STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

May 15, 2014

U.S. Army Corps of Engineers
Wilmington District Office
69 Darlington Avenue
Wilmington, NC 28403

ATTN: Ms. Liz Hair
NCDOT Division 8 Project Coordinator

SUBJECT: **Application for Section 404 Nationwide Permit Numbers 13, 23, and 33 and Section 401 Water Quality Certification** for the replacement of Bridge No. 4 over Raft Swamp on NC 211, Hoke County, North Carolina. Federal Aid Project No. BRSTP-0211(24), TIP No. B-5127.

Debit $240.00 from WBS Element No. 42285.1.1

Please find enclosed the Pre-Construction Notification (PCN), NCEEP acceptance letter, Preliminary Jurisdictional Determination (JD), Stormwater Management Plan, permit drawings, and roadway design plans for the subject project. A Programmatic Categorical Exclusion (PCE) was completed for this project in August 2013.

The proposed let date for this project is February 17, 2015, with a let review date of December 30, 2014. However, the let date may advance as additional funds become available.

A copy of this permit application will be posted on the NCDOT Website at https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx, under *Quick Links > Permit Applications*. A copy of the PCE is also available at the above website address under *Quick Links > Environmental Documents*. Thank you for your assistance with this project. If you have any questions or need additional information, please contact Greg Price at either gwprice@ncdot.gov or (919) 707-6148.

Sincerely,

Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

cc: NCDOT Permit Application Standard Distribution List

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
NATURAL ENVIRONMENT SECTION
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6100

FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

PHYSICAL ADDRESS:
Century Center - Building B
1020 Birch Ridge Dr
Raleigh, NC 27610-4328

Office Use Only:
Corps action ID no. _____
DWQ project no. _____
Form Version 1.3 Dec 10 2008

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	☒ Section 404 Permit	☐ Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 13, 23, and 33 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	☐ Yes	☒ No

1d. Type(s) of approval sought from the DWQ (check all that apply):

☒ 401 Water Quality Certification – Regular ☐ Non-404 Jurisdictional General Permit

☐ 401 Water Quality Certification – Express ☐ Riparian Buffer Authorization

1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: ☐ Yes ☒ No	For the record only for Corps Permit: ☐ Yes ☒ No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	☒ Yes	☐ No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	☐ Yes	☒ No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	☐ Yes	☒ No

2. Project Information

2a. Name of project:	Replacement of Bridge No. 4 on NC 211 over Raft Swamp
2b. County:	Hoke
2c. Nearest municipality / town:	Antioch
2d. Subdivision name:	*not applicable*
2e. NCDOT only, T.I.P. or state project no:	B-5127

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	*not applicable*
3c. Responsible Party (for LLC if applicable):	*not applicable*
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	(919) 707-6148
3g. Fax no.:	(919) 212-5785
3h. Email address:	gwprice@ncdot.gov

4. Applicant Information (if different from owner)	
4a. Applicant is:	☐ Agent ☐ Other, specify:
4b. Name:	*not applicable*
4c. Business name (if applicable):	
4d. Street address:	
4e. City, state, zip:	
4f. Telephone no.:	
4g. Fax no.:	
4h. Email address:	
5. Agent/Consultant Information (if applicable)	
5a. Name:	*not applicable*
5b. Business name (if applicable):	
5c. Street address:	
5d. City, state, zip:	
5e. Telephone no.:	
5f. Fax no.:	
5g. Email address:	

B. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	*not applicable*
1b. Site coordinates (in decimal degrees):	Latitude: 34.891344 (DD.DDDDDD) Longitude: - 79.206274 (-DD.DDDDDD)
1c. Property size:	0.6 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Raft Swamp
2b. Water Quality Classification of nearest receiving water:	C; Sw
2c. River basin:	Lumber
3. Project Description	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: Land use in the project vicinity is primarily agriculture, interspersed with residential development and forestland.	
3b. List the total estimated acreage of all existing wetlands on the property: 0.6 acres	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 140	
3d. Explain the purpose of the proposed project: To replace a functionally obsolete bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 5-span 87-foot bridge with a four barrel,13-foot wide by 13-foot high reinforced concrete box cuvert on the existing bridge location with an offsite detour. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
4. Jurisdictional Determinations	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments: perennial stream and wetland	☒ Yes ☐ No ☐ Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	☒ Preliminary ☐ Final
4c. If yes, who delineated the jurisdictional areas? Name (if known): Lindsey Riddick, NCDOT	Agency/Consultant Company: NCDOT Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. November 1, 2009.	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	☐ Yes ☒ No ☐ Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	☐ Yes ☒ No
6b. If yes, explain.	

C. Proposed Impacts Inventory

1. Impacts Summary

1a. Which sections were completed below for your project (check all that apply):

☒ Wetlands ☒ Streams - tributaries ☐ Buffers

☐ Open Waters ☐ Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)
Site 1 ☒ P ☐ T	Fill	Riverine Swamp Forest	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.05
Site 1 ☒ P ☐ T	Excavation	Riverine Swamp Forest	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.03
Site 1 ☒ P ☐ T	Mechanized Clearing	Riverine Swamp Forest	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.21
☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
				2g. **Total wetland impacts**	0.29 Perm

2h. Comments:

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 ☒ P ☐ T	Culvert Fill	Raft Swamp	☒ PER ☐ INT	☒ Corps ☐ DWQ	50	53
Site 1 ☒ P ☐ T	Bank Stabilization	Raft Swamp	☒ PER ☐ INT	☒ Corps ☐ DWQ	50	67
Site 1 ☐ P ☒ T	Construction Phasing	Raft Swamp	☒ PER ☐ INT	☒ Corps ☐ DWQ	50	85
☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
					3h. **Total stream and tributary impacts**	120 Perm 85 Temp

3i. Comments: Temporary construction phasing impacts (85 ft) completely overlaps the bank stabilization impacts (67 ft).

4. Open Water Impacts

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 ☐ P ☐ T				
O2 ☐ P ☐ T				
O3 ☐ P ☐ T				
O4 ☐ P ☐ T				
			4f. Total open water impacts	

4g. Comments:

5. Pond or Lake Construction

If pond or lake construction proposed, then complete the chart below.

5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)			5e. Upland (acres)
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded
P1								
P2								
	5f. Total							

5g. Comments:

5h. Is a dam high hazard permit required?	☐ Yes ☐ No If yes, permit ID no:
5i. Expected pond surface area (acres):	
5j. Size of pond watershed (acres):	
5k. Method of construction:	

6. Buffer Impacts (for DWQ)

If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you **MUST** fill out Section D of this form.

6a. Project is in which protected basin?			☐ Neuse ☐ Catawba	☐ Tar-Pamlico ☐ Randleman	☐ Other: Jordan
6b. Buffer impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name	6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)
☐ P ☐ T			☐ Yes ☐ No		
☐ P ☐ T			☐ Yes ☐ No		
☐ P ☐ T			☐ Yes ☐ No		
			6h. **Total buffer impacts**		
6i. Comments:					

D. Impact Justification and Mitigation

1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project.

An offsite detour will be used. It was determined that a box culvert was the right option because of the impacts to wetlands, relocating transmission lines and towers and the cost associated with these impacts compared to a bridge option.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques.

NCDOT will use Best Management Practices for Bridge Demolition and Removal as well as Best Management Practices for the Protection of Surface Waters.

2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	☒ Yes ☐ No If no, explain:
2b. If yes, mitigation is required by (check all that apply):	☐ DWQ ☒ Corps
2c. If yes, which mitigation option will be used for this project?	☐ Mitigation bank ☒ Payment to in-lieu fee program ☐ Permittee Responsible Mitigation

3. Complete if Using a Mitigation Bank

3a. Name of Mitigation Bank: not applicable

3b. Credits Purchased (attach receipt and letter)	Type	Quantity

3c. Comments:

4. Complete if Making a Payment to In-lieu Fee Program

4a. Approval letter from in-lieu fee program is attached.	☒ Yes
4b. Stream mitigation requested:	53 linear feet at 2:1 ratio
4c. If using stream mitigation, stream temperature:	☒ warm ☐ cool ☐ cold
4d. Buffer mitigation requested (DWQ only):	
4e. Riparian wetland mitigation requested:	0.29 acres at 2:1 ratio
4f. Non-riparian wetland mitigation requested:	acres
4g. Coastal (tidal) wetland mitigation requested:	acres

4h. Comments:

5. Complete if Using a Permittee Responsible Mitigation Plan

5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.

6. **Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ**				
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?				☐ Yes ☒ No
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.				
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
	6f. **Total buffer mitigation required:**			
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).				
6h. Comments:				

E. Stormwater Management and Diffuse Flow Plan (required by DWQ)	
1. Diffuse Flow Plan	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	☐ Yes ☒ No
1b. If yes, then is a diffuse flow plan included? If not, explain why. Comments:	☐ Yes ☐ No
2. Stormwater Management Plan	
2a. What is the overall percent imperviousness of this project?	N/A
2b. Does this project require a Stormwater Management Plan?	☒ Yes ☐ No
2c. If this project DOES NOT require a Stormwater Management Plan, explain why:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: See attached permit drawings.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	☐ Certified Local Government ☐ DWQ Stormwater Program ☒ DWQ 401 Unit
3. Certified Local Government Stormwater Review	
3a. In which local government's jurisdiction is this project?	not applicable
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	☐ Phase II ☐ NSW ☐ USMP ☐ Water Supply Watershed ☐ Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	☐ Yes ☐ No
4. DWQ Stormwater Program Review	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	☐ Coastal counties ☐ HQW ☐ ORW ☐ Session Law 2006-246 ☐ Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	☐ Yes ☐ No N/A
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	☒ Yes ☐ No
5b. Have all of the 401 Unit submittal requirements been met?	☒ Yes ☐ No

F. Supplementary Information		
1. Environmental Documentation (DWQ Requirement)		
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	☒ Yes	☐ No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	☒ Yes	☐ No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	☒ Yes	☐ No
2. Violations (DWQ Requirement)		
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	☐ Yes	☒ No
2b. Is this an after-the-fact permit application?	☐ Yes	☒ No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):		
3. Cumulative Impacts (DWQ Requirement)		
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	☐ Yes ☒ No	
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.		
4. Sewage Disposal (DWQ Requirement)		
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable		

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	☒ Yes	☐ No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	☒ Yes	☐ No
5c. If yes, indicate the USFWS Field Office you have contacted.	☒ Raleigh ☐ Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? NC Natural Heritage Program data, USFWS website, NCDOT field surveys		
6. Essential Fish Habitat (Corps Requirement)		
6a. Will this project occur in or near an area designated as essential fish habitat?	☐ Yes	☒ No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? NMFS County Index		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	☐ Yes	☒ No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NEPA Documentation		
8. Flood Zone Designation (Corps Requirement)		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	☒ Yes	☐ No
8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics Unit coordination with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA Maps		

Richard W. Hancock, P.E. Applicant/Agent's Printed Name	Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	5/15/2014 Date

Ecosystem

PROGRAM

March 18, 2014

Mr. Richard W. Hancock, P.E.
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

Subject: EEP Mitigation Acceptance Letter:

B-5127, Replace Bridge Number 4 over Raft Swamp on NC 211, Hoke County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream and riparian wetland mitigation for the subject project. Based on the information supplied by you on March 13, 2014, the impacts are located in CU 03040203 of the Lumber River basin in the Southern Inner Coastal Plain (SICP) Eco-Region, and are as follows:

Lumber 03040203 SICP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	53.0	0.29	0	0	0	0

*Some of the stream and wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

EEP commits to implementing sufficient compensatory warm stream mitigation and riparian wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP. If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,

James B. Stanfill
EEP Asset Management Supervisor

cc: Ms. Liz Hair, USACE – Wilmington Regulatory Field Office
Mr. David Wainwright, Division of Water Quality, Raleigh Office
File: B-5127

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): October 27, 2009

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD: Lindsey Riddick, NCDOT, 1598 Mail Service Center, Raleigh, NC 27699-1598

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: SAW-2009-01965 (NCDOT/B-5127/bridge over Raft Swamp, Raeford, Hoke County/Div. 8)

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
B–5127, Hoke County
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)
State: North Carolina County/parish/borough: Hoke City: Raeford
Center coordinates of site (lat/long in degree decimal format):
Lat. 34.891344° **N**, Long. -79.206274° **W**.
Universal Transverse Mercator: Zone 17
Name of nearest waterbody: Raft Swamp

Identify (estimate) amount of waters in the review area:
Non-wetland waters: 200 linear feet: 30 width (ft) and/or acres.
Cowardin Class:
Stream Flow: perennial
Wetlands: 3.19 acres.
Cowardin Class: PFO1C

Name of any water bodies on the site that have been identified as Section 10 waters: N/A
Tidal:
Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: October 27, 2009
☐ Field Determination. Date(s):

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site.

Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:NCDOT.

☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

- ☐ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

- ☐ USGS NHD data.
- ☒ USGS 8 and 12 digit HUC maps

☒ U.S. Geological Survey map(s). Cite scale & quad name:1:24000; Raeford.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Hoke County.

☒ National wetlands inventory map(s). Cite name:.

☐ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date):
or ☐ Other (Name & Date):

☐ Previous determination(s). File no. and date of response letter:

☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory Project Manager (REQUIRED)

Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

SAMPLE

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
1	34.891344	79.206274		200'	Perennial Stream
2	34.891344	79.206274	PFO1C	3.19	Riverine Swamp Forest
3					
4					

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR LINEAR ROADWAY PROJECTS

(Version 1.2; Released September 2011)

Project/TIP No.: B-5127 **County(ies):** Hoke

General Project Information

Project No.:	B-5127		**Project Type:**	Bridge Replacement		**Date:**	3/11/2014
NCDOT Contact:	Galen Cail		**Contractor / Designer:**				
	Address:	1020 Birch Ridge Dr Raleigh, NC 27610		**Address:**			
	Phone:	919.707.6711		**Phone:**			
	Email:	gcail@ncdot.gov		**Email:**			
City/Town:			**County(ies):**	Hoke			
River Basin(s):	Lumber		**CAMA County?**	No			
Primary Receiving Water:			**NCDWQ Stream Index No.:**	14-10-(1)			
NCDWQ Surface Water Classification for Primary Receiving Water		**Primary:**	Class C				
		Supplemental:	Swamp Waters (Sw)				
Other Stream Classification:	None						
303(d) Impairments:	None						
Buffer Rules in Effect	N/A						

Project Description

Project Length (lin. Miles or feet):	0.091 miles	**Surrounding Land Use:**	Swamp Waters (Sw)	
	Proposed Project		**Existing Site**	
Project Built-Upon Area (ac.)	0.39	ac.	0.27	ac.
Typical Cross Section Description:	Roadway and structure will be 2 12ft. lanes with with 9ft. shoulders (4ft. paved).		2 11ft. lanes with 6ft. unpaved shoulder widths. Bridge is 2 12ft. lanes with 2ft. shoulder/curb.	
Average Daily Traffic (veh/hr/day):	Design/Future:	5280/7300	Existing:	4250

General Project Narrative:

The project consists of replacing Bridge #4 on NC 211 over Raft Swamp. The approach work will consist of raising the existing roadway grade and providing grass shoulders and guardrails. Bridge #4 existing 5 span structure (87' total length) will be replaced with 4 @ 13'x13' RCBC. Culvert proposed due to location of transmission line over existing crossing. Construction of a bridge would require relocation of transmission line.

Best Management Practices:
-Promotion of sheet flow and infiltration with grass shoulders except where shoulder berm gutter is located on the project.
-Drainage system outlet to rip rap pad on north side of structure.

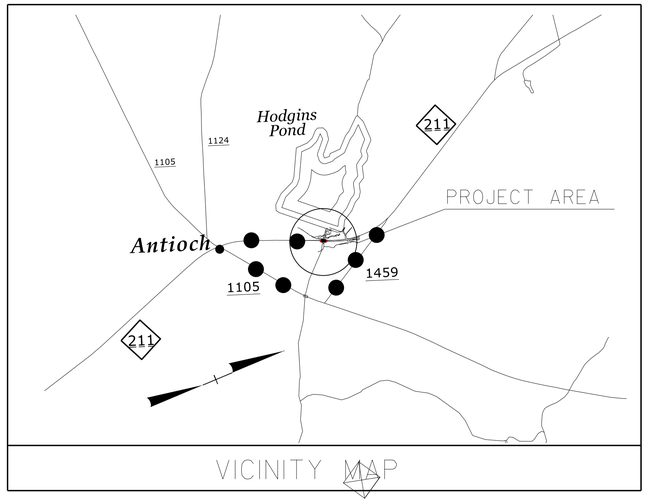
References

09/08/99

TIP PROJECT: B-5127

CONTRACT: _____

See Sheet 1-A For Index of Sheets



Offsite Detour Route

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HOKE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5127	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
42285.1.1	BRSTP-0211(24)	P.E.
42285.3.FR1	BRSTP-0211(24)	R/W, UTILITIES

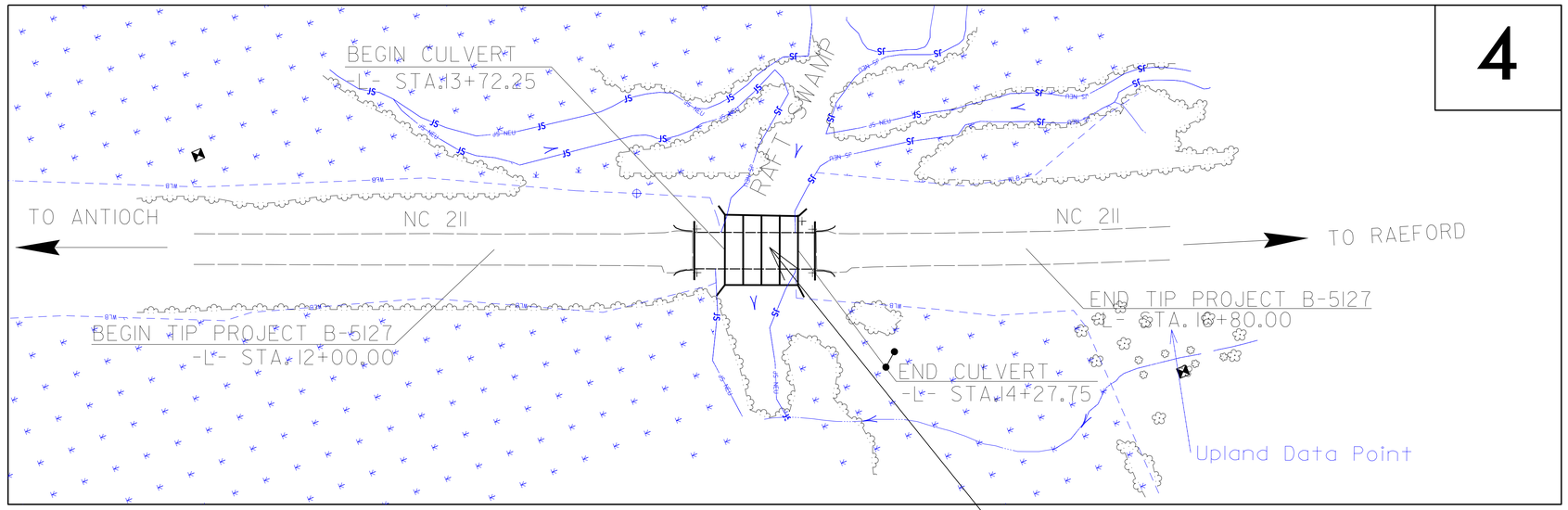
PERMIT DRAWING
SHEET 1 OF 8

LOCATION: *Bridge No. 4 over Raft Swamp on NC 211*

TYPE OF WORK: *Grading, Drainage, Paving, and Culvert*

WETLAND AND SURFACE WATER IMPACTS PERMIT

NAD 83/2001



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2014 = 5280 vpd
ADT 2035 = 7300 vpd
DHV = 10 %
D = 60 %
T = 8 % *
V = 60 MPH
* TTST 5% DUAL 3%
Regional Tier

PROJECT LENGTH

Length Roadway TIP Project B-5127 = 0.080 Miles
Length Structure TIP Project B-5127 = 0.011 Miles
Total Length TIP Project B-5127 = 0.091 Miles

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: February 6, 2014

LETTING DATE: February 17, 2015

James Speer, PE
PROJECT ENGINEER

John Lansford, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

2/27/2014
amkeeter
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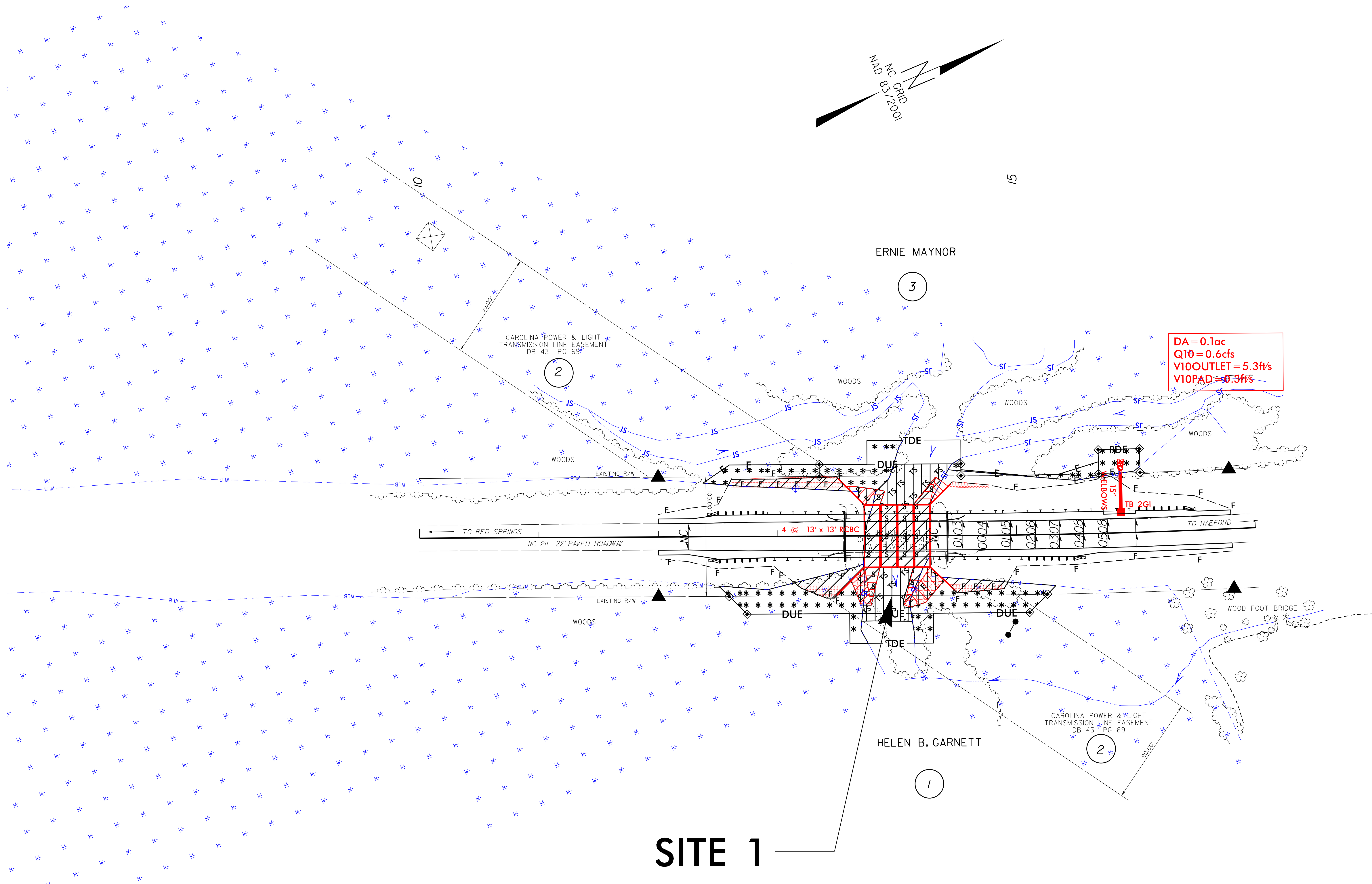
$$$$SYSTIME$$$$
$$$$DGNS$$$$

PROJECT REFERENCE NO.	SHEET NO.
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 2 OF 8



DENOTES EXCAVATION IN WETLAND

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

50' 0' 50' 100' 150'

SCALE 1" = 50'

REVISIONS

3/11/2014
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PROJECT REFERENCE NO.	SHEET NO.

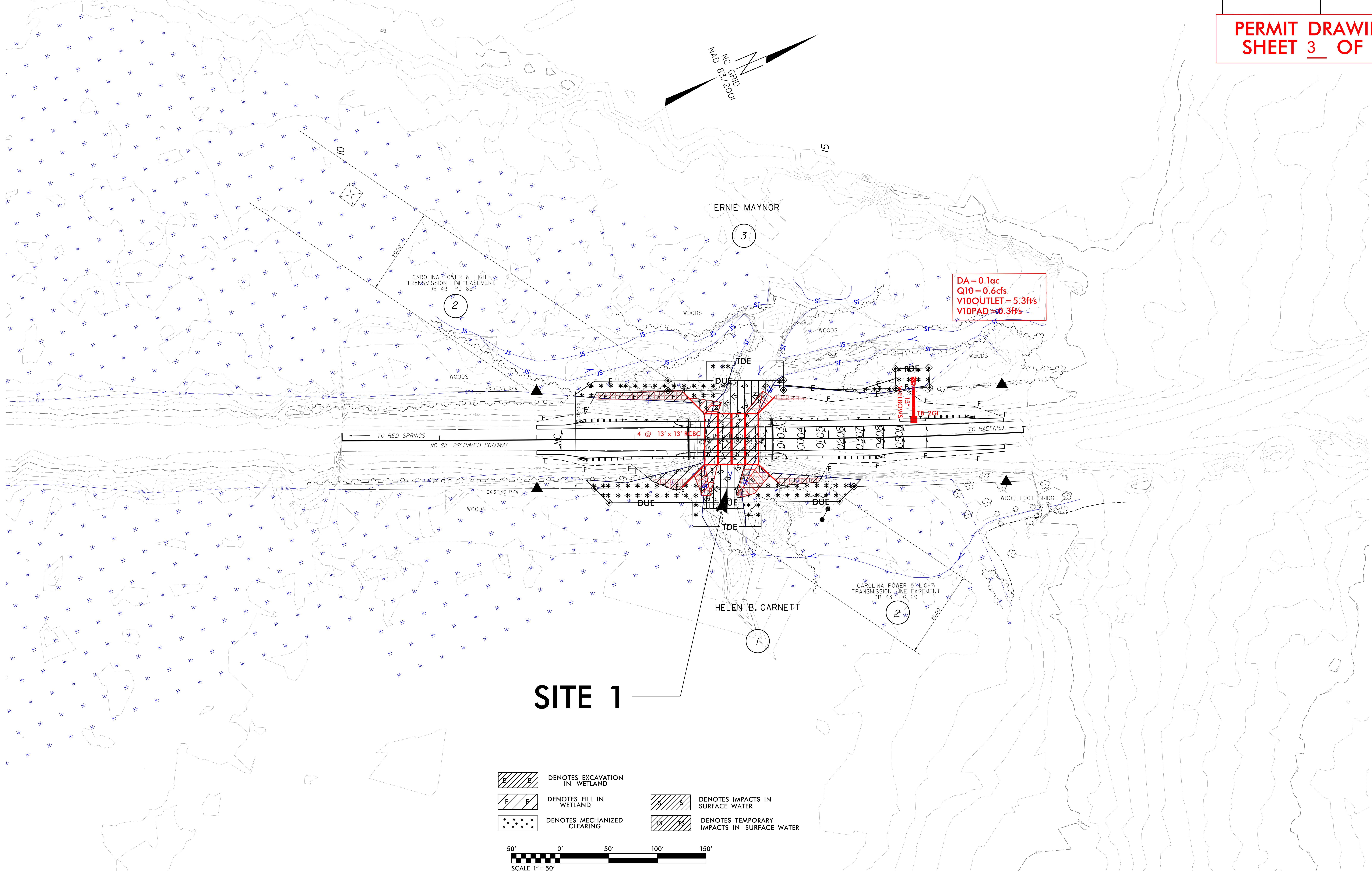
R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 3 OF 8



NC GRID NAD 83/2001
ERNIE MAYNOR
3
CAROLINA POWER & LIGHT TRANSMISSION LINE EASEMENT DB 43 PG 69
2
DA = 0.1ac
Q10 = 0.6cfs
V10OUTLET = 5.3ft/s
V10PAD = 0.3ft/s
WOODS
TDE
DUE
RDE
EXISTING R/W
TO RED SPRINGS
NC 211 22' PAVED ROADWAY
4 @ 13' x 13' RCBC
TO RAEFORD
WOOD FOOT BRIDGE
HELEN B. GARNETT
1
SITE 1
DENOTES EXCAVATION IN WETLAND
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
50' 0' 50' 100' 150'
SCALE 1" = 50'

REVISIONS

8/17/99

3/11/2014
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DA = 0.1ac
Q10 = 0.6cfs
V10OUTLET = 5.3ft/s
V10PAD = 0.3ft/s

PROJECT REFERENCE NO.	SHEET NO.
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 4 OF 8

REVISIONS 8/17/99

POWER & LIGHT
N LINE EASEMENT
3 PG 69

2

WOODS

EXISTING R/W

WOODS

WOODS

WOODS

TDE

DUE

DUE

DUE

TDE

4 @ 13' x 13' RCBC

22' PAVED ROADWAY

TO RAEFORD

15" W/ELBOWS

TB 2GI

WOOD FOOT BRIDGE

CAROLINA POWER & LIGHT
TRANSMISSION LINE EASEMENT
DB 43 PG 69

2

90.00'

HELEN B. GARNETT

1

SITE 1

DENOTES EXCAVATION IN WETLAND

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

50' 0' 50' 100' 150'
SCALE 1" = 50'

NC GRID
NAD 83/2001

3/1/2014
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PROJECT REFERENCE NO. | SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 5 OF 8

5/14/99

2/27/2014
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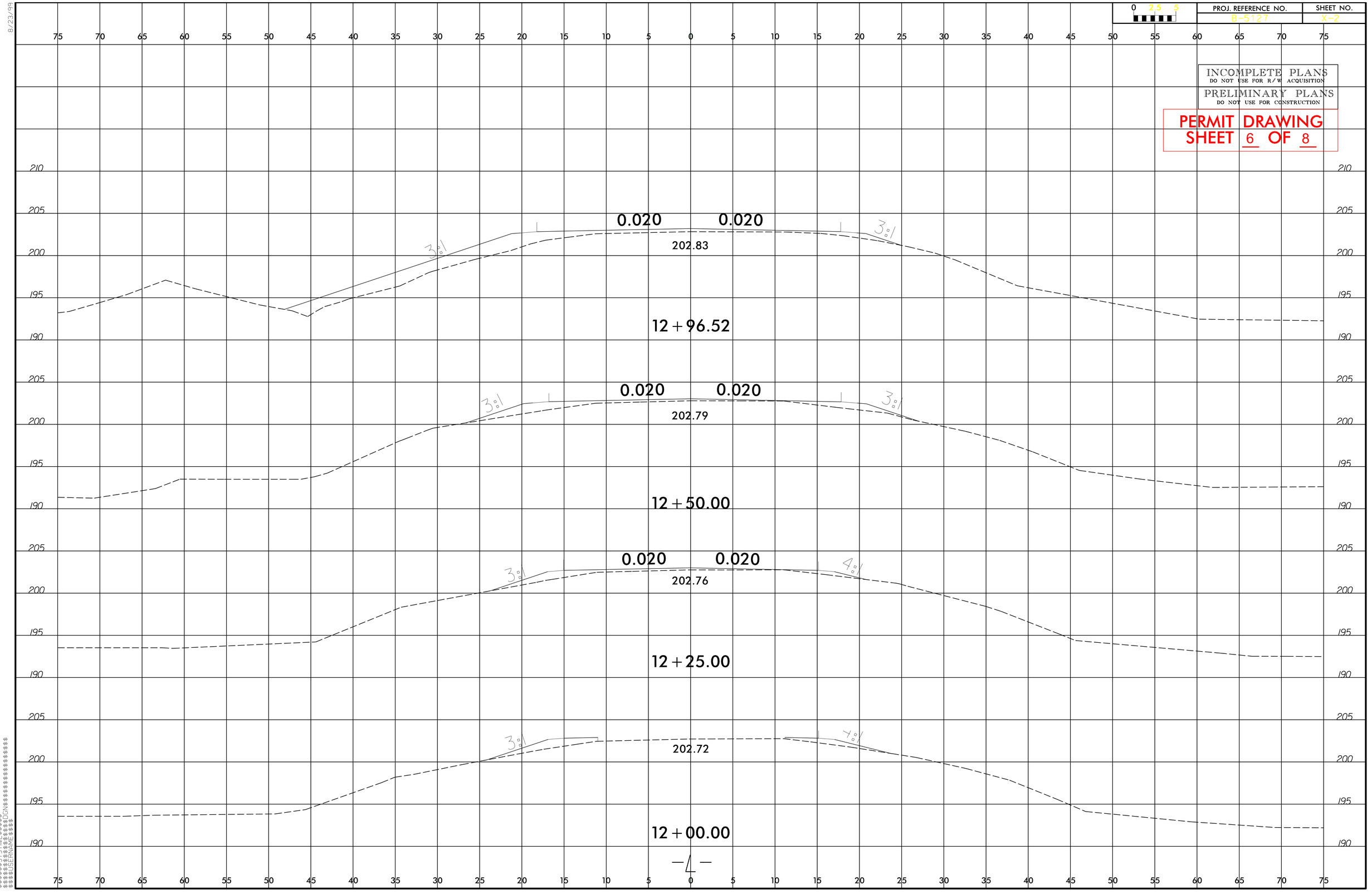

PROJ. REFERENCE NO.	SHEET NO.
B-5127	X-2

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 6 OF 8

8/23/99

1/14/2014
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PROJ. REFERENCE NO.	SHEET NO.
B-5127	X-4

PERMIT DRAWING
SHEET 7 OF 8

8/23/99

2/27/2014
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$$$USERNAME$$$$

WETLAND PERMIT IMPACT SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	12+38 to 16+04-L-LT	FILL	0.02		0.01	0.09						
1	12+50 to 15+32-L-RT	FILL	0.03		0.02	0.12						
1	14+00-L-	4 @ 13'x13' RCBC						0.06		53		
		Bank Stabliziation						0.02		67		
		Constr Phasing							0.06		85	
TOTALS:			0.05		0.03	0.21		0.08	0.06	120	85	

Permanent Bank Stabilization stream impacts overlap Temporary Construction Phasing stream impacts.

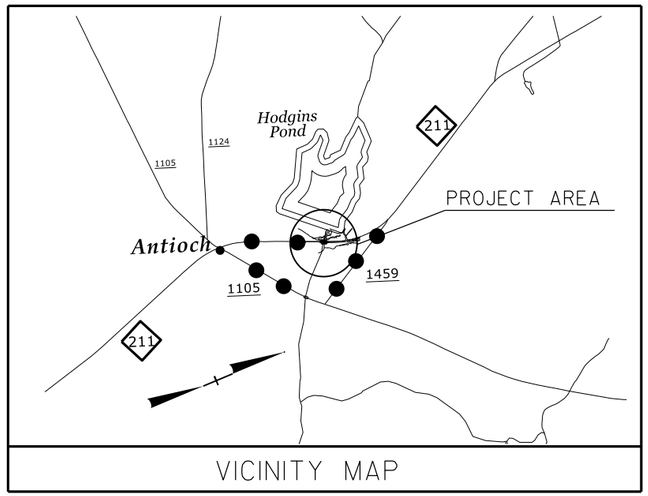
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

HOKE COUNTY
WBS - (B-5127)

09/08/99

TIP PROJECT: B-5127

See Sheet 1-A For Index of Sheets



VICINITY MAP

Offsite Detour Route

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HOKE COUNTY

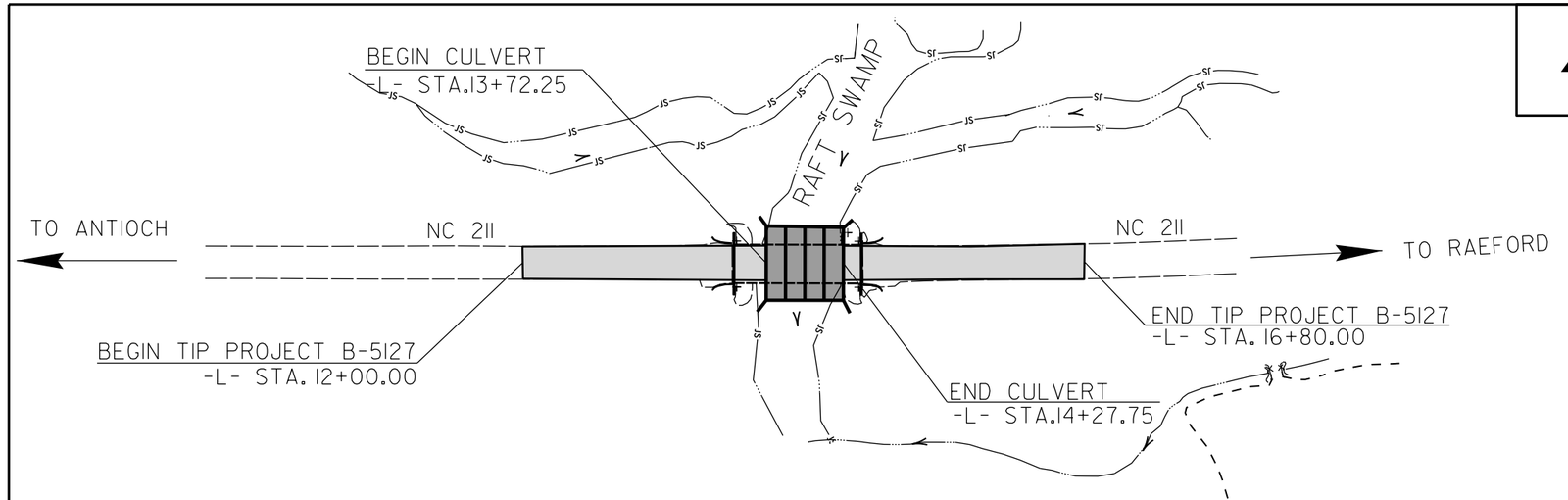
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5127	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
42285.1.1	BRSTP-0211(24)	P.E.
42285.3.FR1	BRSTP-0211(24)	R/W, UTILITIES

LOCATION: ***Bridge No. 4 over Raft Swamp on NC 211***

TYPE OF WORK: ***Grading, Drainage, Paving, and Culvert***

NAD 83/2001



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
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PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2014 = 5280 vpd
ADT 2035 = 7300 vpd
DHV = 10 %
D = 60 %
T = 8 % *
V = 60 MPH
* TTST 5% DUAL 3%
Regional Tier

PROJECT LENGTH

Length Roadway TIP Project B-5127 = 0.080 Miles
Length Structure TIP Project B-5127 = 0.011 Miles
Total Length TIP Project B-5127 = 0.091 Miles

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
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LETTING DATE:
February 17, 2015

James Speer, PE
PROJECT ENGINEER

John Lansford, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION ·

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5/14/99

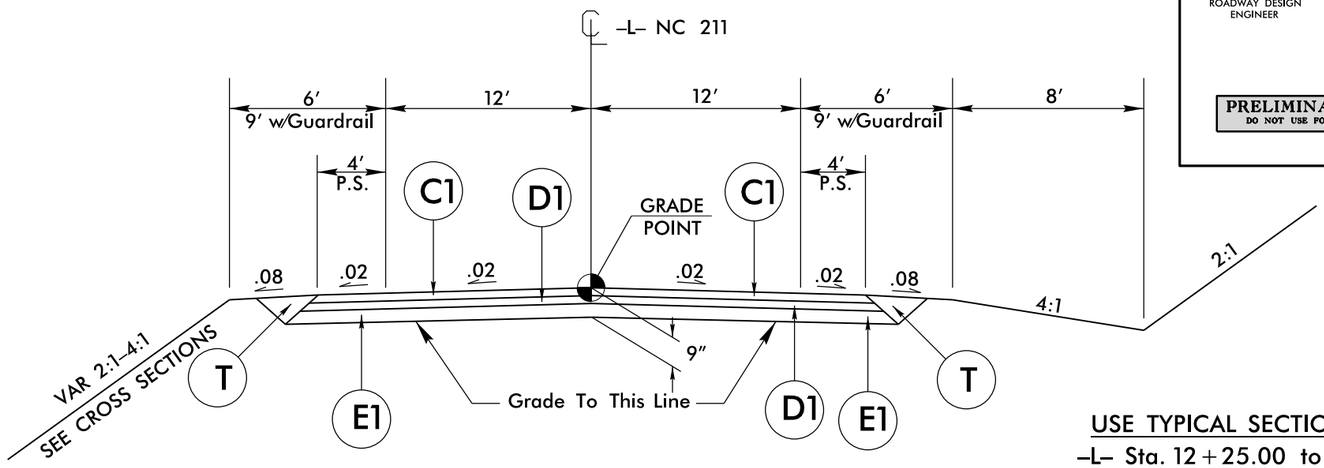
PROJECT REFERENCE NO.	SHEET NO.
B-5127	2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE

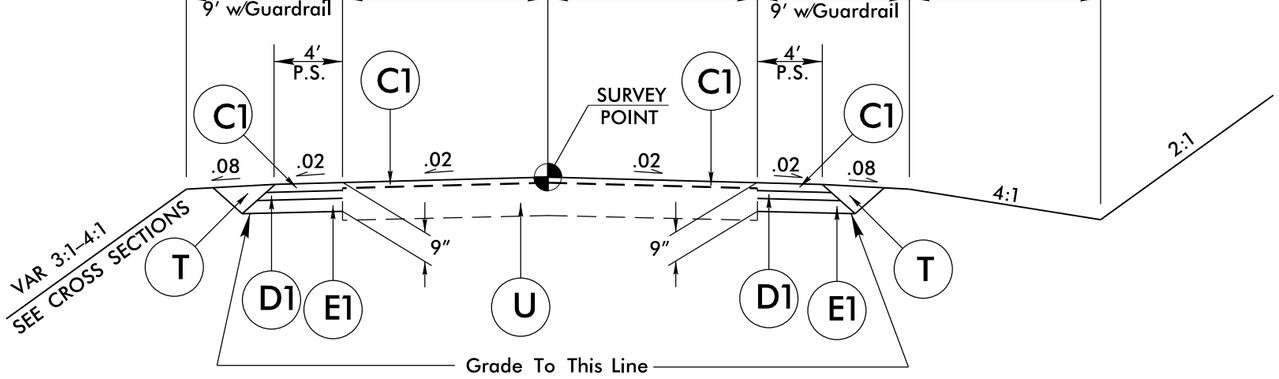
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 3 ½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS PER SQ 1" DEPTH, TO BE PLACED IN LAYERS NOT GREATER THAN 5.5" IN DEPTH OR LESS THAN 3" IN DEPTH.
R	SHOULDER BERM GUTTER
T	EARTH MATERIAL.
U	EXISTING PAVEMENT

ALL PAVEMENT SLOPES ARE 1:1 UNLESS OTHERWISE NOTED



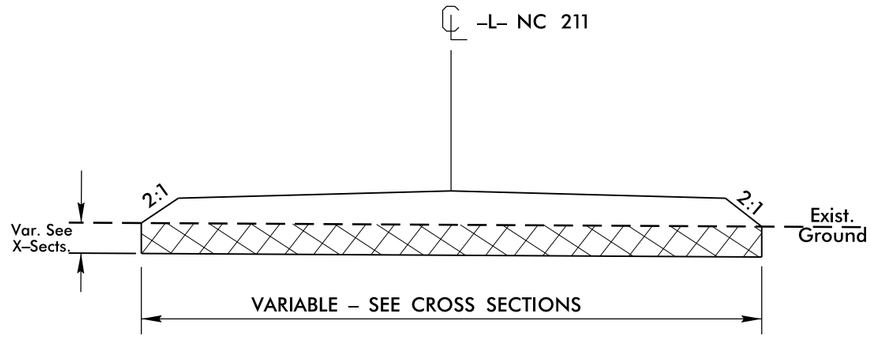
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1
–L– Sta. 12+25.00 to 16+00.00



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2
–L– Sta. 12+00.00 to 12+25.00
–L– Sta. 16+00.00 to 16+80.00

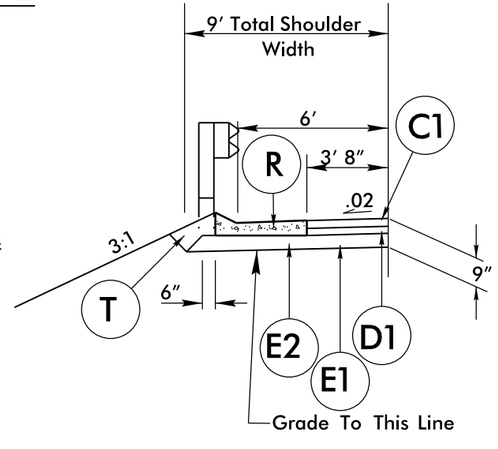


TYPICAL UNDERCUT EXCAVATION

–L– Sta. 13+68.00 to 13+72.25
–L– Sta. 14+27.75 to 14+30.00

DETAIL OF SHOULDER BERM GUTTER

–L– Sta. 15+73 to 16+00 LT.



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12/06/07

COMPUTED BY: KTB DATE: 10-7-13
CHECKED BY: _____ DATE: _____

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
B-5127	3-A

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SUMMARY OF EARTHWORK

IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	UNDERCUT	EMBANK. +20%	BORROW	WASTE
12+00.00 –L–	16+80.00 –L–	201	158	1432	1231	158
SUBTOTALS:		201	158	1432	1231	158
PROJECT TOTALS:		201	158	1432	1231	158
Est 5% to replace topsoil on borrow pit					62	
GRAND TOTALS:		201	158		1293	
SAY:		210	200		1300	

Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

CONTINGENCY UNDERCUT = 200 CY

ESTIMATED DDE = 230 CY

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GRAU 350	M-350	XIII	CAT-1	VI MOD	BIC	AT-1	EA	G	NG				

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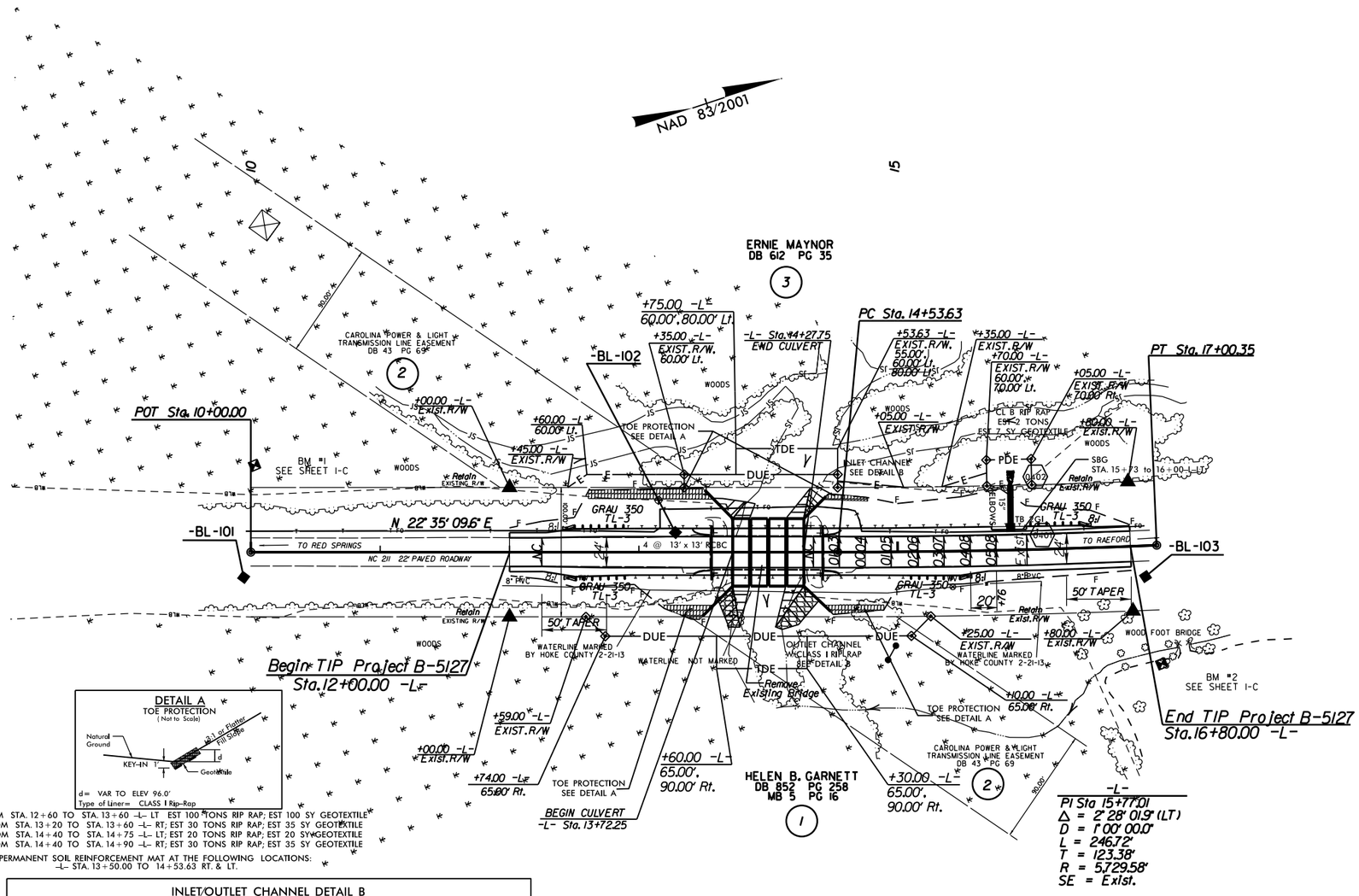
5/14/99

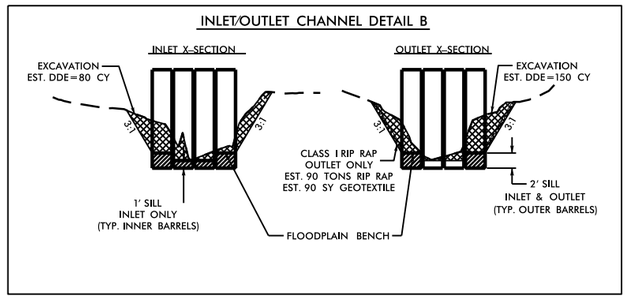
PROJECT REFERENCE NO.	SHEET NO.
B-5127	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



FROM STA. 12+60 TO STA. 13+60 -L- LT EST 100 TONS RIP RAP; EST 100 SY GEOTEXTILE
FROM STA. 13+20 TO STA. 13+60 -L- RT; EST 30 TONS RIP RAP; EST 35 SY GEOTEXTILE
FROM STA. 14+40 TO STA. 14+75 -L- LT; EST 20 TONS RIP RAP; EST 20 SY GEOTEXTILE
FROM STA. 14+40 TO STA. 14+90 -L- RT; EST 30 TONS RIP RAP; EST 35 SY GEOTEXTILE

USE PERMANENT SOIL REINFORCEMENT MAT AT THE FOLLOWING LOCATIONS:
-L- STA. 13+50.00 TO 14+53.63 RT. & LT.



SBG = Shoulder Berm Gutter
See Sheet 5 for -L- Profile
See Sheet C-1 Thru C- For Culvert Plans

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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-5127	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM # 1 ELEVATION 196.25'
N 415302 E 1938120
L STATION 10+02.00 67' LEFT
RR-SPIKE IN BASE OF 26" OAK

Begin Grade Sta.12+25.00 -L-
El.203.00'

PI = 12+75.00
EL = 203.01'
VC = 100'
K = 141

PI = 14+00.00
EL = 203.92'
VC = 135'
K = 118

-L- STA.14+00.00
4 @ 13'x13' RCBC
GP = 203.7'
SKEW = 90°

PI = 15+50.00
EL = 203.29'
VC = 100'
K = 176

BM # 2 ELEVATION 198.56'
N 415891 E 1938531
L STATION 17+00.00 92' RT
RR-SPIKE IN BASE OF 36" YELLOW POPLAR

End Grade Sta.16+00.00 -L-
El.203.32'

(+)0.7280%
(-)0.4200%
(+)0.0200%
(+)0.0600%

UNDERCUT EXCAVATION
UNDERCUT EXCAVATION
UNDERCUT EXCAVATION (Structure For Limits)

PROP. 4@13'x13' RCBC. W/SILLS, 52' LENGTH

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 3127	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 200.5	FT
BASE DISCHARGE	= 3918	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 201.66	FT
OVERTOPPING DISCHARGE	= 4500	CFS
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING ELEVATION	= 203.7	FT

220 210 200 190 180 170 160 150 140 130 120 110 100

10 11 12 13 14 15 16 17

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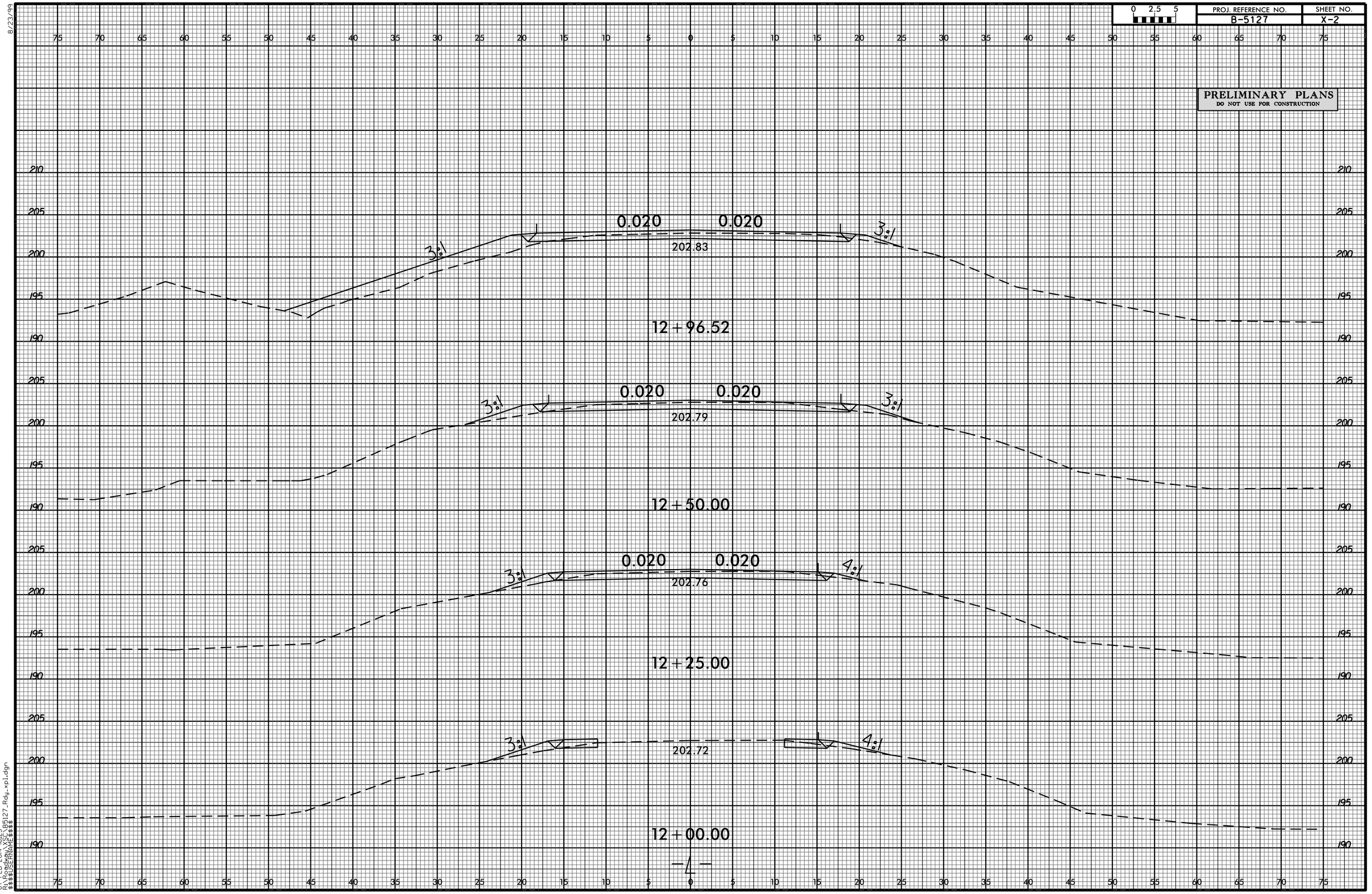
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-5127	X-2

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



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8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-5127	X-3

13+75.71

UNDERCUT EXCAVATION
BEGIN –L– STA. 13+68
END –L– STA. 13+72.25

UNDERCUT EXCAVATION
(STRUCTURE PAY ITEM)

0.020 0.020

2%

2%

192.83

13+50.00

0.020 0.020

202.66

VAR.

VAR.

13+00.00

0.020 0.020

202.83

3:1

VAR.

–L–

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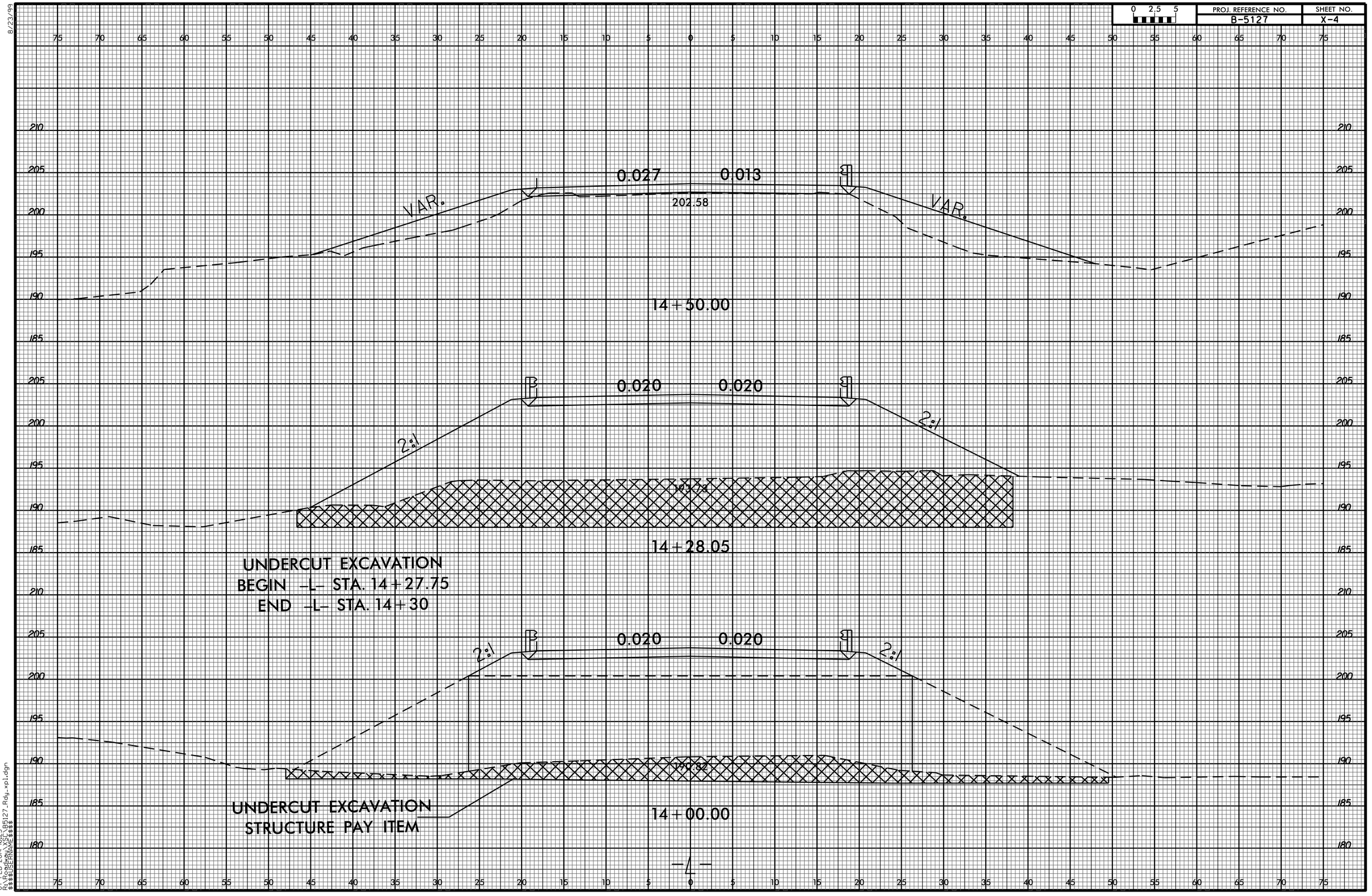
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-5127	X-4



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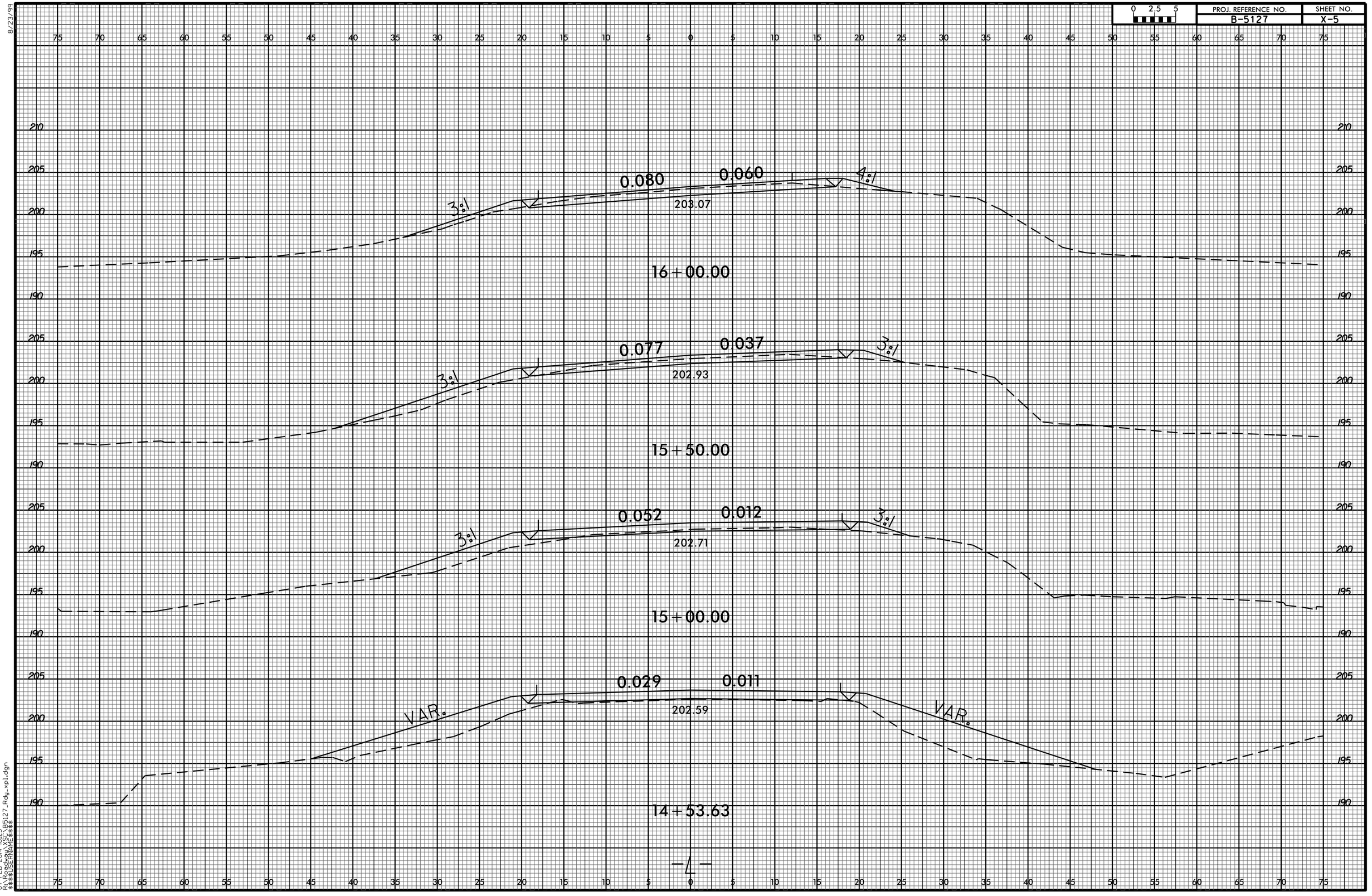
8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-5127	X-5



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8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-5127	X-6

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

210
205
200
195

3:1

4:1

203.32

16+80.00

203.20

16+50.00

07-FEB-2014 16:23
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$$$$USERNAME$$$$