STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI
SECRETARY

February 3, 2012

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

ATTN: Mr. William J. Biddlecome
NCDOT Coordinator

Dear Sirs:

Subject: **Application for Section 404 Nationwide Permit 23** for the Replacement of Bridge No. 23 on SR 1308 (Church St.) over an Unnamed Tributary to Knobb's Creek in Pasquotank County, North Carolina. Federal Aid Project No. BRZ-1308(8); WBS Element 40177.1.1. TIP No. B-4922.

Please find enclosed the Pre-Construction Notification (PCN) form, permit drawings, design plans, stormwater management plan, and jurisdictional determination for the above referenced project. A Programmatic Categorical Exclusion (PCE) was completed for this project on April 8, 2010 and distributed shortly thereafter. Additional copies are available upon request. The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 23 over an unnamed tributary to Knobb's Creek on SR 1308 in Pasquotank County. The project involves replacement of the existing 52-foot structure with a 65-foot long bridge in approximately the same location. There will be 0.06 acre of permanent impacts to riparian wetlands resulting from fill, excavation and mechanized clearing on this project.

The proposed let date for the project is September 18, 2012 with a review date of July 31, 2012. However, the let date may advance as additional funds become available.

Regulatory Approvals

Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1548 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

TELEPHONE: 919-707-6100
FAX: 919-212-5785
WEBSITE: WWW.NCDOT.ORG

LOCATION:
CENTURY CENTER BUILDING B
1020 BIRCH RIDGE DR.
RALEIGH, NC 27610

771.115(b). The NCDOT requests that these activities be authorized by a Nationwide Permit 23 (72 CFR; 11092-11198, March 12, 2007).

Section 401 Permit: We anticipate 401 General Certification number 3701 will apply to this project. All general conditions of the Water Quality Certifications will be met. NCDOT is providing two copies of this application to the NCDWQ for their review.

A copy of this permit application will be posted on the NCDOT Website at: http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Amy James at aejames@ncdot.gov or (919) 707-6129.

Sincerely,

E. L. Lush

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

cc: NCDOT Permit Application Standard Distribution List

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

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	☒ Section 404 Permit	☐ Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 23	or General Permit (GP) number:	
1c. Has the N WP or GP number been verified by the Corps?	☐ Yes	☒ No

1d. Type(s) of approval sought from the DWQ (check all that apply):

☐ 401 Water Quality Certification – Regular ☐ Non-404 Jurisdictional General Permit

☐ 401 Water Quality Certification – Express ☐ Riparian Buffer Authorization

1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: ☒ 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 Confirmed by DCM on 1/13/2012

2. Project Information

2a. Name of project:	Replacement of Bridge 23 over an unnamed tributary to Knobb's Creek on SR 1308
2b. County:	Pasquotank
2c. Nearest municipality / town:	Elizabeth City
2d. Subdivision name:	*not applicable*
2e. NCDOT only, T.I.P. or state project no:	B-4922

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	*not applicable*
3c. Res ponsible 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) 707-6129
3g. Fax no.:	(919) 212-5785
3h. Email address:	aejames@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: 36.299766 (DD.DDDDDD)	Longitude: - 76.246099 (-DD.DDDDDD)
1c. Property size:	1.4 acres	
2. Surface Waters		
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Knobb's Creek	
2b. Water Quality Classification of nearest receiving water:	C;Sw	
2c. River basin:	Pasquotank	
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: The main land use in the project vicinity is commercial and residential development, with pockets of agricultural land.		
3b. List the total estimated acreage of all existing wetlands on the property: 6.8 acres		
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 415 linear feet		
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 52-foot bridge with a 65-foot long, 24" cored slab bridge on the existing alignment with an off-site detour. Standard road building equipment, such as trucks, dozers, and cranes will be used.		
4. Jurisdictional Determinations		
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments:	☒ 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): NCDOT (Amy James)	Agency/Consultant Company: Other:	
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. October 4, 2010		
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.		
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	Fill	Riparian	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.04
Site 1 ☒ P ☐ T	Excavation	Riparian	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.01
Site 1 ☒ P ☐ T	Mechanized Clearing	Riparian	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.01
Site 2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 3 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
				2g. **Total wetland impacts**	0.06 Permanent 0.0 Temporary

2h. Comments: There will be 0.12 acre of hand clearing on this project. Additionally, 0.02 acre of temporary fill in wetlands for erosion control measures will be placed in the hand clearing areas.

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			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 2 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
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**	X Perm X 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			☐ Yes ☐ No		
B2 ☐ P ☐ T			☐ Yes ☐ No		
B3 ☐ P ☐ T			☐ Yes ☐ No		
		6h. **Total buffer impacts**			
6i. Comments:					

D. Impact Justification and Mitigation

1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project.

The proposed bridge is 13 feet longer than the existing bridge and will be at approximately the same grade as the existing structure; 3:1 fill slopes where practicable.

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

NCDOT Best Management Practices for Bridge Demolition, Removal and Construction will be followed, as well as those for Sedimentation and Erosion Control; the utilization of an off-site detour; and an in-water work moratorium will be observed from Feb. 15 to June 15 of any year to protect anadromous fish.

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: Due to minimal impacts, NCDOT is not proposing compensatory mitigation
2b. If yes, mitigation is required by (check all that apply):	☐ DWQ ☐ Corps
2c. If yes, which mitigat ion 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 not, explain why. Comments:	☐ 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:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: See attached permit drawings.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	☐ 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 in process
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	☐ Yes ☐ No N/A
5b. Have all of the 401 Unit submittal requirements been met?	☐ Yes ☐ No N/A

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. Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.		
4. Sewage Disposal (DWQ Requirement)		
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable		

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	☐ Yes	☒ No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	☐ Yes	☒ No
5c. If yes, ind icate 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, 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 Unit coordination with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA Maps		

Dr. Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name	E. L. Lupk Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	2-2-12 Date

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action Id. SAW-2008-00850 County: Pasquotank U.S.G.S. Quad: Elizabeth City, NC

NOTIFICATION OF JURISDICTIONAL DETERMINATION

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

Property description:
Size (acres) 26 acres Nearest Town Elizabeth City
Nearest Waterway UT to Knobbs Creek River Basin Pasquotank
USGS HUC 03010205 Coordinates N 36.2996597 W 76.2466172
Location description The project is located at Bridge # 23 on NCSR 1308 (Church Street) approximately 0.9 miles east of the intersection of NCSR's 1308 and 1307, adjacent to and crossing an unnamed tributary to Knobbs Creek.

TIP # B-4922

Indicate Which of the Following Apply:

A. Preliminary Determination

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

B. Approved Determination

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

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

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

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

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

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

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

Action Id. **SAW-2008-00850**

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

C. Basis For Determination

This site exhibits wetland criteria as described in the 1987 Corps Wetland Delineation Manual and is part of a broad continuum of wetlands connected to an unnamed tributary to Knobbs Creek.

D. Remarks

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

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

District Engineer, Wilmington Regulatory Division
Attn:Bill Biddlecome, Project Manager,
Washington Regulatory Field Office
P.O. Box 1000
Washington, North Carolina 27889

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

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

Corps Regulatory Official: William J. Biddlecome

Date **10/04/2010** Expiration Date **10/04/2015**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at http://regulatory.usacesurvey.com/ to complete the survey online.

Copy furnished:
Ms. Amy James
NCDOT
Natural Environment Project Management Unit
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

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

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
Amy James
NCDOT
1598 Mail Service Center
Raleigh, NC 27699-1598

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Washington

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
B-4922, bridge no. 23 on SR 1308 (Church St.) over an unnamed tributary to Knobb's Creek, Pasquotank County. The project is located in the Pasquotank River Basin (USGS hydrologic unit 03010205).

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

State: North Carolina **County**: Pasquotank **City**: Elizabeth City
Center coordinates of site (lat/long in degree decimal format):
Lat. 36.29977°**N**, Long. -76.246169°**W**.
Universal Transverse Mercator:
Name of nearest waterbody: Knobb's Creek

Identify (estimate) amount of waters in the review area:
Non-wetland waters: 400 linear feet: width (ft) and/or acres.
Cowardin Class: Riverine
Stream Flow: Perennial
Wetlands: 6.6 acres.
Cowardin Class: Forested and scrub/shrub

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

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 10/4/10
☐ Field Determination. Date(s):

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to

request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .

- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name:.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: .

☐ National wetlands inventory map(s). Cite name:.

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date): . or ☐ Other (Name & Date): .

☐ Previous determination(s). File no. and date of response letter: .

☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

William J. Bebbecore
Signature and date of
Regulatory Project Manager
(REQUIRED)

10/5/'10
Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

SAMPLE

Site ID	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
UT to Knobbs Creek	36.29977	-76.246169	RUB2/3	400 linear feet	Perennial
WA	36.300349	-76.24759	PFO6C	4.3 acres	Riverine Swamp
WB	36.299602	-76.246802	PFO6C	0.95 acre	Riverine Swamp
WC	36.299822	-76.245053	PSS1A	0.21 acre	Scrub/Shrub
WD	36.299407	-76.24589	PFO6C	1.3	Riverine Swamp

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

August 25, 2011

MEMORANDUM TO: File

FROM: Paul F. Fisher, P.E.
Hydraulics Unit

SUBJECT: Stormwater Management Plan
B-4922, Pasquotank County

ROADWAY DESCRIPTION:

B-4922 consists of constructing a new bridge on SR 1308 over Knobb's Creek. The total project length is 0.116 miles. This project is in the Pasquotank River Basin. The jurisdictional stream is Knobb's Creek.

ENVIRONMENTAL DESCRIPTION:

This project is in Pasquotank County, which is a CAMA county. There is a wetland site around the bridge that will be impacted by the proposed project. Impacts have been minimized to the extent practicable while bringing the roadway up to current design standards.

BEST MANAGEMENT PRACTICES AND MAJOR STRUCTURES

The primary goal of Best Management Practices (BMP's) is to prevent the degradation of the State's surface waters by the location, construction and operation of the highway system. The BMP's are activities, practices and procedures taken to prevent or reduce stormwater pollution. The BMP measure used on this project to reduce stormwater impacts is:

No deck drains on the bridge.

TIP PROJECT: B-4922

CONTRACT:

See Sheet 1-A For Index of Sheets

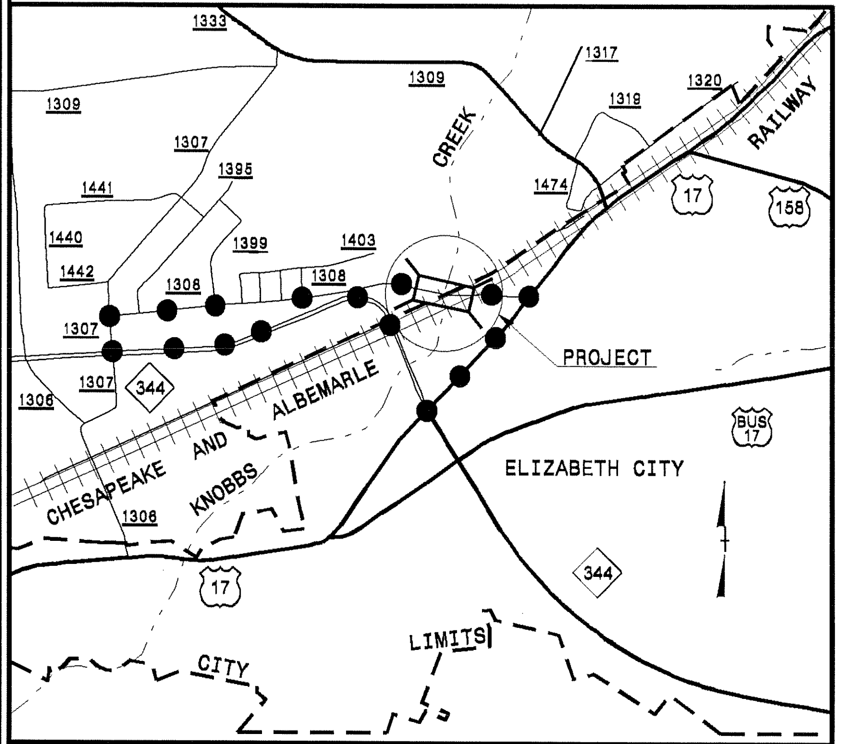
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4922	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40177.1.1	BRZ-1308(8)	P.E.	

PASQUOTANK COUNTY

LOCATION: BRIDGE NO. 23 OVER KNOBB'S CREEK ON SR 1308

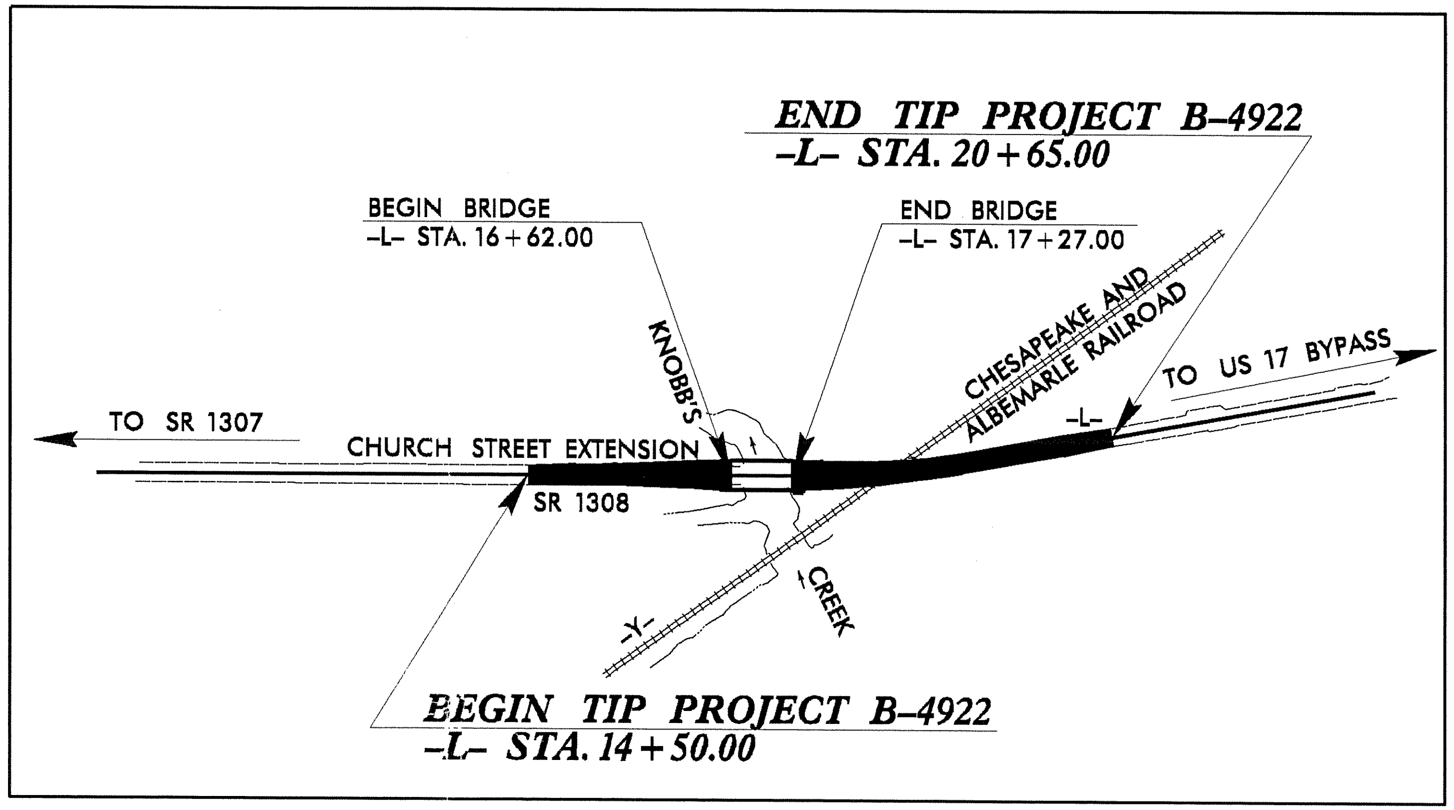
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE



DETOUR ROUTE

VICINITY MAP

NAD 83/CORS 96



Permit Drawing
Sheet 1 of 9

WETLAND & STREAM IMPACTS

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF ELIZABETH CITY.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

GRAPHIC SCALES

50 25 0 50 100 — PLANS

50 25 0 50 100 — PROFILE (HORIZONTAL)

10 5 0 10 20 — PROFILE (VERTICAL)

DESIGN DATA

ADT 2012 = 3150
ADT 2032 = 3800
DHV = 13 %
D = 65 %
T = 3 % *
V = 50 MPH
* TTST 1% DUAL 2%
FUNC CLASS = URBAN COLLECTOR
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4922	=	0.104 MILES
LENGTH STRUCTURE TIP PROJECT B-4922	=	0.012 MILES
TOTAL LENGTH TIP PROJECT B-4922	=	0.116 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
SEPTEMBER 16, 2011

LETTING DATE:
SEPTEMBER 18, 2012

GARY LOVERING, PE
PROJECT ENGINEER

RICK DECOLA, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

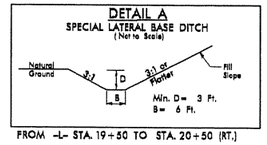
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY DESIGN ENGINEER P.E.

09/08/99

$$$$$$SYSTIME$$$$$$ $$$$$$DGN$$$$$$ $$$$$$USERNAME$$$$$$



PROJECT REFERENCE NO.	SHEET NO.
B-4922	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83 / CORS 96

Permit Drawing
Sheet 2 of 9

▨ F F	DENOTES FILL IN WETLAND
▨ HC HC	DENOTES HAND CLEARING
⁙	DENOTES MECHANIZED CLEARING
▨ E E	DENOTES EXCAVATION IN WETLAND

DETAIL A
SPECIAL LATERAL BASE DITCH
(Not to Scale)

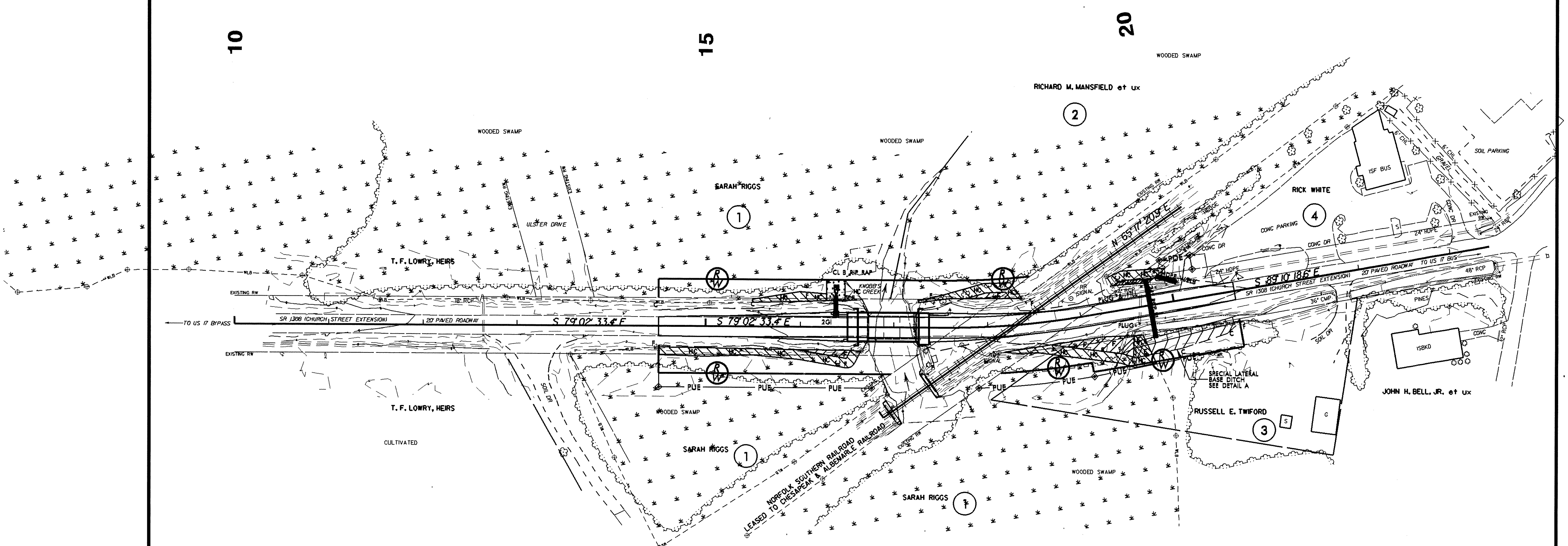
FROM -L- STA. 19+50 TO STA. 20+50 (RT.)

PROJECT REFERENCE NO.	SHEET NO.
B-4922	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION

NAD 83 / CORS 96



10
15
20
WOODED SWAMP
RICHARD M. MANSFIELD et ux
SARAH RIGGS
T. F. LOWRY, HEIRS
ULSTER DRIVE
RICK WHITE
ISF BUS
SOIL PARKING
CONC PARKING
CONC DR
TO US 17 BYPASS
SR 1308 (CHURCH STREET EXTENSION)
20' PAVED ROADWAY
S 79°02' 33.4" E
N 63°17' 20.9" E
S 89°10' 18.6" E
TO US 17 BUS
48" RCP
36" CMP
24" HDPE
KNOBB'S CREEK
PINES
ISBKD
JOHN H. BELL, JR. et ux
RUSSELL E. TWIFORD
SPECIAL LATERAL BASE DITCH SEE DETAIL A
PUE
EXISTING R/W
CULTIVATED
NORFOLK SOUTHERN RAILROAD LEASED TO CHESAPEAKE & ALBEMARLE RAILROAD
RR SIGNAL
PLUG

DENOTES FILL IN WETLAND

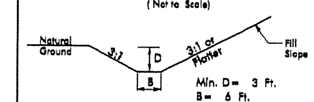
DENOTES HAND CLEARING

DENOTES MECHANIZED CLEARING

DENOTES EXCAVATION IN WETLAND

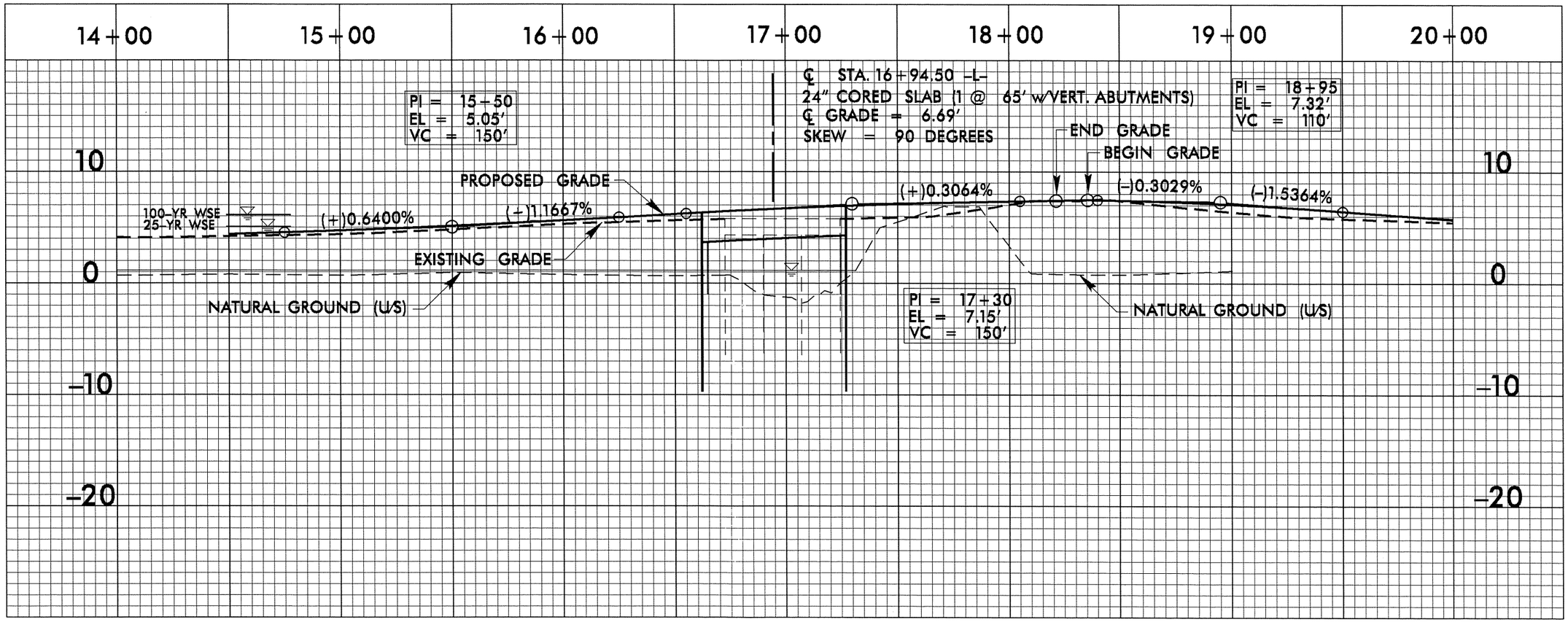
Permit Drawing
Sheet 3 of 9

DETAIL A
SPECIAL LATERAL BASE DITCH
(Not to Scale)



FROM -L- STA. 19+50 TO STA. 20+50 (RT.)

PROJECT REFERENCE NO.	SHEET NO.
B-4922	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PROFILE

B-4922, PASQUOTANK COUNTY

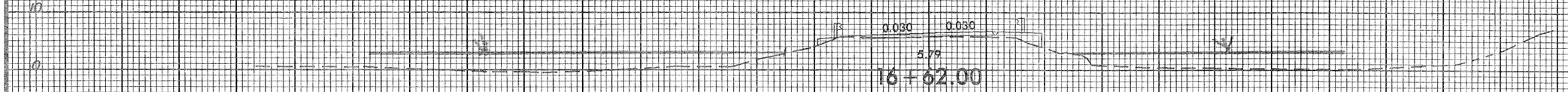
AUGUST 26, 2011

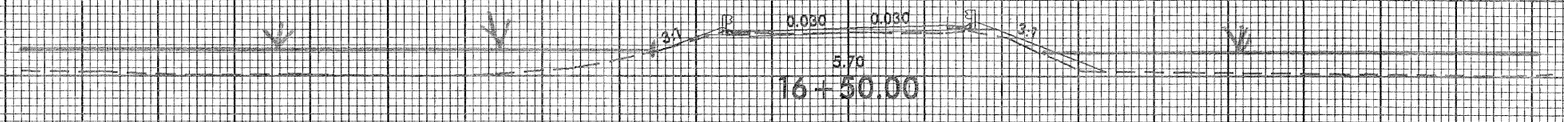
Permit Drawing
Sheet 4 of 9

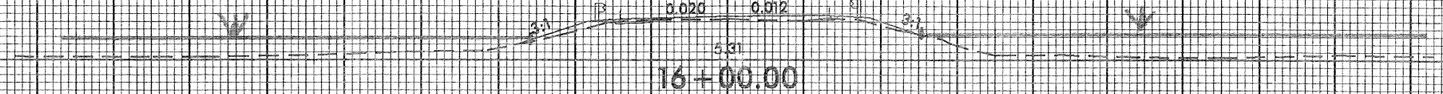
8/23/99

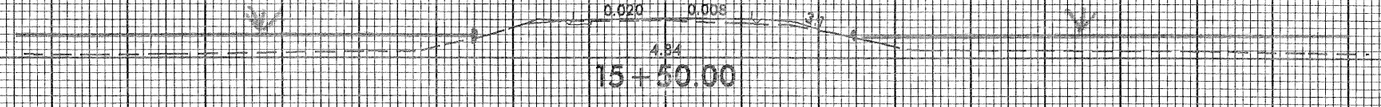
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4922	X-1

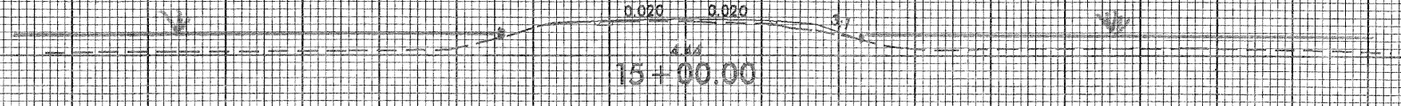
BEGIN BRIDGE -L- STA. 16+62.00

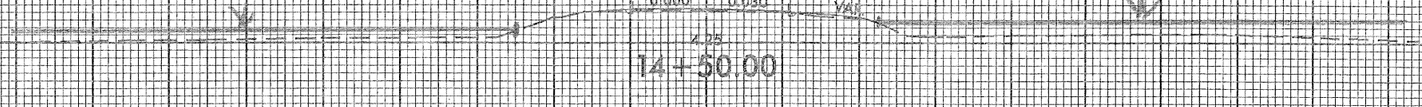




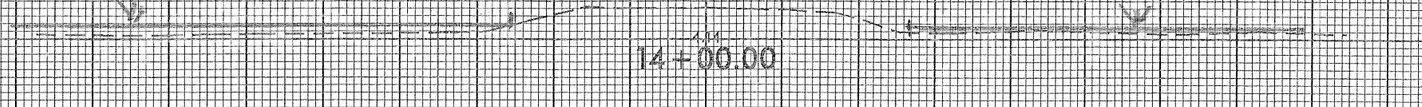








BEGIN PROJECT -L- STA. 14+50.00

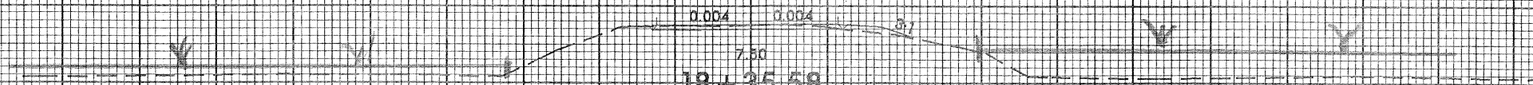


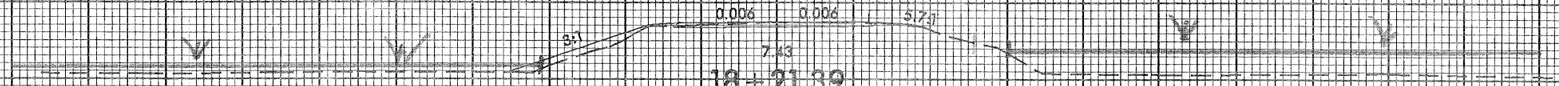
Permit Drawing
Sheet 5 of 9

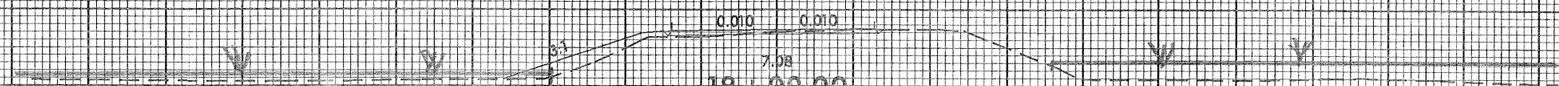
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

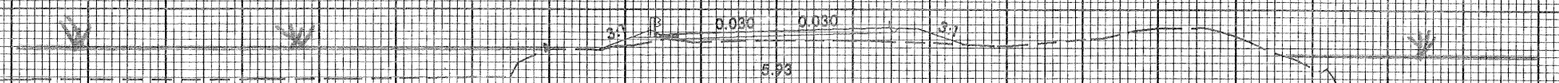
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

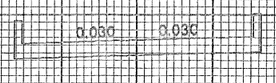
$$$$SYSTIME$$$$
$$$$DGN$$$$











8/23/99

PROJ. REFERENCE NO.	SHEET NO.
B-4922	X-2

Permit Drawing
Sheet 6 of 9

8/23/99

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-4922	X-3

21+00.00

4.85

END PROJECT -L- STA. 20+65.00

20+65.00

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5.08

20+50.00

0.020 0.024 3:1 0.500 3:1

5.19

20+00.00

W

3:1 0.020 0.003 3:1 3:1

5.51 0.250

19+50.00

0.020 0.018

5.93

19+00.00

0.017 0.017 3:1

6.46

18+50.00

0.002 0.002 3:1

7.43

Permit Drawing
Sheet 7 of 9

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$SYSDATE$$$$$$$$
$$$$$$$$DWG$$$$$$$$

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	16+94.50 -L-	Bridge	0.04		0.01	0.01	0.12					
TOTALS:			0.04		0.01	0.01	0.12					

NOTE: No Piers in the Water.
0.02 Acres of Temporary Fill in Wetlands in the Hand Clearing areas for Erosion Control Measures.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PASQUOTANK COUNTY
WBS - 40177.1.1 (B-4922)

SHEET 8 of 9 8/26/2011

ATN Revised 3/31/05

Property Owner Contact Report

B-4922, Pasquotank County

8/26/2011

Parcel #	Owner Last Name/ Business	First Name	Address	City	State	Zip Code
1	Riggs	Sarah	1713 W. Main Street	Elizabeth City	NC	27909
2	State of NC Hwy Dept RW		P.O. Box 748	Ahoskie	NC	27910
3	Twiford	Russell E.	2125 Rivershore Road	Elizabeth City	NC	27909
4	White	Rick	110 Hughes Street	Elizabeth City	NC	27909

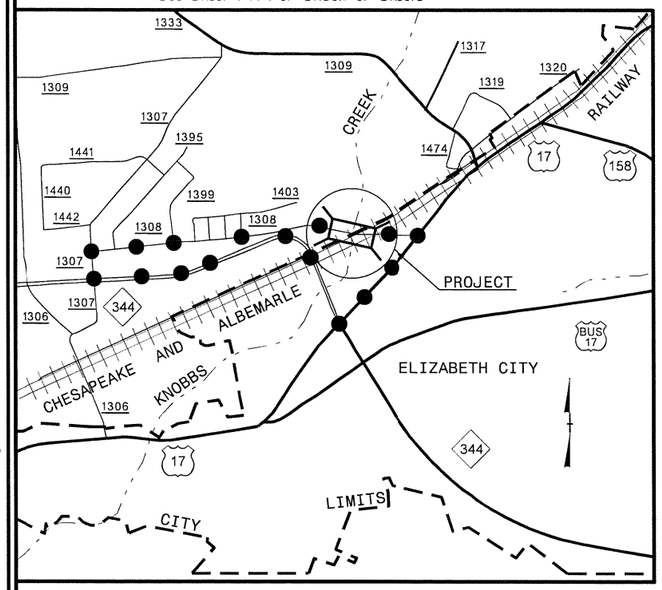
Permit Drawing
Sheet 9 of 9

09/08/99

TIP PROJECT: B-4922

CONTRACT: C202884

See Sheet 1-A For Index of Sheets



DETOUR ROUTE

VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PASQUOTANK COUNTY

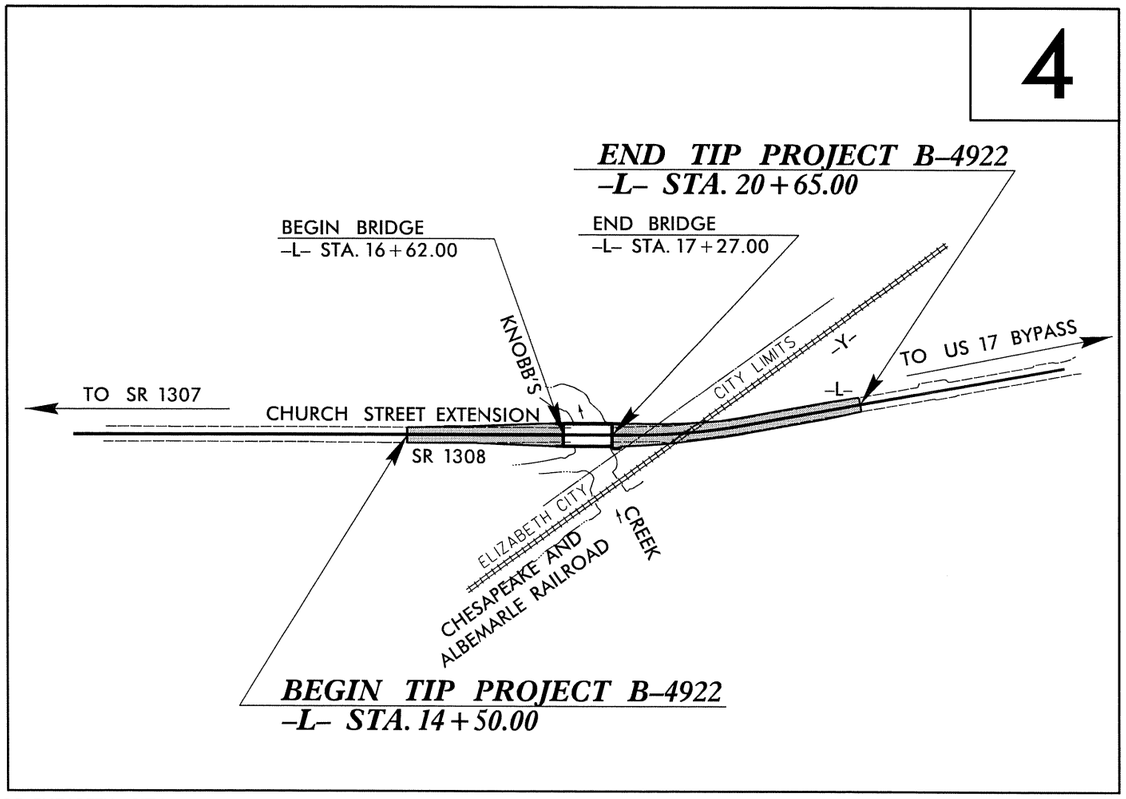
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4922	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
40177.1.1	BRZ-1308(8)	PE
40177.2.1	BRZ-1308(8)	R/W & UTILITY

LOCATION: BRIDGE NO. 23 OVER KNOBB'S CREEK ON SR 1308

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

4



NAD 83/CORS 96

A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF ELIZABETH CITY.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2012 = 3150
ADT 2032 = 3800
DHV = 13 %
D = 65 %
T = 3 % *
V = 50 MPH
* TTST 1% DUAL 2%
FUNC CLASS = URBAN
COLLECTOR
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4922	=	0.104 MILES
LENGTH STRUCTURE TIP PROJECT B-4922	=	0.012 MILES
TOTAL LENGTH TIP PROJECT B-4922	=	0.116 MILES

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

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: SEPTEMBER 23, 2011

LETTING DATE: SEPTEMBER 18, 2012

GARY LOVERING, PE
PROJECT ENGINEER

KEVIN E. MOORE, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION

22-DEC-2011 14:11
R:\Roadway\Proj\b4922_rdy_tsh.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
B-4922	1-A

ROADWAY DESIGN ENGINEER

8/17/99

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
2	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS
3	SUMMARY OF QUANTITIES
3A	SUMMARY OF DRAINAGE QUANTITIES SUMMARY OF GUARDRAIL, EARTHWORK SUMMARY, AND ASPHALT PAVEMENT REMOVAL SUMMARY
4	PLAN SHEET
	PROFILE SHEET
TCP-1 THRU TCP-	TRAFFIC CONTROL PLANS
PM-1 THRU PM-	PAVEMENT MARKING PLANS
L-1 THRU L-	LANDSCAPE PLANS
RF-1 THRU RF-	REFORESTATION PLANS
EC-1 THRU EC-	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-	SIGNING PLANS
U-1 THRU U-	UTILITIES PLANS
X-1 THRU X-	CROSS-SECTIONS
S-1 THRU S-	STRUCTURE PLANS

22-DEC-2011 14:11
c:\projects\b4922_rdy_tsh.dgn
$$$$USER$$$$

04/16/21

PROJECT REFERENCE NO.	SHEET NO.
B-4922	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
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- 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 — FLOW
- 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 Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- 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 Curb Ramp — CR
- 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
- 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:

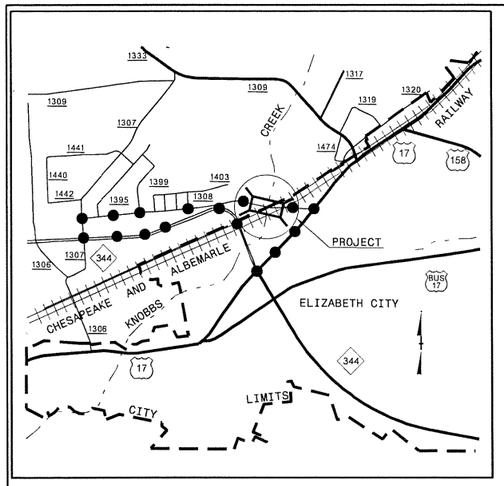
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

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
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

PROJECT REFERENCE NO.	SHEET NO.
B-4922	1C
LOCATION AND SURVEYS	

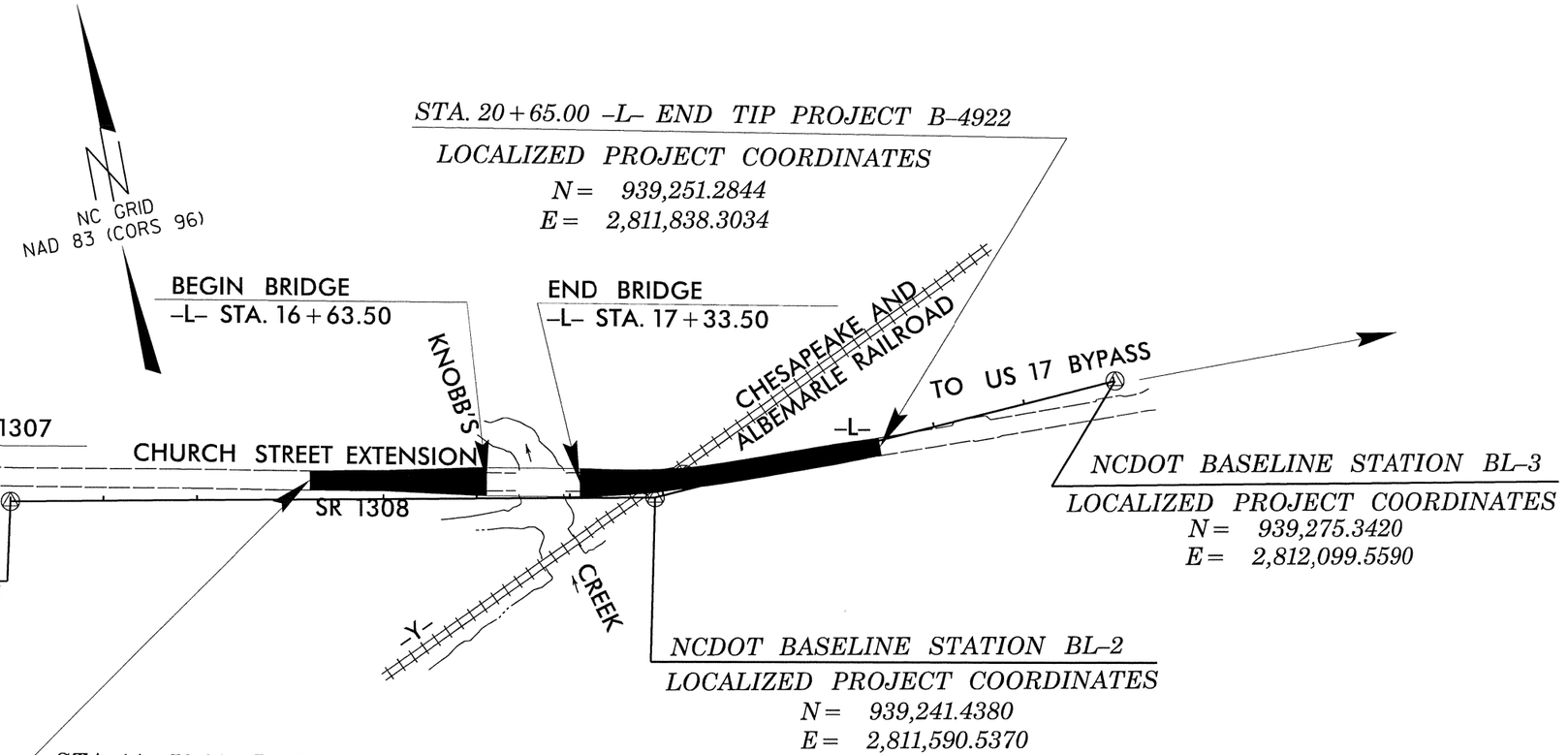
SURVEY CONTROL SHEET B-4922



VICINITY MAP

BLN

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
BL1	BL1	939362.2980	2810910.3790	5.67	11+29.59	25.74 RT
BL2	BL2	939241.4380	2811590.5370	6.59	18+19.02	17.71 RT
BL3	BL3	939275.3420	2812099.5590	3.33	23+25.88	27.83 LT



STA. 20+65.00 -L- END TIP PROJECT B-4922

LOCALIZED PROJECT COORDINATES
N = 939,251.2844
E = 2,811,838.3034

NCDOT BASELINE STATION BL-3

LOCALIZED PROJECT COORDINATES
N = 939,275.3420
E = 2,812,099.5590

NCDOT BASELINE STATION BL-1

LOCALIZED PROJECT COORDINATES
N = 939,362.2980
E = 2,810,910.3790

NCDOT BASELINE STATION BL-2

LOCALIZED PROJECT COORDINATES
N = 939,241.4380
E = 2,811,590.5370

STA. 14+50.00 -L- BEGIN TIP PROJECT B-4922

LOCALIZED PROJECT COORDINATES
N = 939,326.6630
E = 2,811,229.8371

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BL-2" WITH NAD 1983 (CORS 96) STATE PLANE GRID COORDINATES OF NORTHING: 939,241.438(ft) EASTING: 2,811,590.537(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.000045368
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BL-2" TO -L- STATION 14+50.00 IS N 76°42'22" W 370.63 (ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTES:

THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING HTTP:\WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT

FILE: B4922_ls_control_100503.txt

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

△ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.

PROJECT CONTROL ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEM.

NOTE: DRAWING NOT TO SCALE

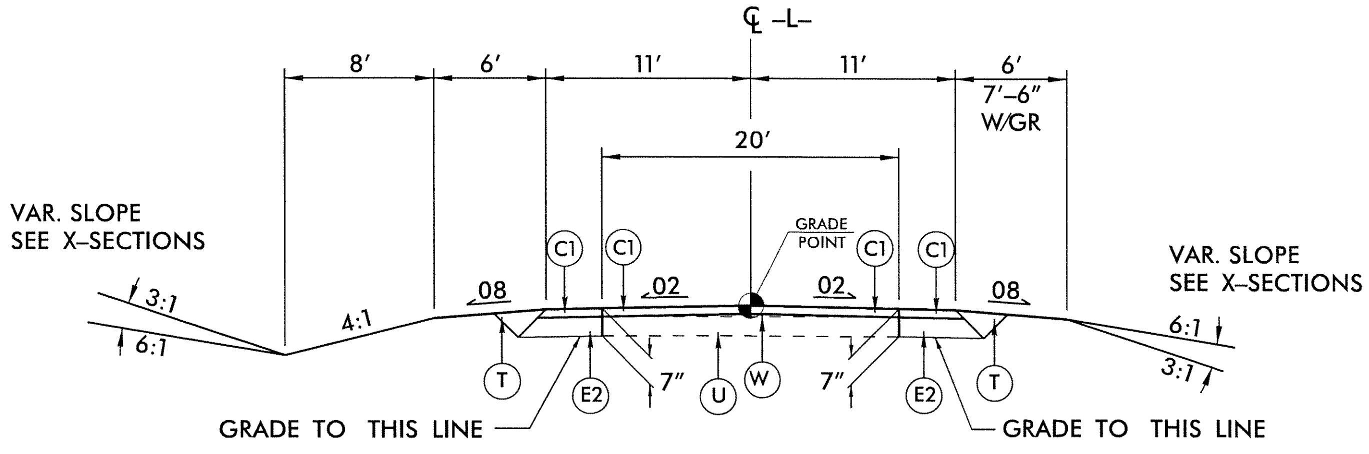
PROJECT REFERENCE NO.	SHEET NO.
B-4922	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE
(FINAL PAVEMENT DESIGN)

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
R1	SHOULDER BERM GUTTER
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

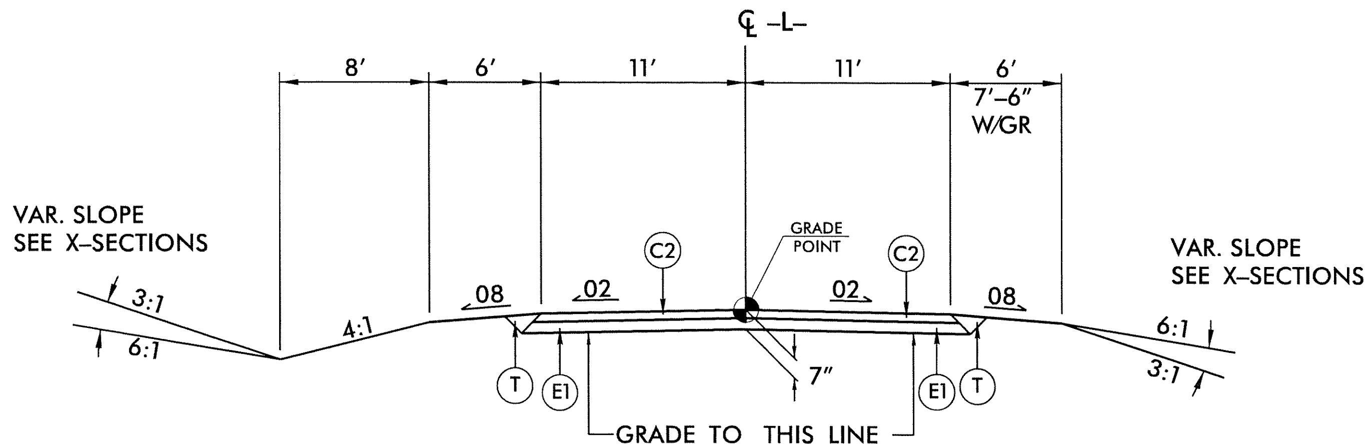
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

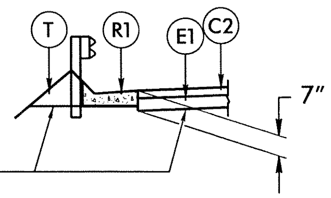
-L- STA. 14+50.00 TO -L- STA. 16+33.50
-L- STA. 18+70.00 TO -L- STA. 20+65.00



TYPICAL SECTION NO. 2

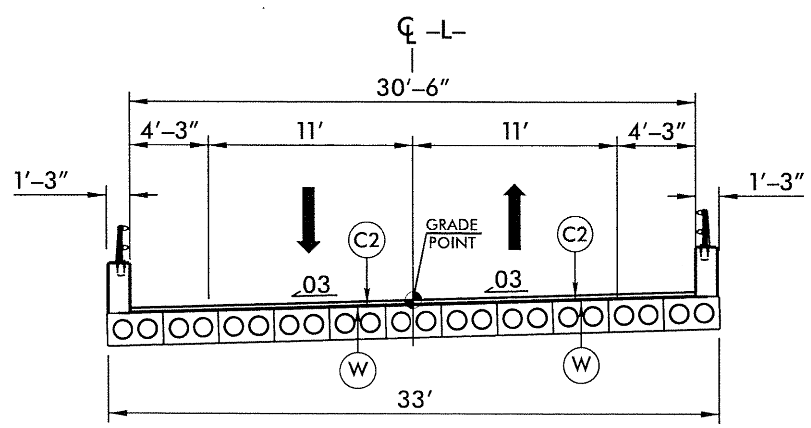
USE TYPICAL SECTION NO. 2

-L- STA. 16+33.50 TO -L- STA. 16+62.00 (BEGIN BRIDGE)
-L- STA. 17+27.00 (END BRIDGE) TO -L- STA. 18+21.39
-L- STA. 18+35.58 TO -L- STA. 18+70.00



DETAIL SHOWING SHOULDER BERM GUTTER ON TOP OF SUBGRADE

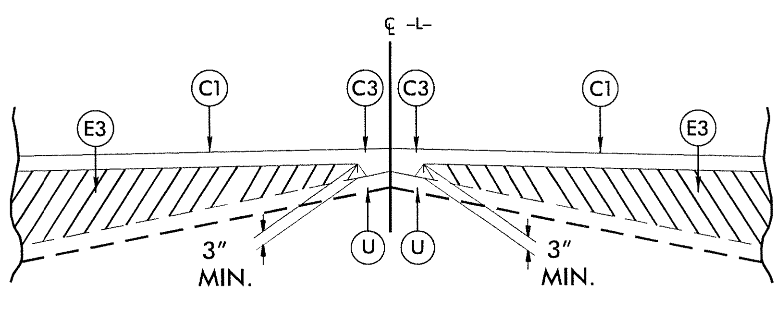
-L- STA. 16+33.50 TO -L- STA. 16+51.00 (LT)
-L- STA. 16+47.00 TO -L- STA. 16+51.00 (RT)
-L- STA. 17+38.00 TO -L- STA. 17+58.25 (LT)



TYPICAL SECTION ON STRUCTURE

USE TYPICAL SECTION ON STRUCTURE

-L- STA. 16+62.00 (BEGIN BRIDGE) TO
-L- STA. 17+27.00 (END BRIDGE)



Standard Wedging Detail

6/2/99

22-DEC-2011 14:11
R:\Roadway\Proj\b4922_rdy_typ.dgn
$$$$USERNAME$$$$

6/21/00

COMPUTED BY: R. SHILLINGLAW DATE: MAY 4, 2011
CHECKED BY: R. J. DECOLA DATE: MAY 9, 2011

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
B-4922	3-A

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO.		TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC)								C.S. PIPE (UNLESS NOTED OTHRWISE)													CLASS III R.C. PIPE (UNLESS OTHERWISE NOTED)							
SIZE								12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"		30"		36"		42"		48"		12"	15"	18"	24"	30"	36"	42"	48"
THICKNESS OR GAUGE		FROM	TO													.064	.064	.064	.064		.079		.079		.109		.109									
-L- 16+39	LT.	0401		5.60	2.80																															
		0401	0402		2.80	1.40			20																											
-L- 19+64	CL																																			
-L- 19+75	CL	0403	0404		-0.40	-0.22																										64				
-L- 20+00	LT.	0405	0406		-0.20	-0.13					24																									
PROJECT TOTAL									20		24																					64				

STATION	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS.		QUANTITIES FOR DRAINAGE STRUCTURES	• TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. •FT.		C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE				D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME & GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH GRATE STD. 840.22	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	J.B. STD. 840.31 OR 840.32							FLOWABLE FILL (CY)	DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN.FT.	REMARKS
				R.C.P.	C.S.P.	PER EACH (0' THRU 5.0')	A 5.0' THRU 10.0'	B 10.0' AND ABOVE		E	F	G																							
-L- 16+39						1											1					1													
-L- 19+64																														5			0.232		FILL 40' EXIST. 24" RCP & PLUG ENDS
-L- 19+75																																			USE RCP CLASS III
-L- 20+00																															1-24"				USE HDPE
PROJECT TOTAL						1											1					1								5	1-24"		0.232		

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I. (N.S.)	GRATED DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS									IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	III	GRAU 350	TL-2	XIII	CAT-1	IAU TYPE 350 TL-2	BIC	AT-1	EA	G	NG				
-L-	15+80.75	16+62.00	LEFT	81.25			16+62.00		4.25'	7.5'		62.50'		1.25		1	1													
-L-	15+80.75	16+62.00	RIGHT	81.25			16+62.00		4.25'	7.5'	62.50'		1.25			1	1													
-L-	17+27.00	17+83.25	LEFT	56.25			17+27.00		4.25'	7.5'	37.50'		0.75			1		1												
-L-	17+27.00	17+42.00	RIGHT	15.00			17+27.00		4.25'	7.5'											1					X				
			PROJECT TOTAL	233.75																										
		LESS ANCHOR DEDUCTION																												
		GRAU-350 2 @ 50.00' =		-100.00'																										
		TYPE III 3 @ 18.75' =		-56.25'																										
		TL-2 1 @ 25.00' =		-25.00'																										
		IAU TYPE 350 TL-2 1 @ 15.00' =		-15.00'																										
			TOTAL	37.50'																										
			SAY	37.50'												3	2	1			1									
														ADDITIONAL GUARDRAIL POST = 5																

COMPUTED BY : R. SHILLINGLAW 4-6-11

SUMMARY OF EARTHWORK IN CUBIC YARDS

LOCATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
-L- 14+50.00 TO 16+62.00 (BEG BRDG)	20	77	57	
SUBTOTAL 1	20	77	57	
-L- 17+27.00 (END BRDG) TO 18+21.39	15	140	125	
SUBTOTAL 2	15	140	125	
-L- 18+35.58 TO 20+65.00	116	426	310	
SUBTOTAL 3	116	426	310	
PROJECT SUBTOTAL	151	644	493	
EST. 5% TO REPLACE TOP SOIL ON BORROW PITT			25	
GRAND TOTAL	151		517	
SAY	155		520	

UNDERCUT EXCAVATION = 400 CY

Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

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

SUMMARY OF HYDRAULIC RIP RAP & DDE QUANTITIES

CHAIN	STATION	STATION	LOCATION	RIP RAP CLASS (TONS)				FF (SY)	DDE (CY)	DETAIL	COMMENT
				I	II	A	B				
-L-	16+38		LEFT				1	5			AT OUTLET
		TOTAL					1	5			

ABBREVATIONS

CY	CUBIC YARD
DDE	DRAINAGE DITCH EXCAVATION
FF	FILTER FABRIC
RR	RIP RAP
SY	SQUARE YARD

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
-L-	16+33.50	16+72	CL	83
-L-	17+25	R/R CROSSING	CL	226
-L-	18+01	18+57	R/R CROSSING	40
-L-	R/R CROSSING	18+70	CL	77
			TOTAL:	426
			SAY:	430

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH
-L- (LT.)	16+33.50	16+51.00	17.50'
-L- (RT.)	16+47.00	16+51.00	4.00'
-L- (LT.)	17+38.00	17+58.25	20.25'
		TOTAL:	41.75'
		SAY:	44'

PARCEL INDEX

PARCEL NO.	PROPERTY OWNER NAME	PLAN SHEET
1	SARAH RIGGS	4
2	RICHARD M. MANSFIELD et ux	4
3	RUSSELL E. TWIFORD	4
4	RICK WHITE	4

22-DEC-2011 14:11
R:\Roadway\Proj\B4922_Rdy_sum.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
B-4922	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83 / CORS 96

FOR -L- PROFILE SEE SHEET 5

BRIDGE APPROCH SLAB

-L-
PI Sta 18+28.56
Δ = 10° 07' 45.3" (LT)
D = 6° 44' 26.4"
L = 150.27'
T = 75.33'
R = 850.00'
SE = SEE PLANS

REVISIONS
8/17/99
NOVEMBER 1, 2011 - R/W REVISION - ADDED PARCEL 5 AND ADDED PUE TO PARCELS 1 AND 5; AND CHANGED PROPERTY OWNER NAME ON PARCEL 4.
DECEMBER 22, 2011 - R/W REVISION - REMOVED PUE ON PARCEL 5.

10 15 20

-L- POT Sta. 10+00.00

BEGIN TIP PROJECT B-4922
-L- STA. 14+50.00

-L- POT Sta. 23+43.01

-Y- POT Sta. 13+89.38

-L- PC Sta. 17+53.22

-L- PT Sta. 19+03.49

WOODED SWAMP

SARAH RIGGS
DB 84 PG 1
DB 259 PG 242
1

RICHARD M. MANSFIELD et ux
DB 642 PG 12
2

T. F. LOWRY, HEIRS
WB 5 PG 84
5

TWIFORD IV, LLC
DB 1073 PG 495
4

RUSSELL E. TWIFORD
DB 789 PG 255
WB 34 PG 7
3

JOHN H. BELL, JR. et ux
DB 931 PG 416

NORFOLK SOUTHERN RAILROAD
LEASED TO CHESAPEAKE & ALBEMARLE RAILROAD

ULSTER DRIVE

SR 1308 (CHURCH STREET EXTENSION)

TO US 17 BYPASS

CENTURY LINK

CITY OF ELIZABETH CITY (COE)

CULTIVATED

-BL- 1

-BL- 2

-BL- 3

BEGIN SBG STA. 16+33.50

END SBG STA. 17+58.25

NOTE: CITY OF ELIZABETH CITY RECORDS INDICATE THE FSS LINE TERMINATES UNDER KNOBB'S CREEK.

S 79° 02' 33.4" E

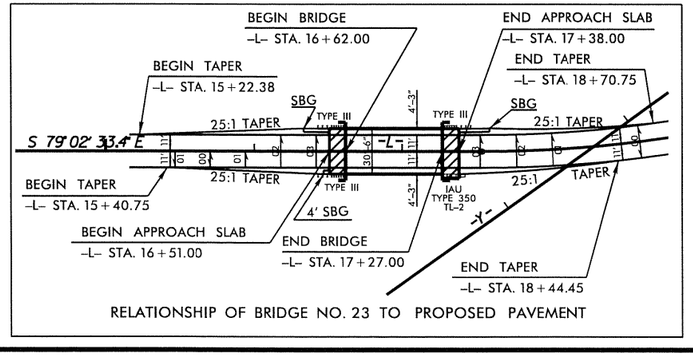
N 65° 17' 20.9" E

S 89° 10' 18.6" E

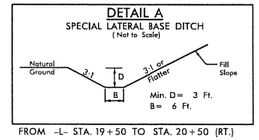
-L- POC Sta. 18+28.45 =
-Y- POT Sta. 11+71.12

-Y- POT Sta. 10+00.00

END TIP PROJECT B-4922
-L- STA. 20+65.00



DETAIL A
SPECIAL LATERAL BASE DITCH
(Not to Scale)



FROM -L- STA. 19+50 TO STA. 20+50 (RT.)

22-DEC-2011 14:41
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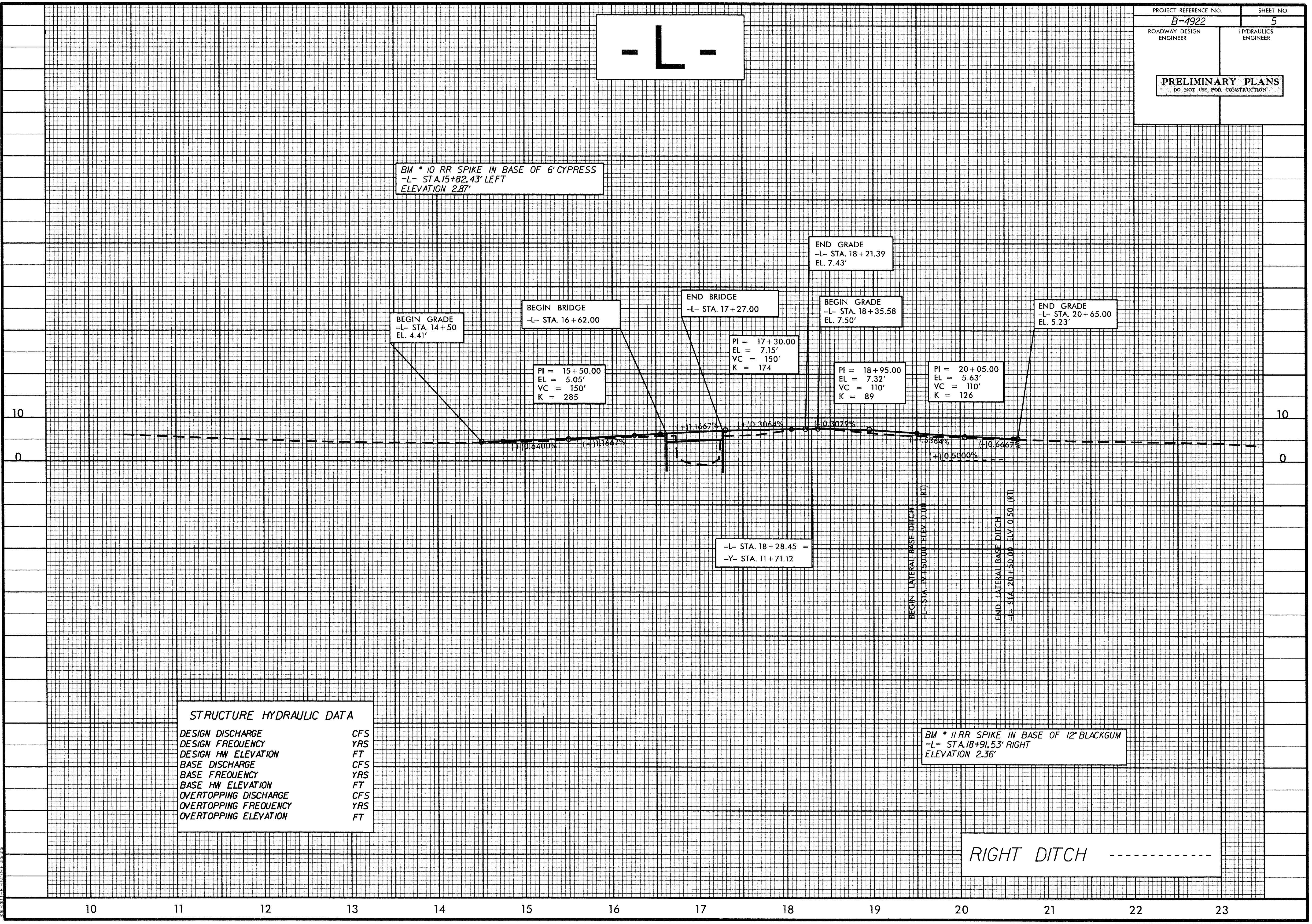
PROJECT REFERENCE NO.	SHEET NO.
B-4922	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-



BM * 10 RR SPIKE IN BASE OF 6' CYPRESS
-L- STA.15+82, 43' LEFT
ELEVATION 2.87'
BEGIN GRADE -L- STA. 14+50 EL. 4.41'
BEGIN BRIDGE -L- STA. 16+62.00
END BRIDGE -L- STA. 17+27.00
END GRADE -L- STA. 18+21.39 EL. 7.43'
BEGIN GRADE -L- STA. 18+35.58 EL. 7.50'
END GRADE -L- STA. 20+65.00 EL. 5.23'
PI = 15+50.00 EL = 5.05' VC = 150' K = 285
PI = 17+30.00 EL = 7.15' VC = 150' K = 174
PI = 18+95.00 EL = 7.32' VC = 110' K = 89
PI = 20+05.00 EL = 5.63' VC = 110' K = 126
(+)0.6400%
(+)1.1667%
(+)1.1667%
(+)0.3064%
(-)0.3029%
(-)1.5364%
(-)0.6667%
(+) 0.5000%
-L- STA. 18+28.45 = -Y- STA. 11+71.12
BEGIN LATERAL BASE DITCH -L- STA. 19+50.00 ELEV. 0.00 (RT)
END LATERAL BASE DITCH -L- STA. 20+50.00 ELV. 0.50 (RT)
BM * 11 RR SPIKE IN BASE OF 12" BLACKGUM
-L- STA.18+91, 53' RIGHT
ELEVATION 2.36'
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
RIGHT DITCH
10
0
10
11
12
13
14
15
16
17
18
19
20
21
22
23

5/14/99

22-DEC-2011 14:12
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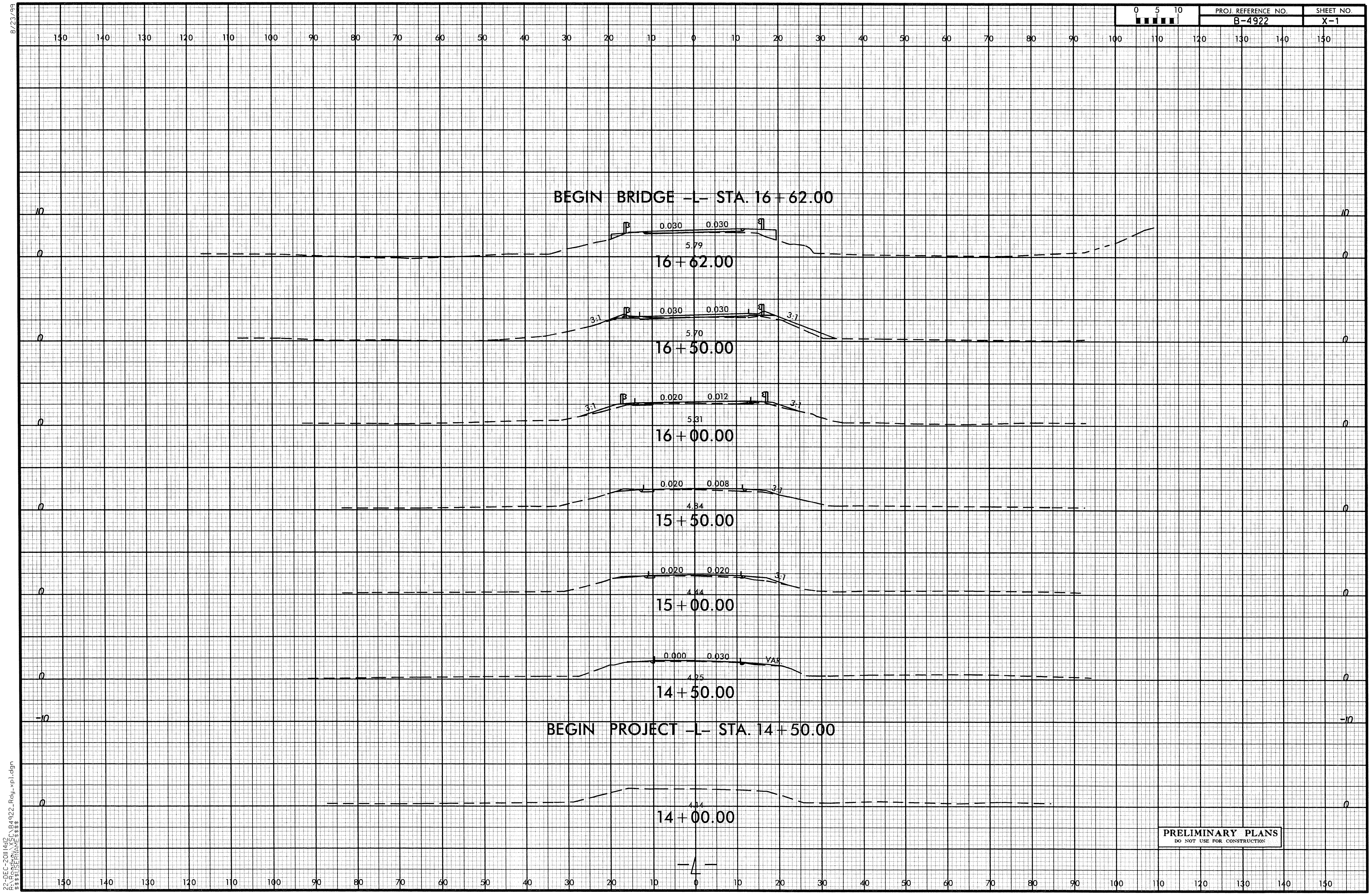
$$$$USERNAME$$$$



PROJ. REFERENCE NO.
B-4922
SHEET NO.
X-1
BEGIN BRIDGE -L- STA. 16+62.00
0.030 0.030
5.79
16+62.00
0.030 0.030
5.70
16+50.00
0.020 0.012
5.31
16+00.00
0.020 0.008
4.84
15+50.00
0.020 0.020
4.44
15+00.00
0.000 0.030 VAR.
4.25
14+50.00
BEGIN PROJECT -L- STA. 14+50.00
4.14
14+00.00
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
8/23/99
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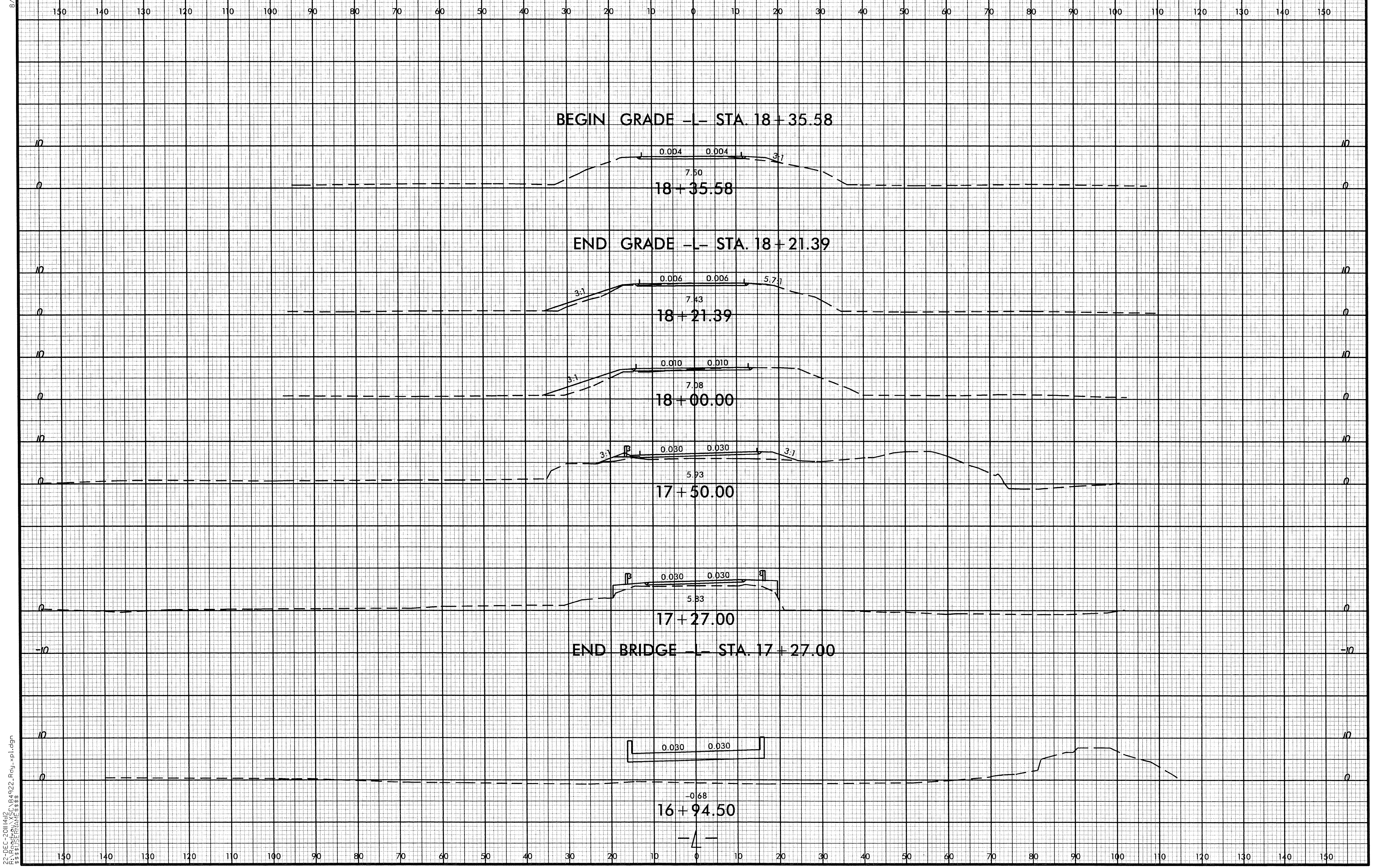
8/23/99

PROJ. REFERENCE NO.	SHEET NO.
B-4922	X-2



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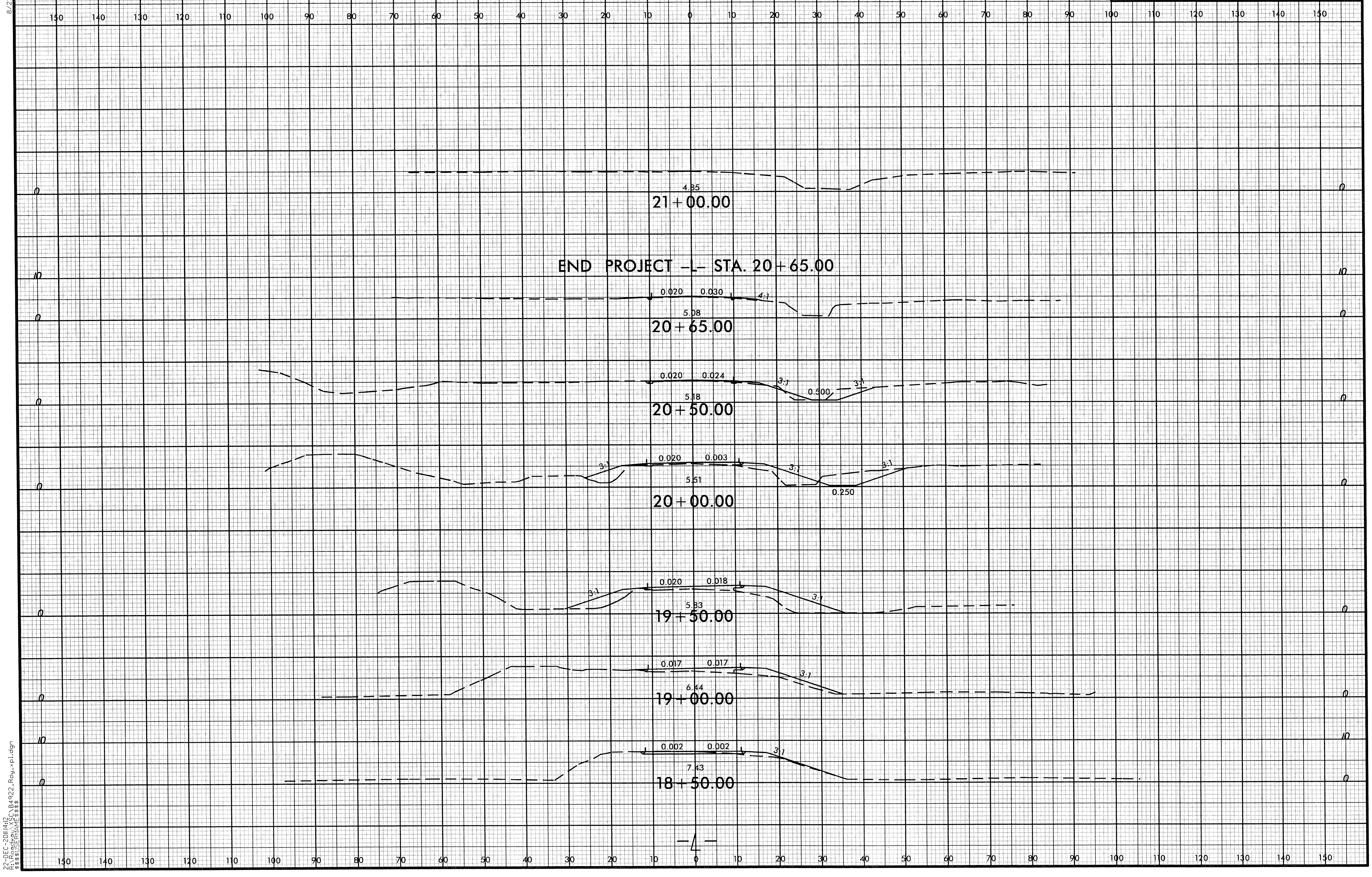
PROJ. REFERENCE NO.	SHEET NO.
B-4922	X-3

8/23/99



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