



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

May 11, 2009

Mr. Bill Biddlecome
U.S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

Mr. Jim Hoadley
Division of Coastal Management
N. C. Dept. of Env. & Natural Resources
1367 U. S. Highway 17
Elizabeth City, NC 27909

Dear Sirs:

Subject: Nationwide 12 and 23 Permit Application, and CAMA Major Development Permit Application for the replacement of Bridge No. 5 over Pembroke Creek on SR 1208 in Chowan County. State Project No. 8.2031101. Federal Aid Project Number BRZ-1208(1). Debit \$400.00 from WBS 33714.1.1.TIP No. B-4465.

Please find enclosed the North Carolina Division of Coastal Management Major Permit Forms 1 and 5, Pre-Construction Notification (PCN) form, Ecosystem Enhancement Program (EEP) acceptance letter, N.C. State Stormwater Permit Exclusion letter, permit drawings, half-size plan sheets, utility narrative/drawings, and adjacent riparian landowner return receipts for the above referenced project. A Categorical Exclusion (CE) was completed for this project on January 3, 2008, and distributed shortly thereafter. Additional copies are available upon request. The North Carolina Department of Transportation (NCDOT), Division of Highways, in consultation with the Federal Highway Administration (FHWA), proposes to replace Bridge No. 5 in Chowan County. The proposed let date for the project is January 19, 2010 with a review date of December 1, 2009.

Regulatory Approvals

CAMA: NCDOT requests that the proposed work be authorized under a Coastal Area Management Act Major Development Permit. The landowner receipts are provided with this permit application. Authorization to debit the \$400 Permit Application Fee from WBS Element 33714.1.1 is hereby given.

Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that a Nationwide Permit 23 authorize these activities. We are also requesting the issuance of a Nationwide Permit 12 for utility work and 33 for the temporary fill due to the installation of erosion control measures. (72 CFR; 11092-11198, March 12, 2007).

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

TELEPHONE: 919-431-2000
FAX: 919-431-2002
WEBSITE: WWW.NCDOT.ORG

LOCATION:
4701 ATLANTIC AVENUE
SUITE 116
RALEIGH NC 27604

Section 401 Permit: We anticipate 401 General Certification numbers 3699 and 3701 will apply to this project. All general conditions of the Water Quality Certifications will be met, therefore we are not requesting written approval from NCDWQ. In accordance with 15A NCAC 2H, Section .0500(a), we are providing two copies of this application to the NCDWQ for their review.

A copy of this permit application 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 or email Mrs. Veronica Barnes, at 919-431-6758 or vabarnes@ncdot.gov.

Sincerely,



for

Gregory J. Thorpe, Ph.D. Environmental Management Director
Project Development and Environmental Analysis Branch

cc List:

W/attachment

Mr. Brian Wrenn, NCDWQ (2 Copies)
Ms. Cathy Brittingham, NCDCM

W/o attachment (see website for attachments)

Mr. Scott McLendon, USACE, Wilmington
Mr. Travis Wilson, NCWRC
Mr. Gary Jordan, USFWS
Mr. Ron Sechler, NMFS
Ms. Anne Deaton, NCDMF
Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Anthony Roper, P.E., Division 1 Engineer
Mr. Clay Willis, Division 1 Environmental Officer
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Ms. Beth Harmon, EEP
Mr. Todd Jones, NCDOT External Audit Branch
Ms. Christy M. Wright, P.E., PDEA



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

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps: Section 404 Permit Section 10 Permit

1b. Specify Nationwide Permit (NWP) number: 12 23 or General Permit (GP) number:

1c. Has the NWP or GP number been verified by the Corps? Yes No

1d. Type(s) of approval sought from the DWQ (check all that apply):
 401 Water Quality Certification – Regular Non-404 Jurisdictional General Permit
 401 Water Quality Certification – Express Riparian Buffer Authorization

| | | |
|--|---|--|
| 1e. Is this notification solely for the record because written approval is not required? | For the record only for DWQ 401 Certification: <input checked="" type="checkbox"/> Yes <input 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. Yes No

1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below. Yes No

1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)? Yes No

2. Project Information

| | |
|--|--|
| 2a. Name of project: | Replace Bridge No. 5 over Pembroke Creek on SR 1208. |
| 2b. County: | Chowan |
| 2c. Nearest municipality / town: | Edenton |
| 2d. Subdivision name: | not applicable |
| 2e. NCDOT only, T.I.P. or state project no.: | B-4465 |

3. Owner Information

| | |
|--|---|
| 3a. Name(s) on Recorded Deed: | North Carolina Department of Transportation |
| 3b. Deed Book and Page No. | not applicable |
| 3c. Responsible Party (for LLC if applicable): | not applicable |
| 3d. Street address: | 4701 Atlantic Ave, Suite 116 |
| 3e. City, state, zip: | Raleigh, NC 27604 |
| 3f. Telephone no.: | (919) 431-6758 |
| 3g. Fax no.: | (919) 431-2002 |
| 3h. Email address: | vabarnes@ncdot.gov |

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

| B. Project Information and Prior Project History | |
|---|--|
| 1. Property Identification | |
| 1a. Property identification no. (tax PIN or parcel ID): | N/A |
| 1b. Site coordinates (in decimal degrees): | Latitude: 36.88085 (DD.DDDDDD) Longitude: - 76.641702 (-DD.DDDDDD) |
| 1c. Property size: | N/A acres |
| 2. Surface Waters | |
| 2a. Name of nearest body of water (stream, river, etc.) to proposed project: | Pembroke Creek |
| 2b. Water Quality Classification of nearest receiving water: | C |
| 2c. River basin: | Chowan |
| 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: Existing conditions on the site include Hardwood swamp forest and general land use is cropland and pasture. | |
| 3b. List the total estimated acreage of all existing wetlands on the property: 8.0 | |
| 3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 450 | |
| 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 a structurally deficient bridge with a six-span 18 inch cored slab bridge on pile bents. The existing structure is a three span bridge with prestressed concrete channels on precast prestressed concrete caps and timber piles. Standard road building equipment will be used. Existing utilities will be relocated on-site via the directional bore method. | |
| 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown |
| 4b. If the Corps made the jurisdictional determination, what type of determination was made? | <input type="checkbox"/> Preliminary <input checked="" type="checkbox"/> Final |
| 4c. If yes, who delineated the jurisdictional areas? Name (if known): | Agency/Consultant Company: EcoScience Corporation Other: |
| 4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. March 7, 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. N/A | |
| 6. Future Project Plans | |
| 6a. Is this a phased project? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 6b. If yes, explain. N/A | |

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) |
|--|-----------------------|--------------------------------------|--|---|----------------------------------|
| W1 <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 | 0.30 |
| W2 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | |
| W3 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | |
| W4 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | |
| W5 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | |
| W6 <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 | | | | | 0.30 |

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) |
|---|-----------------------|--------------------|--|---|---|---|
| S1 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> PER <input type="checkbox"/> INT | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | | |
| S2 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> PER <input type="checkbox"/> INT | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | | |
| S3 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> PER <input type="checkbox"/> INT | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | | |
| S4 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> PER <input type="checkbox"/> INT | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | | |
| S5 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> PER <input type="checkbox"/> INT | <input type="checkbox"/> Corps <input type="checkbox"/> DWQ | | |
| S6 <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

3i. Comments:

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 | | | | |

4g. Comments: N/A

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: N/A

5h. Is a dam high hazard permit required? Yes No If yes, permit ID no: _____

5i. Expected pond surface area (acres): _____

5j. Size of pond watershed (acres): _____

5k. Method of construction: _____

6. Buffer Impacts (for DWQ)

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

| 6a. Project is in which protected basin? | | | <input type="checkbox"/> Neuse <input 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 type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| B2 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| B3 <input type="checkbox"/> P <input type="checkbox"/> T | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| 6h. Total buffer impacts | | | | | |

6i. Comments: N/A

| | | |
|---|---|----------|
| D. Impact Justification and Mitigation | | |
| 1. Avoidance and Minimization | | |
| 1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. Measures taken during the design process to avoid or minimize impacts include the use of NCDOT Best Management Practices, increasing the length of the proposed bridge, and removal of the existing causeway. | | |
| 1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Construction techniques used to minimize impacts include the use of top-down construction and Stream Crossing Guidelines for Anadromous Fish Passage, including an in-water work moratorium from Feb. 15 to Jun. 15. | | |
| 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| 2b. If yes, mitigation is required by (check all that apply): | <input type="checkbox"/> DWQ <input checked="" type="checkbox"/> Corps | |
| 2c. If yes, which mitigation option will be used for this project? | <input type="checkbox"/> Mitigation bank <input checked="" 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 checked="" 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): | N/A square feet | |
| 4e. Riparian wetland mitigation requested: | 0.30 acres | |
| 4f. Non-riparian wetland mitigation requested: | N/A acres | |
| 4g. Coastal (tidal) wetland mitigation requested: | N/A acres | |
| 4h. Comments: N/A | | |
| 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. N/A | | |

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 | N/A | | 3 (2 for Catawba) | |
| Zone 2 | N/A | | 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).

N/A

6h. Comments: N/A

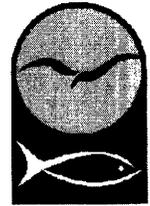
| E. Stormwater Management and Diffuse Flow Plan (required by DWQ) | |
|--|--|
| 1. Diffuse Flow Plan | |
| 1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments: | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 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 attachments. | |
| 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 checked="" 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 checked="" 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. N/A | |
| 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? USFWS list of Threatened and Endangered Species for Chowan County (January 30, 2008) | | |
| 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? Index of Waterbodies with Essential Fish Habitat | | |
| 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? | | |
| 8. Flood Zone Designation (Corps Requirement) | | |
| 8a. Will this project occur in a FEMA-designated 100-year floodplain? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics Unit will coordinate with FEMA | | |
| 8c. What source(s) did you use to make the floodplain determination? FEMA maps | | |
| Gregory J. Thape, PhD 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> | 5-11-09 Date |

APPLICATION for Major Development Permit

(last revised 12/27/06)



North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applicant/ Landowner Information

| | | | |
|---|----------------|--|-----------------------------|
| Business Name North Carolina Department Of Transportation | | Project Name (if applicable) B-4465 | |
| Applicant 1: First Name Gregory | MI | Last Name Thorpe, PhD. | |
| Applicant 2: First Name | MI | Last Name | |
| <i>If additional applicants, please attach an additional page(s) with names listed.</i> | | | |
| Mailing Address 1598 Mail Service Center | | PO Box | City Raleigh |
| | | | State NC |
| ZIP 27699 1598 | Country USA | Phone No. 919 - 431 - 2000 ext. | FAX No. 919 - 431 - 2002 |
| Street Address (if different from above) 4701 Atlantic Ave, Suite 116 | | City Raleigh | State NC |
| | | | ZIP 27604- |
| Email gthorpe@ncdot.gov | | | |

2. Agent/Contractor Information

| | | | |
|--|--------------|-------------------------|-------------------------|
| Business Name | | | |
| Agent/ Contractor 1: First Name | MI | Last Name | |
| Agent/ Contractor 2: First Name | MI | Last Name | |
| Mailing Address | | PO Box | City |
| | | | State |
| ZIP | | Phone No. 1 - - ext. | Phone No. 2 - - ext. |
| FAX No. | Contractor # | | |
| Street Address (if different from above) | | City | State |
| | | | ZIP |
| Email | | | |

<Form continues on back>

| | | | |
|--|--------------------------------|---|----------------|
| 3. Project Location | | | |
| County (can be multiple) Chowan | Street Address Wildcat Road | State Rd. # SR 1208 | |
| Subdivision Name N/A | City Edenton | State NC | Zip 27932 - |
| Phone No. N/A - - ext. | | Lot No.(s) (if many, attach additional page with list) N/A, , , , | |
| a. In which NC river basin is the project located? Chowan | | b. Name of body of water nearest to proposed project Pembroke Creek | |
| c. Is the water body identified in (b) above, natural or manmade? <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Manmade <input type="checkbox"/> Unknown | | d. Name the closest major water body to the proposed project site. Chowan River | |
| e. Is proposed work within city limits or planning jurisdiction? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | f. If applicable, list the planning jurisdiction or city limit the proposed work falls within. N/A | |

| | |
|--|---|
| 4. Site Description | |
| a. Total length of shoreline on the tract (ft.) 100 | b. Size of entire tract (sq.ft.) 111,344 sq. ft. |
| c. Size of individual lot(s) N/A, (if many lot sizes, please attach additional page with a list) | d. Approximate elevation of tract above NHW (normal high water) or NWL (normal water level) 6.25 ft <input checked="" type="checkbox"/> NHW or <input type="checkbox"/> NWL |
| e. Vegetation on tract Cypress-gum swamp and Maintained/Disturbed area (various grasses and weeds) | |
| f. Man-made features and uses now on tract Bridge and Roadway Approaches | |
| g. Identify and describe the existing land uses <u>adjacent</u> to the proposed project site. Agricultural and forested | |
| h. How does local government zone the tract? A1-Agricultural | i. Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA |
| j. Is the proposed activity part of an urban waterfront redevelopment proposal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA If yes, by whom? | |
| l. Is the proposed project located in a National Registered Historic District or does it involve a National Register listed or eligible property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA | |

<Form continues on next page>

| | |
|--|---|
| m. (i) Are there wetlands on the site? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| (ii) Are there coastal wetlands on the site? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| (iii) If yes to either (i) or (ii) above, has a delineation been conducted? <i>(Attach documentation, if available)</i> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| n. Describe existing wastewater treatment facilities. None | |
| o. Describe existing drinking water supply source. None | |
| p. Describe existing storm water management or treatment systems. None | |

| | |
|---|---|
| 5. Activities and Impacts | |
| a. Will the project be for commercial, public, or private use? | <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Public/Government <input type="checkbox"/> Private/Community |
| b. Give a brief description of purpose, use, and daily operations of the project when complete. This project involves the replacement of Bridge No. 5 (SR 1208) in Edenton. | |
| c. Describe the proposed construction methodology, types of construction equipment to be used during construction, the number of each type of equipment and where it is to be stored. The bridge will be replaced at the existing location, and traffic will be maintained with an off-site detour. The existing bridge will be removed without dropping any components into the water. Typical construction, earth moving, and road surface equipment will be used. | |
| d. List all development activities you propose. Roadway and bridge construction | |
| e. Are the proposed activities maintenance of an existing project, new work, or both? Both | |
| f. What is the approximate total disturbed land area resulting from the proposed project? 1 <input type="checkbox"/>Sq.Ft or <input checked="" type="checkbox"/>Acres | |
| g. Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of? <input checked="" type="checkbox"/>Yes <input type="checkbox"/>No <input type="checkbox"/>NA | |
| h. Describe location and type of existing and proposed discharges to waters of the state. N/A | |
| i. Will wastewater or stormwater be discharged into a wetland? <input checked="" type="checkbox"/>Yes <input type="checkbox"/>No <input type="checkbox"/>NA If yes, will this discharged water be of the same salinity as the receiving water? <input checked="" type="checkbox"/>Yes <input type="checkbox"/>No <input type="checkbox"/>NA | |
| j. Is there any mitigation proposed? <input checked="" type="checkbox"/>Yes <input type="checkbox"/>No <input type="checkbox"/>NA If yes, attach a mitigation proposal. | |

<Form continues on back>

6. Additional Information

In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below.

- a. A project narrative.
- b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguish between work completed and proposed.
- c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site.
- d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties.
- e. The appropriate application fee. Check or money order made payable to DENR.

f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management.

| | |
|---|-----------|
| Name See Attached permit drawing sheet 2 of 9 | Phone No. |
| Address | |
| Name | Phone No. |
| Address | |
| Name | Phone No. |
| Address | |

g. A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates.

NCDENR State Stormwater Permit Exclusion, SW7090324;
issued to NCDOT on April 9, 2009

- h. Signed consultant or agent authorization form, if applicable.
- i. Wetland delineation, if necessary.
- j. A signed AEC hazard notice for projects in oceanfront and inlet areas. (Must be signed by property owner)
- k. A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A 1-10), if necessary. If the project involves expenditure of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act.

7. Certification and Permission to Enter on Land

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to the conditions and restrictions contained in the permit.

I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date May 11, 2009 Print Name Gregory J. Thorpe, PhD
Signature E. J. Luck

Please indicate application attachments pertaining to your proposed project.

- DCM MP-2 Excavation and Fill Information
- DCM MP-3 Upland Development
- DCM MP-4 Structures Information
- DCM MP-5 Bridges and Culverts

BRIDGES and CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. BRIDGES

This section not applicable

- a. Is the proposed bridge:
 Commercial Public/Government Private/Community
- b. Water body to be crossed by bridge:
Pembroke Creek
- c. Type of bridge (construction material):
21" Cored Slab
- d. Water depth at the proposed crossing at NLW or NWL:
7'
- e. (i) Will proposed bridge replace an existing bridge? Yes No
If yes,
(ii) Length of existing bridge: 90'
(iii) Width of existing bridge: 24'
(iv) Navigation clearance underneath existing bridge: 2.5'
(v) Will all, or a part of, the existing bridge be removed?
(Explain) Yes, All of the existing bridge will be removed
- f. (i) Will proposed bridge replace an existing culvert? Yes No
If yes,
(ii) Length of existing culvert: _____
(iii) Width of existing culvert: _____
(iv) Height of the top of the existing culvert above the NHW or NWL: _____
(v) Will all, or a part of, the existing culvert be removed?
(Explain)
- g. Length of proposed bridge: 240 ft)
- h. Width of proposed bridge: 33'
- i. Will the proposed bridge affect existing water flow? Yes No
If yes, explain: The new bridge and roadway grade will cause a slight increase in the 100 year water surface elevation
- j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? Yes No
If yes, explain: Increase opening
- k. Navigation clearance underneath proposed bridge: 5'
- l. Have you contacted the U.S. Coast Guard concerning their approval? Yes No
If yes, explain:
- m. Will the proposed bridge cross wetlands containing no navigable waters? Yes No
If yes, explain:
- n. Height of proposed bridge above wetlands: 5'

2. CULVERTS

This section not applicable

- a. Number of culverts proposed: N/A
- b. Water body in which the culvert is to be placed:

< Form continues on back >

c. Type of culvert (construction material):
N/A

d. (i) Will proposed culvert replace an existing bridge? Yes No
 If yes,
 (ii) Length of existing bridge: _____
 (iii) Width of existing bridge: _____
 (iv) Navigation clearance underneath existing bridge: _____
 (v) Will all, or a part of, the existing bridge be removed?
 (Explain)

e. (i) Will proposed culvert replace an existing culvert? Yes No
 If yes,
 (ii) Length of existing culvert(s): _____
 (iii) Width of existing culvert(s): _____
 (iv) Height of the top of the existing culvert above the NHW or
 NWL: _____
 (v) Will all, or a part of, the existing culvert be removed?
 (Explain)

f. Length of proposed culvert: _____

g. Width of proposed culvert: _____

h. Height of the top of the proposed culvert above the NHW or NWL.

i. Depth of culvert to be buried below existing bottom contour.

j. Will the proposed culvert affect navigation by reducing or
 increasing the existing navigable opening? Yes No
 If yes, explain:

k. Will the proposed culvert affect existing water flow? Yes No
 If yes, explain:

3. EXCAVATION and FILL

This section not applicable

a. (i) Will the placement of the proposed bridge or culvert require any
 excavation below the NHW or NWL? Yes No
 If yes,
 (ii) Avg. length of area to be excavated: _____
 (iii) Avg. width of area to be excavated: _____
 (iv) Avg. depth of area to be excavated: _____
 (v) Amount of material to be excavated in cubic yards: _____

b. (i) Will the placement of the proposed bridge or culvert require any
 excavation within coastal wetlands/marsh (CW), submerged
 aquatic vegetation (SAV), shell bottom (SB), or other wetlands
 (WL)? If any boxes are checked, provide the number of square
 feet affected.
 CW _____ SAV _____ SB _____
 WL _____ None

(ii) Describe the purpose of the excavation in these areas:
 N/A

c. (i) Will the placement of the proposed bridge or culvert require any
 high-ground excavation? Yes No
 If yes,
 (ii) Avg. length of area to be excavated: 150'
 (iii) Avg. width of area to be excavated: 35'
 (iv) Avg. depth of area to be excavated: 3'
 (v) Amount of material to be excavated in cubic yards: 500

d. If the placement of the bridge or culvert involves any excavation, please complete the following:

(i) Location of the spoil disposal area: Approved NCDOT site

(ii) Dimensions of the spoil disposal area: To be determined by contractor

(iii) Do you claim title to the disposal area? Yes No (If no, attach a letter granting permission from the owner.)

(iv) Will the disposal area be available for future maintenance? Yes No

(v) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAVs), other wetlands (WL), or shell bottom (SB)?

CW SAV WL SB None

If any boxes are checked, give dimensions if different from (ii) above.

(vi) Does the disposal area include any area below the NHW or NWL? Yes No

If yes, give dimensions if different from (ii) above.

e. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed below NHW or NWL? Yes No

If yes,

(ii) Avg. length of area to be filled: 2000'

(iii) Avg. width of area to be filled: 10'

(iv) Purpose of fill: Widening roadway approaches

f. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

CW _____ SAV _____ SB _____
 WL 12939 None

(ii) Describe the purpose of the excavation in these areas:

Installation of interior bridge bent

g. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed on high-ground? Yes No

If yes,

(ii) Avg. length of area to be filled: _____

(iii) Avg. width of area to be filled: _____

(iv) Purpose of fill: _____

4. GENERAL

a. Will the proposed project require the relocation of any existing utility lines? Yes No

If yes, explain: See attached utility plans. Existing utilities will be relocated on-site via the directional bore method.

b. Will the proposed project require the construction of any temporary detour structures? Yes No

If yes, explain:

If this portion of the proposed project has already received approval from local authorities, please attach a copy of the approval or certification.

< Form continues on back >

Form DCM MP-5 (Bridges and Culverts, Page 4 of 4)

c. Will the proposed project require any work channels?
 Yes No
If yes, complete Form DCM-MP-2.

d. How will excavated or fill material be kept on site and erosion controlled?
Use of Standard NCDOT BMP's

e. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)?
Standard NCDOT road construction equipment will be used including but not limited to a crane, pile driver, and backhoe

f. Will wetlands be crossed in transporting equipment to project site?
 Yes No
If yes, explain steps that will be taken to avoid or minimize environmental impacts.

g. Will the placement of the proposed bridge or culvert require any shoreline stabilization?
 Yes No
If yes, complete form MP-2, Section 3 for Shoreline Stabilization only.

May 11, 2009

Date

B-4465

Project Name

Gregory J. Thape, PhD

Applicant Name

E. J. Lusk

Applicant Signature



April 30, 2009

Mr. Bill Biddlecome
U. S. Army Corps of Engineers
Washington Regulatory Field Office
Post Office Box 1000
Washington, North Carolina 27889-1000

Dear Mr. Biddlecome:

Subject: EEP Mitigation Acceptance Letter:

B-4465, Replace Bridge Number 5 over Pollock Swamp on SR 1208, Chowan County; Pasquotank River Basin (Cataloging Unit 03010205); Northern Outer Coastal Plain (NOCP) Eco-Region

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory riparian wetland mitigation for the unavoidable impact associated with the above referenced project. As indicated in the NCDOT's mitigation request dated March 2, 2009, riparian wetland mitigation from EEP is required for 0.30 acre of riparian wetland impact.

This mitigation acceptance letter replaces the mitigation acceptance letter issued on March 16, 2009. Mitigation associated with this project will be provided in accordance with Section X of Amendment No. 2 to the Memorandum of Agreement between the N. C. Department of Environment and Natural Resources, the N. C. Department of Transportation, and the U. S. Army Corps of Engineers fully executed on March 8, 2007 (Tri-Party MOA). EEP commits to implement sufficient riparian wetland mitigation up to 0.60 riparian wetland credits to offset the impacts associated with this project by the end of the MOA year in which this project is permitted. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

A handwritten signature in black ink that reads "William D. Gilmore for".

William D. Gilmore, P.E.
EEP Director

cc: Mr. Gregory J. Thorpe, Ph.D., NCDOT-PDEA
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: B-4465 Revised

Restoring... Enhancing... Protecting Our State





April 30, 2009

Mr. Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

B-4465, Replace Bridge Number 5 over Pollock Swamp on SR 1208, Chowan County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the riparian wetland mitigation for the subject project. Based on the information supplied by you dated March 2, 2009, the impacts are located in CU 03010205 of the Pasquotank River Basin in the Northern Outer Coastal Plain (NOCP) Eco-Region, and are as follows:

Riparian Wetland: 0.30 acre

This mitigation acceptance letter replaces the mitigation acceptance letter issued on March 16, 2009. EEP commits to implementing sufficient compensatory riparian wetland mitigation credits to offset the impacts associated with this project by the end of the MOA Year in which this project is permitted, in accordance with Section X of the Amendment No. 2 to the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, fully executed on March 8, 2007. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

A handwritten signature in black ink that reads "William D. Gilmore" followed by a stylized flourish.

William D. Gilmore, P.E.
EEP Director

cc: Mr. Bill Biddlecome, USACE – Washington Regulatory Field Office
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: B-4465 Revised

Restoring... Enhancing... Protecting Our State





North Carolina Department of Environment and Natural Resources

Division of Water Quality

Coleen H. Sullins

Director

Dee Freeman
Secretary

April 9, 2009

RECEIVED
APR 15 2009

DIVISION OF HIGHWAYS
HYDRAULICS UNIT

MWC
let 1/10
Beverly Eaves Perdue
Governor

Mr. D.R. Henderson, PE
NCDOT – Hydraulics Unit
1590 Mail Service Center
Raleigh, NC 27699-1590

**Subject: Stormwater Permit Exclusion – NC DOT Activity
Replacement of Bridge No.5 over Pembroke Creek on SR1208
Stormwater Project No. SW7090324
Chowan County**

Dear Mr. Henderson:

On March 30, 2009, the Washington Regional Office of the Division of Water Quality received a Coastal Stormwater Permit Application for project B-4465, the replacement of Bridge No. 5, located over Pembroke Creek on SR 1208 in Chowan County. Staff review of the plans and supporting documents has determined that the project proposes activities that are excluded from State Stormwater permitting requirements as set forth in Section 2.(d)(1) of Session Law 2008-211, effective October 1, 2008, and the stormwater rules under Title 15A NCAC 2H .1000, as amended.

Therefore, the Director of the Division of Water Quality is hereby providing confirmation that the subject project is excluded from State Stormwater permitting requirements, being an activity of the NC DOT that is regulated in accordance with the provisions of the NC DOT's National Pollutant Discharge Elimination System (NPDES) Stormwater Permit.

Under Section 15A NCAC 2H .1003, any future development or changes to the proposed development, including but not limited to, the locations of the built-upon area and construction of additional built-upon area, may require approval or a Stormwater Management permit application and permit issuance from the Division of Water Quality prior to any construction. Any construction on the site prior to receipt of the required approval or permit will constitute a violation of Title 15A NCAC 2H.1000 and Session Law 2008-211, and may result in the initiation of appropriate enforcement action.

Please keep in mind that this determination does not affect your legal obligation to obtain other permits and approvals, which may be required by Federal, State, or local government agencies, rule or law. If you have any questions, or need additional information concerning this matter, please contact either Scott Vinson or me at (252) 946-6481.

Sincerely,


Al Hodge
Regional Supervisor
Surface Water Protection Section

AH/sv: S:\WQS\STORMWATER\PERMIT\EXCLUSIONS\SW7090324

cc: Chown County Building Inspections
Division of Coastal Management
Garcy Ward, DWQ
Washington Regional Office
Central Files

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

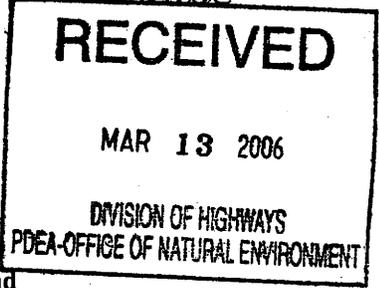
Action Id. 200511636

County: Chowan

U.S.G.S. Quad: Edenhouse

NOTIFICATION OF JURISDICTIONAL DETERMINATION *Riverbank*

Property Owner/Agent: North Carolina Department of Transportation
Address: Gregory J. Thorpe, Ph.D.
1548 Mail Service Center
Raleigh, North Carolina 27699-1548
Telephone No.: (919) 733-3141



Property description:
Size (acres) 12.8 acres Nearest Town Edenton
Nearest Waterway Pollock Swamp River Basin Albemarle Sound
USGS HUC 03010205 Coordinates N 36.0880858 W 76.6417026
Location description The project is located on NCSR 1208 at bridge # 5, adjacent to and crossing Pollock Swamp.
TIP # B-4465

Indicate Which of the Following Apply:

A. Preliminary Determination

Based on preliminary information, there may be wetlands on the above described property. We strongly suggest you have this property inspected to determine the extent of Department of the Army (DA) jurisdiction. To be considered final, a jurisdictional determination must be verified by the Corps. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).

B. Approved Determination

There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

There are waters of the U.S. including wetlands on the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

We strongly suggest you have the wetlands on your property delineated. Due to the size of your property and/or our present workload, the Corps may not be able to accomplish this wetland delineation in a timely manner. For a more timely delineation, you may wish to obtain a consultant. To be considered final, any delineation must be verified by the Corps.

The waters of the U.S. including wetland on your project area have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

The wetlands have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on _____. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Elizabeth City, NC, at (252) 264-3901 to determine their requirements.

Action ID: 200511636

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **Bill Biddlecome** at **(252) 975-1616 ext. 26**.

C. Basis For Determination

This site exhibits wetland criteria as described in the 1987 Corps Wetland Delineation Manual and is part of a broad continuum of wetlands connected to Pollock Swamp, a tributary to Pembroke Creek, a tributary to the Albemarle Sound.

D. Remarks

E. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Atlantic Division, Division Office at the Following address:

Mr. Michael F. Bell, Administrative Appeal Review Officer
CESAD-ET-CO-R
U.S. Army Corps of Engineers, South Atlantic Division
60 Forsyth Street, Room 9M15
Atlanta, Georgia 30303-8801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **May 7, 2006**.

****It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.****

Corps Regulatory Official: William J. Biddlecome

Date **03/07/2006** Expiration Date **03/07/2011**

Copy furnished:
Eco Science
Ms. Heather Jean Saunders
1101 Haynes Street, Suite 101
Raleigh, North Carolina 27604

See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CHOWAN COUNTY

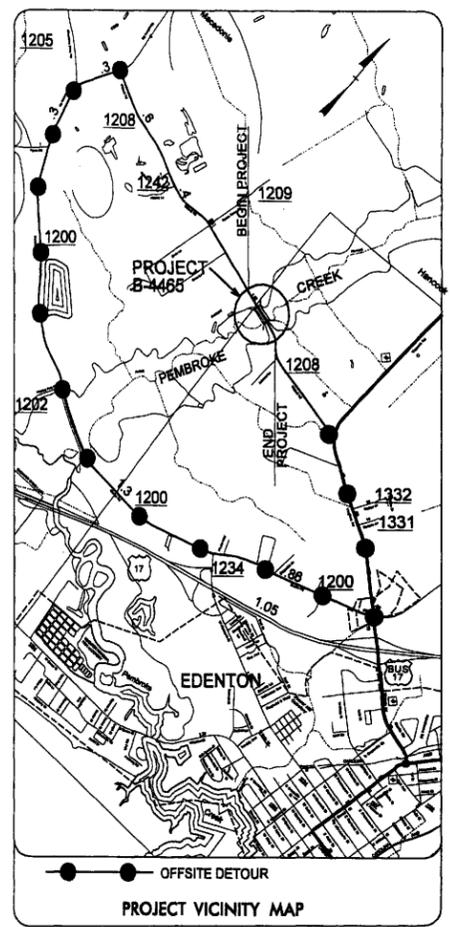
**LOCATION: BRIDGE NO. 5 ON SR 1208 OVER
PEMBROKE CREEK**

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

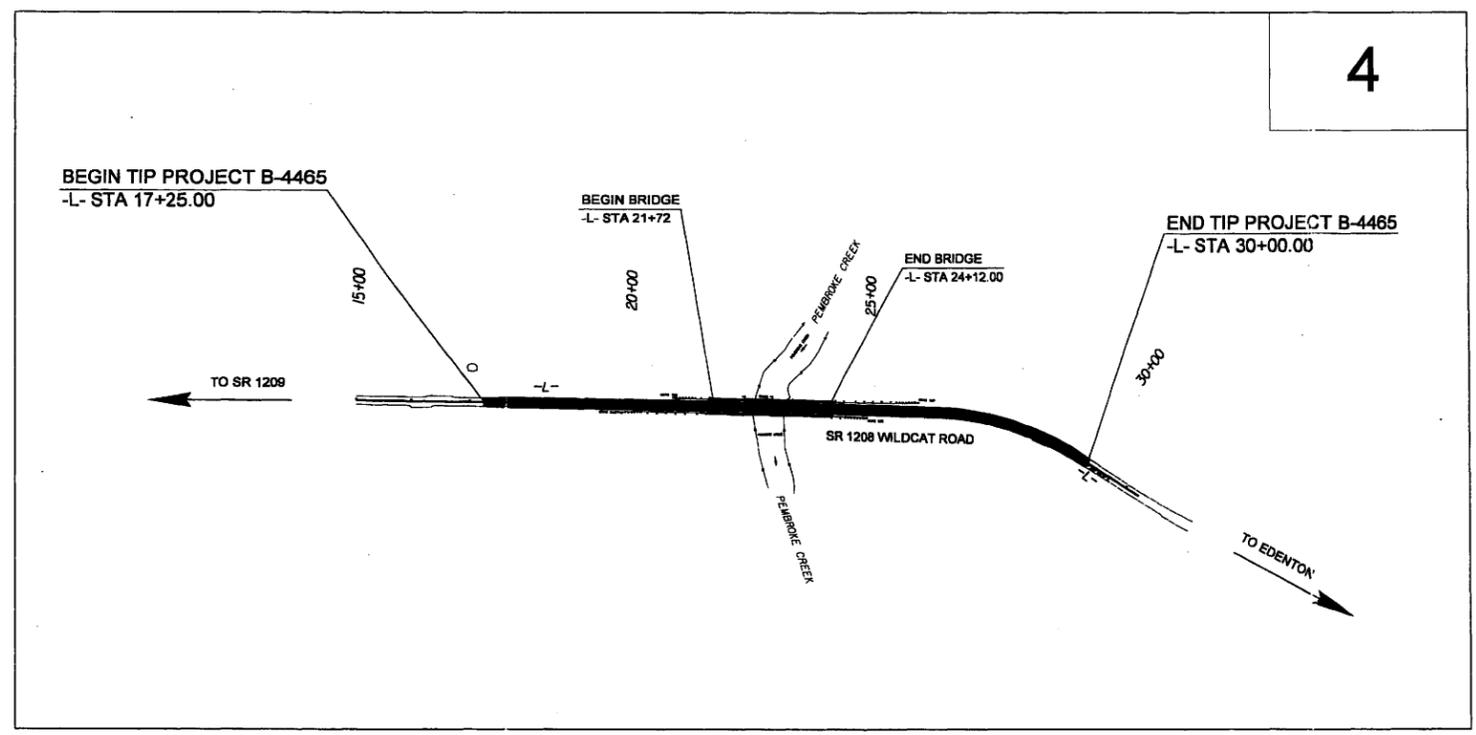
WETLAND PERMIT DRAWINGS

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|--------------------------|--------------|
| N.C. | B-4465 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 33714.1.1 | BRZ-1208(1) | P.E. | |
| 33714.2.1 | BRZ-1208(1) | R.W. & UTILITY CONST. | |
| | | | |
| | | | |
| | | | |

TIP PROJECT: B-4465



RIGHT-OF-WAY PLANS

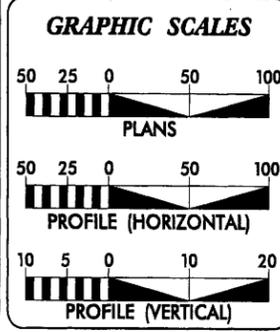


-THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

-CLEARING ON THIS PROJECT SHALL BE TO THE LIMITS ESTABLISHED BY METHOD III (MODIFIED NOT TO EXCEED R/W OR PDE)

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NCDOT Contact: Cathy S. Houser, PE
Roadway Design-Engineering Coordination



DESIGN DATA

| | |
|------------|-------------------------|
| ADT 2010 | = 1410 |
| ADT 2030 | = 2100 |
| DHV | = 10 % |
| D | = 60 % |
| T | = 3% (TTST 1%, DUAL 2%) |
| V | = 50 MPH |
| FUNC CLASS | = RURAL LOCAL |

PROJECT LENGTH

| | |
|-------------------------------------|--------------|
| LENGTH ROADWAY TIP PROJECT B-4465 | = 0.196 MILE |
| LENGTH STRUCTURE TIP PROJECT B-4465 | = 0.045 MILE |
| TOTAL LENGTH TIP PROJECT B-4465 | = 0.241 MILE |

Prepared in the Office of
DYER, RIDDLE, MILLS & PRECOURT, INC. (DRMP)
7506 EAST INDEPENDENCE BLVD., SUITE 105
CHARLOTTE, NORTH CAROLINA 28227
(704) 332-2289

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 16, 2009

LETTING DATE:
JANUARY 19, 2010

Ronald C. Smith, PE
PROJECT ENGINEER

A. Matthew Thigpen, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____

ROADWAY DESIGN ENGINEER

SIGNATURE: _____

P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

Permit Drawing
Sheet 1 of 9 P.E.
STATE HIGHWAY DESIGN ENGINEER

CONTRACT: 4-22-09

Property Owners

| Parcel Number | Names | Addresses |
|---------------|---------------------------|---|
| 1 | <u>Jerry H. Small</u> | <u>300 Wildcat Rd, Edenton, NC 27932</u> |
| 2 | Mark W. Small | 251 Wildcat Road Edenton, NC 27932 |
| 3 | Albemarle Beach Farms Inc | PO Box 148 Edenton, NC 27932 |
| 4 | <u>Claude E Small III</u> | 3000 Kingston Circle, Apt. K5 Greenville, NC 27858 |

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Chowan COUNTY
WBS - 33714.1.1 (B-4465)

SHEET

12/18/2008

B/17/99

REVISIONS

04/22/2009
25:10:00
C:\Users\jca\Documents\Permit\B4465_Hyd.prm_vet.dgn

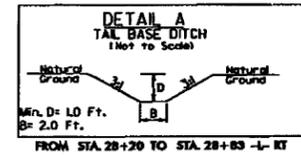
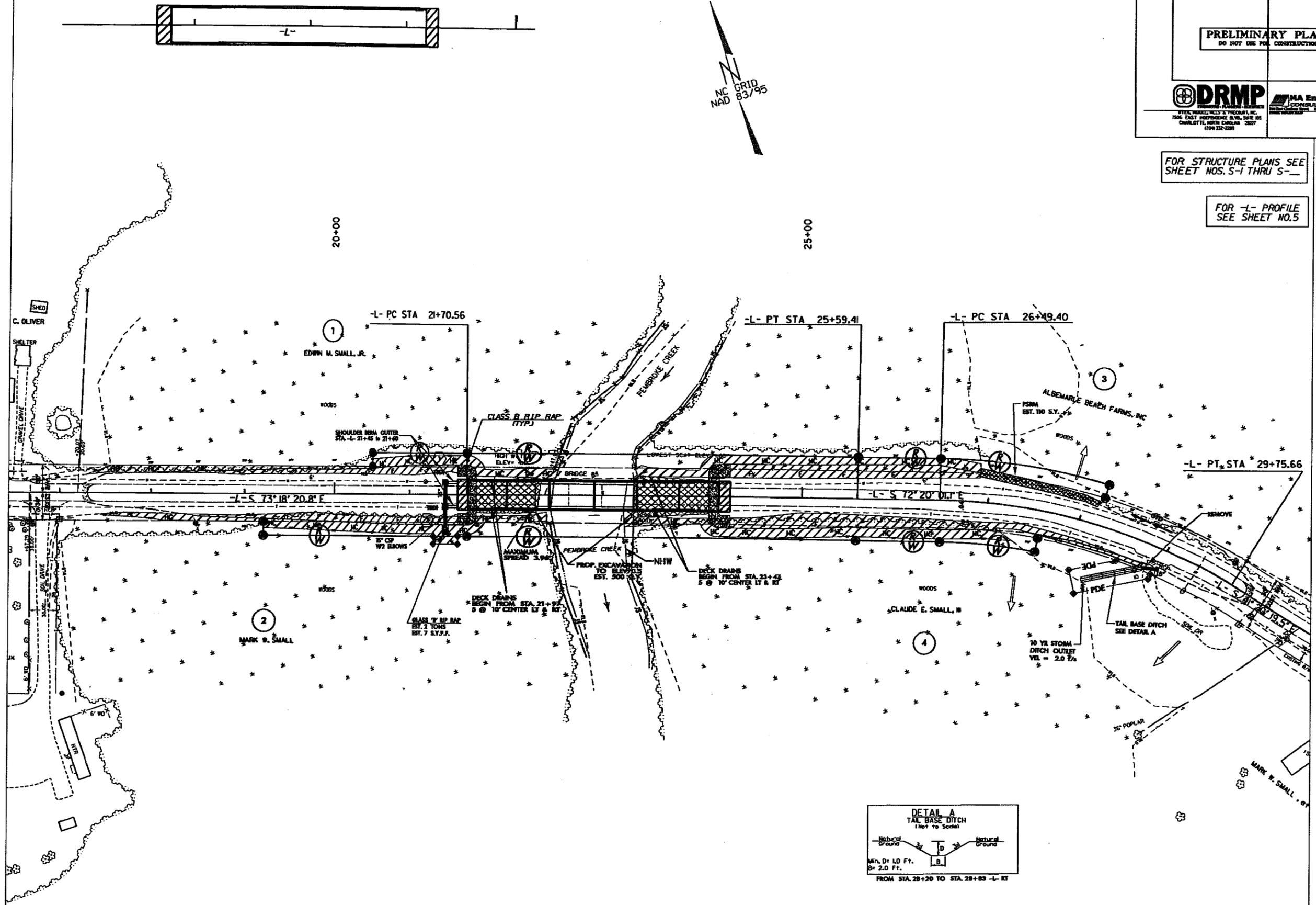
DENOTES FILL IN WETLAND
 DENOTES HAND CLEARING

NC GRID
MAD 83/95

| | |
|---|--|
| PROJECT REFERENCE NO. B-4465 | SHEET NO. 4 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |
| DRMP DRYDEN, HODGES & PETERSON, INC. 7004 EAST WINDERMERE BLVD, SUITE 205 CHARLOTTE, NORTH CAROLINA 28207 (704) 332-2289 | MA Engineering CONSULTANTS, INC. 1000 W. WILSON ST., SUITE 200 CHARLOTTE, NC 28202 (704) 332-2289 |

FOR STRUCTURE PLANS SEE SHEET NOS. S-1 THRU S-__

FOR -L- PROFILE SEE SHEET NO.5



8/17/99

DIAGONAL HATCHING DENOTES FILL IN WETLAND

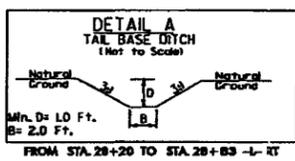
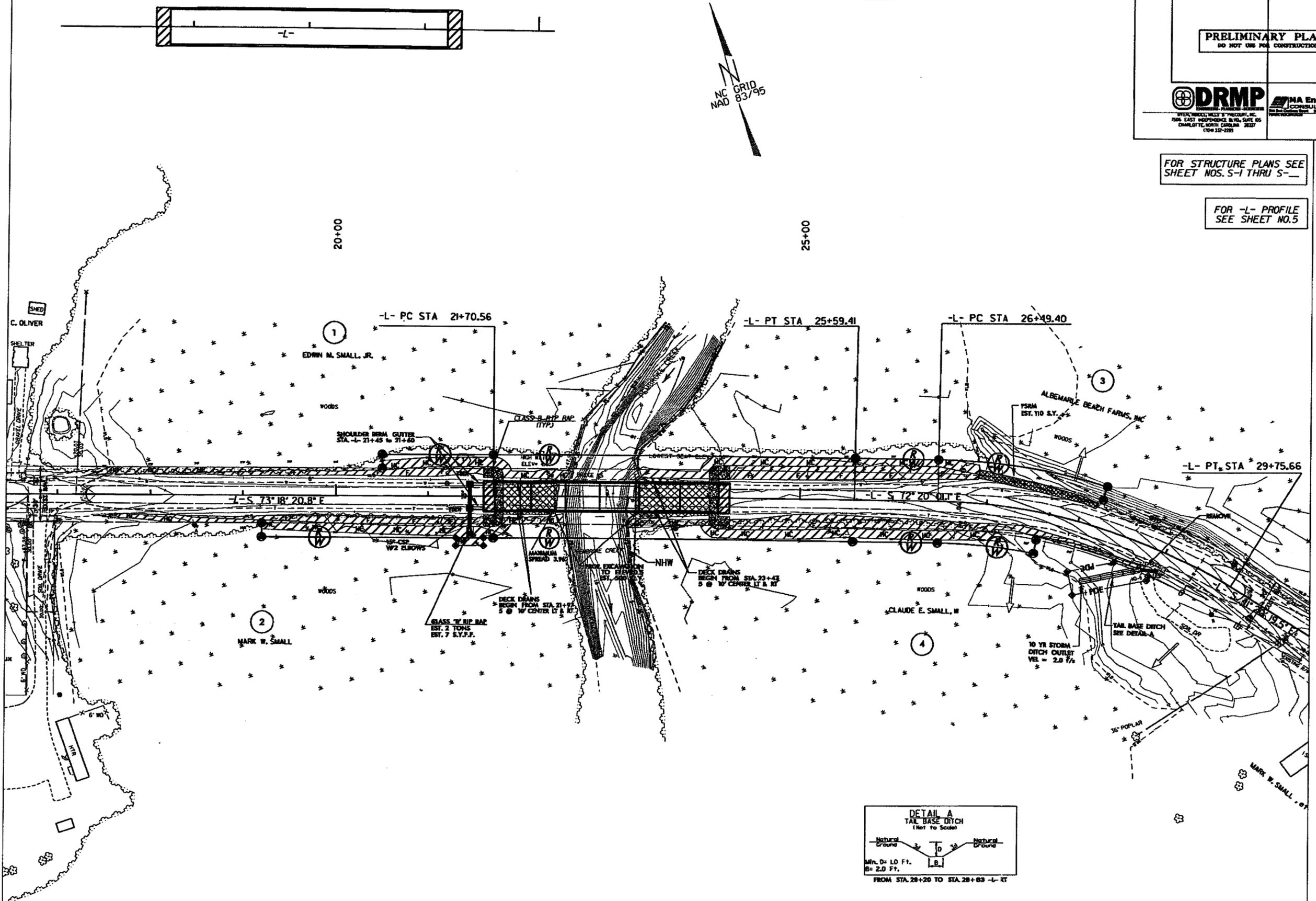
DIAGONAL HATCHING DENOTES HAND CLEARING



| | | | |
|--|--|---|--|
| PROJECT REFERENCE NO. B-4465 | | SHEET NO. 4 | |
| ROADWAY DESIGN ENGINEER | | HYDRAULICS ENGINEER | |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | | | |
| DRMP <small>DRMP CONSULTANTS, INC. 7004 EAST WISCONSIN BLVD, SUITE 105 CHARLOTTE, NORTH CAROLINA 28227 (704) 332-2289</small> | | MA Engineering <small>CONSULTANTS, INC. 1000 W. GARDNER ST. Raleigh, NC 27601 (919) 876-1100</small> | |

FOR STRUCTURE PLANS SEE SHEET NOS. S-1 THRU S-4

FOR -L- PROFILE SEE SHEET NO. 5



REVISIONS

04/27/2009 10:45:18 AM Permit\B4465_Hyd_prm_wet.dgn

5/14/09

| | |
|---|---------------------|
| PROJECT REFERENCE NO. B-4465 | SHEET NO. 5 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION | |
| PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION | |

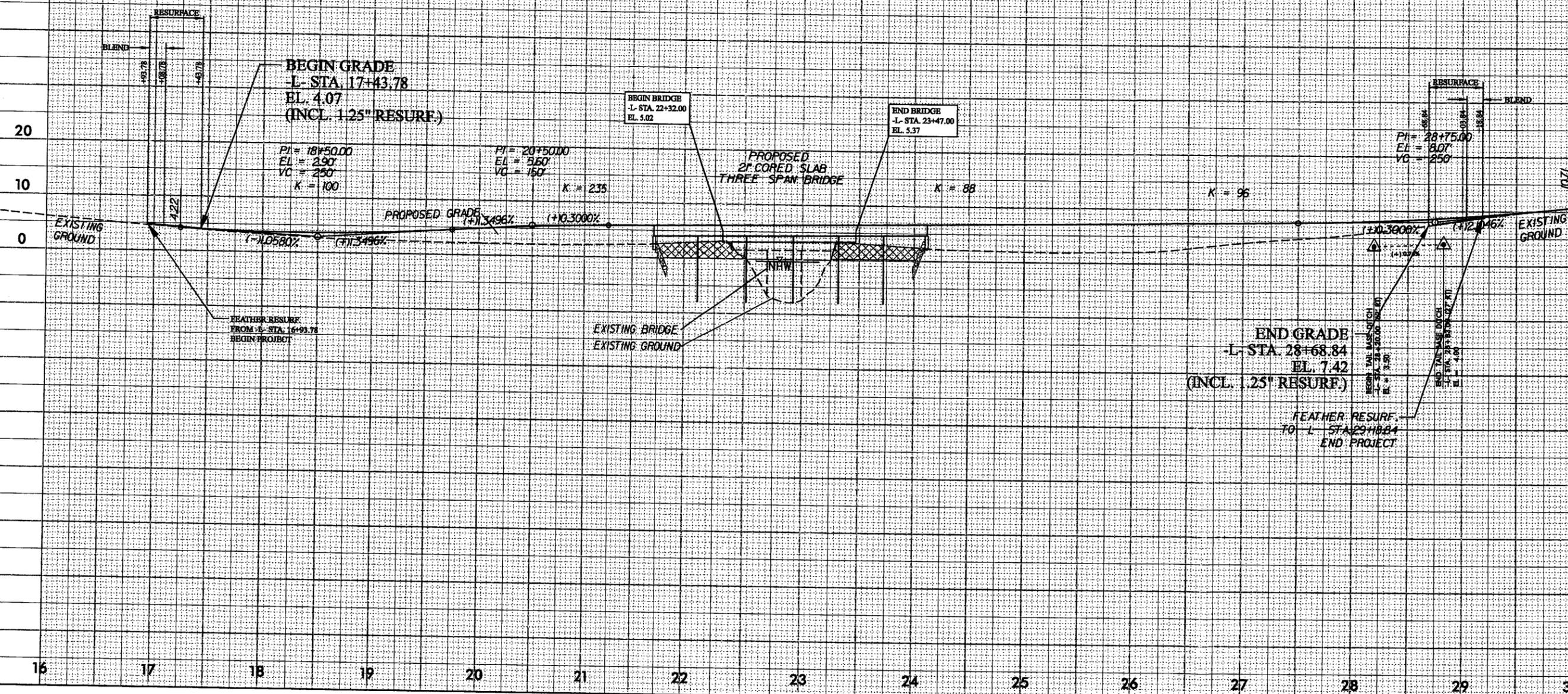


-L-

| BRIDGE HYDRAULIC DATA | |
|----------------------------------|-------|
| DESIGN DISCHARGE | = CFS |
| DESIGN FREQUENCY | = YRS |
| DESIGN HW ELEVATION | = FT |
| BASE DISCHARGE | = CFS |
| BASE FREQUENCY | = YRS |
| BASE HW ELEVATION | = FT |
| OVERTOPPING DISCHARGE | = CFS |
| OVERTOPPING FREQUENCY | = YRS |
| OVERTOPPING ELEVATION | = FT |
| DATE OF SURVEY | = |
| W.S. ELEVATION AT DATE OF SURVEY | = FT |

BM #10
 -L- STA 24+39, 71' LT
 -BL- STA 27+33, 62' LT
 ELEV= 1.82
 RR SPIKE SET IN 10" BLACK GUM

BM #11
 -L- STA 21+35, 65' LT
 -BL- STA 24+37, 54' LT
 ELEV= 1.99
 RR SPIKE SET IN 12" BLACK GUM

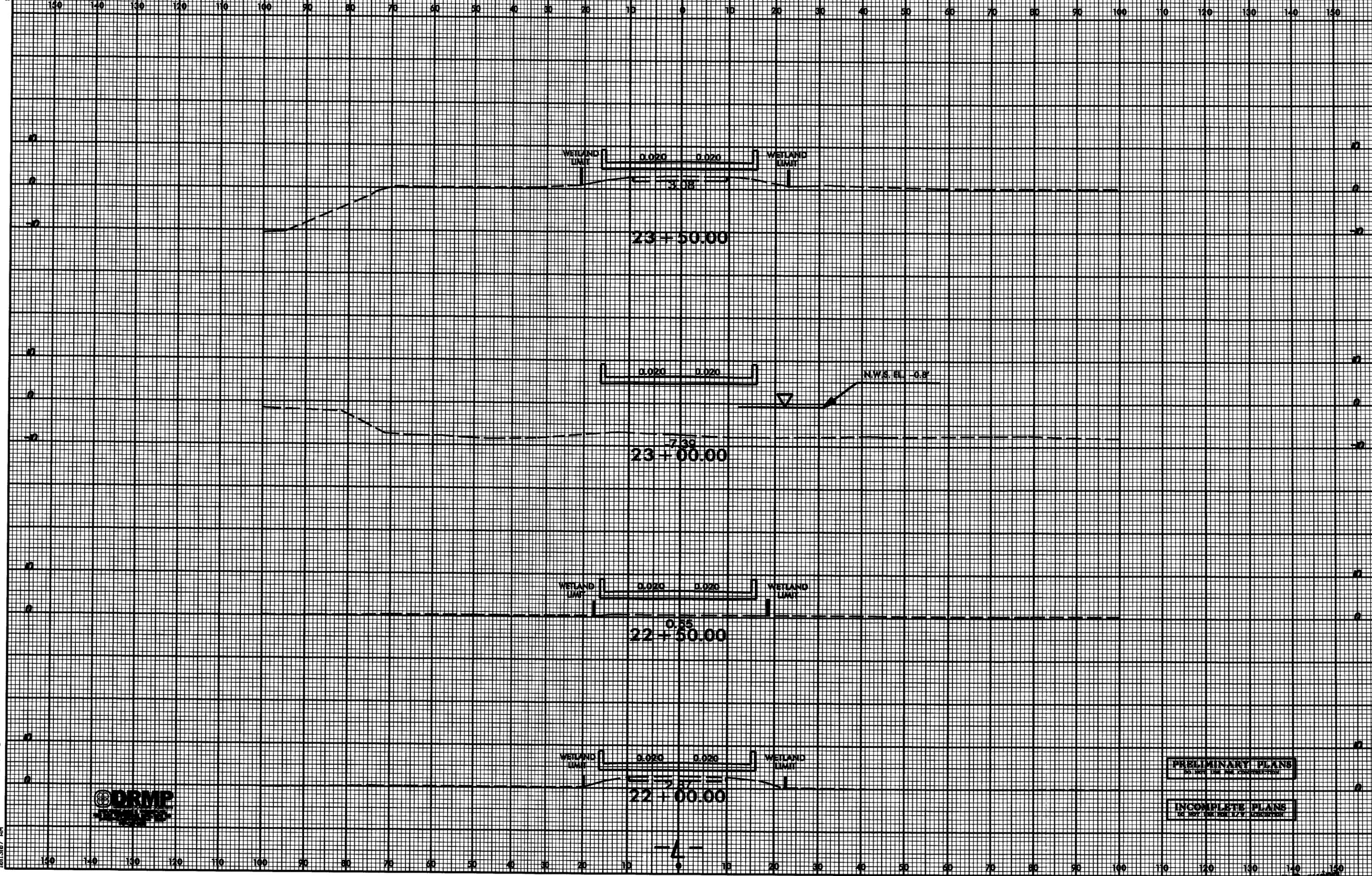


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8/23/99



| | |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| B-4465 | X-3 |



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR PERMITS

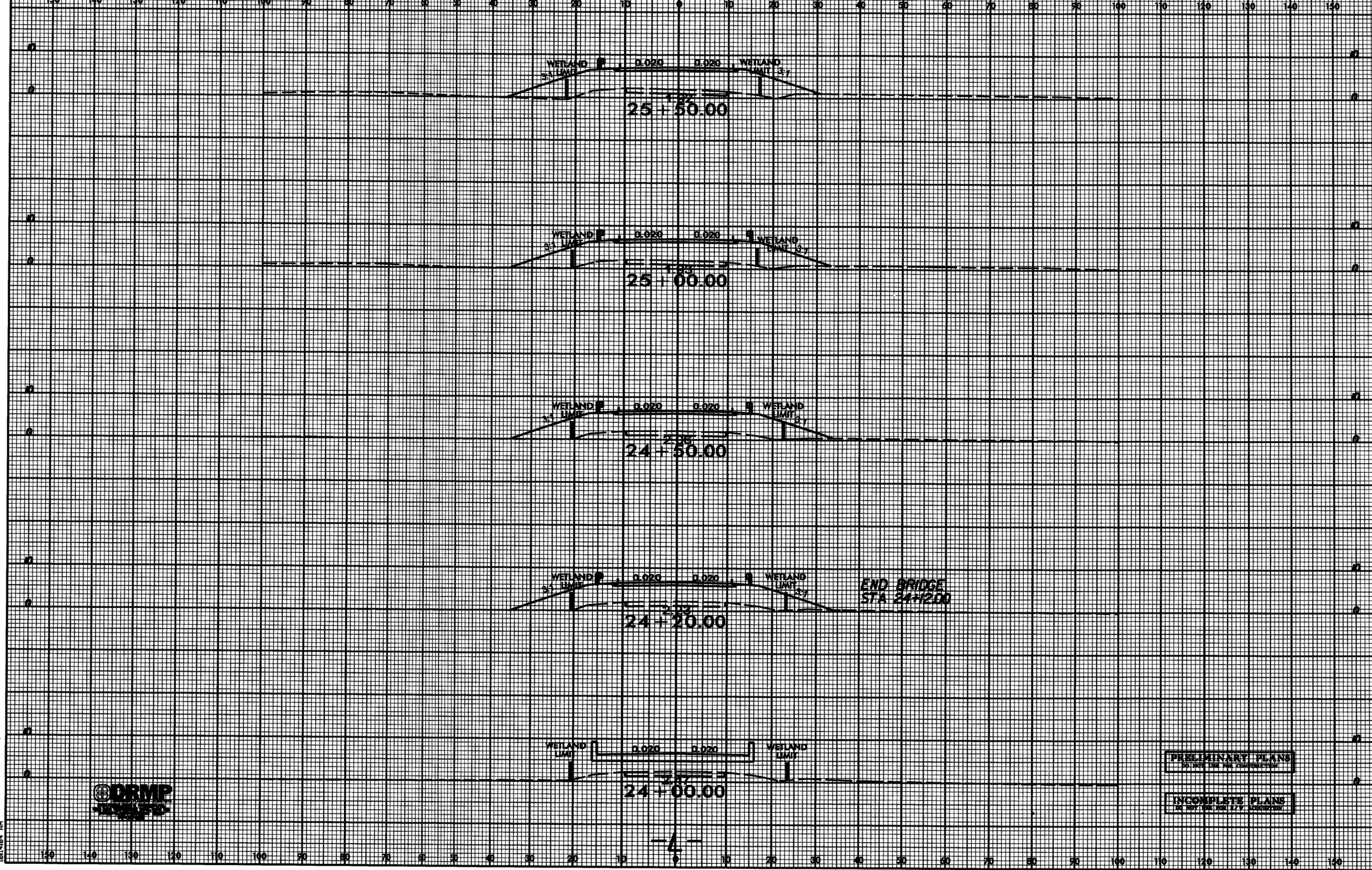
04/22/2009 10:50:00 AM X:\ec\B4465_Rd\wp1.dgn

Permit Drawing
Sheet X of 9

8/23/99



| | |
|---------------------|-----------|
| PROJ. REFERENCE NO. | SHEET NO. |
| B-4465 | X-4 |



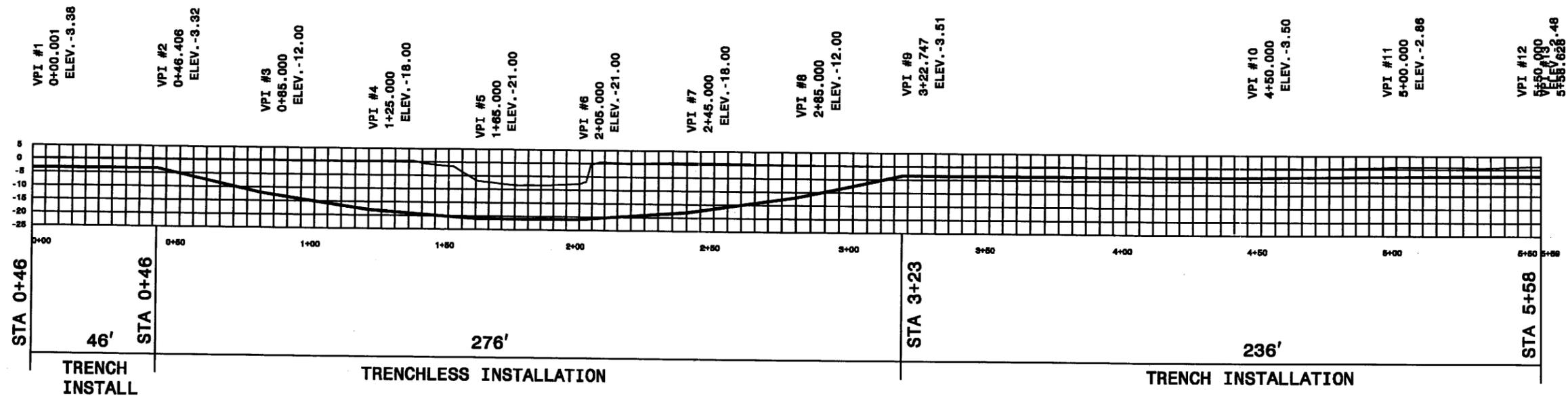
PRELIMINARY PLANS
FOR THE USE OF THE CONTRACTOR

INCOMPLETE PLANS
FOR THE USE OF THE CONTRACTOR

04/22/2009
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POWER CABLE PRELIMINARY DRAWING NOT FOR CONSTRUCTION

| | |
|--|------------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| RWY SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS <small>DO NOT USE FOR ACQUISITION</small> | |
| PRELIMINARY PLANS <small>DO NOT USE FOR CONSTRUCTION</small> | |



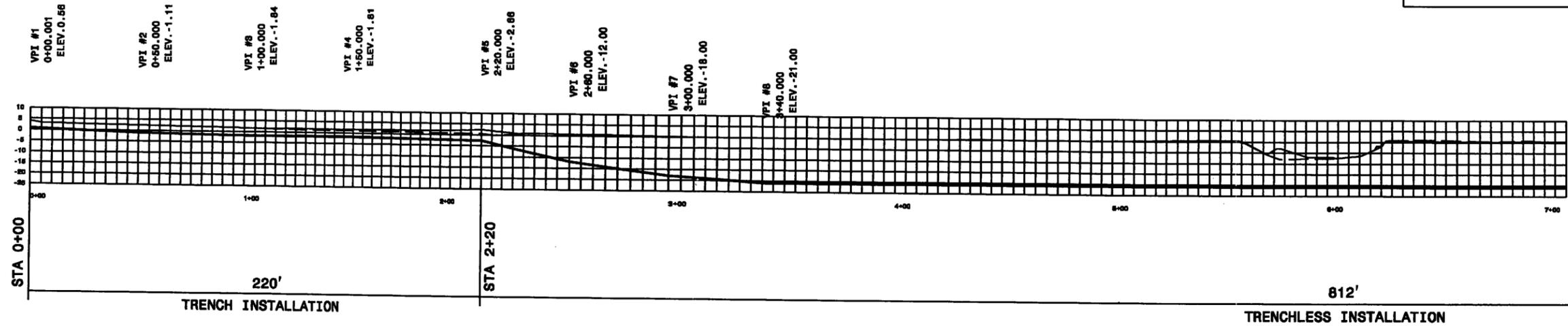
NOTE: DIRECTIONAL DRILL DEPTH BELOW STREAM BED IS BASED ON
 MAXIMUM SCOUR DEPTH (50 YEAR STORM SCOUR DEPTH = -18') WITH
 3' OF SOIL ABOVE PIPE

B-4465 NEU PERMIT DRAWING

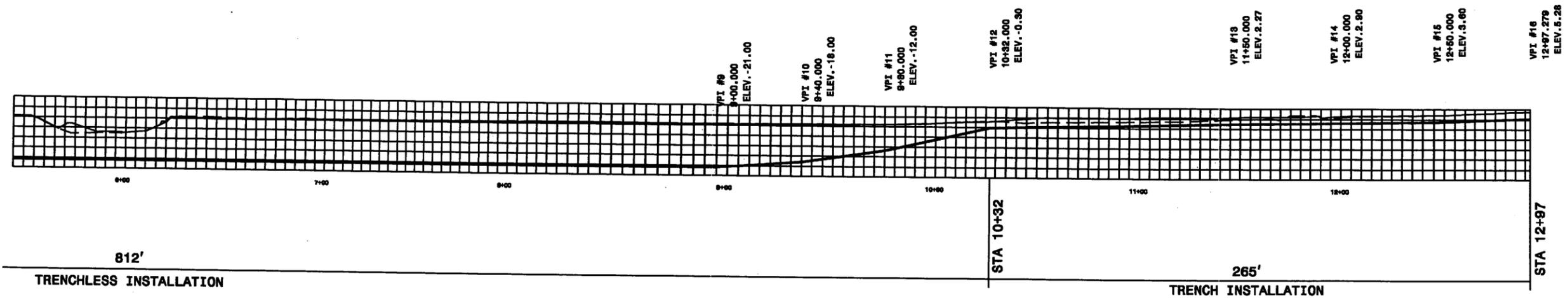
Utility
 Permit Drawing
 Sheet 3 of 5

TELEPHONE CABLE PRELIMINARY DRAWING NOT FOR CONSTRUCTION

| | |
|--|------------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| RWY SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS <small>DO NOT USE FOR A/E/W ACQUISITION</small> | |
| PRELIMINARY PLANS <small>DO NOT USE FOR CONSTRUCTION</small> | |



NOTE: DIRECTIONAL DRILL DEPTH BELOW STREAM BED IS BASED ON MAXIMUM SCOUR DEPTH (50 YEAR STORM SCOUR DEPTH = -18') WITH 3' OF SOIL ABOVE PIPE



B-4465 NEU PERMIT DRAWING

Utility
Permit Drawing
Sheet 4 of 5

REVISIONS

*****SYSTEMS*****
*****PERMIT DRAWING*****
*****DO NOT USE FOR CONSTRUCTION*****

Haugaard, Eric W

From: Haugaard, Eric W
Sent: Friday, December 19, 2008 12:01 PM
To: Fontaine, Lance P. Ph.D.
Cc: Haugaard, Eric W
Subject: B-4465

Attachments: B-4465 plan view.pdf; B-4465 profile views.pdf



B-4465 plan
view.pdf (288 KB)



B-4465 profile
views.pdf (134 ...

Lance,

According to utilities information we have available, there will not be an environmental impact on this project. Attached to this e-mail are "pdf" copies of plan and profile views of the required directional bores for water, telephone, and power lines.

Below is contact information for all utilities inside project limits:

Albemarle EMC
Jerry Keeter
252-426-5735

Chowan County Water
Ray Goodwin
252-482-7477

Embarq Telephone
Hester Jones
252-335-2678

As this is a CAMA county, a separate hard copy plan sheet and profile sheets of the proposed utility relocations will follow via courier.

Thank You,
Eric Haugaard, PE
NCDOT-Utilities
919-250-4128, ext. 253

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

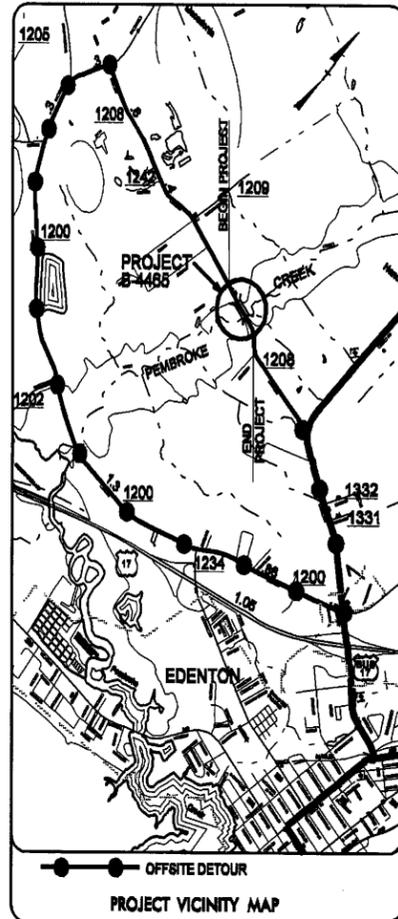
CHOWAN COUNTY

**LOCATION: BRIDGE NO. 5 ON SR 1208 OVER
PEMBROKE CREEK**

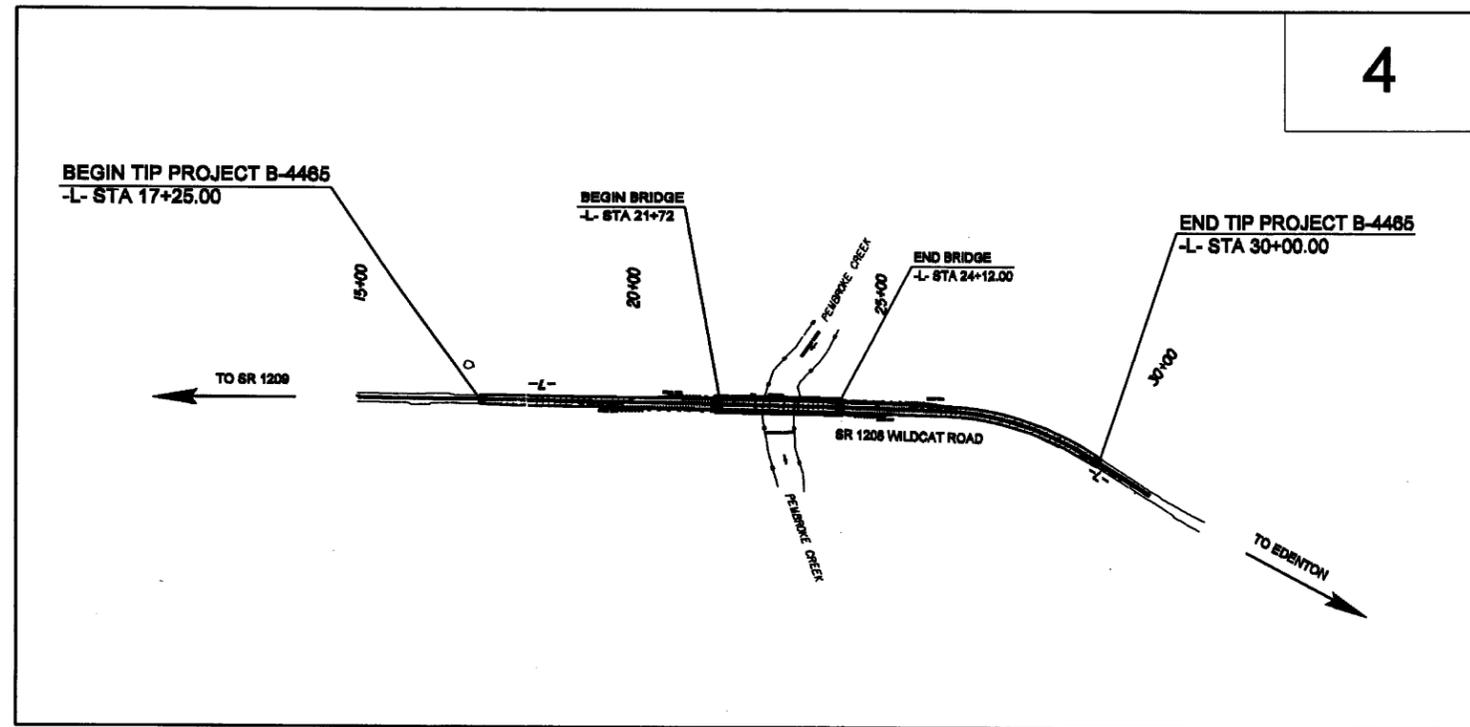
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|--------------------------|--------------|
| N.C. | B-4465 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 33714.1.1 | BRZ-1208(1) | P.E. | |
| 33714.2.1 | BRZ-1208(1) | R.W. & UTILITY CONST. | |

TIP PROJECT: B-4465



RIGHT-OF-WAY PLANS



4

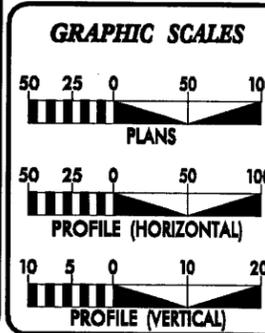
-THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

-CLEARING ON THIS PROJECT SHALL BE TO THE LIMITS ESTABLISHED BY METHOD III (MODIFIED NOT TO EXCEED R/W OR PDE)

NCDOT Contact: Cathy S. Houser, PE
Roadway Design-Engineering Coordination

PRELIMINARY PLANS

CONTRACT:



DESIGN DATA

| |
|---------------------------|
| ADT 2010 = 1410 |
| ADT 2030 = 2100 |
| DHV = 10 % |
| D = 60 % |
| T = 3% (TTST 1%, DUAL 2%) |
| V = 50 MPH |
| FUNC CLASS = RURAL LOCAL |

PROJECT LENGTH

| | |
|-------------------------------------|--------------|
| LENGTH ROADWAY TIP PROJECT B-4465 | = 0.196 MILE |
| LENGTH STRUCTURE TIP PROJECT B-4465 | = 0.045 MILE |
| TOTAL LENGTH TIP PROJECT B-4465 | = 0.241 MILE |

Prepared In the Office of
DYER, RIDDLE, MILLS & PRECOURT, INC. (DRMP)
7506 EAST INDEPENDENCE BLVD., SUITE 105
CHARLOTTE, NORTH CAROLINA 28227
(704) 332-2289

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 16, 2009

LETTING DATE:
JANUARY 19, 2010

Ronald C. Smith, PE
PROJECT ENGINEER

A. Matthew Thigpen, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____

ROADWAY DESIGN ENGINEER

SIGNATURE: _____

P.E.



31-DEC-2008 08:54 \\dot\dfsroot\proj\projects\b4465\roadway\proj\b4465_rdy_tsh.dgn

3/15/06

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

| | |
|-------------------------------------|-------|
| State Line | ----- |
| County Line | ----- |
| Township Line | ----- |
| City Line | ----- |
| Reservation Line | ----- |
| Property Line | ----- |
| Existing Iron Pin | ○ |
| Property Corner | ----- |
| Property Monument | □ |
| Parcel/Sequence Number | ②③ |
| Existing Fence Line | ----- |
| Proposed Woven Wire Fence | ----- |
| Proposed Chain Link Fence | ----- |
| Proposed Barbed Wire Fence | ----- |
| Existing Wetland Boundary | ----- |
| Proposed Wetland Boundary | ----- |
| Existing Endangered Animal Boundary | ----- |
| Existing Endangered Plant Boundary | ----- |

BUILDINGS AND OTHER CULTURE:

| | |
|------------------------------|---|
| Gas Pump Vent or UG Tank Cap | ○ |
| Sign | ○ |
| Well | ○ |
| Small Mine | ⊗ |
| Foundation | □ |
| Area Outline | □ |
| Cemetery | ⊕ |
| Building | □ |
| School | □ |
| Church | ⊕ |
| Dam | ⊕ |

HYDROLOGY:

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

RAILROADS:

| | |
|--------------------|-------|
| Standard Gauge | ----- |
| RR Signal Milepost | ----- |
| Switch | ----- |
| RR Abandoned | ----- |
| RR Dismantled | ----- |

RIGHT OF WAY:

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

ROADS AND RELATED FEATURES:

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

VEGETATION:

| | |
|--------------|-------|
| Single Tree | ○ |
| Single Shrub | ○ |
| Hedge | ----- |
| Woods Line | ----- |
| Orchard | ----- |
| Vineyard | ----- |

EXISTING STRUCTURES:

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

UTILITIES:

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

TELEPHONE:

| | |
|--|-------|
| Existing Telephone Pole | ● |
| Proposed Telephone Pole | ○ |
| Telephone Manhole | ⊕ |
| Telephone Booth | ⊕ |
| Telephone Pedestal | ⊕ |
| Telephone Cell Tower | ⊕ |
| UG Telephone Cable Hand Hole | ⊕ |
| Recorded UG Telephone Cable | ----- |
| Designated UG Telephone Cable (S.U.E.*) | ----- |
| Recorded UG Telephone Conduit | ----- |
| Designated UG Telephone Conduit (S.U.E.*) | ----- |
| Recorded UG Fiber Optics Cable | ----- |
| Designated UG Fiber Optics Cable (S.U.E.*) | ----- |

WATER:

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

TV:

| | |
|---|-------|
| TV Satellite Dish | ⊕ |
| TV Pedestal | ⊕ |
| TV Tower | ⊕ |
| UG TV Cable Hand Hole | ⊕ |
| Recorded UG TV Cable | ----- |
| Designated UG TV Cable (S.U.E.*) | ----- |
| Recorded UG Fiber Optic Cable | ----- |
| Designated UG Fiber Optic Cable (S.U.E.*) | ----- |

GAS:

| | |
|----------------------------------|-------|
| Gas Valve | ⊕ |
| Gas Meter | ⊕ |
| Recorded UG Gas Line | ----- |
| Designated UG Gas Line (S.U.E.*) | ----- |
| Above Ground Gas Line | ----- |

SANITARY SEWER:

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

MISCELLANEOUS:

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

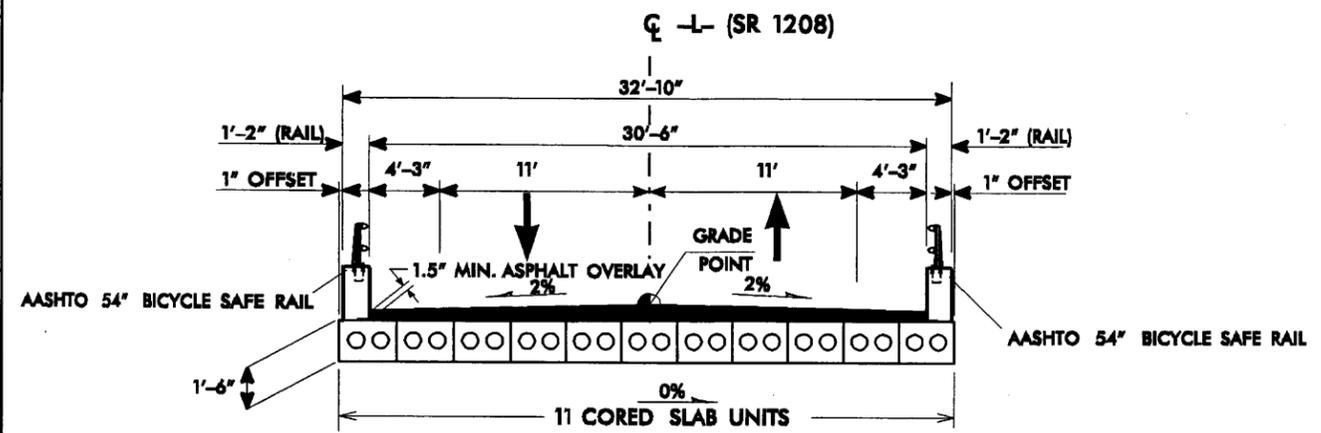
6/2/99

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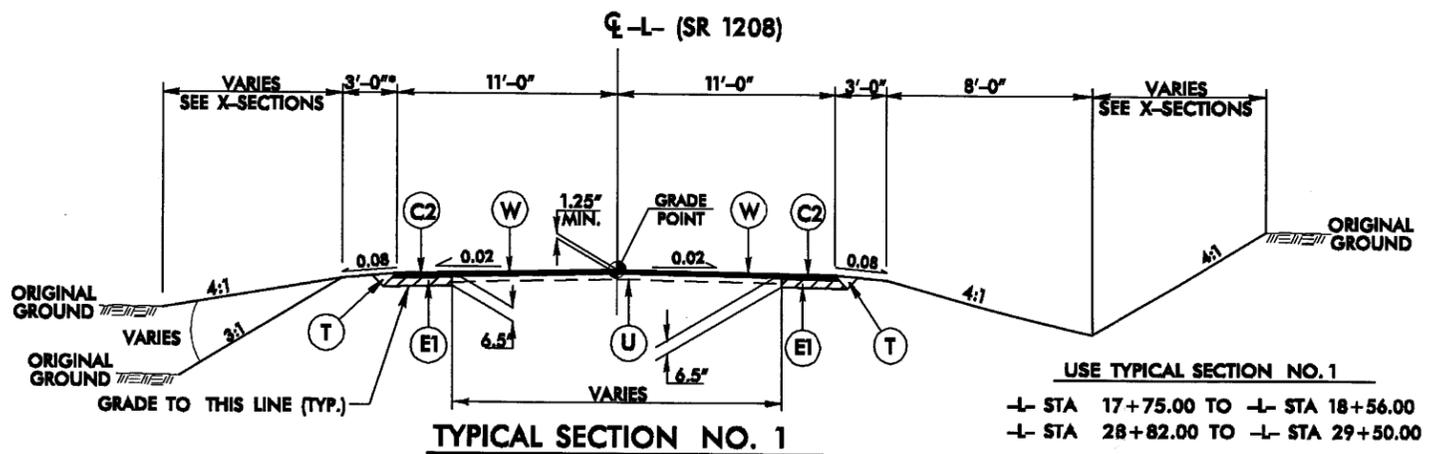
| | |
|--|--------------------------|
| PROJECT REFERENCE NO. B-4465 | SHEET NO. 2 |
| ROADWAY DESIGN ENGINEER | PAVEMENT DESIGN ENGINEER |
|  <small>DRMP DYE, RIDDLE, MILLS & FREEMANT, INC. 1708 EAST INDEPENDENCE BLVD. SUITE 100 CHARLOTTE, NORTH CAROLINA 28227 (704) 332-2288</small> | |

| PAVEMENT SCHEDULE | |
|-------------------|---|
| C1 | PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. |
| C2 | PROP. APPROX. 2.5" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS. |
| C3 | PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1.0" IN DEPTH OR GREATER THAN 1.5" IN DEPTH. |
| E1 | PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. |
| E2 | PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 6.5" IN DEPTH. |
| T | EARTH MATERIAL. |
| U | EXISTING PAVEMENT. |
| W | WEDGING. (SEE WEDGING DETAIL, THIS SHEET) |

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



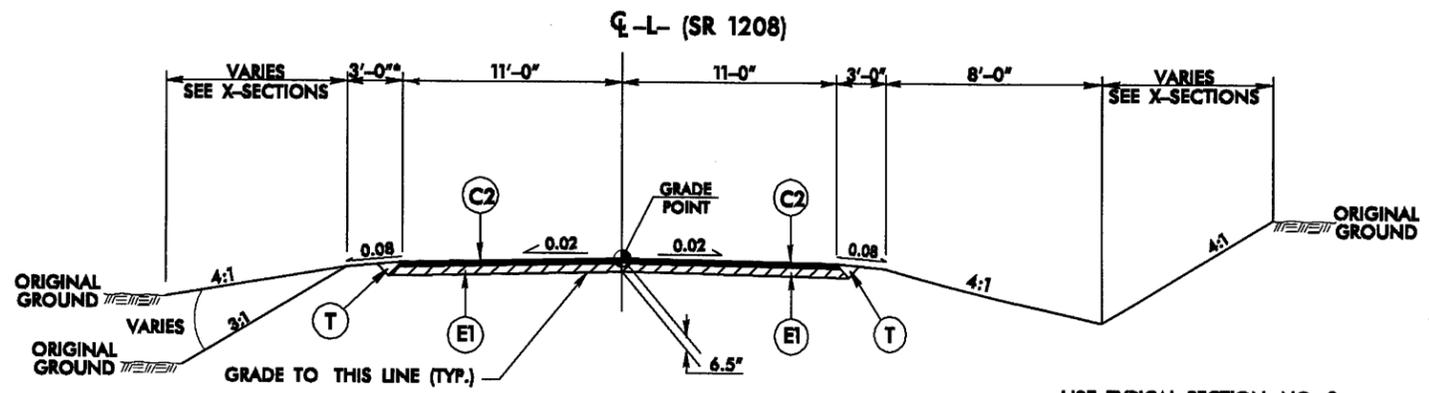
TYPICAL SECTION NO. 3
 SEE STRUCTURE PLANS FOR DETAILS
 USE TYPICAL SECTION NO. 3
 -L- STA 21+72.00 (BEGIN BRIDGE) TO
 -L- STA 24+12.00 (END BRIDGE)



TYPICAL SECTION NO. 1
 USE TYPICAL SECTION NO. 1
 -L- STA 17+75.00 TO -L- STA 18+56.00
 -L- STA 28+82.00 TO -L- STA 29+50.00

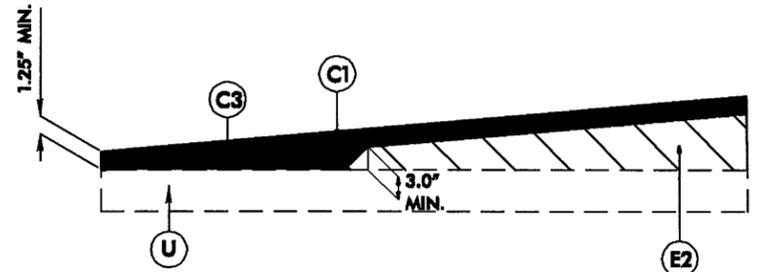
* 7' WITH GUARDRAIL
 FULL DEPTH PAVED SHOULDER
 BETWEEN GUARDRAIL AND EOP.

**TRANSITION FROM TYPICAL SECTION NO. 1
 TO EXISTING (INCLUDES FEATHERING)**
 -L- STA 17+25.00 (BEGIN PROJECT) TO -L- STA 17+75.00
 -L- STA 29+50.00 TO -L- STA 30+00.00 (END PROJECT)



TYPICAL SECTION NO. 2
 USE TYPICAL SECTION NO. 2
 -L- STA 18+56.00 TO -L- STA 21+72.00 (BEGIN BRIDGE)
 -L- STA 24+12.00 (END BRIDGE) TO -L- STA 28+82.00

* 7' WITH GUARDRAIL
 FULL DEPTH PAVED SHOULDER
 BETWEEN GUARDRAIL AND EOP.



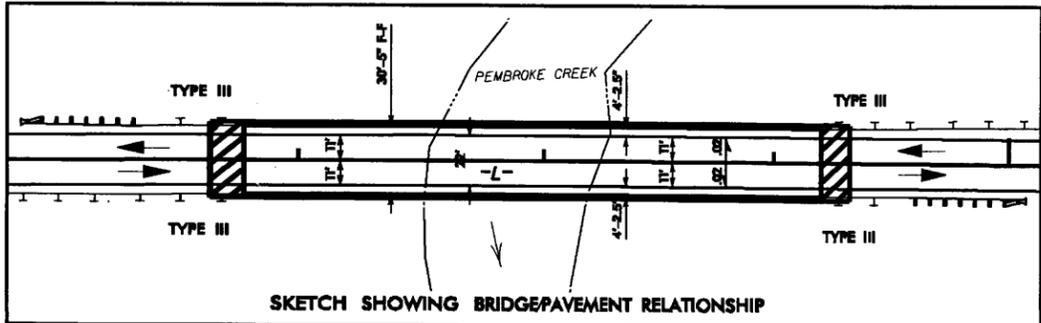
W - Wedging Detail

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

8/17/99

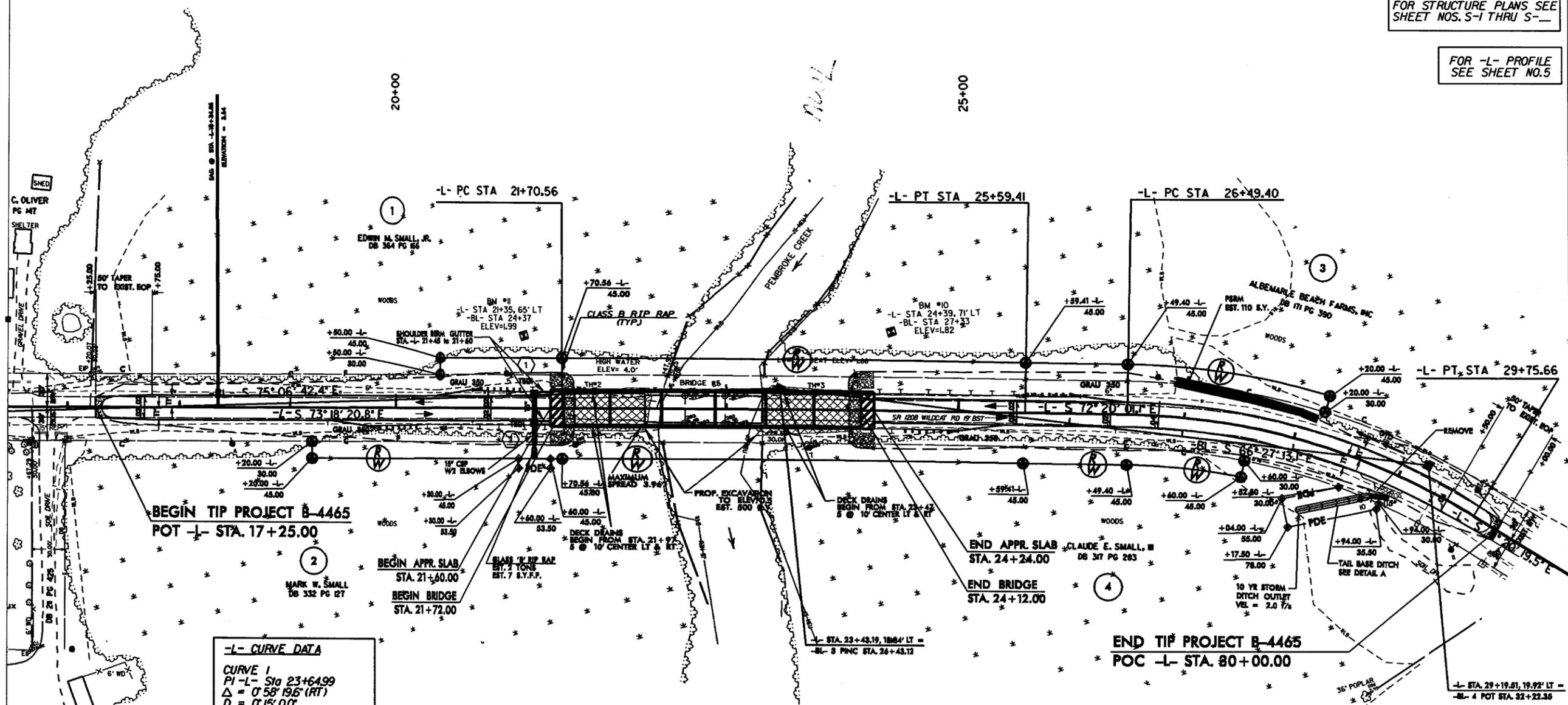
REVISIONS

| | |
|---|-----------------------|
| PROJECT REFERENCE NO. B-4465 | SHEET NO. 4 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS | |
|   | |
| <small>DRMP: DYER, RIDDLE, MILLS & FREEDMAN, INC. 7504 EAST INDEPENDENCE BLVD., SUITE 05 CHARLOTTE, NORTH CAROLINA 28227 (704) 332-2289</small> | |



FOR STRUCTURE PLANS SEE SHEET NOS. S-1 THRU S-...

FOR -L- PROFILE SEE SHEET NO.5



BEGIN TIP PROJECT B-4465
POT -L- STA. 17+25.00

BEGIN APPR. SLAB
STA. 21+60.00
BEGIN BRIDGE
STA. 21+72.00

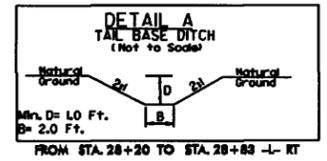
END APPR. SLAB
STA. 24+24.00
END BRIDGE
STA. 24+12.00

END TIP PROJECT B-4465
POC -L- STA. 80+00.00

-L- CURVE DATA

CURVE 1
 PI -L- Sta 23+64.99
 $\Delta = 0^\circ 58' 19.6''$ (RT)
 $D = 0^\circ 15' 0.0''$
 $L = 388.85'$
 $T = 194.43'$
 $R = 22,918.31'$
 $e = NC$
 DESIGN SPEED = 50 MPH

CURVE 2
 PI -L- Sta 28+16.63
 $\Delta = 30^\circ 59' 41.6''$ (RT)
 $D = 9^\circ 29' 59.9''$
 $L = 326.26'$
 $T = 167.23'$
 $R = 603.11'$
 $e = 0.04$
 RUNOFF = 12"
 DESIGN SPEED = 40 MPH



REVISIONS

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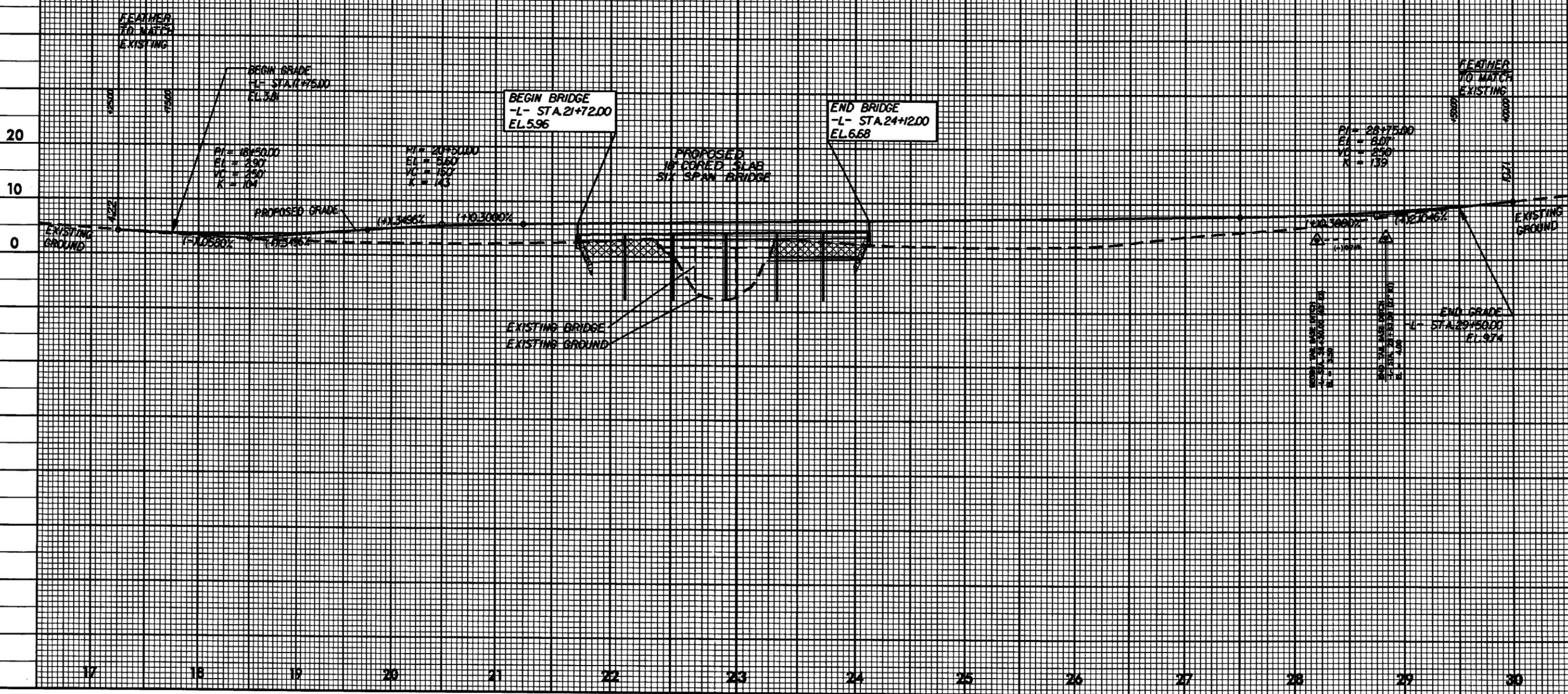
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|--|--|
| PROJECT REFERENCE NO. B-4465 | SHEET NO. 5 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS | |
| DRMP DESIGN, PLANNING, & CONSTRUCTION 1700 EAST WILKINSON BLVD., SUITE 605 CHARLOTTE, NORTH CAROLINA 28227 (704) 332-2289 | MA Engineering CONSULTANTS, INC. 1000 W. WILKINSON BLVD., SUITE 100 CHARLOTTE, NORTH CAROLINA 28227 (704) 332-2289 |

-L-

| BRIDGE HYDRAULIC DATA | |
|----------------------------------|-------------|
| DESIGN DISCHARGE | = 2,000 CFS |
| DESIGN FREQUENCY | = 25 YRS |
| DESIGN HW ELEVATION | = 3.9 FT |
| BASE DISCHARGE | = 3,056 CFS |
| BASE FREQUENCY | = 100 YRS |
| BASE HW ELEVATION | = 5.3 FT |
| OVERTOPPING DISCHARGE | = 1,600 CFS |
| OVERTOPPING FREQUENCY | = 10+ YRS |
| OVERTOPPING ELEVATION | = 3.6 FT |
| DATE OF SURVEY | = Jan, 2008 |
| W.S. ELEVATION AT DATE OF SURVEY | = -0.08 FT |

BM #10
 -L- STA 24+38, 71' LT
 -BL- STA 27+33, 62' LT
 ELEV= 1.82
 RR SPIKE SET IN 10" BLACK GUM

BM #11
 -L- STA 21+35, 65' LT
 -BL- STA 24+37, 54' LT
 ELEV= 1.99
 RR SPIKE SET IN 12" BLACK GUM



3-DEC-2008 09:56
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