



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

March 10, 2011

U. S. Army Corps of Engineers  
Regulatory Field Office  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, NC 27587

ATTN: Mr. Eric Alsmeyer  
NCDOT Coordinator

Dear Sir:

Subject: **Application for Section 404 Nationwide Permits 33, 23, 13, Section 401 Water Quality Certification, and Tar-Pamlico Riparian Buffer Authorization** for the replacement of Bridge No. 36 over Tar River on SR 1003 in Franklin County, State Project No. 8.23611011, Federal Aid Project No. BRSTP-1003(30), Division 5, T.I.P No. B-4514.

Debit \$240.00 from WBS No. 33739.1.1

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge No. 36 over the Tar River on SR 1003 (Sims Bridge Road) in Franklin County.

Please see the enclosed copies of the Pre-Construction Notification (PCN), Stormwater Management Plan, permit drawings, and design plans for the above-referenced project. The Categorical Exclusion (CE) for this project was completed in May 2009. Additional copies are available upon request.

There will be 0.07 acres of riparian wetland impacts from permanent fill and mechanized clearing. Due to the minimal amount of wetland impacts, the fact that the function of the wetland will not be compromised, and the wetland is scrub/shrub and not a mature forest, NCDOT proposes no mitigation. There will also be 92 linear feet of stream impact due to bank stabilization requiring no mitigation.

This project calls for a letting date of January 17, 2012 and a review date of November 29, 2011. However, the let date may advance as additional funds become available.

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

TELEPHONE: 919-707-6000  
FAX: 919-212-5785  
WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

LOCATION:  
Century Center Building B  
1020 Birch Ridge Road  
Raleigh, NC 27610

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 call Greg Price at (919) 707-6148.

Sincerely

A handwritten signature in black ink, appearing to read "E. J. Thorpe". The signature is written in a cursive style with a large initial "E" and "J".

Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA

cc:

NCDOT Permit Application Standard Distribution List



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:	<input checked="" type="checkbox"/> Section 404 Permit	<input type="checkbox"/> Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 23 33 13 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input checked="" type="checkbox"/> 401 Water Quality Certification – Regular <span style="margin-left: 100px;"><input type="checkbox"/> Non-404 Jurisdictional General Permit</span> <input type="checkbox"/> 401 Water Quality Certification – Express <span style="margin-left: 100px;"><input checked="" type="checkbox"/> Riparian Buffer Authorization</span>		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

#### 2. Project Information

2a. Name of project:	Replacement of Bndge 36 on SR 1003 (Sims Bridge Road)
2b. County:	Franklin
2c. Nearest municipality / town:	Louisburg
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P or state project no:	B-4514

#### 3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	<i>not applicable</i>
3c. Responsible Party (for LLC if applicable):	<i>not applicable</i>
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

<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: 36.1422 (DD.DDDDDD) Longitude: - 78.3721 (-DD.DDDDDD)
1c. Property size:	5 acres
<b>2. Surface Waters</b>	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Tar River
2b. Water Quality Classification of nearest receiving water:	WS-IV, NSW
2c. River basin:	Tar-Pamlico
<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: Low density single family, cultivated land, and forest land	
3b. List the total estimated acreage of all existing wetlands on the property: 0.07	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 94	
3d. Explain the purpose of the proposed project: To replace a structurally deficient and functionally obsolete bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing bridge No. 36 with a structure that is approximately 285 feet long. All five bents in the water for existing bridge will be removed while only one bent for new bridge will be placed in the water. The new bridge will include two 12-foot lanes, 4 foot shoulders on the existing alignment with an off-site detour. One temporary causeway will be used to construct the new bridge. 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:	<input type="checkbox"/> Yes <input checked="" 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):	Agency/Consultant Company: Environmental Services Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. Site visit on October 31, 2006 by Eric Alsmeyer of USACE.	
<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	Permanent 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	Mechanized Clearing	Riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.02
Site 3 <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 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>					0.07 Permanent

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 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Causeway	Tar River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	100	94
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Bank stabilization	Tar River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	100	92
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>						94

3i. Comments: Total impact for Temporary Causeway is 0.07 acres. Length of stream impact for causeway encompasses bank stabilization impacts.

**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>				

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 checked="" type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Other: <input type="checkbox"/> Catawba <input type="checkbox"/> Randleman			
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 checked="" type="checkbox"/> P <input type="checkbox"/> T	Bridge Impacts	Tar River	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6,392	3,732
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>				<b>6,392</b>	<b>3,732</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. An off site detour will be used. Design Standards in Sensitive Watersheds will be used. Only one bent will be placed in water for new bridge compared to five bents for existing bridge.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. 2:1 slopes in jurisdictional and buffer areas, and Best Management Practices for Surface Waters. Bridge end drains are located outside of buffer and wetlands. No deck drains are used on the roadway side of the bridge. Preformed Scour Hole at pipe outlet.		
<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 Due to the minimal amount of wetland impacts, the fact that the function of the wetland will not be compromised and the wetland is scrub/shrub and not a mature forest, NCDOT proposes no mitigation.	
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:	0 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):	0 square feet	
4e. Riparian wetland mitigation requested:	0 acres	
4f. Non-riparian wetland mitigation requested:	0 acres	
4g. Coastal (tidal) wetland mitigation requested:	0 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.		

<b>6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ</b>				
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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments: if yes, see attached permit drawings.	<input checked="" 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 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5b. Have all of the 401 Unit submittal requirements been met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<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 checked="" type="checkbox"/> Yes	<input 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? NHP, USFWS website, and the NCDOT mussel surveys conducted in August 2005, August 2008, and March 2011. No dwarf wedgemussel or Tar spiny mussel species were found. The Biological Conclusion remains "May affect-not likely to adversely affect." In a letter dated December 30, 2008, the USFWS concurred on this Biological Conclusion.		
<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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics 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.)	3.10.11 Date

# STORMWATER MANAGEMENT PLAN

Project: 33739 1.1  
TIP: B-4514  
County: Franklin

Hydraulics Project Engineers: Josh Dalton, P.E. (Sungate Design Group);  
Marshal Clawson, P.E. (NCDOT Hydraulics Unit)

## ROADWAY DESCRIPTION

The project involves the replacement of Bridge No. 36 on SR 1003 (Sims Bridge Road) over the Tar River. The overall length of the project with approach work is approximately 830 feet. The proposed bridge will consist of 1 @ 85' and 2 @ 100' box beams. The project drainage systems consist of the bridge and associated bridge end drains. No side ditches are proposed.

## ENVIRONMENTAL DESCRIPTION

The project is located in the Tar-Pamlico River Basin. Buffer rules are in effect for this river basin. The project will have one (1) crossing of a jurisdictional stream that will impact Tar River. The Tar River at this location is classified as WS-IV and NSW. The Tar River is not listed on NCDWQ's 303d list. Wetlands will be impacted by the proposed project.

## BEST MANAGEMENT PRACTICES AND MAJOR STRUCTURES

The primary goal of Best Management Practices (BMPs) is to prevent degradation of the states surface waters as a result of the location, construction and operation of the highway system. BMPs are activities, practices and procedures taken to prevent or reduce stormwater pollution. The BMP measures used on this project to reduce stormwater impacts are:

- Preformed Scour Hole at pipe outlet.

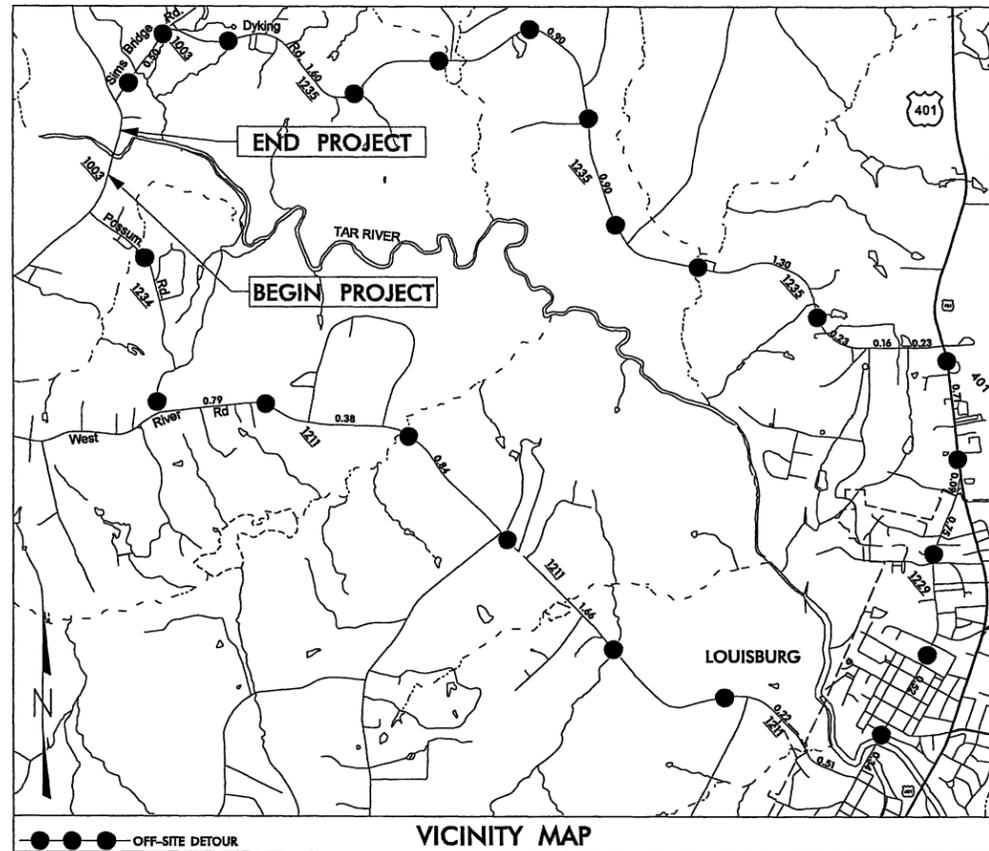
At all the sites, stormwater will be treated and non-erosive velocities will be achieved where practicable.

## MINIMIZATION OF IMPACTS

Several design elements provided for minimization of wetland impacts. Bridge end drains are located outside of buffers and wetland areas. Also, fill slopes were limited to 2:1 (H:V) in wetland areas to reduce impacts.

09/08/09

TIP PROJECT: B-4514



See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**FRANKLIN COUNTY**

LOCATION: BRIDGE NO. 36 OVER TAR RIVER  
ON SR 1003 (SIMS BRIDGE RD.)

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

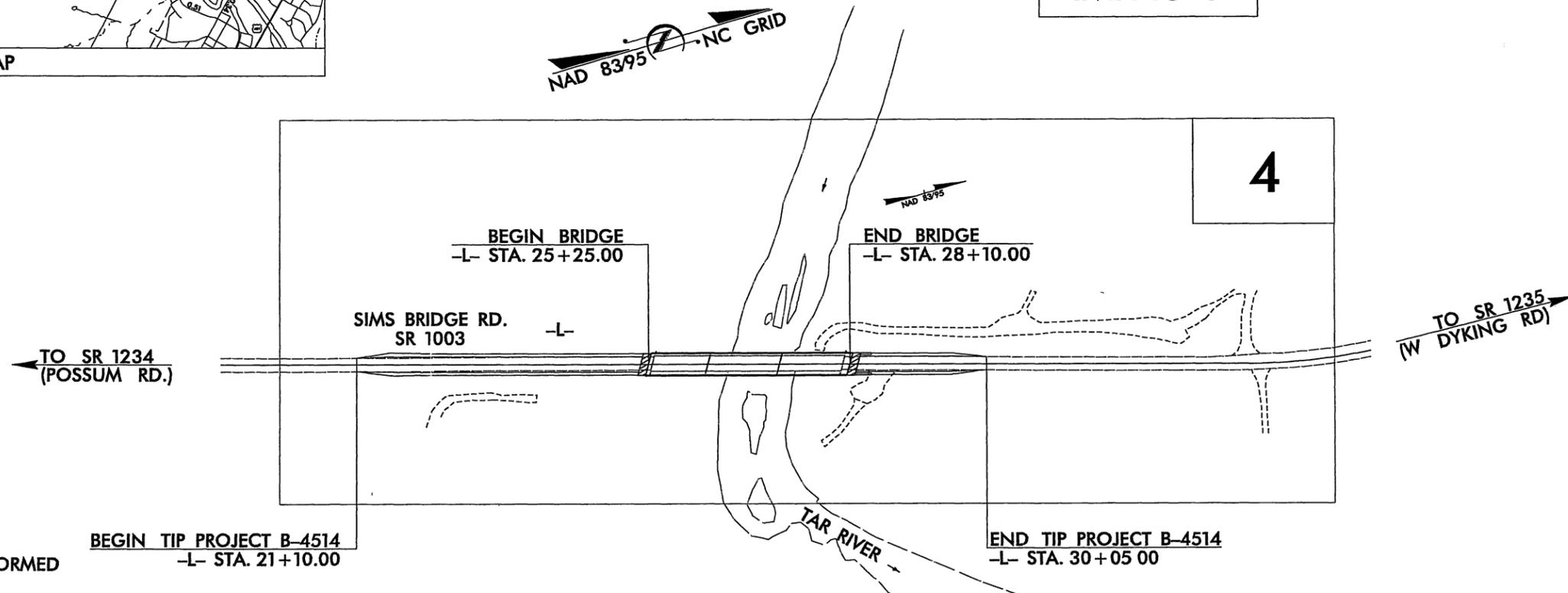
RIGHT-OF-WAY PLANS

BUFFER  
IMPACTS

STATE	STATE PROJECT REFERENCE NO	SHEET NO.	TOTAL SHEETS
N.C.	B-4514	1	
STATE PROJ NO	F.A. PROJ NO	DESCRIPTION	
33739.1.1	BRSTP-1003(30)	P.E.	
33739.2.1	BRSTP-1003(30)	R/W & UTILITIES	

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

Buffer Drawing  
Sheet 1 of 5

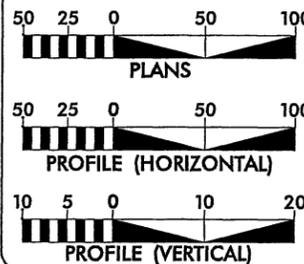


THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

CONTRACT:

GRAPHIC SCALES



DESIGN DATA

ADT 2012 = 2040  
ADT 2035 = 4200  
DHV = 10%  
D = 70%  
T = 5% TTST = 3%  
DUAL = 2%  
V = 60 MPH  
CLASS = RURAL MINOR COLLECTOR

PROJECT LENGTH

LENGTH ROADWAY PROJECT B-4514 = 0.115 mi  
LENGTH STRUCTURE PROJECT B-4514 = 0.054 mi  
TOTAL LENGTH STATE PROJECT B-4514 = 0.169 mi



2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
NOVEMBER 19, 2009

LETTING DATE:  
JANUARY 17, 2012

Prepared in the Office of:

STEWART ENGINEERING

For  
NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

DREW BAIRD, PE  
PROJECT ENGINEER

JONATHAN HEFNER, PE  
PROJECT DESIGN ENGINEER

DOUG TAYLOR, PE  
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_ PE

ROADWAY DESIGN  
ENGINEER

SIGNATURE: \_\_\_\_\_ PE

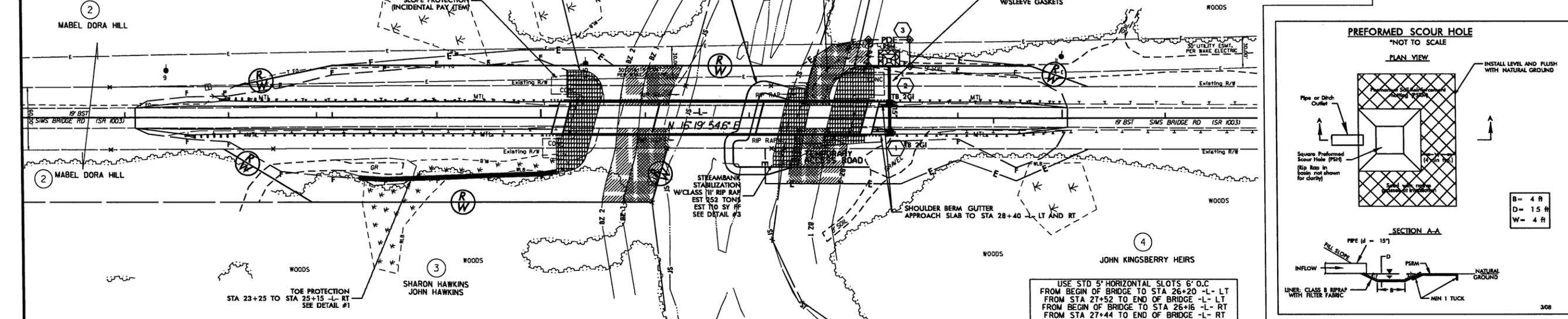
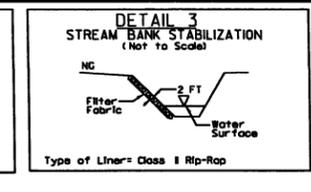
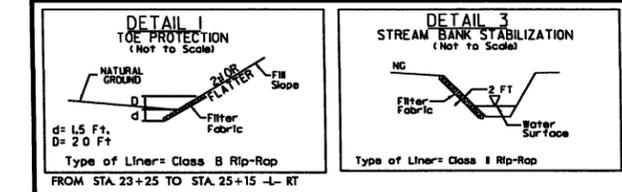
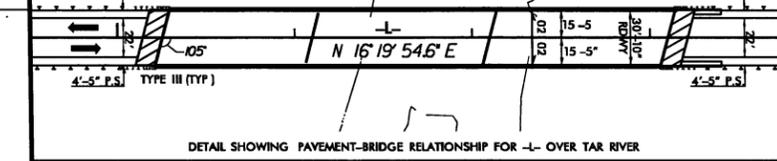
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA



ART McMILLAN, PE  
STATE HIGHWAY DESIGN ENGINEER

\$\$\$SYSTIME\$\$\$  
\$\$\$DGN\$\$\$  
\$\$\$SERNAME\$\$\$

8/17/99



PROJECT REFERENCE NO. B-4514 SHEET NO. 4

RW SHEET NO. ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

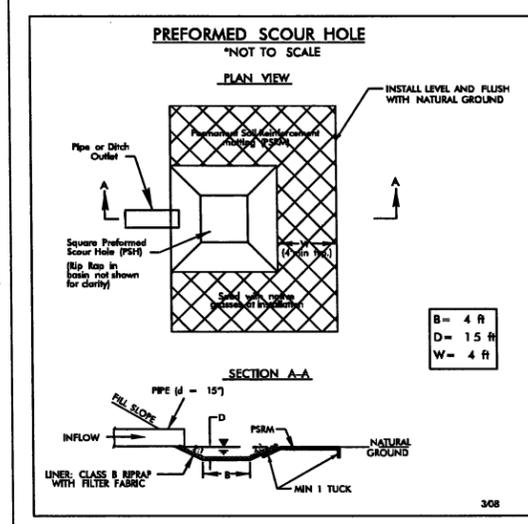
**Buffer Drawing Sheet 2 of 5**

PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION

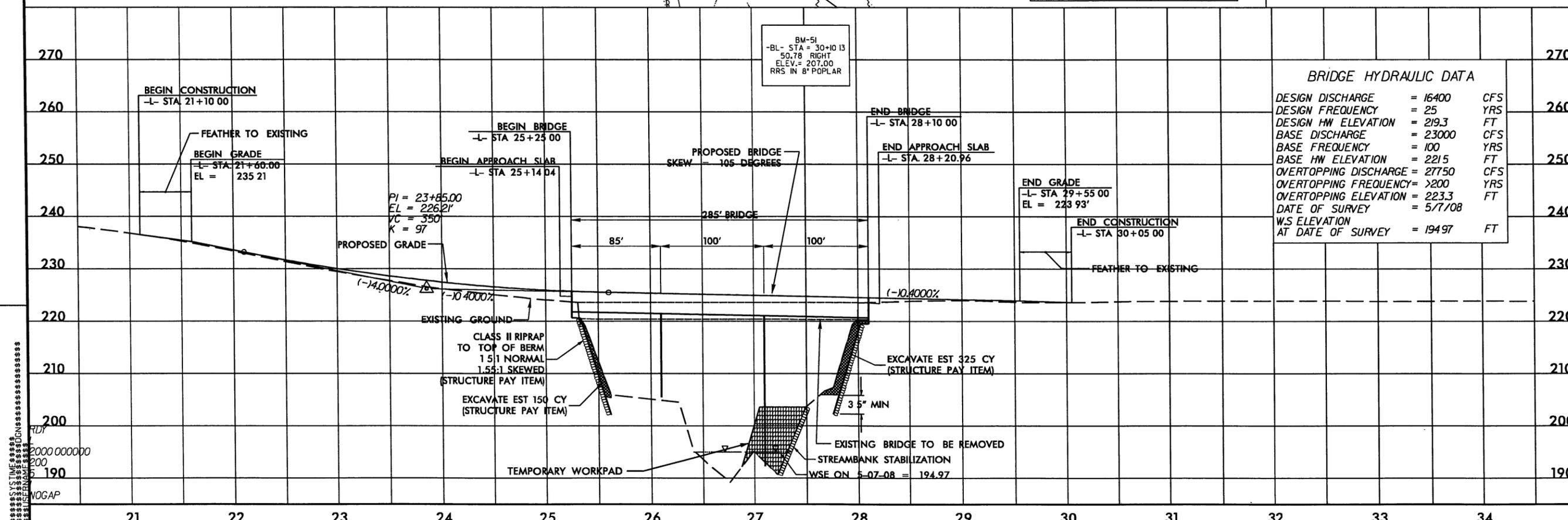
421 Fayetteville Street Mail Suite 400 Raleigh, NC 27601 T 919 380 8750 F 919 380 8752 www.stewart-eng.com

**STEWART**

JEFFREY V HOFFMANN ANGELA B HOFFMANN



USE STD 5\"/>



REVISIONS

DATE: \_\_\_\_\_ - PARCELS 2 AND 5; PUE REMOVED

SYSTEMS DESIGN

2000 000000

200

VOGAP

# PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
2	MABEL DORA HILL	615 SIMS BRIDGE ROAD FRANKLINTON, NC 27525
4	JOHN KINGSBERRY HEIRS	375 W 127TH ST APT 53 NEW YORK, NY 10027
5	JEFFREY V. AND ANGELA B. HOFFMANN	955 SIMS BRIDGE ROAD KITTRELL, NC 27544

BUFFER  
IMPACTS

**NCDOT**  
DIVISION OF HIGHWAYS  
FRANKLIN COUNTY  
PROJECT: 33739.1.1 (B-4514)  
BRIDGE NO. 36 OVER TAR RIVER  
ON SR 1003 (SIMS BRIDGE RD.)  
BETWEEN SR 1234 (POSSUM RD.)  
AND SR 1235 (W DYKING RD.)  
SHEET 3 OF 5 1/12/10

## BUFFER IMPACTS SUMMARY

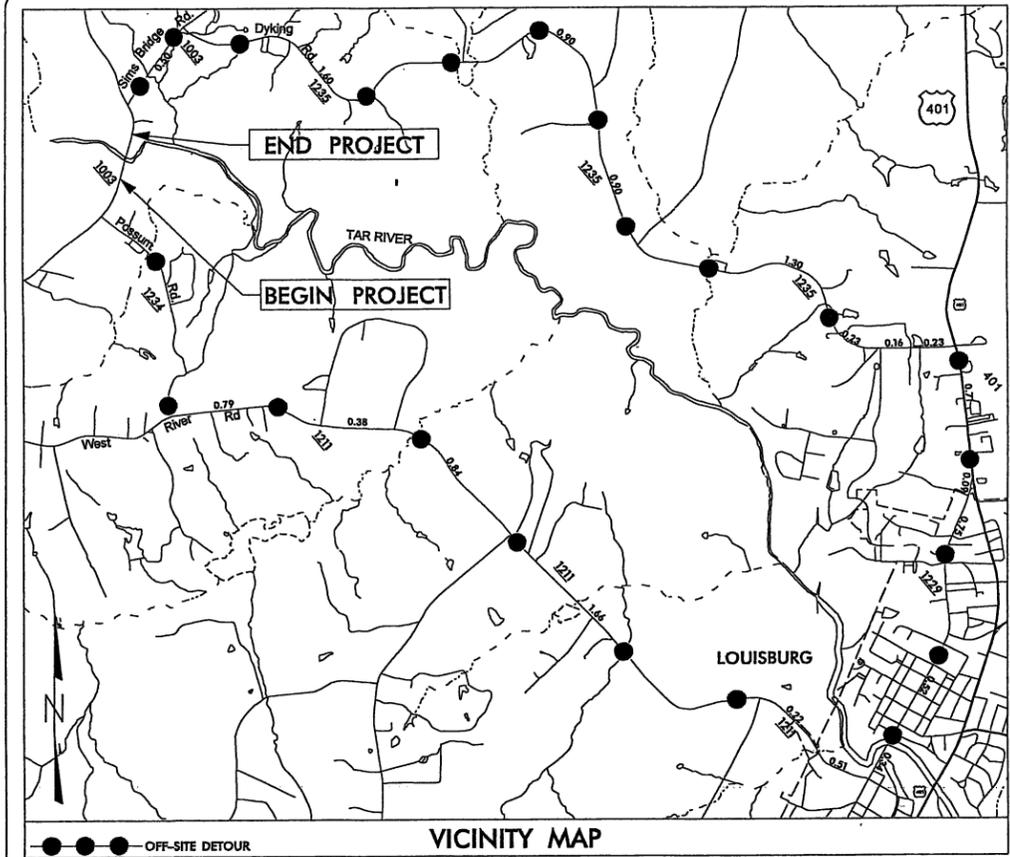
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT						BUFFER REPLACEMENT				
			TYPE		ALLOWABLE		MITIGABLE		ZONE 1 (ft²)	ZONE 2 (ft²)			
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)			ZONE 1 (ft²)	ZONE 2 (ft²)	
	1@85', 2@100' BRIDGE	25+25 to 28+10 -L-		X		6392	3732	10124					
<b>TOTAL:</b>						6392	3732	10124	00	00	00		

N C DEPT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
  
 FRANKLIN COUNTY  
 PROJECT: 33739 1 1 (B-4514)  
  
 1/13/2010  
 SHEET **4** OF **5**



09/08/99

TIP PROJECT: B-4514



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**FRANKLIN COUNTY**

LOCATION: BRIDGE NO. 36 OVER TAR RIVER  
ON SR 1003 (SIMS BRIDGE RD.)

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

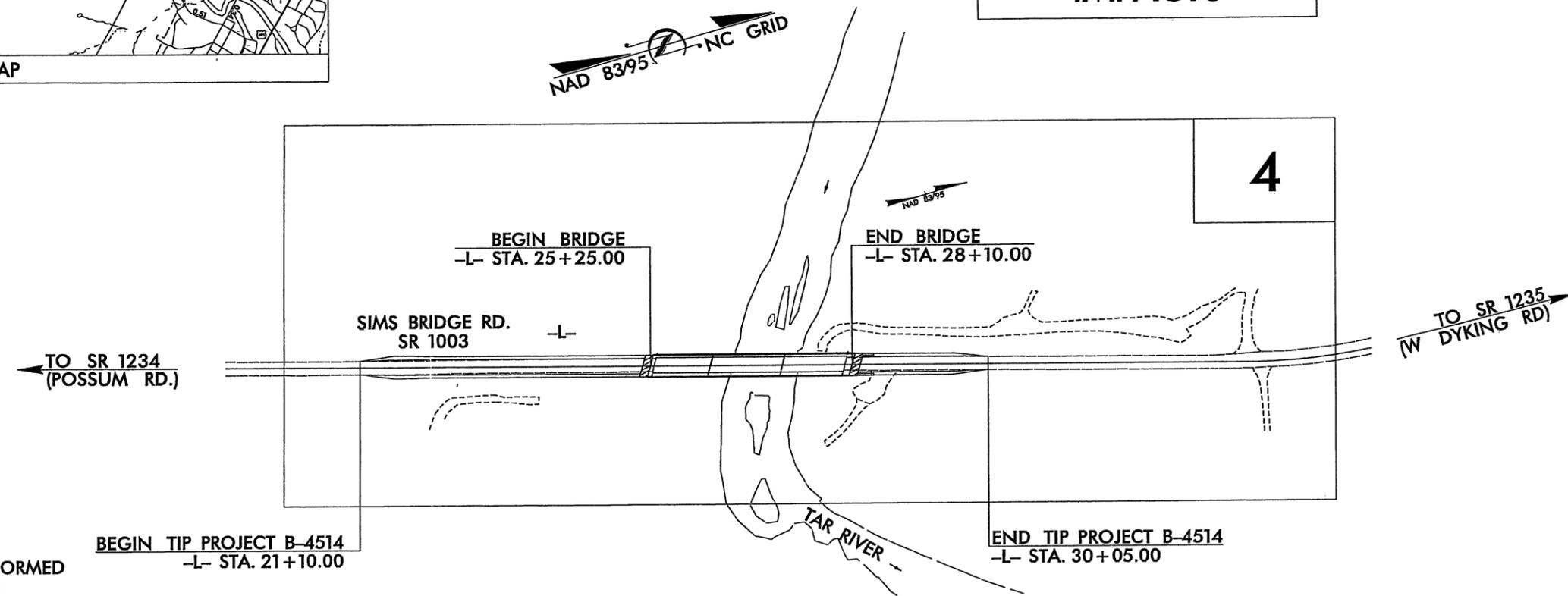
RIGHT-OF-WAY PLANS

WETLAND/STREAM  
IMPACTS

STATE	STATE PROJECT REFERENCE NO	SHEET NO.	TOTAL SHEETS
N.C.	B-4514	1	
STATE PROJ NO.	F.A. PROJ NO.	DESCRIPTION	
33739.1.1	BRSTP-1003(30)	P.E.	
33739.2.1	BRSTP-1003(30)	R/W & UTILITIES	

Permit Drawing  
Sheet 1 of 7

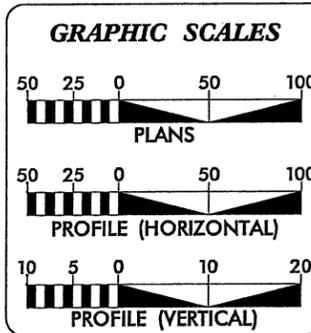
PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

CONTRACT:



DESIGN DATA

ADT 2012 = 2040
ADT 2035 = 4200
DHV = 10%
D = 70%
T = 5% TTST = 3%
DUAL = 2%
V = 60 MPH
CLASS = RURAL MINOR COLLECTOR

PROJECT LENGTH

LENGTH ROADWAY PROJECT B-4514 = 0.115 mi
LENGTH STRUCTURE PROJECT B-4514 = 0.054 mi
TOTAL LENGTH STATE PROJECT B-4514 = 0.169 mi

411 Fayetteville Street, Suite 400  
Raleigh, NC 27601  
T 919.382.8750  
F 919.382.8752  
www.stewart-eng.com

**STEWART**

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
NOVEMBER 19, 2009

LETTING DATE:  
JANUARY 17, 2012

Prepared in the Office of:  
STEWART ENGINEERING

For  
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DEPARTMENT OF TRANSPORTATION

DREW BAIRD, PE  
PROJECT ENGINEER

JONATHAN HEFNER, PE  
PROJECT DESIGN ENGINEER

DOUG TAYLOR, PE  
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_ PE

ROADWAY DESIGN ENGINEER

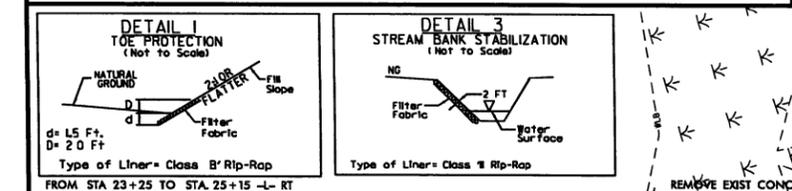
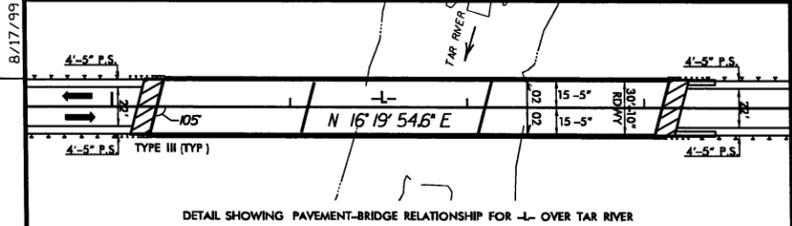
SIGNATURE: \_\_\_\_\_ PE

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

ART McMILLAN, PE  
STATE HIGHWAY DESIGN ENGINEER

\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DGN\$\$\$\$\$  
\$\$\$\$\$USERNAME\$\$\$\$\$

8/17/99



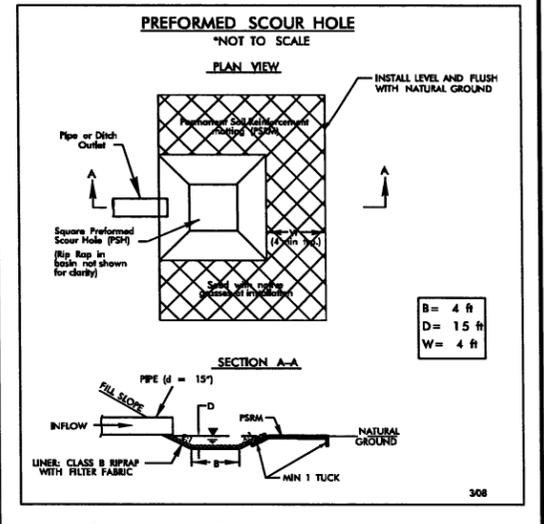
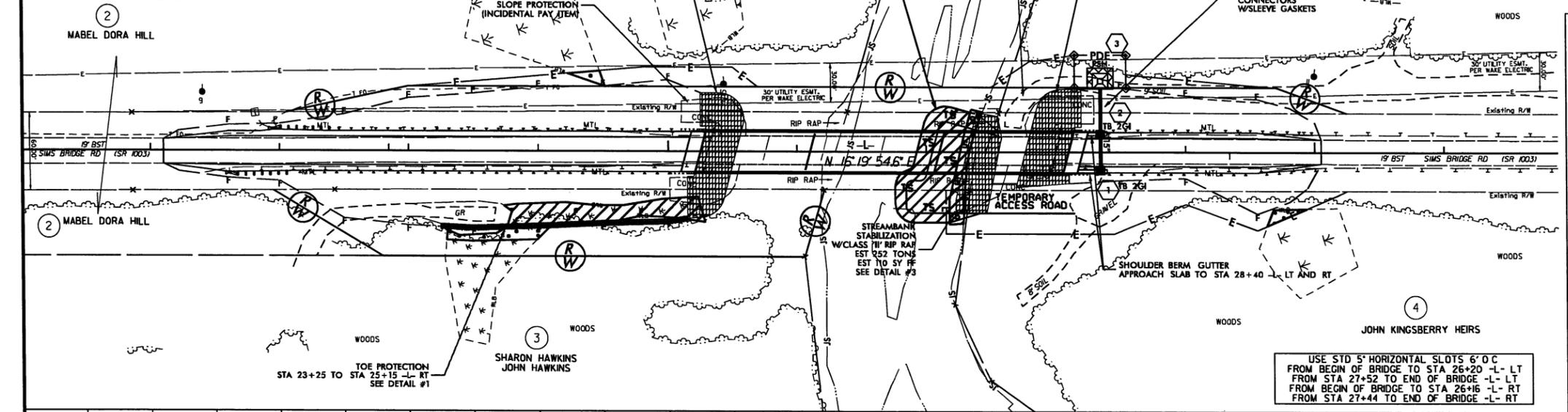
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING



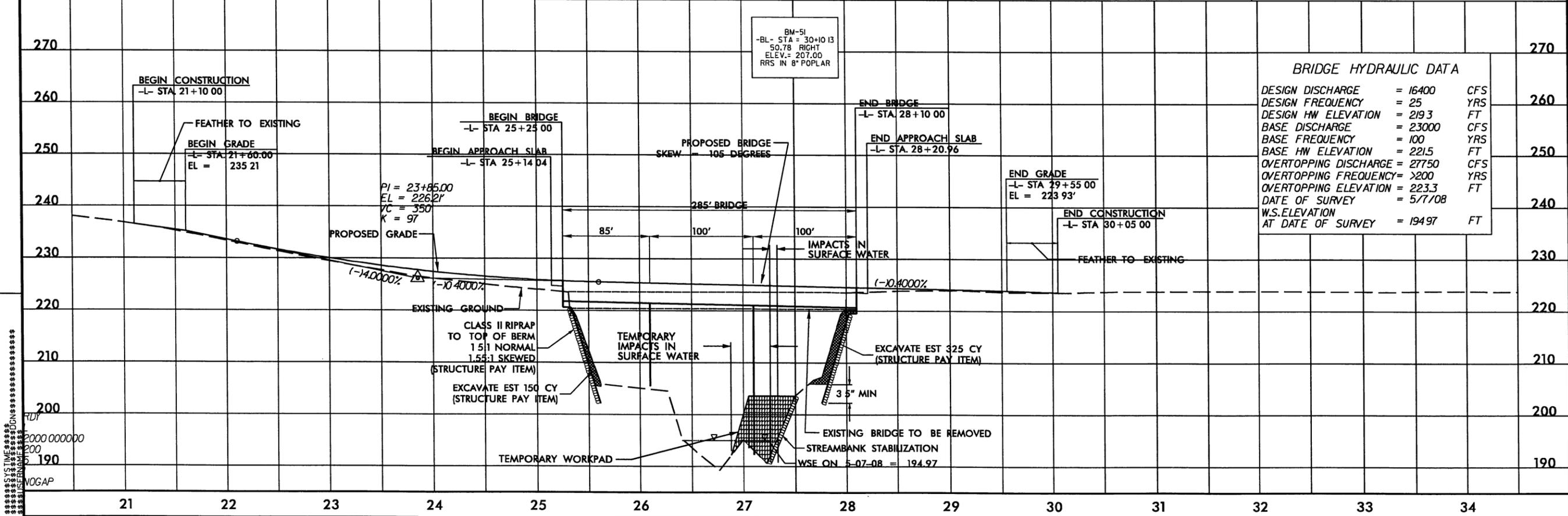
PROJECT REFERENCE NO	SHEET NO.
B-4514	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Permit Drawing	Sheet 2 of 7
PRELIMINARY PLANS	
DO NOT USE FOR CONSTRUCTION	

421 Fayetteville Street Mall  
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Raleigh, NC 27601  
T 919 380 8750  
F 919 380 8752  
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JEFFREY V HOFFMANN  
ANGELA B HOFFMANN



USE STD 5\"/>



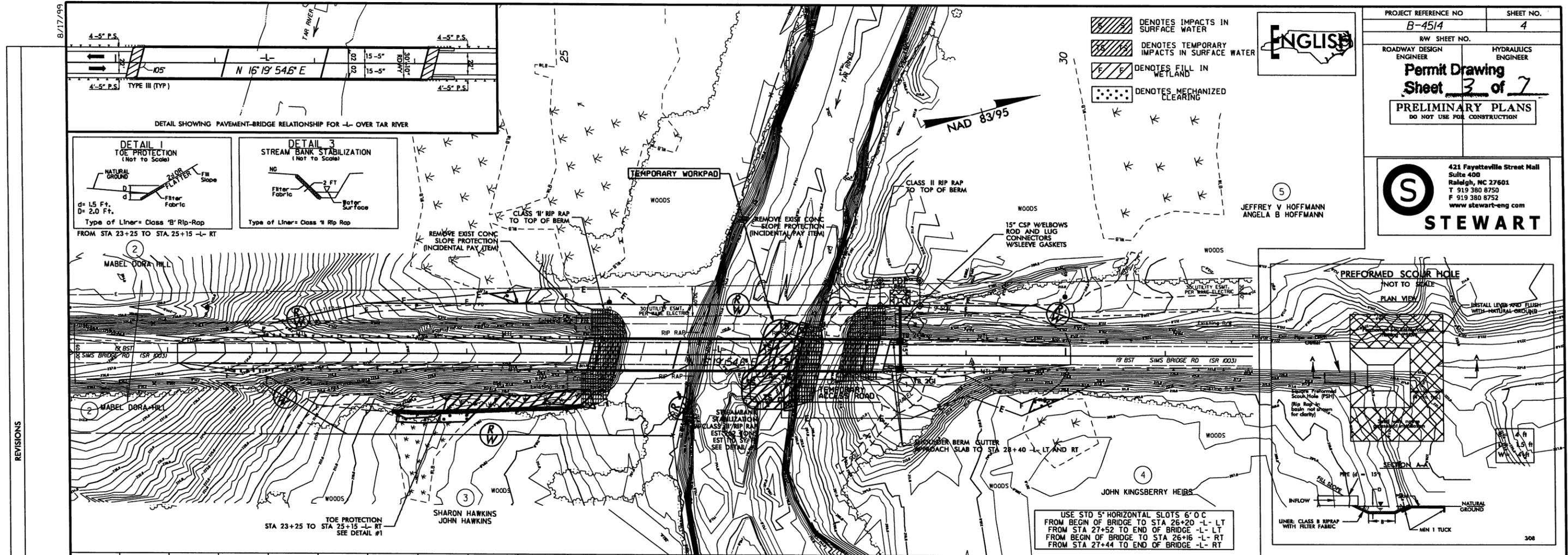
BRIDGE HYDRAULIC DATA	
DESIGN DISCHARGE	= 16400 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 219.3 FT
BASE DISCHARGE	= 23000 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 221.5 FT
OVERTOPPING DISCHARGE	= 27750 CFS
OVERTOPPING FREQUENCY	= >200 YRS
OVERTOPPING ELEVATION	= 223.3 FT
DATE OF SURVEY	= 5/7/08
W.S. ELEVATION AT DATE OF SURVEY	= 194.97 FT

REVISIONS: - PARCELS 2 AND 5; PUE REMOVED  
 DATE:

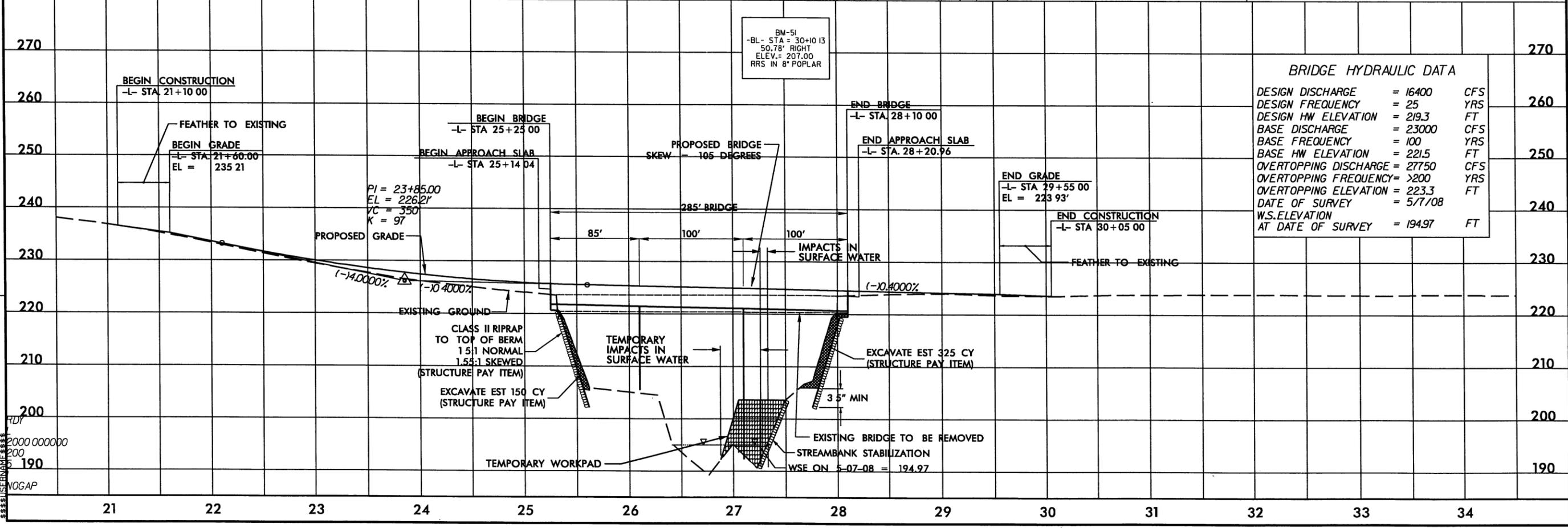
SYSTEM TIME: 08/17/99 10:00:00  
 USER: JHOGAP

**STEWART**  
 421 Fayetteville Street Mall  
 Suite 400  
 Raleigh, NC 27601  
 T 919 380 8750  
 F 919 380 8752  
 www.stewart-eng.com

- DENOTES IMPACTS IN SURFACE WATER
- DENOTES MECHANIZED CLEARING
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND



REVISIONS  
 DATE: \_\_\_\_\_  
 - PARCELS 2 AND 5; PUE REMOVED



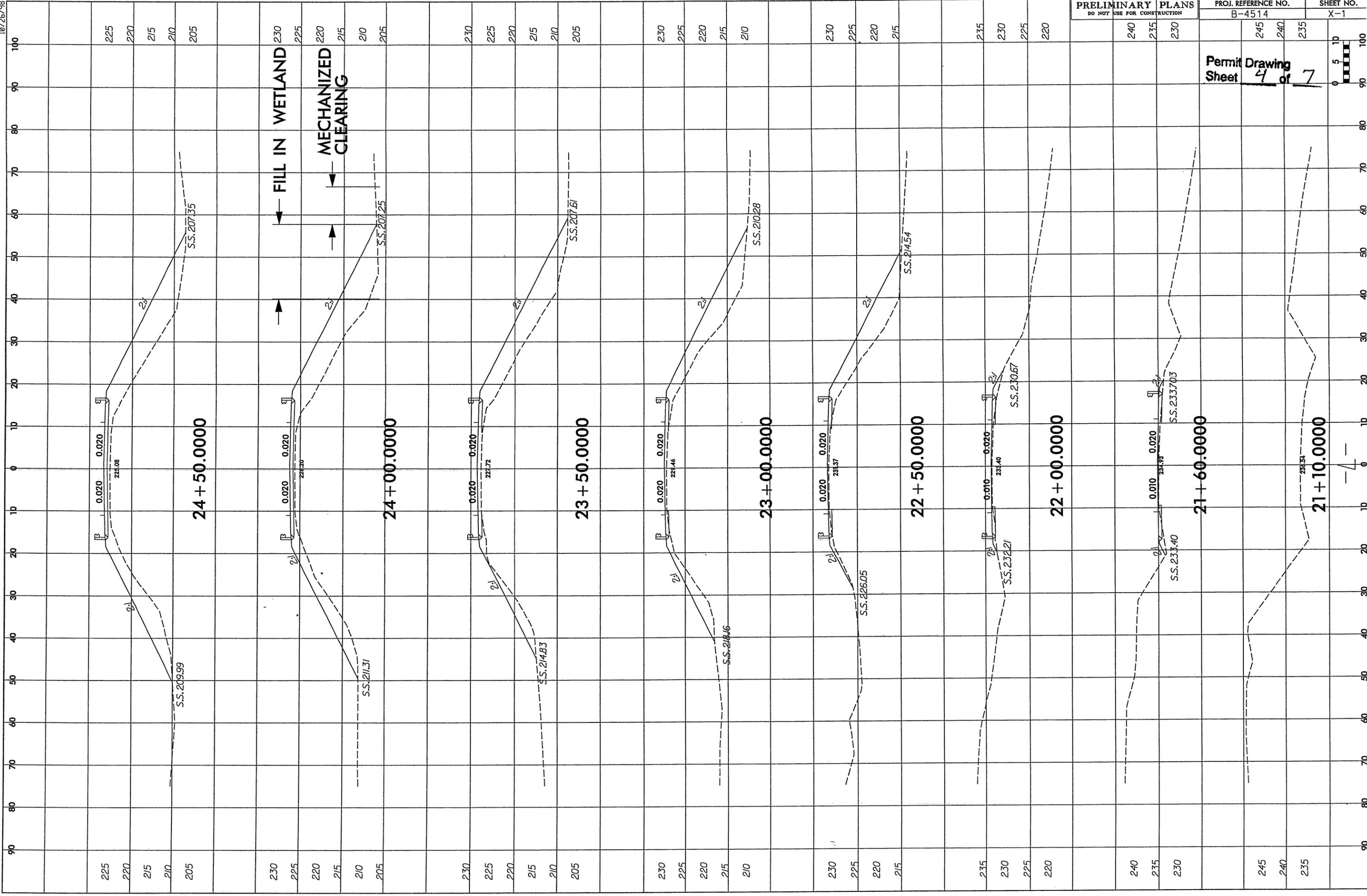
SYSTEMS  
DO NOT  
USE

10/26/98

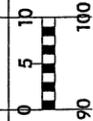
PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

PROJ. REFERENCE NO.  
B-4514

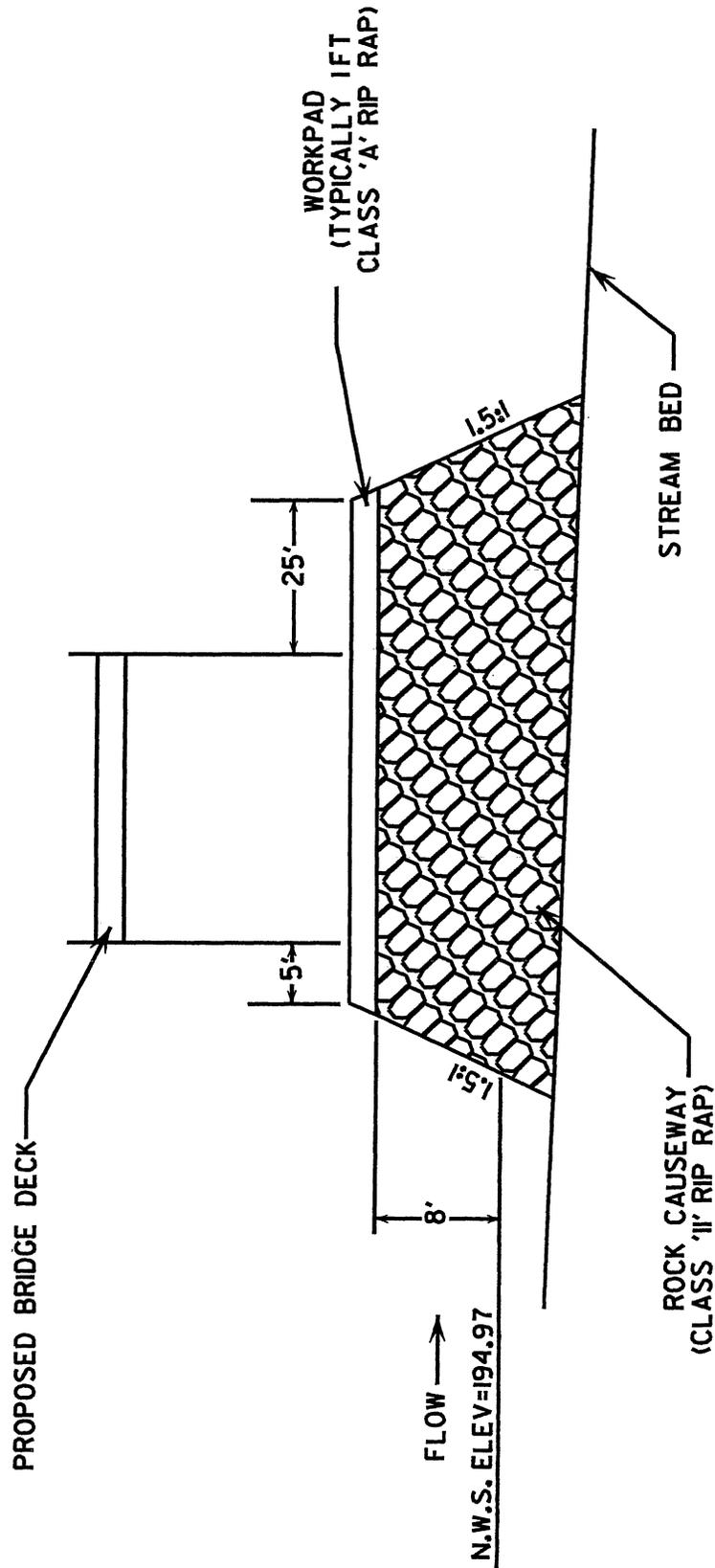
SHEET NO.  
X-1



Permit Drawing  
Sheet 4 of 7



# WORKPAD DETAIL (NOT TO SCALE)



## QUANTITIES OF ESTIMATES

VOLUME OF CLASS II RIP RAP= 1700 yds<sup>3</sup>  
 AREA OF CLASS II RIP RAP= 0.127 ac  
 Estimate 2500 Tons Class '11' Rip Rap  
 Estimate 195 Tons Class 'A' Rip Rap

N.C. DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 FRANKLIN COUNTY

PROJECT: 33739.1.1 (B-4514)  
 BRIDGE NO. 36  
 OVER TAR RIVER  
 ON SR 1003 (SIMS BRIDGE RD)

SHEET 5 OF 7  
 1/12/10

**PROPERTY OWNERS**  
**NAMES AND ADDRESSES**

<b>PARCEL NO.</b>	<b>NAMES</b>	<b>ADDRESSES</b>
2	MABEL DORA HILL	615 SIMS BRIDGE ROAD FRANKLINTON, NC 27525

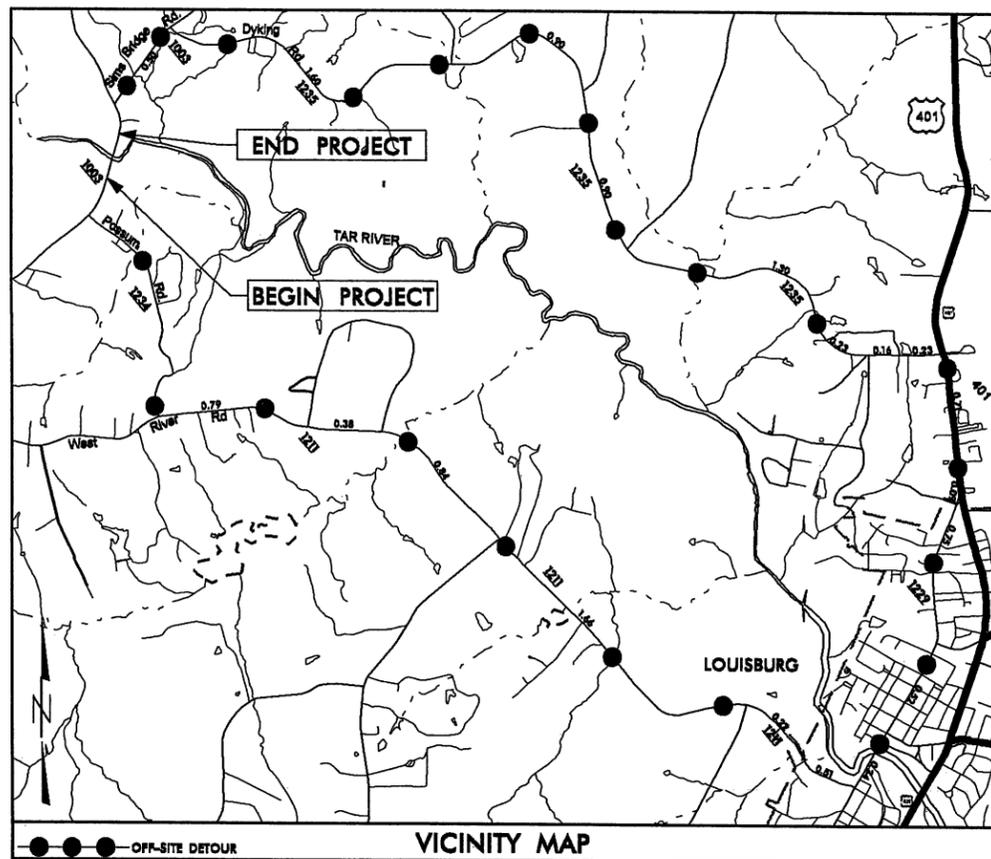
**WETLAND/ STREAM  
IMPACTS**

**NCDOT**  
**DIVISION OF HIGHWAYS**  
**FRANKLIN COUNTY**  
**PROJECT: 33739.L1 (B-4514)**  
**BRIDGE NO. 36 OVER TAR RIVER**  
**ON SR 1003 (SIMS BRIDGE RD.)**  
**BETWEEN SR 1234 (POSSUM RD.)**  
**AND SR 1235 (W DYKING RD)**  
**SHEET 6 OF 7 1/12/10**



09/08/99

TIP PROJECT: B-4514



See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**FRANKLIN COUNTY**

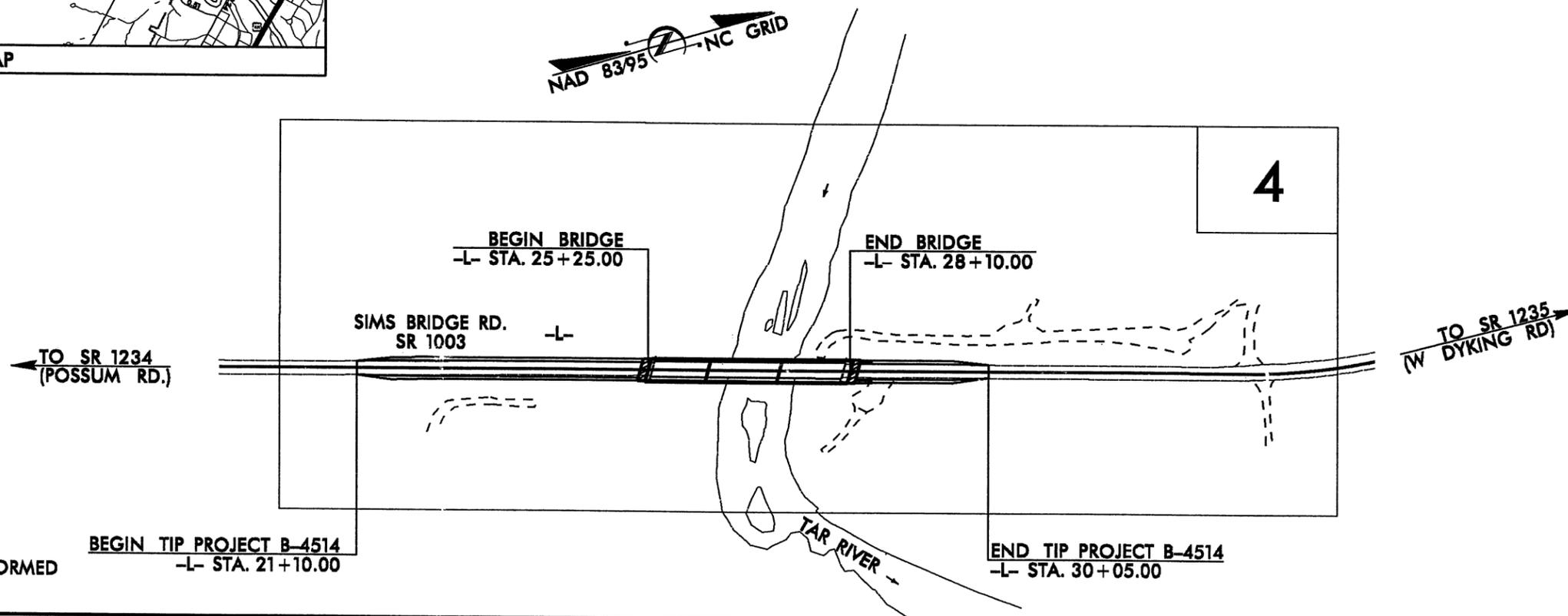
LOCATION: BRIDGE NO. 36 OVER TAR RIVER  
ON SR 1003 (SIMS BRIDGE RD.)

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4514	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33739.1.1	BRSTP-1003(30)	P.E.	
33739.2.1	BRSTP-1003(30)	RAW & UTILITIES	

PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION

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

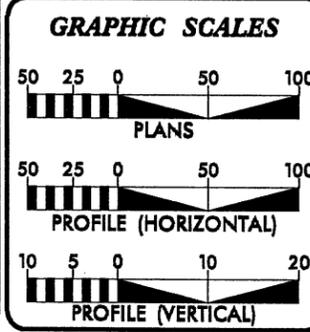
90% PLANS



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

CONTRACT:



**DESIGN DATA**

ADT 2012 = 2040
ADT 2035 = 4200
DHV = 10%
D = 70%
T = 5% TTST = 3%
DUAL = 2%
V = 60 MPH
CLASS = RURAL MINOR COLLECTOR

**PROJECT LENGTH**

LENGTH ROADWAY PROJECT B-4514 = 0.116 mi.
LENGTH STRUCTURE PROJECT B-4514 = 0.054 mi.
TOTAL LENGTH STATE PROJECT B-4514 = 0.170 mi.

**STEWART ENGINEERING**  
421 Southville Street  
Raleigh, NC 27603  
P 919.867.8770  
www.stewart-engineering.com

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
NOVEMBER 19, 2009

LETTING DATE:  
JANUARY 17, 2012

Prepared in the Office of  
**STEWART ENGINEERING**

For  
NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

**DAVID RUGGLES, PE**  
PROJECT ENGINEER

**JONATHAN HEFNER, PE**  
PROJECT DESIGN ENGINEER

**DOUG TAYLOR, PE**  
NCDOT CONTACT

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ PE

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ PE

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

ART McMILLAN, PE  
STATE HIGHWAY DESIGN ENGINEER

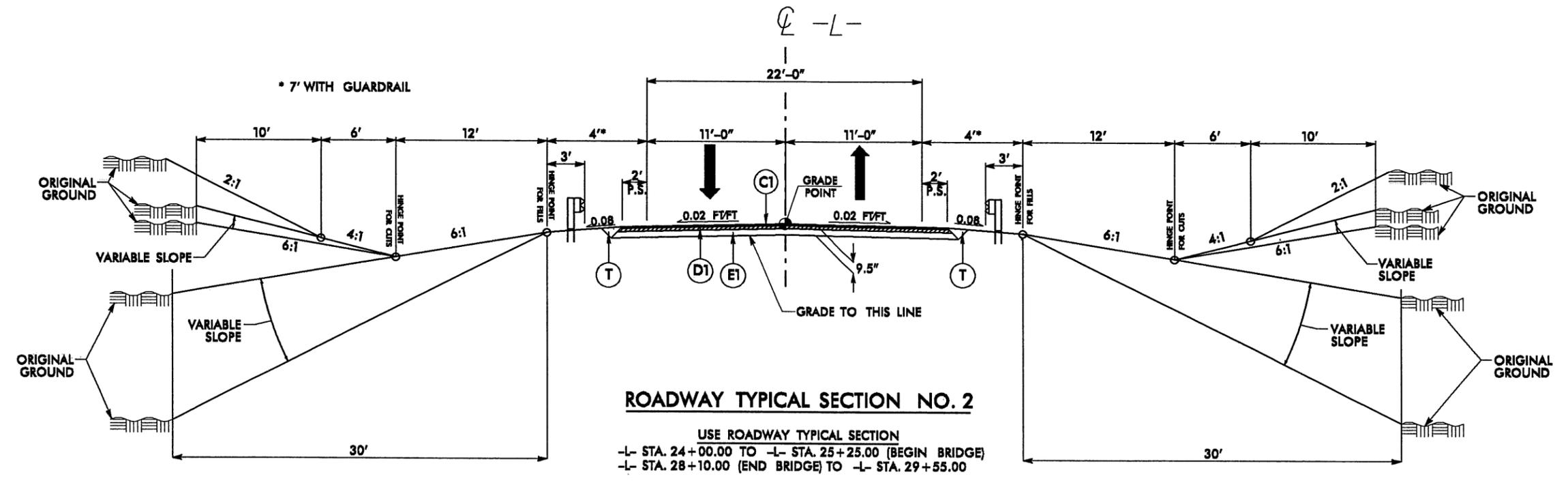
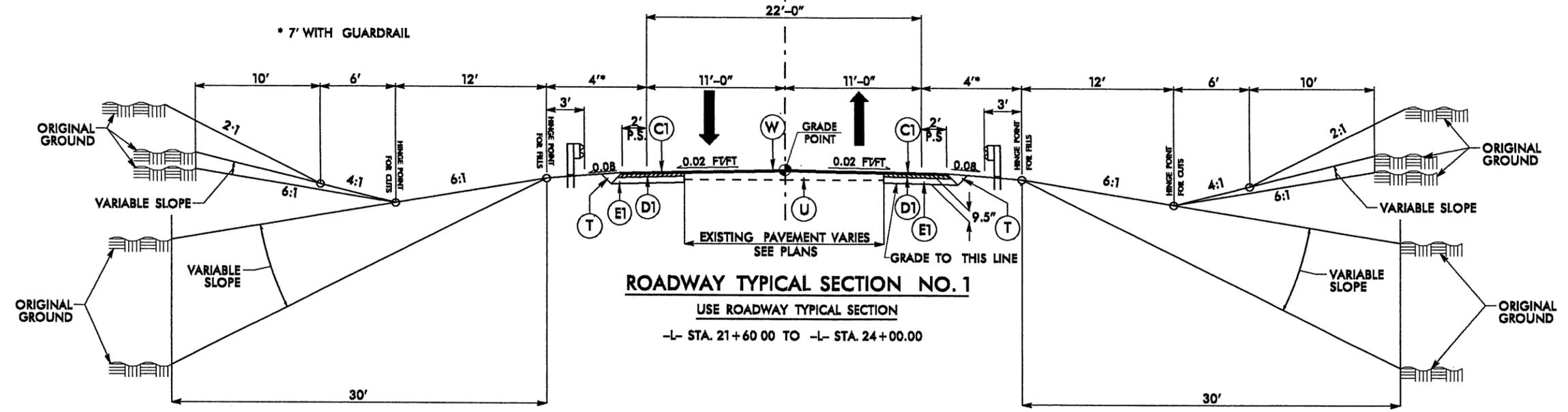
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R:\Roadway\pco\B4514\_rdy\_tsh.dgn  
\$\$\$\$\$USERNAME\$\$\$\$\$

NOTE: TRANSITION FROM EXISTING TO TYPICAL SECTION NO 1 -L- STA 21+10 00 TO -L- STA. 21+60 00  
 TRANSITION FROM TYPICAL SECTION NO 2 TO EXISTING -L- STA 29+55 00 TO -L- STA 30+05 00

PROJECT REFERENCE NO. B-4514	SHEET NO. 2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

421 Fayetteville Street Mall  
 Suite 400  
 Raleigh, NC 27601  
 T 919.380.8750  
 F 919.380.8752  
 www.stewart-eng.com

**STEWART**



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

PAVEMENT SCHEDULE			
FINAL PAVEMENT DESIGN			
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE SB 5B, AT AN AVERAGE RATE OF 188 LBS. PER SQ. YD. IN EACH OF TWO LAYERS	E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25 0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SB 5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 1 1/2" IN DEPTH	T	EARTH MATERIAL.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19 0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19 0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH.	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

