STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 31, 2009

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

Mr. Stephen Lane
N. C. Dept. of Env. & Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Dear Sirs:

Subject: **Application for Nationwide Permits 13 & 33, 401 Water Quality Certification, CAMA General Permit, and Tar-Pamlico Riparian Buffer Authorization** for the replacement of Bridge No. 140 over Albemarle Canal on SR 1616 in Beaufort County. State Project No. 8.2151701. Federal Aid Project Number BRZ-1626(6). Debit $400.00 from WBS 33698.1.1. TIP No. B-4428.

Please find enclosed a Pre-Construction Notification (PCN) form, U.S. Coast Guard Public Notice, buffer drawings, permit drawings, roadway plans, a copy of the State Stormwater Permit Exclusion, North Carolina Division of Coastal Management Major Permit Forms 1, 2, and 5, utility drawings, and adjacent riparian landowner return receipts for the above referenced project. A Categorical Exclusion (CE) was completed for this project on March 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. 140 in Beaufort County. The proposed let date for the project is May 18, 2010 with a review date of March 30, 2010; however, the let date may advance as additional funds become available. There are no proposed permanent impacts resulting from construction of the project.

Regulatory Approvals

CAMA: NCDOT requests that the proposed work be authorized under a Coastal Area Management Act General Permit. The landowner receipts are provided with this permit application. Authorization to debit the $400 Permit Application Fee from WBS Element 33698.1.1 is hereby given.

Section 404 Permit: The NCDOT requests that a Nationwide Permit 33 be issued to authorize temporary fill. We are also requesting the issuance of a Nationwide Permit 13 for bank stabilization. (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 3688 and 3689 will apply to this project. We are requesting written approval from NCDWQ. In accordance with 15A NCAC 2H, Section .0500(a), we are providing five copies of this application to the NCDWQ for their review and approval.

Tar-Pamlico River Basin Buffer Authorization: NCDOT requests that the NC Division of Water Quality review this application and issue a written approval for a Tar-Pamlico Riparian Buffer Authorization.

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 Dr. Lance P. Fontaine at 919-431-6667 or lpfontaine@ncdot.gov.

Sincerely,

E. D. Lusk

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

W/attachment
Mr. Brian Wrenn, NCDWQ (5 Copies)

W/o attachment (see website for attachments)
Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Mark Staley, Roadside Environmental
Mr. C. E. Lassiter, P.E., Division 2 Engineer
Mr. Jay Johnson, Division 2 Environmental Officer
Mr. Scott McLendon, USACE, Wilmington
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC
Mr. Ron Sechler, NMFS
Ms. Anne Deaton, NCDMF
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Ms. Dionne Brown, 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:	☒ Section 404 Permit	☐ Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 13 33	or General Permit (GP) number:	
1c. Has the NWP or GP number been verified by the Corps?	☐ Yes	☒ No
1d. Type(s) of approval sought from the DWQ (check all that apply): ☒ 401 Water Quality Certification – Regular ☐ 401 Water Quality Certification – Express ☐ Non-404 Jurisdictional General Permit ☒ Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: ☐ Yes ☒ No	For the record only for Corps Permit: ☐ Yes ☒ No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	☐ Yes	☒ No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	☒ Yes	☐ No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	☒ Yes	☐ No

2. Project Information

2a. Name of project:	Replacement of Bridge No. 140 over Albemarle Canal on SR 1626
2b. County:	Beaufort
2c. Nearest municipality / town:	Pantego
2d. Subdivision name:	*not applicable*
2e. NCDOT only, T.I.P. or state project no:	B-4428

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	*not applicable*
3c. Responsible Party (for LLC if applicable):	*not applicable*
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	(919) 431-6667
3g. Fax no.:	(919) 431-2002
3h. Email address:	lpfontaine@ncdot.gov

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

B. Project Information and Prior Project History		
1. Property Identification		
1a. Property identification no. (tax PIN or parcel ID):	*not applicable*	
1b. Site coordinates (in decimal degrees):	Latitude: 35.638614 (DD.DDDDDD)	Longitude: - 76.672386 (-DD.DDDDDD)
1c. Property size:	~2 acres	
2. Surface Waters		
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Albemarle Canal	
2b. Water Quality Classification of nearest receiving water:	SC; NSW	
2c. River basin:	Tar Pamlico	
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 maintained/disturbed, agricultural/cultivated land, and some woodland adjacent to Albemarle Canal. General land use is Residential with Very Low-density detached dwelling and cropland and pasture.		
3b. List the total estimated acreage of all existing wetlands on the property: 0		
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: Albemarle Canal - 120'		
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 3-span, 116-foot timber bridge on timber pile bents with a 130-foot, 3-span, 21 inch cored slab superstructure atop pile bents. The new bridge will be on the existing alignment and an off-site detour will be used. Standard road building equipment, such as trucks, dozers, and cranes will be used. Telephone 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:	☒ Yes ☐ No ☐ Unknown	
4b. If the Corps made the jurisdictional determination, what type of determination was made?	☐ Preliminary ☒ Final	
4c. If yes, who delineated the jurisdictional areas? Name (if known): J. Barmore, S. Ward	Agency/Consultant Company: Environmental Services, Inc. Other:	
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. May 8, 2006		
5. Project History		
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	☐ Yes ☒ No ☐ Unknown	
5b. If yes, explain in detail according to "help file" instructions. N/A		

6. Future Project Plans	
6a. Is this a phased project?	☐ Yes ☒ No
6b. If yes, explain.	

C. Proposed Impacts Inventory

1. Impacts Summary

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

☐ Wetlands ☒ Streams - tributaries ☒ Buffers

☐ Open Waters ☐ Pond Construction

2. Wetland Impacts

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

2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)
Site 1 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 3 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 4 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 5 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 6 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
				2g. **Total wetland impacts**	X Permanent X 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 ☒ P ☐ T	Stabilization: embankment rip-rap (stormwater management)	Albemarle Canal	☒ PER ☐ INT	☒ Corps ☐ DWQ	65	12
Site 2 ☐ P ☒ T	Pipe	Albemarle Canal	☒ PER ☐ INT	☒ Corps ☐ DWQ	65	12
Site 3 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 4 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 5 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 6 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		

3h. **Total stream and tributary impacts**	12 Perm 12 Temp
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 ☐ P ☐ T				
O2 ☐ P ☐ T				
O3 ☐ P ☐ T				
O4 ☐ P ☐ T				
			4f. Total open water impacts	X Permanent X 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?	☐ Yes ☐ No If yes, permit ID no:
5i. Expected pond surface area (acres):	
5j. Size of pond watershed (acres):	
5k. Method of construction:	

6. Buffer Impacts (for DWQ)

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

6a. Project is in which protected basin?			☐ Neuse ☐ Catawba	☐ Tar-Pamlico ☐ Randleman	☐ Other:
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 ☒ P ☐ T	Driveway / Access (associated with DR4)	Albemarle Canal	☐ Yes ☒ No	1118.0	304.0
B2 ☒ P ☐ T	Cored Slab Bridge	Albemarle Canal	☐ Yes ☒ No	706.0	
B3 ☒ P ☐ T	Temp Access / Fill (Road Crossing Impacts and Grading and ReVeg in BZ-2)	Albemarle Canal	☐ Yes ☒ No	6604.0	184.0
			6h. **Total buffer impacts**	8428.0	488.0

6i. Comments: Impacts as per meeting with David Wainwright of DWQ 14 May 2009 - B1 captures impacts associated with the driveway DR4. B2 captures impacts associated with bridge from end-bent to end-bent. B3 captures 1) impacts of fill/rip-rap near bridge but outside the limits associated with "Bridge Crossing", and 2) impacts associated with the relocation of the existing road facility east and away from Albemarle Canal. Exisiting concrete of road facility will be removed, area will be graded to drain over a re-seeded grass area and into wooded riparian buffer. Exisiting conditions in this area (Sta. 13+51.00 to 19+25.00) are such that BZ-2 lies on paved road surface. BZ-1 consists of a maintained/disturbed (mowed) grass strip of varying width (~20 - 45 ft) and an existing wooded riparian buffer adjacent to Albemarle Canal. NCDOT does not plan to remove any woody vegetation from BZ-1 in this area.

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 is 14 feet longer than the exisiting bridge; existing road facility from approximately Sta. 13+51.00 to 19+25.00 will be removed, graded to drain towards canal and re-seeded with grass. This will produce a vegetated BZ-2 where it is currently pavement (i.e. Grading and Revegetation in BZ-2); rip-rap will be installed as part of stormwater management plan in areas where existing pipes or drainage are causing heavy erosion; an off site detour will be used; 3:1 fill slopes where practicable; utility relocation staging and bore holes will take place in area of existing road facility to be re-graded and re-seeded.

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

Design standards in sensitive waters; soil and erosion control measures; top down construction

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

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	☐ Yes ☒ No If no, explain: The NCDOT does not propose mitigation for stream bank stabilization activities. Stabilizing the bank of a stream does not require fill in the stream bed and, therefore, under Section 404 of the Clean Water Act, does not constitute Loss of Waters of the U.S. and is not subject to compensatory mitigation. Furthermore, the proposed bank stabilization activities are necessary to prevent erosion and sedimentation, i.e. preventing bank destabilization and minimizing impacts to the environment.
2b. If yes, mitigation is required by (check all that apply):	☐ DWQ ☐ Corps
2c. If yes, which mitigation option will be used for this project?	☐ Mitigation bank ☐ Payment to in-lieu fee program ☐ Permittee Responsible Mitigation

3. Complete if Using a Mitigation Bank

3a. Name of Mitigation Bank: not applicable

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

3c. Comments:

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

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

4h. Comments:

5. Complete if Using a Permittee Responsible Mitigation Plan

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

6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ	
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?	☐ Yes ☒ No

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

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

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

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

F. Supplementary Information		
1. Environmental Documentation (DWQ Requirement)		
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	☒ Yes	☐ No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	☒ Yes	☐ No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	☒ Yes	☐ No
2. Violations (DWQ Requirement)		
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	☐ Yes	☒ No
2b. Is this an after-the-fact permit application?	☐ Yes	☒ No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):		
3. Cumulative Impacts (DWQ Requirement)		
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	☐ Yes ☒ No	
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description.		
4. Sewage Disposal (DWQ Requirement)		
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable		

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

Dr. Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name	E. L. Lupk Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	7.31.09 Date

DCM MP-1

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-4428 (33698.1.1)		
Applicant 1: First Name: Gregory	MI:	Last Name: Thorpe		
Applicant 2: First Name:	MI:	Last Name:		
If additional applicants, please attach an additional page(s) with names listed.				
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)	Street Address		State Rd. #
Beaufort	Railroad Bed Road		SR 1626
Subdivision Name N/A	City Project not within any municipal boundaries.	State NC	Zip 27860 -

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? Tar-Pamlico	b. Name of body of water nearest to proposed project Albemarle Canal
c. Is the water body identified in (b) above, natural or manmade? ☐Natural ☒Manmade ☐Unknown	d. Name the closest major water body to the proposed project site. Pantego Creek
e. Is proposed work within city limits or planning jurisdiction? ☐Yes ☒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.) 110'	b. Size of entire tract (sq.ft.) 70,350 sq ft (inside R/W limits)
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)* 10' - 12' ☐NHW or ☒NWL

e. Vegetation on tract
Agriculture fields, ditches, grass (shoulders and yard), woods

f. Man-made features and uses now on tract
Road facility including ditches, house/yard, agriculture

g. Identify and describe the existing land uses adjacent to the proposed project site.
Existing road facility, ditches, agriculture, residence

h. How does local government zone the tract? Per county website, adjacent tracts have no zoning designation.	i. Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable) ☒Yes ☐No ☐NA

j. Is the proposed activity part of an urban waterfront redevelopment proposal? ☐Yes ☒No

k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy. ☒Yes ☐No ☐NA

If yes, by whom? North Carolina Dept. of Cultural Resources - State Historic Preservation Office

l. Is the proposed project located in a National Registered Historic District or does it involve a National Register listed or eligible property? ☐Yes ☒No ☐NA

<Form continues on next page>

m. (i) Are there wetlands on the site?	☐Yes ☒No
(ii) Are there coastal wetlands on the site?	☐Yes ☒No
(iii) If yes to either (i) or (ii) above, has a delineation been conducted? *(Attach documentation, if available)*	☐Yes ☐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. See attached stormwater management plan.	

5. Activities and Impacts

a. Will the project be for commercial, public, or private use?	☐Commercial ☒Public/Government ☐Private/Community
b. Give a brief description of purpose, use, and daily operations of the project when complete. Replace existing bridge due to low sufficiency rating. Lengthen bridge and improve road facility and safety with widening and addition of guardrail.	
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. Propose top/down construction at existing location with no temporary causeway(s). Typical construction equipment includes crane, bulldozer, dump trucks, motor grader, etc.	
d. List all development activities you propose. Replace/Lengthen bridge; addition of fill due to widening facility and raising of the existing road grade. The grade has to be raised to provide minimum grade across new bridge. Realigning existing road east of crossing to improve curve/safety of facility. Telephone utility relocation–staging and bore holes will take place in area of existing road facility to be re-graded and re-seeded.	
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?	1.0 ☐Sq.Ft or ☒Acres
g. Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of?	☒Yes ☐No ☐NA
h. Describe location and type of existing and proposed discharges to waters of the state. Existing ditches drain to creek in SW and NE quadrants. Sheet flow in SE quadrant and existing pipe system drains to canal in NW quadrant. Propose shoulder berm gutter on West side of road which will outlet to grassed swale. NE side of road will drain over grassed shoulders to grassed swale. Propose to tie to existing pipe system in NW quadrant.	
i. Will wastewater or stormwater be discharged into a wetland?	☐Yes ☒No ☐NA
If yes, will this discharged water be of the same salinity as the receiving water?	☐Yes ☐No ☒NA
j. Is there any mitigation proposed? If yes, attach a mitigation proposal.	☐Yes ☒No ☐NA

<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 plansheet with property owner list.

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.

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 7.31.09 Print Name E.L. Lusk

Signature E.L. Lusk

Please indicate application attachments pertaining to your proposed project.

☒DCM MP-2 Excavation and Fill Information ☒DCM MP-5 Bridges and Culverts

☐DCM MP-3 Upland Development

☐DCM MP-4 Structures Information

Form DCM MP-2

EXCAVATION and FILL

(Except for 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.

Describe below the purpose of proposed excavation and/or fill activities. **All values should be given in feet.**

	Access Channel (NLW or NWL)	Canal	Boat Basin	Boat Ramp	Rock Groin	Rock Breakwater	Other (excluding shoreline stabilization)
Length							
Width							
Avg. Existing Depth					NA	NA	
Final Project Depth					NA	NA	

1. EXCAVATION

☒ *This section not applicable*

a. Amount of material to be excavated from below NHW or NWL in cubic yards.

b. Type of material to be excavated.

c. (i) Does the area to be excavated include 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:

d. High-ground excavation in cubic yards.

2. DISPOSAL OF EXCAVATED MATERIAL

☒ *This section not applicable*

a. Location of disposal area.

b. Dimensions of disposal area.

c. (i) Do you claim title to disposal area?

☐Yes ☐No ☐NA

(ii) If no, attach a letter granting permission from the owner.

d. (i) Will a disposal area be available for future maintenance?

☐Yes ☐No ☐NA

(ii) If yes, where?

e. (i) Does the disposal area include any 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 disposal in these areas:

f. (i) Does the disposal include any area in the water?

☐Yes ☐No ☐NA

(ii) If yes, how much water area is affected?

3. SHORELINE STABILIZATION

☐ *This section not applicable*

(If development is a wood groin, use MP-4 – Structures)

a. Type of shoreline stabilization:
☐Bulkhead ☒Riprap ☐Breakwater/Sill ☐Other: _____

b. Length: 15'
Width: 26'

c. Average distance waterward of NHW or NWL: 5'

d. Maximum distance waterward of NHW or NWL: 13'

e. Type of stabilization material:
Class II Rip Rap w/ Filter Fabric

f. (i) Has there been shoreline erosion during preceding 12 months?
☒Yes ☐No ☐NA
(ii) If yes, state amount of erosion and source of erosion amount information.
Stormwater draining to canal bank eroding approx 300 sq ft

g. Number of square feet of fill to be placed below water level.
Bulkhead backfill _____ Riprap 180 sq ft
Breakwater/Sill _____ Other _____

h. Type of fill material.
Class I Rip Rap w/ filter fabric

i. Source of fill material.

4. OTHER FILL ACTIVITIES

☒ *This section not applicable*

(Excluding Shoreline Stabilization)

a. (i) Will fill material be brought to the site? ☐Yes ☐No ☐NA
If yes,
(ii) Amount of material to be placed in the water _____
(iii) Dimensions of fill area _____
(iv) Purpose of fill

b. (i) Will fill material be placed in 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 fill in these areas:

5. GENERAL

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

b. What type of construction equipment will be used (e.g., dragline, backhoe, or hydraulic dredge)?
Typical construction equipment includes crane, bulldozer, dump trucks, motor grader, etc.

c. (i) Will navigational aids be required as a result of the project?
☐Yes ☐No ☒NA
(ii) If yes, explain what type and how they will be implemented.

d. (i) Will wetlands be crossed in transporting equipment to project site? ☐Yes ☐No ☒NA
(ii) If yes, explain steps that will be taken to avoid or minimize environmental impacts.

08/03/2009
Date

Applicant Name

Applicant Signature

B-4428
Project Name

Gregory Thorpe

Form DCM MP-5

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:
Albemarle Canal

c. Type of bridge (construction material):
1 @ 40'; 1 @ 50'; 1 @ 40' – 21" Cored Slab

d. Water depth at the proposed crossing at NLW or NWL:
9' at MHT

e. (i) Will proposed bridge replace an existing bridge? ☒Yes ☐No
If yes,
(ii) Length of existing bridge: 116'
(iii) Width of existing bridge: 26'
(iv) Navigation clearance underneath existing bridge: 8'
(v) Will all, or a part of, the existing bridge be removed?
(Explain) All 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: 130'

h. Width of proposed bridge: 30'

i. Will the proposed bridge affect existing water flow? ☐Yes ☒No
If yes, explain: In-kind replacement with minimal canal bank work.

j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? ☐Yes ☒No
If yes, explain: In-kind replacement.

k. Navigation clearance underneath proposed bridge: 8.5'

l. Have you contacted the U.S. Coast Guard concerning their approval? ☒Yes ☐No
If yes, explain: U.S. Coast Guard contacted with details about proposed bridge replacement. Requested waiver of a bridge permit under Title 33, CFR, Section 115.70, advance approval for bridges. Public notice 5-1151 response received 01 July 2009. Public response period ends 03 Aug 2009.

m. Will the proposed bridge cross wetlands containing no navigable waters? ☐Yes ☒No
If yes, explain:

n. Height of proposed bridge above wetlands: N/A

2. CULVERTS

☒ *This section not applicable*

a. Number of culverts proposed: _____

b. Water body in which the culvert is to be placed:

< Form continues on back>

c. Type of culvert (construction material):

_____

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:

_____

_____

_____

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: 465'

(iii) Avg. width of area to be excavated: 15'

(iv) Avg. depth of area to be excavated: 2.0'

(v) Amount of material to be excavated in cubic yards: 400 cu yds

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: 15'

(iii) Avg. width of area to be filled: 26'

(iv) Purpose of fill: Stabilization: embankment rip-rap (stormwater management). This is duplicate of entry from Form DCM MP2 - 3b.

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 ____ ☒None

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

Fill due to proposed widening and raising of existing road grade.

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: 600'

(iii) Avg. width of area to be filled: 20'

(iv) Purpose of fill: Due to proposed realignment of main road and driveways.

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 telephone cable will be relocated on-site via directional bore method. Boring will maintain a minimum of 7' below stream bed. Bore hole and equipment to be staged in area of exisiting roadway.

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

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

If yes, explain:

< Form continues on back>

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?

Standard NCDOT BMP's will be utilized.

e. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)?

Standard NCDOT road construction equipment will be employed, including by not limited to a crane, bulldozer, dump truck, and motor grader.

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.

7-31-09

Date

B-4428

Project Name

Gregory Thorpe

Applicant Name

E. L. Lush

Applicant Signature

NCDENR
North Carolina Department of Environment and Natural Resources
Division of Water Quality
Coleen H. Sullins
Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

June 29, 2009

Mr. Galen Cail, TES III
NCDOT – Hydraulics Unit
1590 Mail Service Center
Raleigh, NC 27699-1590

Subject: **Stormwater Permit Exclusion – NC DOT Activity**
Replace Bridge #140 over Albemarle Canal
Stormwater Project No. SW7090510
Beaufort County

Dear Mr. Cail:

On May 8, 2009, the Washington Regional Office of the Division of Water Quality received a Coastal Stormwater Permit Application for the subject project, located on SR1626, bridge #140 over Albemarle Canal, Beaufort County, North Carolina. 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\SW7090510

cc: Division of Coastal Management
Garcy Ward, DWQ
Washington Regional Office
Central Files

STORMWATER MANAGEMENT PLAN

TIP No. B-4428 (33698.1.1)
Beaufort County
April 2009

Project Description

This project consists of approach roadway work and the replacement of Bridge #140 over Albemarle Canal on SR 1626 (Wilkinson Station Road). The existing 2 lane facility has 10' lanes. The proposed facility will will have 2 - 10' lanes. The existing 1 @ 40.5', 1 @ 35', 1 @ 40.5' (116' total) bridge will be replaced with a 1 @ 40', 1 @ 50', 1 @ 40' – 21" cored slab bridge (130' total). There are no wetlands in the project area.

Project Involvement

The drainage at the site consists of ephemeral drainage ditches and pipe systems. West of the x-ing two existing drainage pipes outlet into the canal. It is proposed to remove the pipe in the SW quadrant and use embankment rip rap down to canal. The outlet pipe in the NW quadrant will be replaced in place.

Best Management Practices

Best Management Practices (BMPs) utilized on the project are as follows:

-Promotion of sheet flow and infiltration with grassed shoulders and grassed swales.
-No direct discharge into buffer. Outlet drainage systems to grassed swales with treatment prior to buffer.
-No deck drains on bridge

U.S. Department of Homeland Security

United States Coast Guard

Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, Va. 23704-5004
Staff Symbol: (dpb)
Phone: (757) 398-6422
Fax: (757) 398-6334
Email: Bill.H.Brazier@uscg.mil

16591
JUL 1 2009
B-4428

PUBLIC NOTICE 5-1151

TO WHOM IT MAY CONCERN:

All interested parties are notified that the Commander Fifth Coast Guard District has received an application from the North Carolina Department of Transportation (NCDOT) for approval of the location and plan for a replacement bridge to be constructed across a navigable waterway of the United States.

WATERWAY AND LOCATION: Across Albemarle Canal on SR 1626, a tributary of Tar-Pamlico Rivers in Swindell, Beaufort County, NC.

CHARACTER OF WORK: NCDOT proposes plans for replacement of the Bridge #140 over Albemarle Canal. The bridge will be replaced on existing location with off-site detour. NCDOT is requesting a waiver of a bridge permit under Title 33, Code of Federal Regulations, Section 115.70, advanced approval for bridges. Advance approval waterways are those that are navigable in law, but not actually navigated by other than small boats. The Commandant of the Coast Guard has given advance approval to the construction or repair of bridges across such waterways.

MINIMUM NAVIGATIONAL CLEARANCES:

Vertical Clearance – 13.5 feet above mean high water at low steel.

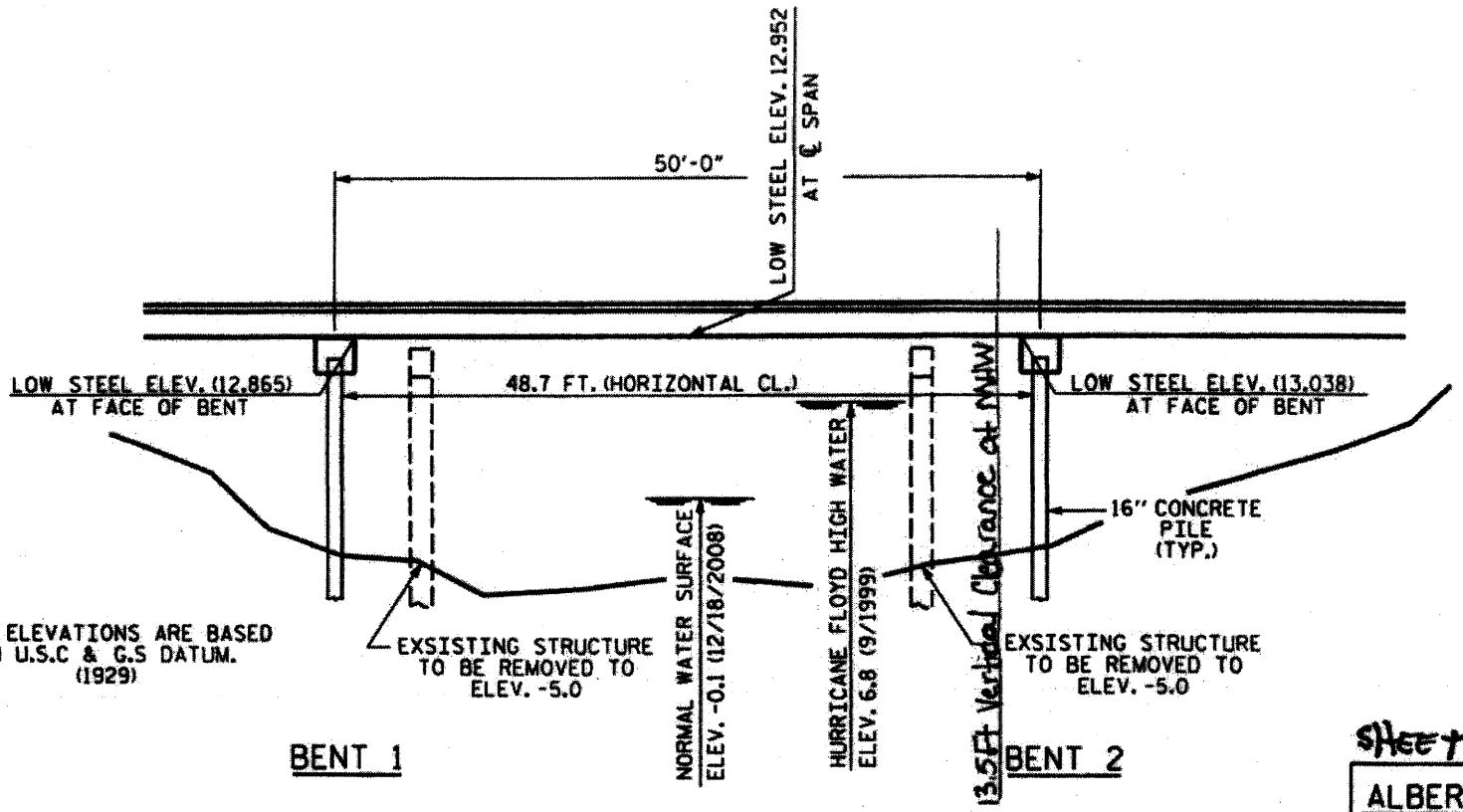
Horizontal Clearance – 48 feet between pile bents.

SOLICITATION OF COMMENTS:
Interested parties are requested to express their views, in writing, on the replacement of the proposed bridge giving sufficient detail to establish a clear understanding of their reasons for support of or opposition to the proposed replacement bridge project. Comments will be received for the record at the office of the Commander (dpb), Fifth Coast Guard District, Federal Building, 431 Crawford Street, Portsmouth, VA 23704-5004 through AUG 3 2009.

Copy of location map and plan are attached.

Waverly W. Gregory, Jr.

WAVERLY W. GREGORY, JR.
Chief, Bridge Administration Branch
By direction of the Commander
Fifth Coast Guard District



CHANNEL SPAN ELEVATION

20 0 20 40

IN FEET

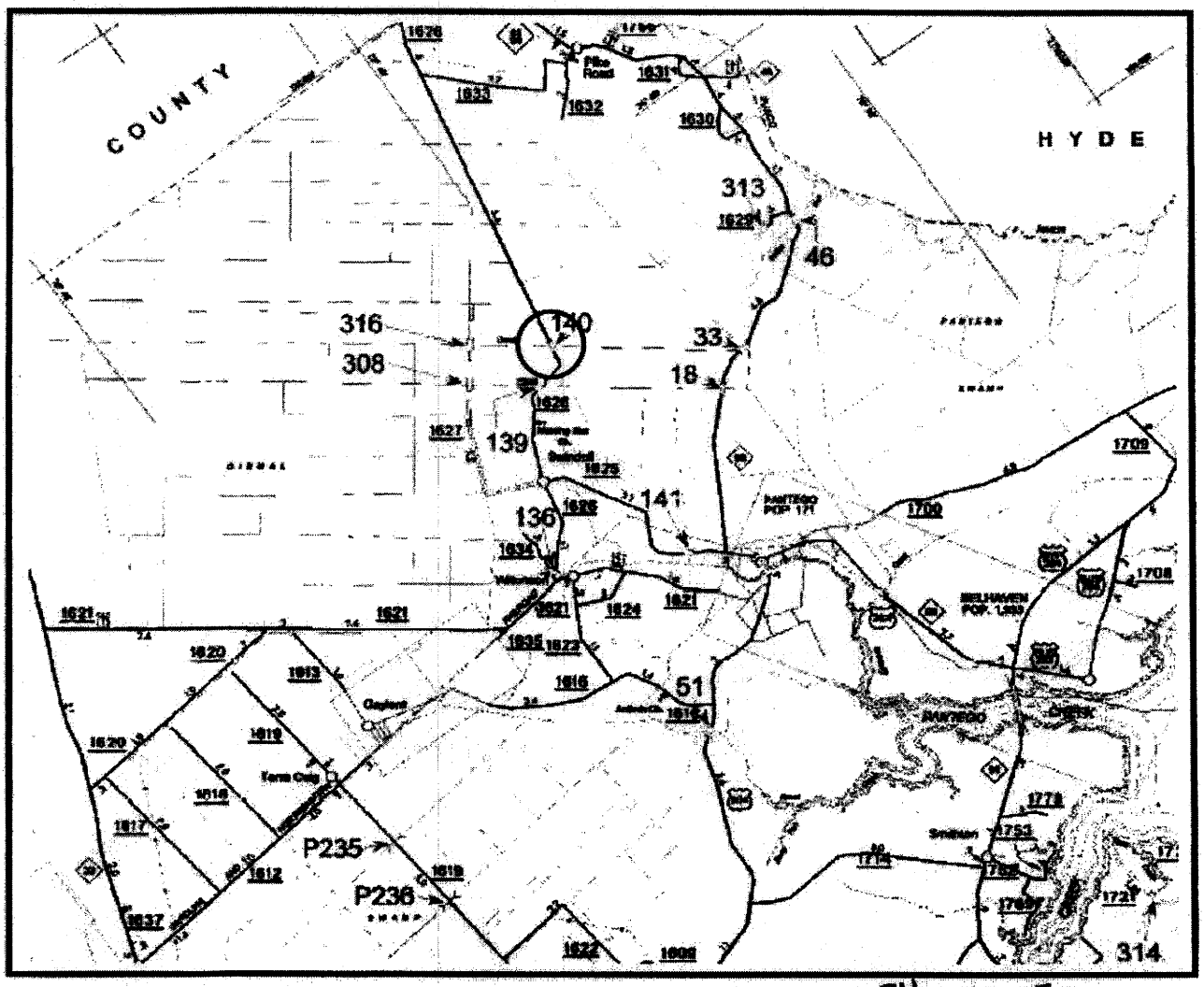
Sheet 1 of 2

ALBERMARLE CANAL

PROPOSED BRIDGE OVER
ALBERMARLE CANAL NEAR
PANTEGO, NORTH CAROLINA
BEAUFORT COUNTY
SR 1626
APPLICATION BY NORTH
CAROLINA DEPT. OF
TRANSPORTAION

DATE: JUNE 2009

b4428_sd_coastguard.dgn 6/24/2009 10:06:29 AM



SHEET 2 OF 2

B-4428. Replacement of Bridge No. 140 on SR 1626 over a Canal.

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 30, 2009

Sharon A. Greig
P.O. Box 238
Pantego, NC 27860

Dear Landowner:

The North Carolina Department of Transportation is planning to replace bridge number 140 on SR 1626 over Albemarle Canal. The proposed project will replace the aging existing structure over the Albemarle Canal. The project will replace the existing 116-foot bridge with a 130-foot bridge. The additional length will allow for the replacement of a substandard structure as well as improve the existing floodplain. This project crosses an Area of Environmental Concern, as defined by the North Carolina Division of Coastal Management (DCM), and must be approved by the DCM under provisions of the Coastal Area Management Act (CAMA). One of the prerequisites to this approval is that adjacent riparian landowners be given an opportunity to comment on the proposal. A vicinity map and site drawings are enclosed for your review.

The attached form is submitted to ensure that you have an opportunity to comment on the proposal. The work planned is depicted in the attached drawing. If you have **no** objections to the proposal, please return the form with your response within 10 days to this office. If you **do** have objections to the project, please forward your comments to:

Mr. Stephen Lane
N. C. Dept. of Env. & Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Thank you for your cooperation.

Sincerely,

E. R. Lush

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

Enclosures
cc: Stephen Lane, NCDCM
File B-4428

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

ADJACENT RIPARIAN LANDOWNER STATEMENT

(Beaufort County: Replace Bridge No. 140 over Albemarle Canal; NCDOT TIP B-4428)

General Statutes and Division of Coastal Management General Permit approval procedures require that riparian landowners with property adjoining a proposed development in an Area of Environmental Concern (AEC) be given ten (10) days in which to comment on the proposed development. This form allows the adjacent riparian landowner to express either: (1) that he objects to the project; or, (2) that he does not object and desires to waive his/her right to the 10-day period so that the processing of the application can progress more rapidly. Of course, the adjacent riparian landowner need not sign this form at all if he/she so chooses.

I, _____ , am an adjacent riparian property owner and am aware of the North Carolina Department of Transportation's plans for replacing bridge number 140 over Albemarle Canal in Beaufort County, North Carolina. I am further aware that this work will occur in one or more Areas of Environmental Concern and therefore will require authorization from the Division of Coastal Management in accordance with the Coastal Area Management Act (CAMA).

_____ I have no objection to the project as presently proposed and hereby waive that right of objection as provided in General Statute 113-229

_____ I have objections to the project as presently proposed and my comments are attached

_____ _____

Signature of Adjacent Riparian Landowner Date

_____

Phone Number with Area Code

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 30, 2009

James S. Harris
2516 Oaks Plantation Dr.
Raleigh, NC 27610

Dear Landowner:

The North Carolina Department of Transportation is planning to replace bridge number 140 on SR 1626 over Albemarle Canal. The proposed project will replace the aging existing structure over the Albemarle Canal. The project will replace the existing 116-foot bridge with a 130-foot bridge. The additional length will allow for the replacement of a substandard structure as well as improve the existing floodplain. This project crosses an Area of Environmental Concern, as defined by the North Carolina Division of Coastal Management (DCM), and must be approved by the DCM under provisions of the Coastal Area Management Act (CAMA). One of the prerequisites to this approval is that adjacent riparian landowners be given an opportunity to comment on the proposal. A vicinity map and site drawings are enclosed for your review.

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Mr. Stephen Lane
N. C. Dept. of Env. & Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Thank you for your cooperation.

Sincerely,

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

Enclosures
cc: Stephen Lane, NCDCM
File B-4428

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

ADJACENT RIPARIAN LANDOWNER STATEMENT

(Beaufort County: Replace Bridge No. 140 over Albemarle Canal; NCDOT TIP B-4428)

General Statutes and Division of Coastal Management General Permit approval procedures require that riparian landowners with property adjoining a proposed development in an Area of Environmental Concern (AEC) be given ten (10) days in which to comment on the proposed development. This form allows the adjacent riparian landowner to express either: (1) that he objects to the project; or, (2) that he does not object and desires to waive his/her right to the 10-day period so that the processing of the application can progress more rapidly. Of course, the adjacent riparian landowner need not sign this form at all if he/she so chooses.

I, _____, am an adjacent riparian property owner and am aware of the North Carolina Department of Transportation's plans for replacing bridge number 140 over Albemarle Canal in Beaufort County, North Carolina. I am further aware that this work will occur in one or more Areas of Environmental Concern and therefore will require authorization from the Division of Coastal Management in accordance with the Coastal Area Management Act (CAMA).

_____ I have no objection to the project as presently proposed and hereby waive that right of objection as provided in General Statute 113-229

_____ I have objections to the project as presently proposed and my comments are attached

_____ _____

Signature of Adjacent Riparian Landowner Date

_____

Phone Number with Area Code

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 30, 2009

Albemarle Drainage District
6414 NC Hwy 99 South
Pantego, NC 27860

Dear Landowner:

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N. C. Dept. of Env. & Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Thank you for your cooperation.

Sincerely,

E. L. Lush

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

Enclosures
cc: Stephen Lane, NCDCM
File B-4428

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1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

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

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SUITE 116
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(Beaufort County: Replace Bridge No. 140 over Albemarle Canal; NCDOT TIP B-4428)

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Phone Number with Area Code

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 30, 2009

Romico, Inc.
P.O. Box 8
Washington, NC 27889

Dear Landowner:

The North Carolina Department of Transportation is planning to replace bridge number 140 on SR 1626 over Albemarle Canal. The proposed project will replace the aging existing structure over the Albemarle Canal. The project will replace the existing 116-foot bridge with a 130-foot bridge. The additional length will allow for the replacement of a substandard structure as well as improve the existing floodplain. This project crosses an Area of Environmental Concern, as defined by the North Carolina Division of Coastal Management (DCM), and must be approved by the DCM under provisions of the Coastal Area Management Act (CAMA). One of the prerequisites to this approval is that adjacent riparian landowners be given an opportunity to comment on the proposal. A vicinity map and site drawings are enclosed for your review.

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Division of Coastal Management
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Morehead City, NC 28557

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E. L. Luck

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

Enclosures
cc: Stephen Lane, NCDCM
File B-4428

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(Beaufort County: Replace Bridge No. 140 over Albemarle Canal; NCDOT TIP B-4428)

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Phone Number with Area Code

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

July 30, 2009

Lutie B. Jennette
Leslie R. Simpkins
C/O Wanda Jennette
272 Seymour Ave.
Newark, NJ 07112

Dear Landowner:

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for E. L. Lush

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Environmental Management Director, PDEA

Enclosures
cc: Stephen Lane, NCDCM
File B-4428

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_____ _____

Signature of Adjacent Riparian Landowner Date

_____

Phone Number with Area Code

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
2	SHARON A. GRIEG	P.O. BOX 238 PANTEGO, NC 27860
3	ALBEMARLE DRAINAGE DISTRICT	6414 NC HWY. 99 SOUTH PANTEGO, NC 27860
4	ROMICO, INC.	P.O. BOX 8 WASHINGTON, NC 27889
8	LUTIE B. JENNETTE LESLIE R. SIMPKINS	C/O WANDA JENNETTE 272 SEYMOUR AVE. NEWARK, NJ 07112
NOT ON PLANS	JAMES S. HARRIS	2516 OAKS PLANTATION DR. RALEIGH, NC 27610

Permit Drawing
Sheet 5 of 6

NCDOT
DIVISION OF HIGHWAYS
BEAUFORT COUNTY
PROJECT: 33698.1.1 (B-4428)
PANTEGO
OVER ALBEMARLE CANAL
ON SR 1626

SHEET OF 4/22/09

WETLAND PERMIT IMPACT SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	12+45-L-/13+37-L-	Embankment Riprap						<0.01	<0.01	12	12	
TOTALS:								<0.01	<0.01	12	12	

Permit Drawing
Sheet 6 of 6

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

BEAUFORT COUNTY
WBS - 33698.1.1 (B-4428)

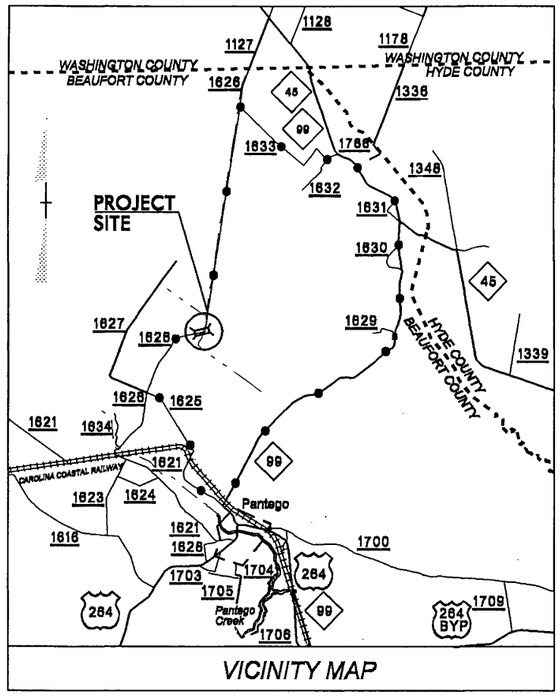
SHEET 4/30/2009

ATN Revised 3/31/05

09/08/

TIP PROJECT: B-4428

CONTRACT: 33698



VICINITY MAP

OFFSITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BEAUFORT COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4428	1	

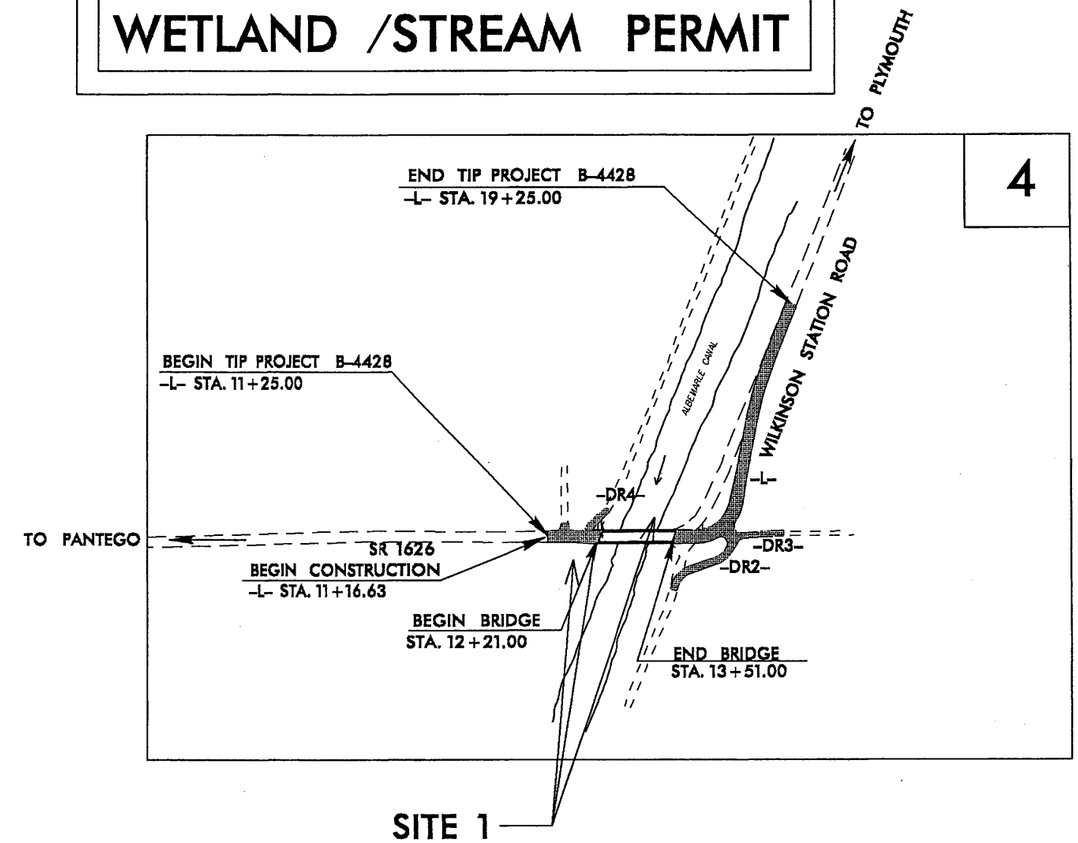
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
33698.1.1	BRZ-1616(6)	P.E.
33698.2.1	BRZ-1626(3)	ROW, UTIL

Permit Drawing
Sheet 1 of 6

LOCATION: BRIDGE #140 OVER ALBEMARLE CANAL ON SR 1626 (WILKINSON STATION ROAD) > >

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

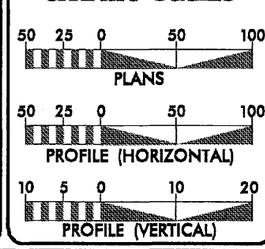
WETLAND /STREAM PERMIT



INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



DESIGN DATA

ADT 2010 = 505
ADT 2030 = 800
DHV = 10 %
D = 60 %
T = 3 % *
V = 60 MPH**
FUNC CLASS = RURAL LOCAL

* (TTST 1% + DUAL 2%)

** DESIGN EXCEPTION REQUIRED FOR THE DESIGN SPEED FROM 60 MPH TO 30 MPH

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4428	=	0.127 MI
LENGTH OF STRUCTURES TIP PROJECT B-4428	=	0.025 MI
TOTAL LENGTH OF TIP PROJECT B-4428	=	0.152 MI

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MAY 15, 2009

LETTING DATE: MAY 18, 2010

BRENDA MOORE, P.E.
PROJECT ENGINEER

THAD F. DUNCAN, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

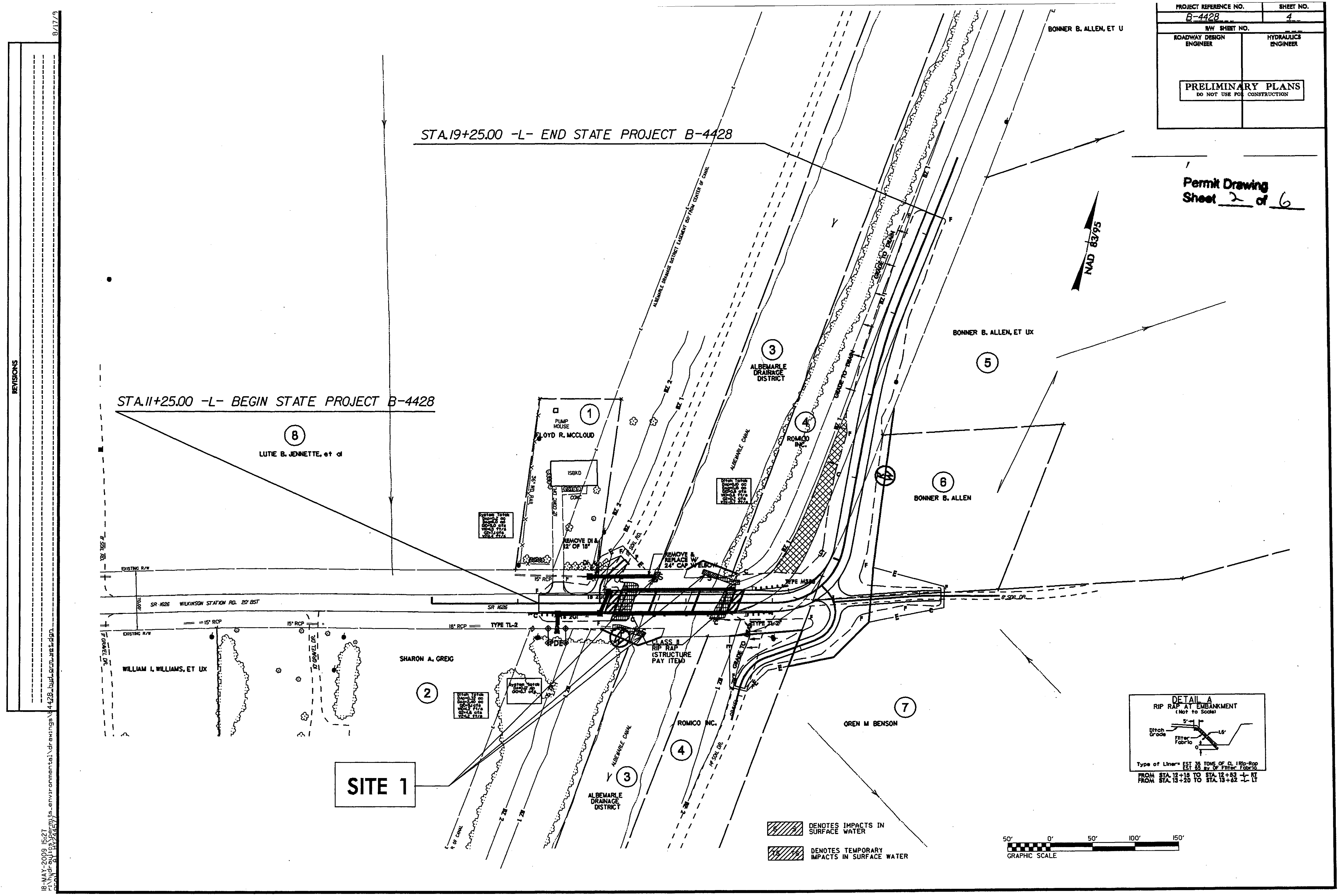
ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

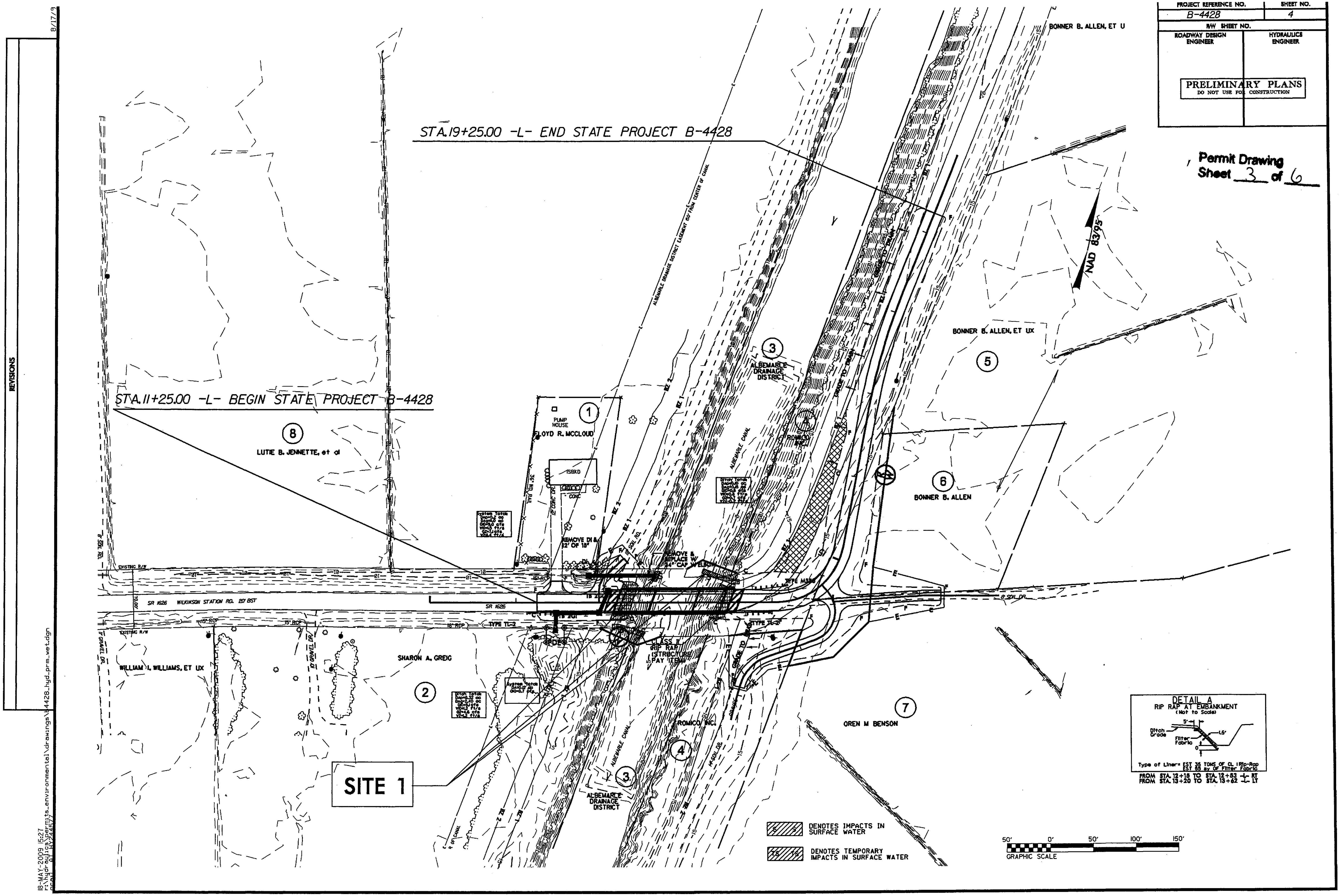
DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

P.E.
STATE HIGHWAY DESIGN ENGINEER

01-MAY-2009 08:43
r:\hydraulics\permits\environmental\drawings\b4428_hyd_tsh_wet.dgn
ameadows AT HY24462



PROJECT REFERENCE NO.
SHEET NO.
B-4428
4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
Permit Drawing
Sheet 2 of 6
NAD 83/95
STA.19+25.00 -L- END STATE PROJECT B-4428
STA.11+25.00 -L- BEGIN STATE PROJECT B-4428
BONNER B. ALLEN, ET U
BONNER B. ALLEN, ET UX
BONNER B. ALLEN
LUTIE B. JENNETTE, et al
FLOYD R. MCCLOUD
PUMP HOUSE
ALBEMARLE DRAINAGE DISTRICT
ROMICO INC.
ALBEMARLE CANAL
SHARON A. GREIG
WILLIAM I. WILLIAMS, ET UX
OREN M BENSON
SR 1626 WILKINSON STATION RD. 20' BST
SR 1626
EXISTING R/W
15" RCP
18" RCP
TYPE TL-2
GRADE TO DRAIN
REMOVE DI & 32' OF 15"
REMOVE & REPLACE W/ 24" CAP W/ELBOW
CLASS II RIP RAP (STRUCTURE PAY ITEM)
SITE 1
DETAIL A
RIP RAP AT EMBANKMENT
(Not to Scale)
Ditch Grade
Filter Fabric
Type of Liner= EST 35 TONS OF CL I Rip-Rap
EST 65 sy OF Filter Fabric
FROM STA. 12+18 TO STA. 12+83 -L- RT
FROM STA. 13+20 TO STA. 13+62 -L- LT
DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
50' 0' 50' 100' 150'
GRAPHIC SCALE
REVISIONS
18-MAY-2009 15:27



PROJECT REFERENCE NO. B-4428
SHEET NO. 4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
Permit Drawing
Sheet 3 of 6
STA.19+25.00 -L- END STATE PROJECT B-4428
STA.11+25.00 -L- BEGIN STATE PROJECT B-4428
BONNER B. ALLEN, ET U
BONNER B. ALLEN, ET UX
BONNER B. ALLEN
NAD 83/95
ALBEMARLE DRAINAGE DISTRICT
ALBEMARLE CANAL
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(Not to Scale)
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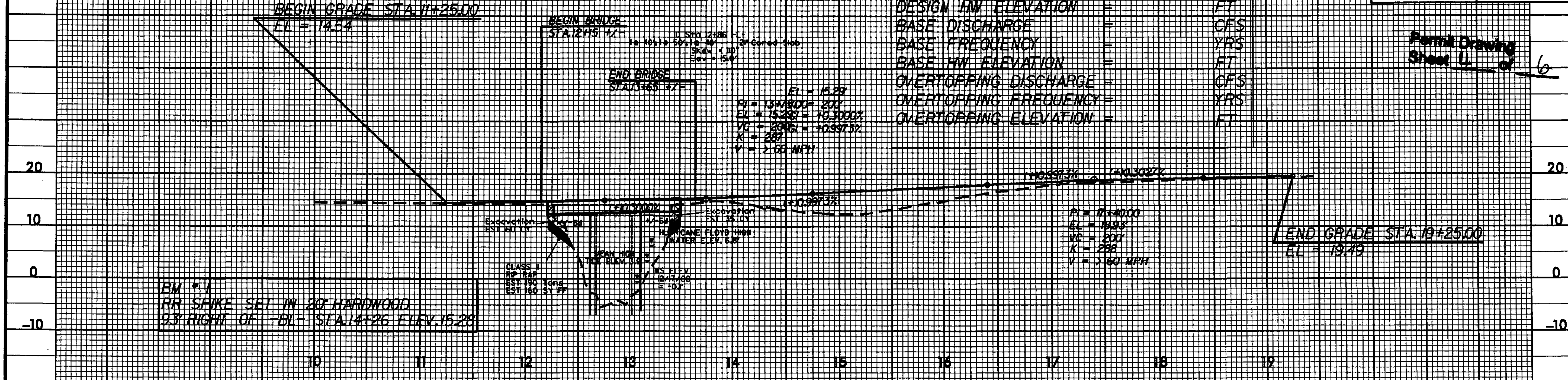
FROM STA. 13+20 TO STA. 13+62 -L- LT
DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER
GRAPHIC SCALE
REVISIONS
18-MAY-2009 15:27

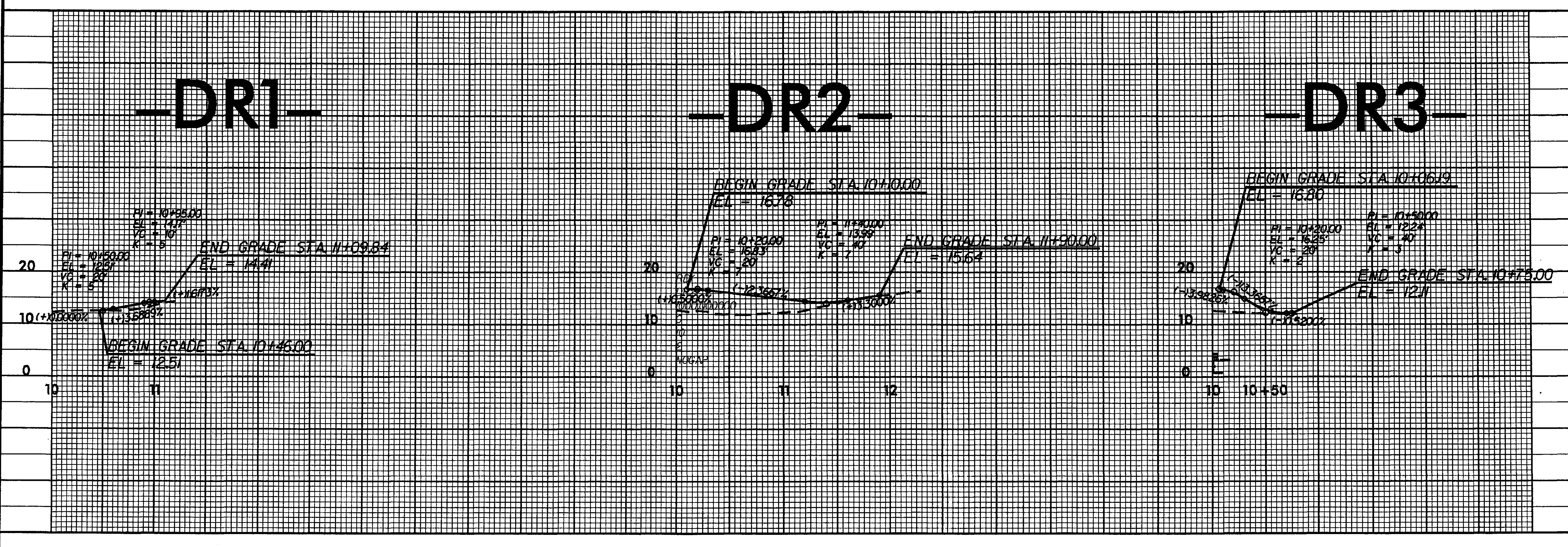
PROJECT REFERENCE NO.	SHEET NO.
B-4428	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Permit Drawing
Sheet 4 of 6





PROJECT REFERENCE NO.	SHEET NO.

B-4428 NEU PERMIT DRAWING

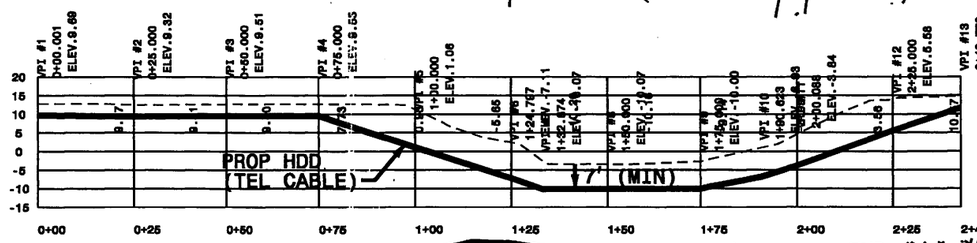
UTILITIES BY OTHERS

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

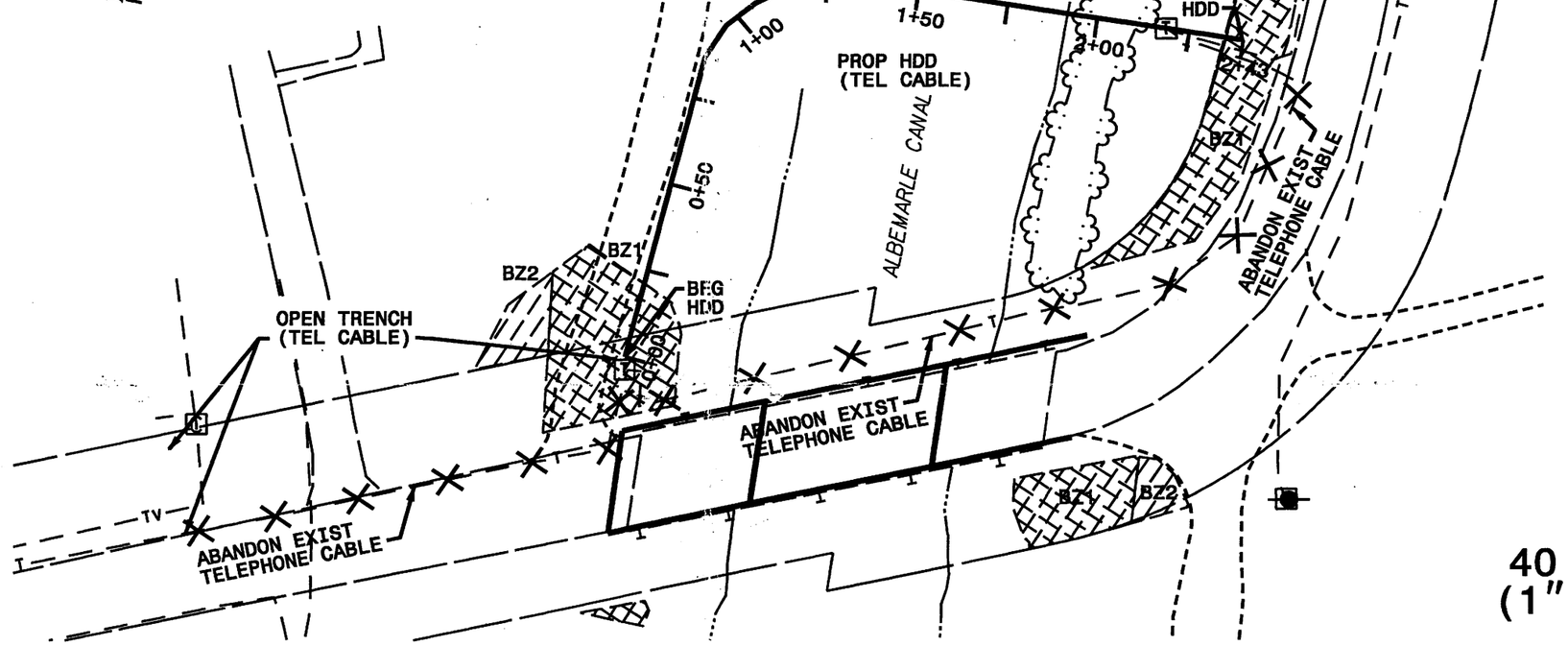
Utility
Permit Drawing
Sheet 1 of 1

B-4428

PROP HDD PROFILE



NAD 83/NSRS 2007

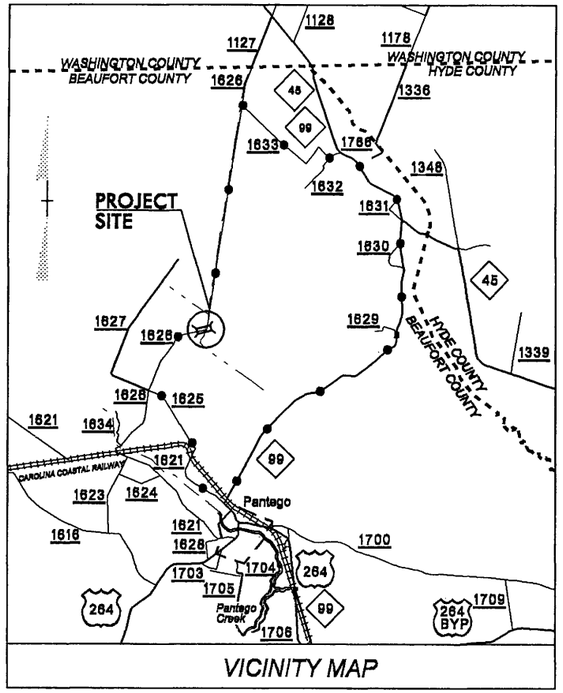


40 SCALE
(1" = 40')

09/08/9

TIP PROJECT: B-4428

CONTRACT: 33698



VICINITY MAP

OFFSITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BEAUFORT COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4428	1	

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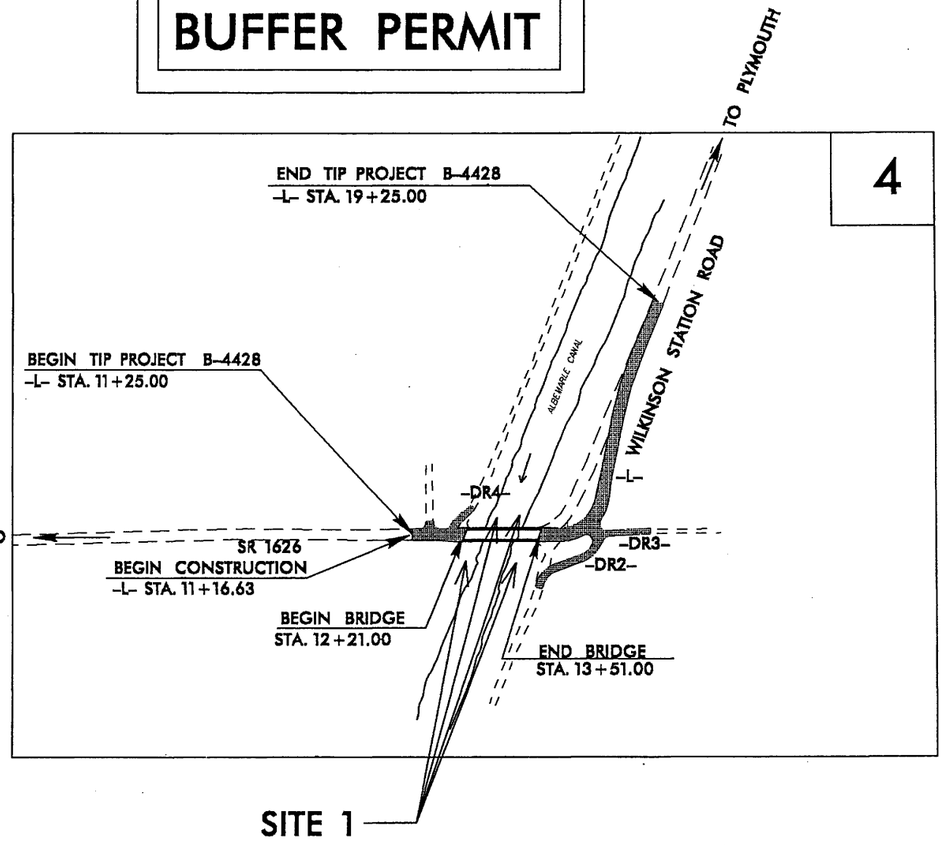
33698.1.1	BRZ-1616(6)	P.E.
33698.2.1	BRZ-1626(3)	ROW, UTIL

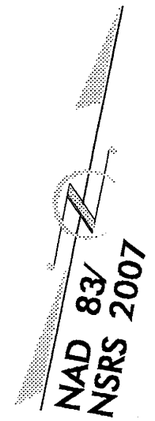
Buffer Drawing Sheet 1 of 2

LOCATION: *BRIDGE #140 OVER ALBEMARLE CANAL ON SR 1626 (WILKINSON STATION ROAD) > >*

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

BUFFER PERMIT





INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES

PLANS 50 25 0 50 100

PROFILE (HORIZONTAL) 50 25 0 50 100

PROFILE (VERTICAL) 10 5 0 10 20

DESIGN DATA

ADT 2010 = 505
ADT 2030 = 800
DHV = 10 %
D = 60 %
T = 3 % *
V = 60 MPH**
FUNC CLASS = RURAL LOCAL

* (TTST 1% + DUAL 2%)

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LENGTH OF STRUCTURES TIP PROJECT B-4428	=	0.025 MI
TOTAL LENGTH OF TIP PROJECT B-4428	=	0.152 MI

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HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

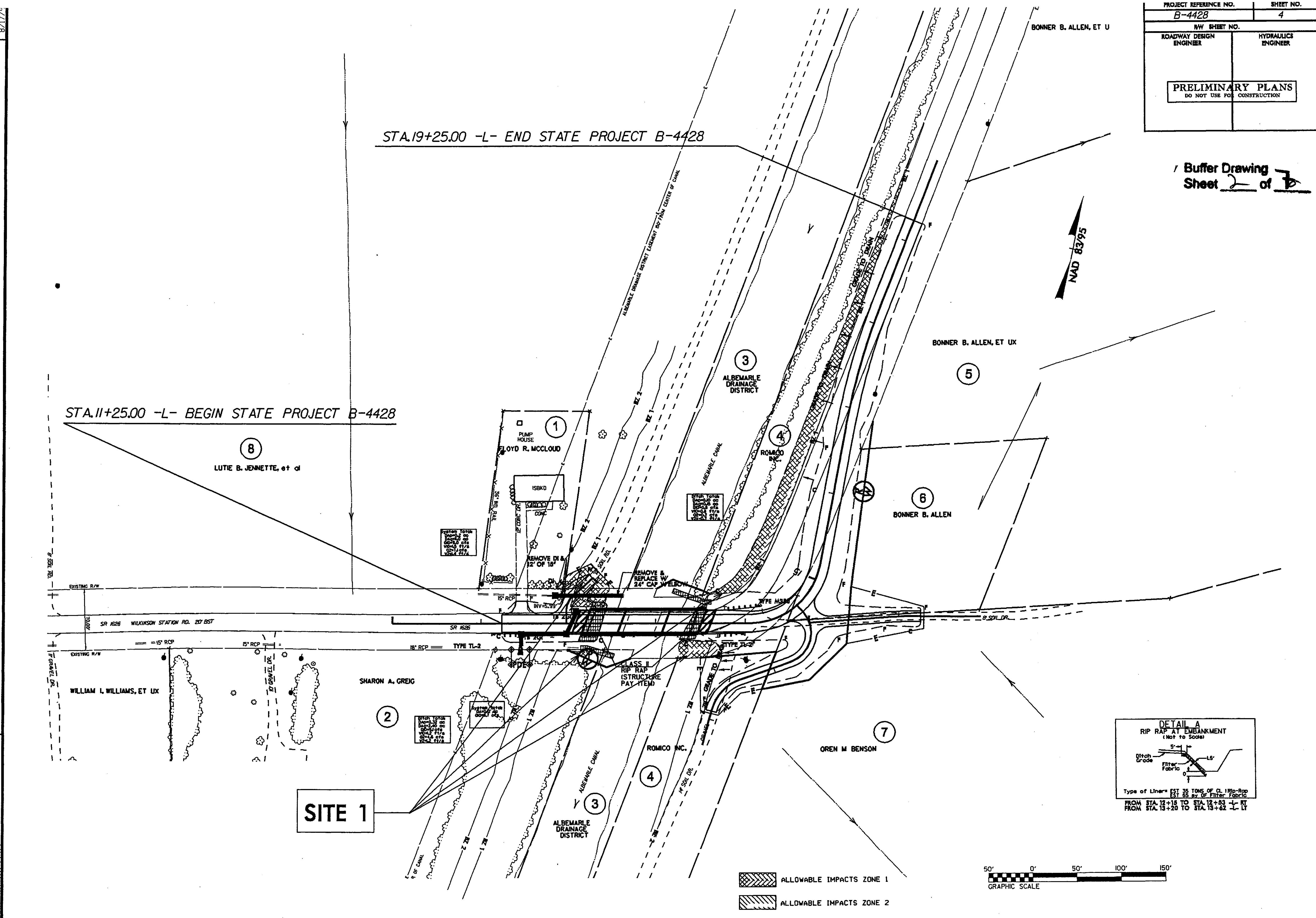
P.E.
STATE HIGHWAY DESIGN ENGINEER

01-MAY-2009 08:45
r:\hydraulics\permits_environmental\drawings\b4428_hyd_tsh_buf.dgn
cmeddows
AI HY244562

PROJECT REFERENCE NO.	SHEET NO.
B-4428	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Buffer Drawing
Sheet 2 of 7



STA.19+25.00 -L- END STATE PROJECT B-4428
STA.11+25.00 -L- BEGIN STATE PROJECT B-4428
BONNER B. ALLEN, ET U
BONNER B. ALLEN, ET UX
BONNER B. ALLEN
NAD 83/95
LUTIE B. JENNETTE, et al
FLOYD R. MCCLOUD
PUMP HOUSE
ALBEMARLE DRAINAGE DISTRICT
ALBEMARLE CANAL
ROMICO INC.
SHARON A. GREIG
WILLIAM I. WILLIAMS, ET UX
OREN M BENSON
SR 1626 WILKINSON STATION RD. 20' BST
EXISTING R/W
REMOVE DI & 12' OF 18"
REMOVE & REPLACE W/ 24" CAP W/ ELBOW
CLASS II RIP RAP (STRUCTURE PAY ITEM)
TYPE TL-2
GRADE TO DRAIN
SITE 1
DETAIL A
RIP RAP AT EMBANKMENT
(Not to Scale)
Ditch Grade
Filter Fabric
Type of Liner= EST 35 TONS OF CL. I Rip-Rap EST 65 sy OF Filter Fabric
FROM STA. 12+18 TO STA. 12+83 -L- RT
FROM STA. 13+20 TO STA. 13+62 -L- LT
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
GRAPHIC SCALE
REVISIONS

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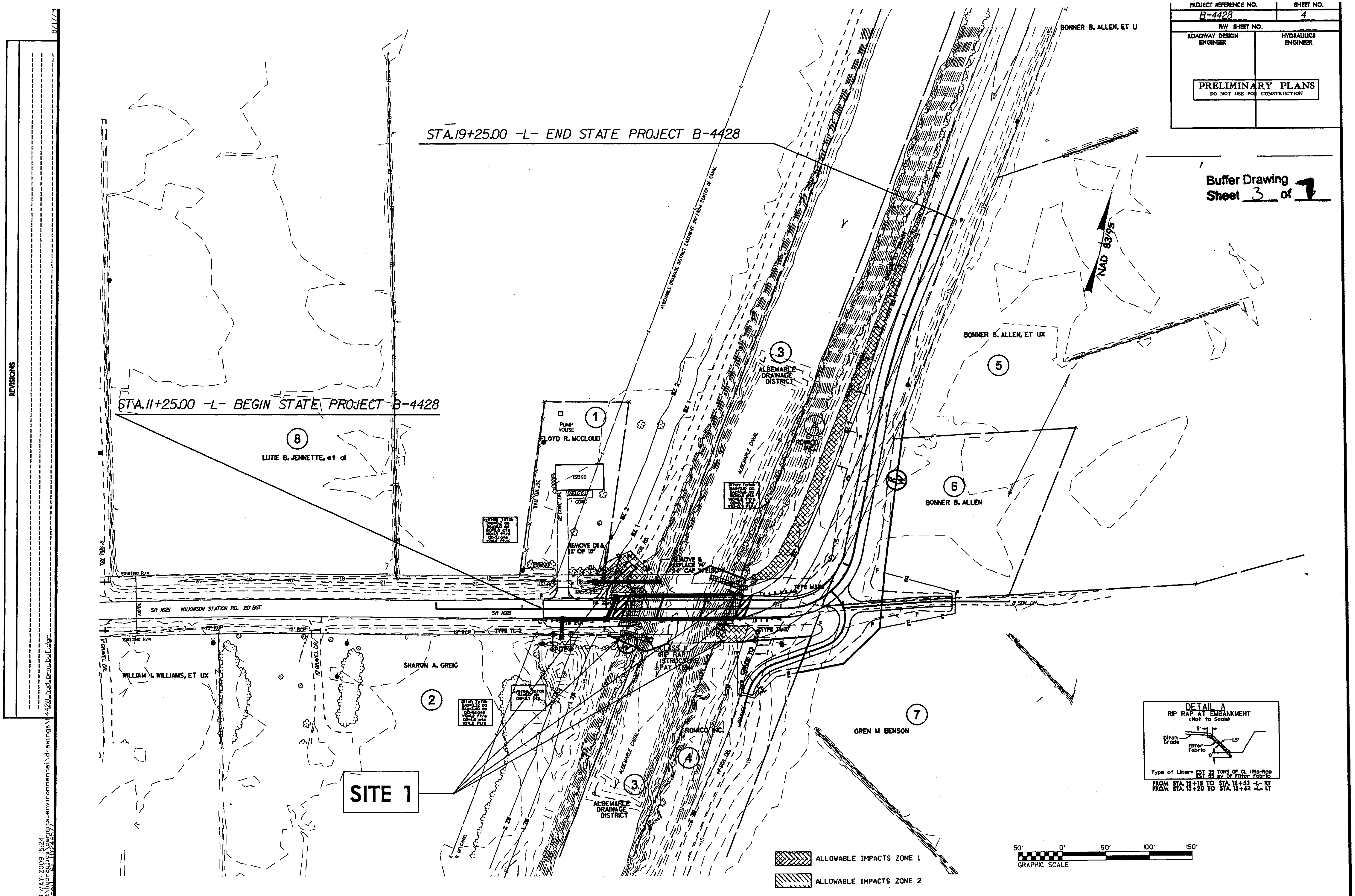
PROJECT REFERENCE NO. B-4428
SHEET NO. 4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
Buffer Drawing
Sheet 3 of 7
NAD 83/95
STA.19+25.00 -L- END STATE PROJECT B-4428
STA.11+25.00 -L- BEGIN STATE PROJECT B-4428
BONNER B. ALLEN, ET U
BONNER B. ALLEN, ET UX
BONNER B. ALLEN
ALBEMARLE DRAINAGE DISTRICT
ALBEMARLE CANAL
PUMP HOUSE
FLOYD R. MCCLOUD
LUTIE B. JENNETTE, et al
SHARON A. GREIG
WILLIAM L. WILLIAMS, ET UX
ROMICO INC.
OREN M BENSON
SR 1626 WILKINSON STATION RD. 20' BST
REMOVE DI & 12' OF 18"
REMOVE & REPLACE W 24" CAP W/ELBOW
CLASS II RIP RAP (STRUCTURE PAY ITEM)
SITE 1
DETAIL A
RIP RAP AT EMBANKMENT
(Not to Scale)
Type of Liner= EST 35 TONS OF CL I Rip-Rap
EST 85 SY OF Filter Fabric
FROM STA. 12+18 TO STA. 12+53 -L- RT
FROM STA. 13+20 TO STA. 13+62 -L- LT
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
50' 0' 50' 100' 150'
GRAPHIC SCALE
REVISIONS
8/17/9
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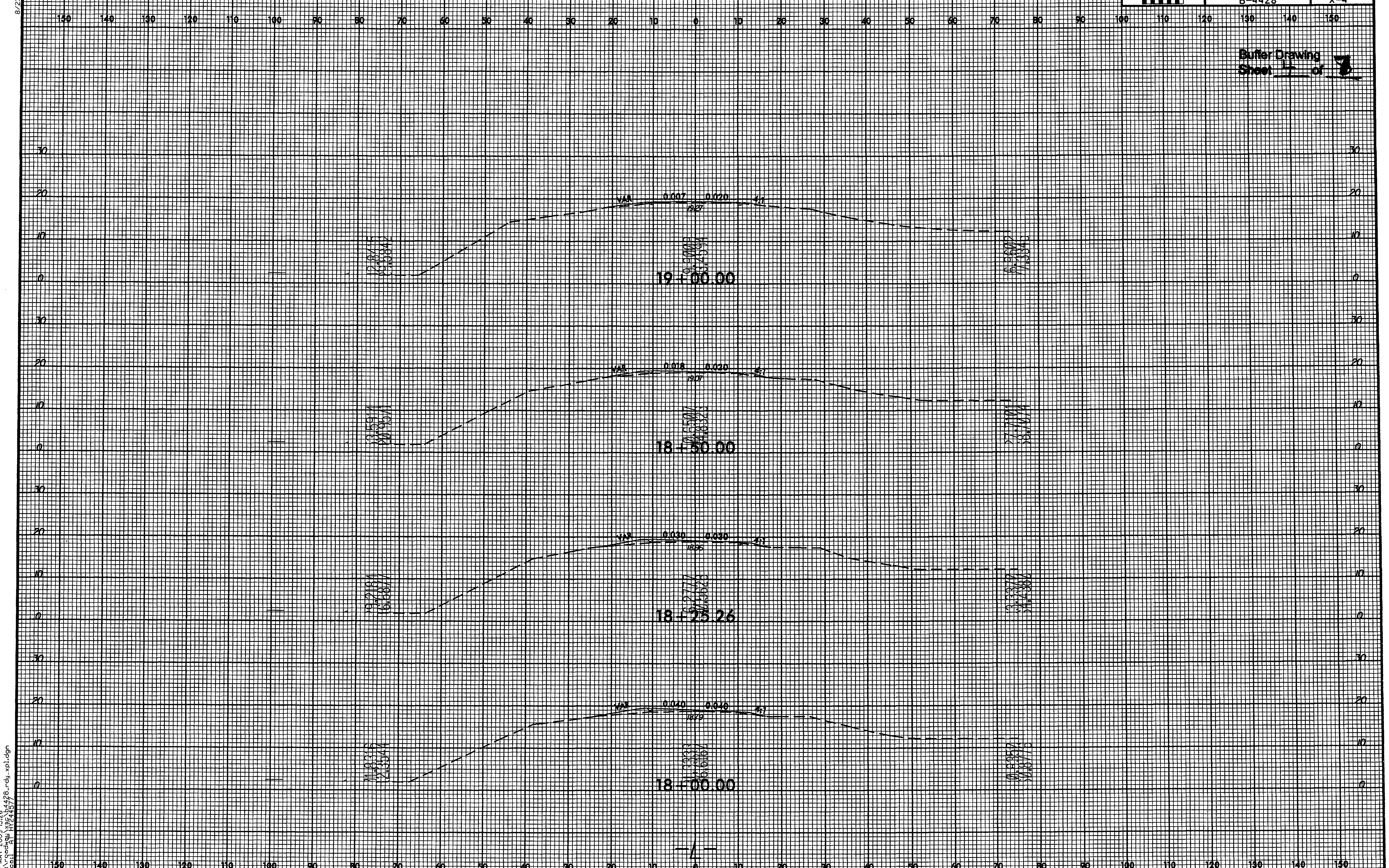
PROJ. REFERENCE NO.	SHEET NO.
B-4428	X-4



5/28/99

PROJECT REFERENCE NO.	SHEET NO.
B-4428	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Buffer Drawing
Sheet 6 of 7

STRUCTURE 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

-L-

BEGIN GRADE STA. 11+25.00
EL = 14.54

BEGIN BRIDGE STA. 12+15 +/-

9 Std 12'-0" - 24" Corred Slab
Skew = 30°
Elev = 6.0'

END BRIDGE STA. 13+65 +/-

PI = 13+80.00
EL = 15.28
VC = 200'
K = 287
V = 2 60 MPH

PI = 11+40.00
EL = 15.28
VC = 200'
K = 287
V = 2 60 MPH

PI = 11+80.00
EL = 15.28
VC = 200'
K = 287
V = 2 60 MPH

PI = 11+40

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
2	SHARON A. GRIEG	P.O. BOX 238 PANTEGO, NC 27860
3	ALBEMARLE DRAINAGE DISTRICT	6414 NC HWY. 99 SOUTH PANTEGO, NC 27860
4	ROMICO, INC.	P.O. BOX 8 WASHINGTON, NC 27889
8	LUTIE B. JENNETTE LESLIE R. SIMPKINS	C/O WANDA JENNETTE 272 SEYMOUR AVE. NEWARK, NJ 07112
NOT ON PLANS	JAMES S. HARRIS	2516 OAKS PLANTATION DR. RALEIGH, NC 27610

Buffer Drawing
Sheet 6 of 7

NCDOT

DIVISION OF HIGHWAYS

BEAUFORT COUNTY

PROJECT: 33698.1.1 (B-4428)

PANTEGO

OVER ALBEMARLE CANAL

ON SR 1626

SHEET OF 4/22/09

BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE				
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)
1	Driveway / Access	11+89 to 12+55 -L- LT	X			1118.0	304.0	1422.0					
1	CORED SLAB BRG.	12+86 -L-		X		706.0		706.0					
1	Temp Access / Fill	13+47 to 19+25 -L-	X			6604.0	184.0	6788.0					
TOTAL:						8428.0	488.0	8916.0	0.0	0.0	0.0		

Total buffer impact length = 565'.

Buffer Drawing
Sheet 7 of 7

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

BEAUFORT COUNTY

PROJECT: 33698.1.1.2 (B-4428)

5/18/2009
SHEET OF

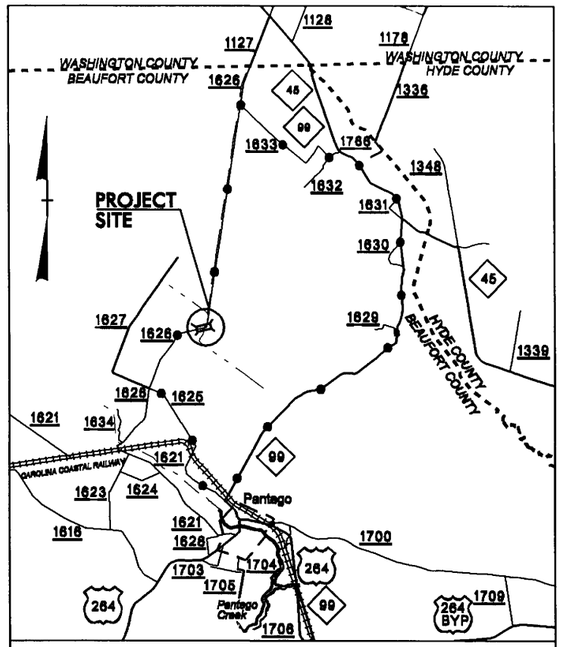
Rev. May 2006

09/08/99

TIP PROJECT: B-4428

CONTRACT:

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Symbology



VICINITY MAP

OFFSITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

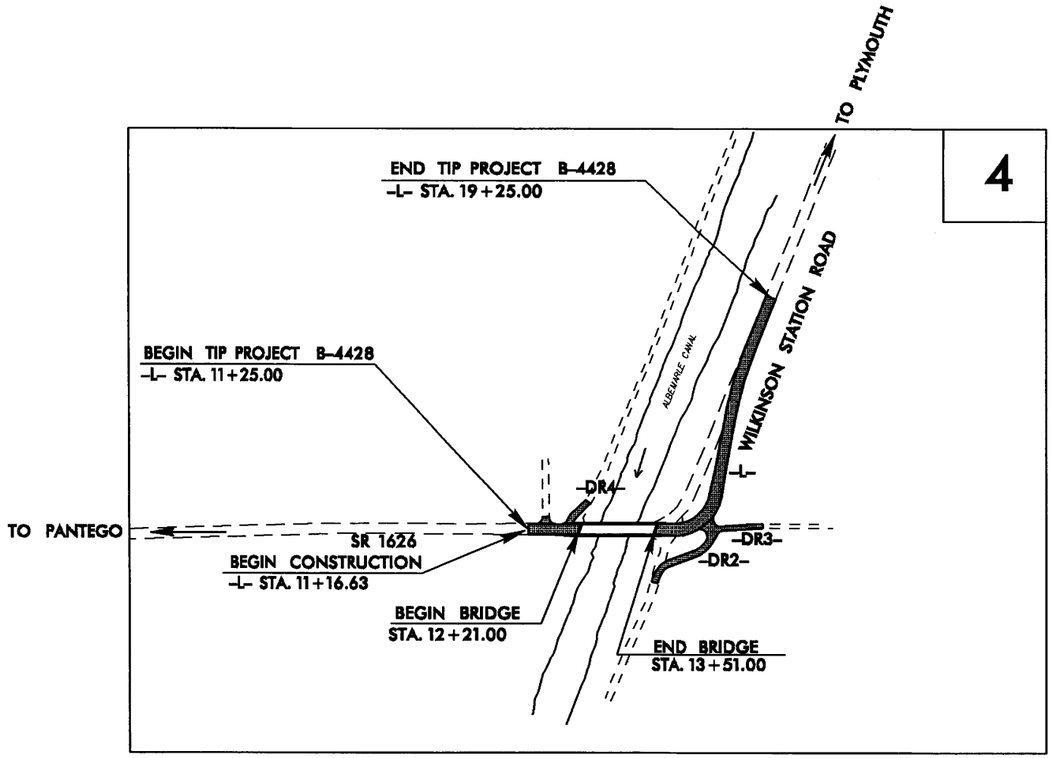
BEAUFORT COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4428	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
33698.1.1	BRZ-1616(6)	P.E.
33698.2.1	BRZ-1626(3)	ROW, UTIL

LOCATION: BRIDGE #140 OVER ALBEMARLE CANAL ON SR 1626 (WILKINSON STATION ROAD)

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



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

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

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

GRAPHIC SCALES

PLANS: 50 25 0 50 100

PROFILE (HORIZONTAL): 50 25 0 50 100

PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2010 = 505
ADT 2030 = 800
DHV = 10 %
D = 60 %
T = 3 % *
V = 60 MPH**
FUNC CLASS = RURAL LOCAL
* (TTST 1% + DUAL 2%)
** DESIGN EXCEPTION REQUIRED FOR THE DESIGN SPEED FROM 60 MPH TO 30 MPH

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4428	=	0.127 MI
LENGTH OF STRUCTURES TIP PROJECT B-4428	=	0.025 MI
TOTAL LENGTH OF TIP PROJECT B-4428	=	0.152 MI

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MAY 15, 2009

LETTING DATE: MAY 18, 2010

BRENDA MOORE, P.E.
PROJECT ENGINEER

THAD F. DUNCAN, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

P.E.
STATE HIGHWAY DESIGN ENGINEER

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$$$$USERNAME$$$$

3/15/06

PROJECT REFERENCE NO.	SHEET NO.
B-4428	1-B

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 — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 23
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

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

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — 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 — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Wheel Chair Ramp — WCR
- 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 — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

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

6/2/99

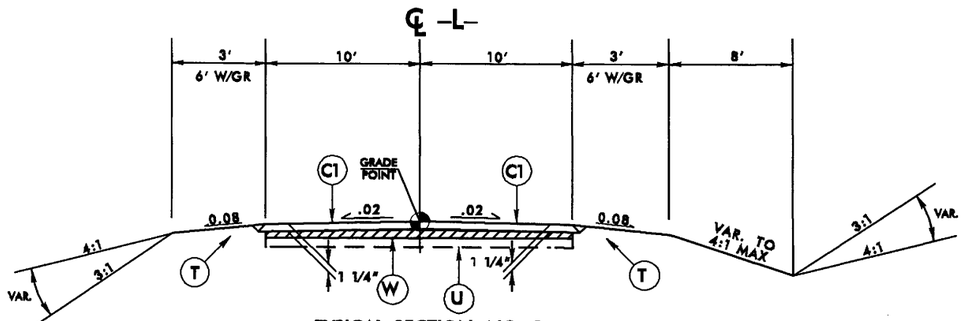
PROJECT REFERENCE NO.	SHEET NO.
B-4428	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR CONSTRUCTION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE
(FINAL PAVEMENT DESIGN)

A1	6" PORTLAND CEMENT CONCRETE PAVEMENT (WITH DOWELS).
C1	PROP. APPROX. 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 2½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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 TO EXCEED 1½" IN DEPTH.
D1	PROP. APPROX. 3¼" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 370.5 LBS. PER SQ. YD.
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 2½" IN DEPTH OR GREATER THAN 4 " IN DEPTH.
E1	PROP. APPROX. 5½" ASPHALT BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 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 8½" IN DEPTH.
J1	PROP. 6" AGGREGATE BASE COURSE.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL SHEET No.)

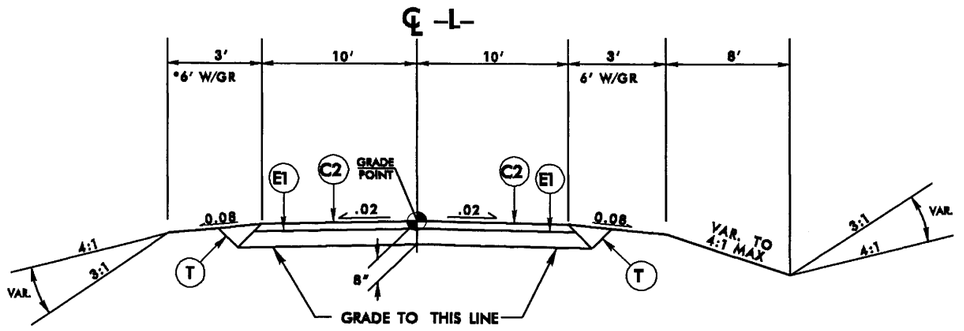
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

–L– STA. 11+25.00 TO –L– STA. 11+70.00
–L– STA. 18+25.26 TO –L– STA. 19+25.00



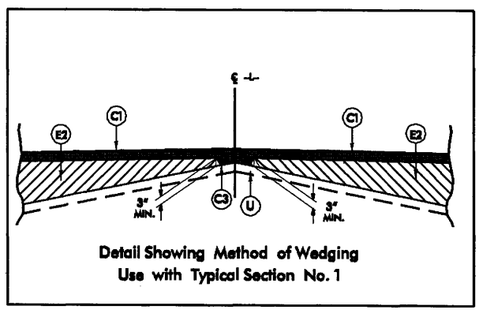
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2

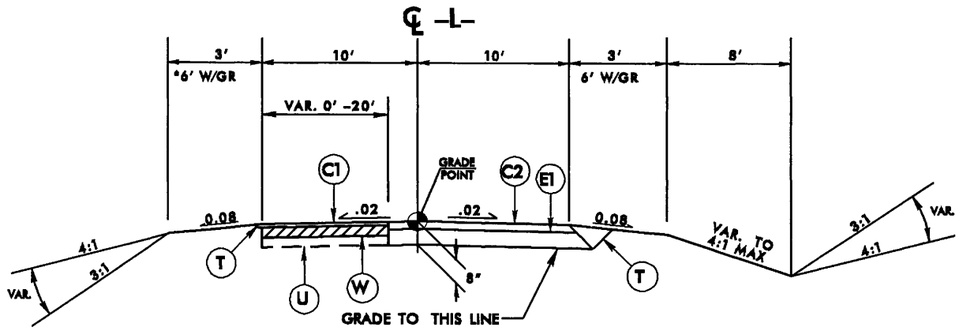
–L– STA. 11+70.00 TO –L– STA. 12+21.00 (BEGIN BRIDGE)
–L– STA. 13+51.00 (END BRIDGE) TO –L– STA. 16+48.24

* USE 8' W/GR FROM –L– STA. 11+73.00 LT TO –L– STA. 14+22.00 LT.

NOTE:
MAINTAIN 2' OF SHOULDER BEHIND M-350 ANCHOR UNIT.



Detail Showing Method of Wedging
Use with Typical Section No. 1



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3

–L– STA. 16+48.24 TO –L– STA. 18+25.26

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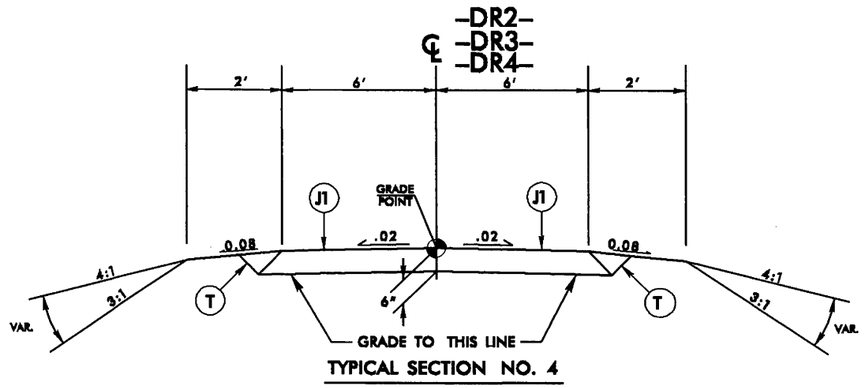
6/2/99

A1	6" CONCRETE
C1	1.25" SF9.5A.
C2	2.5" SF9.5A.
C3	VAR. SF9.5A.
D1	3½" I19.0B.
D2	VAR. I19.0B.
E1	5½" B25.0B.
E2	VAR. B25.0B.
J1	6" ABC
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
B-4428	2-A
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

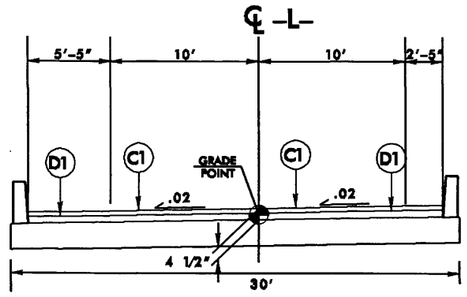
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4

–DR2– STA. 10+10.00 TO –DR2– STA. 11+90.00
–DR3– STA. 10+06.19 TO –DR3– STA. 11+25.00
–DR4– STA. 10+00.00 TO –DR4– STA. 10+54.20



TYPICAL BRIDGE DETAIL NO. 1

–L– STA. 12+21.00 TO –L– STA. 13+51.00

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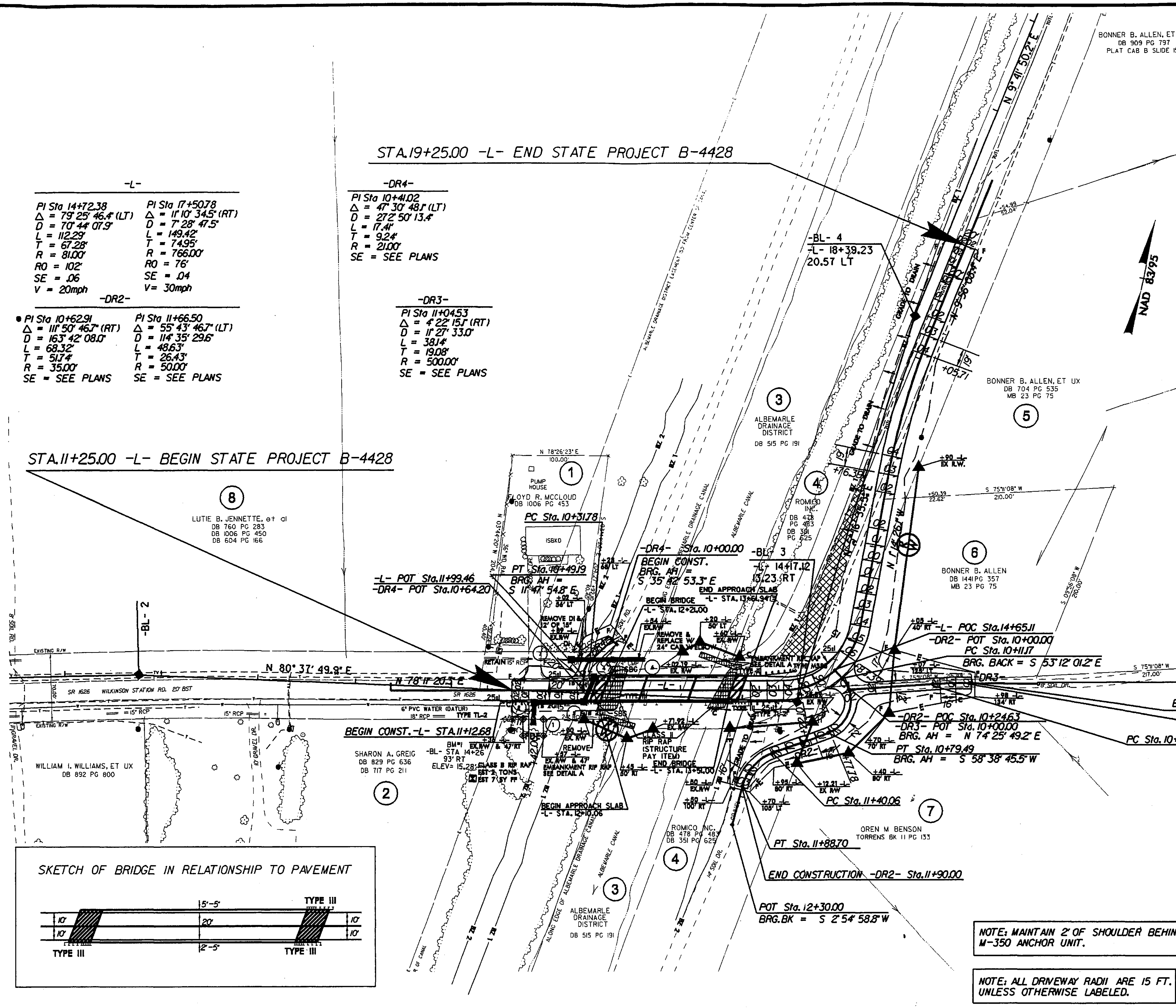
PROJECT REFERENCE NO.	SHEET NO.
B-4428	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS



STA.19+25.00 -L- END STATE PROJECT B-4428
STA.11+25.00 -L- BEGIN STATE PROJECT B-4428
-L-
PI Sta 14+72.38
Δ = 79° 25' 46.4" (LT)
D = 70° 44' 07.9"
L = 112.29'
T = 67.28'
R = 81.00'
RO = 102'
SE = .06
V = 20mph
PI Sta 17+50.78
Δ = 11° 10' 34.5" (RT)
D = 7° 28' 47.5"
L = 149.42'
T = 74.95'
R = 766.00'
RO = 76'
SE = .04
V= 30mph
-DR2-
PI Sta 10+62.91
Δ = 111° 50' 46.7" (RT)
D = 163° 42' 08.0"
L = 68.32'
T = 51.74'
R = 35.00'
SE = SEE PLANS
PI Sta 11+66.50
Δ = 55° 43' 46.7" (LT)
D = 114° 35' 29.6"
L = 48.63'
T = 26.43'
R = 50.00'
SE = SEE PLANS
-DR4-
PI Sta 10+41.02
Δ = 47° 30' 48.1" (LT)
D = 272° 50' 13.4"
L = 17.41'
T = 9.24'
R = 21.00'
SE = SEE PLANS
-DR3-
PI Sta 11+04.53
Δ = 4° 22' 15.1" (RT)
D = 11° 27' 33.0"
L = 38.14'
T = 19.08'
R = 500.00'
SE = SEE PLANS
BONNER B. ALLEN, ET U
DB 909 PG 797
PLAT CAB B SLIDE 153
NAD 83/95
-BL- 4
-L- 18+39.23
20.57 LT
BONNER B. ALLEN, ET UX
DB 704 PG 535
MB 23 PG 75
ALBEMARLE DRAINAGE DISTRICT
DB 515 PG 191
ROMICO INC.
DB 478 PG 483
DB 351 PG 625
BONNER B. ALLEN
DB 1441 PG 357
MB 23 PG 75
LUTIE B. JENNETTE, et al
DB 760 PG 283
DB 1006 PG 450
DB 604 PG 166
FLOYD R. MCCLOUD
DB 1006 PG 453
PUMP HOUSE
PC Sta. 10+31.78
-L- POT Sta.11+99.46
-DR4- POT Sta.10+64.20
PT Sta. 10+49.19
BRG. AH =
S 11° 47' 54.8" E
-DR4- Sta. 10+00.00
BEGIN CONST.
BRG. AH =
S 35° 22' 53.3" E
-BL- 3
-L- 14+17.12
13.23 RT
END APPROACH SLAB
-L- STA. 13+61.94
BEGIN BRIDGE
-L- STA. 12+21.00
-BL- 2
N 80° 37' 49.9" E
N 78° 11' 20.3" E
SR 1626 WILKINSON STATION RD. 20' BST
EXISTING R/W
BEGIN CONST. -L- STA.11+12.68
BM#1 -BL- STA 14+26 93' RT ELEV= 15.28'
CLASS B RIP RAP EST 2 TONS
EST 7 SY FF
EMBANKMENT RIP RAP SEE DETAIL A
CLASS II RIP RAP (STRUCTURE PAY ITEM)
END BRIDGE -L- STA. 13+51.00
BEGIN APPROACH SLAB -L- STA. 12+10.06
SHARON A. GREIG
DB 829 PG 636
DB 717 PG 211
WILLIAM I. WILLIAMS, ET UX
DB 892 PG 800
ROMICO INC.
DB 478 PG 483
DB 351 PG 625
ALBEMARLE DRAINAGE DISTRICT
DB 515 PG 191
-L- POC Sta.14+65.11
-DR2- POT Sta. 10+00.00
PC Sta. 10+11.17
BRG. BACK = S 53° 12' 01.2" E
-DR3-
POT Sta. 11+92.16
BRG. BACK = N 78° 48' 04.3" E
END CONSTRUCTION -DR3- STA.11+25.00
PT Sta. 11+23.59
PC Sta. 10+85.44
-DR2- POC Sta. 10+24.63
-DR3- POT Sta. 10+00.00
BRG. AH = N 74° 25' 49.2" E
PT Sta. 10+79.49
BRG. AH = S 58° 38' 45.5" W
PC Sta. 11+40.06
OREN M BENSON
TORRENS BK 11 PG 133
PT Sta. 11+88.70
END CONSTRUCTION -DR2- Sta.11+90.00
POT Sta. 12+30.00
BRG.BK = S 2° 54' 58.8" W
SKETCH OF BRIDGE IN RELATIONSHIP TO PAVEMENT
TYPE III

SBG= SHOULDER BERM GUTTER

BEGIN SBG STA 12+07 LT
END SBG BEGIN BRIDGE LT

BEGIN SBG STA 11+42 RT
END SBG BEGIN BRIDGE RT

DETAIL A
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner= EST 35 TONS OF CL I Rip-Rap
EST 55 sy OF Filter Fabric
FROM STA. 12+15 TO STA. 12+83 -L- RT
FROM STA. 13+20 TO STA. 13+62 -L- LT

NOTE: MAINTAIN 2' OF SHOULDER BEHIND M-350 ANCHOR UNIT.

NOTE: ALL DRIVEWAY RADII ARE 15 FT. UNLESS OTHERWISE LABELED.

FOR -L- PROFILE SEE SHEET 5
FOR -DR1- PROFILE SEE SHEET 5
FOR -DR2- PROFILE SEE SHEET 5
FOR -DR3- PROFILE SEE SHEET 5
FOR -DR4- PROFILE SEE SHEET 5
FOR STRUCTURE SEE SHEET S1 TO SX

8/17/99

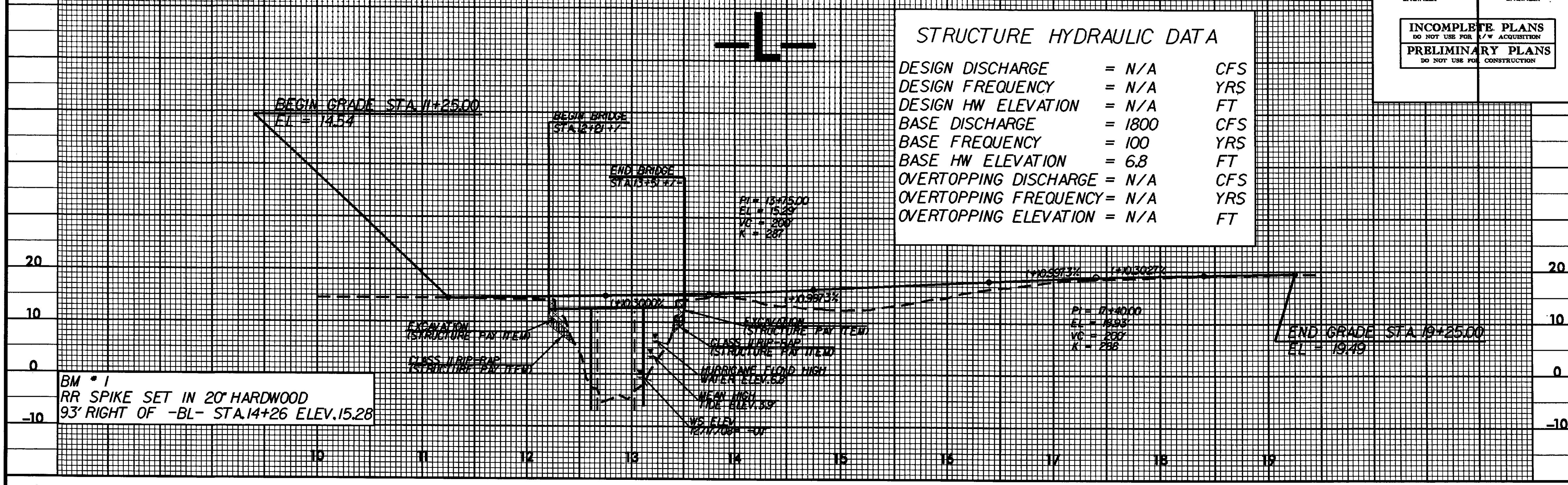
18-MAY-2009 15:26

PROJECT REFERENCE NO.	SHEET NO.
B-4428	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

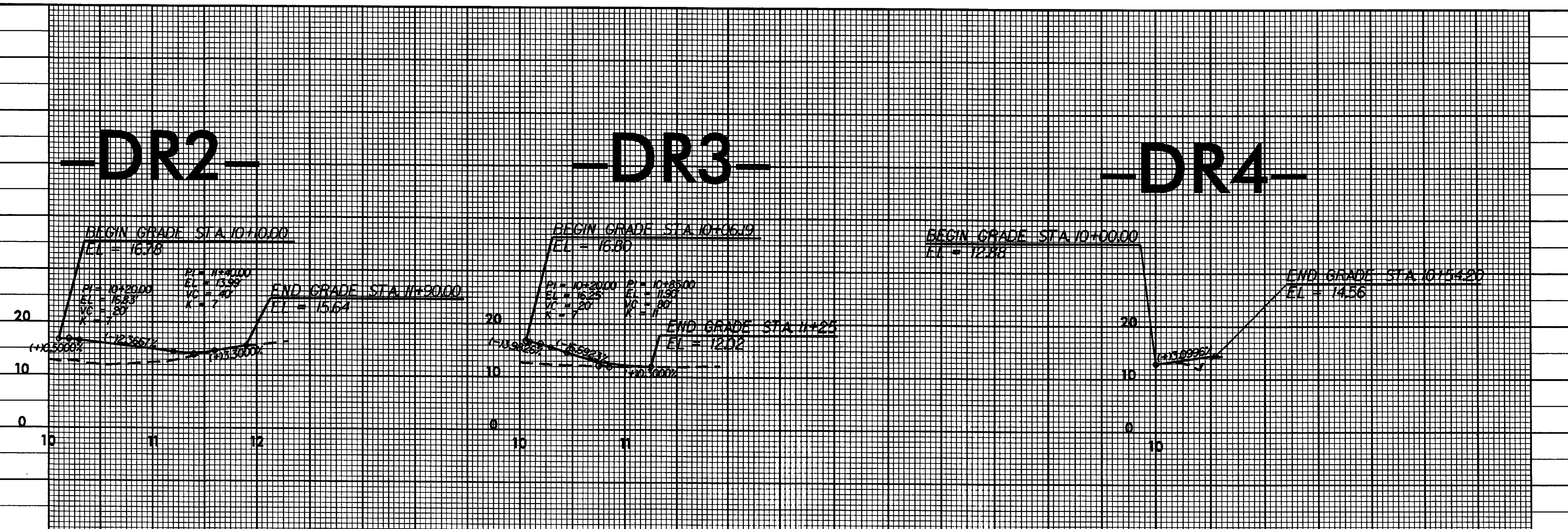
5/28/99



—L—
BEGIN GRADE STA. 11+25.00
EL = 14.54
BEGIN BRIDGE
STA. 12+21 +/-
END BRIDGE
STA. 13+51 +/-
PI = 13+75.00
EL = 15.29
VC = 200
K = 287
(+)0.3000%
(+)0.3973%
(+)0.5973%
(+)0.3027%
PI = 17+40.00
EL = 19.93
VC = 200
K = 286
END GRADE STA. 19+25.00
EL = 19.49
EXCAVATION
(STRUCTURE PAY ITEM)
CLASS II RIP-RAP
(STRUCTURE PAY ITEM)
HURRICANE FLOOD HIGH
WATER ELEV. 6.8
MEAN HIGH
TIDE ELEV. 3.9
WS ELEV.
12/11/98 = -0.1
BM # 1
RR SPIKE SET IN 20" HARDWOOD
93' RIGHT OF -BL- STA. 14+26 ELEV. 15.28
20
10
0
-10
10
11
12
13
14
15
16
17
18
19

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	=	N/A	CFS
DESIGN FREQUENCY	=	N/A	YRS
DESIGN HW ELEVATION	=	N/A	FT
BASE DISCHARGE	=	1800	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	6.8	FT
OVERTOPPING DISCHARGE	=	N/A	CFS
OVERTOPPING FREQUENCY	=	N/A	YRS
OVERTOPPING ELEVATION	=	N/A	FT



—DR2—
BEGIN GRADE STA. 10+10.00
EL = 16.78
PI = 10+20.00
EL = 16.83
VC = 20
K = 7
PI = 11+40.00
EL = 13.99
VC = 40
K = 7
(+)0.5000%
(-)2.3661%
(+)3.3000%
END GRADE STA. 11+90.00
EL = 15.64
—DR3—
BEGIN GRADE STA. 10+06.19
EL = 16.80
PI = 10+20.00
EL = 16.25
VC = 20
K = 7
PI = 10+85.00
EL = 11.30
VC = 80
K = 11
(-)3.9826%
(-)5.5923%
(+)0.3000%
END GRADE STA. 11+25
EL = 12.02
—DR4—
BEGIN GRADE STA. 10+00.00
EL = 12.88
(+)3.0996%
END GRADE STA. 10+54.20
EL = 14.56
20
10
0
10
11
12

01-MAY-2009 11:52
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$$$$USERNAME$$$$

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4428	X-1

13+00.00

12+50.00

12+21.00

BEGIN BRIDGE -L- STA 12+21.00

12+00.00

11+50.00

11+25.00

BEGIN STATE PROJECT B-4428 -L- STA. 11+25.00

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing, Removal of Existing Pavement, and Removal of Existing Concrete Pavement will be paid for at the contract lump sum price for "Grading."

30-APR-2009 10:13
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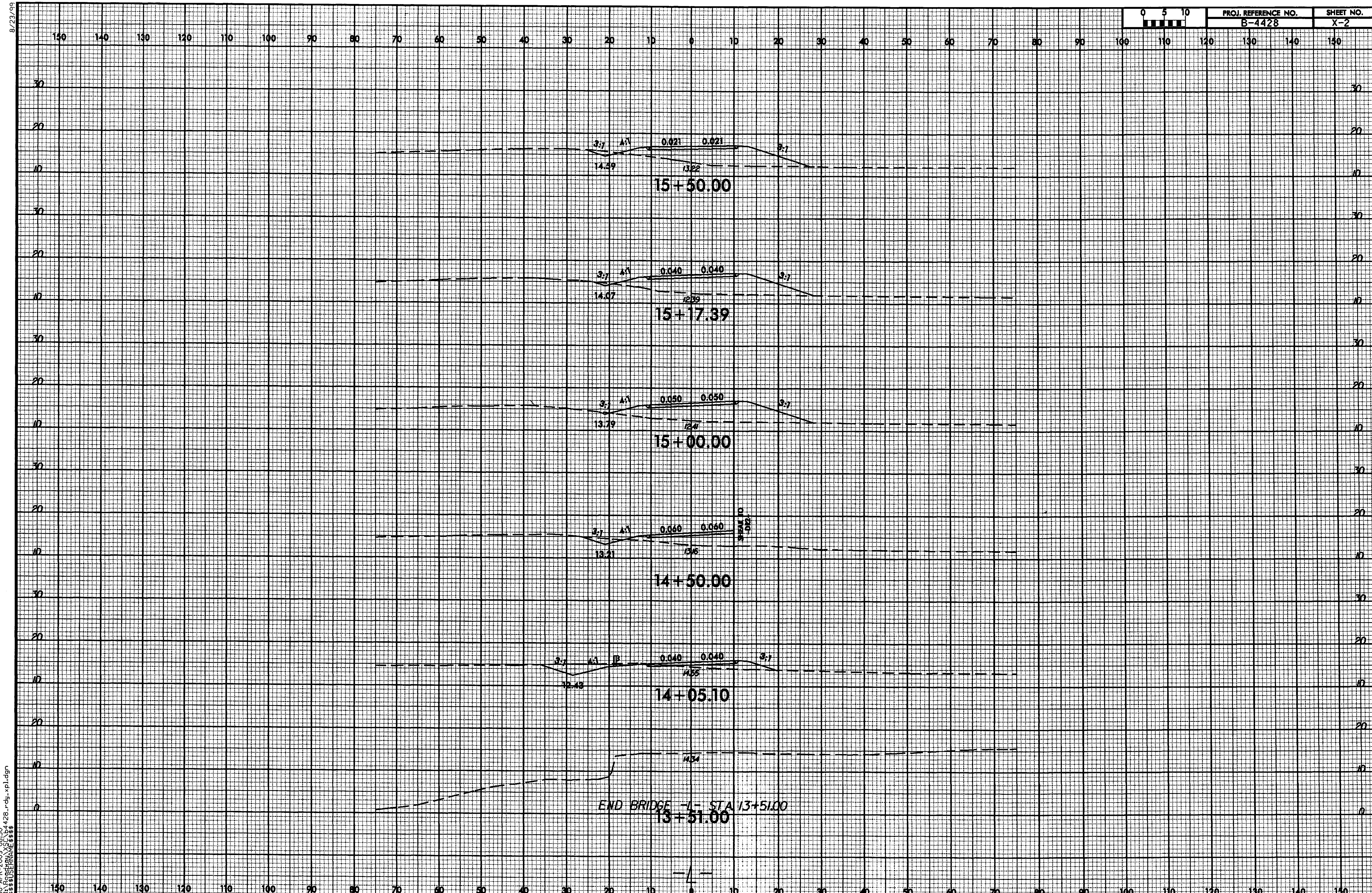
PROJ. REFERENCE NO. B-4428
SHEET NO. X-2



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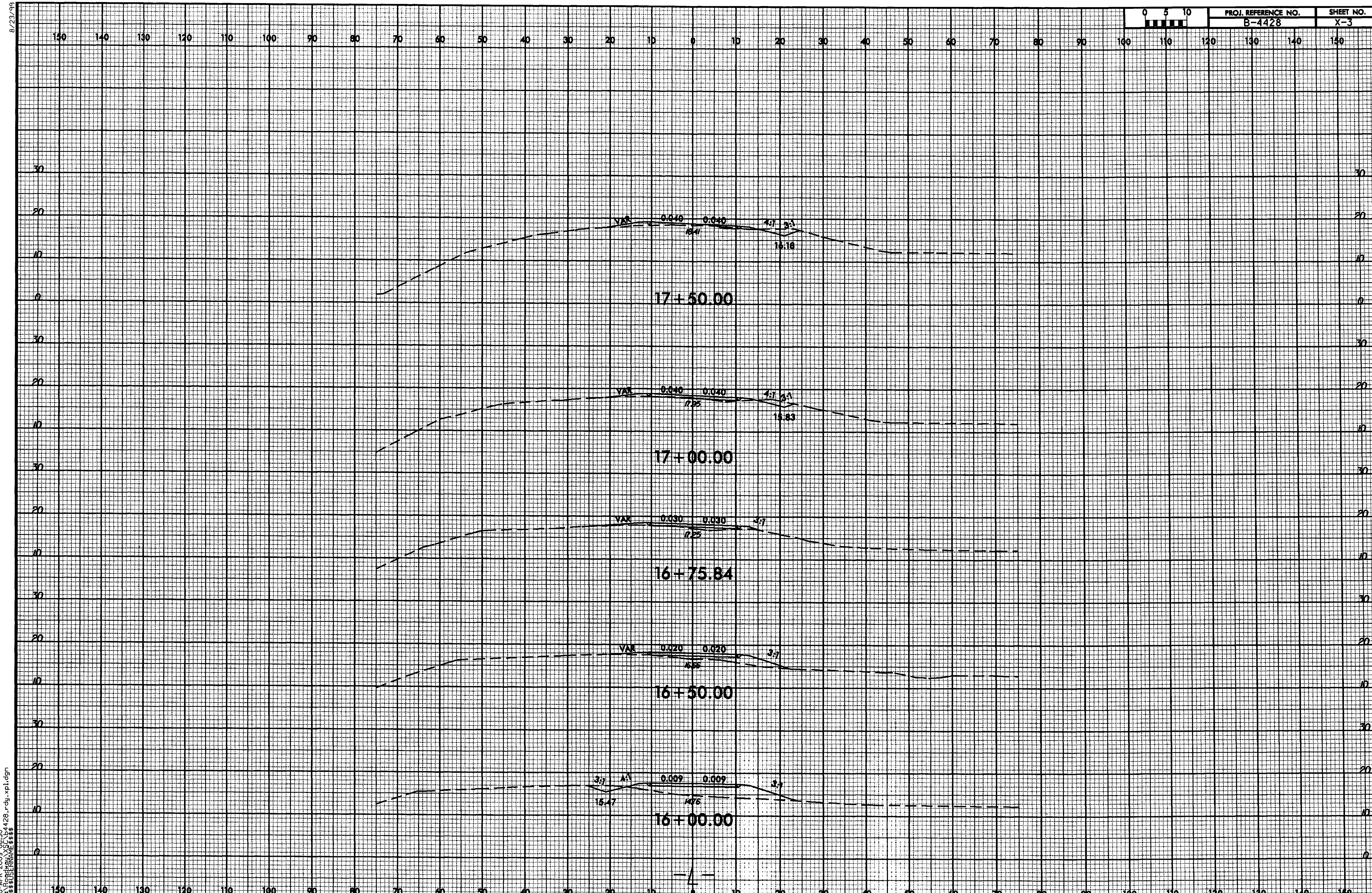
PROJ. REFERENCE NO.	SHEET NO.
B-4428	X-3



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$$$$USERNAME$$$$

8/23/99

PROJ. REFERENCE NO.	SHEET NO.
B-4428	X-4

0 5 10

19+00.00

VAR 0.007 0.020 4:1 3:1
19.27 16.97

18+50.00

VAR 0.018 0.020 4:1 3:1
19.27 16.82

18+25.26

VAR 0.030 0.030 4:1 3:1
18.96 16.65

18+00.00

VAR 0.040 0.040 4:1 3:1
18.79 16.44

30-APR-2009 08:30
$$$$USERNAME$$$$
B-4428_rdy_xpl.dgn

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4428	X-5

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

20
10
0
-10

RPL

19+25.00

END STATE PROJECT B-4428 -L- STA. 19+25.00

-L-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

20
10
0
-10

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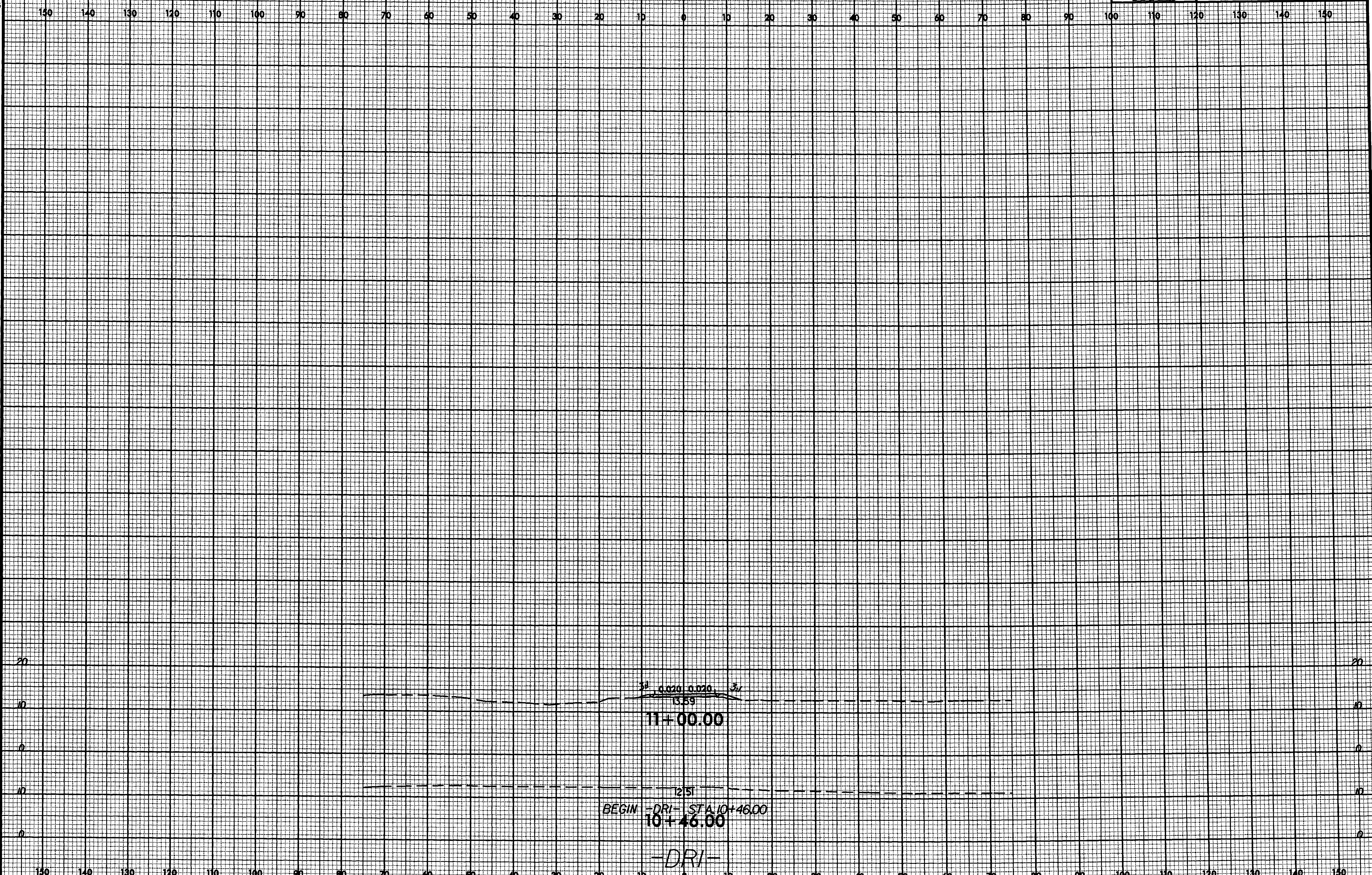
PROJ. REFERENCE NO.	SHEET NO.
B-4428	X-6



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8/23/99

0 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4428	X-7

END DR2 STA. 11+90.00

15.34

11+90.00

3H 0.020 0.020 3V

14.06

11+50.00

3H 0.019 0.019 3V

13.65

11+40.06

3H 0.006 0.006 3V

12.33

11+00.00

3H 0.019 0.019 3V

12.13

10+79.49

3H 0.020 0.020 3V

11.98

10+50.00

SHEAR KEY

0.010 0.010

SHEAR KEY

12.54

10+11.17

-DR2-

30-APR-2009 08:30
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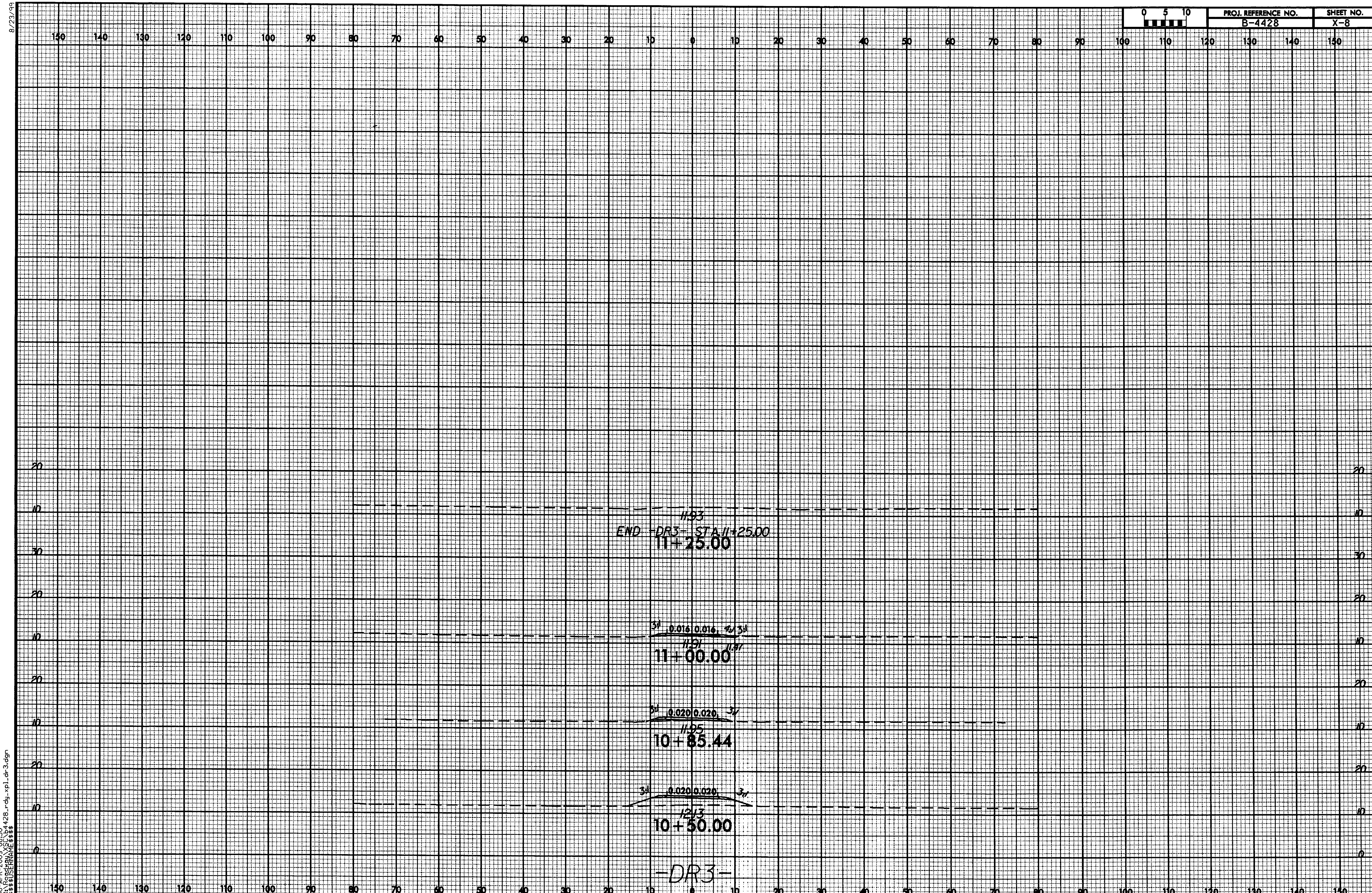
PROJ. REFERENCE NO.	SHEET NO.
B-4428	X-8



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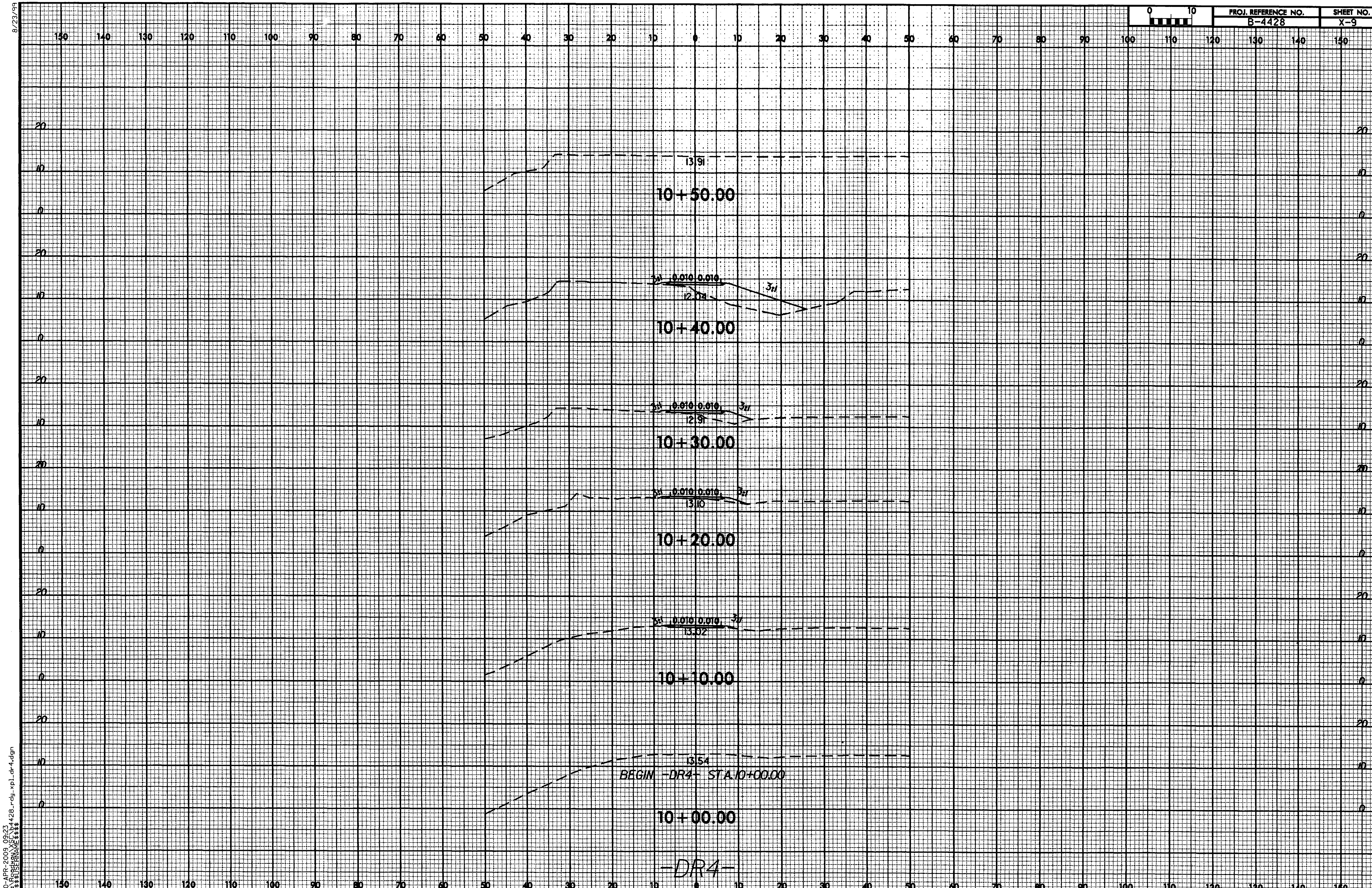
PROJ. REFERENCE NO.	SHEET NO.
B-4428	X-9



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