



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

October 17, 2012

U.S. Army Corps of Engineers
Regulatory Field Office
69 Darlington Avenue
Wilmington, North Carolina 28403

Attention: Mr. Ronnie Smith
NCDOT Coordinator

Dear Sir:

Subject: **Application for Section 404 Nationwide Permits (NWP) 23, 33 & 12, and Section 401 Water Quality Certification** for the replacement of Bridges No. 116 & 117 over Hog Swamp on SR 2262 (Bethesda Church Road) in Robeson; TIP Project B-4619; Federal Aid Project No. BRZ-2262 (1); Debit \$240 from WBS No. 33800.1.1.

Please find enclosed PCN, permit drawings, stormwater management plan, and roadway plans for the above referenced project proposed by the North Carolina Department of Transportation (NCDOT). A Categorical Exclusion (CE) was completed for this project on June 22, 2009 and distributed shortly thereafter. Additional copies are available upon request. The NCDOT proposes to replace existing Bridges No. 116 and 117 over Hog Swamp on SR 2262 in Robeson County. The project involves replacement of the existing structurally deficient bridges and approaches with new structures. Bridge 116 will be replaced with a new 170-foot long bridge, and Bridge 117 with a new 120-foot long bridge. Both bridges will include two 11-foot lanes and 4-foot offsets on each side. The approach roadway will be widened to a 22-foot pavement width to provide two 11-foot lanes, with six-foot shoulders on each side.

Proposed permanent impacts to riparian wetlands from bridge construction are 0.02 acre of fill, and 0.03 acre of excavation. A temporary work pad will be needed to construct Bridge No. 116, and this will involve 0.03 acre of temporary fill in wetlands. Utility relocations will require less than 0.01 acre of fill in wetlands, with 0.36 acre of hand clearing. Traffic will be detoured off-site during construction.

This project calls for a letting date of July 16, 2013 and a review date of May 28, 2013; however, the let date may advance as additional funding becomes available.

MAILING ADDRESS:

NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
NATURAL ENVIRONMENT SECTION
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6100
FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:

1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610-4328

Regulatory Approvals

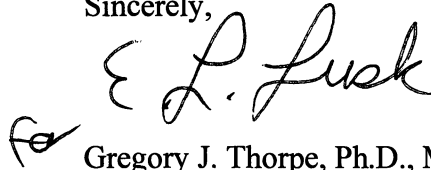
Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that the project be authorized by NWP 23 for bridge construction, NWP 33 for the temporary work pad, and NWP 12 for utility relocations.

Section 401 Permit: We anticipate 401 General Certification numbers 3891, 3893 and 3884 will apply to this project. NCDOT is requesting written concurrence from the North Carolina Department of Environmental and Natural Resources, Division of Water Quality. We are providing five copies of this application to the NCDWQ for their approval.

A copy of this permit application and its distribution list will be posted on the NCDOT website at <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>.

If you have any questions or need additional information, please contact Gordon Cashin at (919) 707-6107.

Sincerely,

A handwritten signature in black ink, appearing to read "E. L. Fusk". To the left of the signature is a small, stylized mark that looks like a checkmark or the letters "fe".

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:	<input checked="" type="checkbox"/> Section 404 Permit <input type="checkbox"/> Section 10 Permit	
1b. Specify Nationwide Permit (NWP) number: 23, 33 & 12	or General Permit (GP) number:	
1c. Has the NWP or GP number been verified by the Corps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input checked="" type="checkbox"/> 401 Water Quality Certification – Regular <input type="checkbox"/> Non-404 Jurisdictional General Permit <input type="checkbox"/> 401 Water Quality Certification – Express <input type="checkbox"/> Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Project Information

2a. Name of project:	Replacement of Bridge Nos. 116 & 117 over Hog Swamp on SR 2262 (Bethesda Church Road)
2b. County:	Robeson
2c. Nearest municipality / town:	Fairmont
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P. or state project no:	B-4619

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	<i>not applicable</i>
3c. Responsible Party (for LLC if applicable):	<i>not applicable</i>
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	(919) 707-6107
3g. Fax no.:	(919) 431-2002
3h. Email address:	gcashin@ncdot.gov

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

B. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 34.426244 Longitude: -79.109067 (DD.DDDDDD) (-DD.DDDDDD)
1c. Property size:	23.1 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Hog Swamp
2b. Water Quality Classification of nearest receiving water:	C-Sw
2c. River basin:	Lumber River Basin
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: Agriculture, with residential along roadways, and forested stream corridors.	
3b. List the total estimated acreage of all existing wetlands on the property: 13.87	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: Two channels of Hog Swamp; 553 feet and 570 feet	
3d. Explain the purpose of the proposed project: To replace two structurally deficient bridges.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing two bridges on the existing alignment using 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: Richard Spencer visited the site on July 15, 2008, but no JD was issued. JD is requested with this application.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known): Matt Smith, Nicole Loft	Agency/Consultant Company: ESI Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

C. Proposed Impacts Inventory

1. Impacts Summary

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

- Wetlands Streams - tributaries Buffers
 Open Waters Pond Construction

2. Wetland Impacts

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

2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	fill	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.02
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	excavation	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.01
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	fill	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	<0.01
Site 2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	fill	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.03
Site 2 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	excavation	riparian	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	0.01
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
2g. Total wetland impacts					0.05 Perm. 0.03 Temp.

2h. Comments: There will be 0.12 ac of hand clearing due to bridge construction & 0.36 ac due to utility relocation. Due to rounding, site impacts do not match those on the impact summary sheet, however, total impacts are the same. Additionally, there will be 0.02 ac of temporary fill in wetlands in the hand clearing areas for the installation of erosion control measures, including temporary silt fence and/or special sediment control fence.

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
3h. Total stream and tributary impacts						0.0 Perm 0.0 Temp

3i. Comments:

4 Revised
10/24/12

4. Open Water Impacts

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Gum Swamp	Permanent		<0.01
O2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Gum Swamp	Temporary		0.02
O3 <input type="checkbox"/> P <input type="checkbox"/> T				
O4 <input type="checkbox"/> P <input type="checkbox"/> T				
4f. Total open water impacts				<0.01 Permanent 0.02 Temporary

4g. Comments:

5. Pond or Lake Construction

If pond or lake construction proposed, then complete the chart below.

5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)			5e. Upland (acres)
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded
P1								
P2								
5f. Total								

5g. Comments:

5h. Is a dam high hazard permit required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, permit ID no:
5i. Expected pond surface area (acres):			
5j. Size of pond watershed (acres):			
5k. Method of construction:			

6. Buffer Impacts (for DWQ)

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


6a. Project is in which protected basin?		<input type="checkbox"/> Neuse <input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Other: <input type="checkbox"/> Catawba <input type="checkbox"/> Randleman			
6b. Buffer impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name	6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)
B1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
6h. Total buffer impacts					
6i. Comments:					

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 bridges are longer than the existing bridge; the proposed bridges will be at approximately the same grade as the existing structures; an off site detour will be used. Slopes of 2.4:1 or 3:1 will be constructed in wetlands.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Sub regional tier design guidelines for bridge projects were used to develop this project. Best management practices include replacement of bridges along existing alignment, minimization of fill slopes and use of hand clearing as opposed to mechanized clearing.		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, explain: Due to the minimal amount of impacts, compensatory mitigation is not proposed.	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	linear feet	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	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?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.				
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
6f. Total buffer mitigation required:				
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).				
6h. Comments:				

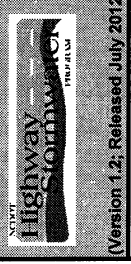
E. Stormwater Management and Diffuse Flow Plan (required by DWQ)	
1. Diffuse Flow Plan	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments:	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Stormwater Management Plan	
2a. What is the overall percent imperviousness of this project?	N/A
2b. Does this project require a Stormwater Management Plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2c. If this project DOES NOT require a Stormwater Management Plan, explain why:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: See attached permit drawings.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	<input type="checkbox"/> Certified Local Government <input type="checkbox"/> DWQ Stormwater Program <input checked="" type="checkbox"/> DWQ 401 Unit
3. Certified Local Government Stormwater Review	
3a. In which local government's jurisdiction is this project?	not applicable
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Phase II <input type="checkbox"/> NSW <input type="checkbox"/> USMP <input type="checkbox"/> Water Supply Watershed <input type="checkbox"/> Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. DWQ Stormwater Program Review	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Coastal counties <input type="checkbox"/> HQW <input type="checkbox"/> ORW <input type="checkbox"/> Session Law 2006-246 <input type="checkbox"/> Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A
5b. Have all of the 401 Unit submittal requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Violations (DWQ Requirement)	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
3. Cumulative Impacts (DWQ Requirement)	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.	
4. Sewage Disposal (DWQ Requirement)	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input type="checkbox"/> Raleigh <input type="checkbox"/> Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? USFWS County Site, NC Natural Heritage site		
6. Essential Fish Habitat (Corps Requirement)		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? NMFS County Index		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NEPA Documentation		
8. Flood Zone Designation (Corps Requirement)		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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	 Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	10-16-12 Date



North Carolina Department of Transportation
 Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
 FOR LINEAR ROADWAY PROJECTS

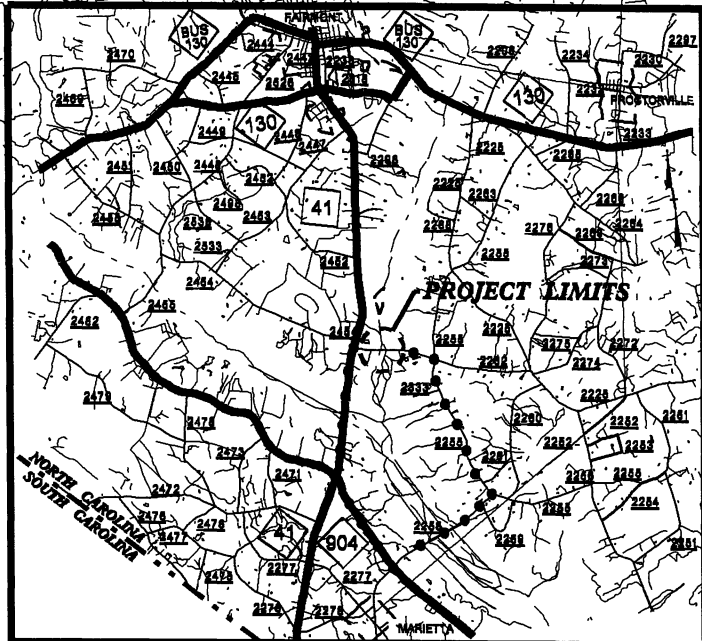


(Version 1.2, Released July 2012)

General Project Information	
Project No.:	B-4619
NCDOT Contact:	Linda Johns Address: 1020 Birch Ridge Rd Raleigh, NC 27610 Phone: 919-707-6728 Email: ljohns@ncdot.gov
City/Town:	Fairmont
River Basin(s):	Lumber
Primary Receiving Water:	Hog Swamp
NCDWQ Surface Water Classification for Primary Receiving Water	Class C
Other Stream Classification:	Swamp Waters (Sw)
303(d) Impairments:	None
Buffer Rules in Effect	N/A
Project Description	
Project Length (lin. Miles or feet):	0.22
Project Built-Upon Area (ac.):	0.55
Typical Cross Section Description:	2@11' travel lanes with 4' 5" paved shoulders on the bridge and varied width earthen shoulders along the roadway
Average Daily Traffic (veh/hr/day):	Design/Future: ADT 2030=1700
General Project Narrative:	Sub regional tier design guidelines for bridge projects was used to develop this project. Best management practices include replacement of bridges along the existing alignment, minimization of fill side slopes and use of hand clearing as oppose to mechanized clearing.
Project Type:	Bridge Replacement
Contractor / Designer:	NCDOT Hydraulics Unit Address: 1020 Birch Ridge Rd Raleigh, NC 27610 Phone: 919-707-6728 Email: ljohns@ncdot.gov
County(ies):	Robeson
CAMA County?	No
NCDWQ Stream Index No.:	14-30-7
Surrounding Land Use:	Aggricultural, Forests and Rural Residential
Proposed Project	Existing Site
Surrounding Land Use:	0.74 ac.
Existing Site	ADT 2010=1182
References	

09/08/99

SEE SHEET 1-A FOR INDEX OF SHEETS
SEE SHEET 1-B FOR SYMBOLS SHEET
SEE SHEET 1-C FOR SURVEY CONTROL SHEET



TIP PROJECT: B-4619

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

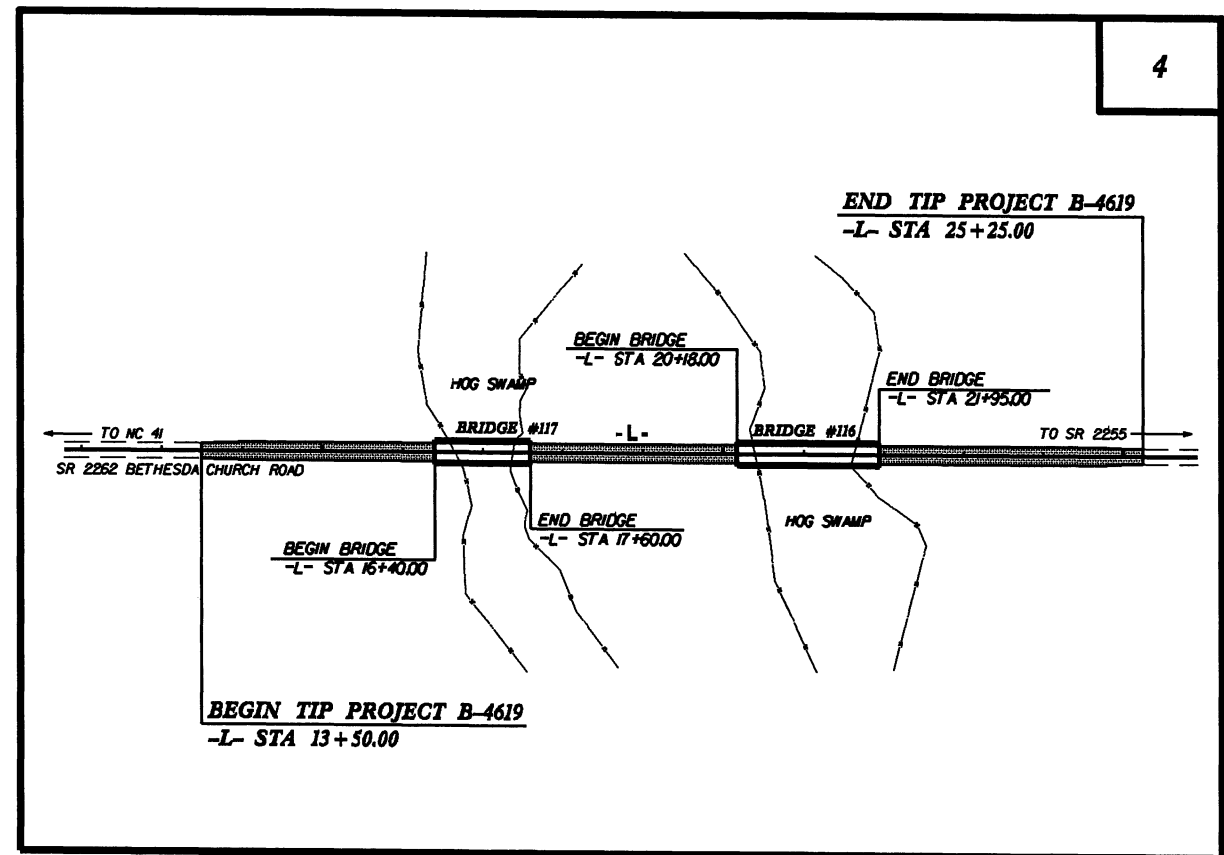
ROBESON COUNTY

LOCATION: BRIDGES NO. 116 AND 117 ON SR 2262
(BETHESDA CHURCH ROAD) OVER HOG SWAMP

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4619	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33800.1.1	BRZ-2262(1)	P.E.	
33800.2.1	BRZ-2262(1)	RW	

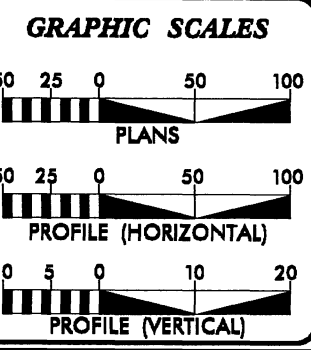
WETLAND & STREAM IMPACTS



Permit Drawing
Sheet 1 of 13

- NOTES:
- CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
 - THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
 - SUB REGIONAL TIER DESIGN GUIDELINES FOR BRIDGE PROJECTS WAS USED TO DEVELOP THIS PROJECT.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



DESIGN DATA

ADT 2010 =	1182
ADT 2030 =	1700
DHV =	10 %
D =	60 %
T =	3 % *
V =	60 MPH
FUNC. CLASS. :	RURAL LOCAL
* TTST 1% DUAL 2%	

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT B-4619	=	0.167 MI
LENGTH OF STRUCTURE PROJECT B-4619	=	0.056 MI
LENGTH OF TOTAL PROJECT B-4619	=	0.223 MI

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 20, 2009

LETTING DATE:
NOVEMBER 16, 2010

GARY LOVERING, PE
PROJECT ENGINEER

ANTHONY C. WEST
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

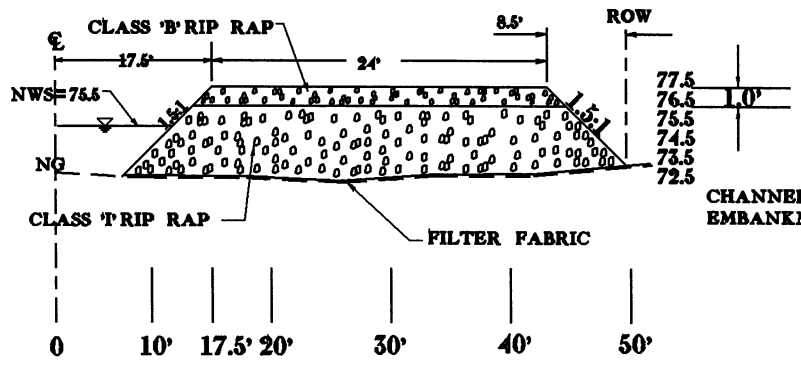
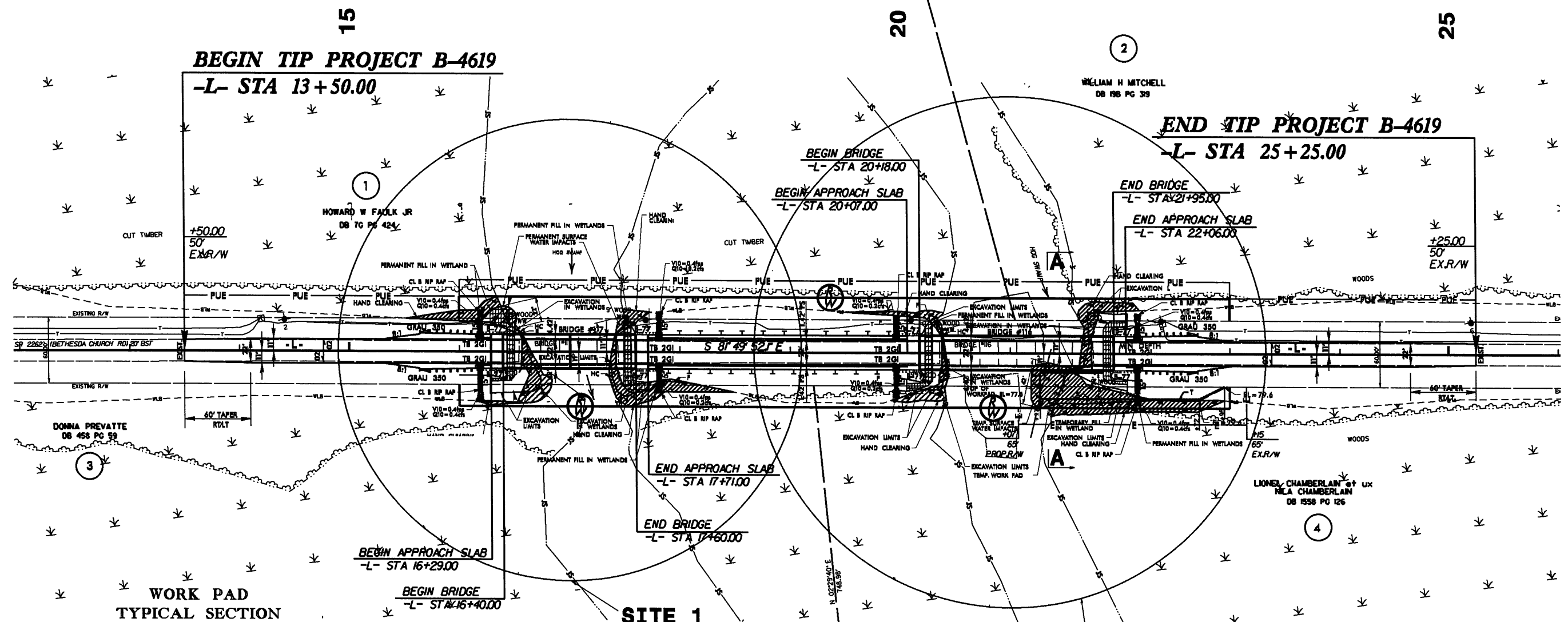
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

CONTRACT:

SYSTEM\$\$\$\$
DCN\$\$\$\$
USER\$\$\$\$

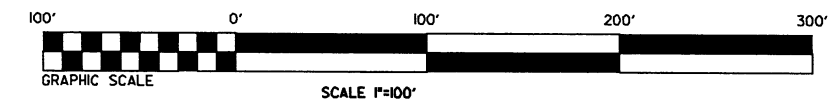
PROJECT REFERENCE NO. B-4619	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



ESTIMATE OF QUANTITIES
 VOLUME OF CLASS I RIP RAP BELOW O.H.W. = 170 CY
 FILTER FABRIC = 336 SY

DECK DRAINAGE:
 INSTALL 4" DIA. DECK DRAINS ON 3' CENTERS
 FROM -L- STA 16+44 TO 16+50 RT. & LT.
 FROM -L- STA 17+50 TO 17+56 RT. & LT.
 FROM -L- STA 20+22 TO 20+28 RT. & LT.
 FROM -L- STA 21+85 TO 21+91 RT. & LT.

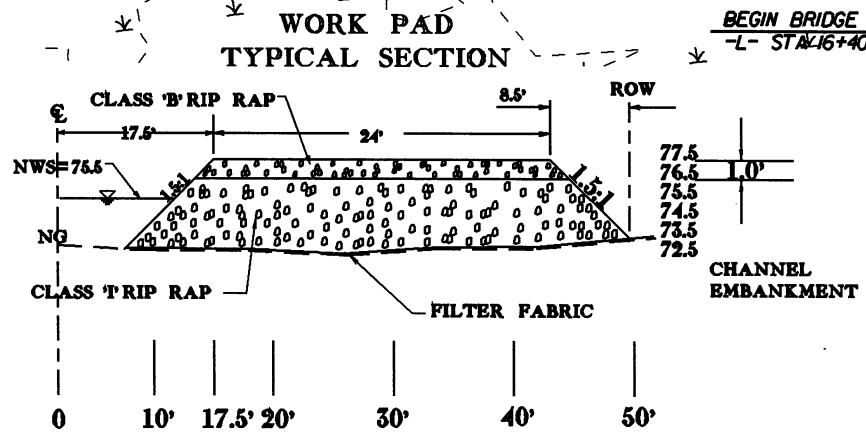
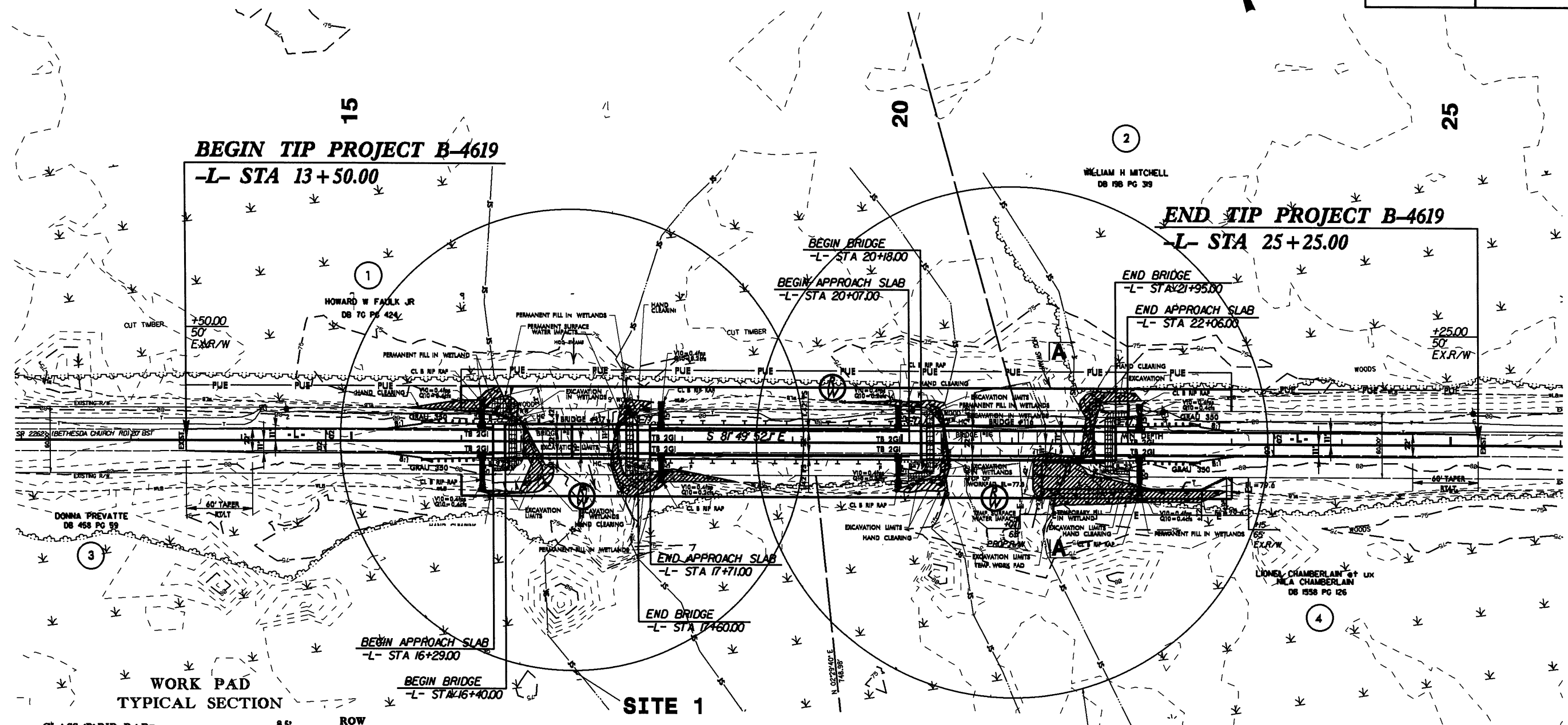
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES HAND CLEARING



Permit Drawing
 Sheet 2 of 13

5/14/99 SYSTEMS DESIGN

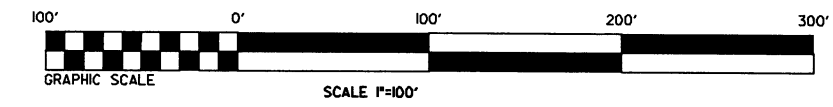
PROJECT REFERENCE NO. B-4619	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



DECK DRAINAGE:
 INSTALL 4" DIA. DECK DRAINS ON 3' CENTERS
 FROM -L- STA 19+44 TO 16+50 RT. & LT.
 FROM -L- STA 17+50 TO 17+54 RT. & LT.
 FROM -L- STA 20+22 TO 20+26 RT. & LT.
 FROM -L- STA 21+85 TO 21+91 RT. & LT.

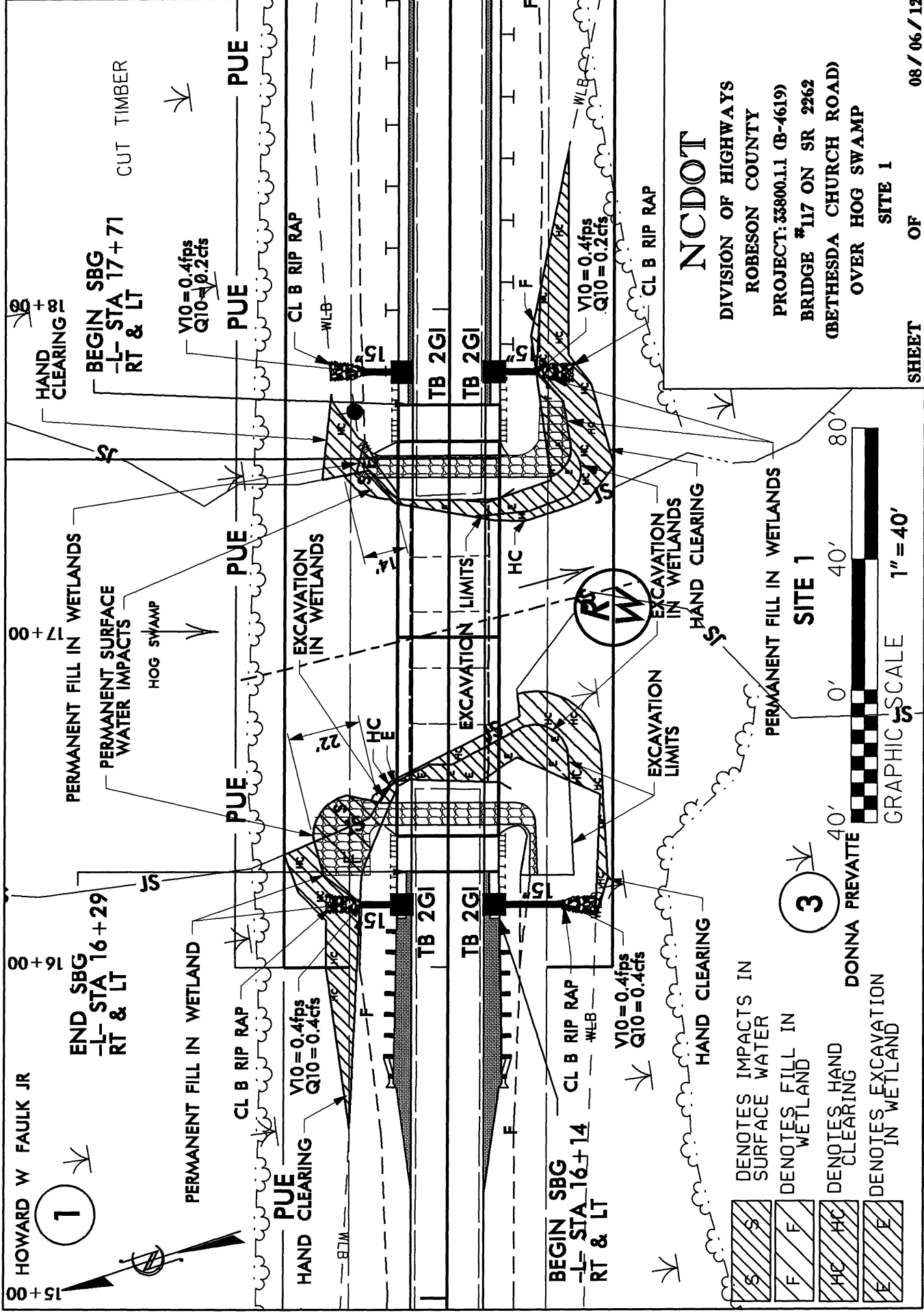
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES HAND CLEARING

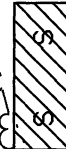



ESTIMATE OF QUANTITIES
 VOLUME OF CLASS I RIP RAP BELOW O.H.W. = 170 CY
 FILTER FABRIC = 336 SY



Permit Drawing
 Sheet 3 of 13

5/14/99



-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING
-  DENOTES EXCAVATION IN WETLAND

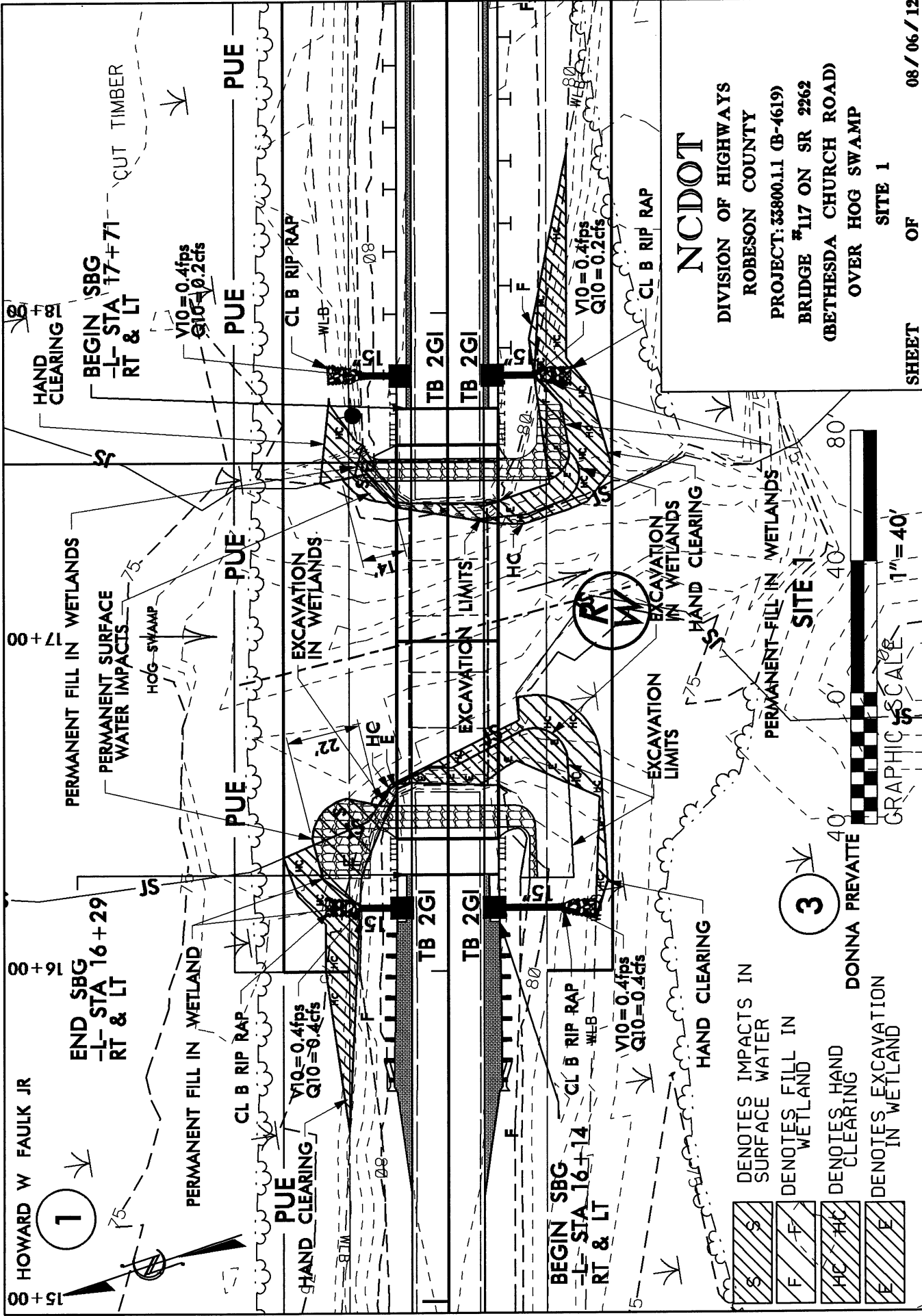
3
DONNA PREVATTE



NCDOT
 DIVISION OF HIGHWAYS
 ROBESON COUNTY
 PROJECT: 33800.1.1 (B-4619)
 BRIDGE #117 ON SR 2262
 (BETHESDA CHURCH ROAD)
 OVER HOG SWAMP

SHEET OF 08 / 06 / 12




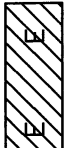
Permit Drawing
 Sheet 4 of 13

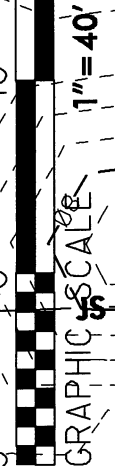


NCDOT
 DIVISION OF HIGHWAYS
 ROBESON COUNTY
 PROJECT: 33800.1.1 (B-4619)
 BRIDGE #117 ON SR 2262
 (BETHESDA CHURCH ROAD)
 OVER HOG SWAMP

SHEET OF 08 / 06 / 12

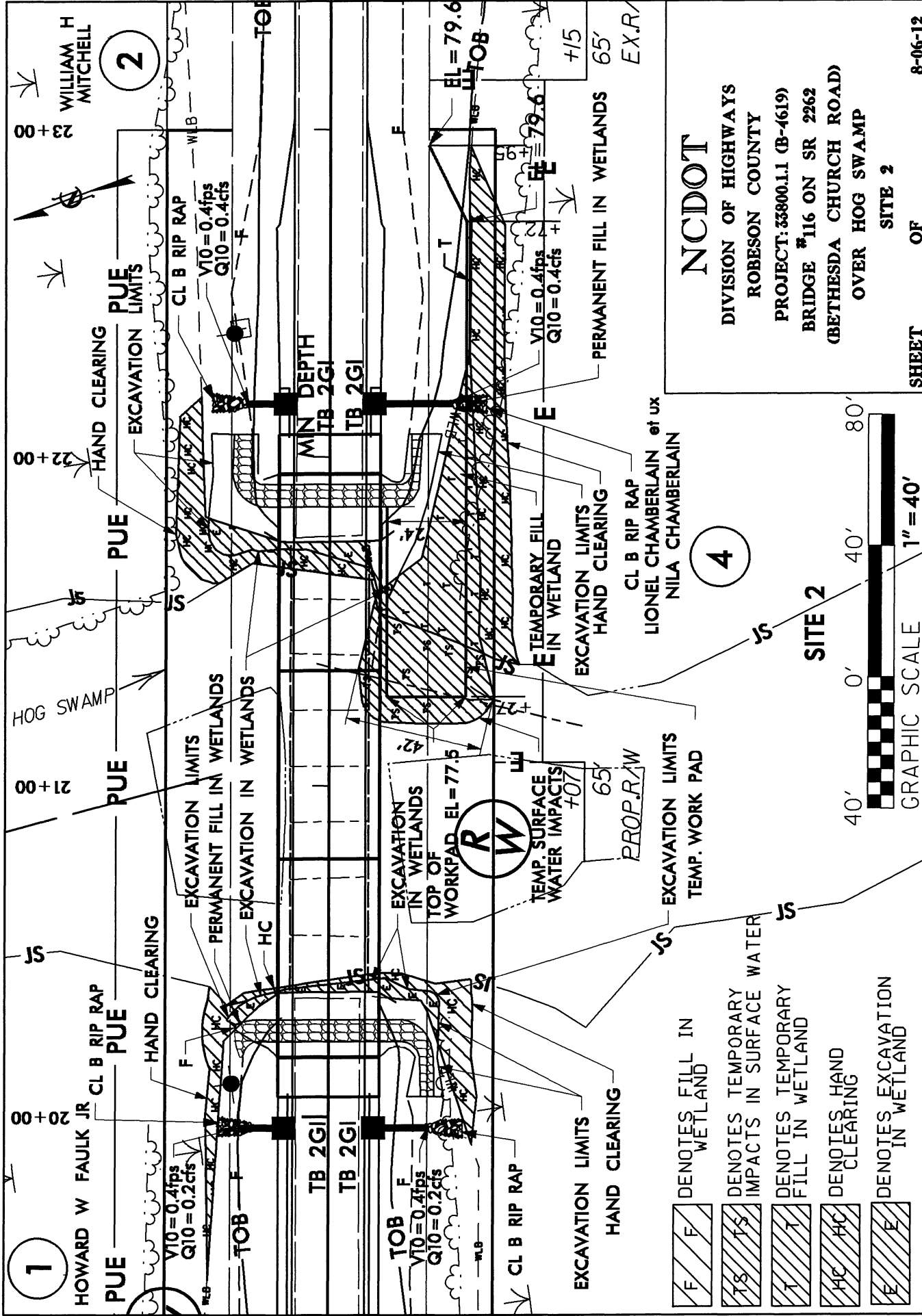
SITE 1
 OF
 PERMIT DRAWING
 SHEET 5 of 13

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING
-  DENOTES EXCAVATION IN WETLAND



3

DONNA PREVATE



1

HOWARD W FAULK JR
CL B RIP RAP
PUE
HAND CLEARING

V10 = 0.4fps
Q10 = 0.2cfs

TB 2GI
TB 2GI

TOB F
V10 = 0.4fps
Q10 = 0.2cfs

CL B RIP RAP

21+00

PUE
HAND CLEARING

EXCAVATION LIMITS
PERMANENT FILL IN WETLANDS
EXCAVATION IN WETLANDS

EXCAVATION
IN WETLANDS
TOP OF
WORKPAD EL = 77.5

TEMP. SURFACE
WATER IMPACTS
+07'

65'
PROP. RAW

22+00

PUE
HAND CLEARING

MIN DEPTH
TB 2GI
TB 2GI

EXCAVATION LIMITS
HAND CLEARING

TEMPORARY FILL
IN WETLAND
EXCAVATION LIMITS
HAND CLEARING

CL B RIP RAP
LIONEL CHAMBERLAIN et ux
NILA CHAMBERLAIN

23+00

PUE
HAND CLEARING

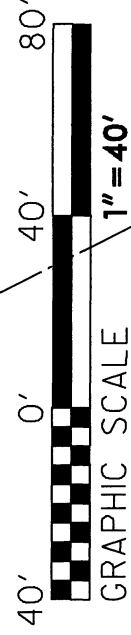
CL B RIP RAP
V10 = 0.4fps
Q10 = 0.4cfs

EL = 79.6
TOB

V10 = 0.4fps
Q10 = 0.4cfs
+15'

PERMANENT FILL IN WETLANDS
65'
EX.R.V

- DENOTES FILL IN WETLAND
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES EXCAVATION IN WETLAND



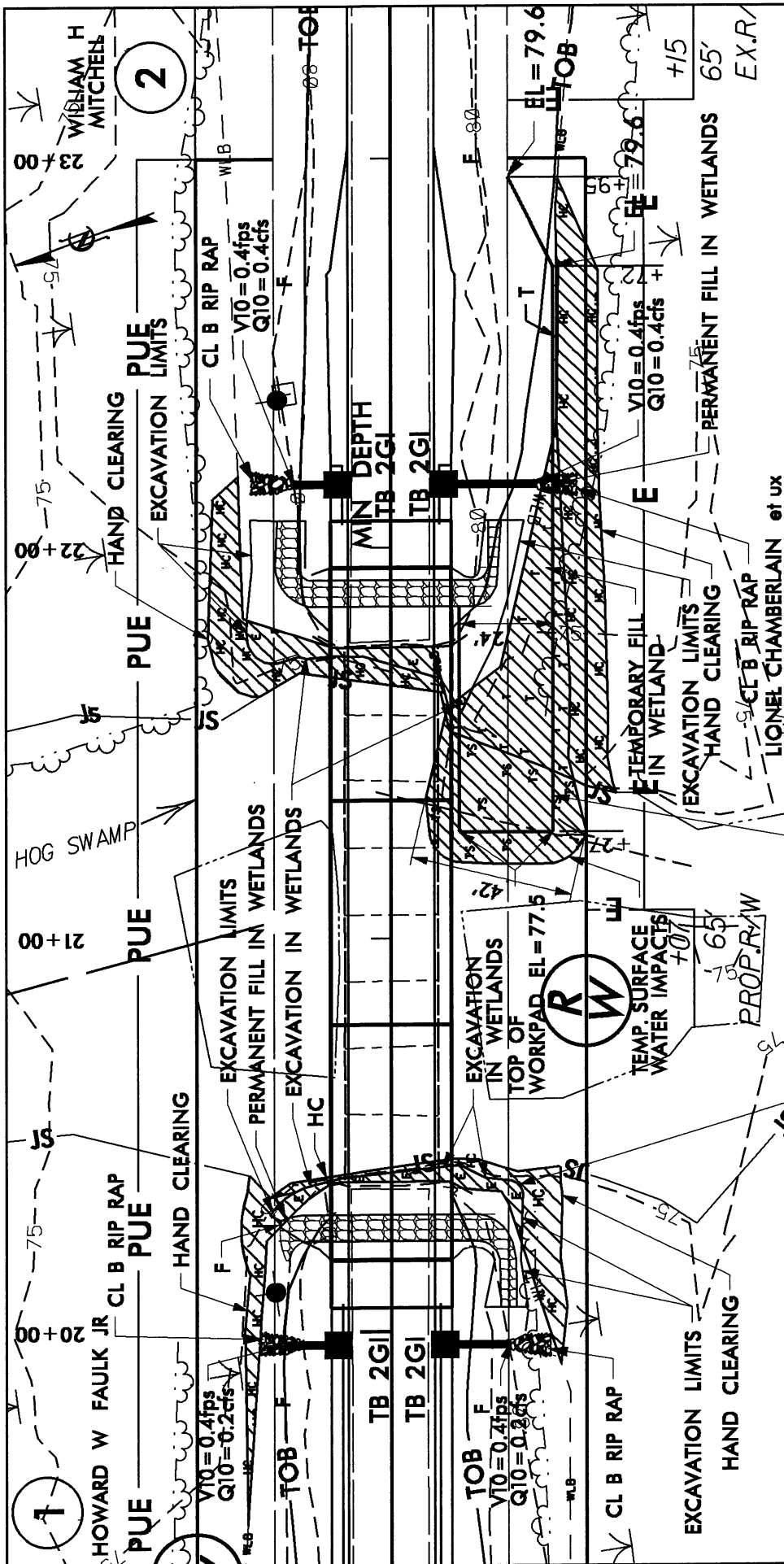
NCDOT

DIVISION OF HIGHWAYS
ROBESON COUNTY
PROJECT: 33800.1.1 (B-4619)
BRIDGE #116 ON SR 2262
(BETHESDA CHURCH ROAD)
OVER HOG SWAMP

SHEET OF
SITE 2

8-06-12

Permit Drawing
Sheet 6 of 13



NCDOT
 DIVISION OF HIGHWAYS
 ROBESON COUNTY
 PROJECT: 33800.1.1 (B-4619)
 BRIDGE #116 ON SR 2262
 (BETHESDA CHURCH ROAD)
 OVER HOG SWAMP

SITE 2
 SHEET OF
 8-06-12

4

SITE 2

LIONEL CHAMBERLAIN et ux
 NILA CHAMBERLAIN

EXCAVATION LIMITS
HAND CLEARING

EXCAVATION LIMITS
HAND CLEARING

EXCAVATION LIMITS
HAND CLEARING

TEMPORARY FILL
IN WETLAND

EXCAVATION LIMITS
HAND CLEARING

EXCAVATION LIMITS
HAND CLEARING

EXCAVATION IN WETLANDS

EXCAVATION IN WETLANDS

EXCAVATION IN WETLANDS

EXCAVATION IN WETLANDS

HOWARD W FAULK JR

CL B RIP RAP

CL B RIP RAP

CL B RIP RAP

WILLIAM H MITCHELL

CL B RIP RAP

CL B RIP RAP

CL B RIP RAP

TOB

MIN DEPTH
TB 2GI

MIN DEPTH
TB 2GI

MIN DEPTH
TB 2GI

EXCAVATION IN WETLANDS
TOP OF
WORKPAD

EL = 77.5

TEMP. SURFACE
WATER IMPACTS
+01'

PROP. RW

EL = 79.6

EL = 79.6

EL = 79.6

EL = 79.6

PERMANENT FILL IN WETLANDS

PERMANENT FILL IN WETLANDS

PERMANENT FILL IN WETLANDS

PERMANENT FILL IN WETLANDS

TEMP. WORK PAD

TEMP. WORK PAD

TEMP. WORK PAD

TEMP. WORK PAD

EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

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EXCAVATION LIMITS

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EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

HAND CLEARING

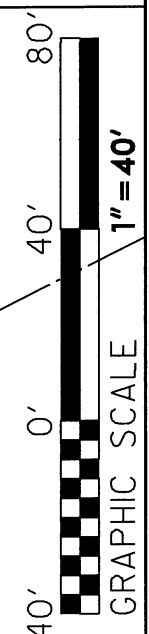
EXCAVATION LIMITS

HAND CLEARING

EXCAVATION LIMITS

HAND CLEARING

- DENOTES FILL IN WETLAND
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES EXCAVATION IN WETLAND



5/28/09

PROJECT REFERENCE NO. B-4619	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

BRIDGE HYDRAULIC DATA #17

DESIGN DISCHARGE	= 1700	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 78.5	FT
BASE DISCHARGE	= 2544	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 79.2	FT
OVERTOPPING DISCHARGE	= 6700	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 81J	FT

DATE OF SURVEY	= 10/27/08
W.S.ELEVATION AT DATE OF SURVEY	= 75.5 FT

BRIDGE HYDRAULIC DATA #116

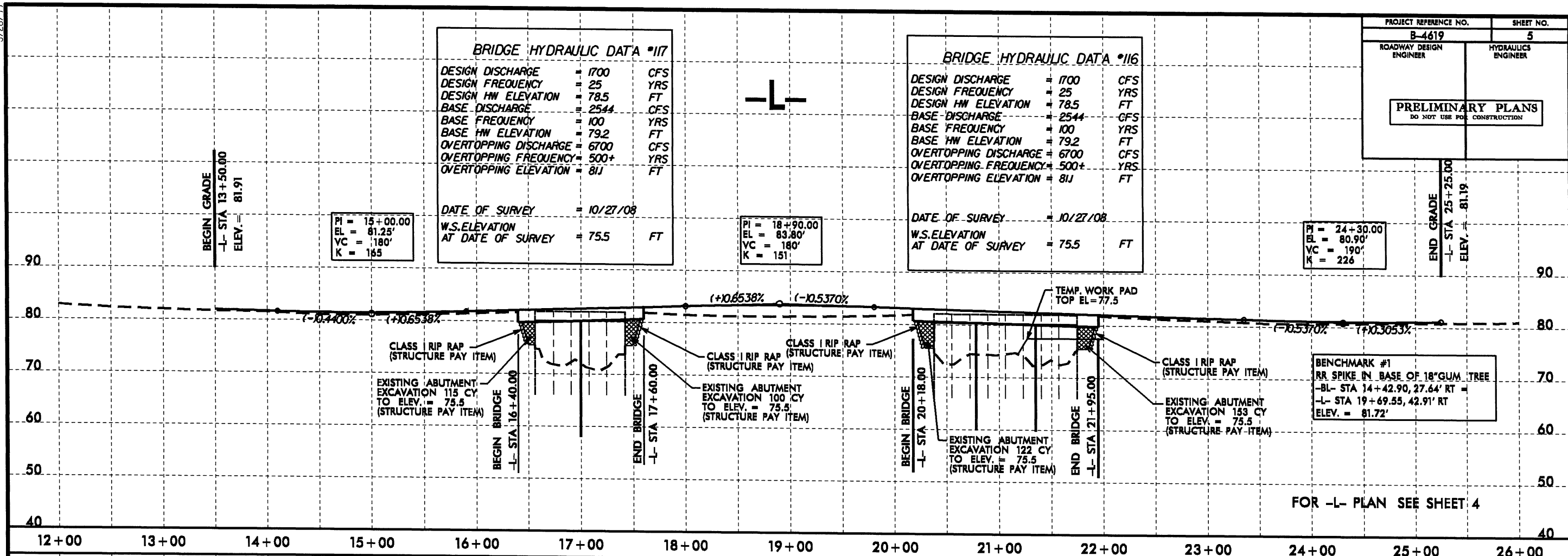
DESIGN DISCHARGE	= 1700	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 78.5	FT
BASE DISCHARGE	= 2544	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 79.2	FT
OVERTOPPING DISCHARGE	= 6700	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 81J	FT

DATE OF SURVEY	= 10/27/08
W.S.ELEVATION AT DATE OF SURVEY	= 75.5 FT

PI = 15+00.00
EL = 81.25'
VC = 180'
K = 165

PI = 18+90.00
EL = 83.80'
VC = 180'
K = 151

PI = 24+30.00
EL = 80.90'
VC = 190'
K = 226



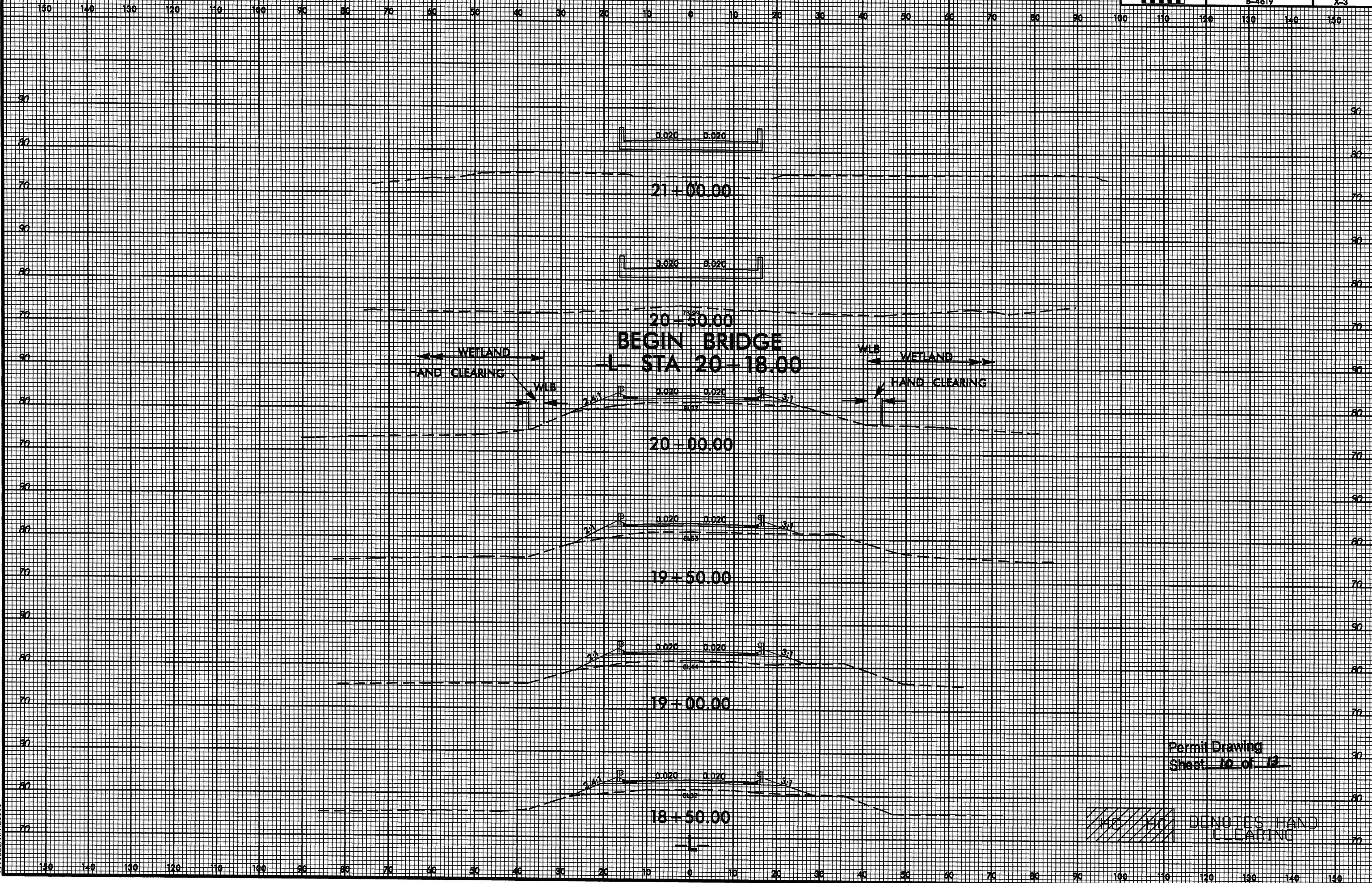
FOR -L- PLAN SEE SHEET 4

*****SYTIME*****
*****CONSTRUCTION*****
*****PERMIT*****


8/23/99



PROJ. REFERENCE NO. B-4619 SHEET NO. X-3

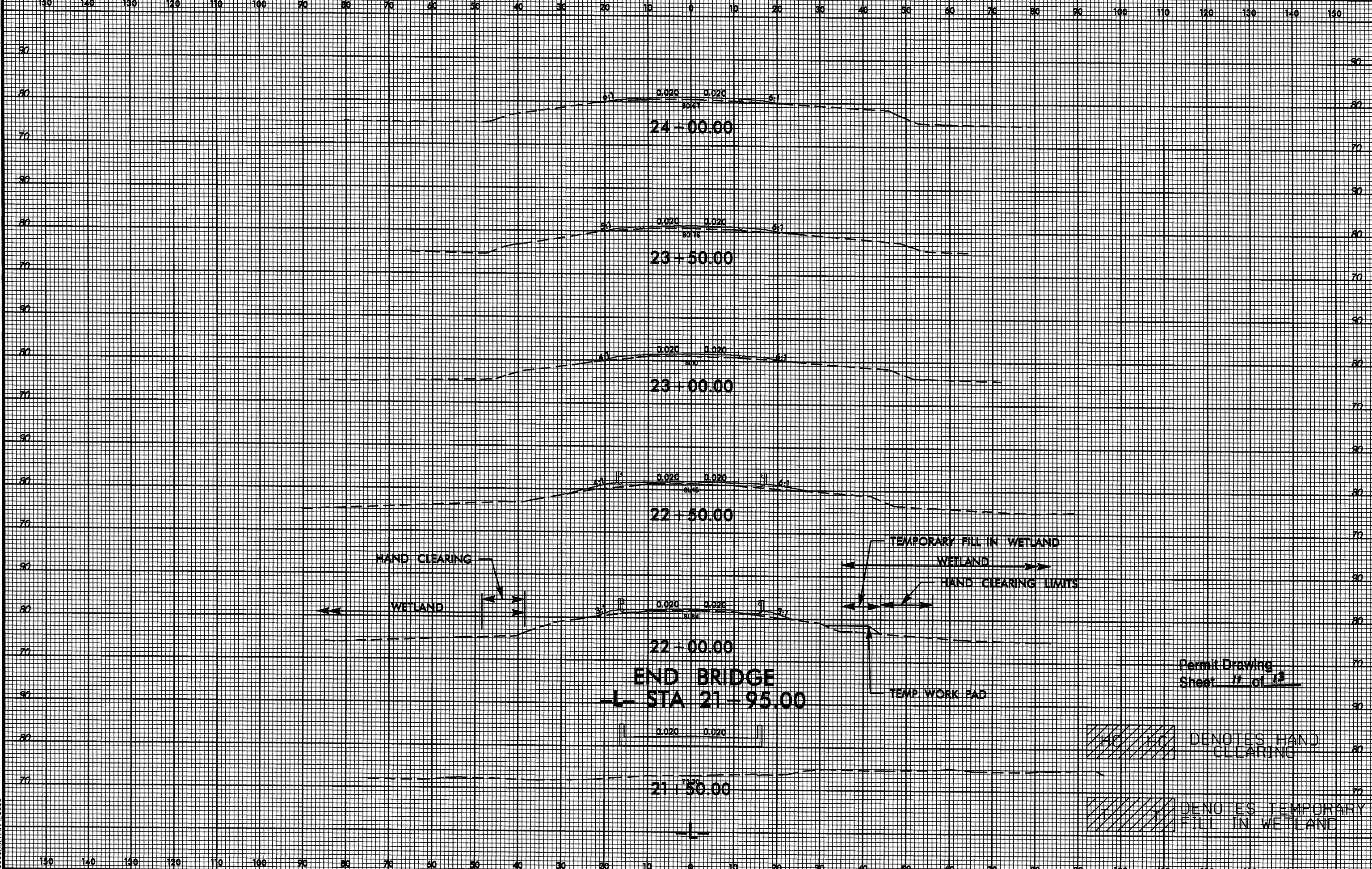


Permit Drawing
Sheet 10 of 12

 DENOTES HAND CLEARING

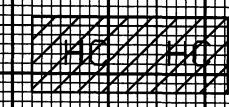
SYSTEMS
US
FRM

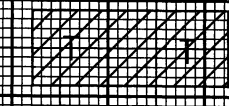
8/23/99



END BRIDGE
L STA 21-95.00

Permit Drawing
Sheet 11 of 13

 DENOTES HAND CLEARING

 DENOTES TEMPORARY FILL IN WETLAND

SYSTEMS
DESIGN
INC.

PROPERTY OWNERS
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	HOWARD W FAULK JR	RT. 4, BOX 163, FAIRMONT, NC 28340
2	WILLIAM H. MITCHELL	407 CHURCH STREET, FAIRMONT, NC 28340
3	DONNA PREVATTE	2595 BETHESDA CHURCH RD., ORRUM, NC 28369
4	LIONEL CHAMBERLAIN	PO BOX 595, FAIRMONT, NC 28340

Permit Drawing
Sheet 12 of 13

NCDOT
DIVISION OF HIGHWAYS
ROBESON COUNTY
PROJECT: 33800.L1 (B-4619)
BRG #116 & #117 ON SR 2262
(BETHESDA CHURCH ROAD)
OVER HOG SWAMP

SHEET OF 8 / 3 / 12

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	16+35 LT	BRG 117	0.01				0.01					
1	16+50 LT	BRG 117						<0.01				
1	16+60 RT/LT/CNTR	BRG 117			0.01		0.01					
1	17+50 LT	BRG 117	<0.01				<0.01	<0.01				
1	17+50 RT	BRG 117	0.01		<0.01		0.02					
2	20+00 LT	BRG 116					<0.01					
2	20+20 LT	BRG 116	<0.01									
2	20+40 RT/LT/CNTR	BRG 116			<0.01		0.01					
2	21+40 RT	Temp. work pad							0.02			
2	21+70 RT/LT/CNTR	BRG 116			<0.01		0.02					
2	21+75 RT	Temp. work pad		0.03								
2	21+76 LT/CNTR	BRG 116			<0.01							
2	22+16 RT	BRG 116	<0.01									
2	22+20 RT	Temp. work pad					0.03					
TOTALS:			0.02	0.03	0.03		0.12	<0.01	0.02	0	0	

PERMANENT SURFACE WATER IMPACTS FOR BENTS:
SITE 1: 8-14x73 HP Steel Piles used for the interior bent. Total Permanent Surface water impact = 12sf
SITE 2: 8-14x73 HP Steel Piles used for each interior bent. Total Permanent Surface water impact = 24sf

0.02 acre of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

ROBESON COUNTY
 WBS - 33800.1.1 (B-4619)

SHEET 10/23/2012

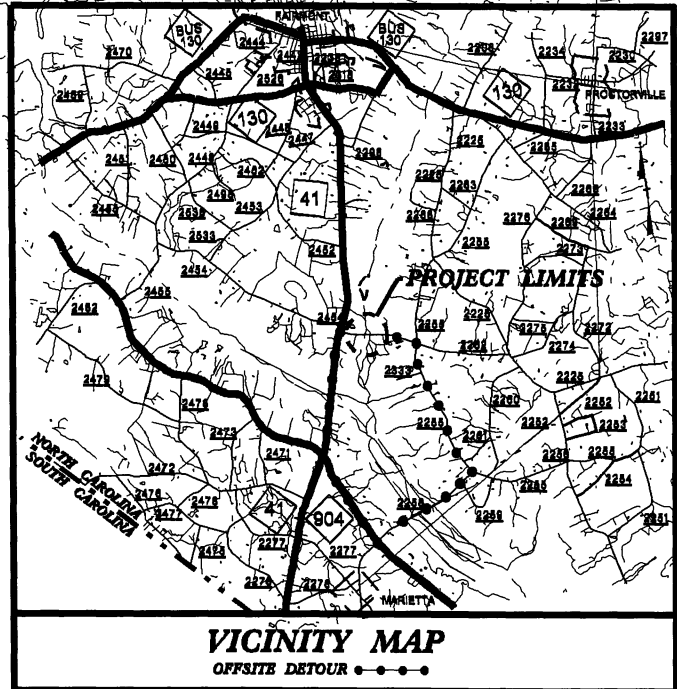
ATN Revised 3/31/05

Permit Drawing
 Sheet 13 of 13 Revised 10/24/12

09/08/09

TIP PROJECT: B-4619

SEE SHEET 1-A FOR INDEX OF SHEETS
SEE SHEET 1-B FOR SYMBOLS SHEET
SEE SHEET 1-C FOR SURVEY CONTROL SHEET



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ROBESON COUNTY

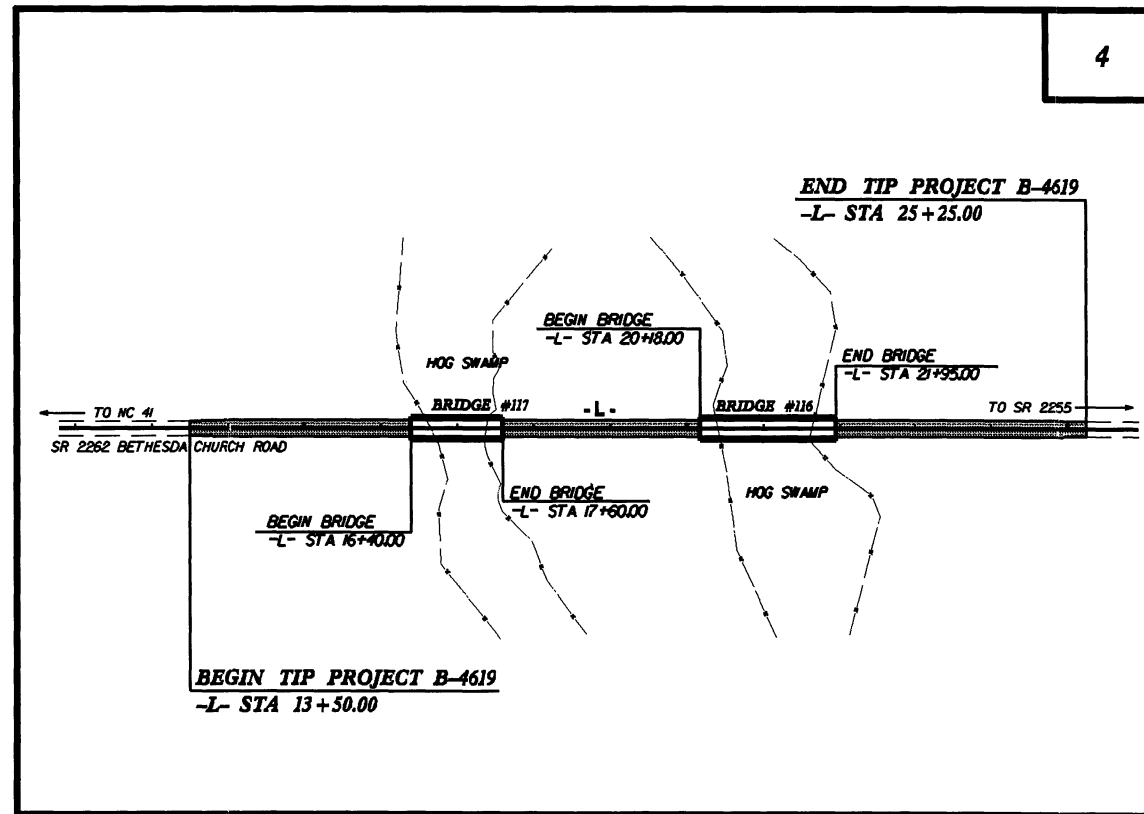
LOCATION: BRIDGES NO. 116 AND 117 ON SR 2262
(BETHESDA CHURCH ROAD) OVER HOG SWAMP

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4619	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33800.1.1	BRZ-2262(1)	P.E.	
33800.2.1	BRZ-2262(1)	RAW	



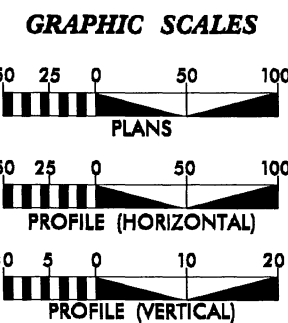
**NEU PERMIT PLANS
AUGUST 1, 2011**



NOTES:

1. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
2. THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
3. SUB REGIONAL TIER DESIGN GUIDELINES FOR BRIDGE PROJECTS WAS USED TO DEVELOP THIS PROJECT.

CONTRACT:



DESIGN DATA

ADT 2010 =	1182
ADT 2030 =	1700
DHV =	10 %
D =	60 %
T =	3 % *
V =	60 MPH
FUNC. CLASS. :	RURAL LOCAL
* TTST 1% DUAL 2%	

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT B-4619	=	0.167 MI
LENGTH OF STRUCTURE PROJECT B-4619	=	0.056 MI
LENGTH OF TOTAL PROJECT B-4619	=	0.223 MI

Prepared In the Office of:

DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: AUGUST 2011	GARY LOVERING, PE PROJECT ENGINEER
LETTING DATE: JUNE 2012	ANTHONY C. WEST PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

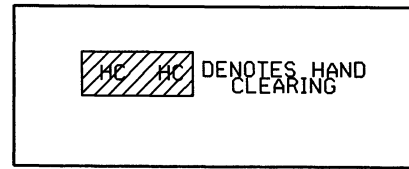
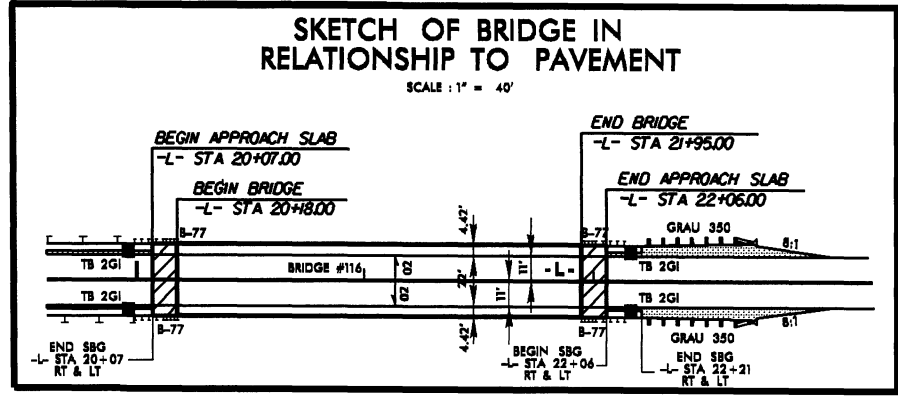
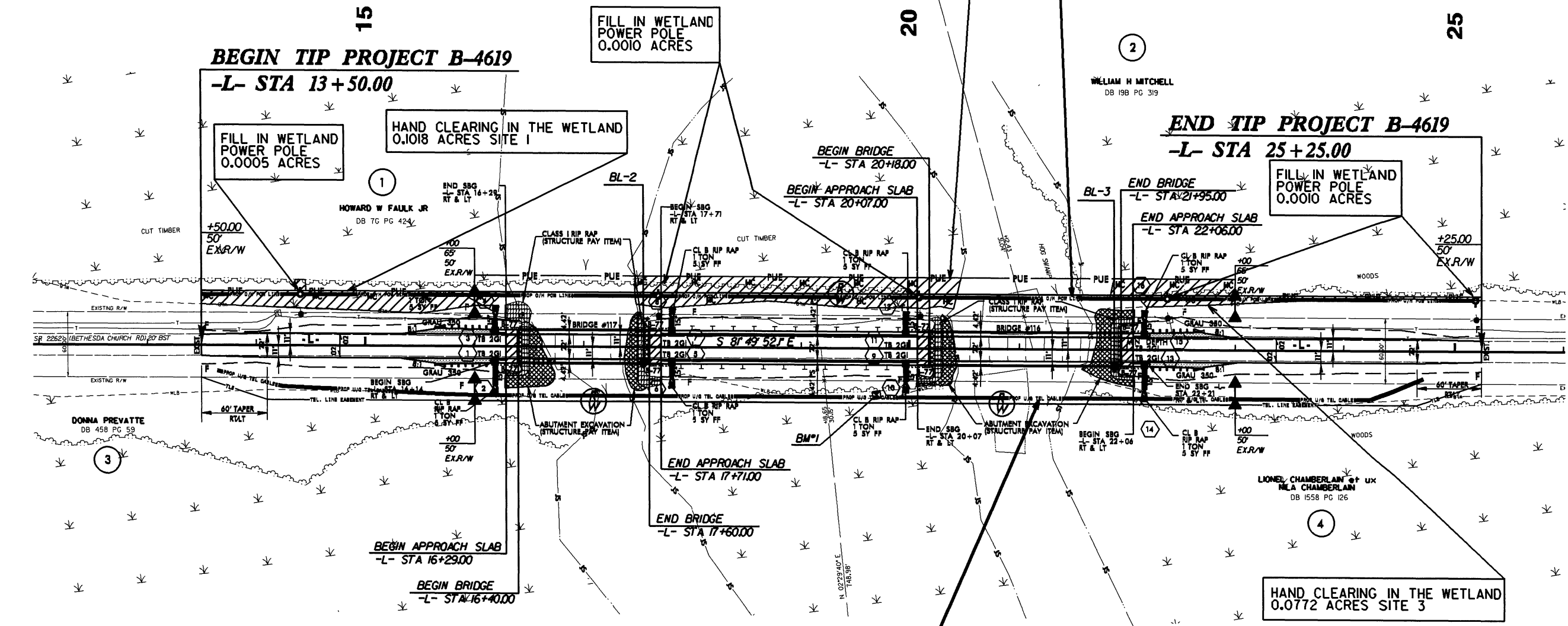
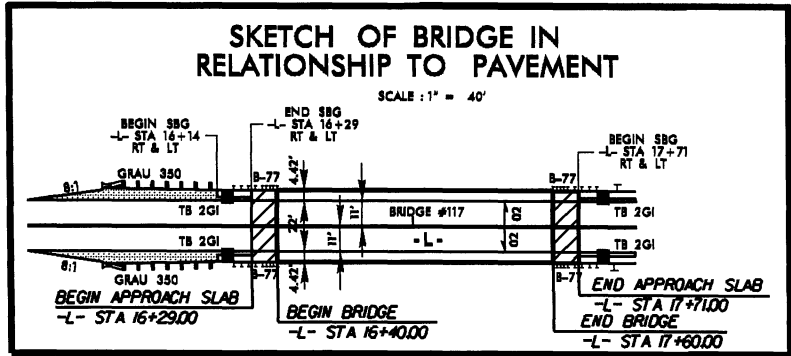
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\$\$\$\$\$USERNAME\$\$\$\$\$

5/14/09
01-AUG-2011 11:17 permits\64619.NEU_rdy_psh_4.dgn

PROJECT REFERENCE NO. B-4619		SHEET NO. 4	
RAW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

NEU PERMIT DRAWING (Aug 1, 2011)

B-4619 BRIDGES NO. 116 AND 117 ON SR 2262 (BETHESDA CHURCH RD) OVER HOG SWAMP



FOR -L- PROFILE SEE SHEET 5
FOR STRUCTURE PLANS, SEE SHEETS S-1 TO S

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES	SITE NO.
1	HOWARD W FAULK JR	DB 7G PG 424	1
1	HOWARD W FAULK JR	DB 7G PG 424	2
2	WILLIAM H MITCHELL	DB 19B PG 319	3

NORTH CAROLINA

DIVISION OF HIGHWAYS
ROBESON COUNTY
TIP PROJECT: (B-4619)
BRIDGES NO. 116 AND 117 ON
SR 2262
(BETHESDA CHURCH RD)
OVER HOG SWAMP

Utility Permit Drawing
Sheet 3 of 4

8 / 1 / 11

WETLAND PERMIT IMPACT SUMMARY																
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS									
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)				
1	-L-13+50 TO 16+34	Aerial Power line	< 0.01				0.10									
2	-L-17+46 TO 20+47	Aerial Power line	< 0.01				0.18									
3	-L-21+85 TO 25+25	Aerial Power line	< 0.01				0.08									
TOTALS:			< 0.01	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note : 4.00 sq. ft. (Each) = 0.0001 ac (Each) permanent impact in the wetlands from pole installation.
 Total = 20.00 sq. ft.
 = 0.0005 ac
 = < 0.01 ac

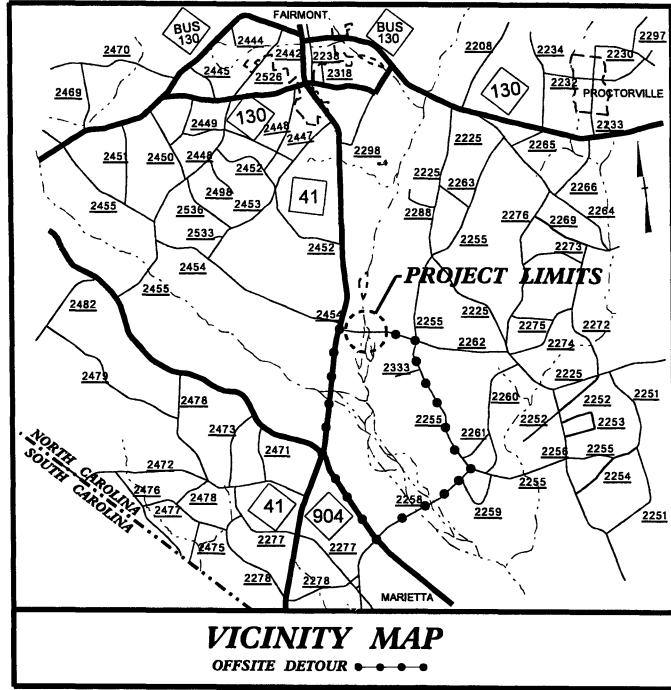
NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 ROBESON COUNTY
 TIP PROJECT (B-4619)

8/1/2011

09-08-14-01

TIP PROJECT: B-4619

SEE SHEET 1-A FOR INDEX OF SHEETS
SEE SHEET 1-B FOR SYMBOLOLOGY SHEET
SEE SHEET 1-C FOR SURVEY CONTROL SHEET



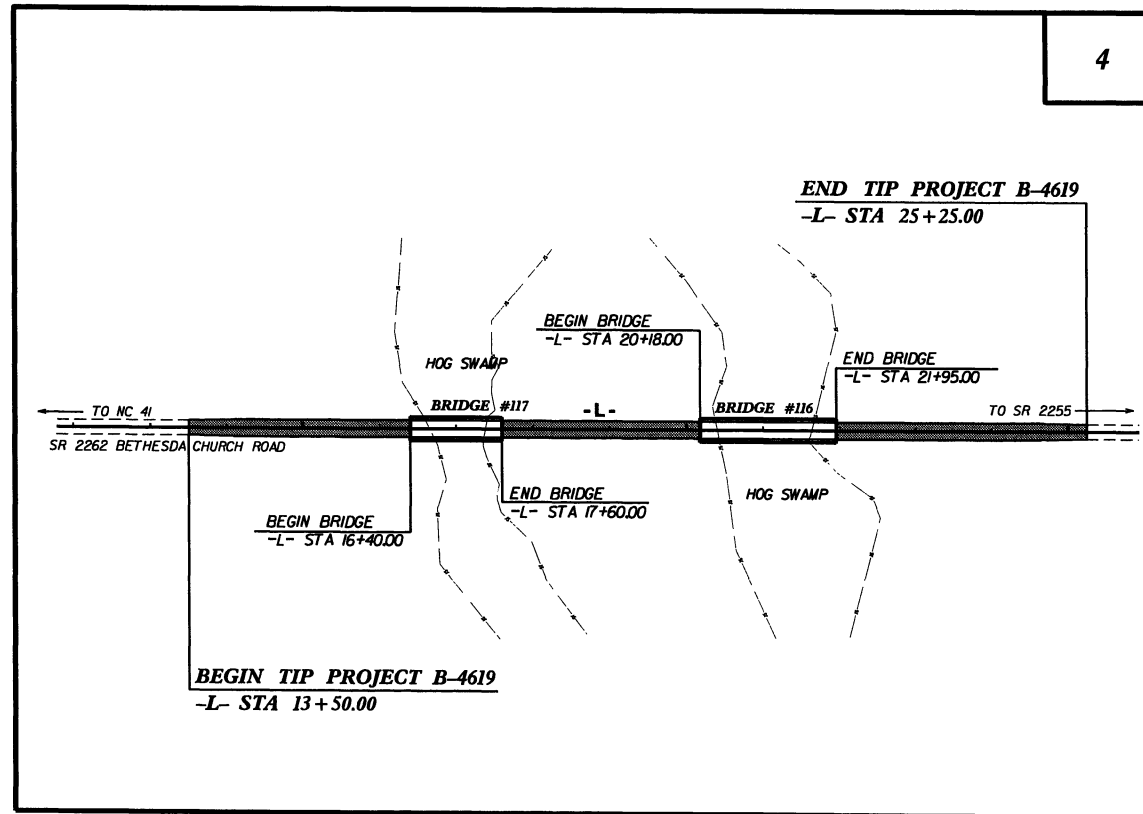
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ROBESON COUNTY

LOCATION: BRIDGES NO. 116 AND 117 ON SR 2262
(BETHESDA CHURCH ROAD) OVER HOG SWAMP

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURES

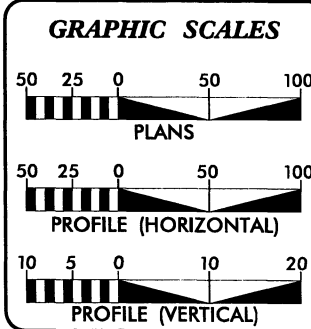
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4619	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33800.1.1	BRZ-2262(1)	P.E.	
33800.2.1	BRZ-2262(1)	RW & UTIL.	



- NOTES:
- CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
 - THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
 - SUB REGIONAL TIER DESIGN GUIDELINES FOR BRIDGE PROJECTS WAS USED TO DEVELOP THIS PROJECT.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2010 =	1182
ADT 2030 =	1700
DHV =	10 %
D =	60 %
T =	3 % *
V =	60 MPH
FUNC. CLASS. :	RURAL LOCAL
* TTST 1% DUAL 2%	

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT B-4619	=	0.167 MI
LENGTH OF STRUCTURE PROJECT B-4619	=	0.056 MI
LENGTH OF TOTAL PROJECT B-4619	=	0.223 MI

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JULY 23, 2012

LETTING DATE: JULY 16, 2013

GARY LOVERING, PE
PROJECT ENGINEER

ANTHONY C. WEST
PROJECT DESIGN ENGINEER

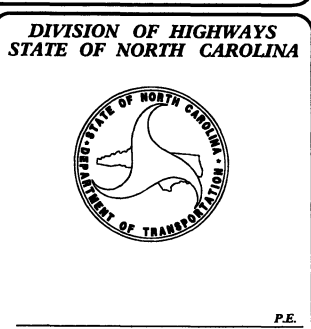
HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

STATE HIGHWAY DESIGN ENGINEER



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\$\$\$\$\$USERNAME\$\$\$\$\$

3/15/06

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.
B-4619

SHEET NO.
1-B

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ _{EP}
Property Corner	-----
Property Monument	□ _{PM}
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	-----
Proposed Wetland Boundary	-----
Existing Endangered Animal Boundary	-----
Existing Endangered Plant Boundary	-----

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or UG Tank Cap	○
Sign	○ _S
Well	○ _W
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	□ _C
Building	□
School	□ _S
Church	□ _{CH}
Dam	□ _D

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	----- _L
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ _{CSX TRANSPORTATION} 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	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Permanent Easement with Iron Pin and Cap Marker	-----

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- _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 HW}
MINOR:	
Head and End Wall	----- _{CONC HW}
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ _{CB}
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	-----

UTILITIES:

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

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	⊕
Telephone Cell Tower	⊗
UG Telephone Cable Hand Hole	□ _{PH}
Recorded UG Telephone Cable	-----
Designated UG Telephone Cable (S.U.E.*)	-----
Recorded UG Telephone Conduit	----- _{TC}
Designated UG Telephone Conduit (S.U.E.*)	----- _{TC}
Recorded UG Fiber Optics Cable	----- _{TF}
Designated UG Fiber Optics Cable (S.U.E.*)	----- _{TF}

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded UG Water Line	-----
Designated UG Water Line (S.U.E.*)	-----
Above Ground Water Line	----- _{A/G Water}

TV:

TV Satellite Dish	⊗
TV Pedestal	⊕
TV Tower	⊗
UG TV Cable Hand Hole	□ _{PH}
Recorded UG TV Cable	----- _{TV}
Designated UG TV Cable (S.U.E.*)	----- _{TV}
Recorded UG Fiber Optic Cable	----- _{TV FO}
Designated UG Fiber Optic Cable (S.U.E.*)	----- _{TV FO}

GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded UG Gas Line	-----
Designated UG Gas Line (S.U.E.*)	-----
Above Ground Gas Line	----- _{A/G Gas}

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
UG 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:

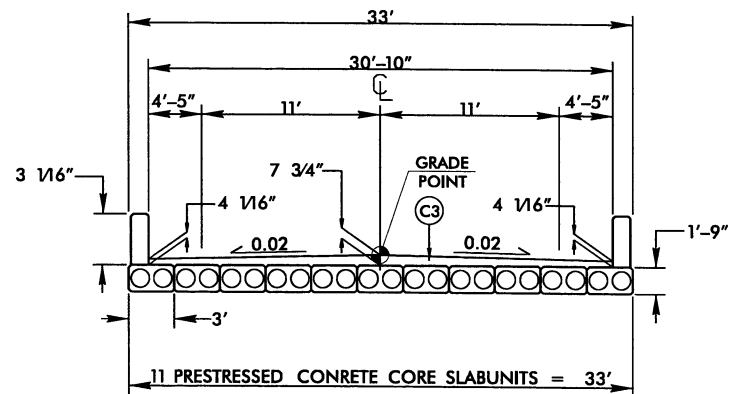
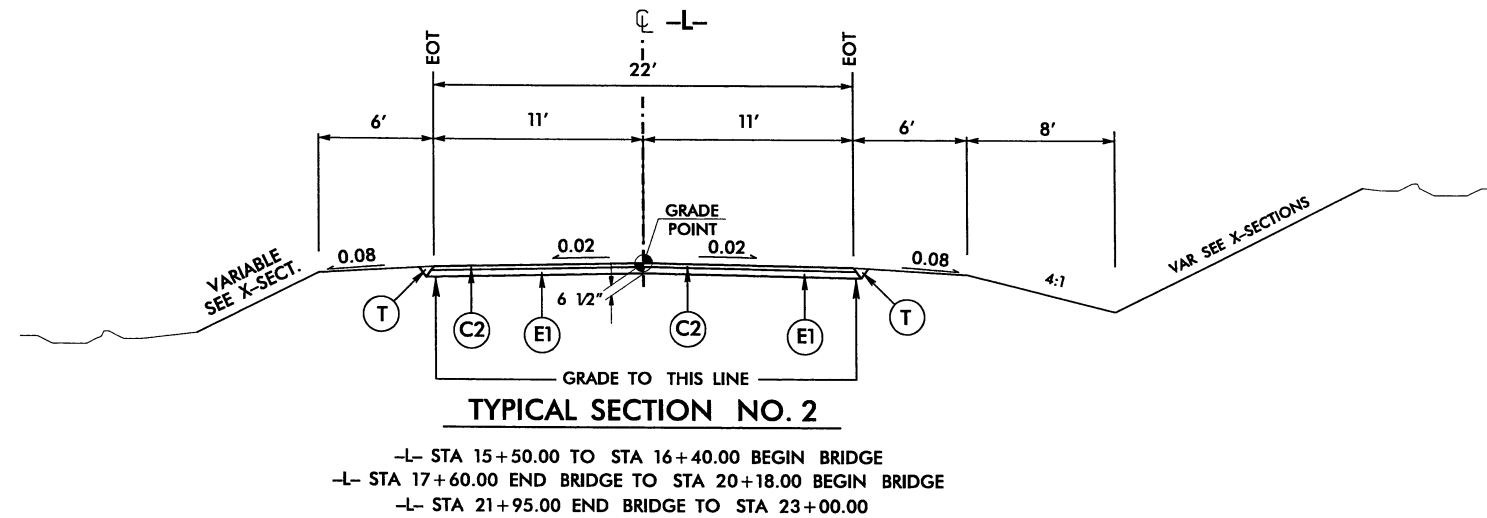
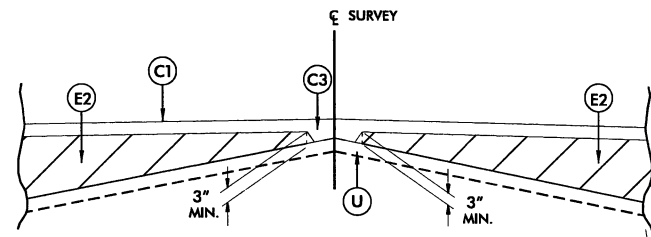
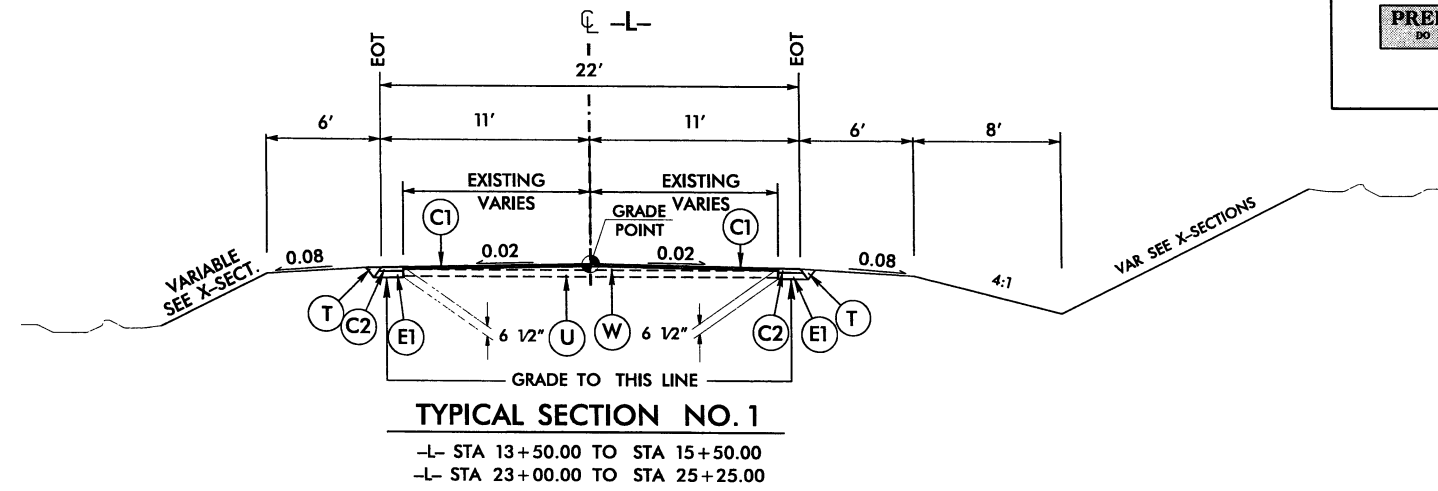
Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown UG Line	----- _{UTIL}
UG Tank; Water, Gas, Oil	□
A/G Tank; Water, Gas, Oil	□
UG Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

6/22/19

PROJECT REFERENCE NO. B-4619	SHEET NO. 2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PAVEMENT SCHEDULE FINAL PAVEMENT DESIGN	
C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 2 1/2" 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 1 1/2" 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. 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 5 1/2" IN DEPTH.
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.



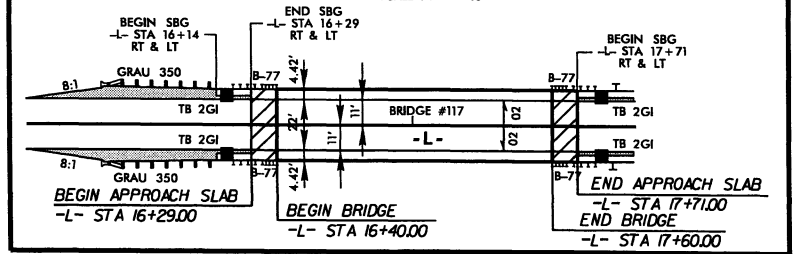
BRIDGE #117 -L- STA 16+40.00 TO STA 17+60.00
 BRIDGE #116 -L- STA 20+18.00 TO STA 21+95.00

NOTE: ROADWAY SHOULDER TO BE WIDENED AN ADDITIONAL 1.5' WHEN GUARDRAIL IS PLACED. SEE PLAN VIEW FOR GUARDRAIL LOCATIONS.

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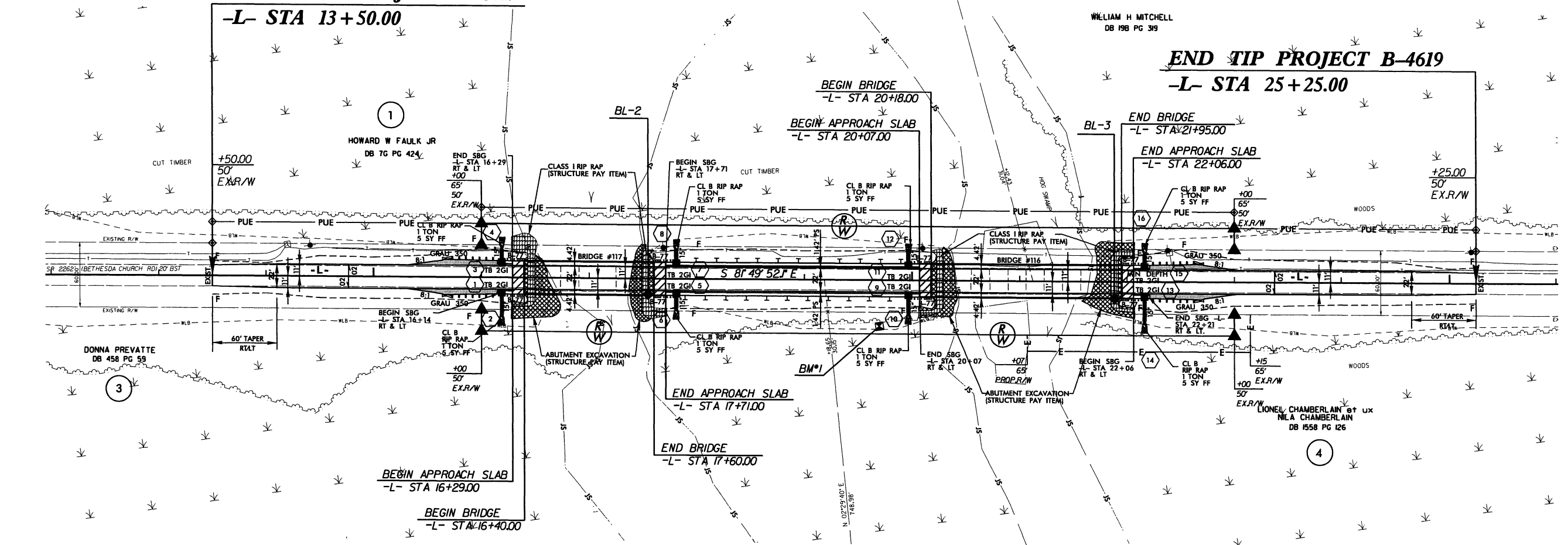
PROJECT REFERENCE NO.		SHEET NO.	
B-4619		4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER			HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

SKETCH OF BRIDGE IN RELATIONSHIP TO PAVEMENT
SCALE : 1" = 40'

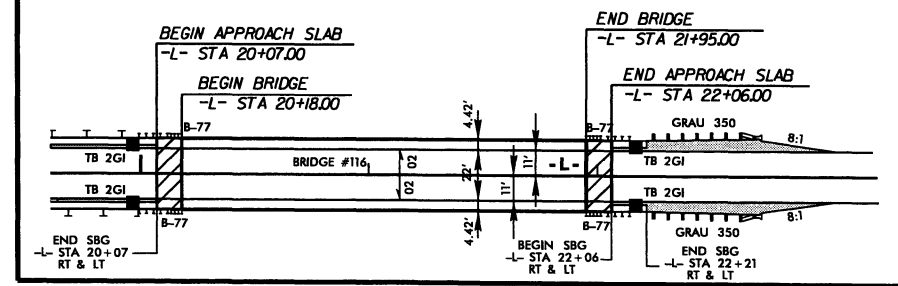


BEGIN TIP PROJECT B-4619
-L- STA 13+50.00

END TIP PROJECT B-4619
-L- STA 25+25.00



SKETCH OF BRIDGE IN RELATIONSHIP TO PAVEMENT
SCALE : 1" = 40'



 PAVED SHOULDER

FOR -L- PROFILE SEE SHEET 5
FOR STRUCTURE PLANS, SEE SHEETS S-1 TO S

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