadvantaged Individuals, the Department shall certify the eligibility of DBEs and joint ventures involving DBEs named by bidders.

Questions concerning DBE Certification/Criteria should be directed to the EEO Office at (404) 631-1972.

INSTRUCTIONS FOR LIST OF DBE PARTICIPANTS

If a DBE Goal is indicated, you must propose to achieve a goal that is equal or greater than the percentage required. If no goal is indicated, you may propose your own goal.

The DBE firms to be utilized as counting toward the proposed goal must be listed on this form, along with their addresses, type of work, and the amount to be paid to each of the minority firms. The amount entered will not necessarily be the contract amount, but must be the actual amount that will be paid to the DBE firm. In the case of a DBE supplier, the amount paid and 60% of that amount both will be entered; and only the 60% figure should be added to the total. An example of this is shown in the example chart:

Vendor Number	Company Name And Address (City and State)	Type Of Work	*Work Code	Race Neutral	Race Conscious	Amount
	ABC Oil Company Atlanta, GA	Diesel Fuel Supplier				\$80,000.00 (60%= \$48,000.00)

* For Departmental use ONLY. Do not fill in Work Codes.

The Contractor shall indicate for each DBE and Type of Work whether the DBE Participant is Race Neutral or Race Conscious by placing a checkmark in the appropriate column.

PLEASE NOTE: For 60% of the amount paid to a DBE supplier to be eligible to count toward fulfilling the DBE goal, the supplier must be an established "regular dealer" in the product involved, and not just a broker. A "regular dealer" would normally sell the product to several customers and would usually have product inventory on hand.

DBE GOALS

VENDOR ID:

BIDDER'S COMPANY NAME:

PROJECT NO. & COUNTY: **PI# 0012624, FAYETTE COUNTY**

LET NO:

LET DATE:

TOTAL BID:

THE REQUIRED DBE GOAL ON THIS CONTRACT IS: **15 %**

I PROPOSE TO UTILIZE THE FOLLOWING DBE CONTRACTORS:

LIST OF DBE PARTICIPANTS

VENDOR NUMBER	DBE NAME/ ADDRESS (CITY, STATE)	TYPE OF WORK	*WORK CODE	Race Neutral	Race Conscious	AMOUNT
TOTAL						

***For Departmental use only. Do not fill in Work codes.**

PLEASE NOTE: Only 60 % of the participation of a DBE Supplier who does not manufacture or install the product will be counted toward the goal. See below for further instructions.

INSTRUCTIONS TO CONTRACTOR **DBE PARTICIPATION REPORT**

In order to receive credit toward the DBE Goal, the prime contractor must complete the report in its entirety and submit this form MONTHLY to the Project Manager in charge of the contract. Failure to submit this form will result in no credit toward the contract DBE requirements.

1. PROJECT NUMBER – This is the GDOT assigned project number – See Contract.
 2. COUNTY – See Contract.
 3. CONTRACT ID NUMBER – This is the GDOT Contract Identification Number – See Contract.
 4. CONTRACTOR NAME –
 5. REPORT SUBMISSION DATE – This is the date the report is completed.
 6. REPORT NUMBER – Reports must be consecutively numbered.
 7. REPORT TYPE – This should be checked monthly until all work has been completed, at which time the Report Type should be changed to Final and submitted to the Project Manager.
 8. DATE WORK BEGAN – This is the date of the first day any work occurred on the project.
 9. DBE REQUIRED PERCENTAGE – This is the total required % of the original contract amount.
 10. CONTRACT \$ AMOUNT – DBE Amount: *The DBE amount and percentage are the DBE amount and percentage shown in the original contract. (In some instances, this amount may be greater than the percentage amount and may exceed the percentage in the contract; for reporting purposes, the amount over the DBE percentage on this contract is considered race neutral). Original subcontract amount should be at least the amount listed in the contract. Any amounts above the race conscious number or percentage are counted as race neutral and should be shown on report on a separate line than the race conscience. The contractor cannot add the race neutral until the race conscious is exceeded.*
 11. PERCENT \$ COMPLETE – Insert the Percentage Complete, which reflects the percentage of project completed in dollars to the ending date of this report.
 12. DBE \$ AMOUNT – This is the total dollar amount representing the percentage of the original contract.
 13. PERCENT PROJECT COMPLETE – Insert the Percentage of Project Complete, which indicates the time completed on the project.
 14. DATE CLOSING THIS REPORT – Please check the appropriate date for the close of payments for this report.
 15. SUPPLIER (S) – One who supplies material to the Project. The dollar value shown in the contracts for suppliers represents the calculated sixty percent (60%) dollar value of the original amount; therefore, the supplier percentage requires no further adjustments. The amount in the contract should be shown as the subcontract amount.
 16. OWNER / OPERATOR (O) – One who owns and operates the equipment themselves.
 17. SUBCONTRACTOR (SC) – Those who aren't a supplier or owner/operator.
 18. SUBCONTRACTOR AGREEMENT RECEIVED (SAR): The Department requests that you supply a copy of valid executable subcontract agreements between your company and your DBE subcontractors per section 108.01 of the Standard Specifications. All subcontracts shall include the Required Contract Provisions, FHWA 1273; these provisions shall not be incorporated by reference. A copy of subcontractor agreement (SAR) between the prime and each DBE must be submitted to the Area Engineer's Office.
 19. RACE NEUTRAL (RN) – DBE participation that would have been used in the absence of any contract goal provisions.
 20. RACE CONSCIOUS – DBE participation that was utilized specifically to meet the proposed contract goal or portion thereof.
-

21. ORIGINAL SUBCONTRACT AMOUNT – This is the original amount shown in the Signed Contract.
22. PREVIOUS PAYMENTS – This totals all PAYMENTS prior to this report.
23. PAYMENTS THIS REPORT – These are the totals of PAYMENTS during this report period only.
24. PAYMENTS TO DATE – Show the actual amount that each DBE has payments to-date under the contract based on the unit prices paid to the DBE by the prime contractor and not contract unit prices. When a supplier is used to fulfill the DBE requirements, only 60% of the amount earned by the supplier may be entered. Show that total amount in the space provided.
25. CURRENT COLUMN TOTALS – Total each column.
26. PERCENT OF CONTACT – This percentage is calculated using the contract amount and the total DBE payments-to-date.
27. CERTIFICATION – The contractor or his authorized representative must sign this form prior to submittal. Failure to complete and submit this form in a timely manner may delay monthly progress payments.
28. DBE must perform at least 30% of work with own forces to meet commercially useful function criteria (49CFR26.55). If a DBE subcontracts part of the work of its contract to another firm, the value of the work can only be counted toward the DBE goal if the DBE's subcontractor is itself a DBE.
29. A DBE hauler must itself own and operate at least one fully licensed, insured and operational truck to be used on the contract.
30. Payments and commitments for Federal-aid projects **shall be separate and distinct and cannot be transferred or combined in any manner.**
31. Credits towards DBE goal can only be claimed after the amount being claimed toward the goal has been paid to the DBE. Attach cancelled checks: Prime Contractor shall submit documentation regarding all payments made from the Prime to all DBE subcontractors on federal aid projects in the form of copies of cancelled checks or notarized electronic documentation which validates said payments made on the DBE Monthly Participation Reports. This information shall be required monthly and submitted with the DBE Monthly Participation Report (49CFR26.11).

GENERAL INFORMATION

The prime contractor may change DBE firms only with the approval of the District Engineer, provided the changes confirm to contract regulations.

The prime contractor is responsible for sending a copy of the subcontractor agreement between the prime and its subcontractors to the Project Manager. After submitting this document to the Project Manager, the prime contractors checks the block on the DBE Participation Report. Only one copy of the subcontractor agreement is requested for each DBE subcontractor.

If the prime contractor has not submitted a copy of the subcontractor agreement between the prime and its DBE subcontractor(s), the project manager will contact the prime contractor and request this document.

The prime contractor is not requested to send copies of the subcontractor agreement signed with the DBE firms to multiple offices within GDOT. Sending this information to the Project Manager will satisfy the federal requirements.

The prime contractor is responsible to accurately complete the report prior to submitting to the department. Once submitted to the department, the department project manager is responsible for reviewing it for accuracy.

If the report is inaccurate, the department project manager shall send the report back to the prime contractor for corrections. Payment will be withheld by the Department until a correct report is received.

The prime contractor is required to submit the monthly DBE from the month of Notice To Proceed until the Final DBE Report is submitted. Payment will be withheld by the Department until the report is received.

Upon completion of the work, a final "DBE Participation Report" will be required and submitted to the Area Engineer prior to final payment. All information shown on the form must be completed, including the payments of each approved DBE.

Joint ventures between non-DBE and certified DBE: Only that portion of the work for which the DBE is responsible may be used to satisfy the requirements.

Should you have questions about the Monthly DBE Participation Report – ARRA Reporting, contact the local District Contracts Administration Office or District EEO Officer.

FOR DEPARTMENTAL USE ONLY:

Federal Law requires that the work of DBE contractors be monitored in the field as part of the effort to ensure that DBEs are actually performing the work (49CFR26.37 (b)).

District EEO Officers must receive copies of the Monthly DBE Participation Reporting.

MONTHLY DBE PARTICIPATION REPORT

REPORT SUBMISSION DATE: _____

PROJECT NO.: _____

COUNTY: _____

CONTRACT ID NO.: _____

CONTRACTOR: _____

REPORT NO.: _____

NOTICE TO PROCEED: _____

DATE WORK BEGAN: _____

CONTRACT \$ AMOUNT: _____

DBE \$ AMOUNT: _____

DBE REQUIRED %: _____

% DOLLAR COMPLETE: _____

% PROJECT COMPLETE: _____

31-Jan

28-Feb

31-Mar

30-Apr

31-May

30-Jun

31-Jul

31-Aug

30-Sep

31-Oct

30-Nov

31-Dec

S = SUPPLIER

SC = SUBCONTRACTOR

APPROVED DBE				VENDOR ID	DESCRIPTION OF WORK	
	S	SC	ORIGINAL SUBCONTRACT AMOUNT	PREVIOUS PAYMENTS	PAYMENTS THIS REPORT	TOTAL PAYMENTS TO DATE
1						
RN						
RC						
2						
RN						
RC						
3						
RN						
RC						
4						
RN						
RC						
5						
RN						
RC						
6						
RN						
RC						

RN COLUMN TOTALS:				
RC COLUMN TOTALS:				

TOTAL % PAID TO DATE: _____

I HEREBY CERTIFY THAT THE ABOVE STATEMENT IS TRUE AND CORRECT AND SUPPORTING DOCUMENTATION IS ON FILE AND IS AVAILABLE FOR INSPECTION BY DEPARTMENT PERSONNEL AT ANY TIME.
ALL PARTICIPATION COUNTED TOWARD FULFILLMENT OF THE DBE GOALS IS
(1) REAL AND SUBSTANTIAL; (2) ACTUALLY PERFORMED BY VIABLE, INDEPENDENT DBE OWNED FIRMS; AND (3) IN ACCORDANCE WITH THE SPIRIT OF APPLICABLE LAWS AND REGULATIONS.

PRINT NAME: _____
NAME / TITLE

SIGNATURE: _____

FOR DEPARTMENT USE ONLY

THIS DOCUMENT HAS BEEN REVIEWED AT THE PROJECT LEVEL BY:

PRINT NAME: _____
NAME / TITLE

SIGNATURE: _____
(Mandatory)

THIS DOCUMENT HAS BEEN REVIEWED AT THE DISTRICT LEVEL BY:

PRINT NAME: _____
NAME / TITLE

SIGNATURE: _____
(Mandatory)

FHWA Tips on Evaluating a Commercially Useful Function

Of all the many elements in the DBE program there is one that can have the most detrimental impact on the ability of the prime contractor to meet its contract goal as well as the ability of a recipient to meet its overall goal. This element is commonly referred to as commercially useful function or “CUF”. How can just one element of the program have such an impact achieving the results Congress intended when it established the DBE program?

Both the prime contractor and the State Transportation Agency (STA) receive credit toward the DBE goal (contract and overall) only when a DBE working on a contract performs a CUF. DBEs generally perform work on a contract either as a contractor, a trucker, a regular dealer, or a manufacturer. While each of these categories is evaluated differently when determining whether the DBE has performed a CUF, there is one guiding principle that must be followed. Under the terms established in 49 CFR §26.55, a DBE firm performs a CUF when it is:

"Responsible for execution of the work of the contract or a distinct element of the work . . . by actually performing, managing, and supervising the work involved."

The question contract administrators often face is, “What are the management, supervision, and performance actions of a DBE firm that satisfactorily meet this requirement?” Evaluating these areas will form the basis to render a determination that a DBE has in fact performed a CUF. The contract is the one key reference point for any contract administrator and it is essential for this evaluation process. The contract has an effective description of the work to be performed by a DBE and is a legally recognized document.

The USDOT DBE regulations identify the following key factors that should be analyzed when determining whether a CUF is being performed:

- ❑ Evaluation of the amount of work subcontracted, whether it is consistent with normal industry practices;
- ❑ Whether the amount the firm is paid under the contract is commensurate with the work that is actually being performed to be credited towards the goal;
- ❑ When the DBE furnishes materials, the DBE must be responsible for negotiating the price, for determining the quality and quantity of the material, ordering the material, and paying for it. As a contractor, a DBE firm would typically be hired to both furnish the material and install it with its own labor force;
- ❑ Whether the DBE’s role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In essence, was the role merely a contrived arrangement for the purpose of meeting the DBE contract goal?

In determining whether a DBE is such an extra participant, you must examine similar transactions, particularly those performed by non-DBEs. A DBE must have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the program. The firm’s role must not be a superfluous step added in an attempt to obtain credit towards the goal.

Normal Industry Practice

One of the most important elements to consider in any analysis of whether the DBE is performing a CUF is determining whether its role on the project is consistent with “normal industry practice.” This means, one must determine if the DBE is performing the work or services in the manner normally performed by all contractors—DBEs and non-DBEs. However, even if a DBE is performing pursuant to normal industry practices if those practices, in fact, erode the ability of the DBE to control its work and remain independent, the practice may affect how much can be credited toward the DBE goal and may raise questions about the DBE eligibility.

One general rule of thumb that can be considered is whether a DBE would be performing in the same manner if there was no DBE program. As further evidence of meeting normal industry practice, one must consider if the DBE performs this work on non-federally assisted contracts.

Monitoring

In keeping with normal contract requirements, it is the primary responsibility of the prime contractor to ensure that the DBE is performing a CUF. The STA, as the contracting agency, has oversight responsibility to ensure that the prime contractor has effectively met this responsibility under its contract with the STA.

The STA needs to have sufficient field personnel and general headquarters staff to monitor the performance of work performed by DBEs on all federal aid projects, including those of sub-recipients. Contractors, DBEs, local public agencies, and all employees are required to cooperate in carrying out this responsibility. The STA should establish and enforce monitoring procedures that include the following:

- ❑ Clearly written directives defining the role and interrelationship of the STA’s various departmental staff responsible to monitor and evaluate the contractor’s compliance with the DBE contract provisions;
- ❑ Procedures that spell out specific monitoring activities and responsibilities of a project level monitoring program;
- ❑ Exchange of information between departmental, central and field offices in reporting accomplishments, violations and enforcement; and
- ❑ Procedures for the application of appropriate sanctions once a determination of failure to meet the DBE contract requirements is made.

DBE Performance - CUF

Highway firms certified in the DBE program typically perform in four (4) categories: prime or subcontractor, trucker, regular dealer, and manufacturer. The following is an overview of each category, typical CUF questions, and a list of documents to review.

While DBEs are occasionally awarded prime contracts, DBEs primarily work as subcontractors for the prime. Subcontractors typically perform specific contract items and provide their own labor and materials. To determine whether a DBE subcontractor is performing a CUF, five (5) distinct operations must be considered: management, workforce, equipment, materials, and performance.

These areas must be evaluated to make a CUF determination, and situations need to be reviewed on a case by case basis. Some of the CUF questions cited below may also be quite adaptable to the other three types of work categories.

MANAGEMENT

The DBE must manage the work that has been contracted to its firm. Management includes, but is not limited to:

- ☐ Scheduling work operations;
- ☐ Ordering equipment and materials;
- ☐ Preparing and submitting certified payrolls;
- ☐ Hiring and firing employees.

The DBE owner must supervise daily operations, either personally, or with a full time, skilled and knowledgeable superintendent employed by and paid wages by the DBE. The superintendent must be present on the job site and under the DBE owner's direct supervision. The DBE owner must make all operational and managerial decisions for the firm. Mere performance of administrative duties is not considered supervision of daily operations.

☐ Red Flags

Red flags are questionable practices which may warrant further review. The red flags for management operations may include, but are not limited to:

- ☐ The DBE owner or superintendent provides little or no supervision of the work;
- ☐ The DBE's superintendent is not a regular employee of the firm or supervision is performed by personnel associated with the prime contractor, or another business;
- ☐ Key staff and personnel are not under the control of the DBE;
- ☐ The DBE's owner is not aware of the status of the work or the performance of the business;
- ☐ Inquiries by department or FHWA representatives are answered by the prime contractor.

Typical CUF questions could include:

- ☐ Is there a written legal document executed by the DBE to perform a distinct element of work?
- ☐ Who does the on-site DBE representative report to?
- ☐ Has this individual ever shown up on any other contractor's payroll?
- ☐ Has the DBE owner been present on the jobsite?

Typical documentation to evaluate:

- ☐ Written contract
- ☐ Daily inspection reports and project diaries
- ☐ Payrolls

WORKFORCE

In order to be considered an independent business, a DBE must keep a regular workforce. DBEs cannot "share" employees with non-DBE contractors, particularly the prime contractor. The DBE shall perform its work with employees normally employed by and under the DBE's control. All work must be performed with a workforce the DBE controls, with a minimum of **30%** of the work to be performed by the DBE's regular employees, or those hired by the DBE for the project from a source, such as a labor union. The DBE, in all instances, must have direct supervision over all of its employees.

The DBE must be responsible for payroll and labor compliance requirements for all employees performing on the contract and is expected to prepare and finance the payrolls. Direct or indirect payments by any other contractor are not allowed.

The DBE must perform at least 30% of the total cost of its contract with its own workforce. The DBE must not subcontract a greater portion of the work than would be expected on the basis of normal industry practice for the type of work involved.

❑ Red Flags

Some questionable workforce practices which may warrant further review include, but are not limited to:

- ❑ Supervision of DBE employees by another contractor;
- ❑ Actual work is performed by personnel normally employed by the prime contractor or another business;
- ❑ Employees are paid by the DBE and the prime contractor.

Typical CUF questions could include:

- ❑ Who prepares the DBE's certified payroll?
- ❑ Have any of the DBE's employees ever shown up on any other contractor's payroll?
- ❑ Who does the DBE on-site representative contact for hiring, firing or to modify the contract due to site condition changes or change orders?
- ❑ Asking DBE employees on the jobsite who they report to and who signs their checks.

Typical Documents to evaluate:

- ❑ Written contract
- ❑ Daily inspection reports and project diaries
- ❑ Certified payrolls
- ❑ Copies of cancelled checks, if necessary

EQUIPMENT

A DBE may lease specialized equipment from a contractor, excluding the prime, if it is consistent with normal industry practices and at rates competitive for the area. The lease must specify the terms of the agreement. The lease must be for a short period of time and involve a specialized piece of equipment to be used at the job site. The lease may include an operator for the equipment who remains on the lessor's payroll if this is a generally acceptable practice within the industry. The operation of the equipment must be subject to the full control of the DBE.

The DBE is expected to provide the operator for non-specialized equipment and is responsible for all payroll and labor compliance requirements. A separate lease agreement is required. All lease agreements should be approved by the STA prior to the DBE starting the work.

On a case by case basis, the STA may approve the DBE to lease a specialized piece of equipment from the prime. However, the STA must ensure that the lease amount is not counted toward the contract goal. Equipment leased and used by the DBE with payment deducted from the prime contractor's payment (s) to the DBE is not allowed.

☐ Red Flags

Some questionable equipment practices which may warrant further review include, but are not limited to:

- ☐ Equipment used by the DBE belongs to the prime contractor or another contractor with no formal lease agreement;
- ☐ The equipment signs and markings cover another owner's identity, usually through the use of magnetic signs;
- ☐ A DBE trucking business uses trucks owned by the prime contractor.

Typical CUF questions could include:

- ☐ List the major self-propelled (engine) equipment used by the DBE. Determine if the equipment belongs to the DBE. Is it owned or leased?
- ☐ If leased, is there an agreement identifying the terms and parties? Is it signed by the DBE owner?
- ☐ Does the equipment have the DBE's markings or emblems?
- ☐ Is the equipment under the direct supervision of the DBE?
- ☐ Is the operator of the leased equipment the DBE's employee?
- ☐ If the equipment is leased, is the payment for the equipment deducted from the work performed?

Typical Documents to evaluate:

- ☐ Written contract
- ☐ Daily inspection reports and project diaries
- ☐ Leases

MATERIALS

For a DBE contractor (furnish and install) to receive credit for supplying materials, the DBE must perform the following four functions: (1) negotiate price; (2) determine quality and quantity; (3) order the materials; and (4) pay for the material itself. If the DBE does not perform all of these functions, it has not performed a CUF with respect to obtaining the materials, and the cost of the materials may not be counted toward the DBE goal. Invoices for the material should show the payor as the DBE.

While the regulations tell recipients to consider normal industry practices, this does not overrule the requirement that the DBE must perform the four functions enumerated above. For example, even if standard industry practices in certain areas of the country allow no subcontractor to perform all four functions enumerated above (e.g. manufacturers will only negotiate with a prime, thereby eliminating the DBE's ability to negotiate the price), the "furnish" portion of the transaction does not lend itself to the performance of a CUF by the DBE, and credit cannot be given for the acquisition or cost of the materials.

❑ Red Flags

Some questionable material supply practices which may warrant further review include, but are not limited to:

- ❑ Materials for the DBE are ordered, or paid for, by the prime contractor;
- ❑ Two party checks or joint checks are sent by the prime to the supplier or manufacturer, instead of sent by the DBE;
- ❑ Materials or supplies necessary for the DBE's performance are delivered to, billed to, or paid by another business;
- ❑ Materials are delivered to the jobsite by a party separate from the DBE;
- ❑ Payment for materials is deducted by the prime contractor from payments to the DBE for work performed;
- ❑ A DBE prime contractor only purchases materials while performing little or no work.

Typical CUF questions could include:

- ❑ Is there a written contract executed by the DBE to perform a distinct element of work? Is the work to be performed by a DBE a "furnish and install" item of work?
- ❑ Who makes arrangements for delivery of materials?
- ❑ Who are the material invoices made out to?
- ❑ Who scheduled delivery of materials?
- ❑ In whose name are materials shipped?
- ❑ Who actually delivered the materials?
- ❑ If two party checks are used, who are the parties identified as payable to?

Typical Documentation to evaluate:

- ❑ Written contract
- ❑ Delivery tickets
- ❑ Invoices
- ❑ Daily inspection reports and project diaries

PERFORMANCE

The DBE must be responsible for the performance, management and supervision of a distinct element of the work, in accordance with normal industry practice (except where such practices are inconsistent with the DBE regulations).

☐ Red Flags

Some questionable performance practices which may warrant further review include, but are not limited to:

- ☐ Work is being done jointly by the DBE and another contractor;
- ☐ The work to be performed by the DBE is outside of the DBE's known experience or capability;
- ☐ Any portion of the work designated to be performed by a DBE subcontractor is performed by the prime contractor or any other firm;
- ☐ The DBE is working without a subcontract approved by the department, except in the case of trucking;
- ☐ A DBE prime contractor subcontracts more than 50% of the contract value;
- ☐ The agreement between the prime contractor and DBE artificially inflates the DBE participation;
- ☐ An agreement that erodes the ownership, control or independence of the DBE subcontractor;
- ☐ A DBE works for only one prime contractor, or a large portion of the firm's contracts are with one contractor;
- ☐ The volume of work is beyond the capacity of the DBE.

Typical CUF questions could include:

- ☐ Does the DBE on-site representative effectively manage the job site without any interference from the prime contractor?
- ☐ Does the DBE appear to have control over methods of work on its contract items?
- ☐ Is the DBE actually scheduling work activities, material deliveries and other related actions required for execution of the work?
- ☐ Has any other contractor performed any amount of work specified in the DBE's contract?

Typical Documents to evaluate:

- ☐ Written contract
- ☐ Daily inspection reports or project diaries

DBE TRUCKING FIRMS

To be certified in the DBE program as a trucking firm, the DBE is required to own and operate at least one fully licensed, insured, and operational truck used on the contract. To perform a CUF, a DBE must also be responsible for the management and supervision of the entire trucking operation or a specified portion of the trucking operation to which it has been committed. There cannot be a contrived arrangement for the purpose of meeting a DBE goal.

A DBE can supplement its fleet by leasing a truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the DBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Otherwise, the DBE does not receive full credit for DBE participation.

Leased trucks must display the name and identification number of the DBE. The DBE trucker must also hold the necessary, where appropriate, license, hauling permit, etc., as required by the State to transport material on public highways.

To count the value of DBE trucking services toward a contract goal, the following can occur:

- ❑ The DBE may lease trucks from another DBE, including an owner-operator that is certified as a DBE. The DBE can count the entire value of services performed by these DBE trucks.
- ❑ The DBE may also lease trucks from non-DBEs and owner--operators. The DBE can count the value of these trucking services up to the value of services performed by the DBE trucks used on the contract.
- ❑ DBE participation can be counted for the value of services of non-DBE trucks that exceed the value of the services performed by DBE trucks only in the amount of the fee or commission a DBE receives as a result of the lease arrangement.

In order for the STA or subrecipient to monitor the performance of a DBE trucking firm, the work to be performed must be covered by a subcontract approved by the STA prior to performing the work. Additional documentation required when the DBE leases equipment is a valid lease to be provided to the STA for appropriate action. To be considered valid, the lease must include such items as the lessor's name, list of trucks to be leased by vehicle identification number (VIN), and the agreed upon amount of the cost and method of payment. It should be the responsibility of the DBE to provide the operator's fuel, maintenance and insurance for all leased trucks.

Typical CUF questions could include:

- ❑ Do the trucks used on the project belong to the DBE?
- ❑ If leased, is there a formal lease identifying the terms and parties?
- ❑ Are the rates appropriate?
- ❑ Is there an approved subcontract?
- ❑ If so, who are the parties?
- ❑ Are the DBE's employees shown on the certified payrolls?

Typical Documentation to evaluate:

- ❑ Subcontracts
- ❑ Leases
- ❑ Payroll records
- ❑ Daily inspection reports and project diaries

DBE REGULAR DEALERS

In order for a firm to operate as a regular dealer, it must perform CUF, and must also comply with other requirements applicable to regular dealers. It must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. In addition, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business, except as noted below.

It is important to make a distinction between a regular dealer and a firm that supplies a product on an *ad hoc* basis in relation to a particular contract or contractor. A regular dealer has a regular trade with a variety of customers. One of the key considerations of being a regular, established dealer is the presence of an inventory of materials and/or supplies. A regular dealer assumes the actual and contractual responsibility for the provision of the material and/or supplies.

A firm may be a regular dealer in bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the firm both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an *ad hoc* or contract-by-contract basis.

If a DBE meets the requirements of a regular dealer, it may count 60% of the cost of the materials, if reasonable, toward the contract goal. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers.

Typical CUF questions could include:

- ❑ Does the regular dealer have an established storage facility and inventory?
- ❑ Does the dealer have a business that sells to the public on a routine basis in the product being supplied?
- ❑ Does the business stock the product for use on the project as a normal stock item?
- ❑ Who is delivering and unloading the material?
- ❑ Is distribution equipment owned or leased, long term by the DBE, used in delivering the product?
- ❑ For bulk items, where does the material come from? Does the DBE have a distribution agreement?

Typical Documentation to evaluate:

- ☐ Purchase Orders
- ☐ Invoices
- ☐ Delivery Tickets

DBE MANUFACTURERS

As described in 26.55(e)(1)(ii)), a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications. Examples of such items could be a concrete ready mix plant, a crushing operation, or a steel or concrete fabricating plant.

Typical CUF questions could include:

- ☐ Is the business's primary function to manufacture construction products?
- ☐ Does the business stock the product altered for this project as a normal stock item?
- ☐ Is the quality of the materials controlled by the DBE?
- ☐ Does the DBE purchase the raw material used in its plant?

Typical Documents to evaluate:

- ☐ Purchase orders
- ☐ Bill of lading
- ☐ Shipping tickets

Sanctions for Compliance and Enforcement

The prime contractor is ultimately responsible for ensuring that a DBE performs a CUF. Failure of a DBE to perform a commercially useful function should result in the STA taking specific definitive actions to enforce the CUF requirement of the contract. Some of the actions an STA could take include, but are not limited to, the following:

- ☐ Deny or limit credit towards the contract goal;
- ☐ Require the prime to make GFE to replace the DBE to meet the goal on remaining work;
- ☐ Withhold progress payments;
- ☐ Terminate the contract;
- ☐ Reduce the contractor's prequalification limit.

Some questions that could be part of an evaluation procedure:

- ☐ If a CUF was not performed by the DBE, what action was taken to correct the deficiency?
- ☐ Did the action taken correct the deficiency?

List of Typical Documentation to Collect:

- ☐ Executed contracts

- ❑ Material/ supply agreements
- ❑ Invoices of materials/supplies
- ❑ Equipment titles of ownership
- ❑ Equipment lease/rental agreements
- ❑ Hauling tickets
- ❑ Delivery tickets
- ❑ Canceled checks
- ❑ Project inspection/diaries
- ❑ Payroll records

When a DBE is presumed not to be performing a CUF, the DBE may present evidence to rebut this presumption. Decisions regarding CUF determinations are subject to review by concerned operating administrations, such as the FHWA. However, CUF decisions are not appealable to USDOT, they are contract administration issues.

CUF & Certification

Certification and commercially useful function are separate and distinct issues. Certification decisions address the nature of a firm's ownership and structure while CUF primarily concerns the role a firm has played in a particular transaction. Even if the certification process has identified the DBE's ability to perform as a contractor, regular dealer, or manufacturer, it is important to review and determine what and how a DBE actually performs during the performance of the contract.

A DBE's repeated failure to perform a CUF may raise questions regarding the firm's control, as it relates to independence, and perhaps ownership. If there is evidence of a pattern of failing to perform a CUF that raises serious issues with the firm's ability to control the work and its independence from the non-DBE firm, the STA should address this matter. An STA may commence a proceeding under 26.87 to determine the continued eligibility of the DBE firm.

In cases of deliberate attempts to circumvent the intent of the DBE program, or fraud, these actions may lead to criminal prosecution of both the prime contractor and the DBE. If fraud is suspected the STA should contact the DOT Office of Inspector General.

COMMERCIALLY USEFUL FUNCTION CHECKLIST

Project Name and Number: _____

Prime Contractor: _____

DBE Firm's Name: _____

Type of Operation

☐ Contractor

☐ Trucker

☐ Manufacturer

☐ Regular Dealer

Date Contract/Subcontract/Agreement Approved: _____

Start Date(s) of DBE's Work: _____

Date DBE to Complete Work: _____

Date of review: _____

Describe the type of work observed: _____

Check off each item used in conducting this review. The documents checked need not be attached to the review report, but should be filed with the report for easy reference if needed. If the answer is no to any of the following questions provide an explanation in the general notes at the end of the report.

1. Management:

a. Is there a legal contract executed by the DBE to perform a distinct element of work?

☐ Yes

☐ No

b. Name of the on-site representative: _____

c. On-site representative reports to: _____

d. Has the on-site representative been identified as an employee of the DBE?

☐ Yes

☐ No

e. Has this individual ever appeared on any other contractor's payroll?

☐ Yes

☐ No

f. Does the DBE on-site representative effectively manage the job without interference from any other non-DBE contractor?

☐ Yes

☐ No

g. Who does the DBE on-site representative contact for hiring, firing, or to modify the contract? _____

h. Has the DBE owner been present on the jobsite?

☐ Yes

☐ No

i. Does the DBE appear to have control over methods of work on its contract items?

☐ Yes

☐ No

j. Is the DBE maintaining its own payroll?

☐ Yes

☐ No

k. Who prepares the DBEs certified payroll? _____

l. Is the DBE actually scheduling work activities, material deliveries and other related actions required for prosecution of the work?

☐ Yes

☐ No

m. Did the DBE subcontract any items or portions of the work to any other firm?

☐ Yes

☐ No

If yes, what % was subcontracted? _____%

Name of the firm _____

2. Equipment

a. List the major self-propelled (engine) equipment used by the DBE: _____

b. Does the equipment have the DBE's markings or emblems?

☐ Yes

☐ No

If another firm's markings are discernible, note the name: _____

c. Is the DBE's equipment?

☐ Owned

☐ Leased from _____

d. If leased, is there a formal agreement identifying the terms and parties?

☐ Yes

☐ No

e. Is the equipment under the direct supervision of the DBE?

☐ Yes

☐ No

f. Is the operator of the leased equipment the DBE's employee?

☐ Yes

☐ No

If not the DBE's, whose employee is he/she? _____

g. If the equipment is leased, is the payment for the equipment deducted from the work performed?

☐ Yes

☐ No

3. Workforce:

a. List the name of DBE's crew as observed during the operation described above:

b. Has any of this crew ever shown up on any other contractors' payroll?

☐ Yes

☐ No

c. Does the DBE's workforce know who they work for?

☐ Yes

☐ No

4. Materials:

- a. Is the DBE contracted to furnish and install a contract item?
☐ Yes ☐ No
- b. Is the quality and quantity of the materials controlled by the DBE?
☐ Yes ☐ No
- c. If two party checks used, who are the parties identified as payable to:

- d. Who makes arrangements for delivery of materials? _____
- e. Material Invoices made out to: _____
- f. Who scheduled delivery of materials? _____
- g. In whose name area materials shipped? _____
- h. Does the prime contractor direct whom the DBE is to obtain the material from and at what price?
☐ Yes ☐ No

5. Performance:

- a. Does the DBE appear to have control over methods of work on its contract items?
☐ Yes ☐ No
- b. Has any other contractor performed any amount of work specified in the DBE contract?
☐ Yes ☐ No

6. Other Work categories:

Truckers:

- a. Are DBE trucks present on the job site? ☐ Yes ☐ No
Are they ☐ Owned ☐ Leased from _____
If leased, is there a formal agreement identifying the terms and parties?
☐ Yes ☐ No
- b. Are the rates appropriate?
☐ Yes ☐ No
- c. Is there an approved subcontract or written agreement?
☐ Yes ☐ No
Who are the parties? _____

- d. Are DBE employees shown on the certified payroll?
☐ Yes ☐ No

Regular Dealers:

- a. Does the regular dealer have an established storage facility and inventory?
☐ Yes ☐ No
- b. Does the dealer have a business that sells the product being supplied to the public on a routine basis?
☐ Yes ☐ No
- c. Does the business stock the product being supplied as a normal stock item?
☐ Yes ☐ No
- d. Is the quantity and quality of the materials controlled by the DBE?
☐ Yes ☐ No
- e. In whose name are the materials shipped? _____
- f. Who is delivering and unloading the material? _____
- g. Is the distribution equipment used in delivering the product the DBE's?
☐ Yes ☐ No
If so, is it: ☐ Owned ☐ Leased
- h. If leased, is it a long term lease and not a lease developed specifically for the project?
☐ Yes ☐ No

7. Manufacturer

- a. Is the business's primary function to manufacture construction products?
☐ Yes ☐ No
- b. Does the business stock the product manufactured or altered for this project as a normal stock item?
☐ Yes ☐ No
- c. Is the quality of the materials controlled by the DBE?
☐ Yes ☐ No

General Notes:

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

First Use 2013 Specifications: November 01, 2013

Updated July 01, 2018

SPECIAL PROVISION

PROMPT PAYMENT:

Prime Contractors, who sublet a portion of their work, shall pay their subcontractors for satisfactory performance of their contracts no later than 10 calendar days from receipt of each payment made to them. Any delay or postponement of payment among the parties may take place only for good cause with prior written approval from the Department. If the contractor is found to be in noncompliance with these provisions, it shall constitute a breach of contract and further payments for any work performed may be withheld until corrective action is taken. If corrective action is not taken, it may result in termination of the contract.

Prime contractors must maintain records and documents of payments to subcontractors, including DBEs, for a minimum of three (3) years after Contract Final Acceptance. These records shall be made available for inspection upon request by any authorized representative of the Georgia Department of Transportation or USDOT.

All subcontract agreements shall contain this requirement.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONTRACTS

BUY AMERICA

Revised: March 25, 1992

Revised: January 7, 1994

Revised: June 9, 1995

First Use 2013 Specifications: November 1, 2013

All manufacturing processes for steel and iron materials and steel and iron coatings permanently incorporated into this project must occur in the United States of America. However, pig iron and processed, pelletized, or reduced iron ore used in the production of these products may be manufactured outside the United States.

This requirement, however, does not prevent a minimal use of foreign materials and coatings, provided the cost of materials and coatings used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500.00, whichever is greater.

NOTE: Coatings include: epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of the material.

CONVICT PRODUCED MATERIALS

March 25, 1992

Revised: September 6, 1993

First Use 2013 Specifications: November 1, 2013

Materials produced by convict labor after July 1, 1991, may not be used for Federal-Aid highway construction projects unless it meets the following criteria:

1. The materials must be produced by convicts who are on parole, supervised release or probation from a prison; or,
2. If produced in a qualified prison facility, the amount of such materials produced in any 12-month period shall not exceed the amount produced in such facility for such construction during the 12-month period ending July 1, 1987. A qualified prison is defined as one producing convict made materials prior to July 1, 1987.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

FEDERAL AID CERTIFICATION
(English Project)

First Use Date 2013 Specifications: November 22, 2013
Revised: June 8, 2016

Failure to complete appropriate certification requirements identified below or submission of a false certification shall render the bid non-responsive.

EQUAL EMPLOYMENT OPPORTUNITY

I further certify that I have ____/have not ____ participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that I have ____ / have not ____ filed with the Joint Reporting Committee, the Director of the *Office of Federal Contract Compliance*, a Federal Government contracting or administering agency, or the former *President's Committee on Equal Employment Opportunity*, all reports due under the applicable filing requirements.

I understand that if I have participated in a previous Contract or Subcontract subject to the Executive Orders above and have not filed the required reports that 41 CFR 60-1.7(b)(1) prevents the award of this Contract unless I submit a report governing the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

Reports and notifications required under 41 CFR 604, including reporting subcontract awards in excess of \$10,000.00 should be addressed to:

Mr. Sam Maiden
Regional Director, U.S. Department of Labor
Office of Federal Contract Compliance Programs, Region4
Rm. 7B75
61 Forsyth Street, S.W.
Atlanta GA 30303

EXAMINATION OF PLANS AND SPECIFICATIONS

I acknowledge that this Project will be constructed in English units.

I certify that I have carefully examined the Plans for this Project and the Standard Specifications 2013 Edition, the 2016 Supplemental Specifications modifying the 2013 Standard Specifications and Special Provisions included in and made a part of this Proposal, and have also personally examined the site of the work. On the basis of the said Specifications and Plans, I propose to furnish all necessary machinery, tools, apparatus and other means of construction, and do all the work and furnish all the materials in the manner specified.

I understand the quantities mentioned are approximate only and are subject to either increase or decrease and hereby propose to perform any increased or decreased quantities of work or extra work on the basis provided for in the Specifications.

I also hereby agree that the State, or the Department of Transportation, would suffer damages in a sum equal to at least the amount of the enclosed Proposal Guaranty, in the event my Proposal should be accepted and a Contract tendered me thereunder and I should refuse to execute same and furnish bond as

**DEPARTMENT OF TRANSPORTATION
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herein required, in consideration of which I hereby agree that, in the event of such failure on my part to execute said Contract and furnish bond within fifteen (15) days after the date of the letter transmitting the Contract to me, the amount of said Proposal Guaranty shall be and is hereby, forfeited to the State, or to the Department of Transportation, as liquidated damages as the result of such failure on my part.

I further propose to execute the Contract agreement described in the Specifications as soon as the work is awarded to me, and to begin and complete the work within the time limit provided. I also propose to furnish a Contract Bond, approved by the State Transportation Board, as required by the laws of the State of Georgia. This bond shall not only serve to guarantee the completion of the work on my part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted, as well as to fully comply with all the laws of the State of Georgia.

CONFLICT OF INTEREST

By signing and submitting this Contract I hereby certify that employees of this company or employee of any company supplying material or subcontracting to do work on this Contract will not engage in business ventures with employees of the Georgia Department of Transportation (GA D.O.T.) nor shall they provide gifts, gratuities, favors, entertainment, loans or other items of value to employees of this department.

Also, by signing and submitting this Contract I hereby certify that I will notify the Georgia Department of Transportation through its District Engineer of any business ventures entered into between employees of this company or employees of any company supplying material or subcontracting to do work on this Contract with a family member of GA D.O.T. employees.

DRUG FREE WORKPLACE

The undersigned certifies that the provisions of Code Sections 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the "Drug-free Workplace Act", have been complied with in full. The undersigned further certifies that:

- (1) A drug-free workplace will be provided for the Contractor's employees during the performance of the Contract; and
- (2) Each Contractor who hires a Subcontractor to work in a drug-free workplace shall secure from that Subcontractor the following written certification:

"As part of the subcontracting agreement with _____ (Contractor's name), _____ (Subcontractor's name) certifies to the Contractor that a drug free workplace will be provided for the Subcontractor's employees during the performance of this Contract pursuant to paragraph (7) of subsection (b) of Code Section 50-24-3."

Also, the undersigned further certifies that he will not engage in the unlawful manufacture, sale distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

BOYCOTT OF ISRAEL

By signing and submitting this Contract and Pursuant to O.C.G.A. Sec. 50-5-85, CONTRACTOR hereby certifies that it is not currently engaged in, and agrees that for the duration of this contract, it will not engage in a boycott of Israel.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

NON-COLLUSION CERTIFICATION

I hereby certify that I have not, nor has any member of the firm(s) or corporation(s), either directly or indirectly entered into any agreement, participated in any collusion, nor otherwise taken any action in restraint of free competitive bidding in connection with this submitted bid.

It is understood and agreed that this Proposal is one of several competitive bids made to the Department of Transportation, and in consideration of mutual agreements of the bidders, similar hereto, and in consideration of the sum of One Dollar cash in hand paid, receipt whereof is hereby acknowledged, the undersigned agrees that this Proposal shall be an option, which is hereby given by the undersigned to the Department of Transportation to accept or reject this Proposal at any time within thirty (30) calendar days from the date on which this sealed proposal is opened and read, unless a longer period is specified in the Proposal or the successful bidder agrees in writing to a longer period of time for the award, and in consideration of the premises, it is expressly covenanted and agreed that this Proposal is not subject to withdrawal by the Proposer or Bidder, during the term of said option.

I hereby acknowledge receipt of the following checked amendments of the Proposal, Plans, Specifications and/or other documents pertaining to the Contract.

Amendment Nos.: 1___2___3___4___5___. I understand that failure to confirm the receipt of amendments is cause for rejection of bids.

Witness my hand and seal this the ____ day of _____, 20_____.

The bidder(s) whose signature(s) appear on this document, having personally appeared before me, and being duly sworn, deposes and says that the above statements are true and correct.

Sworn to and subscribed before me this _____ day of _____, 20_____.

(Notary Public)

My Commission expires the _____ day of _____, 20_____.

(Federal ID No./IRS No.)

(Print Company Name)

By _____ (Seal)
Corporate President/Vice President or
Individual Owner or Partner (Strike
through all except the one which applies.)

Joint Bidder:

(Print Company Name)

By _____ (Seal)
Corporate President/Vice President or
Individual Owner or Partner (Strike
through all except the one which applies.)

Joint Bidder:

(Print Company Name)

By _____ (Seal)
Corporate President/Vice President or
Individual Owner or Partner (Strike
through all except the one which applies.)



Contractor's Name:	
Solicitation/Contract No./ Call No. or Project Description:	

CONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, entity or corporation which is engaged in the physical performance of services on behalf of the Georgia Department of Transportation has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number
(EEV/E-Verify Company Identification Number)

Date of Authorization

Name of Contractor

I hereby declare under penalty of perjury that the foregoing is true and correct

Printed Name (of Authorized Officer or Agent of Contractor)

Title (of Authorized Officer or Agent of Contractor)

Signature (of Authorized Officer or Agent)

Date Signed

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE

____ DAY OF _____, 20 ____

Notary Public

[NOTARY SEAL]

My Commission Expires: _____

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SPECIAL PROVISION

Utility Conflicts

Utility companies having known facilities that conflict with the construction of this project will be directed by the Department to adjust or relocate their facilities and will be notified of the contract award.

Conform to all the requirements of the Specifications as they relate to cooperation with utility owners and the protection of utility installations that exist on the project. Refer to the requirements of Section 107, Legal Regulations and Responsibility to the Public, with particular attention to Subsection 107.21.

Coordinate The Work with any work to be performed by others in any right of way clearance and arrange a schedule of operations that will allow for completion of the Project within the specified contract time. Where stage construction is required, notify the utility owner when each stage of work is completed and the site is available for utility work to proceed.

Information concerning utility facilities known to exist within the project limits, including the list of owners, is available for reference.

Under Georgia Code Section 32-6-171, utilities are required to remove or relocate their facilities. The Department is required to give the utility at least 60 days written notice directing the removal, relocation, or adjustment and the utility owner is required to begin work within the time specified in the utility's work plan or revised work plan.

Upon request, copies of all approved Work Plans submitted by utility companies having facilities on this project will be made available for examination by the Contractor at the Department's District Office. Utility Adjustment Schedules, when submitted to the Department by the utilities, will be made available to the Contractor after the Notice to Contractors has been posted by the Office of Construction Bidding Administration. The Contractor is responsible for considering in its bid all existing and proposed utility locations and the removals, relocations, and adjustments specified in the Utility's Work Plan.

For this Project, Utility Owners that are required to remove, relocate, or adjust their facility to accommodate the construction of this Project may be liable to the Contractor for damages or delay costs resulting from the Utility Owner's failure to clear conflicts within the time specified in the approved Utility Work Plan. If the Utility Owner is unable to submit and obtain Department approval of a revised Work Plan or fails to complete the removal, relocation, or adjustment of its facilities in accordance with the approved Work Plan, the Utility Owner may be liable to the Department, or the Contractor, for damages or delay costs.

In accordance with Subsection 105.06 of the Specifications, the Department is not liable for payment of any claims due to utility delays, inconvenience or damage sustained by the Contractor due to interference of any utilities or appurtenances, or the operation of moving them.

In any case in which the Contractor believes that it will be entitled to damages or delay costs from the Utility Owner in accordance with O.C.G.A. 32-6-171, the Contractor shall provide written notice to the Utility Owner

and the Department within ten (10) days from the time of the dispute or potential dispute is identified. The Contractor shall follow the Procedures for Utility Damages or Delay Costs outlined in the latest edition of The Utility Accommodation Policy and Standards Manual. Failure to follow the above will result in waiver of the Contractor's claim against the Utility Owner for damages or delay costs.

In accordance with Subsection 107.21.G delays by utilities will continue to be considered by the Department in charging Contract Time. For purposes of applying provisions of this paragraph, railroads and the Metropolitan Atlanta Rapid Transit Authority (MARTA) are considered utilities.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SUPPLEMENTAL SPECIFICATION

Section 107—Legal Regulations and Responsibility to the Public

Delete Subsection 107.21 and Substitute the following:

107.21—Contractor's Worksite Utility Coordination Supervisor

107.21 General Description

The Contractor shall designate, prior to beginning any work, a Worksite Utility Coordination Supervisor (WUCS) who shall be responsible for initiating and conducting utility coordination meetings and accurately recording and reporting the progress of utility relocations and adjustment work. Also, the WUCS shall prepare an Emergency Response Plan for the purpose of planning, training, and communicating among the agencies responding to the emergency. The WUCS shall be the primary point of contact between all of the Utility companies, the Contractor and the Department. The WUCS shall recommend the rate of reoccurrence for utility coordination meetings and the Engineer will have the final decision on the regularity for utility coordination meetings. In no case will utility coordination meetings occur less than monthly until controlling items of utility relocations and adjustment milestones are completed. The WUCS shall contact each of the utility companies for the purpose of obtaining information including, but not limited to, a Utility Adjustment Schedule for the controlling items of utility relocations and adjustments. The WUCS shall notify the appropriate utility company and/or utility subcontractors and the Department of the status of controlling items of relocations and adjustment milestones as they are completed. The WUCS shall furnish the Engineer, for approval, a Progress Schedule Chart, immediately following the receipt of the Notice to Proceed unless otherwise specified, which includes the utility companies controlling items of work and other information in accordance with Section 108.03 or elsewhere in the Contract documents.

A. Qualifications

The WUCS shall be an employee of the Prime Contractor, shall have at least one year experience directly related to highway and utility construction in a supervisory capacity and have a complete understanding of the Georgia Utilities Protection Center operations, and shall be knowledgeable of the High-voltage Safety Act and shall be trained on the Georgia Utility Facility Protection Act (GUFPA). The Department does not provide any training on GUFPA but will maintain a list of the Georgia Public Service Commission certified training programs developed by other agencies. Currently the following companies offer approved GUFPA training programs:

Associated Damage Consultants

Phone: 706.234.8218 or 706.853.1362

Georgia Utility Contractors Association

Phone: 404.362.9995

Section 107—Legal Regulations and Responsibility to the Public

Georgia Utilities Protection Center

Phone: 678.291.0631 or 404.375.6209

H B Training & Consulting

Phone: 706.619.1669 or 877.442.4282 (Toll Free)

The Prime Contractor is responsible for obtaining the GUFPA training for their employees.

Questions concerning the Georgia Public Service Commission GUFPA training program should be directed to:

Georgia Public Service Commission

244 Washington St. SW

Atlanta, GA 30334-5701

404.463.9784

B. Ticket Status

During the utility coordination meetings the WUCS shall collect and maintain the Ticket Status information to determine the status of all locate requests within the project limits. This information will be used to assure those planning to use mechanized equipment to excavate or work within the project limits are prepared to begin work when they have reported or estimated beginning work. At points where the Contractor's or utility company's operations are adjacent to or conflict with overhead or underground utility facilities, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not commence until all arrangements necessary for the protection thereof have been made.

C. Notice

The names of known utility companies and the location of known utility facilities will be shown on the Plans, or listed in the Subsurface Utility Engineering Investigation if performed or in the Special Provisions; and the WUCS shall give 24-hour notice to such utility companies before commencing work adjacent to said utility facilities which may result in damage thereto. The WUCS shall further notify utility companies of any changes in the Contractor's work schedules affecting required action by the utility company to protect or adjust their facilities. Notice to the utility companies by the Department of the Award of Contract, under Subsection 105.06, shall not be deemed to satisfy the notice required by this paragraph. Furthermore, this 24-hour notice shall not satisfy or fulfill the requirements of the Contractor as stated in Chapter 9 of Title 25 of the Official Code of Georgia Annotated, known as the "Georgia Utility Facility Protection Act".

D. Agenda

The WUCS shall cooperate with the companies of any underground or overhead utility facilities in their removal and relocations or adjustment work in order that these operations may progress in a reasonable manner, that duplication of their removal and relocations or adjustment work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted. To promote this effort the WUCS shall prepare an agenda for the utility coordination meetings and circulate same in advance of the meeting to encourage input and participation from all of the utility companies. The agenda will be prepared by an examination of the project site and may include photographs of potential/actual utility conflicts.

Section 107—Legal Regulations and Responsibility to the Public

E. Emergency Response Plan

The WUCS shall prepare an Emergency Response Plan within 30 days following the receipt of the Notice to Proceed. The WUCS shall clearly mark and highlight the gas, water and other pressurized pipeline shut-off valves and other utility services including overhead switch locations on the utility plans; and prepare a chart to indicate the location of each site (Street address or intersections), the utility company or operator of the facility with emergency contact information and the working condition of the device to facilitate prompt shut-off. The WUCS shall post the Emergency Response Plan in an area readily accessible to the Department. In the event of interruption to gas, water or other utility services as a result of accidental breakage or as a result of being exposed or unsupported, the WUCS shall promptly notify the appropriate emergency officials, the Georgia Utilities Protection Center and the appropriate utility facility company or operator, if known. Until such time as the damage has been repaired, no person shall engage in excavating or blasting activities that may cause further damage to the utility facility.

F. Submission

Provisions for reporting all utility coordination meetings, the progress of utility relocation and adjustment work milestones and ticket status information will be reported on a form developed by the WUCS and will be distributed by the WUCS to all of the utility companies as milestones are met and shall be included as part of the project records. These reports shall be delivered to the Engineer for review, on a monthly basis. The WUCS shall immediately report to the Engineer any delay between the utility relocation and adjustment work, the existing Utility Adjustment Schedule, or the proposed Utility Adjustment Schedule so that these differences can be reconciled.

G. Delays

Delays and interruptions to the controlling Item or Items of The Work caused by the adjustment or repair of water, gas, or other utility appurtenances and property will be considered for an extension of Contract Time as provided in Subsection 108.07.E unless such delays are due to the negligence of the Contractor.

H. Facilities Supported on Bridges

If the utility facilities are to be supported on bridges, the following provisions shall apply:

1. The Plans will show the location of the facility and the auxiliary items necessary to support the facility.
 2. The Contractor constructing the bridge shall install anchor bolts, thimbles, inserts, or other auxiliary items attached to the bridge as a part of the support for the utility facility. The Utility Company shall furnish these auxiliary items, unless the Contract indicates these items are to be furnished by the Contractor as a part of the bridge construction.
 3. The Utility or its subcontractor constructing the utility facility shall install hanger rods, pipe rollers, and other attachments necessary for the support of the utility facility as indicated on the Plans. The Utility Company shall furnish these attachments at no cost to the Department or the prime contractor unless otherwise specified. This work shall also include:
 - a. Caulking the openings around the utility where it passes through endwalls to prevent the passage of undesirable materials.
 - b. Painting the exposed portions of utility supports unless such supports are corrosion resistant. Painting shall be done in accordance with the applicable portions of Section 535, unless otherwise specified.
 4. The sequence of bridge construction work may be set forth in the Plans and/or the Special Provisions and will show at what stage of the Work a utility company will be allowed to make the utility installation. Further, all or any portion of The Work under Subsection 107.21.H.3 may be included in the bridge Contract by the Plans and/or the Special Provisions.
-

Section 107—Legal Regulations and Responsibility to the Public

5. Any damage to the bridge structure caused by the utility installation shall be repaired to the satisfaction of the Engineer at the expense of the Utility or its subcontractor installing the utility facility.

I. Clearances

The Plans provide for at least minimum clearance of utilities as required by the National Electrical Safety Code, U.S. Department of Commerce, and National Bureau of Standards. Any additional clearance the Contractor may desire or require in performing The Work shall be arranged by the Contractor with the utility company. The Department will pay no extra compensation for such additional clearances.

J. Utility Relocation Progress Schedule

The purpose of the Utility Adjustment Schedule is to provide the Contractor with the pertinent information, including any utility staging required, dependent activities, or joint-use coordination that is required for the creation of a feasible progress schedule. A suitable Utility Adjustment Schedule form is available from the Department for the WUCS to circulate to utility companies for any proposed project construction staging or should a utility company not duly file a Utility Adjustment Schedule to the Department during the preconstruction phase of the project. The WUCS shall submit a Utility Relocation Progress Schedule showing together the Progress Schedule Chart referenced in Section 108.03 and the proposed Utility Adjustment Schedules from all utility companies to the Engineer for review and approval. Copies of existing Utility Adjustment Schedules with utility companies having facilities on this project will be made available at the Georgia Department of Transportation, Office of Construction Bidding Administration, located at One Georgia Center, 600 West Peachtree Street, NW, Atlanta, GA 30308, for examination by the Contractor. The Utility Adjustment Schedules are available on-line at: <http://www.dot.ga.gov/doingbusiness/contractors/Pages/default.aspx>

K. Compensation

There will be no separate measurement or payment for this Work. The cost associated with this Work shall be included in the overall Bid submitted.

Project Special Provisions Cover Sheet

P.I. No. 0012624

Project Number: 0012624

County: Fayette

Date Submitted: August 19, 2019

Letting Date: October 2019

Project Manager: Antoniette Moseley

Description of project:

This project consists of a 10-ft wide multi-use path along Redwine Road between Foreston Place and Preserve Place, Segment 1, east side of the road (a distance of 3,600 feet) and a similar multi-use path between New Haven Drive and Birkdale Drive, Segment 2, east side of the road (a distance of 4,300 feet). Segment 2 includes crossing improvements near Quarters Road and Birkdale Drive. Segment 3 consists of a short connection on the west side of Redwine Road from the proposed pedestrian hybrid beacon crossing near Quarters Road and Birkdale Drive to Quarters Road. The project is local sponsored and will be let by Fayette County.

Included Special Provisions

SP 108.08 - Prosecution and Progress (Intermediate Completion)

SP 150.11 – Traffic Control Special Conditions

SP 643 – Fence

SP 999 – Infiltration Trench

April 24, 2018

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL PROVISION

COUNTY: FAYETTE
P.I. No.: 0012624**

SECTION 108 - PROSECUTION AND PROGRESS

Retain Sub-Section 108.08 as written and add the following:

108.08. Failure or Delay in Completing Work on Time

C: Intermediate Completion

Failure to comply with Special Provision Section 150.11 will result in the assessment of Liquidated Damages at the rate of \$1,000.00 per hour.

The above rates are cumulative and are in addition to any Liquidated Damages which may be assessed for failure to complete the overall project.

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

SPECIAL PROVISION

COUNTY: FAYETTE

P.I. No.: 0012624

Section 150 – Traffic Control

Section 150 - Add the following:

150.11 Special Conditions

- A. The contractor is prohibited from parking equipment or staging materials on the west side of Redwine Road between station 225+00 and station 227+00.
- B. Single lane closures are allowed between the hours of 9:00 am to 4:00 pm, Monday through Friday.
- C. Single lane closures are allowed between the hours of 9:00 am to 7:00 pm, Saturday and Sunday.
- D. Starrs Mill School Complex Major Events or Games:

No lane closures will be allowed that affects traffic a minimum of 2 hours before and 2 hours after a Major Event or Game. It is the responsibility of the Contractor to verify the schedule and plan The Work accordingly.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

SPECIAL PROVISION

Fayette County

P.I. No. 0012624

Section 643 — Fence

643.1 General Description

This item includes the materials, constructing, fabrication, and installation of fences in-kind with existing fences.

643.1.01 Definitions

Fences are defined generally as follows: FENCE

643.1.02 Related References

A. Referenced Documents

Fence description and Picture included in this Special Provision.

643.2 Construction Requirements

643.2.01 Personnel

General Provisions 101 through 150.

643.2.02 Equipment

General Provisions 101 through 150

643.2.03 Quality Acceptance

General Provisions 101 through 150.

643.3 Measurement

The quantity measured for payment shall be for linear foot of fence. This shall include materials, constructing, fabrication, and installation.

643.3.01 Limits

General Provisions 101 through 150.

643.4 Payment

This item, measured according to Subsection 643, "Measurement," for each fence, is paid for installed item per linear foot.



Two rail, stained/painted dimensional lumber fencing.



Three rail, white, vinyl fencing approximately 4' tall.

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

SPECIAL PROVISION

FAYETTE COUNTY

P.I. NO. 0012624

Section 999 Infiltration Trench

999.1 General Description

This work includes materials and equipment, subgrade preparation, pipe installation, bed preparation, pipe placement, backfilling, embankment construction, vegetative stabilization, and miscellaneous items for the construction and installation of Infiltration Trenches.

999.1.01 Definitions

Infiltration Trench - Infiltration system located within the base of a swale. The purpose of such a structure is to provide conveyance of storm water in addition to the filtration of fine and coarse sediments.

Each of the components of the Infiltration Trench is designed to perform a specific function. The grass buffer strip reduces incoming runoff velocity and filters particulates from the runoff. The ponding area provides a temporary storage location for runoff prior to its evaporation or infiltration. Some particulates not filtered out by the grass filter strip or the sand bed settles within the ponding area.

Infiltration Soils – Permeable soils for the infiltration of storm water runoff at a minimum rate meeting the requirements of the Georgia Stormwater Management Manual, and soils having sufficient moisture retention to support healthy vegetation.

Infiltration - The process in which contaminants and sedimentation are removed from stormwater runoff. Stormwater is collected into the treatment area, which consists of a grass buffer strip, ponding area, and plants.

999.1.02 Related References

A. Georgia Department of Transportation Specifications

- Section 101 – Definitions and Terms
- Section 105 – Control of Work
- Section 106 – Control of Materials
- Section 161 – Control of Soil Erosion and Sedimentation
- Section 170 – Silt Retention Barrier
- Section 171 – Silt Fence
- Section 202 – Random Clearing and Grubbing
- Section 204 – Channel Excavation
- Section 207 – Excavation and Backfill for Minor Structures
- Section 208 – Embankments
- Section 210 – Grading Complete

- Section 550 – Storm Drain Pipe, Pipe-Arch Culverts, and Side Drain Pipe
- Section 573 – Underdrains
- Section 668 – Miscellaneous Drainage Structures
- Section 700 – Grassing
- Section 703 – Tree Wells, Tree Walls, and Root Protection
- Section 706 – Turf Establishment
- Section 708 – Plant Topsoil
- Section 716 – Erosion Control Mats
- Section 725 – Weed Control
- Section 805 – Rip Rap and Curbing Stone
- Section 812 – Backfill Materials
- Section 846 – Polyvinyl Chloride (PVC) Drain Pipe
- Section 997 – Mowing

B. Referenced Documents

- American Association of Nurserymen (AAN)
- American Association of State Highway and Transportation Officials (AASHTO)
- American Concrete Institute (ACI)
- American National Standards Institute (ANSI)
- American Society of Civil Engineers (ASCE)
- American Society of Testing and Materials (ASTM)
- Atlanta Regional Commission (ARC)
- Georgia Department of Transportation (DOT)
- Georgia Stormwater Management Manual, 2016
- Natural Resources Conservation Service (NRCS)
- American Society of Agricultural Engineers (ASAE)
- Testing Methods for the Examination of Compost and Composting (TMECC)
- Seal of Testing Assurance (STA)

Obtain approval by the Engineer for all materials, equipment, accessories and components that are not in accordance with the specific standards and requirements. Ensure conflicts between referenced industry specifications and this specification are addressed by the Engineer.

Use the latest version of referenced industry specifications, standards, and practices in force and in existence as of this project's advertisement date unless otherwise noted.

Acquire and use all applicable manuals, guidelines, standards and practices applying to the design, construction, and testing activities required to complete this project.

999.1.03 Submittals

This chart is to be used as a guide and does not relieve the Contractor from submitting additional information to form a complete submittal package.

Section 999 Submittal Requirements									
Material	Specification Reference	Catalog Cuts	Mfg. Spec.	Materials Cert.	Lab Test	Installation Procedure	Test Plan	Training Plan Maint. Procedure	Submittal Due Date (Cal. Days after NTP)
Earth Fill	999.2.01			X					30 Days
Infiltration Soils (Refer to 999.1.04)	999.2.02			X			X		30 Days
Structural Backfill	999.2.03			X			X		30 Days
Rock Rip Rap	999.2.06			X					30 Days
Filter Fabric	999.2.07	X	X			X			30 Days
Filter Sand	999.2.08	X	X			X			30 Days
Polyvinyl Chloride (PVC) Drain Pipe	999.2.10	X	X	X					30 Days
Temporary Grassing	999.2.11			X					30 Days
Permanent Grassing	999.2.12	X	X	X		X			30 Days

999.1.04 Submittals - Infiltration Soils

The following added requirements must be submitted to the Engineer for approval at least 30-days prior to the anticipated construction date:

- A 100-pound minimum sample of the mixed Infiltration Soil.
- A 10-pound minimum sample of the mineral aggregate.
- A 10-pound minimum sample of compost.
- Grain size analysis results of the fine sand component performed in accordance with ASTM D422, Standard Test Method for Particle size Analysis of Soils.
- Quality analysis results for compost performed in accordance with Seal of Testing Assurance (STA) standards as specified in this document.
- Organic content test results of mixed Infiltration Soil. Organic content test shall be performed in accordance with Testing Methods for the Examination of compost and Composting (TMECC) 05.07A, "Loss-On-Ignition Organic Matter Method".
- Modified Proctor compaction testing of mixed Infiltration Soil, performed in accordance with ASTM D 1557, Test Method for Laboratory compaction Characteristics of Soil Using Modified Effort.
- A description of the equipment and methods proposed to mix the mineral aggregate and compost to produce Infiltration Soil.

- i. Permeability or hydraulic conductivity testing of the Infiltration Soil, performed in accordance with ASTM D 2434, Standard Test Method for Permeability of Granular Soils. For the Landscape Infiltration Soil assume a relative compaction of 85 percent of Modified maximum dry density (ASTM D 1557).
- j. Provide the following information about the testing laboratory(ies):
 1. Name of laboratory(ies), including contact person(s),
 2. Address(es),
 3. Phone contact(s),
 4. E-mail address(es), and
 5. Laboratory qualifications.

Provide six (6) copies of complete and thorough submittal data for all components required for this item. Furnish the submittal data to the Engineer.

Include in the submittal data complete technical and performance specifications on all hardware, materials and training to be performed under this contract. Provide technical schematics clearly showing how the proposed equipment works and is connected and configured.

Organize each package of submittal data and separate by hardware item. Include an index of all submittal data documents contained within the package. Provide neat, legible, and orderly submittal data. Organize each package of submittal data and separate by hardware item.

999.2 Materials

999.2.01 Earth Fill

The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6-inches, frozen or other objectionable materials. Fill material for the center of the embankment shall conform to Unified soil classification GC, SC, CH, or CL and must have at least 30% passing the No. 200 sieve. Consideration may be given to the use of other materials in the embankments designed by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capacity to support vegetation of the quality required to prevent erosion of the embankment.

999.2.02 Infiltration Soils

Infiltration soils shall be in accordance with this project Special Provision.

999.2.03 Structural Backfill

Structural backfill shall be in accordance with the applicable GDOT Specifications

999.2.04 Rock Rip Rap

Rip Rap shall be in accordance with the applicable GDOT Specifications.

999.2.05 Filter Fabric

Filter fabric placed beneath the rip rap shall meet federal department of transportation requirements for a Class "C" filter fabric.

999.2.06 Filter Sand

Filter sand shall be in accordance with the applicable GDOT Specification.

999.2.7 Polyvinyl Chloride (PVC) Drain Pipe

Polyvinyl Chloride (PVC) shall be in accordance with the applicable GDOT Specification.

999.2.8 Temporary Grassing

Grassing shall be in accordance with the applicable GDOT Specifications.

999.2.9 Permanent Grassing

Permanent grassing is covered under a separate contract.

999.3 Construction Requirements

Ensure that all construction for the equipment, materials, components and assemblies of the Infiltration Trenches conform to the manufacturer's requirements and recommendations.

Install Infiltration Trenches at the locations indicated on the Plans. Coordinate Contractor installation activities with other utilities along the project corridor and the Engineer.

999.3.01 Personnel

General Provisions 101 through 150

999.3.02 Equipment

General Provisions 101 through 150

999.3.03 Preparation

General Provisions 101 through 150

999.3.04 Fabrication

General Provisions 101 through 150

999.3.05 Construction

999.3.05.01 Site Preparation

Site preparation shall be in accordance with the applicable GDOT Specifications and the following provisions:

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots, and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to on steeper than 1:1. All trees shall be cleared and grubbed within 15-feet of the toe of the embankment.

Areas to be covered by the infiltration trenches will be cleared of all trees, brush, logs, fences, rubbish and other objectionable materials unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface, with the exception of areas designated for Infiltration. Trees, brush, and stumps shall be removed, including roots.

All cleared and grubbed material shall be disposed of outside and below the limits of the Infiltration Trench as directed by the Engineer. A sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated area.

999.3.05.02 Earth Fill

Earth fill shall be in accordance with the applicable GDOT Specifications and the following provisions:

Material – The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6-inches, frozen or other objectionable materials. Fill material for the center of the embankment shall conform to Unified soil classification GC, SC, CH, or CL and must have at least 30% passing the No. 200 sieve. Consideration may be given to the use of other materials in the embankments designed by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capacity to support vegetation of the quality required to prevent erosion of the embankment.

Placement – Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8-inch thick (prior to compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment.

Compaction – The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used.

The minimum required density shall not be less than 95% of maximum dry density with a moisture content within 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain the density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

999.3.05.03 Infiltration Soils

Infiltration soils shall be in accordance with the applicable Special Provision and the GDOT Specifications and the following provisions:

Material – The Infiltration soil material shall meet the material requirements within the applicable Special Provision.

Placement and Compaction – Mixing or placing Infiltration soil will not be allowed if the area receiving Infiltration soil is wet or saturated or has been subjected to more than ½-inch of precipitation within 48-hours prior to mixing or placement. Engineer shall have final authority to determine if wet or saturated conditions exist.

Place Landscape Infiltration Soil loosely. Final grade shall be measured only after the soil has been water compacted, which requires filling the cell with water, without creating any scour or erosion, to at least 1-inch of ponding. If water compaction is not an option, final grade shall be measured at “X” inches above the grade specified on the plans to allow for settling after the first storm. “X” shall be calculated by depth of soil multiplied by 0.25 and rounded up to the nearest whole number.

Place Turf Infiltration Soil in loose lifts not exceeding 8-inches. Compact Turf Infiltration Soil to a relative compaction of 58-percent of Modified maximum dry density (ASTM D 1557), where slopes allow, as determined by the Engineer. Where Turf Infiltration Soil is placed within the trail shoulder, compact to a relative compaction of 90-percent of Modified maximum dry density (ASTM D 1557).

Contractor shall not start Infiltration construction until the site draining to the Infiltration area has been stabilized and the Engineer gives authorization.

At the locations shown on the drawings, excavate, grade, and shape to the contours indicated to accommodate

placing of Infiltration soil to the thickness required. Dispose of excavated soils or reuse elsewhere, as the Contract or Engineer will allow. Scarify the subgrade soil a minimum of 2-inches deep where slopes allow, as determined by the Engineer prior to placing Infiltration soil.

Mixing or placing Infiltration soil will not be allowed if the area receiving Infiltration soil is wet or saturated or has been subjected to more than ½-inch of precipitation within 48-hours prior to mixing or placement. Engineer shall have final authority to determine if wet or saturated conditions exist.

Place Landscape Infiltration Soil loosely. Final grade shall be measured only after the soil has been water compacted, which requires filling the cell with water, without creating any scour or erosion, to at least 1-inch of ponding. If water compaction is not an option, final grade shall be measured at “X” inches above the grade specified on the plans to allow for settling after the first storm. “X” shall be calculated by depth of soil times 0.85 and rounded up to the nearest whole number.

Place Turf Infiltration Soil in loose lifts not exceeding 8-inches. Compact Turf Infiltration Soil to a relative compaction of 58-percent of Modified maximum dry density (ASTM D 1557), where slopes allow, as determined by the Engineer. Where Turf Infiltration Soil is placed within the trail shoulder, compact to a relative compaction of 90-percent of Modified maximum dry density (ASTM D 1557).

Mineral Aggregate for Infiltration Soil - Mineral aggregate shall be free of wood, waste, coating, or any other deleterious material. All aggregate passing the #200 sieve size shall be non-plastic.

Mineral Aggregate for Turf and Landscape Infiltration Soil - Mineral aggregate for Turf and Landscape Infiltration soils shall be analyzed by an accredited lab using #200, #100, #60, #40, #20, #10, #4, 3/8-inch, and 1-inch sieves, and meet the following gradation:

Sieve Size	Percent Passing
3/8-inch	100
No. 4	95 – 100
No. 10	75 – 90
No. 40	25 – 40
No. 100	4 – 10
No. 200	2 – 5

Efforts should be made to have the mineral aggregate for Turf and Landscape Infiltration soils meet the following gradation coefficients: Coefficient of Uniformity ($C_u = D_{60}/D_{10}$) equal to or greater than 6; and Coefficient of Curve ($C_c = \frac{D_{40}^2}{D_{10}D_{60}}$) greater than or equal to 1 and less than or equal to 3.

Infiltration Soil - Infiltration Soil shall be a well-blended mixture of mineral aggregate and compost measured on a volume basis.

Landscape Infiltration Soil - Landscape Infiltration soil shall consist of 2 parts compost, 35 to 40 percent, by volume meeting the requirements of Section 999.4.04 and 2 parts mineral aggregate, 60 to 65 percent, by volume meeting the requirements of Section 999.3.02. The mixture shall be well blended to produce a homogeneous mix. Efforts should be made to attain organic matter content as close to 5 to 6 percent as possible, with the final mix to be determined by the Engineer based on samples and test results submitted.

Turf Infiltration Soil - Turf Infiltration soil shall consist of 2 parts compost, 30 to 35 percent, by volume meeting the requirements of Section 999.4.04 and 2 parts mineral aggregate, 65 to 70 percent, by volume meeting the requirements of Section 999.3.02. The mixture shall be well blended to produce a homogeneous mix. Efforts should be made to attain organic matter content as close to 5 to 6 percent as possible, with the final mix to be determined by the Engineer based on samples and test results submitted.

Composted Material - Compost products shall be the result of the biological degradation and transformation under controlled conditions designed to promote aerobic decomposition. Compost shall be stable with regard to oxygen consumption and carbon dioxide generation. Compost shall be mature with regard to its suitability for serving as a soil amendment and an erosion control BMP as defined below. The compost shall have a moisture

content that has no visible free water or dust produced when handling the material.

Compost production and quality shall meet the following criteria:

1. Compost material shall be tested in accordance with Testing Methods for the Examination of Compost and Composting (TMECC) Test Method 02.02-B, "Sample Sieving for Aggregate Size Classification".

Compost shall meet the following:

Percent passing 1-inch: greater than or equal to 99%, and less than or equal to 100%
Percent passing 5/8-inch: greater than or equal to 90%, and less than or equal to 100%
Percent passing 1/4-inch: greater than or equal to 40%, and less than or equal to 90%

2. The pH shall be between 5.5 and 8.0 when tested in accordance with TMECC 04.11-A, "1:5 Slurry pH".
3. Manufactured inert material (plastic, concrete, ceramic, metal, etc.) shall be less than 1.0 percent by weight as determined by TMECC 03.08-A : Percent Dry Weight Basis".
4. Organic matter content should be between 45 and 65 percent dry weight as determined by TMECC 05.07A, "Loss-On-Ignition Organic Matter Method".
5. Soluble salt shall be less than 6.0 mmhos/cm tested in accordance with TMECC 04.10-A, "1:5 Slurry Method, Mass Basis".
6. Maturity shall be greater than 80% in accordance with TMECC 05.05-A, "Germination and Vigor".
7. Stability shall be 7 or below in accordance with TMECC 05.08-B, "Carbon Dioxide Rate".
8. The compost must have a minimum of 65 percent recycled material, by volume. A maximum of 35 percent by volume of organic wastes, including post-consumer food waste, but not including biosolids.
9. Carbon to nitrogen ratio shall be less than 25:1 as determined using TMECC 04.01 "Total Carbon" and TMECC 04.02D "Total Kjeldhal Nitrogen".
10. The Engineer may also evaluate compost for maturity using the Solvita Compost Maturity Test at time of delivery. Compost shall score a number 6 or above on the solvita Compost Maturity Test.

The compost supplier shall test all compost products within 90 calendar days prior to application. Samples will be taken using the Seal of Testing Assurance (STA) sample collection protocol. (The sample collection protocol can be obtained from the U. S. Composting Council, 4250 Veterans Memorial highway, Suite 275, Holbrook, NY 11741 Phone: 631-737-4931, www.compostingcouncil.org). The sample shall be sent to an independent STA Program approved laboratory. The compost supplier shall pay for the tests. A copy of the approved STA Program laboratory test report shall be submitted to the Engineer prior to the initial application of the compost.

Compost not conforming to the above requirements or taken from a source other than those tested and accepted shall be immediately removed for the project and replaced with acceptable material at no cost to the owner

999.3.05.04 Structure Backfill

Structural Stormwater Detention Pond and Infiltration Area backfill shall be in accordance with the applicable GDOT Specifications and the following provisions:

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed 4-inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4-feet, measured horizontally, to any part of a structure. Under no

circumstances shall equipment be drive over any part of the concrete structure or pipe, unless there is a compacted fill of 24-inches or greater over the structure or pipe.

999.3.05.05 Rip Rap

Rip Rap shall be in accordance with the applicable GDOT Specifications.

999.3.05.06 Filter Fabric

Filter Fabric shall be in accordance with the applicable GDOT Specifications and the following provisions:

Filter fabric placed beneath the rip rap shall meet federal department of transportation requirements for a Class “C” filter fabric. Some acceptable filter fabrics that meet the Class “C” criteria include:

- Mirafi 180-N
- Amoco 4552
- Webtec N07
- Geolon N70
- Carthage FX-70S
- “or approved equal”

999.3.05.7 Temporary Grassing

Grassing shall be in accordance with the applicable GDOT Specifications. Permanent Grassing is included within a separate contract.

999.3.05.8 Sand Filter

Filter sand shall be in accordance with the applicable GDOT Specifications and placed per the project drawings.

999.3.06 Quality Acceptance

Perform acceptance testing for all work provided under this Contract at each Infiltration Trench installation.

Obtain Engineer’s approval for all test procedures prior to beginning acceptance testing.

Notify the Engineer of a desired acceptance test schedule no less than fourteen Calendar days prior to beginning testing.

Complete all work prior to the beginning of any acceptance testing at a given Infiltration Trench site. Perform all testing in the presence of the Engineer.

Have a complete copy of all materials and equipment submissions and all documentary items on hand at all acceptance testing sessions.

999.3.07 Contractor Warranty and Maintenance

Provide a manufacturer's support (usual and customary warranties) period for all equipment and materials furnished and installed as part of the Infiltration Trench.

999.4 Measurement

Work measured as Per Each for all Infiltration Trenches within project scope.

Item No. 999	Infiltration Trench	Per Each
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999.4.01 Limits

General Provisions 101 through 150

999.5 Payment

A. Infiltration Trench

Infiltration Trenches are paid for per each for all areas shown on plans. Payment is full compensation for furnishing and installing all Infiltration Trenches including the work within this specification section.

Payment for Infiltration Trench is made under:

Item No. 999	Infiltration Trench	Per Each
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999.5.01 Adjustments

General Provisions 101 through 150.

DEPARTMENT OF LABOR WAGE DETERMINATION (1/1/2021)

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

General Decision Number: GA20210244 01/01/2021

Superseded General Decision Number: GA20200244

State: Georgia

Construction Type: Highway

County: Fayette County in Georgia.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 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 \$10.95 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 2021. 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	01/01/2021

SUGA2014-078 10/03/2016

	Rates	Fringes
CARPENTER, Excludes Form Work....	\$ 15.54	0.00
CEMENT MASON/CONCRETE FINISHER....	\$ 14.70	0.00
FENCE ERECTOR.....	\$ 16.54	0.00
FORM WORKER.....	\$ 15.26	2.08
HIGHWAY/PARKING LOT STRIPING:		
Operator (Striping Machine).....	\$ 12.37	1.95
INSTALLER - GUARDRAIL.....	\$ 15.65	0.00
INSTALLER - SIGN.....	\$ 13.03	0.00
IRONWORKER, REINFORCING.....	\$ 14.64	0.00
IRONWORKER, STRUCTURAL.....	\$ 15.12	0.00
LABORER: Concrete Paving Joint Sealer.....	\$ 17.66	0.00
LABORER: Grade Checker.....	\$ 11.45	0.00
LABORER: Mason Tender - Brick....	\$ 11.61	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 11.44	0.00
LABORER: Pipelayer.....	\$ 12.45	0.00
LABORER: Asphalt (Includes Distributor, Raker, Screed, Shoveler, and Spreader).....	\$ 13.15	0.00
LABORER: Common or General, Includes Erosion Control.....	\$ 10.36	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 16.69	2.41

OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 13.38	0.00
OPERATOR: Broom/Sweeper.....	\$ 14.83	1.38
OPERATOR: Bulldozer.....	\$ 16.07	1.81
OPERATOR: Compactor.....	\$ 14.64	0.00
OPERATOR: Concrete Saw.....	\$ 18.94	0.00
OPERATOR: Crane.....	\$ 21.06	4.24
OPERATOR: Distributor.....	\$ 17.00	1.93
OPERATOR: Grader/Blade.....	\$ 18.42	5.04
OPERATOR: Hydroseeder.....	\$ 15.20	0.00
OPERATOR: Loader.....	\$ 14.27	1.49
OPERATOR: Mechanic.....	\$ 19.54	0.00
OPERATOR: Milling Machine Groundsman.....	\$ 13.43	1.24
OPERATOR: Milling Machine.....	\$ 16.00	1.31
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.50	2.93
OPERATOR: Piledriver.....	\$ 16.70	0.00
OPERATOR: Roller.....	\$ 14.38	1.29
OPERATOR: Scraper.....	\$ 12.64	0.00
OPERATOR: Screed.....	\$ 14.67	1.86
OPERATOR: Shuttle Buggy.....	\$ 14.06	1.98
PAINTER: Spray.....	\$ 23.30	0.00
TRAFFIC CONTROL: Flagger.....	\$ 12.49	0.00
TRAFFIC CONTROL:		

Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....	\$ 12.60	0.00
TRAFFIC SIGNALIZATION:		
Laborer.....	\$ 13.75	1.14
TRAFFIC SIGNALIZATION:		
Electrician.....	\$ 23.41	4.26
TRUCK DRIVER: Dump Truck.....	\$ 15.00	0.00
TRUCK DRIVER: Flatbed Truck.....	\$ 14.91	1.07
TRUCK DRIVER: Hydroseeder Truck.....	\$ 16.74	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 18.98	0.00
TRUCK DRIVER: Off the Road Truck.....	\$ 12.38	0.00
TRUCK DRIVER: Pickup Truck.....	\$ 13.29	0.00
TRUCK DRIVER: Water Truck.....	\$ 13.19	1.46
TRUCK DRIVER: Semi/Trailer Truck.....	\$ 16.26	0.00

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

EXCEPTIONS TO SPECIFICATIONS

ITB #1951-B: Redwine Road & Starrs Mill School Complex Multi-Use Path

Please list below any exceptions or clarifications to the specifications of this bid. Explain any exceptions in full.

[illegible]

COMPANY NAME: _____