



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 15, 2010

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 Permit 33, 23, Section 401 Water Quality Certification, and Neuse Riparian Buffer Authorization** for the replacement of Bridge No. 19 over the Neuse River on SR 2000 (Falls of Neuse Road), State Project No. 8.2409971, Federal Aid Project No. BRSTP-2000(4), Division 5, T.I.P No. B-4660.

Debit \$240.00 from WBS No. 33822.1.1

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge No. 19 over the Neuse River on SR 2000 (Falls of Neuse Road).

Please see the enclosed copies of the Pre-Construction Notification (PCN), Stormwater Management Plan, Preliminary Jurisdictional Determination Form, permit drawings, and design plans for the above-referenced project. The Programmatic Categorical Exclusion (PCE) for this was completed project in August 2008. Additional copies are available upon request.

There will be 0.03 acres of 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.

This project calls for a letting date of February 15, 2011 and a review date of January 4, 2011. However, the let date may advance as additional funds become available.

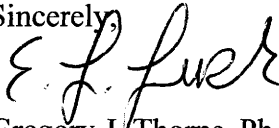
MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
NATURAL ENVIRONMENT UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-431-2000
FAX: 919-431-2001
WEBSITE: WWW.NCDOT.ORG

LOCATION:
4701 Atlantic Ave.,
Suite 116
Raleigh, NC 27604

A copy of this permit application will be posted on the NCDOT Website at:
<http://www.ncdot.org/doh/preconstruct/pe/>. If you have any questions or need additional information, please call Sara Easterly at (919) 431-1605.

Sincerely,


for Gregory J. Thorpe, Ph.D.

Environmental Management Director, PDEA

W/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)
Mr. J. Wally Bowman, P.E., Division Engineer
Mr. Chris Murray, DEO

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC
Mr. Tracy Walter, P.E., PDEA Project Planning Engineer



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 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 <input type="checkbox"/> Non-404 Jurisdictional General Permit <input type="checkbox"/> 401 Water Quality Certification – Express <input checked="" type="checkbox"/> Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <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:	Replacment of Bridge 19 over the Neus River on SR 2000 (Falls of Neuse Road)
2b. County:	Wake
2c. Nearest municipality / town:	Raleigh
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P. or state project no.:	B-4660

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) 431-1605
3g. Fax no.:	(919) 431-2002
3h. Email address:	seeasterly@ncdot.gov

4. Applicant Information (if different from owner)	
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:	
5. Agent/Consultant Information (if applicable)	
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. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 35.9406 (DD.DDDDDD) Longitude: - 78.5799 (-DD.DDDDDD)
1c. Property size:	5 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Neuse River
2b. Water Quality Classification of nearest receiving water:	C, NSW
2c. River basin:	Neuse
3. Project Description	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: Low density single family, cultivated land, and forest land	
3b. List the total estimated acreage of all existing wetlands on the property: 0.8	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 639	
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. 19 with a structure that is approximately 425-feet long. The new bridge will include two 12-foot lanes, 4 foot shoulders and a 10-foot multi-use bike and pedestrian lane on the existing alignment with an off-site detour. NCDOT will also be constricting a greenway path that will pass under the bridge. Two temporary causeways will be used to construct the new bridge. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
4. Jurisdictional Determinations	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments:	<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	
5. Project History	
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.	
6. Future Project Plans	
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	0.01
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	
2g. Total wetland impacts					0.03 Permanent 0 Temporary

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 #1	Neuse River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	100	100
Site 2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Causeway #2	Neuse River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	100	102
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		
3h. Total stream and tributary impacts						0 Perm 202 Temp

3i. Comments: Total impact for Causeway #1 are 0.25 acres the total impact for Causeway #2 are 0.32 acres. Only one

causeway at at time will be installed.

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				
4f. Total open water impacts				0 Permanent 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								
5f. Total								

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 checked="" 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 checked="" type="checkbox"/> P <input type="checkbox"/> T	Bridge Impacts	Neuse River	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1,019	386
B2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Road Crossing	Neuse River	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	420	0
B3 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Greenway	Neuse River	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5,679	4,761
6h. Total buffer impacts				7,118	5,147
6i. Comments:					

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridge will span the river; an off site detour will be used. Design Standards for Sensitive Waters will be used		
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, rip rap dissipater at pipe outlets. Bridge end drains are located outside of buffer and wetlands. No deck drains are used on the roadway side of the bridge. Also, a boardwalk spans the natural outlet ditch under MUP 2 rather than use of a pipe culvert.		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
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	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	<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:		
5. Complete if Using a Permittee Responsible Mitigation Plan		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ

6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation? Yes No

6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.

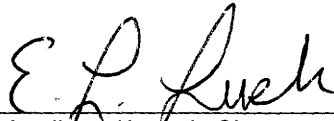
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
6f. Total buffer mitigation required:				

6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).

6h. Comments:

E. Stormwater Management and Diffuse Flow Plan (required by DWQ)	
1. Diffuse Flow Plan	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<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
2. Stormwater Management Plan	
2a. What is the overall percent imperviousness of this project?	N/A
2b. Does this project require a Stormwater Management Plan?	<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
3. Certified Local Government Stormwater Review	
3a. In which local government's jurisdiction is this project?	not applicable
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	<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
4. DWQ Stormwater Program Review	
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
5. DWQ 401 Unit Stormwater Review	
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

F. Supplementary Information	
1. Environmental Documentation (DWQ Requirement)	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<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
2. Violations (DWQ Requirement)	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<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):	
3. Cumulative Impacts (DWQ Requirement)	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<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.	
4. Sewage Disposal (DWQ Requirement)	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input 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 survey conducted in 2006. No dwarf wedgemussel species were found. The Biological Conclusion remains "No Effect"		
6. Essential Fish Habitat (Corps Requirement)		
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		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<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		
8. Flood Zone Designation (Corps Requirement)		
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		
<u>Dr. Gregory J. Thorpe, Ph D</u> Applicant/Agent's Printed Name	 Applicant/Agent's Signature <small>(Agent's signature is valid only if an authorization letter from the applicant is provided.)</small>	7-15-10 Date

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Sara Easterly, NCDOT,
1598 Mail Service Center
Raleigh, NC 27699-1598

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

B-4660: Replace Bridge No. 19 over the Neuse River Creek on Falls of the Neuse Road (SR 2000) Wake County. Field visit held 10/31/06.

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

State:North Carolina County/parish/borough: Wake City: Raleigh
Center coordinates of site (lat/long in degree decimal format): Lat. 35.9406° N, Long. -78.5799° W, Universal Transverse Mercator:
Name of nearest waterbody: Neuse River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 200 linear feet: 40 width (ft) and/or ac res.

Cowardin Class: Riverine

Stream Flow: Perennial

Wetlands: 0.96 acres.

Cowardin Class: NCWAM Headwater Forest

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

Tidal:

Non-Tidal:

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: NC DOT.
- 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: 1:24,000 :New Hill.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Wake County
- 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): Wake sid 08, 2005.
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Other information (please specify): NCDWQ Wetland Rating Sheet.

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)

SARA Easterly 7/15/10
Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
WA	35.9406°	-78.5799°	Headwater Forest	0.0.3	wetland

STORMWATER MANAGEMENT PLAN

Project: 33822.1.1
TIP: B-4660
County: Wake

Hydraulics Project Engineers: Brian Elam, E.I. (Sungate Design Group);
Bill Zerman, P.E. (NCDOT Hydraulics Unit)

ROADWAY DESCRIPTION

The project involves the replacement of Bridge No. 19 on SR 2000 over Neuse River. The overall length of the project with approach work is approximately 1,079 feet. The proposed bridge will consist of 3@ 100', 1@ 80', 1@ 100' PSG (54"). The project drainage consists of the bridge with deck drains on the multi-use path only and drainage systems at the beginning and end of the bridge. There is one proposed standard rip rap ditch and one existing ditch cleanout.

ENVIRONMENTAL DESCRIPTION

The project is located in the Neuse 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 the Neuse River. This section of The Neuse River is classified as WS-IV and NSW. The Neuse River is not listed on NCDENR-DWQ'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. Due to site restrictions no BMPs were used on this project.

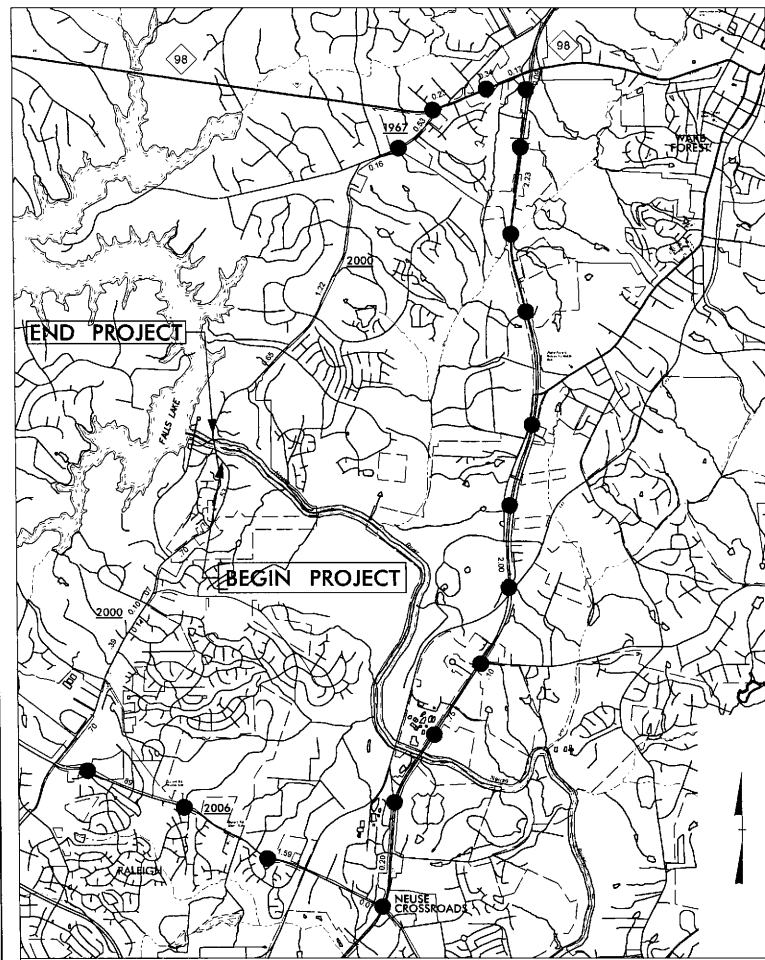
At all the sites, stormwater will be treated and non-erosive velocities will be achieved where practicable.

MINIMIZATION OF IMPACTS

Several design elements provided for minimization of wetland impacts. Bridge end drains are located outside of buffers and wetlands. No deck drains are used on the roadway side of the bridge. Also, a boardwalk spans the natural outlet ditch under -MUP2- rather than use of a pipe culvert.

09/08/99

TIP PROJECT: B-4660



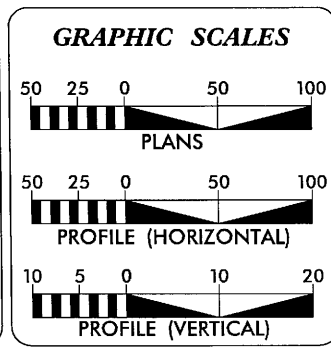
VICINITY MAP
 ●●● OFF-SITE DETOUR
 See Sheet 1-A For Index of Sheets
 See Sheet 1-B For Conventional Symbols

BEGIN TIP PROJECT B-4660
 -L- STA. 19+65.00

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 2010 = 13500
ADT 2030 = 15800
DHV = 10%
D = 60%
T = 3% TTST = 1%
DUAL = 2%
V = 45 MPH
CLASS = RURAL MAJOR COLLECTOR
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4660	= 0.113 mi.
LENGTH STRUCTURE TIP PROJECT B-4660	= 0.091 mi.
TOTAL LENGTH TIP PROJECT B-4660	= 0.204 mi.

STEWART ENGINEERING
 431 Fayetteville Street Mail
 Suite 400
 Raleigh, NC 27601
 P 919.380.8700
 F 919.380.8752
 www.stewart-eng.com

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 FEBRUARY 15, 2010

LETTING DATE:
 FEBRUARY 15, 2011

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

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

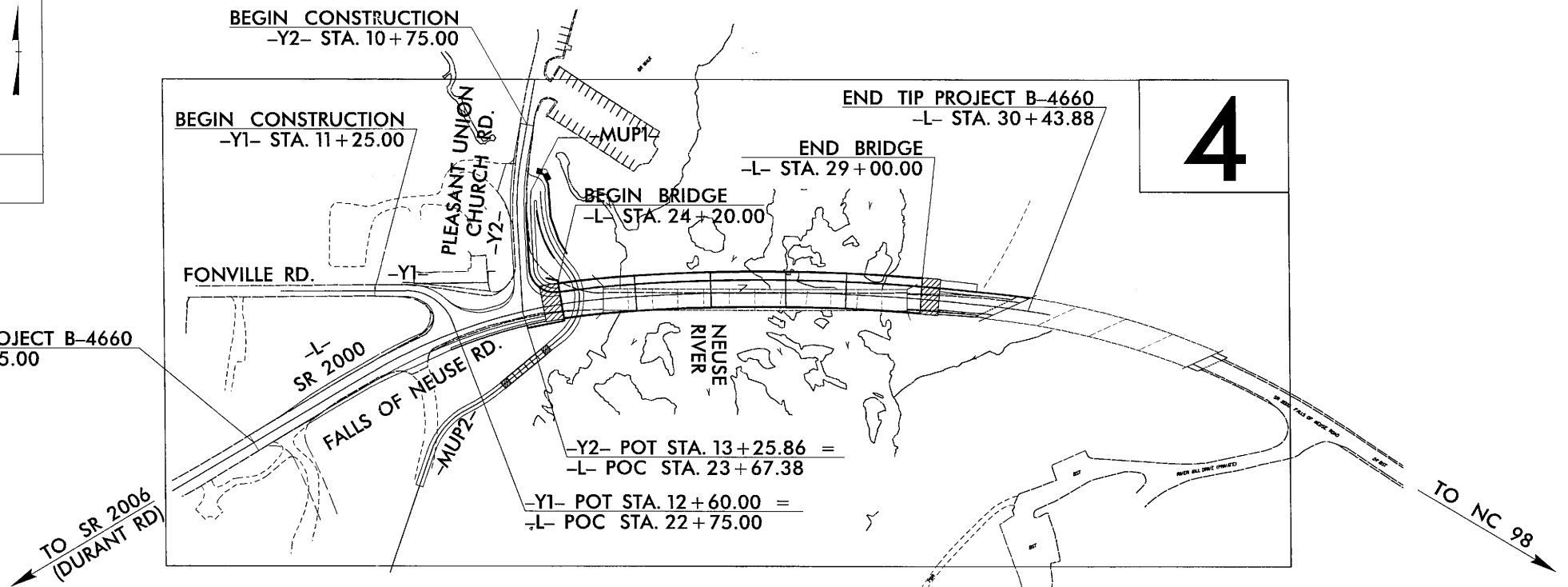
WAKE COUNTY

LOCATION: BRIDGE NO.19 OVER NEUSE RIVER ON SR 2000
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4660	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33822.1.1	BRSTP-2000(4)	PE	
33822.2.1	BRSTP-2000(4)	R/W & UTILITIES	
Permit Drawing			
Sheet <u>1</u> of <u>70</u>			

RW PLANS

WETLAND/STREAM IMPACTS



\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$DDGN\$\$\$\$\$
 \$\$\$USERNAME\$\$\$\$\$

8/17/99

SYSTEMS
DRAWINGS
REVISIONS

CS Sta. 24+20.00

BEGIN BRIDGE
-L- STA. 24+20.00
BEGIN APPROACH SLAB
-L- STA. 23+96.00

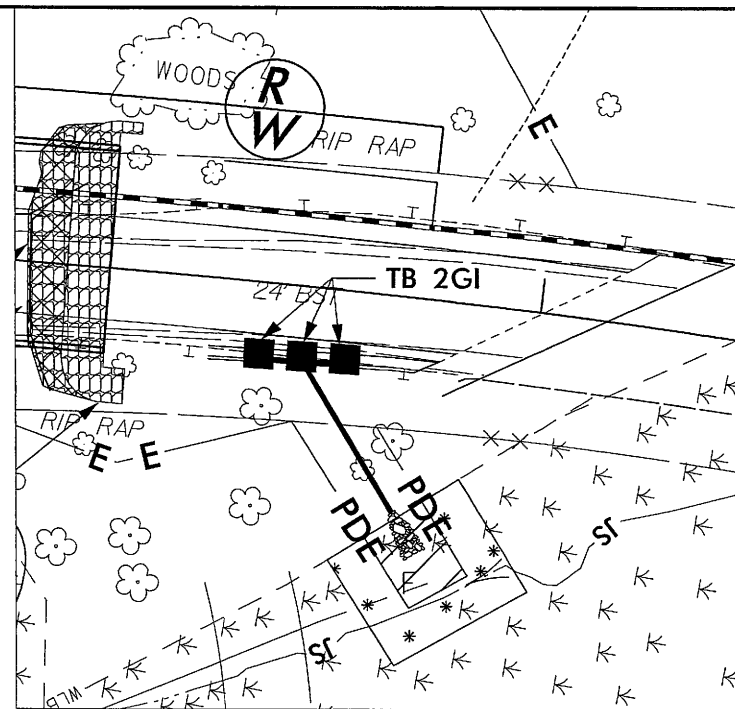
SC Sta. 25+20.00

END BRIDGE
-L- STA. 29+00.00
END APPROACH SLAB
-L- STA. 29+24.00

PROPOSED CONC. BARRIER
PROPOSED MULTI-USE PATH
SLOT DRAINS ON BRIDGE
8"x4" SLOT DRAINS TO BE PLACED ON 12' CENTERS ON MULTI USE PATH SIDE OF BRIDGE ONLY.
*SHOULDER ON THE BRIDGE WAS WIDENED TO 6.5' TO KEEP SPREAD OUT OF THE TRAVEL LANE.
CS Sta. 29+73.00

DETAIL SHOWING PAVEMENT-BRIDGE RELATIONSHIP FOR -L- OVER NEUSE RIVER

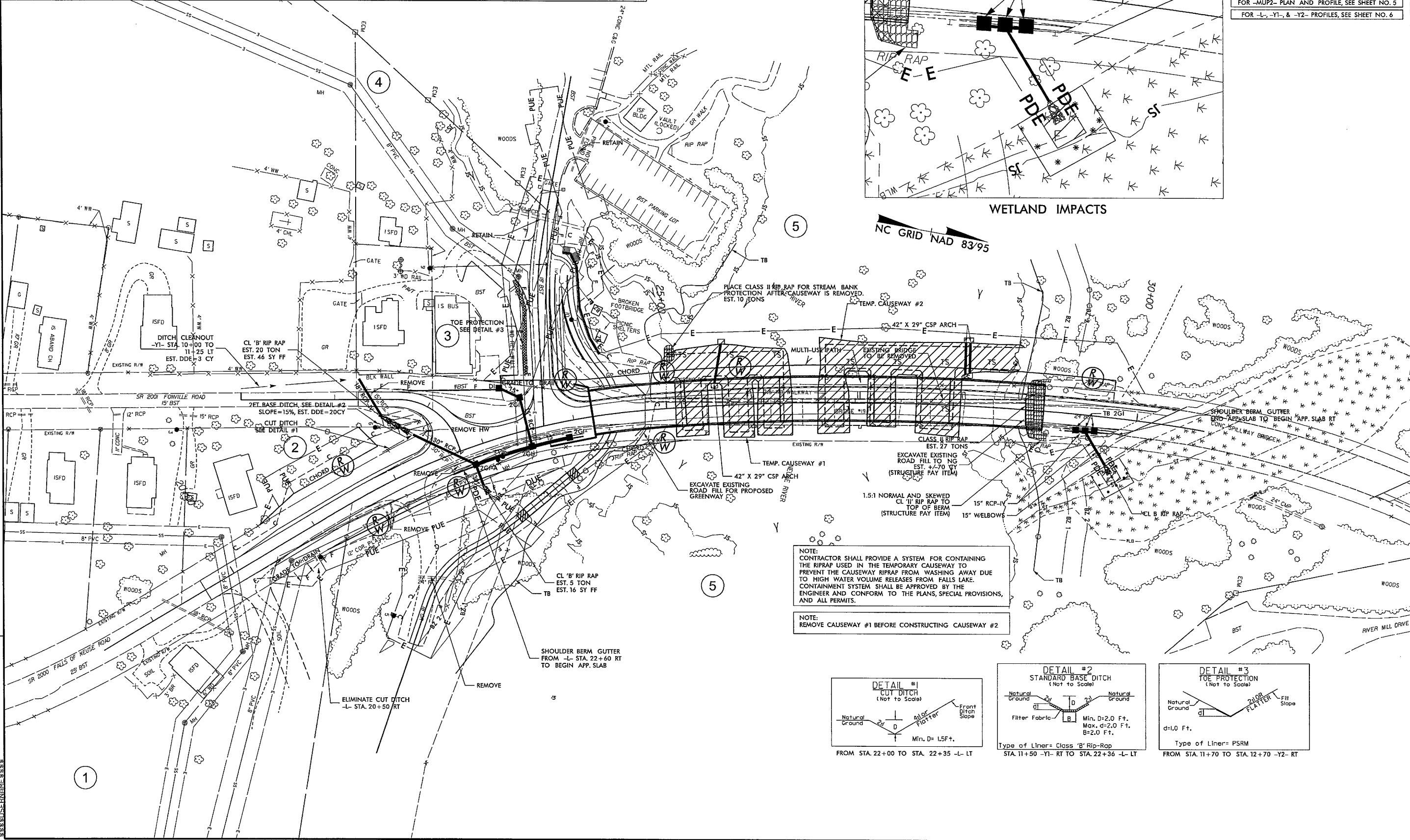
- [Hatched pattern] DENOTES FILL IN WETLAND
- [Cross-hatched pattern] DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- [Dotted pattern] DENOTES MECHANIZED CLEARING



WETLAND IMPACTS

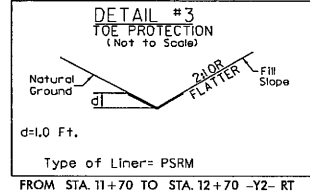
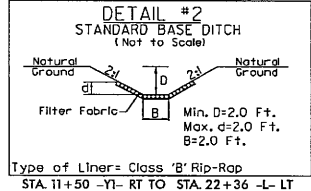
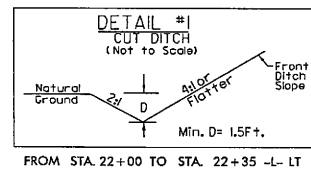
NC GRID NAD 83/95

PROJECT REFERENCE NO. B-4660	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION Permit Drawing Sheet 2 of 10	
FOR -MUP2- PLAN AND PROFILE, SEE SHEET NO. 5	
FOR -L-, -Y1-, & -Y2- PROFILES, SEE SHEET NO. 6	

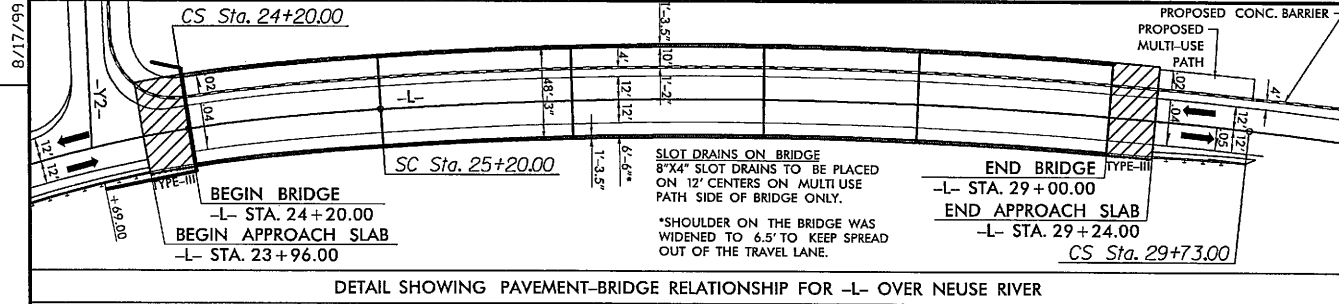


NOTE:
CONTRACTOR SHALL PROVIDE A SYSTEM FOR CONTAINING THE RIPRAP USED IN THE TEMPORARY CAUSEWAY TO PREVENT THE CAUSEWAY RIPRAP FROM WASHING AWAY DUE TO HIGH WATER VOLUME RELEASES FROM FALLS LAKE. CONTAINMENT SYSTEM SHALL BE APPROVED BY THE ENGINEER AND CONFORM TO THE PLANS, SPECIAL PROVISIONS, AND ALL PERMITS.

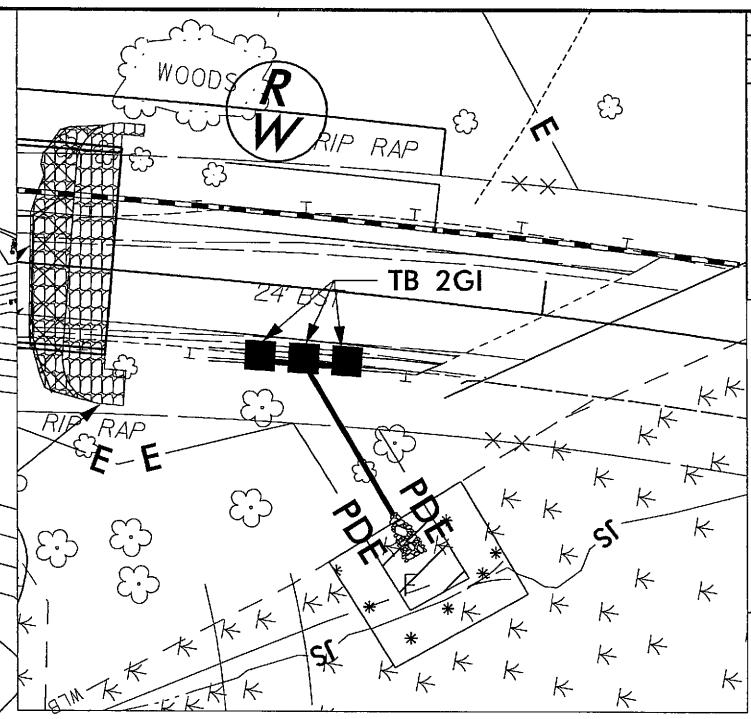
NOTE:
REMOVE CAUSEWAY #1 BEFORE CONSTRUCTING CAUSEWAY #2



8/17/99

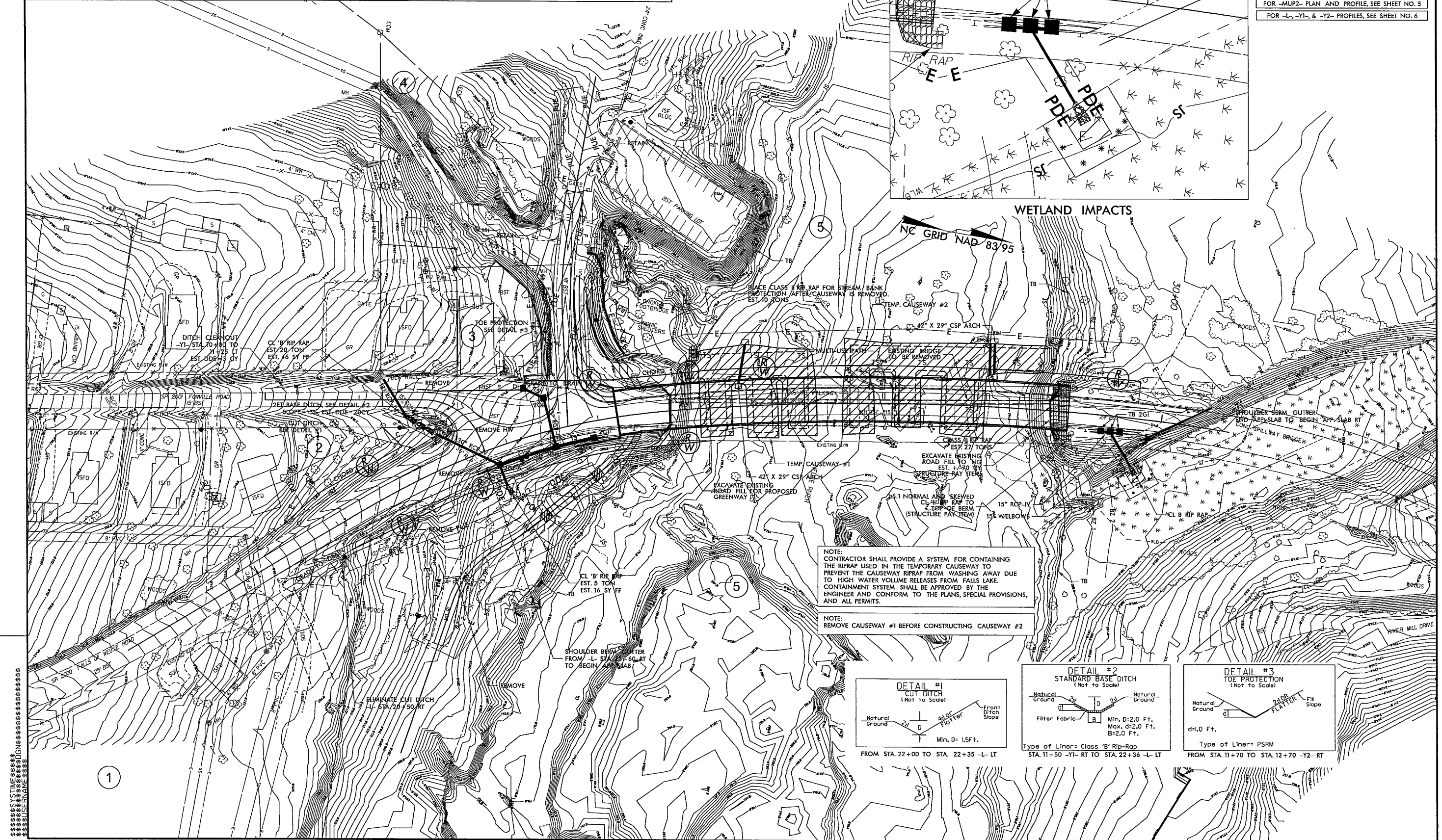


- DENOTES FILL IN WETLAND
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES MECHANIZED CLEARING



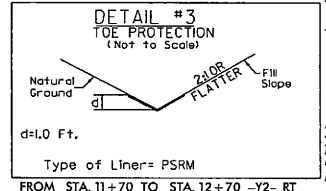
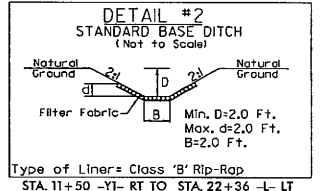
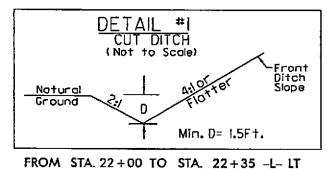
PROJECT REFERENCE NO. B-4660	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION Permit Drawing Sheet 3 of 10	
FOR -MUP2- PLAN AND PROFILE, SEE SHEET NO. 5	
FOR -L-, -Y1-, & -Y2- PROFILES, SEE SHEET NO. 6	

REVISIONS



NOTE:
CONTRACTOR SHALL PROVIDE A SYSTEM FOR CONTAINING THE RIPRAP USED IN THE TEMPORARY CAUSEWAY TO PREVENT THE CAUSEWAY RIPRAP FROM WASHING AWAY DUE TO HIGH WATER VOLUME RELEASES FROM FALLS LAKE. CONTAINMENT SYSTEM SHALL BE APPROVED BY THE ENGINEER AND CONFORM TO THE PLANS, SPECIAL PROVISIONS, AND ALL PERMITS.

NOTE:
REMOVE CAUSEWAY #1 BEFORE CONSTRUCTING CAUSEWAY #2

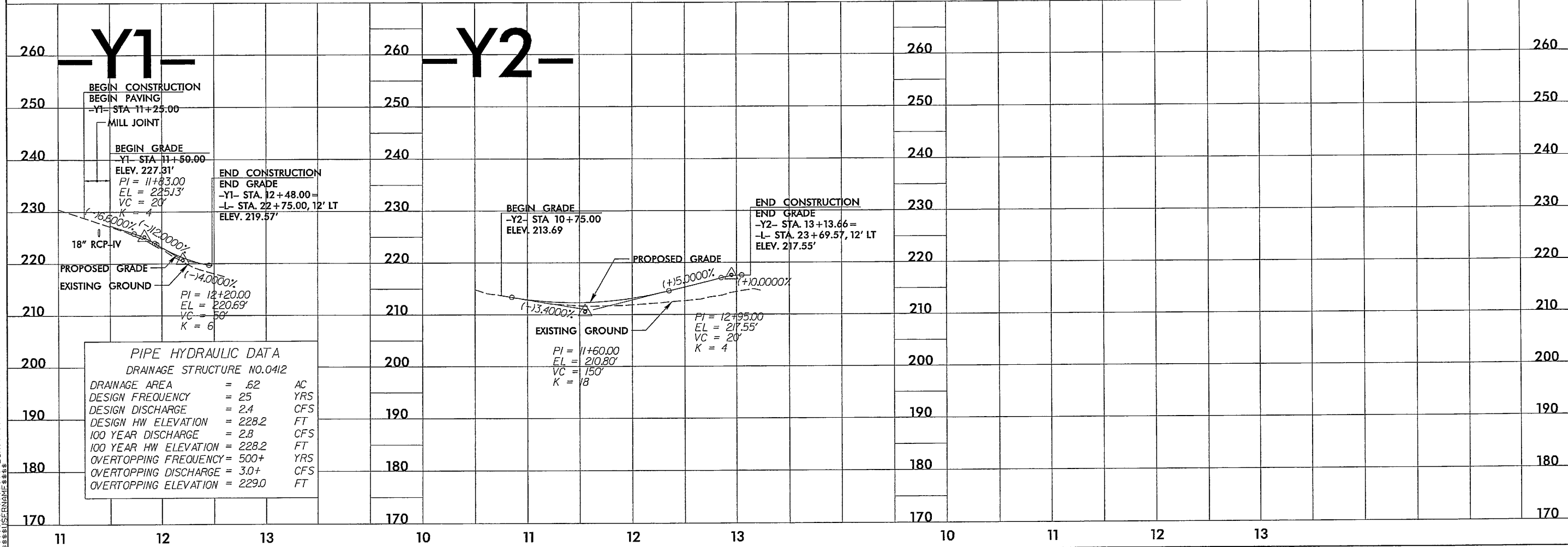
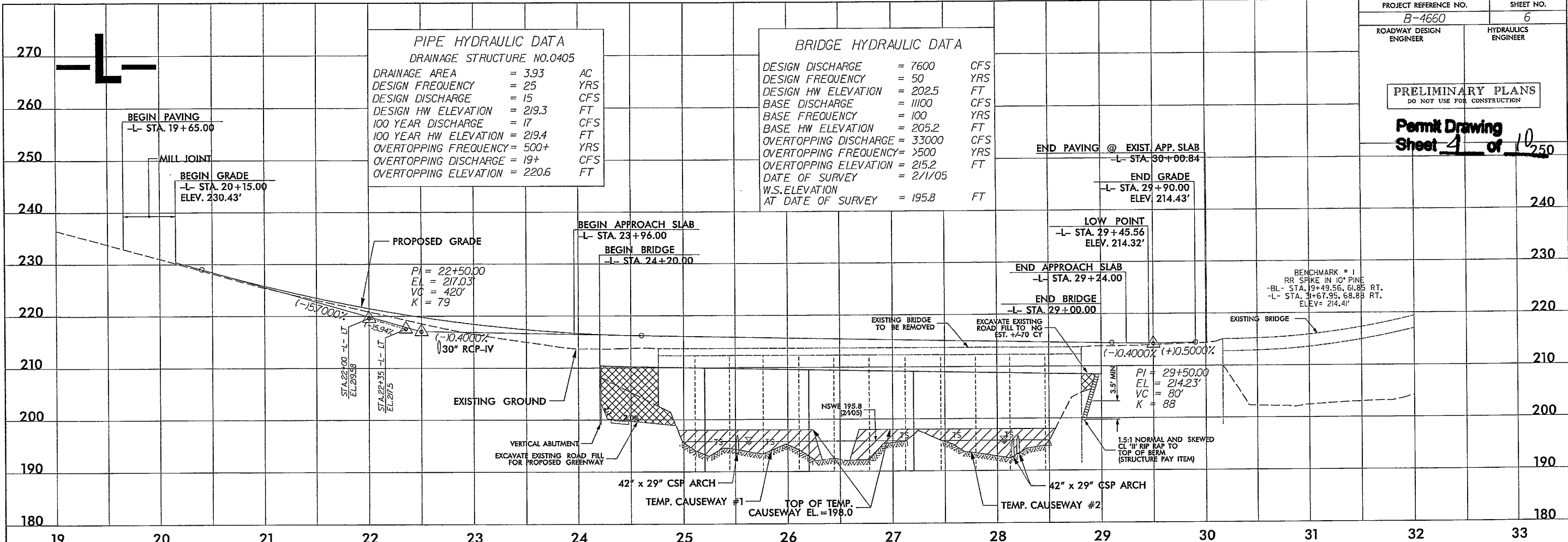


SYSTEMS
DRAWING
USER NAME

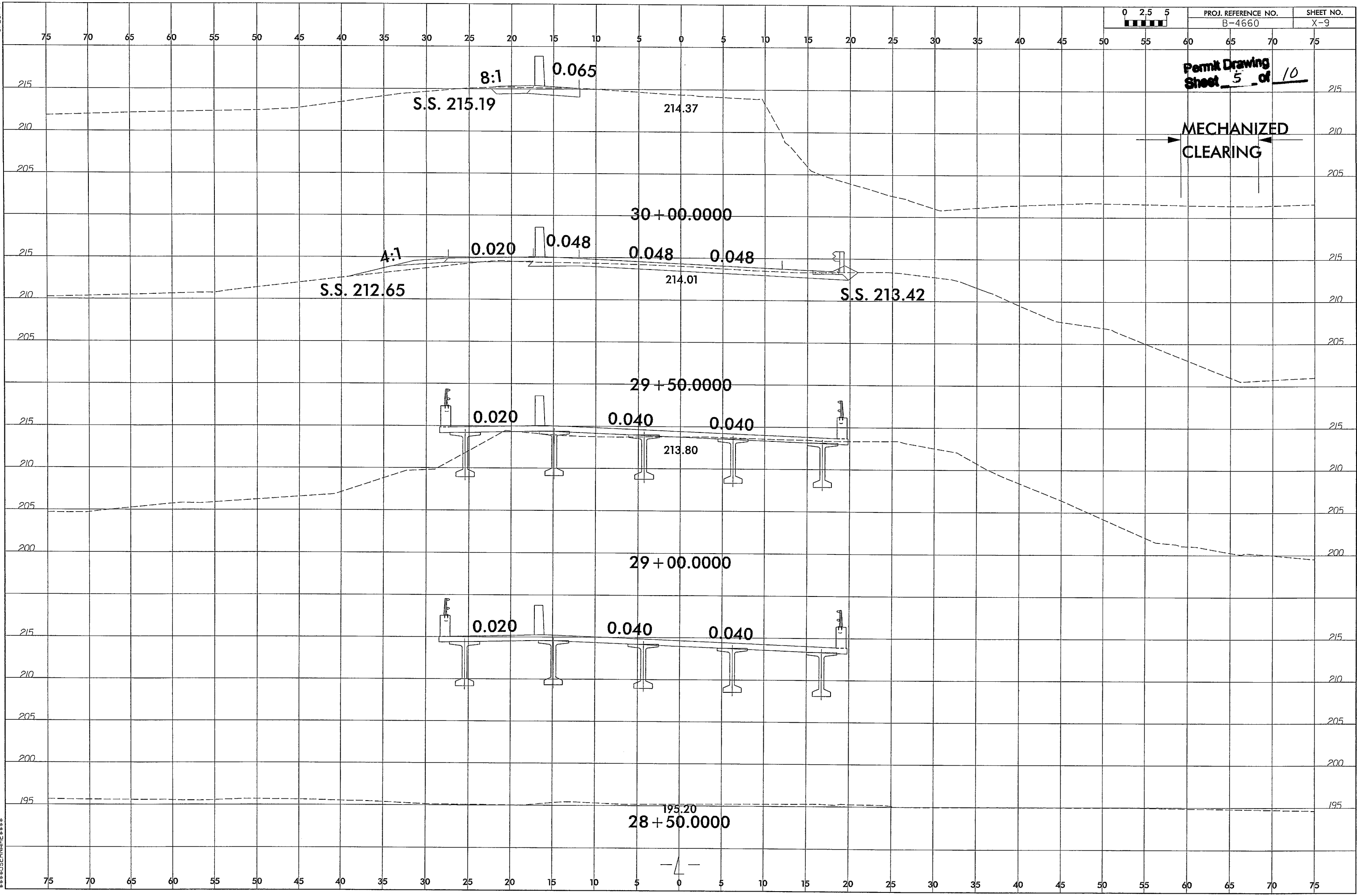
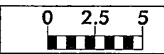
5/28/99

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Permit Drawing
Sheet 4 of 10



*****SYTIME*****
*****PLANNING*****



CONSTRUCTION SEQUENCE

- 1) CONSTRUCT CAUSEWAY #1
- 2) CONSTRUCT FIRST SECTION OF PROPOSED -L- BRIDGE
- 3) REMOVE CAUSEWAY #1
- 4) CONSTRUCT CAUSEWAY #2
- 5) CONSTRUCT SECOND SECTION OF PROPOSED -L- BRIDGE
- 6) REMOVE CAUSEWAY #2

NOTE:
CONTRACTOR SHALL PROVIDE A SYSTEM FOR CONTAINING THE RIPRAP USED IN THE TEMPORARY CAUSEWAY TO PREVENT THE CAUSEWAY RIPRAP FROM WASHING AWAY DUE TO HIGH WATER VOLUME RELEASES FROM FALLS LAKE. CONTAINMENT SYSTEM SHALL BE APPROVED BY THE ENGINEER AND CONFORM TO THE PLANS, SPECIAL PROVISIONS, AND ALL PERMITS.

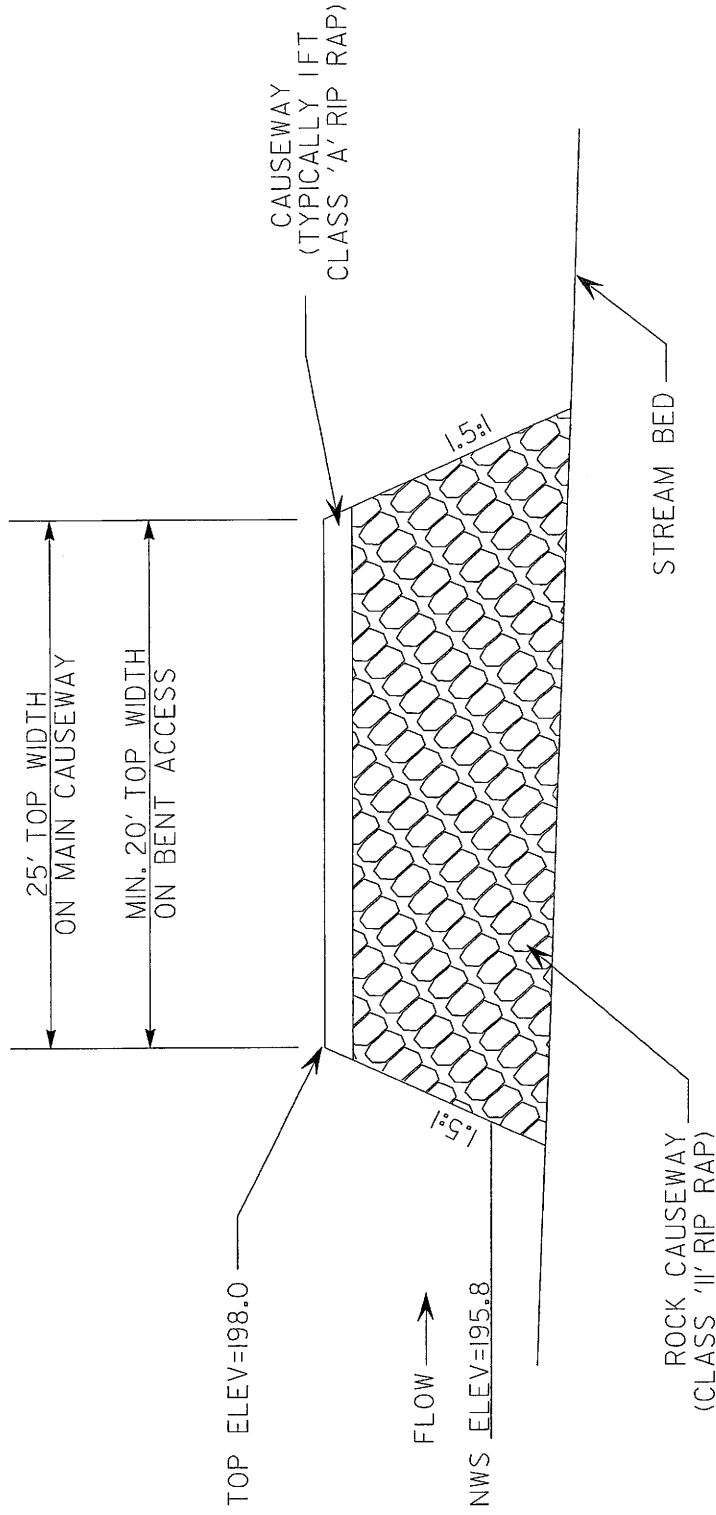
N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
WAKE COUNTY

PROJECT: 33822.1.1 (B-4660)
BRIDGE NO. 19 OVER
NEUSE RIVER

ON SR 2000 (FALLS OF NEUSE RD)

SHEET 6 OF 10 3/14/10

CAUSEWAY DETAIL #1 (NOT TO SCALE)



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 33822.1.1 (B-4660)
BRIDGE NO. 19 OVER NEUSE RIVER
ON SR 2000 (FALLS OF NEUSE RD)

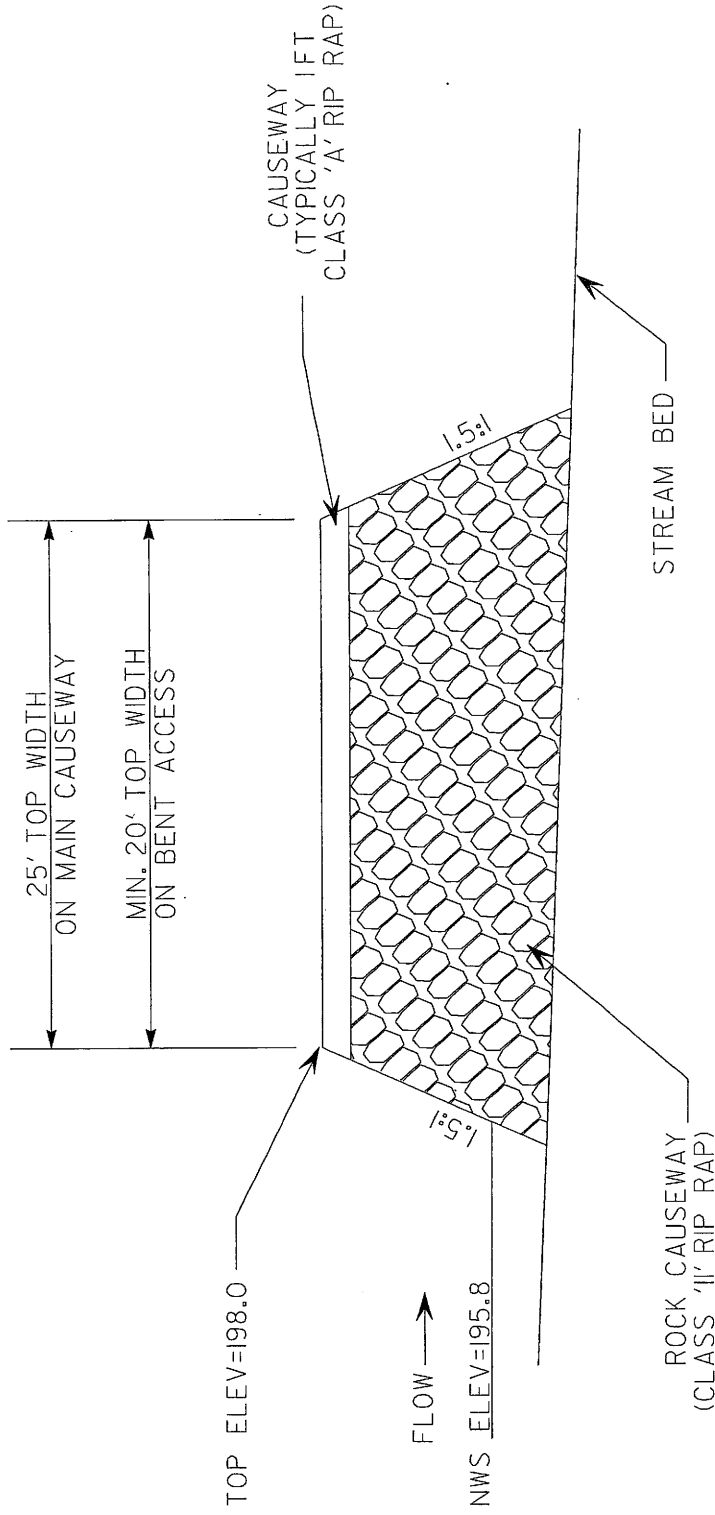
SHEET 7 OF 10 4/14/10

QUANTITIES OF ESTIMATES

VOLUME OF CLASS II RIP RAP= 1300 yds³
 AREA OF CLASS II RIP RAP= 0.25 ac
 Estimate 1900 Tons Class 'II' Rip Rap
 Estimate 350 Tons Class 'A' Rip Rap

#2

CAUSEWAY DETAIL (NOT TO SCALE)



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 33822.1.1 (B-4660)
BRIDGE NO. 19 OVER NEUSE RIVER
ON SR 2000 (FALLS OF NEUSE RD)

SHEET 8 OF 10 4/14/10

QUANTITIES OF ESTIMATES

VOLUME OF CLASS 11 RIP RAP= 1800 yds³
 AREA OF CLASS 11 RIP RAP= 0.32 ac
 Estimate 2500 Tons Class '11' Rip Rap
 Estimate 490 Tons Class 'A' Rip Rap

PROPERTY OWNERS
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
5	U.S. ARMY CORPS OF ENGINEERS	P.O. BOX 350 MONCURE, NC 27559

WETLAND/STREAM
IMPACTS

NCDOT
DIVISION OF HIGHWAYS
WAKE COUNTY
PROJECT: 33822.1.1 (B-4660)
BRIDGE NO. 19 OVER NEUSE RIVER
ON SR 2000 (FALLS OF NEUSE RD.)
BETWEEN SR 2006 (DURANT RD.)
AND NC 98

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS							
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)			
	24+89 to 26+29 -L-	Temp. Causeway#1									0.25			100	
	26+59 to 28+72 -L-	Temp. Causeway#2									0.32			102	
	29+55 to 30+00 -L-RT	Rip Rap	0.01			0.02									
TOTALS:			0.01			0.02					0.57			202	

PERMANENT IMPACTS:
TOTAL PERMANENT PIER IMPACTS = 155 SF = 0.004 AC

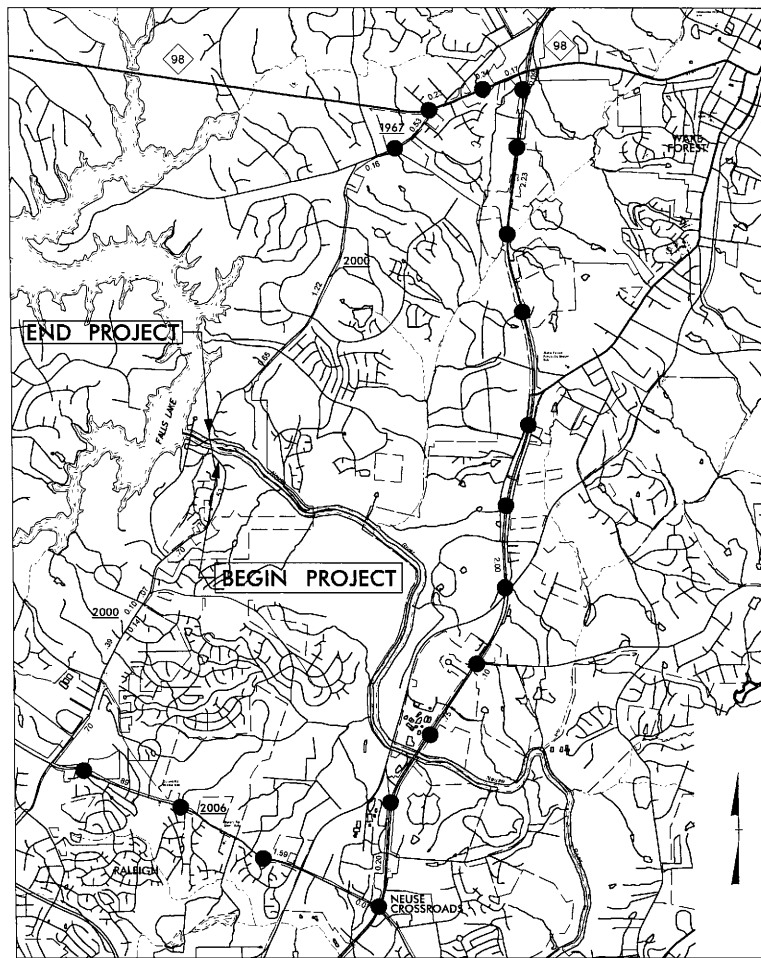
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY
WBS - 33822.1.1 (B-4660)

SHEET 10 of 10 7/9/2010

09/08/99

TIP PROJECT: B-4660



VICINITY MAP
 ●●● OFF-SITE DETOUR
 See Sheet 1-A For Index of Sheets
 See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

WAKE COUNTY

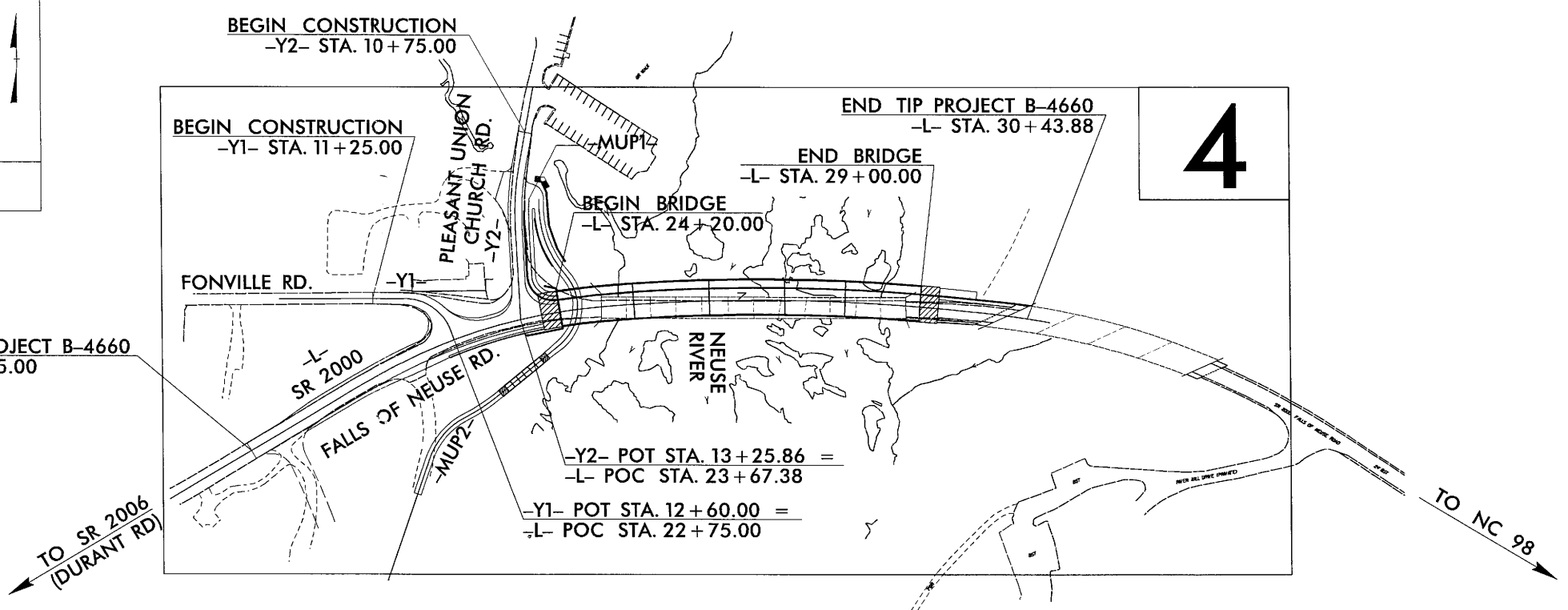
LOCATION: BRIDGE NO. 19 OVER NEUSE RIVER ON SR 2000

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4660	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33822.1.1	BRSTP-2000(4)	PE	
33822.2.1	BRSTP-2000(4)	R/W & UTILITIES	
Buffer Drawing Sheet 1 of 6			

RW PLANS

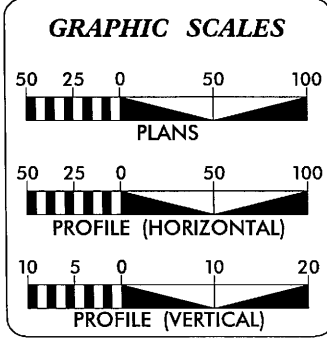
BUFFER IMPACTS



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 2010 = 13500
ADT 2030 = 15800
DHV = 10%
D = 60%
T = 3% TTST = 1%
DUAL = 2%
V = 45 MPH
CLASS = RURAL MAJOR COLLECTOR
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4660	=	0.113 mi.
LENGTH STRUCTURE TIP PROJECT B-4660	=	0.091 mi.
TOTAL LENGTH TIP PROJECT B-4660	=	0.204 mi.

STEWART
 431 Fayetteville Street, Mail Stop 400
 Raleigh, NC 27601
 P 919.380.8700 F 919.380.8752
 www.stewart-eng.com

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 FEBRUARY 15, 2010

LETTING DATE:
 FEBRUARY 15, 2011

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

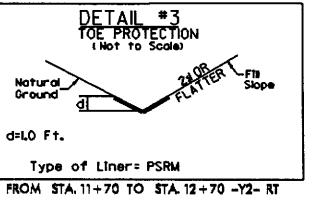
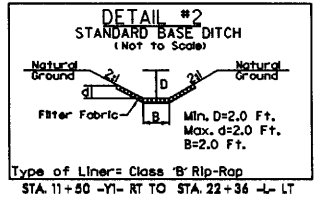
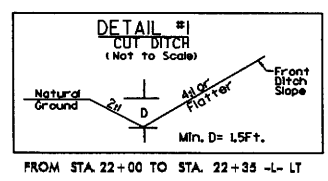
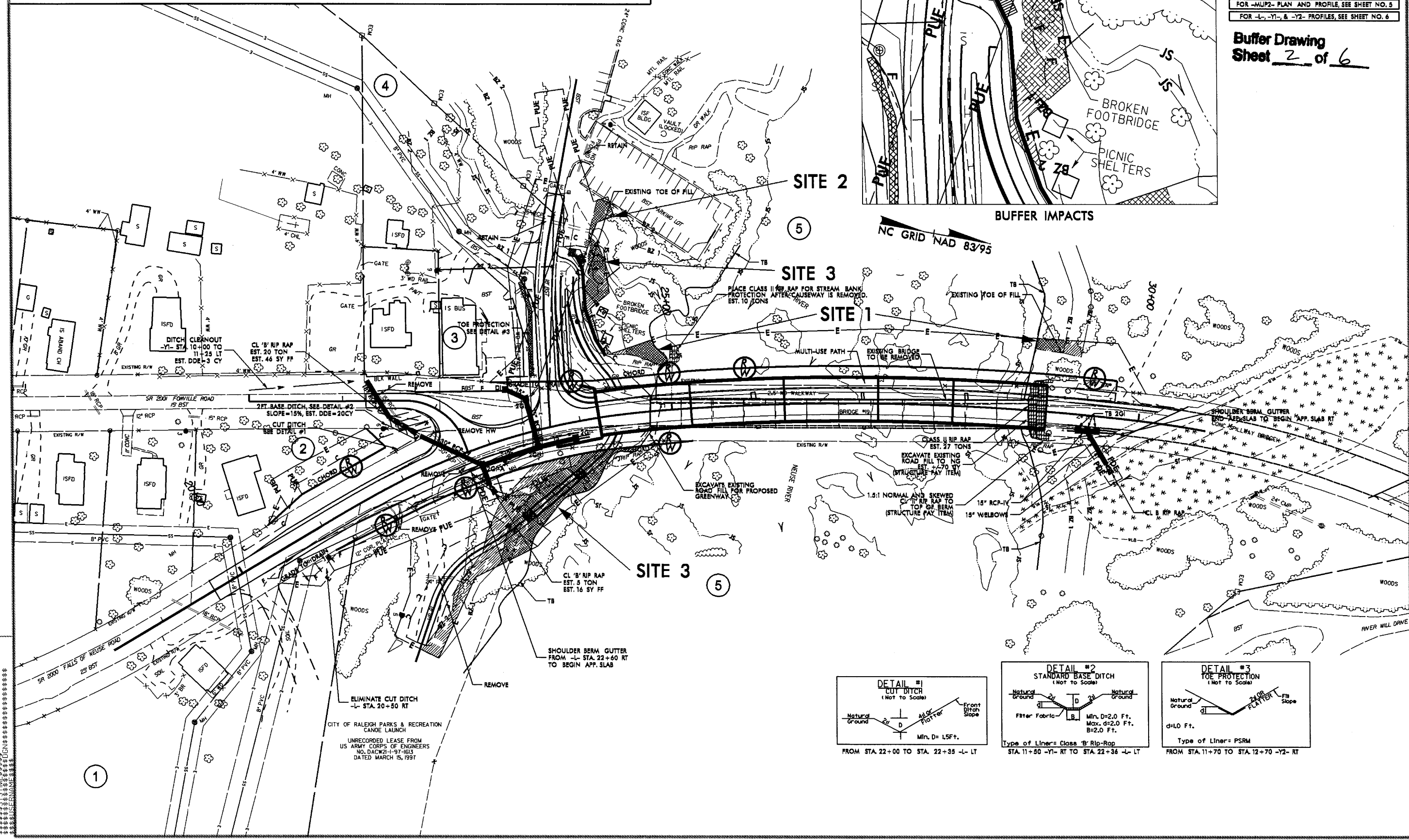
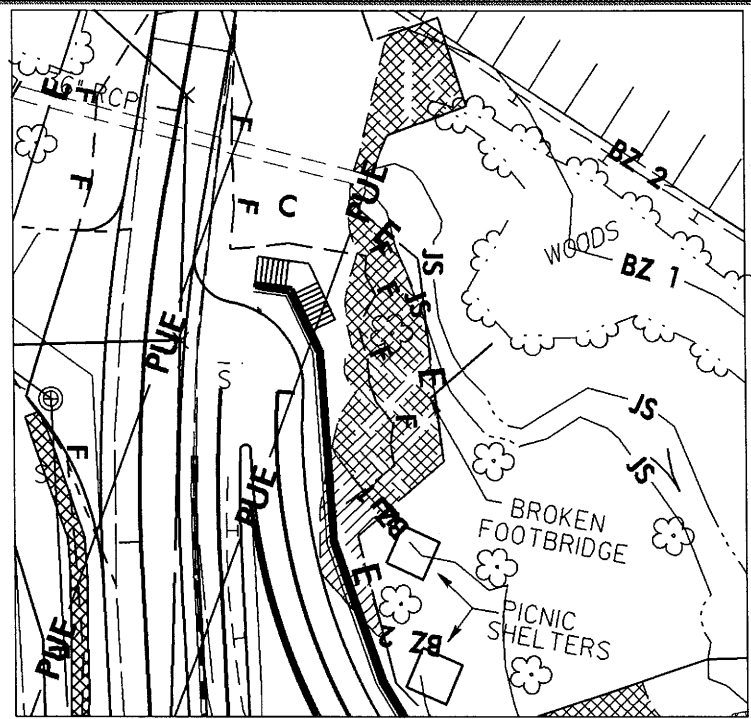
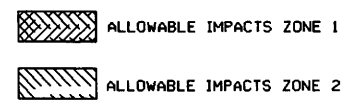
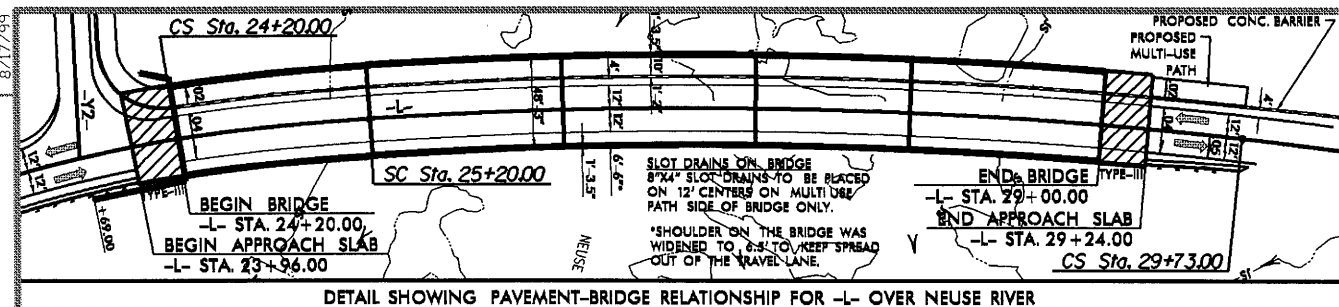
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 \$\$\$DGN\$\$\$\$\$
 \$\$\$USERNAME\$\$\$\$\$

8/17/99

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

FOR -MUP2- PLAN AND PROFILE, SEE SHEET NO. 3
FOR -L-, -Y1-, & -Y2- PROFILES, SEE SHEET NO. 6

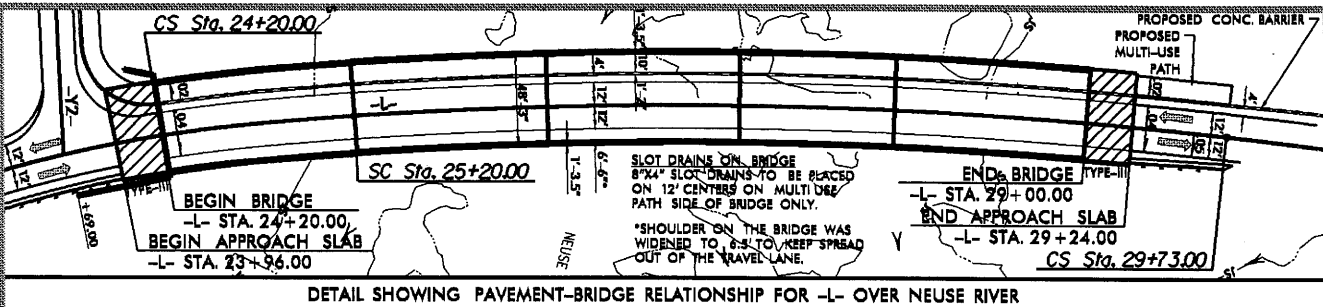
Buffer Drawing
Sheet 2 of 6



REVISIONS

SYSTEMS DESIGN ENGINEERING

8/17/99



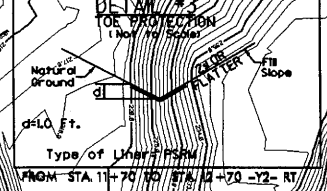
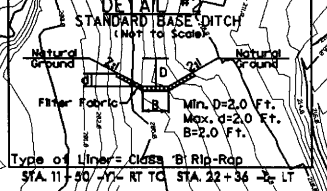
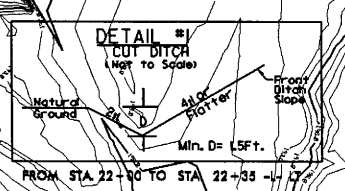
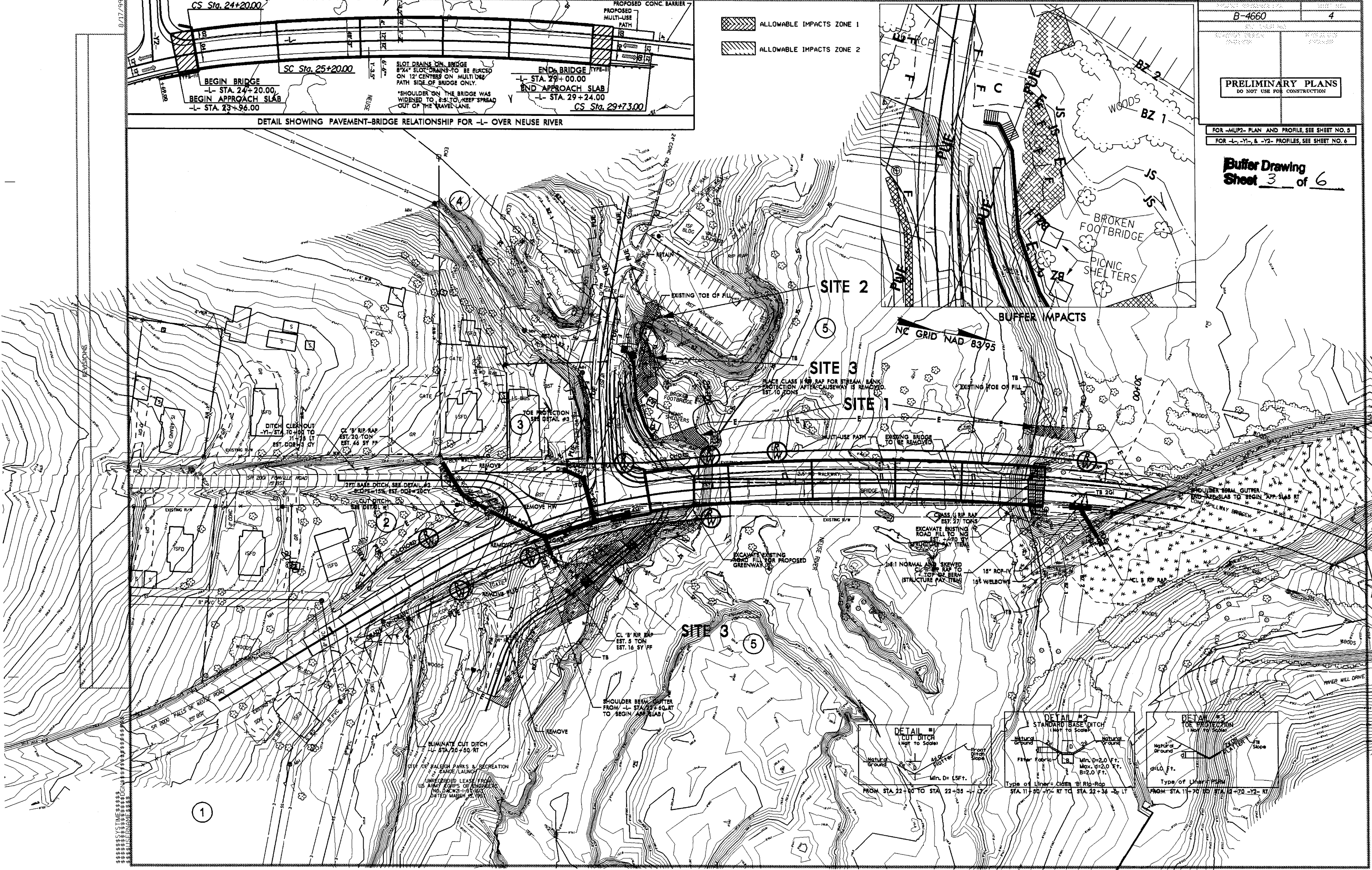
- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2

B-4660 4

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

FOR -MUP2- PLAN AND PROFILE, SEE SHEET NO. 5
FOR -L-, -Y1-, & -Y2- PROFILES, SEE SHEET NO. 6

Buffer Drawing
Sheet 3 of 6



1

PROPERTY OWNERS
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
5	U.S. ARMY CORPS OF ENGINEERS	P.O. BOX 350 MONCURE, NC 27559

BUFFER
IMPACTS

NCDOT
DIVISION OF HIGHWAYS
WAKE COUNTY
PROJECT: 33822.1.1 (B-4660)
BRIDGE NO. 19 OVER NEUSE RIVER
ON SR 2000 (FALLS OF NEUSE RD.)
BETWEEN SR 2006 (DURANT RD.)
AND NC 98
SHEET 4 OF 6 4/23/10

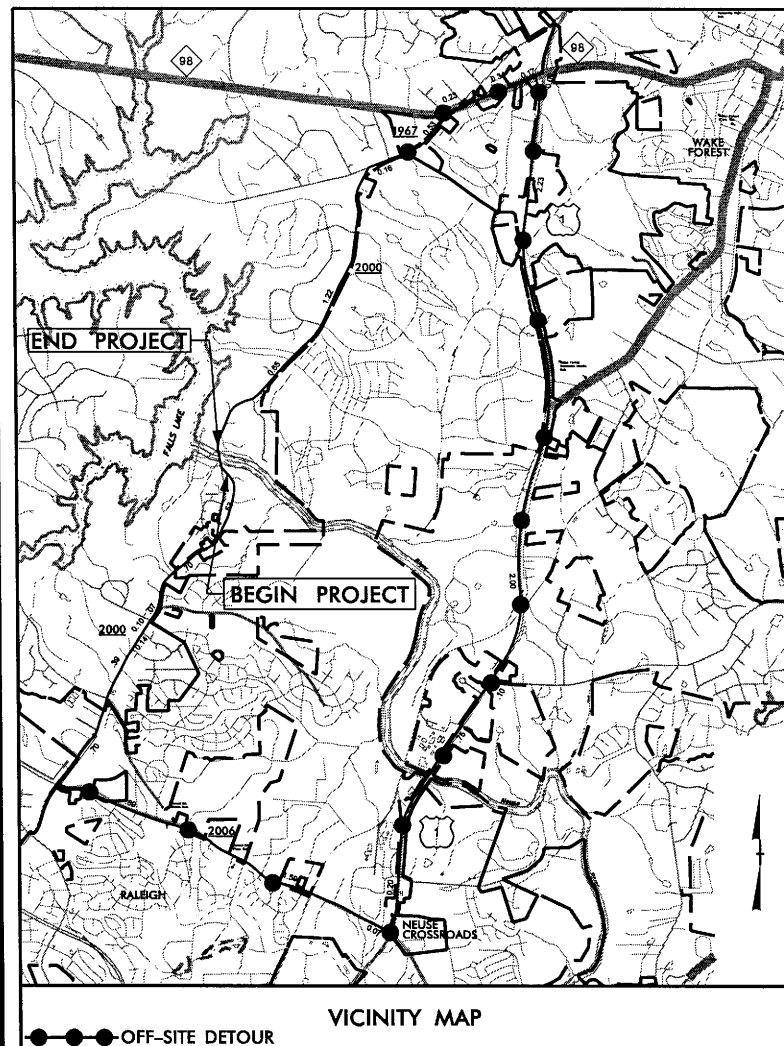
BUFFER IMPACTS SUMMARY

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)	TOTAL (ft²)				
												ZONE 1 (ft²)			ZONE 2 (ft²)
1	3@100', 1@80', 1@100' BRIDGE	24+20 to 29+00 -L-		X		1019	386	1405							
2	Trib To Neuse River	10+72 to 11+94 Y2	X			420	0	420							
3	Greenway		X			5679	4761	10440							
TOTAL:						7118	5147	12265							

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE COUNTY
 PROJECT: 33822.1.1 (B-4660)
 5/25/2010
 SHEET 6 OF 6

09/08/09

TIP PROJECT: B-4660



VICINITY MAP
●●● OFF-SITE DETOUR

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

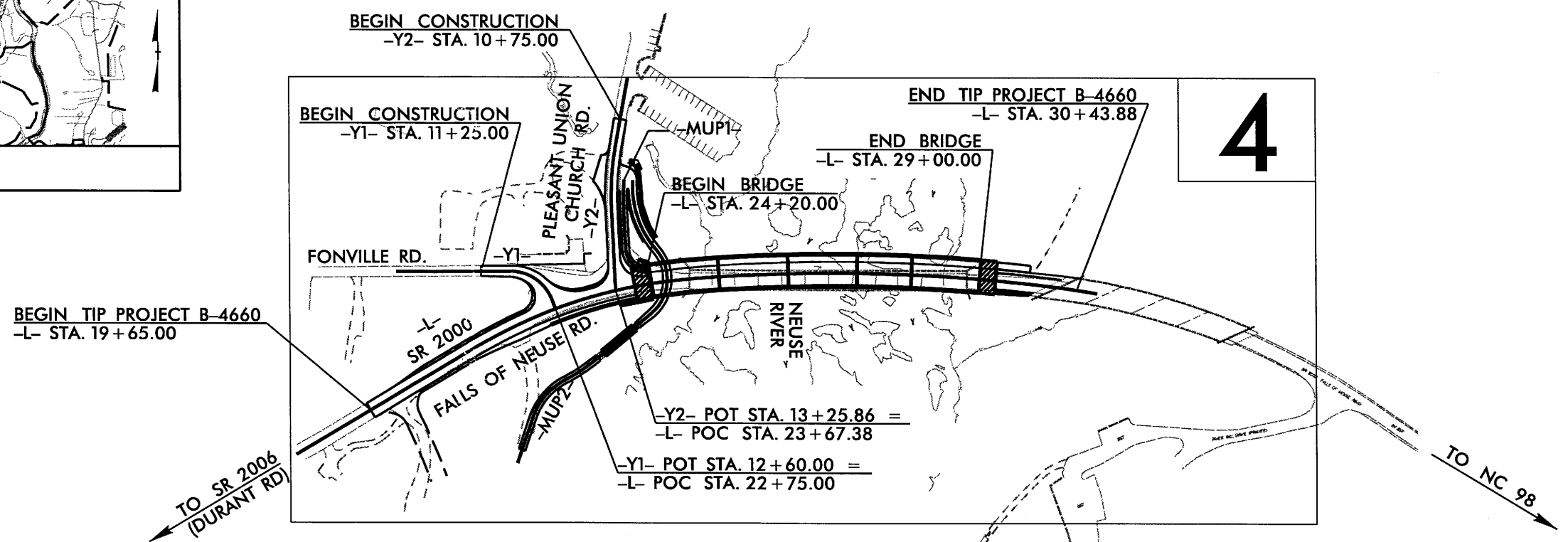
LOCATION: BRIDGE NO. 19 OVER NEUSE RIVER ON SR 2000

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4660	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33822.1.1	BRSTP-2000(4)	PE	
33822.2.1	BRSTP-2000(4)	RW & UTILITIES	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

RW PLANS



4

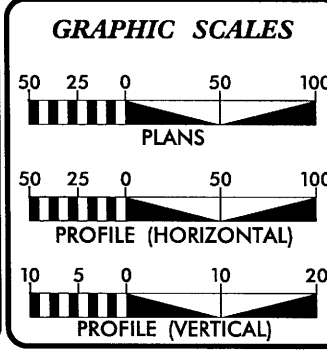
BEGIN TIP PROJECT B-4660
-L- STA. 19+65.00

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

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

NCDOT CONTACT: DOUG TAYLOR, PE
ROADWAY DESIGN - ENGINEERING COORDINATION

CONTRACT:



DESIGN DATA

ADT 2010 = 13500
ADT 2030 = 15800
DHV = 10%
D = 60%
T = 3% TTST = 1%
DUAL = 2%
V = 45 MPH
CLASS = RURAL MAJOR COLLECTOR SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4660	= 0.113 mi.
LENGTH STRUCTURE TIP PROJECT B-4660	= 0.091 mi.
TOTAL LENGTH TIP PROJECT B-4660	= 0.204 mi.

STEWART
4211 Fayetteville Street, Suite 400
Raleigh, NC 27601
T 919.360.8750
F 919.360.8752
www.stewart-eng.com

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
FEBRUARY 15, 2010

LETTING DATE:
FEBRUARY 15, 2011

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

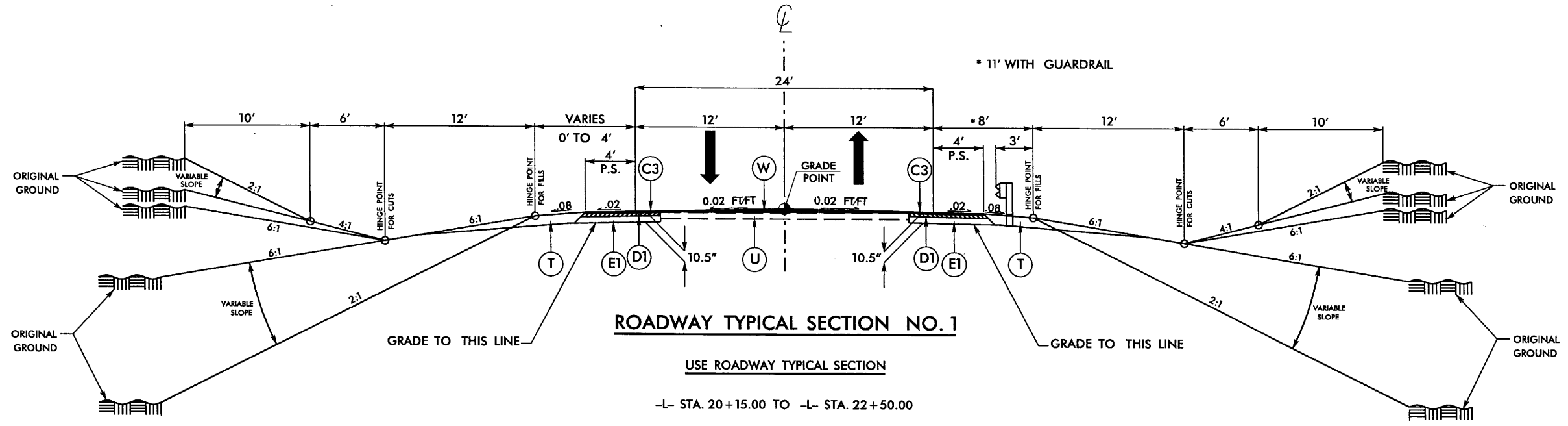
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ PE

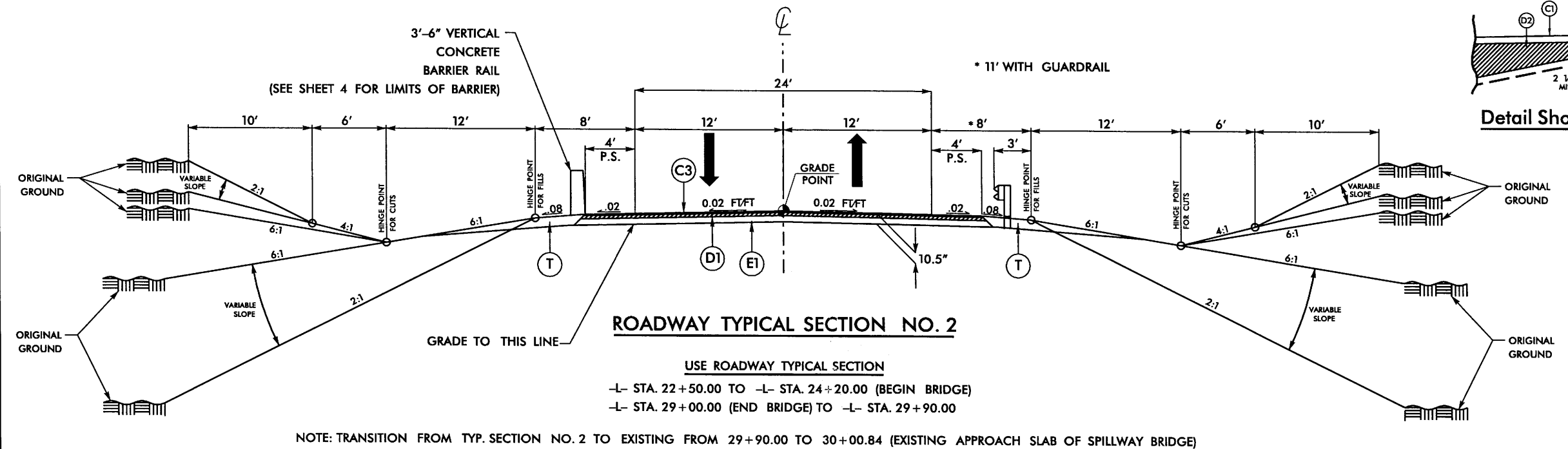
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

ART McMILLAN, PE
STATE HIGHWAY DESIGN ENGINEER

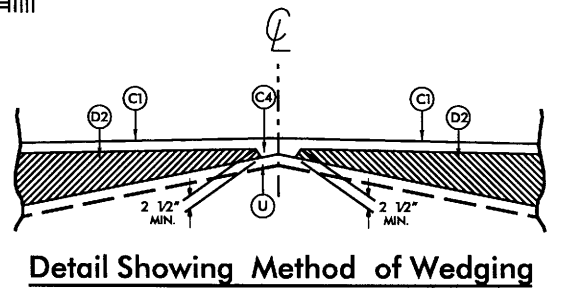
6/8/2010 N:\proj\B4660_RDY_PLANSHEETS.dgn user: jhefner



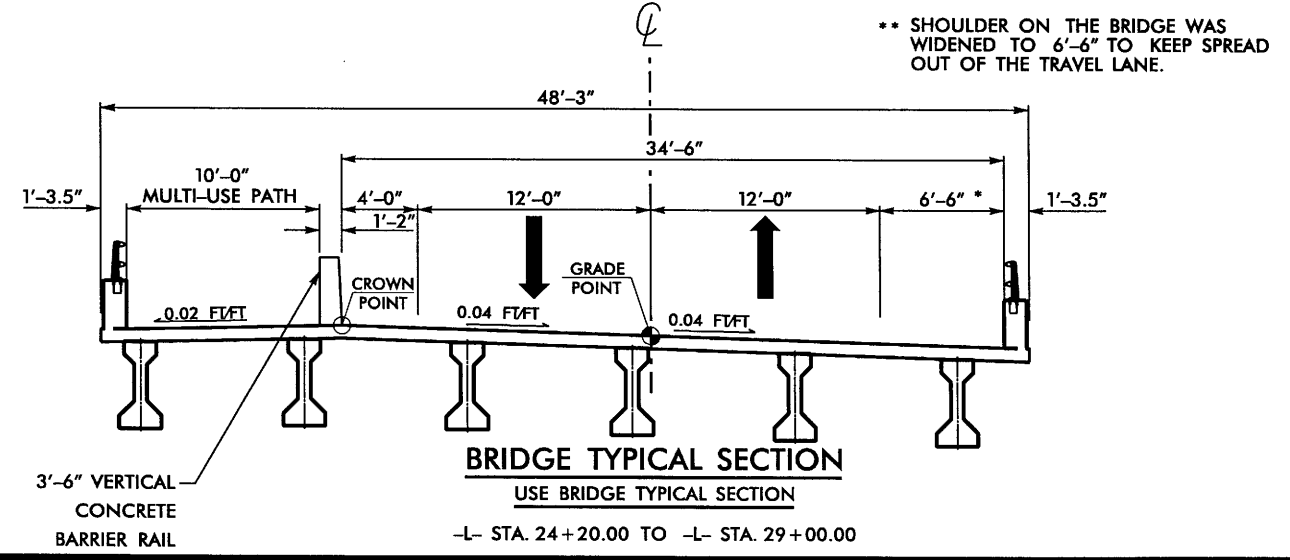
NOTE: TRANSITION FROM EXISTING TO TYP. SECTION NO.1 FROM 19+65.00 TO 20+15.00



NOTE: TRANSITION FROM TYP. SECTION NO.2 TO EXISTING FROM 29+90.00 TO 30+00.84 (EXISTING APPROACH SLAB OF SPILLWAY BRIDGE)

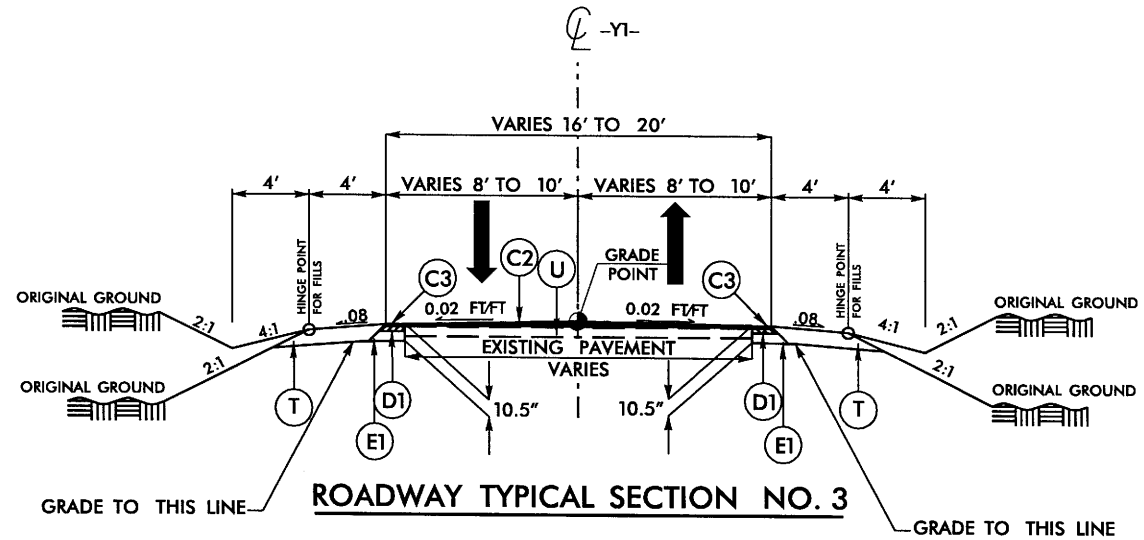


PAVEMENT SCHEDULE			
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.	J1	PROP. 6" AGGREGATE BASE COURSE.
C3	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	T	EARTH MATERIAL.
C4	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, 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.	U	EXISTING PAVEMENT.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)
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.	NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.	

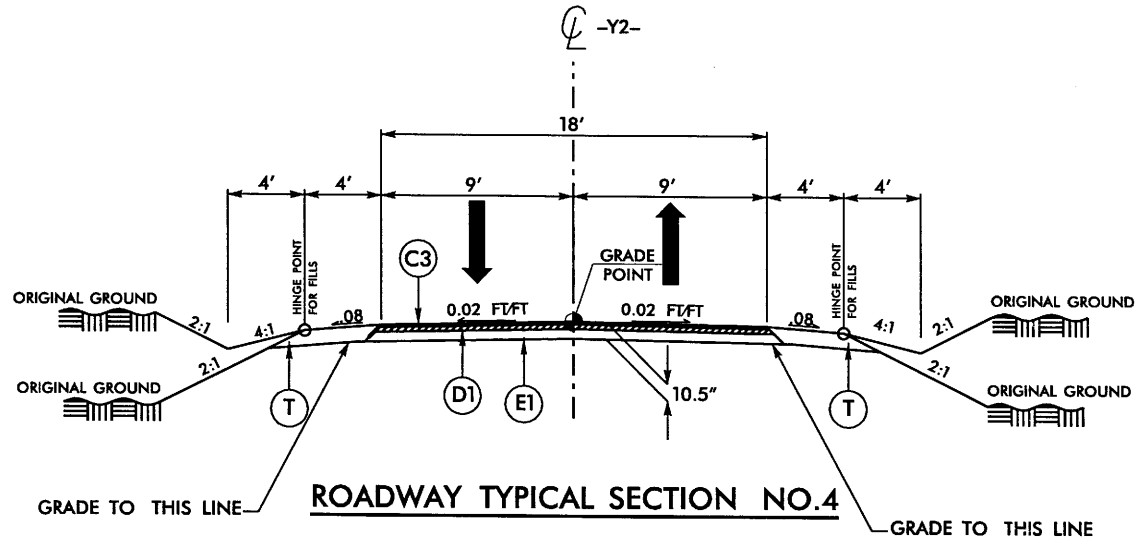


** SHOULDER ON THE BRIDGE WAS WIDENED TO 6'-6" TO KEEP SPREAD OUT OF THE TRAVEL LANE.

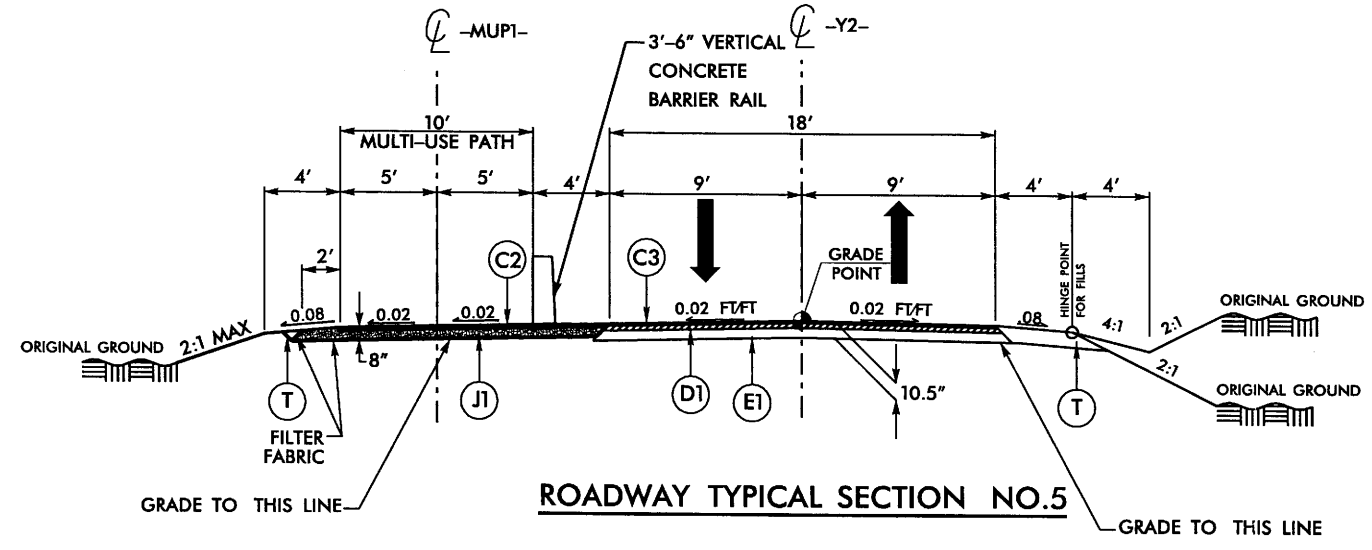
6/8/2009 9:46:50 AM RDY_PLANSHEETS.dgn



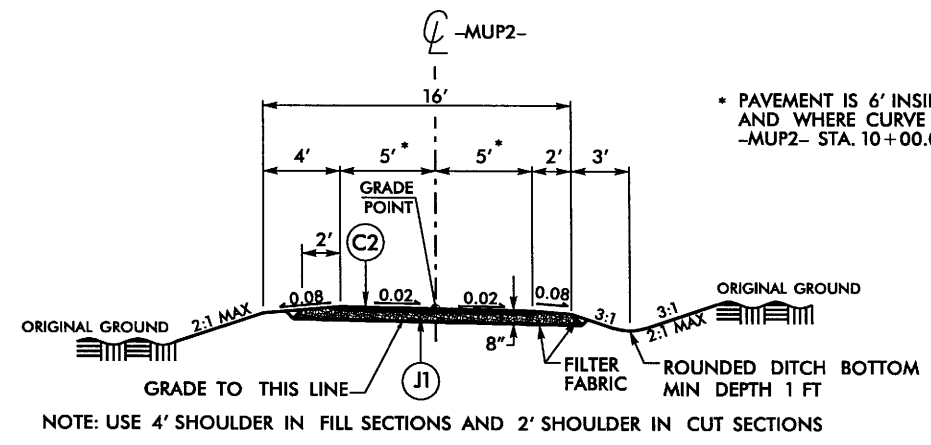
ROADWAY TYPICAL SECTION NO. 3
 USE ROADWAY TYPICAL SECTION
 -Y1- STA. 11+50.00 TO -Y1- STA. 12+48.00
 NOTE: TRANSITION FROM EXISTING TO TYP. SECTION NO. 3 FROM 11+25.00 TO 11+50.00



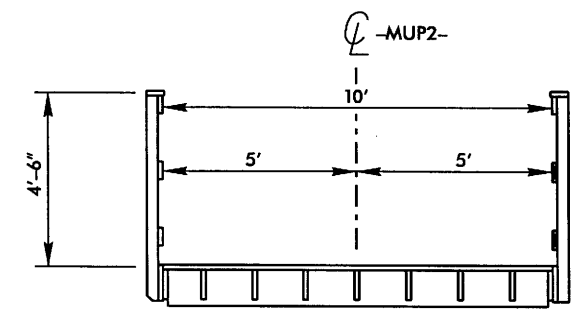
ROADWAY TYPICAL SECTION NO. 4
 USE ROADWAY TYPICAL SECTION
 -Y2- STA. 10+75.00 TO -Y2- STA. 11+63.38



ROADWAY TYPICAL SECTION NO. 5
 USE ROADWAY TYPICAL SECTION
 -Y2- STA. 11+63.38 TO -Y2- STA. 13+13.66



MULTI-USE PATH TYPICAL SECTION
 USE MULTI-USE PATH TYPICAL SECTION
 -MUP2- STA. 10+00.00 TO -MUP2- STA. 12+45.00 (BEGIN BOARDWALK)
 -MUP2- STA. 13+05.00 (END BOARDWALK) TO -MUP2- STA. 14+97.52



BOARDWALK TYPICAL SECTION
 USE BOARDWALK TYPICAL SECTION
 -MUP2- STA. 12+45.00 TO -MUP2- STA. 13+05.00
 SEE SHEETS 2B AND 2C FOR BOARDWALK DETAILS

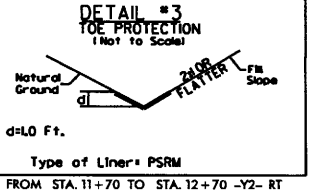
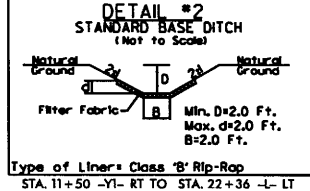
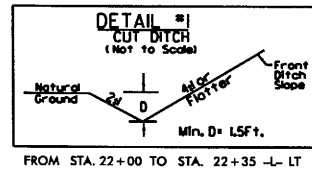
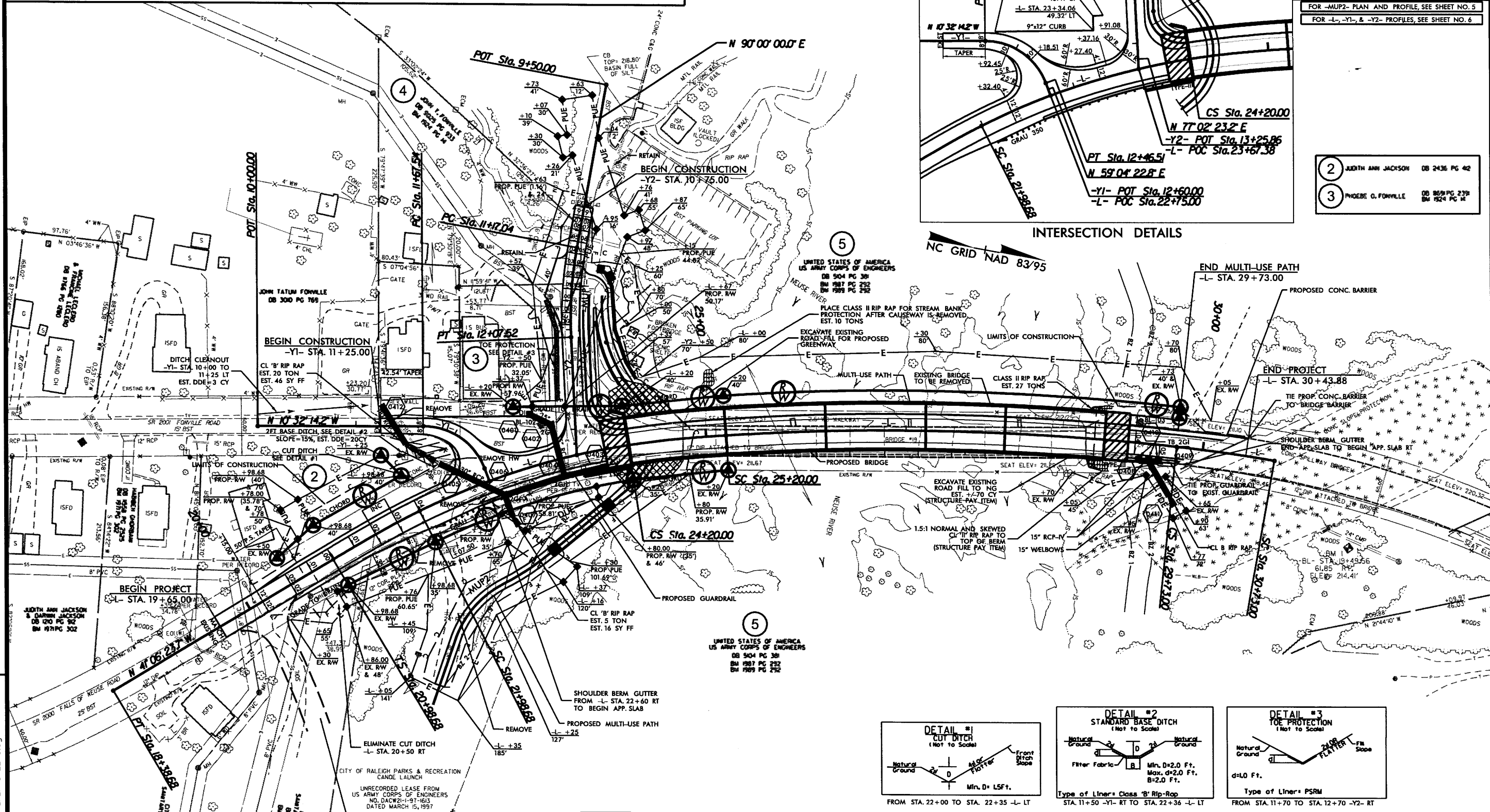
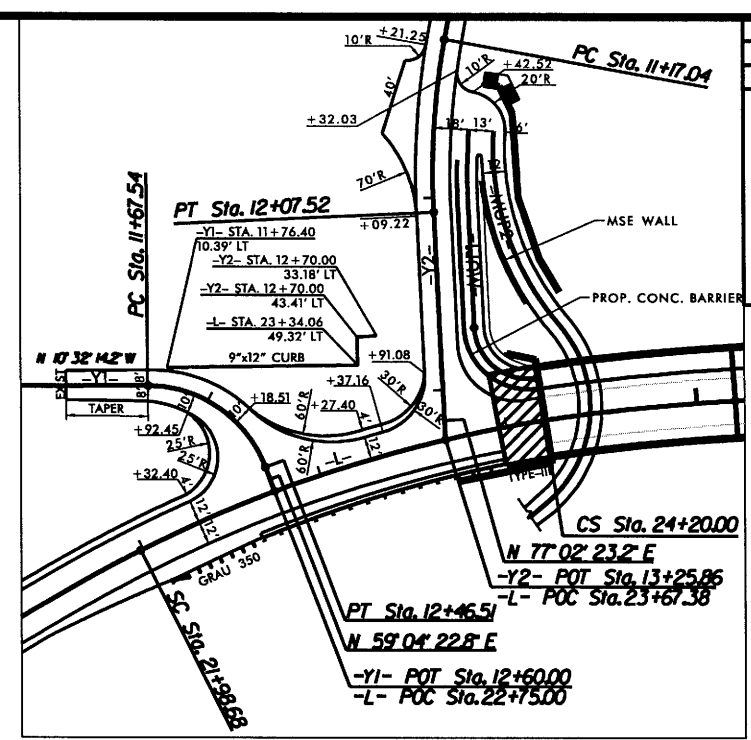
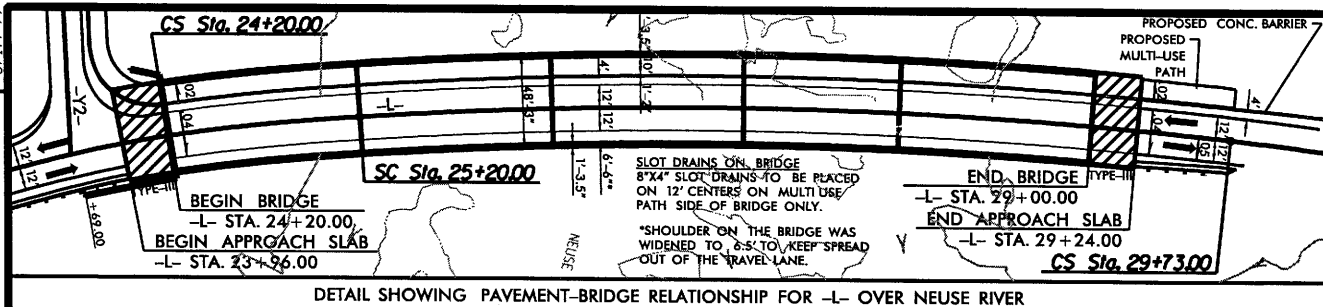
PAVEMENT SCHEDULE	
C1	1 1/2" S9.5B
C2	2" S9.5B
C3	3" S9.5B
C4	VAR. S9.5B
D1	2 1/2" I19.0B
D2	VAR. I19.0B
E1	5" B25.0B
J1	6" ABC
T	EARTH MATERIAL
U	EXIST. PAVEMENT
W	WEDGING

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

6/8/2010 09:46:00_RDY_PLANSHEETS.dgn

FOR -MUP2- PLAN AND PROFILE, SEE SHEET NO. 5
 FOR -L-, -Y1-, & -Y2- PROFILES, SEE SHEET NO. 6

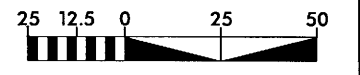
- 2 JUDITH ANN JACKSON DB 2436 PG 42
- 3 PHOEBE O. FOMVILLE DB 869 PG 239
 BM 1524 PG 14



SPIRAL I-1B Pis Sta 21+65.36 Gs = 4'01'45.3" Ls = 100.00' LT = 66.68' ST = 33.35'	CURVE I-1 Pi Sta 23+10.24 Δ = 17°50'06.6" (RT) D = 8'03'30.5" L = 221.32' T = 111.56' R = 711.00' SF = 04	SPIRAL I-1 Pis Sta 24+60.61 Gs = 1'07'08.1" Ls = 4'01'45.7" LT = 100.00' ST = 59.45' SF = 40.61'	CURVE I-2 Pi Sta 27+41.09 Δ = 10°08'19.2" (RT) D = 2'14'17.2" L = 453.00' T = 227.09' R = 2560.00' SF = 00.40	SPIRAL I-2 Pis Sta 30+30.31 Gs = 1'07'08.4" Ls = 2'51'33.1" LT = 100.00' ST = 57.31' SF = 42.73'	CURVE I-3 Pi Sta 31+61.54 Δ = 10°06'00.0" (RT) D = 5'43'05.7" L = 176.63' T = 88.54' R = 1001.98'	CURVE Y1-1 Pi Sta 12+12.73 Δ = 69°36'37.1" (RT) D = 88°08'50.5" L = 78.97' T = 45.18' R = 65.00'	CURVE Y2-1 Pi Sta 11+62.41 Δ = 12°57'36.8" (LT) D = 14'19'26.2" L = 90.48' T = 45.43' R = 400.00'
---	---	---	---	---	--	---	--

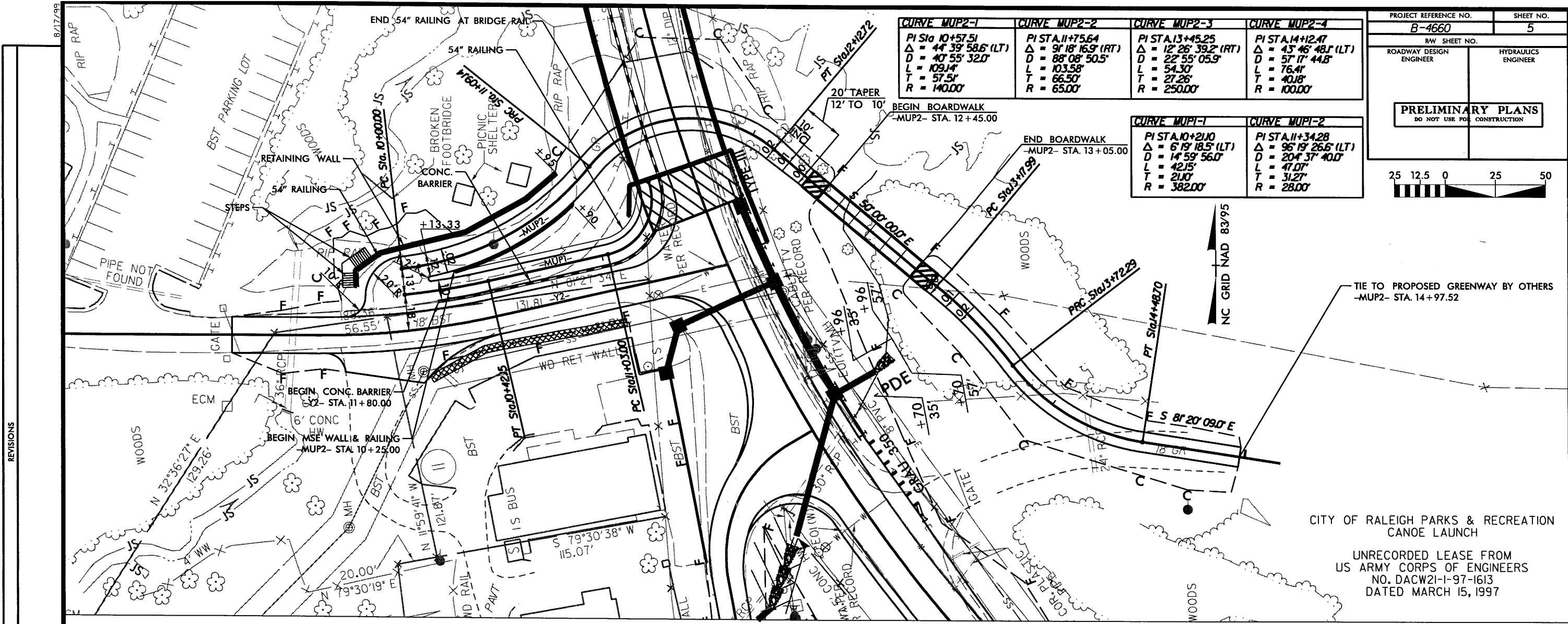
REVISIONS
 PARCEL 5; REVISED TEMPORARY CONSTRUCTION EASEMENT DUE TO CHANGE IN TRAIL ALIGNMENT.
 DATE:

6/8/2010 B4660_RDY_PLANSHEETS.dgn
 8/17/95



CURVE MUP2-1	CURVE MUP2-2	CURVE MUP2-3	CURVE MUP2-4
PI STA 10+57.51	PI STA 11+75.64	PI STA 13+45.25	PI STA 14+12.47
$\Delta = 44^\circ 39' 58.6''$ (LT)	$\Delta = 91^\circ 18' 16.9''$ (RT)	$\Delta = 12^\circ 26' 39.2''$ (RT)	$\Delta = 43^\circ 46' 48.1''$ (LT)
D = 407.55' 32.0"	D = 88' 08" 50.5"	D = 22' 55' 05.9"	D = 57' 17" 44.8"
L = 109.14'	L = 103.58'	L = 54.30'	L = 76.41'
T = 57.57'	T = 66.50'	T = 27.26'	T = 40.18'
R = 140.00'	R = 65.00'	R = 250.00'	R = 100.00'

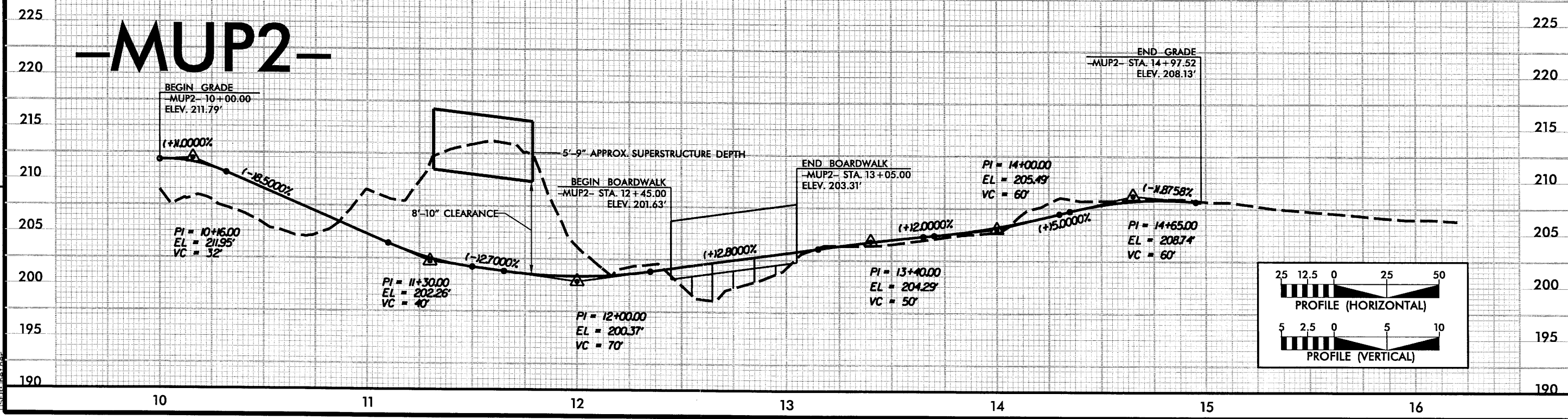
CURVE MUP1-1	CURVE MUP1-2
PI STA 10+21.00	PI STA 11+34.28
$\Delta = 6^\circ 19' 18.5''$ (LT)	$\Delta = 96^\circ 19' 26.6''$ (LT)
D = 14' 59" 56.0"	D = 204' 37" 40.0"
L = 42.15'	L = 47.07'
T = 21.07'	T = 31.27'
R = 382.00'	R = 28.00'



CITY OF RALEIGH PARKS & RECREATION
CANOE LAUNCH

UNRECORDED LEASE FROM
US ARMY CORPS OF ENGINEERS
NO. DACW21-1-97-1613
DATED MARCH 15, 1997

MULTI-USE PATH DESIGN



REVISIONS

6/8/2008 B4660.RDY_PLANSHEETS.dgn

5/28/99

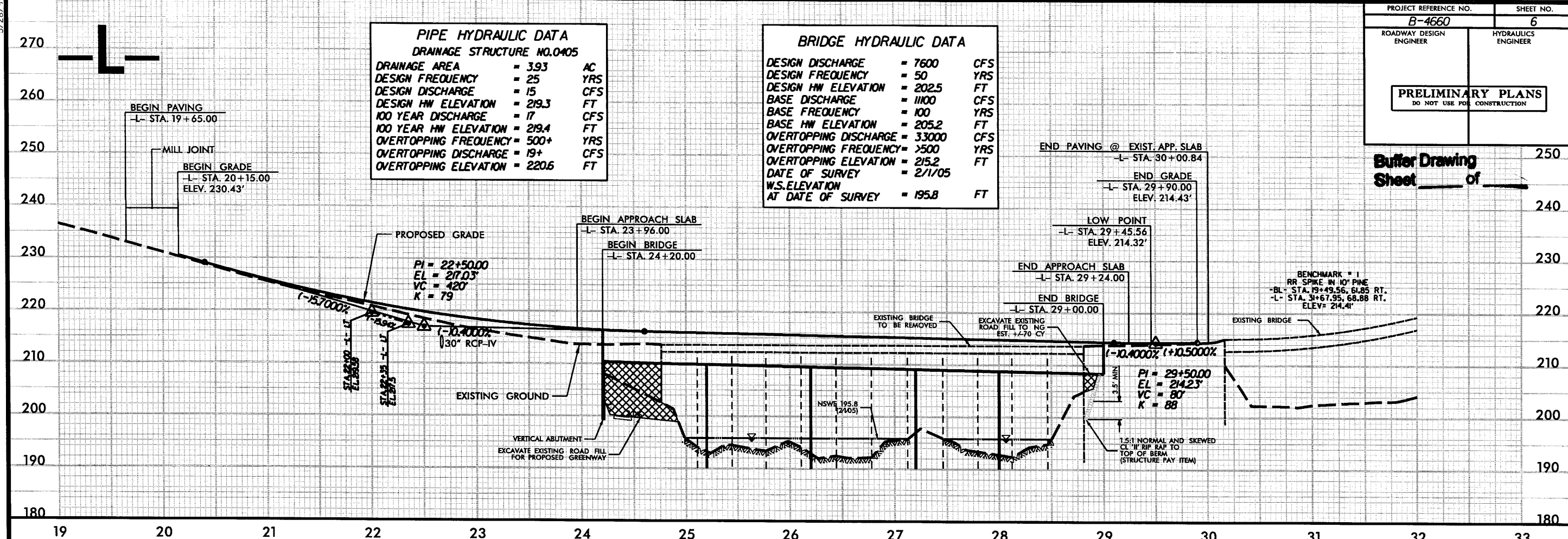
PROJECT REFERENCE NO. B-4660	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.0405

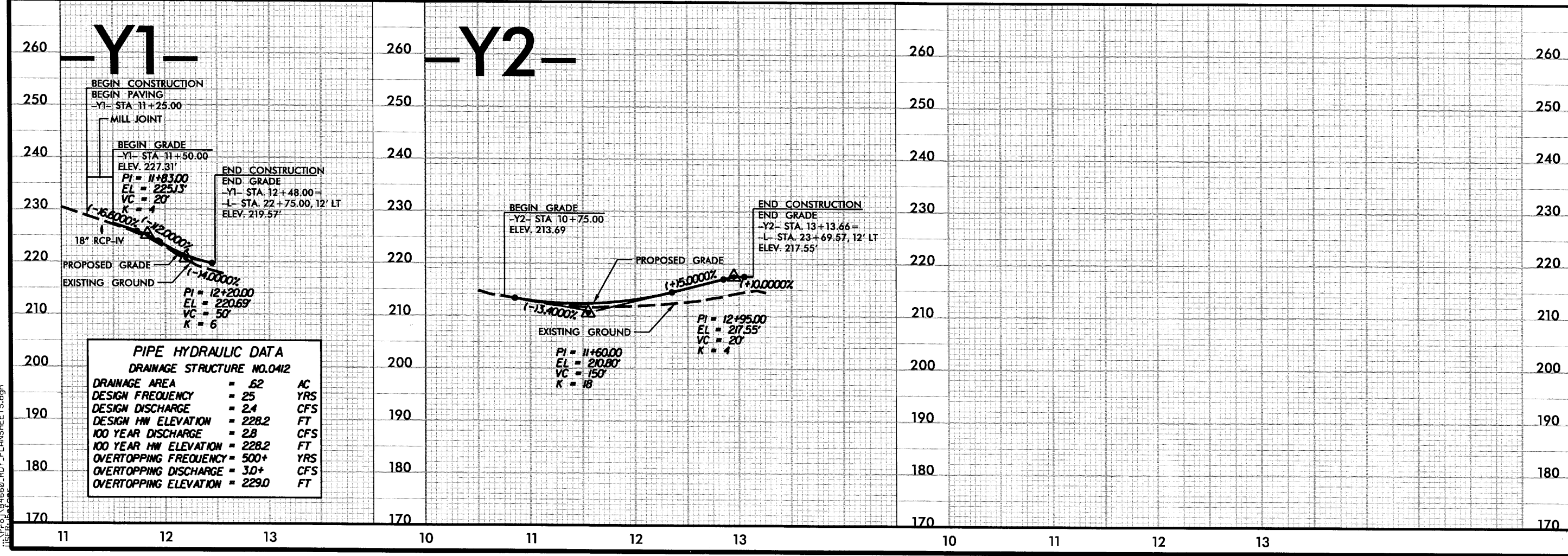
DRAINAGE AREA	= 3.93	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 15	CFS
DESIGN HW ELEVATION	= 219.3	FT
100 YEAR DISCHARGE	= 17	CFS
100 YEAR HW ELEVATION	= 219.4	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 19+	CFS
OVERTOPPING ELEVATION	= 220.6	FT

BRIDGE HYDRAULIC DATA

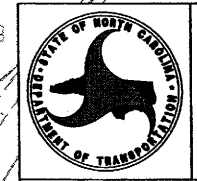
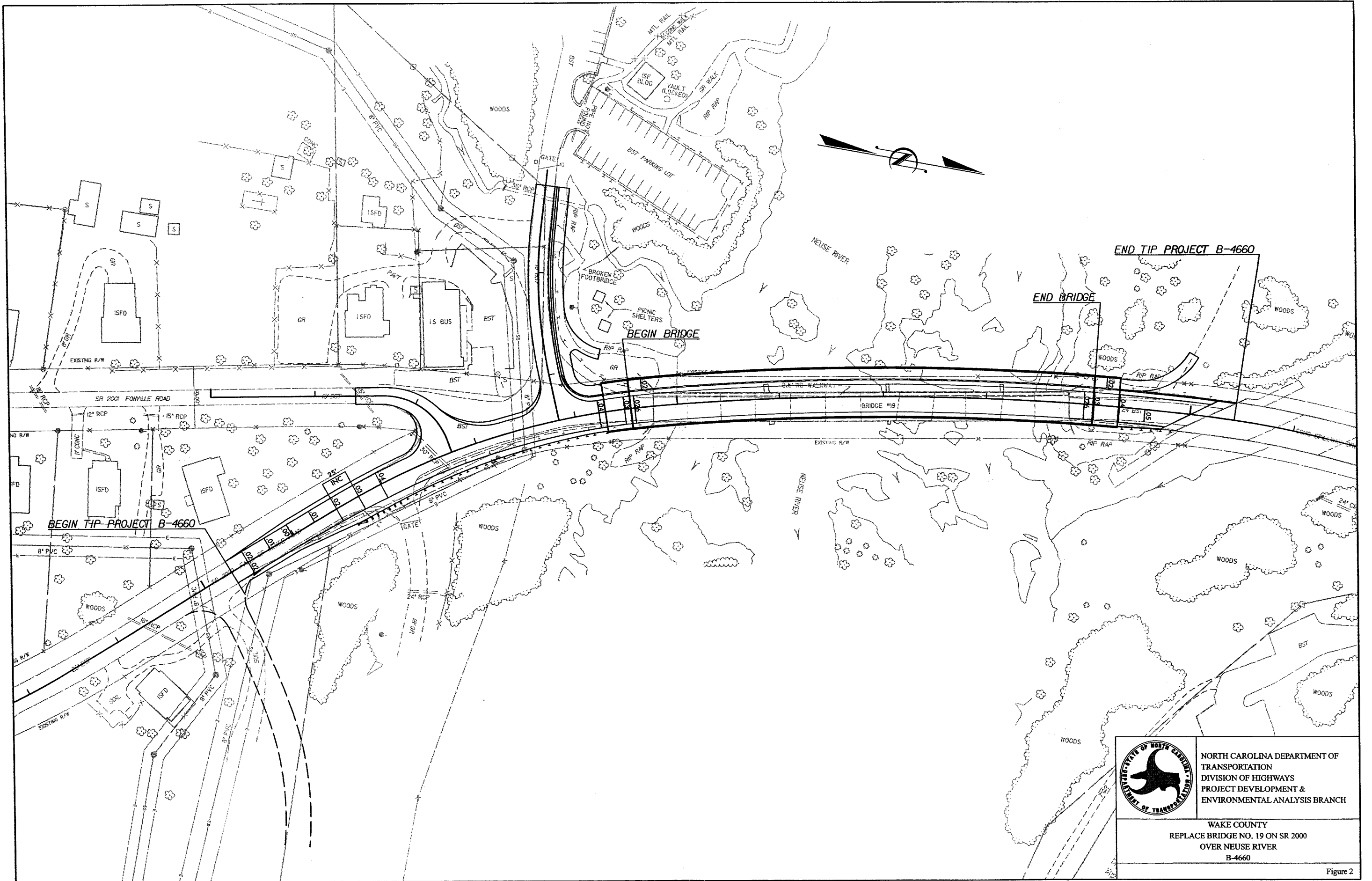
DESIGN DISCHARGE	= 7600	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 202.5	FT
BASE DISCHARGE	= 11100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 205.2	FT
OVERTOPPING DISCHARGE	= 33000	CFS
OVERTOPPING FREQUENCY	= >500	YRS
OVERTOPPING ELEVATION	= 215.2	FT
DATE OF SURVEY	= 2/1/05	
W.S.ELEVATION AT DATE OF SURVEY	= 195.8	FT



Buffer Drawing Sheet ___ of ___



6/8/2010 11:58:10 AM B-4660.RDY_PLANSHEETS.dgn



NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH

WAKE COUNTY
REPLACE BRIDGE NO. 19 ON SR 2000
OVER NEUSE RIVER
B-4660

Figure 2

Federal Aid # BRSTP-2000 (4) TIP # B-4660 County: Wake

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Replace Bridge no. 19 over Neuse River on SR 2000, Wake County

On Feb. 11, 2008 representatives of

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (HPO)
- Other

Reviewed the subject project and agreed

- There are no effects on the National Register-listed property/properties located within the project's area of potential effect and listed on the reverse.
- There are no effects on the National Register-eligible property/properties located within the project's area of potential effect and listed on the reverse.
- There is an effect on the National Register-listed property/properties located within the project's area of potential effect. The property/properties and the effect(s) are listed on the reverse.
- There is an effect on the National Register-eligible property/properties located within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

Signed:

Shelby Spiller 2/11/08
Representative, NCDOT Date

David A. Brown 2-11-08
FHWA, for the Division Administrator, or other Federal Agency Date

Representative, HPO Date

Renee Medkiff-Easley 2-11-08
State Historic Preservation Officer Date

Federal Aid # BRSTP-2000 (4)

TIP # B-4660

County: Wake

Properties within the area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

Falls of Neuse Manufacturing Company (NR)

Askew-Fonville House & Outbuildings (DE)

Falls Community Elevated Water Storage Tank #13 (DE)

Properties within the area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe the effect.

Reason(s) why the effect is not adverse (if applicable).

Initialed:

NCDOT

SLS

FHWA

DB

HPO

RJE

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project No.	B-4660
State Project No.	8.2409971
W.B.S. No.	33822.1.1
Federal Project No.	BRSTP-2000(04)

A. Project Description:

The purpose of this project is to replace Wake County Bridge No. 19 on SR 2000 (Falls of Neuse Road) over the Neuse River. The existing structure has a total length of 404.1-feet. The replacement structure will be a bridge approximately 450-feet long. The bridge will include two 12-foot lanes, 4-foot shoulders and a 10-foot multi-use bike and pedestrian lane separated from the travel lanes by vertical barrier. Total bridge width will be 48.6-feet with a minimum of 34.8-feet clear deck width for travel lanes and 10-feet for the bike and pedestrian lane. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 425-feet from the southern end of the bridge and tie directly into the existing spillway bridge No. 602 to the north. The southern approach will include a 24-foot pavement width providing two 12-foot lanes. Eight-foot shoulders with guardrail will be provided. The roadway will be designed as a Rural Major Collector with a 45 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

B. Purpose and Need:

NC DOT Bridge Maintenance records indicate Bridge No. 19 has a sufficiency rating of 44.2 out of a possible 100 for a new structure. The bridge is considered functionally obsolete due to deck geometry appraisal of 2 out of 9 according to the Federal Highway Administration (FHWA) standards and therefore eligible for FHWA's Highway Bridge Replacement and Rehabilitation Program.

Bridge No. 19 was originally constructed in 1938 and rehabilitated in 1967. Substructure elements range in age from 70 to 40 years in age. Steel superstructure elements are 40 years old. The typical life expectancy for structures of this type is 50 years. Bridge No. 19 has approached the end of its useful life.

C. Proposed Improvements:

Circle one or more of the following Type II improvements which apply to the project:

1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)

- e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane).
 - i. Slide Stabilization
 - j. Structural BMP's for water quality improvement
2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - l. Installing bridge safety hardware including bridge rail retrofit.
 3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings
 - a. Rehabilitating, reconstructing, or replacing bridge approach slabs
 - b. Rehabilitating or replacing bridge decks
 - c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
 - d. Replacing a bridge (structure and/or fill).
 4. Transportation corridor fringe parking facilities.
 5. Construction of new truck weigh stations or rest areas.
 6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts
 7. Approvals for changes in access control.
 8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
 9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
 10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
 11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.

12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3(b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.
13. Acquisition and construction of wetland, stream and endangered species mitigation sites.
14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

D. Special Project Information:

Estimated Costs:

The estimated costs, based on 2008 prices, are as follows:

Structure	\$3,521,000
Roadway Approaches	\$ 450,000
On-Site Detour	N/A
Structure Removal	\$ 170,000
Misc. & Mob.	\$ 540,000
Eng. & Contingencies	\$ 788,000
Total Construction Cost	\$5,600,000
Right-of-Way Cost	\$ 117,500
Utility Relocation Cost	\$ 132,000
Total Project Costs	\$ 5,849,500

Estimated Traffic:

Current	-	13300 vpd
Year 2030	-	15800 vpd
TTST	-	1%
Dual	-	2%

Accidents: Traffic Engineering has evaluated a recent three year period and found 7 accidents occurring in the vicinity of the project. From the crash analysis, there does not appear to be identifiable crash patterns or obvious safety hazards in the vicinity of the structure.

Design Exceptions: There are no anticipated design exceptions for this project.

Bridge Demolition: Bridge No. 19 is constructed of steel, concrete and stone masonry. Best Management Practices for Bridge Demolition and Removal will be used to avoid dropping debris into the river.

Alternatives Discussion:

No Build – No build would result in eventually closing Falls of Neuse Road (SR 2000), which is unacceptable given the volume of traffic the facility carries.

Rehabilitation – The bridge was constructed in 1938 and rehabilitated in 1967 and has reached the end of its life expectancy. Rehabilitation would require replacing both substructure and superstructure components and would effectively constitute replacing the bridge.

Offsite Detour – Bridge No. 19 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 2006 (Durant Road), US 1 (Capital Blvd.) and NC 98 (Durham Road) and add approximately 3.7 miles additional travel.

Wake County Schools and Wake County Emergency Services has indicated that they can manage the proposed detour. NCDOT Division 5 concurs with the use of the detour.

Other Agency Comments:

The **N.C. Wildlife Resource Commission** provided standard comments, recommending replacing this bridge with a bridge.

The **N.C. Division of Water Quality** recommends that the most protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff into the Neuse River. Additionally they request that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NC DWQ *Stormwater Best Management Practices*.

Response: Neuse River Buffer Rules apply; therefore, sedimentation and erosion control measures shall adhere to Design Standards in Sensitive Watersheds.

The **Historic Preservation Office (HPO)** reviewed the project Historic Architectural Resources Survey Report, prepared November 2007 and found that the project will have no effects to listed or eligible National Register properties. (See concurrence dated February 11, 2008.)

City of Raleigh is currently designing the Upper Neuse Greenway, which starts at Falls Lake Dam and will connect to Forest Ridge Park to the north of Bridge No. 19 and under Bridge No. 19 traveling south along the Neuse River. The project begins construction in the fall of 2009. The City has requested that a multiuse path be accommodated on the new bridge and to modify the existing bench on the south end of the bridge allow the greenway to be constructed.

Response: NCDOT has developed the typical section for bridge to accommodate a 10-foot multi-use path separated from the travel lanes by a vertical barrier. The City will be required to contribute to the project for cost associated with the multi-use path on the bridge. NCDOT proposes to delay construction of the greenway directly under Bridge No. 19 and will construct that as a part of the new bridge.

Public Involvement:

A Citizen's Informational Workshop was held on August 13, 2007, which was attended by 175 citizens. The majority of the comments concerned the detour route, which was considered to be too long. There was large support for coordinating the project with the City of Raleigh's New Falls of Neuse project and using that project, which includes a bridge over the Neuse River as the detour route.

Response: NCDOT will coordinate with the City of Raleigh concerning the possibility to utilize the New Falls of Neuse Road as the detour for this bridge replacement project.

E. Threshold Criteria The following evaluation of threshold criteria must be completed for Type II actions:

Ecological		Yes	No
1	Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project involve habitat where federally listed endangered or threatened species may occur?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Will the project affect anadromous fish?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) of an acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Will the project require the use of U. S. Forest Service lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project involve waters classified as Outstanding Water Resources (OWR) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	Will the project require fill in waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Permits and Coordination		Yes	No
10	If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project involve Coastal Barrier Resources Act resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Will a U. S. Coast Guard permit be required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project result in the modification of any existing regulatory floodway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Will the project require any stream relocations or channel changes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Social, Economic and Cultural Resources		Yes	No
15	Will the project induce substantial impacts to planned growth or land use for the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Will the project require the relocation of any family or business?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19	Will the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Will the project substantially alter the usefulness and/or land use of adjacent property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23	Is the project anticipated to cause an increase in traffic volumes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | |
|----|---|--------------------------|--------------------------|
| 24 | Will traffic be maintained during construction using existing roads, staged construction, or on-site detours? | <u>✗</u> | <input type="checkbox"/> |
| 25 | If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility? | <u>✗</u> | <input type="checkbox"/> |
| 26 | Is there substantial controversy on social, economic, or environmental grounds concerning the project? | <input type="checkbox"/> | <u>✗</u> |
| 27 | Is the project consistent with all Federal, State and local laws relating to the environmental aspects of the project? | <u>✗</u> | <input type="checkbox"/> |
| 28 | Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places? | <input type="checkbox"/> | <u>✗</u> |
| 29 | Will the project affect any archaeological remains which are important to history or pre-history? | <input type="checkbox"/> | <u>✗</u> |
| 30 | Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)? | <input type="checkbox"/> | <u>✗</u> |
| 31 | Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended? | <input type="checkbox"/> | <u>✗</u> |
| 32 | Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the Natural System of Wild and Scenic Rivers? | <input type="checkbox"/> | <u>✗</u> |

F. Additional Documentation Required for Unfavorable Responses in Part E

There are no unfavorable responses in Part E.

G. CE Approval

TIP Project No. B-4660
State Project No. 8.2409971
Federal Project No. 33822.1.1

Project Description: (Include project scope and location. Attach location map.)

The purpose of this project is to replace Wake County Bridge No. 19 on SR 2000 (Falls of Neuse Road) over the Neuse River. The existing structure has a total length of 404.1-feet. The replacement structure will be a bridge approximately 450-feet long. The bridge will include two 12-foot lanes, 4-foot shoulders and a 10-foot multi-use bike and pedestrian lane separated from the travel lanes by vertical barrier. Total bridge width will be 48.6-feet with a minimum of 36-feet clear deck width for travel lanes and 10-feet for the bike and pedestrian lane. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 425-feet from the southern end of the bridge and tie directly into the existing spillway bridge No. 602 to the north. The southern approach will include a 24-foot pavement width providing two 12-foot lanes. Eight-foot shoulders with guardrail will be provided. The roadway will be designed as a Rural Major Collector with a 45 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

Categorical Exclusion Action Classification:

TYPE II(A)
 TYPE II(B)

Approved: 8/28/08 William T. Shroder
Date Bridge Project Development Engineer
Project Development & Environmental Analysis Branch

8/29/08 Bryan D. Kline
Date Project Engineer
Project Development & Environmental Analysis Branch

8/28/08 [Signature]
Date Project Planning Engineer
Project Development & Environmental Analysis Branch

8/28/2008 [Signature]
Date Iona L. Hauser, AICP
Senior Planner, Stewart Engineering, Inc.

For type II(B) projects only:

N/A N/A
Date John F. Sullivan, III PE, Division Administrator
Federal Highway Administration

PROJECT COMMITMENTS:

**Wake County
Bridge No. 19 on SR 2000
over Neuse River
Federal Project No. BRSTP-2000(04)
State Project No. 8.2409971
W.B.S. No. 33822.1.1
TIP Project No. B-4660**

All Design Groups & Division Construction – Greenway Accommodation

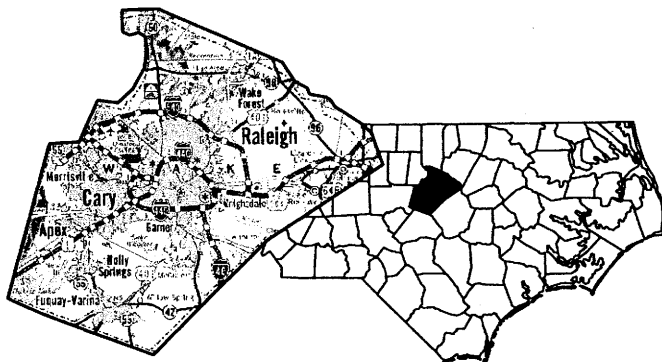
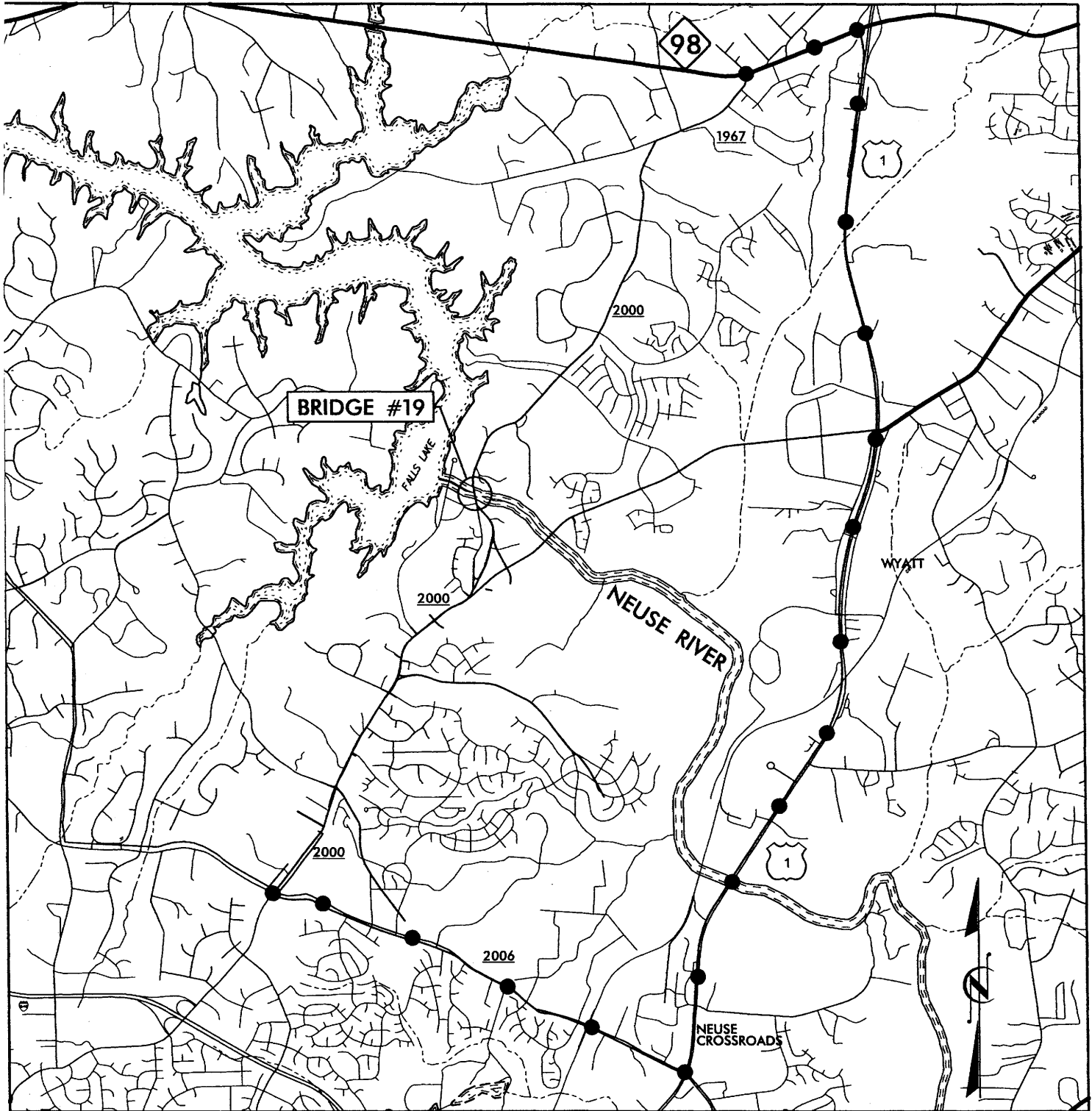
The new bridge will to be designed to include a 10-foot multi-use path separated from the travel lanes by a vertical barrier. The City of Raleigh will be required to contribute to the project for costs associated with the multi-use path on the bridge. NCDOT proposes to delay construction of the greenway under Bridge No. 19 and will construct that as a part of the new bridge.

Division 5 Construction, Resident Engineer's Office – Offsite Detour

The Wake County Emergency Services and Public Schools should be notified at least two month prior to road closure.

Roadside Environmental Unit, Division 5 – Water Quality

Sedimentation and erosion control measures shall adhere to Design Standards in Sensitive Watersheds.



● — ● Denotes off-site detour



NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH

WAKE COUNTY
REPLACE BRIDGE NO. 19 ON SR 2000
OVER NEUSE RIVER
B-4660

Figure 1