



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

February 23, 2012

Mr. Ronnie Smith  
U. S. Army Corps of Engineers  
Regulatory Field Office  
69 Darlington Avenue  
Wilmington, NC 28403

Dear Sir:

**Subject: Application for Section 404 Nationwide Permits (NWP) 23 & 12 & Section 401 Water Quality Certification** for the replacement of Bridge No. 120 over the Black River on SR 1558 in Harnett County; TIP Project B-4543; Federal Aid Project No. BRSTP-1558(2); Debit \$240 from WBS 33758.1.1.

Please find enclosed PCN, permit drawings, utility drawings, stormwater management plan, and roadway plans for the above referenced project proposed by the North Carolina Department of Transportation (NCDOT). A Programmatic Categorical Exclusion (PCE) was completed for this project on January 13, 2010 and distributed shortly thereafter. Additional copies are available upon request. The NCDOT proposes to replace existing Bridge No. 120 over the Black River SR 1558 in Harnett County. The project involves replacement of the existing functionally obsolete and structurally deficient four span 70-foot bridge and approaches with a new two span 105-foot bridge. The new bridge will feature a 22-foot pavement width, with two 11-foot lanes and 4-foot offsets. The approach roadway will extend approximately 180 feet from the northwest end of the new bridge and 155 feet from the southeast end of the new bridge. The approaches will be widened to include a 22-foot pavement width, providing two 11-foot lanes and six-foot grass shoulders.

Proposed permanent impacts to riparian wetlands from bridge construction are 0.05 acre for fill, 0.01 acre for excavation and 0.03 acre for mechanized clearing. Traffic will be detoured off-site during construction.

This project calls for a letting date of November 20, 2012 and a review date of October 2, 2012; however, the let date may advance as additional funding becomes available.

**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](http://WWW.NCDOT.ORG)

**LOCATION:**  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610-4328

## **Regulatory Approvals**

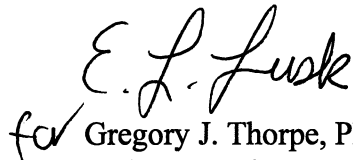
Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that the project be authorized by NWP 23 for bridge construction and NWP 12 for utility impacts. (72 CFR; 11092-11198, March 12, 2007).

Section 401 Permit: We anticipate 401 General Certification numbers 3701 and 3819 will apply to this project. NCDOT is requesting written concurrence from the North Carolina Department of Environmental and Natural Resources, Division of Water Quality. We are providing five copies of this application to the NCDWQ for their approval.

A copy of this permit application and its distribution list will be posted on the NCDOT website at <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>.

If you have any questions or need additional information, please contact Gordon Cashin at (919) 707-6107.

Sincerely,

Handwritten signature of Gregory J. Thorpe in black ink, written in a cursive style. The signature is positioned above the typed name and title.

Gregory J. Thorpe, Ph.D., Manager  
Project Development and Environmental Analysis Unit

cc

NCDOT Permit Application Standard Distribution List.



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

<b>B. Project Information and Prior Project History</b>	
<b>1. Property Identification</b>	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 35.425012 (DD.DDDDDD) Longitude: - 78.646896 (-DD.DDDDDD)
1c. Property size:	0.65 acres
<b>2. Surface Waters</b>	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Black River
2b. Water Quality Classification of nearest receiving water:	C Sw
2c. River basin:	Cape Fear River Basin
<b>3. Project Description</b>	
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: Forested with some agricultural and residential	
3b. List the total estimated acreage of all existing wetlands on the property: 20.8	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 886	
3d. Explain the purpose of the proposed project: To replace a structurally deficient bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 70-foot bridge with a 105-foot, 2-span bridge on the existing alignment with an off-site detour. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
<b>4. Jurisdictional Determinations</b>	
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: Requesting a preliminary JD at permitting	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known): Matt Smith	Agency/Consultant Company: ESI Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. Richard Spencer verified the wetlands on July 15, 2008, but no tearsheet was issued.	
<b>5. Project History</b>	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
<b>6. Future Project Plans</b>	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	fill	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.05
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	excavation.	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.01
Site 3 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	mechanized clearing	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.03
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
<b>2g. Total wetland impacts</b>					0.09 Perm. 0.0 Temporary

2h. Comments: There will be 0.11 ac of hand clearing due to utility relocation and 0.07 ac due bridge construction to as well 0.01 ac. of temporary fill in wetlands in the hand clearing areas for the installation of erosion control measures, including temporary silt fence and/or special sediment control fence. There will also be <0.01 ac of fill in wetlands due to installation of a utility pole.

#### 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 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
<b>3h. Total stream and tributary impacts</b>						0.0 Perm 0.0 Temp

3i. Comments: There will be <0.01 ac of fill in surface waters due to bent installation.

**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 <input type="checkbox"/> P <input type="checkbox"/> T				
O2 <input type="checkbox"/> P <input type="checkbox"/> T				
O3 <input type="checkbox"/> P <input type="checkbox"/> T				
O4 <input type="checkbox"/> P <input type="checkbox"/> T				
<b>4f. Total open water impacts</b>				0.0 Permanent 0.0 Temporary

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								
<b>5f. Total</b>								

5g. Comments:

5h. Is a dam high hazard permit required?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?		<input type="checkbox"/> Neuse <input type="checkbox"/> Catawba		<input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Randleman		<input type="checkbox"/> Other:	
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)		
B1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No				
B2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No				
B3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>6h. Total buffer impacts</b>							
6i. Comments:							

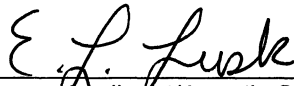


<b>D. Impact Justification and Mitigation</b>		
<b>1. Avoidance and Minimization</b>		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridge is longer than the existing bridge with fewer spans; the proposed bridge will be at approximately the same grade as the existing structure; an off site detour will be used. Slopes of 2:1 will be constructed in wetlands.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Top-down construction, Best Management Practices for the Protection of Surface Waters will be implemented.		
<b>2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State</b>		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, explain: Due to the minimal amount of impacts, compensatory mitigation is not proposed.	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
<b>3. Complete if Using a Mitigation Bank</b>		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
<b>4. Complete if Making a Payment to In-lieu Fee Program</b>		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	linear feet	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	acres	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
<b>5. Complete if Using a Permittee Responsible Mitigation Plan</b>		
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?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	
<b>6f. Total buffer mitigation required:</b>				
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:				

<b>E. Stormwater Management and Diffuse Flow Plan (required by DWQ)</b>	
<b>1. Diffuse Flow Plan</b>	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments:	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>2. Stormwater Management Plan</b>	
2a. What is the overall percent imperviousness of this project?	N/A
2b. Does this project require a Stormwater Management Plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Certified Local Government <input type="checkbox"/> DWQ Stormwater Program <input checked="" type="checkbox"/> DWQ 401 Unit
<b>3. Certified Local Government Stormwater Review</b>	
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):	<input type="checkbox"/> Phase II <input type="checkbox"/> NSW <input type="checkbox"/> USMP <input type="checkbox"/> Water Supply Watershed <input type="checkbox"/> Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>4. DWQ Stormwater Program Review</b>	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Coastal counties <input type="checkbox"/> HQW <input type="checkbox"/> ORW <input type="checkbox"/> Session Law 2006-246 <input type="checkbox"/> Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>5. DWQ 401 Unit Stormwater Review</b>	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A
5b. Have all of the 401 Unit submittal requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A

<b>F. Supplementary Information</b>	
<b>1. Environmental Documentation (DWQ Requirement)</b>	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>2. Violations (DWQ Requirement)</b>	
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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
<b>3. Cumulative Impacts (DWQ Requirement)</b>	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.	
<b>4. Sewage Disposal (DWQ Requirement)</b>	
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	

<b>5. Endangered Species and Designated Critical Habitat (Corps Requirement)</b>		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input checked="" type="checkbox"/> Raleigh <input type="checkbox"/> Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? USFWS County Site, NC Natural Heritage site		
<b>6. Essential Fish Habitat (Corps Requirement)</b>		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? NMFS County Index		
<b>7. Historic or Prehistoric Cultural Resources (Corps Requirement)</b>		
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)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NEPA Documentation		
<b>8. Flood Zone Designation (Corps Requirement)</b>		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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		
Dr. Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name	 Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	2-22-12 Date

Gordon

12/7/11

Hornett

**B-4543 NEU Narrative**

**Utility Owners:**

- **Power:** Progress Energy – (contact: Mr. J. B. Jones 910-259-1966)

**General Utility Relocation:**

The power pole line inside the project limits will be relocated away from the construction limits. The power pole line will be relocated prior to the letting.

**Existing Utilities:**

- **Power:** the existing Progress Energy power pole line is right (south side) of Line-L .

**Proposed Utility Relocation:**

- **Power:** Progress Energy will relocate the power pole line along the proposed R/W line on the right (south side) of Line-L- from Sta. 11+13 to Sta. 18+18.

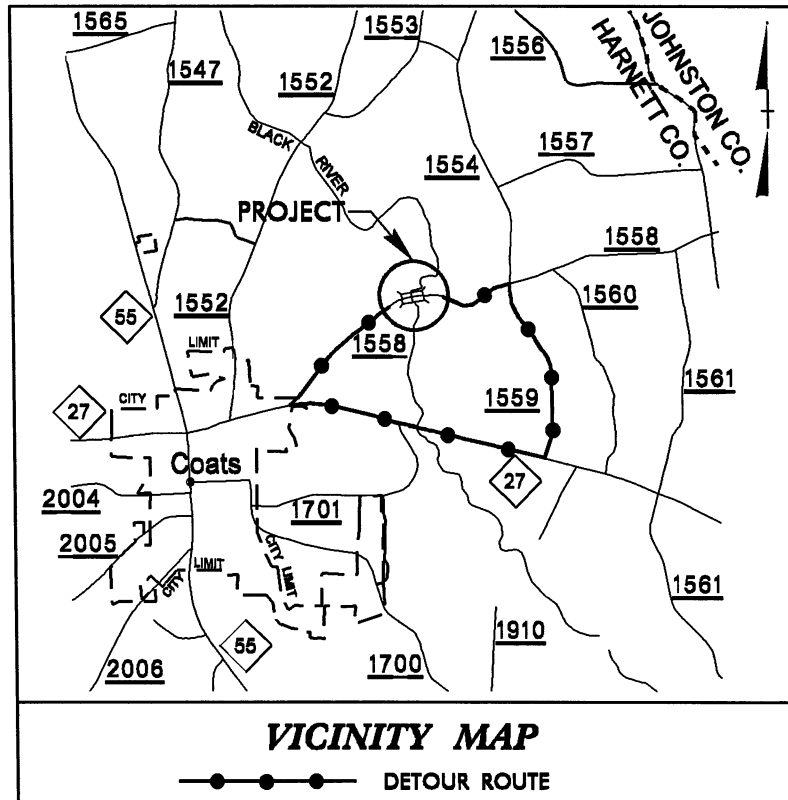


09/08/99

TIP PROJECT: B-4543

T.I.P. NO.	SHEET NO.
B-4543	UO-1

Utility Permit Drawing  
Sheet 1 of 3

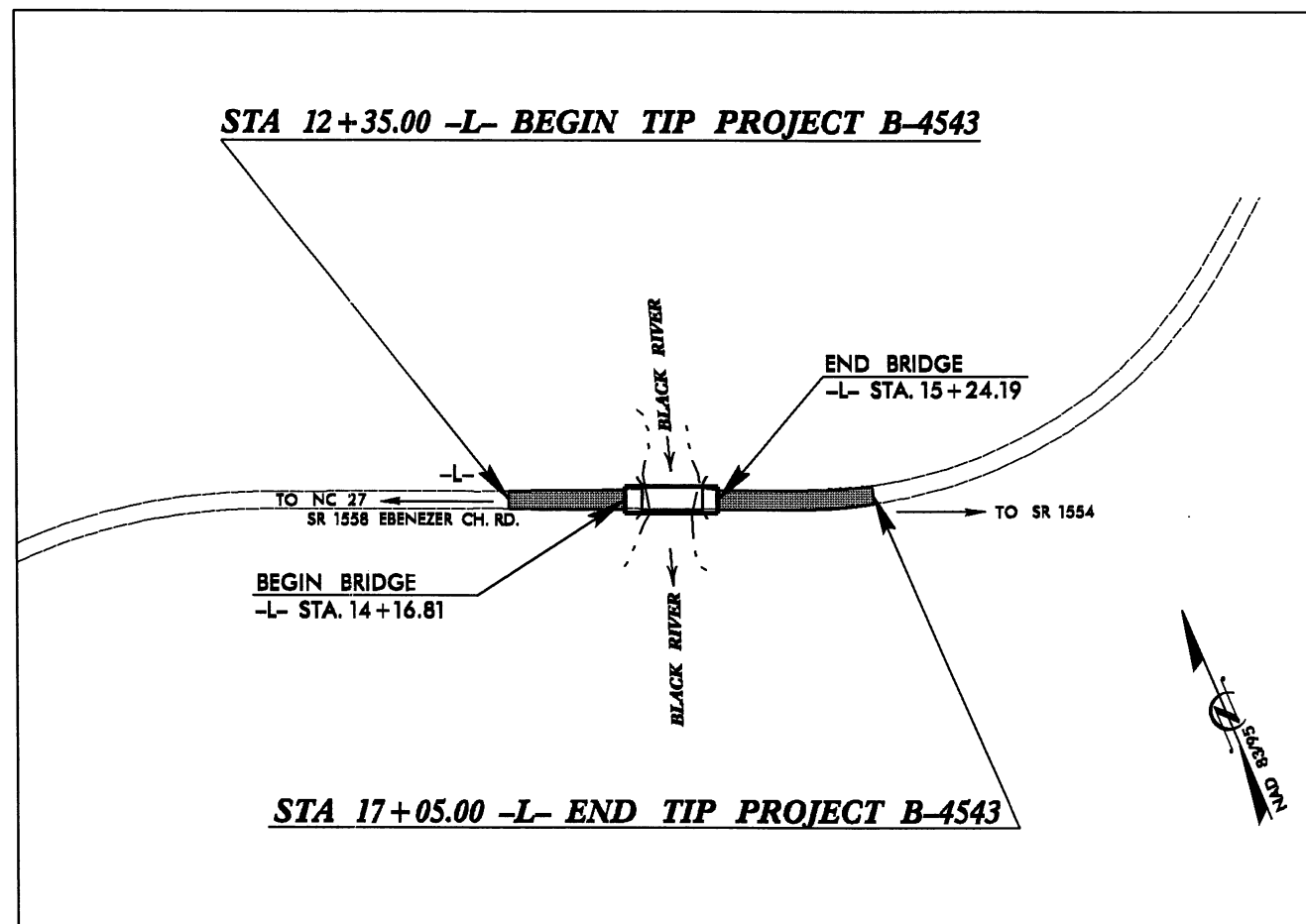


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**NEU PERMIT PLANS (12/11)**  
**HARNETT COUNTY**

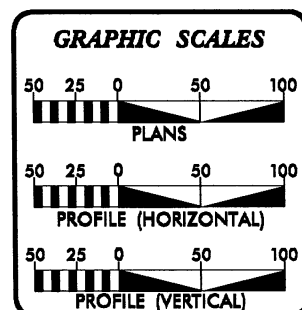
**LOCATION: BRIDGE NO. 120 OVER THE BLACK RIVER  
ON SR 1558 (EBENEZER CHURCH ROAD)**

**TYPE OF WORK: RELOCATE AERIAL POWER LINE**



INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION  
PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

01-DEC-2011 08:06  
RA:UTIL\BGS\NC\U0-1\PROJ\NEU\B-4543\_ut\_neu\_title\_UO-1\_psh.dgn  
\$\$\$\$\$SERVNAME\$\$\$\$\$



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	PLAN SHEET

UTILITY OWNERS ON PROJECT
(1) PROGRESS ENERGY - POWER

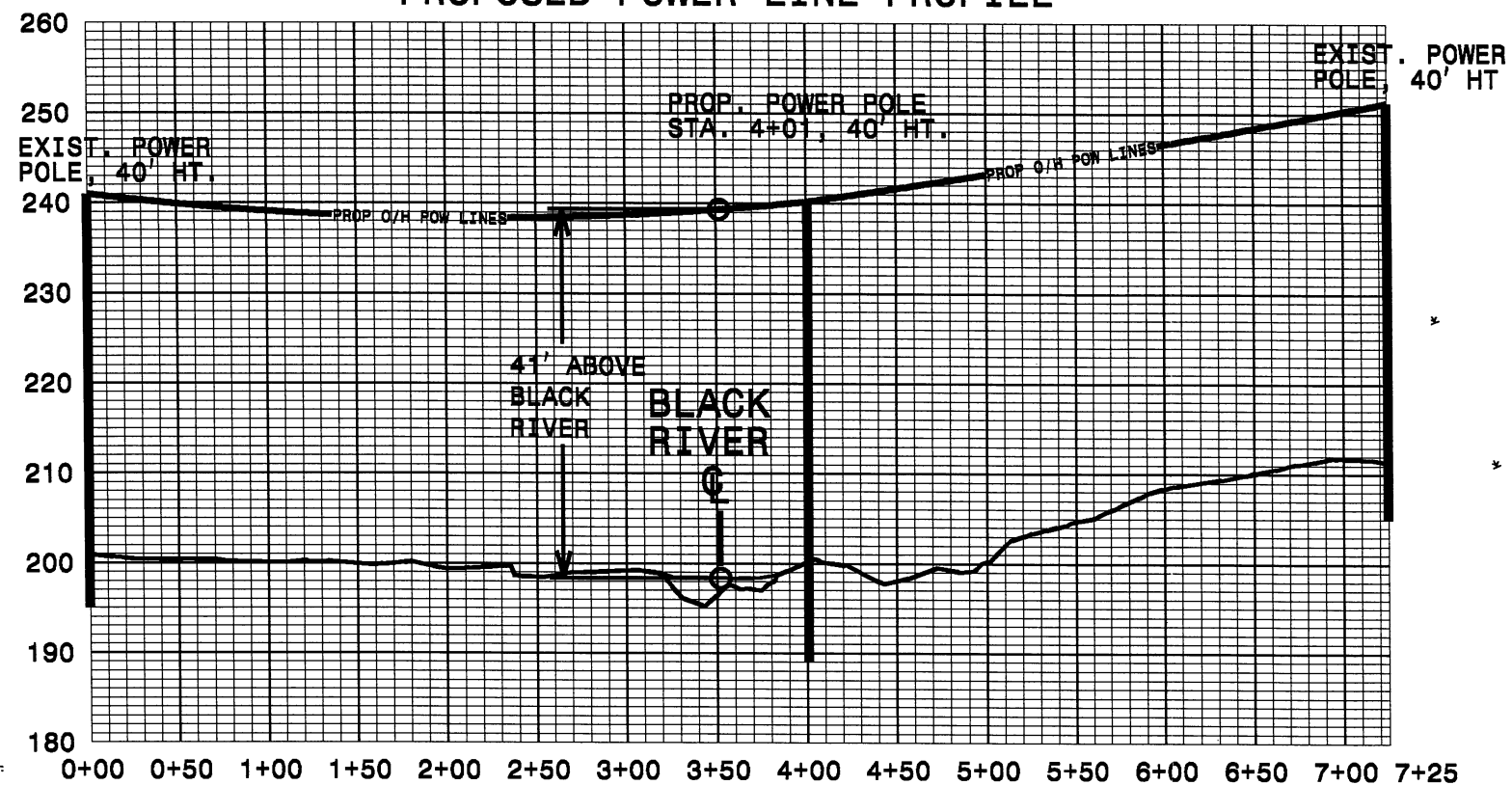
PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
UTILITIES ENGINEERING  
SECTION**

1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**Corey Bousquet, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**Nabil Hamdan** UTILITIES PROJECT DESIGNER

5/14/99  
01 DEC 2010 07:45  
C:\PROJECTS\NEUN-4543.ut.neu.UO-2.psh.dgn

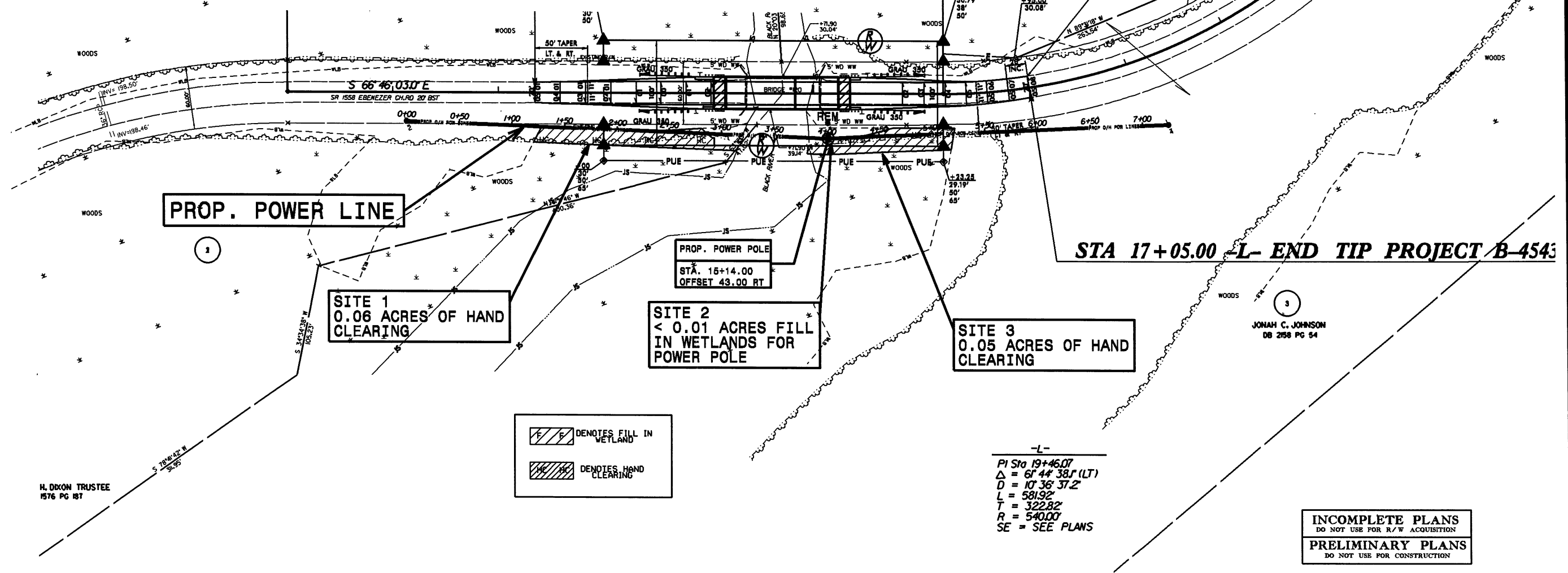
### PROPOSED POWER LINE PROFILE



Utility Permit Drawing  
Sheet 2 of 3

### UTILITIES BY OTHERS

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



STA 17+05.00 -L- END TIP PROJECT B-4543

--- DENOTES FILL IN WETLAND  
--- DENOTES HAND CLEARING

-L-  
PI Sta 19+46.07  
Δ = 6° 44' 38.1" (LT)  
D = 10' 36' 37.2"  
L = 581.92'  
T = 322.82'  
R = 540.00'  
SE = SEE PLANS

INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION  
PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

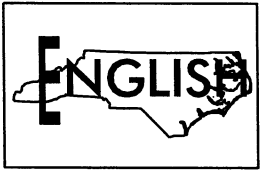
H. DIXON TRUSTEE  
1576 PG 187

JONAH C. JOHNSON  
DB 258 PG 54





STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4543	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33758.1.1	BRSTP-1558(2)	PE	
33758.2.1	BRSTP-1558(2)	RW, UTIL.	
33758.3.1	BRSTP-1558(2)	CONST.	



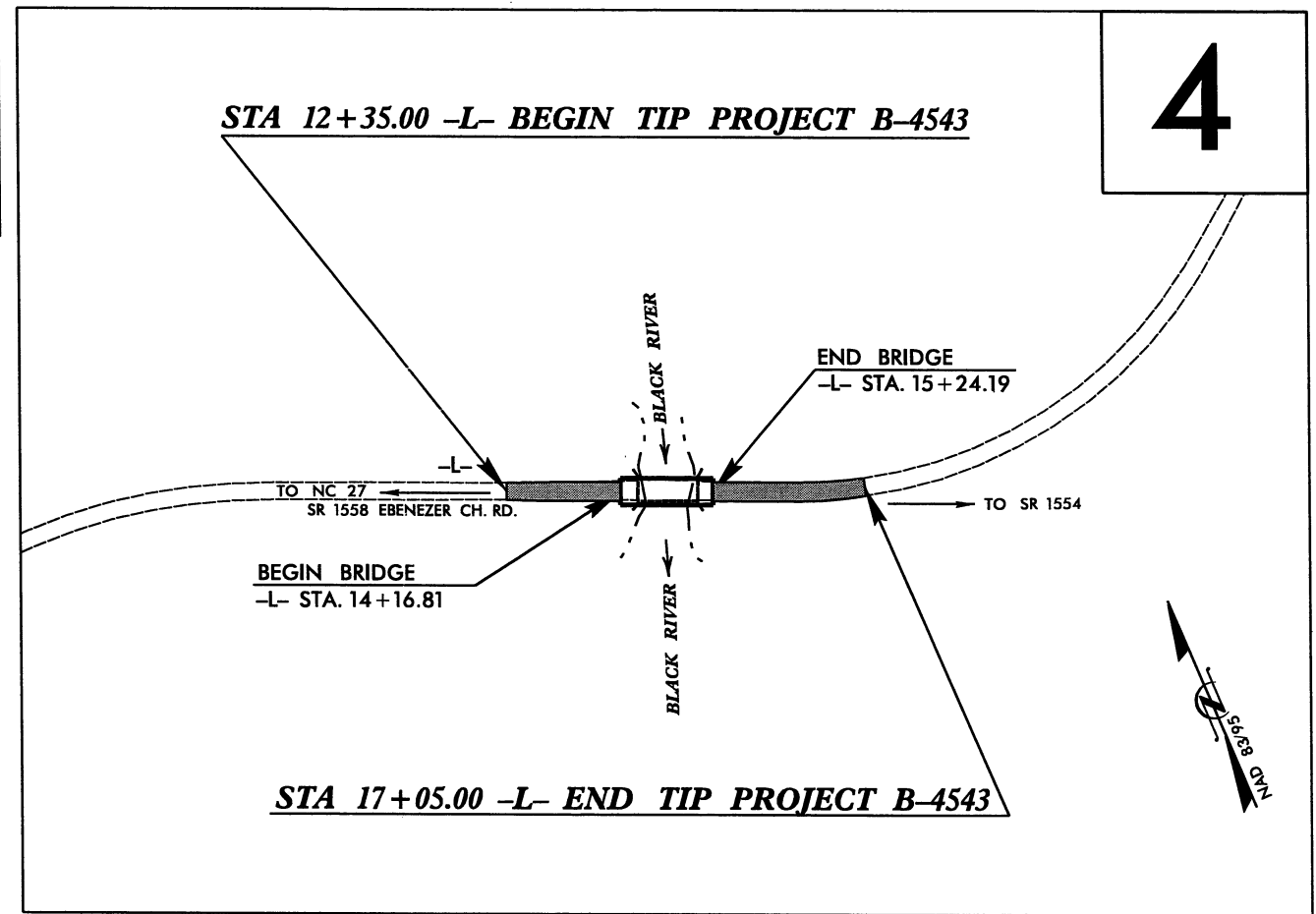
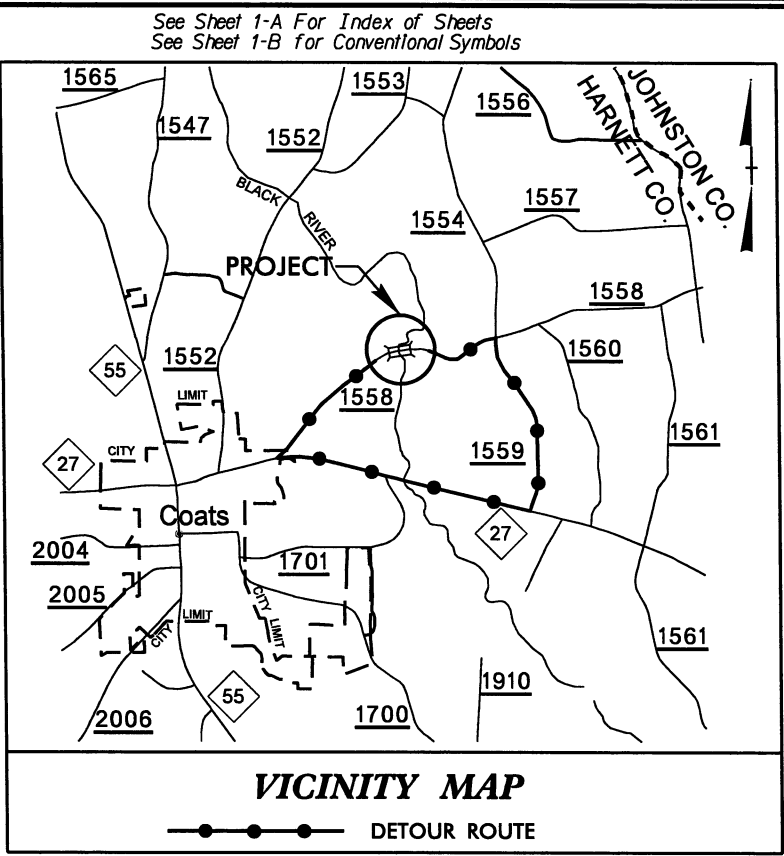
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**HARNETT COUNTY**

LOCATION: BRIDGE NO. 120 OVER THE BLACK RIVER ON  
SR 1558 (EBENEZER CHURCH RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

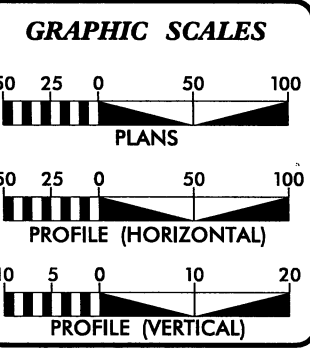
**WETLAND/SURFACE WATER PERMIT DWG.**

Permit Drawing  
Sheet 1 of 10



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.  
SUB REGIONAL TIER DESIGN GUIDELINES FOR BRIDGE PROJECTS WERE USED TO DEVELOP THIS PROJECT.

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



**DESIGN DATA**

ADT 2012 =	1433
ADT 2032 =	2174
DHV =	10 %
D =	60 %
T =	3 % *
V =	50 MPH
FUNC. CLASS =	RURAL LOCAL
* TTST 1%	DUAL 2%

**PROJECT LENGTH**

LENGTH OF ROADWAY TIP PROJECT B-4543	=	0.069 MILES
LENGTH OF STRUCTURE TIP PROJECT B-4543	=	0.020 MILES
TOTAL LENGTH OF TIP PROJECT B-4543	=	0.089 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
JANUARY 8, 2010

LETTING DATE:  
NOVEMBER 20, 2012

GARY LOVERING, PE  
PROJECT ENGINEER

KEVIN E. MOORE, PE  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.

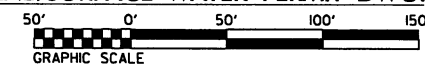
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

CONTRACT: TIP PROJECT: B-4543  
 \$\$\$SYTIME\$\$\$\$\$  
 \$\$\$DCN\$\$\$\$\$  
 \$\$\$SERNAME\$\$\$\$\$

8/13/99

WETLAND/SURFACE WATER PERMIT DWG.



PROJECT REFERENCE NO. <b>B-4543</b>		SHEET NO. <b>4</b>	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION			

Permit Drawing Sheet **2** of **10**

**20**

**10**

**15**

JOEY T. JOHNSON, et al

BOBBY W. POPE

ROBERT H. DIXON TRUSTEE

JOEY T. JOHNSON, et al

SEE ENLARGEMENT

SITE 1

SEE ENLARGEMENT

REVISIONS  
11/30/11 R/W REVISION: CHANGED PROPERTY OWNER NAME TO JOEY T. JOHNSON, ET AL ON PARCEL 003.

15" w/2 ELBOWS  
ROD & LUG  
W/SLEEVE GASKET

FILL IN WETLANDS

EXCAVATE TO N.G.

S 66°46'03.0" E  
SR 1558 EBENEZER CH RD 20' BST

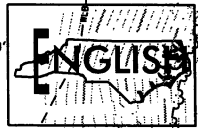
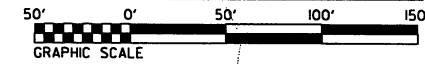
CL II RIP RAP  
TO SHldr. PT. ELEV.  
(STRUCTURE PAY ITEM)

- DENOTES FILL IN WETLAND
- DENOTES EXCAVATION IN WETLAND
- DENOTES HAND CLEARING
- DENOTES MECHANIZED CLEARING

FOR -L- PROFILE SEE SHEET 5

6/13/99

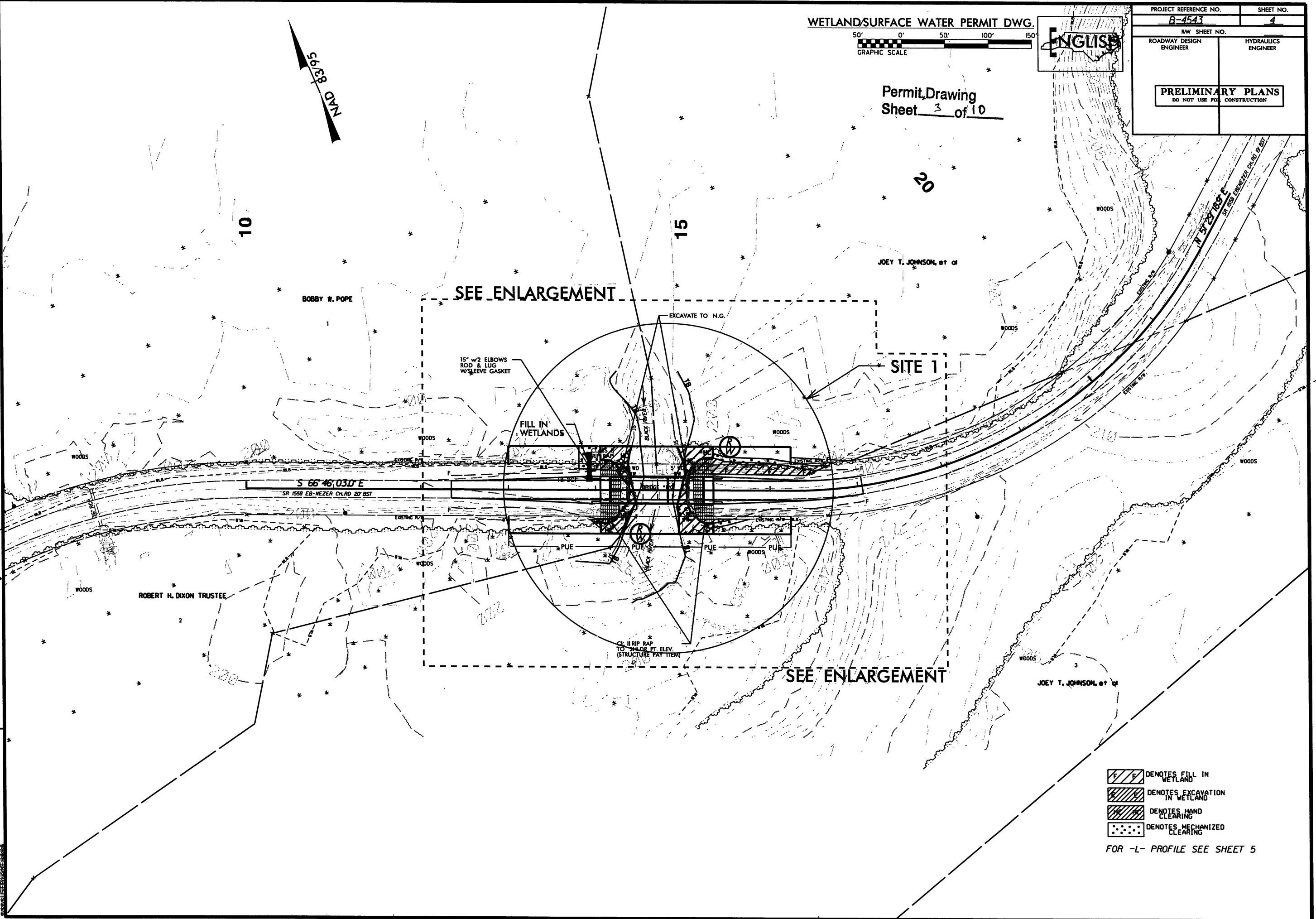
WETLANDS SURFACE WATER PERMIT DWG.



PROJECT REFERENCE NO. B-4543		SHEET NO. 4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION			

Permit Drawing Sheet 3 of 10

REVISIONS  
11/30/11 RW REVISION: CHANGED PROPERTY OWNER NAME TO JOEY T. JOHNSON, ET AL ON PARCEL 003.



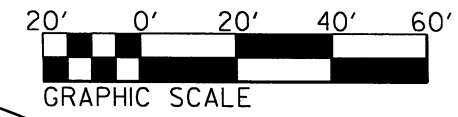
- DENOTES FILL IN WETLAND
- DENOTES EXCAVATION IN WETLAND
- DENOTES HAND CLEARING
- DENOTES MECHANIZED CLEARING

FOR -L- PROFILE SEE SHEET 5

8/17/95

WETLAND/SURFACE WATER PERMIT DWG.

PROJECT REFERENCE NO. <b>B-4543</b>	SHEET NO. <b>ENLARGE</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



Permit Drawing Sheet 4 of 10

NC GRID NAD 83/95

ENLARGEMENT

15" w/2 ELBOWS  
ROD & LUG  
W/SLEEVE GASKET

EXCAVATE TO N.G.

15

FILL IN  
WETLANDS

BLACK RIVER

WOODS

CLASS B  
RIP RAP

BRIDGE #120

CL. II RIP RAP  
TO SHLDR PT. ELEV.  
(STRUCTURE PAY ITEM)

- DENOTES FILL IN WETLAND
- DENOTES EXCAVATION IN WETLAND
- DENOTES HAND CLEARING
- DENOTES MECHANIZED CLEARING

SITE 1

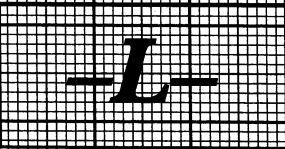
REVISIONS

SYDNEY DENNISON

5/14/99

# WETLAND/SURFACE WATER PERMIT DWG.

PROJECT REFERENCE NO. <b>B-4543</b>	SHEET NO. <b>5</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

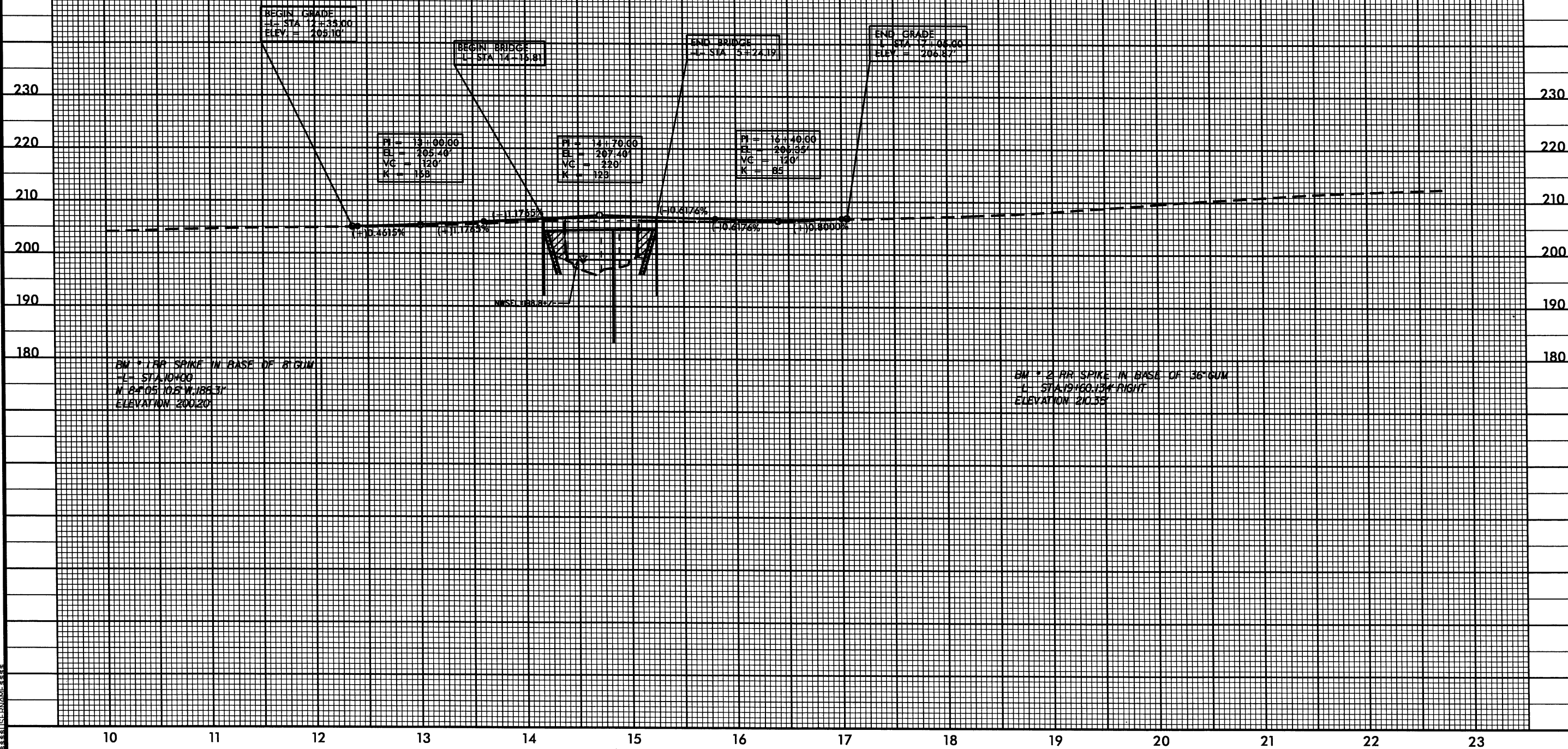


**BRIDGE HYDRAULIC DATA**

DESIGN DISCHARGE	= 1200	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 202.2	FT
BASE DISCHARGE	= 3400	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 204.6	FT
OVERTOPPING DISCHARGE	= 1380	CFS
OVERTOPPING FREQUENCY	= 3+	YRS
OVERTOPPING ELEVATION	= 202.3	FT

DATE OF SURVEY = 3/30/09  
 W.S. ELEVATION AT DATE OF SURVEY = 200.8 FT

Permit Drawing  
 Sheet 5 of 10



5/14/99  
 10 11 12 13 14 15 16 17 18 19 20 21 22 23

8/23/99

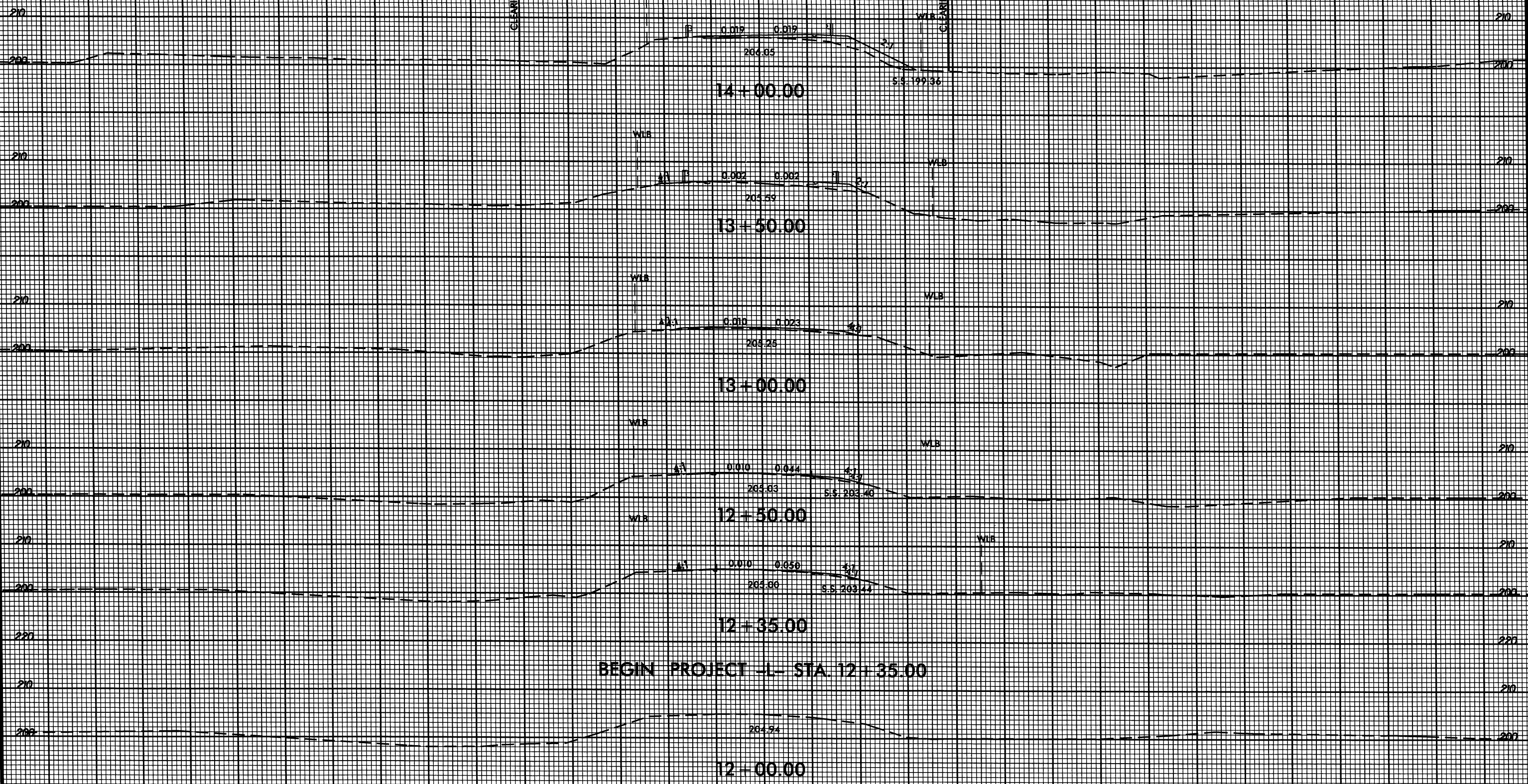
# WETLAND/SURFACE WATER PERMIT DWG.

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4543	X-1

Permit Drawing  
Sheet 6 of 10

CLEARING LIMITS

CLEARING LIMITS

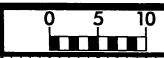


\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$USERNAM\$\$\$\$

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

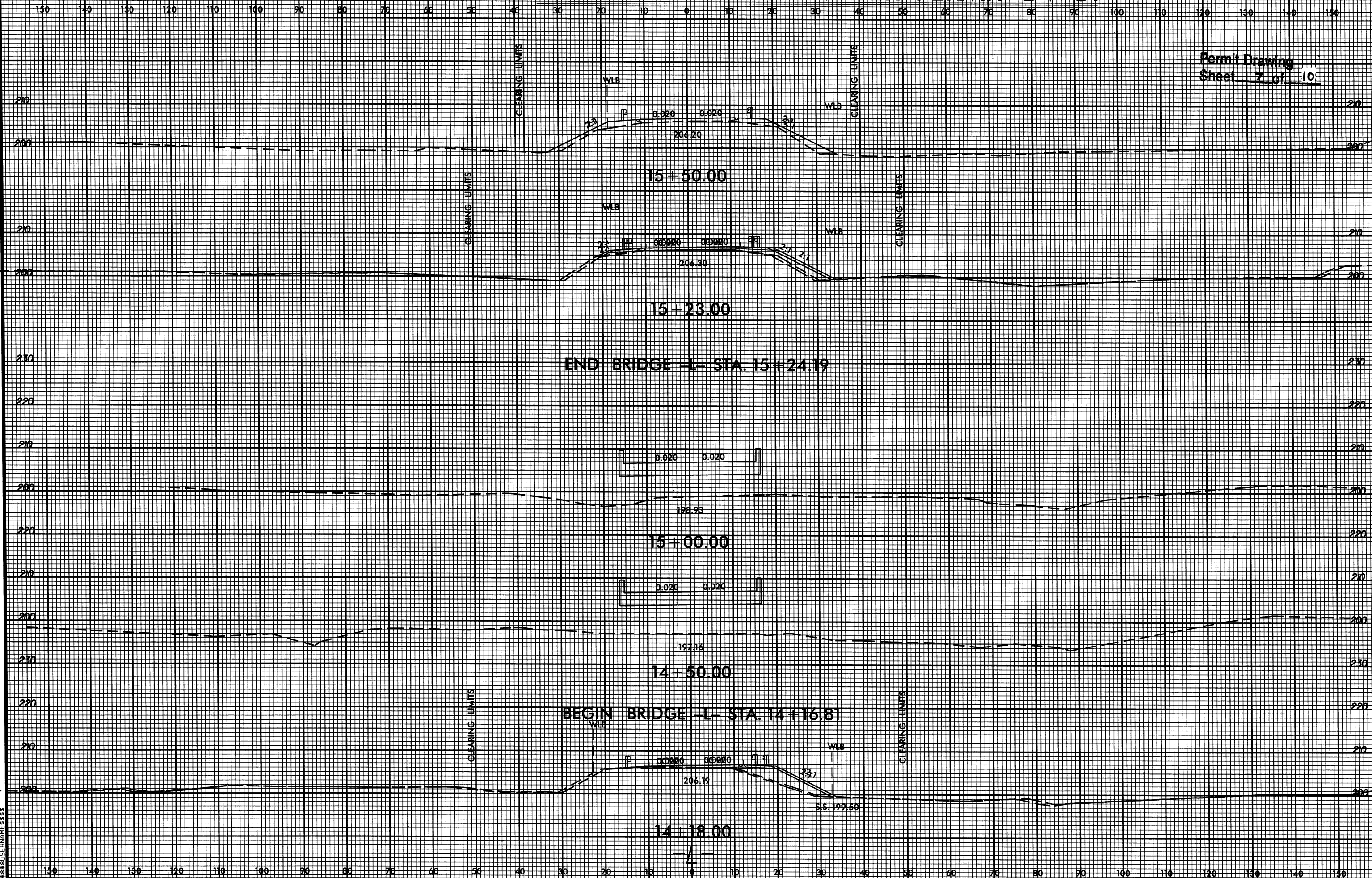
8/23/99

# WETLAND/SURFACE WATER PERMIT DWG.



PROJ. REFERENCE NO. B-4543	SHEET NO. X-2
-------------------------------	------------------

Permit Drawing  
Sheet 7 of 10



\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$SERIAL\$\$\$\$\$  
\$\$\$\$\$SERIAL\$\$\$\$\$





B-4543 Hamnett Co.

Property Owner Information

Last Name	First Name	Address	City/Town	State	Zip Code	Whom Contacted	Relationship	County(s)	Tax Map	Deed Book 1	Page (DB1)
POPE	BOBBY	19 SILAS MOORE ROAD	COATS	NC	27521	MR. POPE		Hamnett	1601-74-9760.000	2036	940
DIXON, TRUSTEE & BENJAMIN VANCE DIXON TRUST	ROBERT HAROLD	PO BOX 849	COATS	NC	27521089	ROBERT DIXON	TRUSTEE	Hamnett	1600-59-4573.000	1576	187
JOHNSON, JR.	JONAH C.	1383 JOHNSON ROAD	COATS	NC	27521	MR. JOHNSON		Hamnett	1601-71-5238.000	2158	54
JOHNSON, JR.	JONAH C.	1383 JOHN ROAD	COATS	NC	27521	MR. JOHNSON		Hamnett	1600-69-5286.000	2158	54



**STORMWATER MANAGEMENT PLAN  
FOR B-4543, HARNETT CO.**

Prepared by Brook Anderson  
MAY 28, 2009

**ROADWAY DESCRIPTION**

The project involves the replacement of Bridge No. 120 on SR 1558 over Black River. The overall length of the project is 0.09 mi. (500 ft.).

**ENVIRONMENTAL DESCRIPTION**

The project is located in the Cape Fear River Basin. Black River is classified as Class C Sw. There are no buffers on the project. Wetlands are located in all four quadrants and will have some impacts due to this project.

**BEST MANAGEMENT PRACTICES AND MAJOR STRUCTURES**

Best Management Practices (BMPs) and measures used on the project to reduce stormwater impacts are listed below.

**BRIDGE/CULVERT**

The existing bridge is a four span 70 ft. bridge with vertical timber abutments. The existing bridge is being replaced with a two span, 105 ft. bridge. The proposed bridge will span the channel. Deck drains will be omitted over the channel and will be placed in the overbank areas only.

**MISC**

The only ditch that will be impacted by the proposed project is in the southeast quadrant. Currently, this ditch turns to sheet flow as it enters the wetlands approximately 100 feet east of the existing bridge. Due to topography, the best option at this location was to maintain the existing ditch geometry and ditch grade. This allows for current drainage patterns to be maintained and minimal impacts to the wetlands in the vicinity.

Sheet flow was maintained in all other quadrants.

Fill slopes will be 3:1, in accordance with the geotechnical design units recommendations, and will impact some wetlands. The impacted areas are small in comparison to the total area of the wetlands.





04/16/11

Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

# CONVENTIONAL PLAN SHEET SYMBOLS

## BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○
Property Corner	-----
Property Monument	□
Parcel/Sequence Number	②
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	-----
Proposed Wetland Boundary	-----
Existing Endangered Animal Boundary	-----
Existing Endangered Plant Boundary	-----
Known Soil Contamination: Area or Site	⊗
Potential Soil Contamination: Area or Site	⊗

## BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○
Small Mine	⊗
Foundation	□
Area Outline	□
Cemetery	↑
Building	□
School	□
Church	□
Dam	▬

## HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	-----
Buffer Zone 1	-----
Buffer Zone 2	-----
Flow Arrow	←
Disappearing Stream	-----
Spring	○
Wetland	-----
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

## RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
Switch	□
RR Abandoned	-----
RR Dismantled	-----

## RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	-----
Proposed Right of Way Line with Concrete or Granite Marker	-----
Existing Control of Access	-----
Proposed Control of Access	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage / Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----

## ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-----
Proposed Slope Stakes Fill	-----
Proposed Curb Ramp	-----
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	-----

## VEGETATION:

Single Tree	○
Single Shrub	○
Hedge	-----
Woods Line	-----

Orchard	-----
Vineyard	-----

## EXISTING STRUCTURES:

MAJOR: Bridge, Tunnel or Box Culvert	-----
Bridge Wing Wall, Head Wall and End Wall	-----
MINOR: Head and End Wall	-----
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	-----

## UTILITIES:

POWER: Existing Power Pole	○
Proposed Power Pole	○
Existing Joint Use Pole	○
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	○
H-Frame Pole	-----
Recorded U/G Power Line	-----
Designated U/G Power Line (S.U.E.*)	-----

## TELEPHONE:

Existing Telephone Pole	○
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	□
Telephone Cell Tower	⊗
U/G Telephone Cable Hand Hole	○
Recorded U/G Telephone Cable	-----
Designated U/G Telephone Cable (S.U.E.*)	-----
Recorded U/G Telephone Conduit	-----
Designated U/G Telephone Conduit (S.U.E.*)	-----
Recorded U/G Fiber Optics Cable	-----
Designated U/G Fiber Optics Cable (S.U.E.*)	-----

## WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	-----
Designated U/G Water Line (S.U.E.*)	-----
Above Ground Water Line	-----

## TV:

TV Satellite Dish	⊗
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	○
Recorded U/G TV Cable	-----
Designated U/G TV Cable (S.U.E.*)	-----
Recorded U/G Fiber Optic Cable	-----
Designated U/G Fiber Optic Cable (S.U.E.*)	-----

## GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	-----
Designated U/G Gas Line (S.U.E.*)	-----
Above Ground Gas Line	-----

## SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
Recorded SS Forced Main Line	-----
Designated SS Forced Main Line (S.U.E.*)	-----

## MISCELLANEOUS:

Utility Pole	○
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	□
Utility Unknown U/G Line	-----
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊕
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

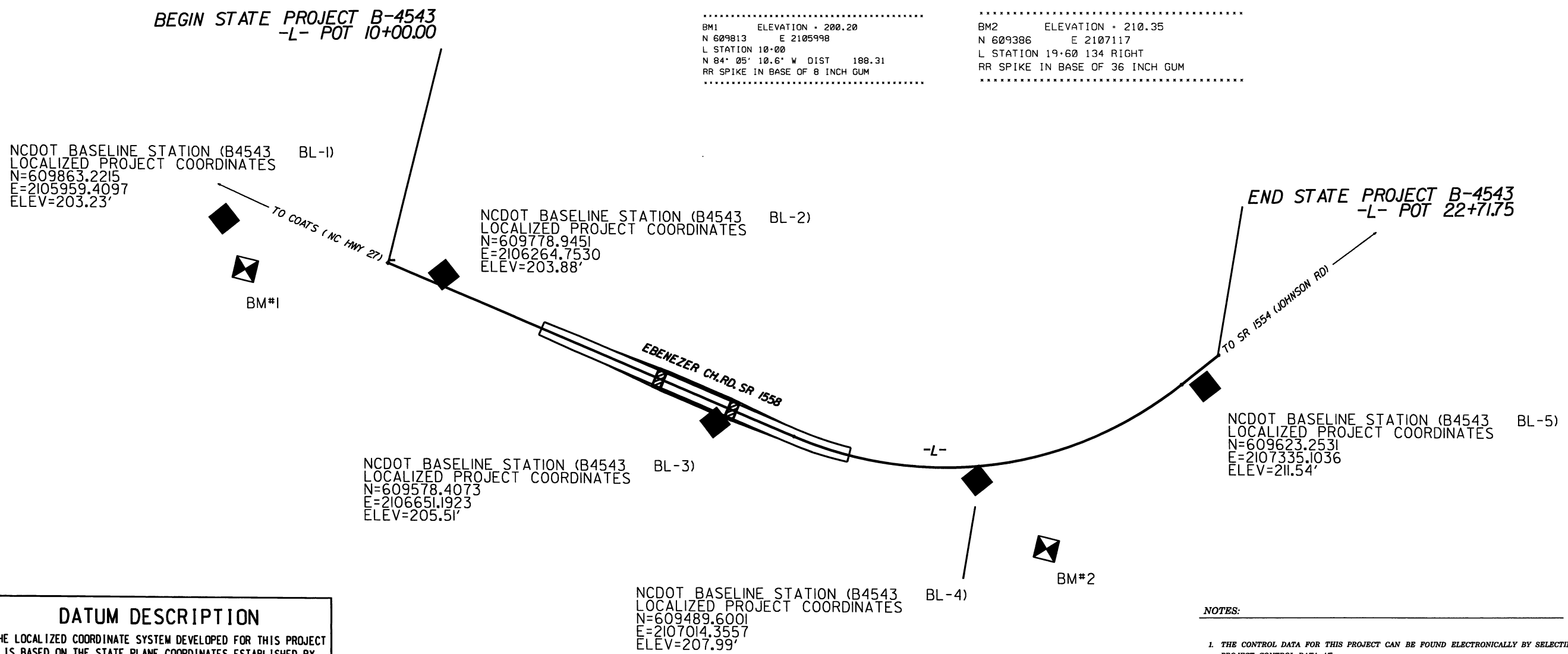
# SURVEY CONTROL SHEET B-4543



BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1	B-4543 BL-1	609863.2215	2105959.4097	203.23'	OUTSIDE PROJECT LIMITS	
2	B-4543 BL-2	609778.9451	2106264.7530	203.88'	10+78.32	17.84 LT
3	B-4543 BL-3	609578.4073	2106651.1923	205.51'	15+12.52	14.00 RT
4	B-4543 BL-4	609489.6001	2107014.3557	207.99'	18+83.91	15.86 RT
5	B-4543 BL-5	609623.2531	2107335.1036	211.54'	22+27.84	15.50 RT

.....  
 BMI ELEVATION = 200.20  
 N 609813 E 2105998  
 L STATION 10+00  
 N 84° 05' 10.6" W DIST 188.31  
 RR SPIKE IN BASE OF 8 INCH GUM  
 .....

.....  
 BM2 ELEVATION = 210.35  
 N 609386 E 2107117  
 L STATION 19+60 134 RIGHT  
 RR SPIKE IN BASE OF 36 INCH GUM  
 .....



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "BUNNLEVEL"

WITH NAD 83/95 STATE PLANE GRID COORDINATES OF  
 NORTHING: 567444.9543(±) EASTING: 2065238.6484(±)  
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: .99987203

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BUNNLEVEL" TO -L- STATION 10+00.00 IS  
 N 44°02'10.1" E 58907.2111'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
 VERTICAL DATUM USED IS NAVD 88

**NOTES:**

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:  
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/)

THE FILES TO BE FOUND ARE AS FOLLOWS:  
 B4543\_LS\_CONTROL\_080414.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

○ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.  
 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.  
 NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION  
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

NOTE: DRAWING NOT TO SCALE

6/2/99  
 07-DEC-2011 12:06  
 \\s01\proj\B4543\B4543\_1s\_1c\_090414.dgn  
 \$\$\$\$

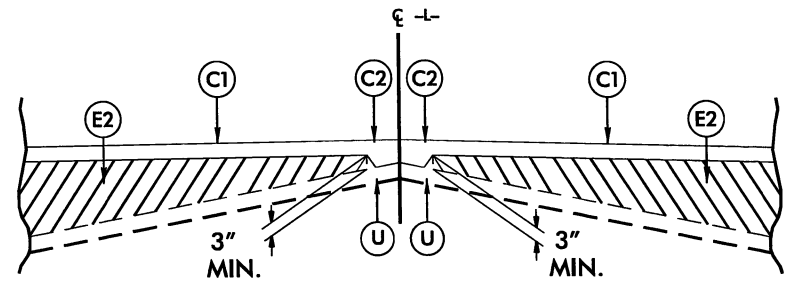


6/2/99

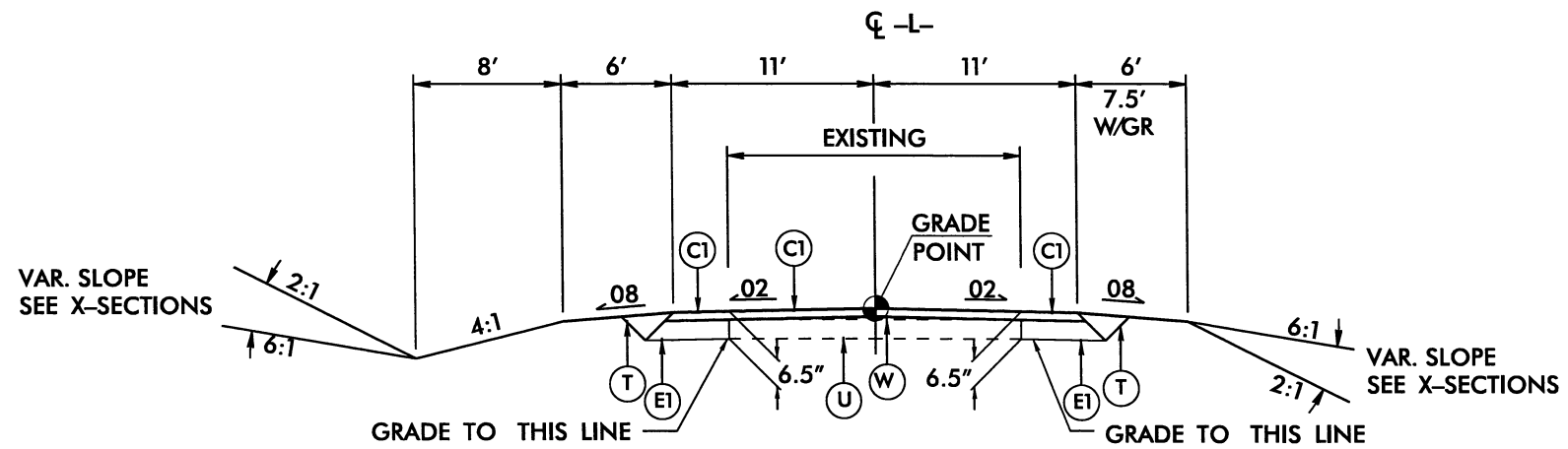
PAVEMENT SCHEDULE	
FINAL PAVEMENT DESIGN	
C1	PROP. APPROX. 2½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1½" IN DEPTH.
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. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL).

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

PROJECT REFERENCE NO. <b>B-4543</b>	SHEET NO. <b>2</b>
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



Standard Wedging Detail



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

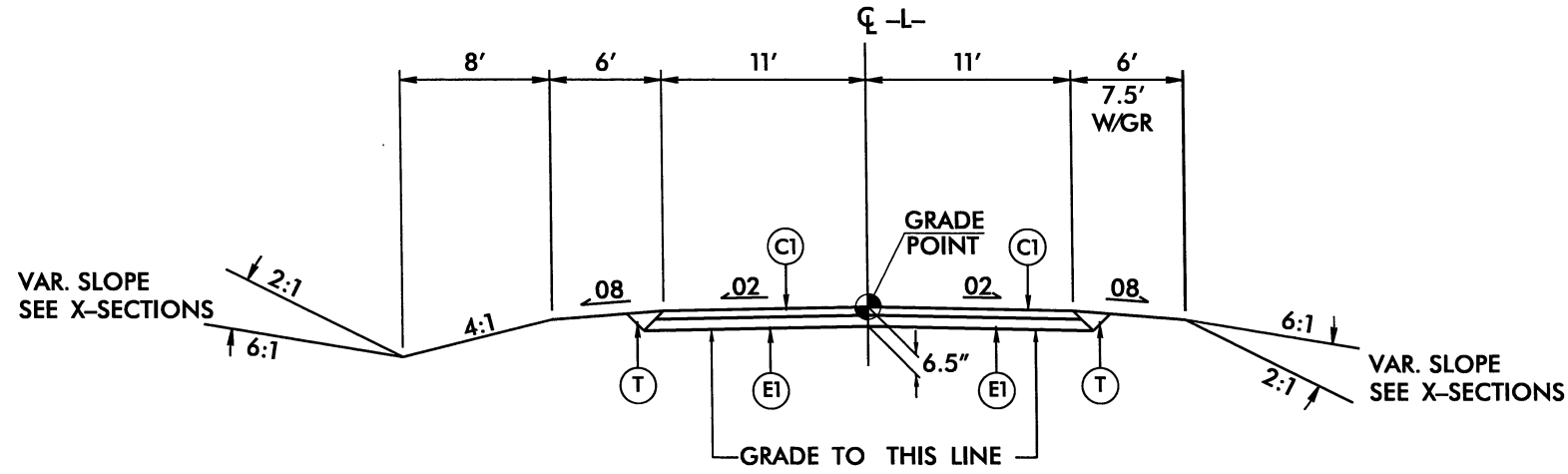
- L- STA. 12+35.00 TO -L- STA. 13+91.81
- L- STA. 15+49.19 TO -L- STA. 17+05.00

07-DEC-2011 12:06  
R:\Projects\111206\111206.dwg  
\$\$\$\$\$

6/2/99

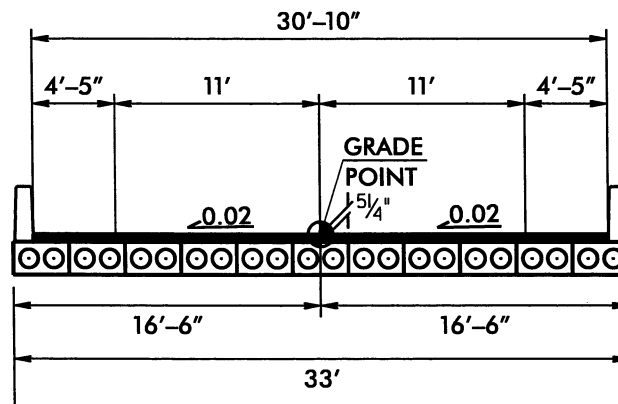
PAVEMENT SCHEDULE	
FINAL PAVEMENT DESIGN	
C1	2 1/2" SF9.5A
C2	VAR. SF9.5A
E1	4" B25.0B
E2	VAR. B25.0B
T	EARTH MATERIAL
U	EXIST. PAVEMENT
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
B-4543	2-A
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2  
 -L- STA. 13+91.81 TO -L- STA. 14+16.81 (BEGIN BRIDGE)  
 -L- STA. 15+24.19 (END BRIDGE) TO -L- STA. 15+49.19



TYPICAL SECTION ON STRUCTURE

USE TYPICAL SECTION ON STRUCTURE  
 -L- STA. 14+16.81 (BEGIN BRIDGE) TO -L- STA. 15+24.19 (END BRIDGE)

07-DEC-2011 12:06  
 R:\Roadway\Projects\B4543.rdj-tyr.dgn  
 \$\$\$IESTRANGE\$\$\$

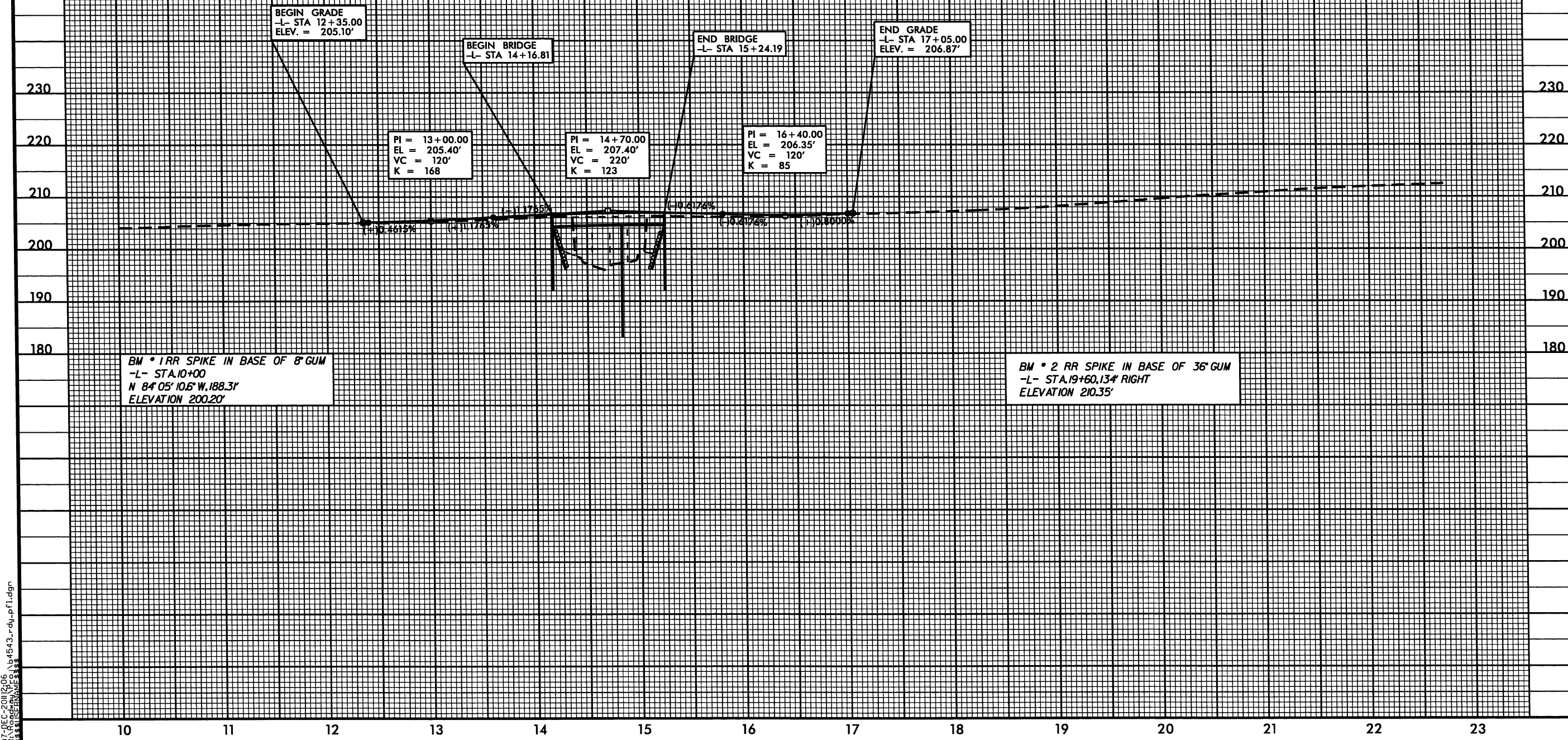


5/14/99

PROJECT REFERENCE NO. <b>B-4543</b>	SHEET NO. <b>5</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

BRIDGE HYDRAULIC DATA		
DESIGN DISCHARGE	= 1,200	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 202.2	FT
BASE DISCHARGE	= 3,400	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 204.6	FT
OVERTOPPING DISCHARGE	= 1,380	CFS
OVERTOPPING FREQUENCY	= 5+	YRS
OVERTOPPING ELEVATION	= 202.3	FT
DATE OF SURVEY	= 3/30/09	
W.S. ELEVATION AT DATE OF SURVEY	= 200.6	FT

-L-

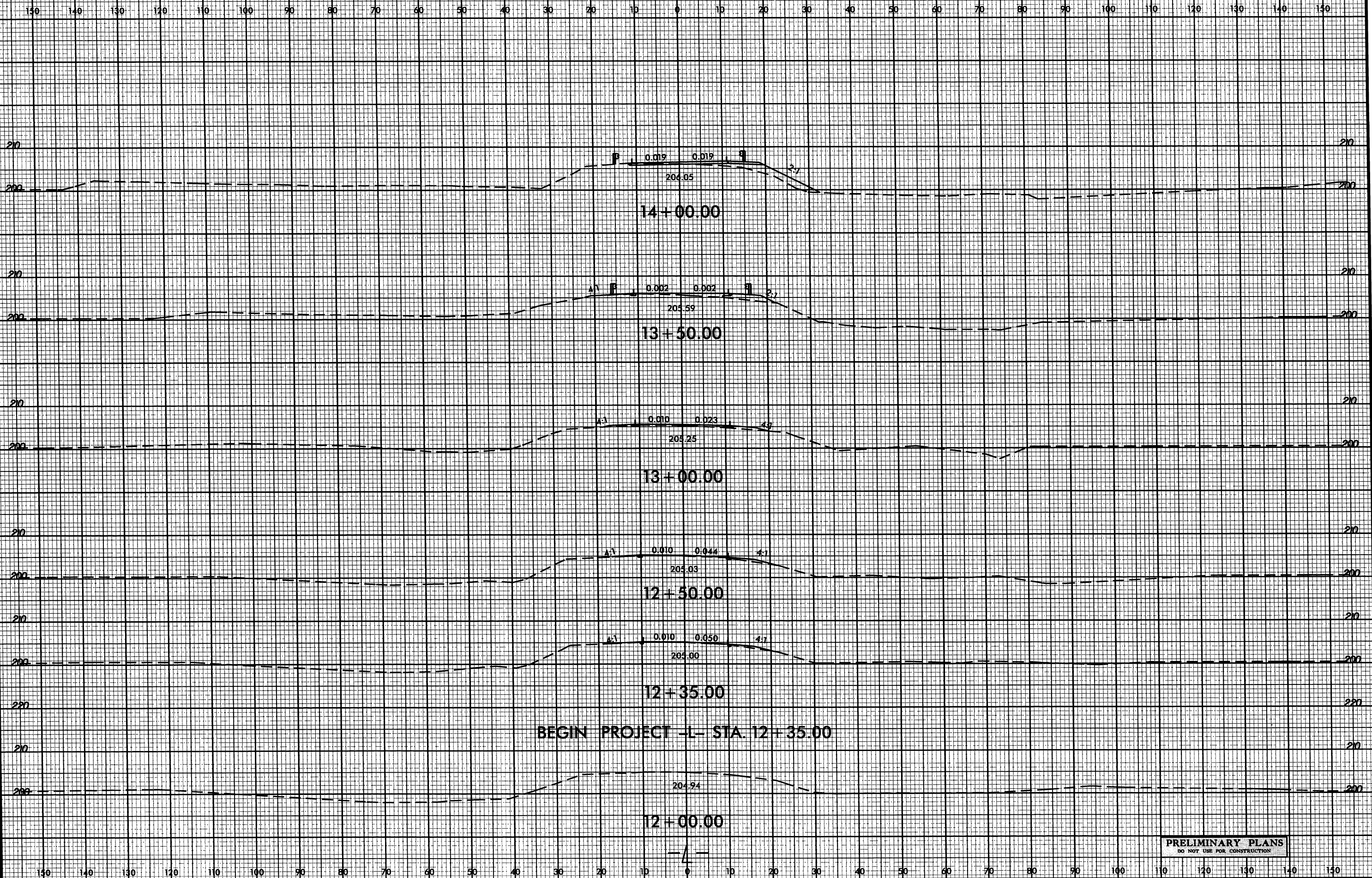


07-DEC-2011 12:06  
R:\Roadway\Projects\B4543.rdw-pl.dgn  
R:\Roadway\Projects\B4543.rdw-pl.dgn

8/23/99



PROJ. REFERENCE NO. B-4543 SHEET NO. X-1

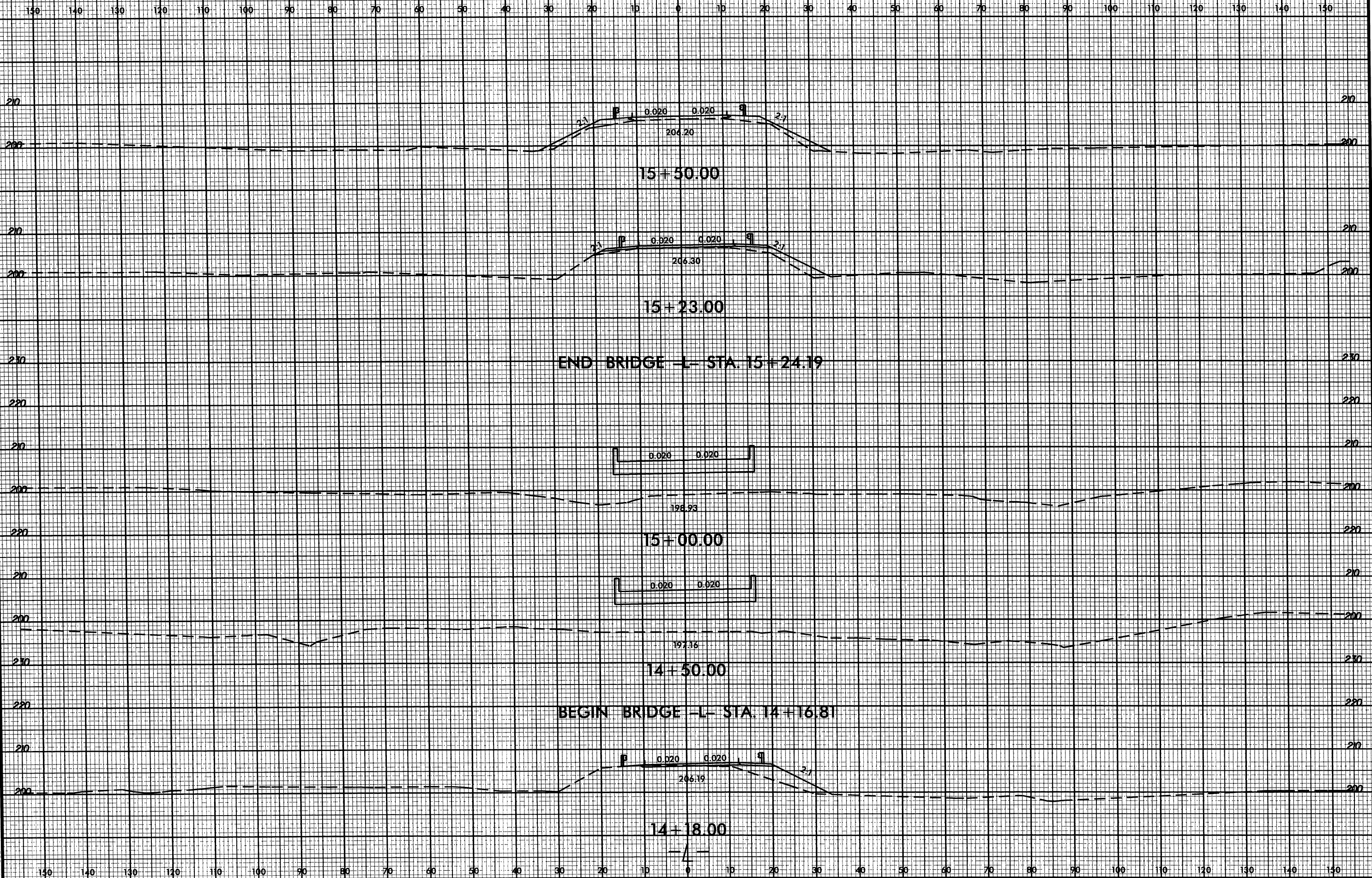


07-DEC-2011 12:06 R:\Rong\REV\SC\_b4543\_rdu\_xpl.dgn

BEGIN PROJECT -L- STA. 12+35.00

PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION

B/23/99

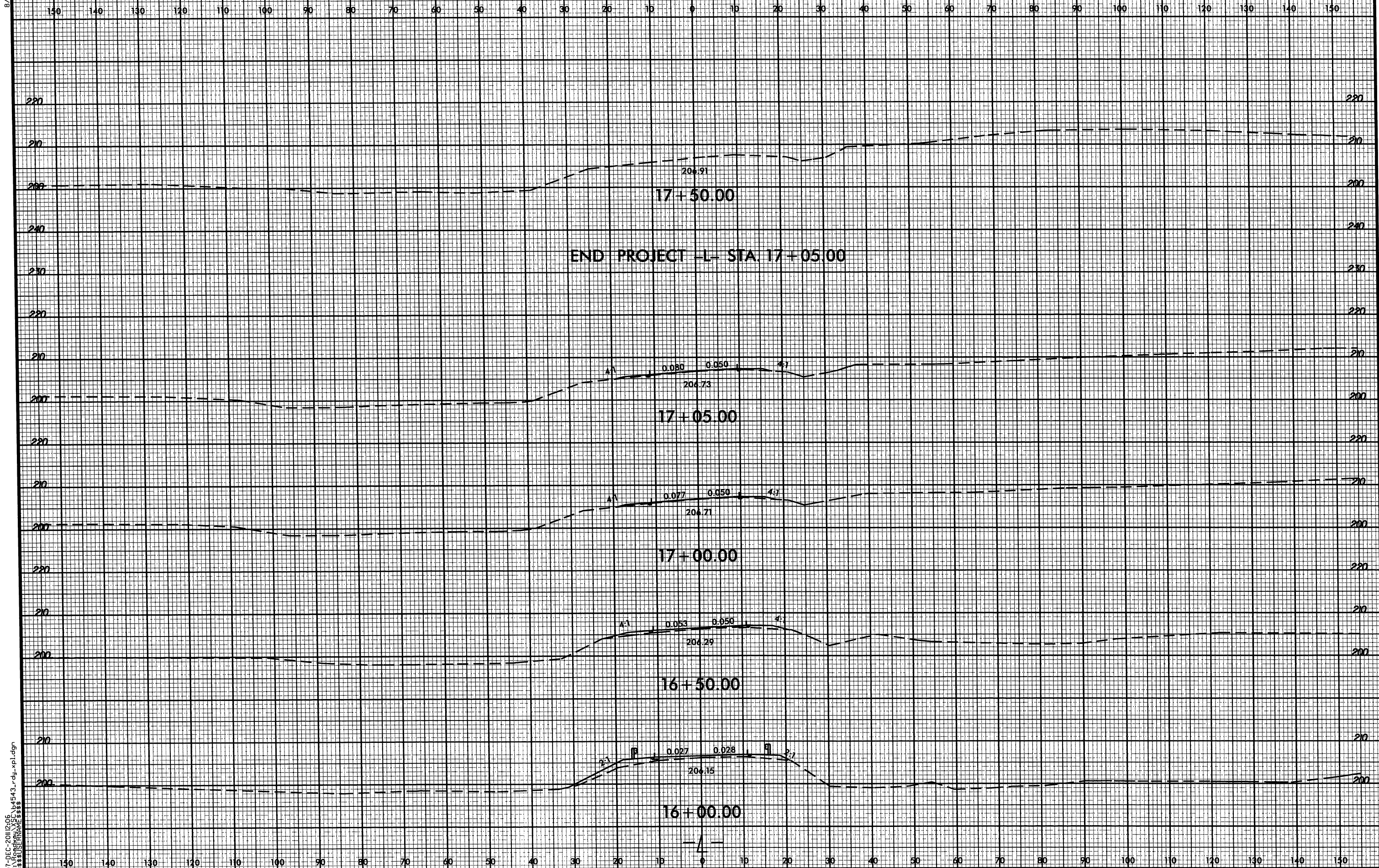


07-DEC-2011 12:05  
R:\Road\Drawings\SC\_b4543-r\_dj\_xpl.dgn  
ssuser\me555

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
B-4543	X-3



END PROJECT -L- STA. 17+05.00

07-DEC-2011 12:06  
 R:\PROJECTS\SSC\_b4543\_rdu\_xpl.dgn  
 \$\$\$SUBSERVANTES\$\$\$

**PRELIMINARY JURISDICTIONAL DETERMINATION FORM**

**BACKGROUND INFORMATION**

- A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):**
  
- B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:**  
Gordon Cashin, NCDOT, 1598 Mail Service Center, Raleigh, NC 27699-1598
  
- C. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAW-RG-L**
  
- D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:**  
TIP: B-4543 Description: Replace Bridge No. 120 on SR 1558 over Black River

**(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)**

State: NC County/parish/borough: Harnett City: Coats  
Center coordinates of site (lat/long in degree decimal format):  
Lat. 35.425012 °N, Long. -78.646896 °W  
Universal Transverse Mercator: NA  
Name of nearest waterbody: Black River

Identify (estimate) amount of waters in the review area:  
Non-wetland waters: See table, linear feet: 886  
Cowardin Class: Riverine  
Stream Flow: Perennial  
Wetlands: 20.8 acres.  
Cowardin Class: Forested

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: N/A  
Non-Tidal: N/A

**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

- Office (Desk) Determination Date:
- 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):

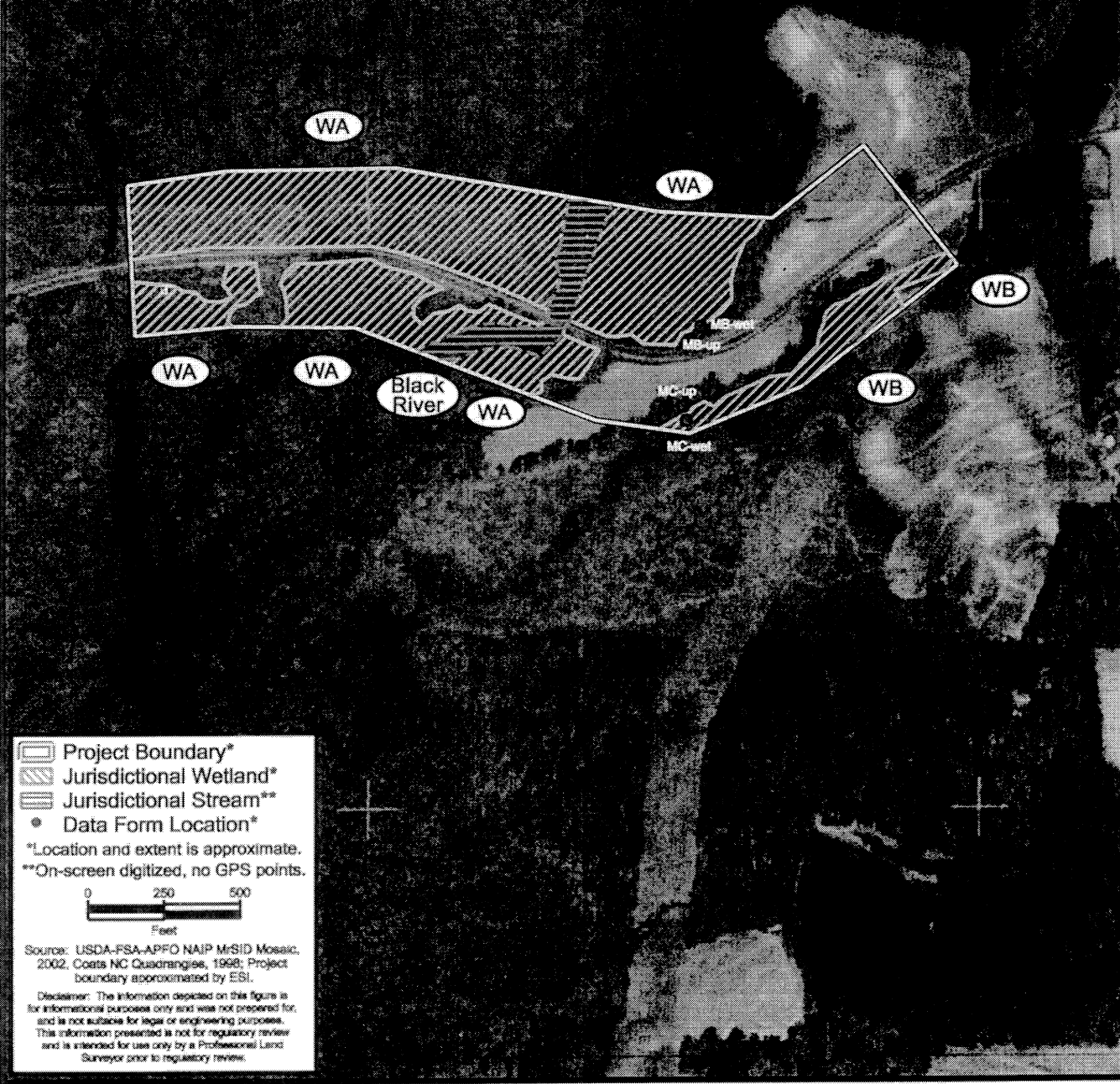
- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant
- Data sheets prepared/submitted by or on behalf of the applicant/consultant
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared 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;
- USDA Natural Resources Conservation Service Soil Survey  
Citation:
  - National wetlands inventory map(s). Cite name:
  - State/Local wetland inventory map(s):
  - FEMA/FIRM maps:
  - 100-year Floodplain Elevation is: (National Geodetic 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): Figure 3 and Tables 5 & 6 from the Natural Resources Technical Report showing jurisdictional areas.


**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)





 Project Boundary\*  
 Jurisdictional Wetland\*  
 Jurisdictional Stream\*\*  
 • Data Form Location\*  
 \*Location and extent is approximate.  
 \*\*On-screen digitized, no GPS points.  
 0 250 500  
 Feet  
 Source: USDA-FSA-APFO NAIP MrSID Mosaic, 2002; Coats NC Quadrangles, 1998; Project boundary approximated by ESI.  
 Disclaimer: The information depicted on this figure is for informational purposes only and was not prepared for, and is not suitable for legal or engineering purposes. This information presented is not for regulatory review and is intended for use only by a Professional Land Surveyor prior to regulatory review.



**ENVIRONMENTAL SERVICES, INC.**  
 524 S. New Hope Road  
 Raleigh, North Carolina 27610  
 (919) 212-1780  
 (919) 212-1707 FAX  
[www.environmentalservicesinc.com](http://www.environmentalservicesinc.com)

Jurisdictional Features Map  
**Bridge No. 120 on SR 1558  
 Over Black River**  
 Harnett County, North Carolina  
 T.I.P. No. B-4543

Project:	WIL06047.00
Date:	Nov 2008
Drwn/Chkd:	EJW/MKS
Figure:	3

**4.4 Invasive Species**

Two species from the NCDOT Invasive Exotic Plant List for North Carolina were found to occur in the study area. The species identified were Chinese privet (Threat level 1) and Japanese honeysuckle (Threat level 2). NCDOT will follow the Department’s BMPs for the management of invasive plant species.

**5.0 JURISDICTIONAL ISSUES**

**5.1 Clean Water Act Waters of the U.S.**

One jurisdictional stream was identified in the study area (Table 5). The location of the stream is depicted on Figure 3. USACE and NCDWQ stream delineation forms are included in Appendix C. The physical characteristics and water quality designations of the jurisdictional stream are detailed in Section 3.2. All jurisdictional streams have been designated as Warm water streams for the purposes of stream mitigation.

**Table 5. Jurisdictional characteristics of water resources in the study area.**

Map ID	Length (ft)	Classification	Compensatory Mitigation Required	River Basin Buffer
Black River	886	Perennial	Yes	NA

Two jurisdictional wetlands were identified within the study area (Figure 3). Wetland classification and quality rating data are presented in Table 6. All wetlands in the study area are within the Cape Fear River Basin (USGS Hydrologic Unit 03030006). USACE wetland delineation forms and NCDWQ wetland rating forms for each site are included in Appendix C. Descriptions of the natural communities at each wetland site are presented in Section 4.1. Wetland site WA comprises the cypress-gum swamp community and lower slope of the adjacent mixed pine/hardwood forest. Wetland site WB is located in portions of the mixed pine/hardwood forest and maintained/disturbed communities.

**Table 6. Jurisdictional characteristics of wetlands in the study area.**

Map ID	Cowardin Classification	Hydrologic Classification	DWQ Wetland Rating	Area (ac.)
WA	PFO6F/C	Riverine	74	18.8
WB	PFO1/2C	Non-riverine	42	2.0

**5.2 Clean Water Act Permits**

The proposed project has been designated as a Categorical Exclusion (CE) for the purposes of NEPA documentation. As a result, a USACE Section 404 Nationwide Permit (NWP) 23 will likely be applicable. Other permits that may apply include a NWP No. 33 for temporary construction activities such as dewatering, work bridges, or temporary causeways that are often used during