STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

April 6, 2009

U. S. Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, NC 27587

ATTN: Mr. John Thomas
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 33** for the proposed replacement of Bridge No. 26 over Third Creek on SR 1003 in Davidson County, Federal Aid Project No. BRZ-1003(32); Division 9; TIP No. B-4627

Dear Sir:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. Bridge No. 26 over Third Creek on SR 1003. There will be 60 feet of temporary surface water impacts (0.05 acres) for a temporary causeway.

Please see enclosed copies of the Pre-Construction Notification (PCN), storm water management plan, permit drawings, and design plans for the above-referenced project. The Categorical Exclusion (CE) was completed in August 2007 and the Right-of-Way Consultation was completed in October 2008. Documents were distributed shortly thereafter. Additional copies are available upon request.

This project calls for a letting date of January 19, 2010 and a review date of December 1, 2009.

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

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

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

A copy of this permit application will be posted on the NCDOT Website at: http://www.ncdot.org/doh/preconstruct/pe/. If you have any questions or need additional information, please call James Pflaum at (919) 715-7217.

Sincerely,

E. D. Lusk

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

w/attachment

Mr. Brian Wrenn, NCDWQ (2 Copies)
Ms. Marla Chambers, NCWRC
Ms. Marella Buncick, USFWS

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Greg Perfetti, P.E., Structure Design
Mr. S. P. Ivey, P.E., Division Engineer
Mr. Kent Boyer, DEO
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Ms. Pam Williams, PDEA

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

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	☒ Section 404 Permit ☐ Section 10 Permit	
1b. Specify Nationwide Permit (NWP) number: 33	or General Permit (GP) number:	
1c. Has the NWP or GP number been verified by the Corps?		☐ Yes ☒ No
1d. Type(s) of approval sought from the DWQ (check all that apply): ☐ 401 Water Quality Certification – Regular ☐ 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

2. Project Information

2a. Name of project:	Replacment of Bridge No.26 over Third Creek on SR 1003
2b. County:	Rowan
2c. Nearest municipality / town:	Woodleaf
2d. Subdivision name:	*not applicable*
2e. NCDOT only, T.I.P. or state project no:	B-4627

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	*not applicable*
3c. Responsible Party (for LLC if applicable):	*not applicable*
3d. Street address:	4701 Atlantic Ave, Suite 116
3e. City, state, zip:	Raleigh, NC 27604
3f. Telephone no.:	(919) 431-6527
3g. Fax no.:	(919) 431-2002
3h. Email address:	jrpflaum@ncdot.gov

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

B. Project Information and Prior Project History		
1. Property Identification		
1a. Property identification no. (tax PIN or parcel ID):	*not applicable*	
1b. Site coordinates (in decimal degrees):	Latitude: 35.785495 (DD.DDDDDD)	Longitude: - 80.595197 (-DD.DDDDDD)
1c. Property size:	17 acres	
2. Surface Waters		
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Third Creek	
2b. Water Quality Classification of nearest receiving water:	C	
2c. River basin:	Yadkin-Pee Dee	
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: Forested area with rural residential housing and some pasture land.		
3b. List the total estimated acreage of all existing wetlands on the property:		
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 350		
3d. Explain the purpose of the proposed project: To replace a structurally deficient bridge.		
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 136-foot bridge long, 26-foot wide, 3 span reinforced concrete deck on I-beams with a 240-foot, 32-foot wide, 3 span prestressed concrete girder 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: All stream perennial, no wetlands	☐ 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):	Agency/Consultant Company: 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?	☐ 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)
W1 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
W2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
W3 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
W4 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
W5 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
W6 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
				2g. **Total wetland impacts**	

2h. Comments:

3. Stream Impacts

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

3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
S1 ☐ P ☒ T	Fill	Third Creek	☒ PER ☐ INT	☒ Corps ☐ DWQ	55	60
S2 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
S3 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
S4 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
S5 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
S6 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
					3h. **Total stream and tributary impacts**	60 Temp

3i. Comments:

Fill is proposed for a temporary causeway. The causeway will need to be the planned size to allow a large crane access for

setting the bridge girders. This crane will need a 20' wide causeway to support the track width and access to the southern end of the bent cap.

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	

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 104 feet longer than the existing bridge; the proposed bridge will be at approximately the same grade as the existing structure; an off site detour will be used; 1 bent will be removed from the stream; no bents will be placed in the stream.

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

NCDOT will implement Best Management Practices for Bridge Demolition and Removal. NCDOT BMP's for the Protection of Surface Waters will be strictly enforced during construction of this project.

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
2b. If yes, mitigation is required by (check all that apply):	☐ DWQ ☐ Corps
2c. If yes, which mitigation option will be used for this project?	☐ Mitigation bank ☐ Payment to in-lieu fee program ☐ Permittee Responsible Mitigation

3. Complete if Using a Mitigation Bank

3a. Name of Mitigation Bank: not applicable

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

3c. Comments:

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

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

4h. Comments:

5. Complete if Using a Permittee Responsible Mitigation Plan

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

6. **Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ**				
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?				☐ Yes ☒ No
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.				
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
	6f. **Total buffer mitigation required:**			
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).				
6h. Comments:				

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

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

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	☒ Yes	☐ No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	☒ Yes	☐ No
5c. If yes, indicate the USFWS Field Office you have contacted.	☒ Raleigh ☐ Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? Field surveys, NHP database, and USFWS Website for Rockingham County		
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? Categorical Exclusion for B-4627		
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: Hydraulics Unit coordinating with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA maps		

Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name	E. P. Lusk Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	4.7.09 Date

STORMWATER MANAGEMENT PLAN

Project: 33802.1.1, TIP No. B-4627 March 24, 2009
Rowan County
Hydraulics Project Manager: Tina Swiezy, P.E. (RK&K Engineers)
Marshal Clawson, P.E. (NCDOT Hydraulics Unit)

ROADWAY DESCRIPTION

The project consists of replacing Bridge #26 and improving the roadway bridge approaches in Rowan County. The bridge is located on Cool Springs Road (SR1003) over Third Creek. The overall length of the project is approximately 0.177 mi. The typical bridge section consists of two 12' lanes with 4' width shoulders. The project will be in standard right-of-way and not controlled access. The drainage system consists of a grated inlet and side stormwater ditches.

Table 1- List of Stream Crossings in Project B-4627

Site #	Station	Stream Name	Drainage area	Proposed Structure
1	-L- 27+66.5	Third Creek	100.5 Sq.Mi.	3-span 54" Pre-stressed concrete Bridge

ENVIRONMENTAL DESCRIPTION

The project is located in the Yadkin Pee-Dee River Basin. There are no buffer or stream rules and regulations mandated by North Carolina Department of Natural Resources (NCDENR). Third fork is classified as 'C' in the NCDENR Division of Water Quality "Redbook". Class C designates freshwater for secondary recreation, fishing, and aquatic life. There are no wetland sites along the proposed project. The crossing lies in a ZONE AE on the FEMA flood maps no. 3710572400J, preliminary May 30, 2007.

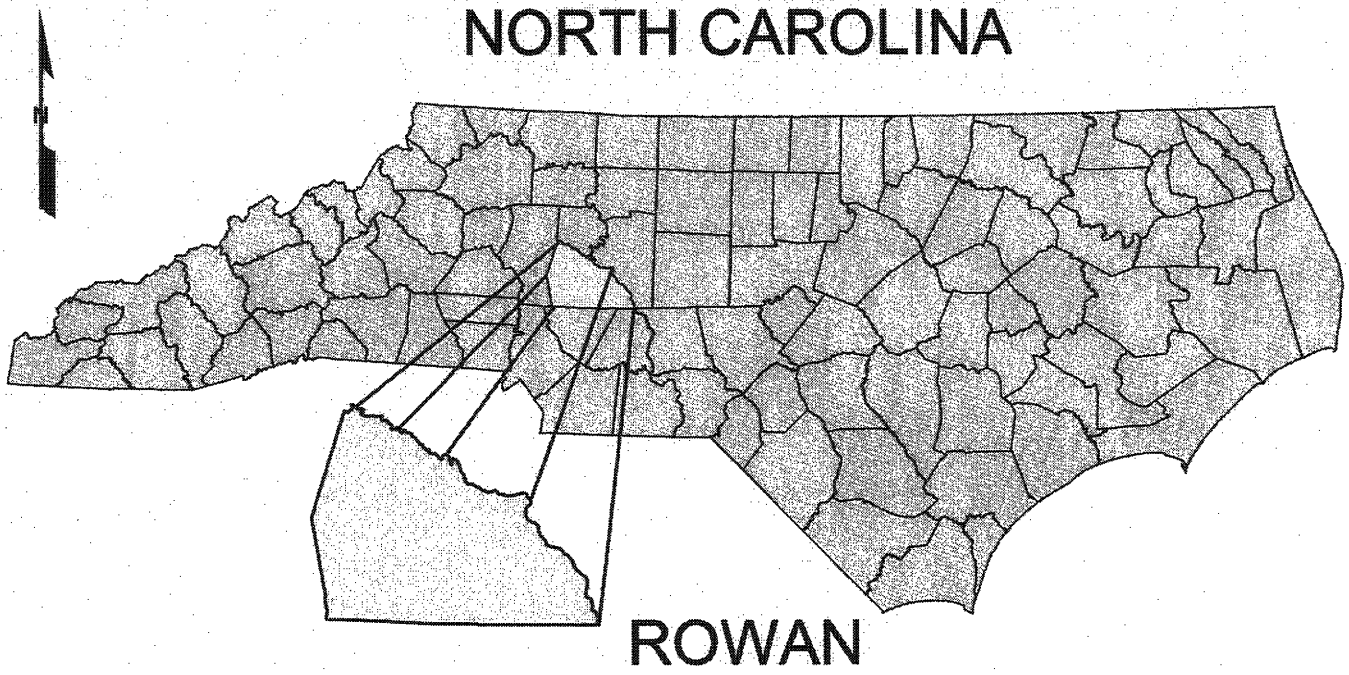
BEST MANAGEMENT PRACTICES AND MAJOR STRUCTURES

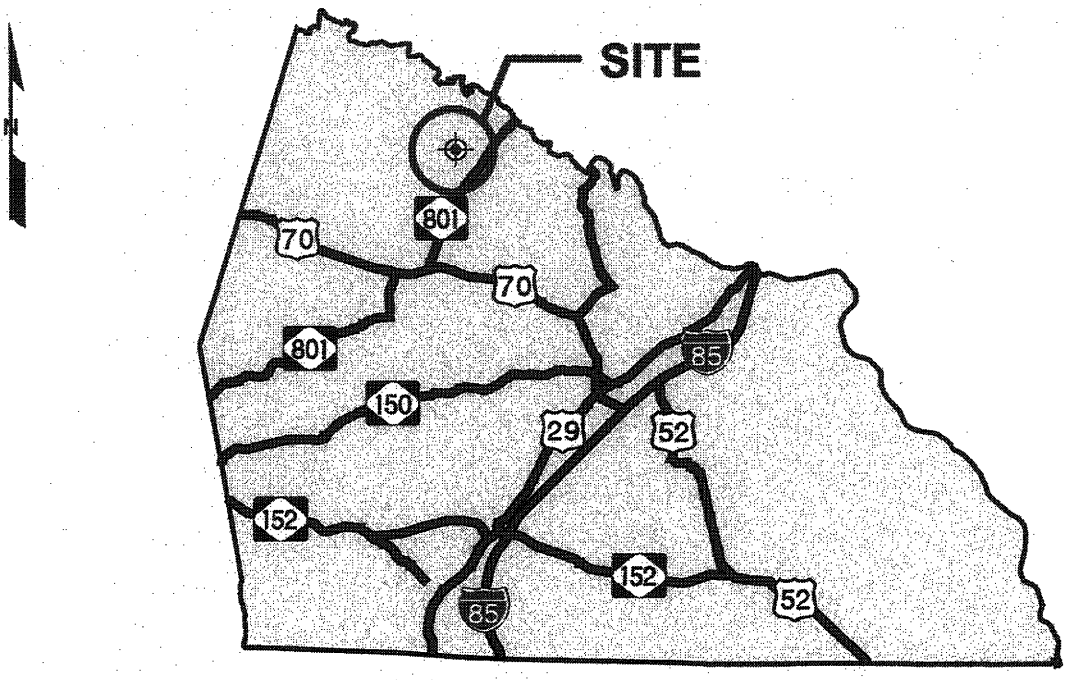
The primary goal of Best Management Practices (BMPs) is to prevent degradation of the state's surface waters by the location, construction and operation of the highway system. BMPs are activities, practices and procedures taken to prevent or reduce stormwater pollution and erosion to the stream and its' banks. The BMPs that will be used on this project to reduce stormwater impacts are riprap outlet pads. The following is a list of riprap outlet pads used on the project:

-L- 26+00 RT	-L- 29+00 RT
Q10=1.2 cfs	Q10=8.3cfs
V10=0.94 ft/s	V10=4.2 ft/s

MAJOR STRUCTURES

The bridge was lengthened and the number of spans reduced to minimize impacts to the existing stream as well as minimize fill in surface water. The existing bridge is a 5-span concrete bridge, with an interior bent in the center of the stream, while the proposed structure is a 3-span pre-stressed concrete girder bridge with no interior bents in the water. The proposed deck drains are not directly over the stream.



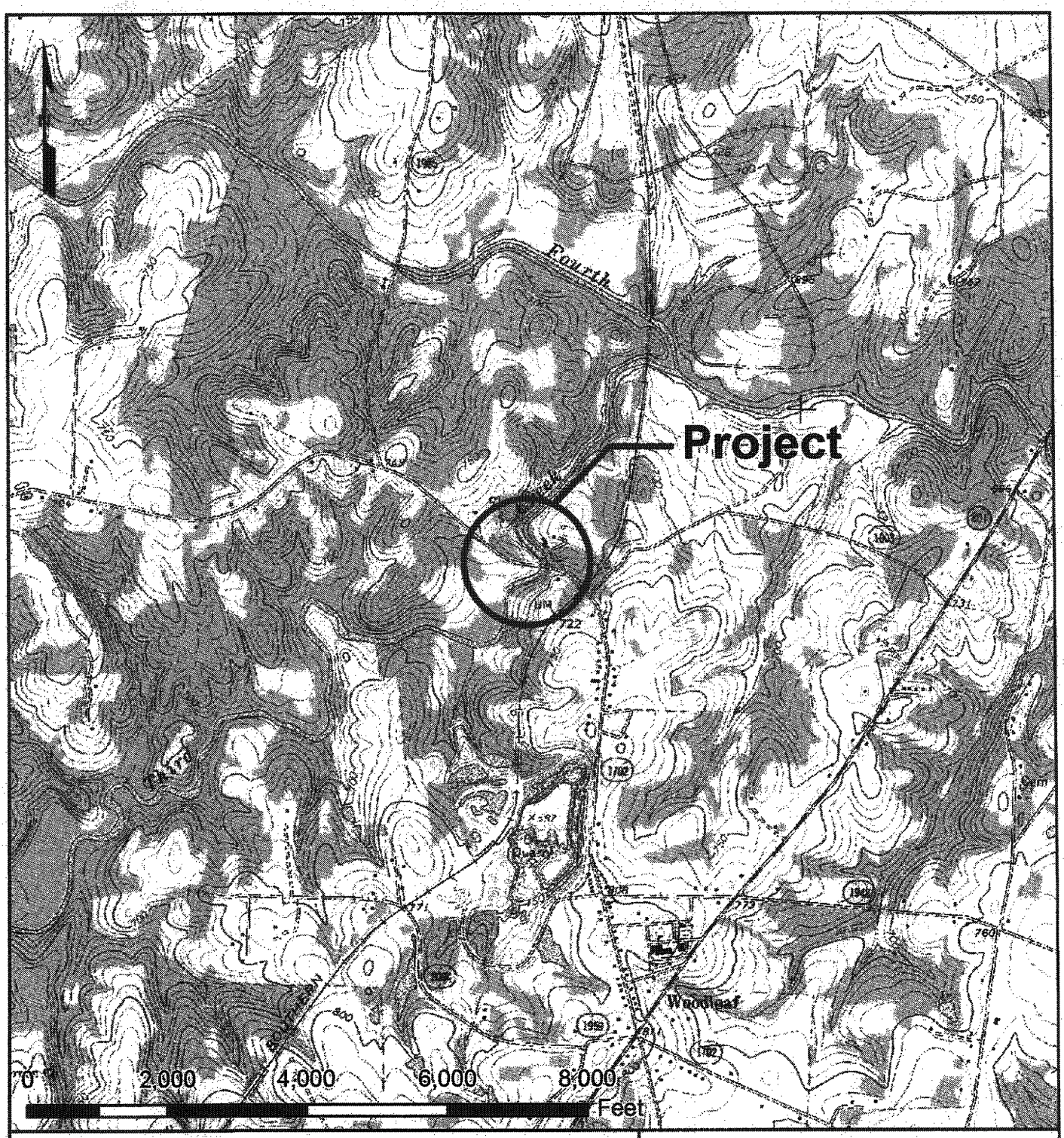


VICINITY MAPS

NCDOT

DIVISION OF HIGHWAYS
ROWAN COUNTY
PROJECT: 33802.1.1 (B-4627)
BRIDGE NO. 26
ON SR 1003 AND APPROACHES
OVER THIRD CREEK

DECEMBER 2008



1 inch equals 2,000 feet

LOCATION

NCDOT

DIVISION OF HIGHWAYS
ROWAN COUNTY
PROJECT: 33802.1.1 (B-4627)
BRIDGE NO. 26
ON SR 1003 AND APPROACHES
OVER THIRD CREEK

DECEMBER 2008

Source: USGS 7.5 Minute Quadrangle, Cooleemee, NC

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	L - 27+75	Bridge							0.052		60	
TOTALS:									0.052		60	

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROWAN COUNTY
PROJECT: 33802.1.1 (B-4627)

SHEET 11/19/08

ATN Revised 3/31/05

PROP. NO.	PROPERTY OWNER NAME	PROP. OWNER ADDRESS
1	Bernard T. Smith & Dianne Smith	PO Box 105, Woodleaf, NC 27054-0105
2	Michael A. Frost & Mariel A. Frost	10375 Cool Springs Road, Woodleaf, NC 27054-9607
3	William Vanderblt Godley, Jr.	10245 Cool Springs Road, Woodleaf, NC 27054-9606

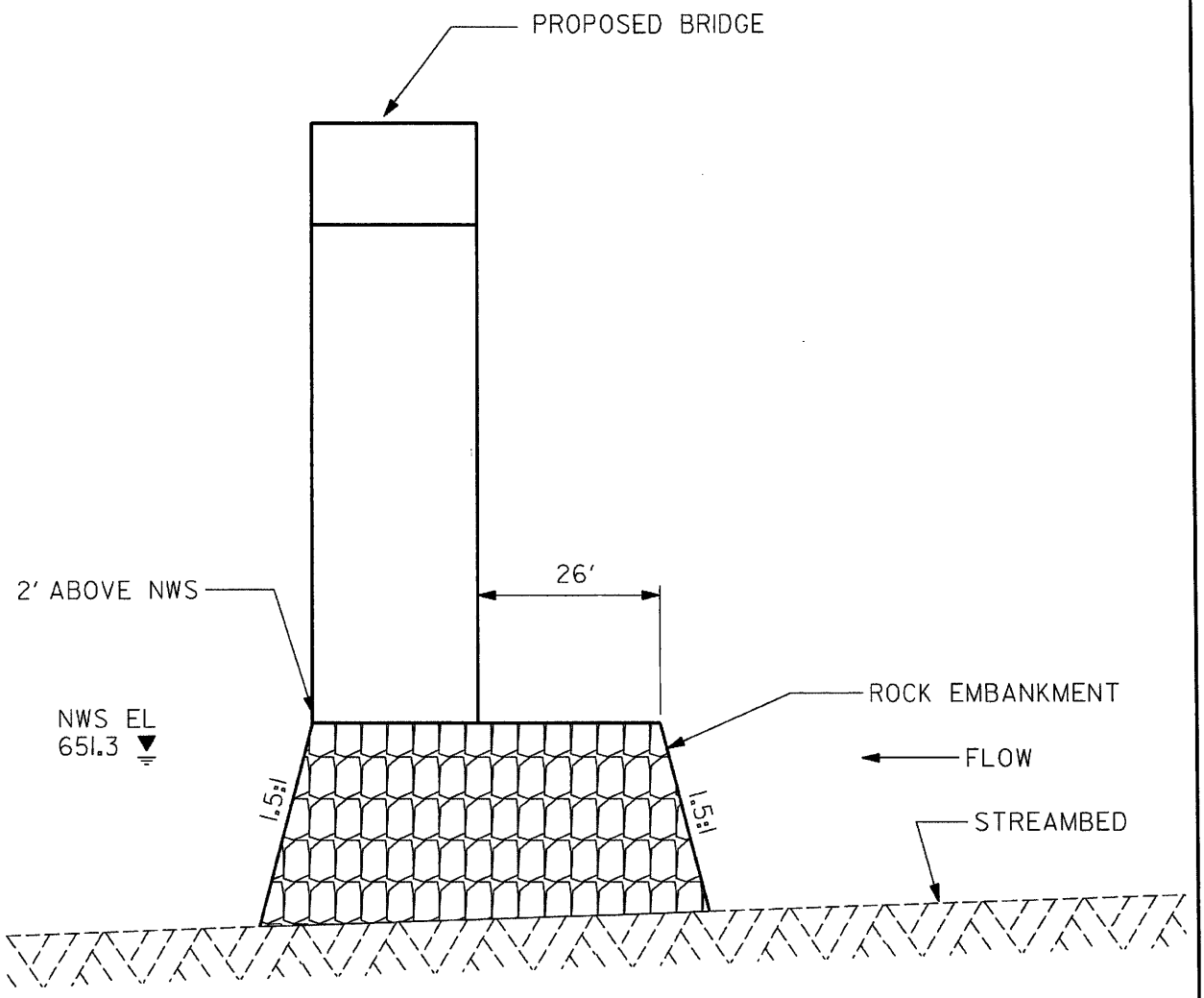
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROWAN COUNTY
PROJECT: 33802.1.1 (B-4627)

11/19/2008

R:/z-misc/Hydro/Wetprop.xls

DETAIL OF CAUSEWAY



NOT TO SCALE

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

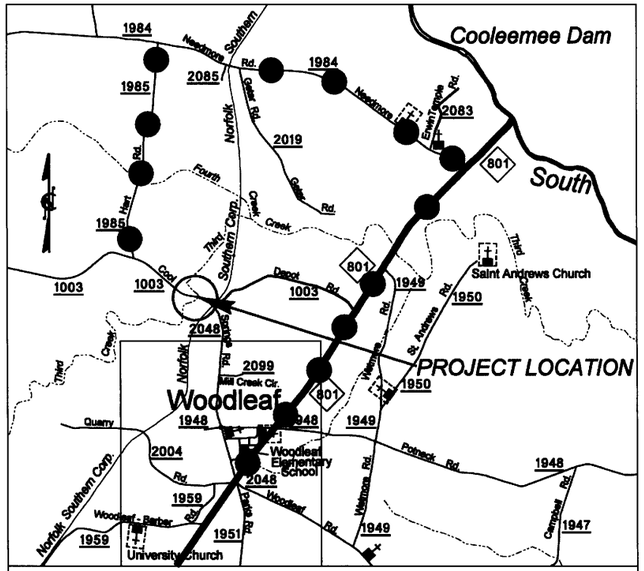
PROJECT: 33802.1.1 (B-4627)

BRIDGE NO. 26 ON SR 1003
(COOL SPRINGS RD.)
OVER THIRD CREEK

SHEET OF

09/08/99

See Sheet 1-A For Index of Sheets



VICINITY MAP

DENOTES OFF–SITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

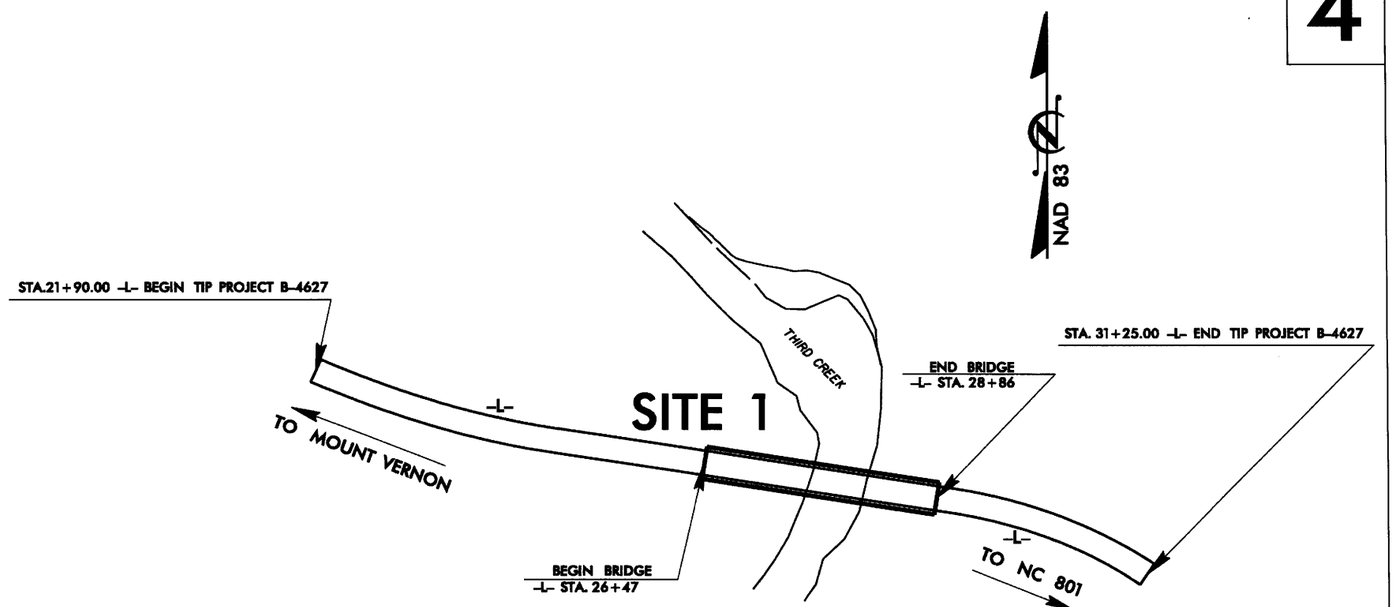
ROWAN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B–4627	1	
STATE PROJ.NO.	F.A.PROJ.NO.	DESCRIPTION	
33802.1.1	BRZ–1003 (32)	PE	
		R/W & UTIL	

LOCATION: BRIDGE NO. 26 ON SR 1003 AND APPROACHES OVER THIRD CREEK

TYPE OF WORK: STREAM IMPACTS PERMIT

4



NOTE: THIS PROJECT IN NOT WITHIN ANY MUNICIPAL BOUNDARIES

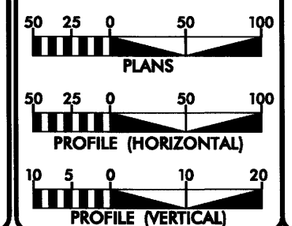
NOTE: THIS NOT A CONTROLLED ACCESS PROJECT

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

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

CONTRACT: TIP PROJECT: B–4627

GRAPHIC SCALES



DESIGN DATA

ADT 2007 = 3320 vpd
ADT 2030 = 5600 vpd
DHV = 11 %
D ≐ 60 %
T = 3 % *
V = 55 MPH

* TTST 1 DUAL 2

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B–4627 = 0.132

LENGTH OF STRUCTURE TIP PROJECT B–4627 = 0.045

TOTAL LENGTH TIP PROJECT B–4627 = 0.177

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JANUARY 16, 2009

LETTING DATE: JANUARY 19, 2010

JIMMY GOODNIGHT PE
PROJECT ENGINEER

TIM GOINS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

P.E.
STATE HIGHWAY DESIGN ENGINEER

1/15/2009
R:\Hydraulics\Permit\b4627_rdy_tsh_permit.dgn
aburnette

ENGLISH

B-4627 | 4

RW SHEET NO.

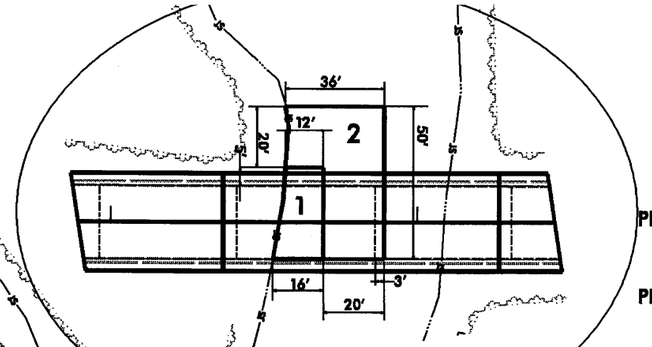
ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PHASE 1 – CAUSEWAY PAD TO CONSTRUCT BENT #1. TO BE REMOVED AFTER BENT #1 HAS BEEI CONSTRUCTED.

PHASE 2 – CAUSEWAY PAD TO REMOVE EXISTING BENT & PLACE NEW GIRDERS..



DETAIL A
NTS

REVISIONS

NAD 83/95

PC Sta. 19+74.83

BEGIN CONSTRUCTION STA. 21+50.00
(PROPOSED LATERAL V DITCH)

BEGIN APPROACH SLAB
–L– STA. 26+22.13

PT Sta. 25+07.22

STA. 21+90.00 –L– BEGIN TIP PROJECT B-4627
BEGIN GRADE

PROP LATERAL V DITCH SEE DETAIL A

BEGIN BRIDGE
–L– STA. 26+47

DETAIL A

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

SITE 1

STA. 30+50.00 –L– END TIP PROJECT B-4627

END APPROACH SLAB
–L– STA. 29+10

END BRIDGE
–L– STA. 28+86

END GRADE
–L– STA. 30+00

PC Sta. 28+96.81

PT Sta. 31+30.20

PCC Sta. 30+72.97

THIRD CREEK

COOL SPRINGS RD.
SR 1003

3/17/2009
R:\Hydraulics\Permits\b4627_rdy_psh_permit.dgn

AT THE FOLLOWING LOCATIONS:
L 26+60
L 26+78
L 26+96
L 27+14
L 27+32
L 28+25
L 28+43
L 28+61
L 28+79

NOTE: OUTLET HAS DETACHED FROM MAIN PIPE. MAINTENANCE NEEDED: COLLAR AND REATTACH PIPE SECTION, PLACE RIPRAP AT THE OUTLET.

PC Sta. 19+74.83

BEGIN CONSTRUCTION STA. 21+50.00
(PROPOSED LATERAL V DITCH)

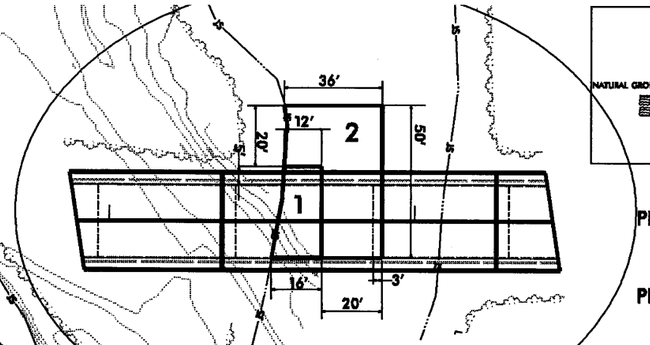
BEGIN APPROACH SLAB
-L- STA. 26+22.13

PT Sta. 25+07.22

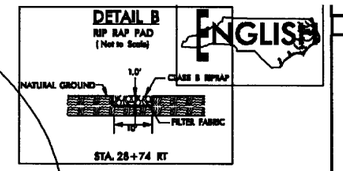
STA. 21+90.00 -L- BEGIN TIP PROJECT B-4627
BEGIN GRADE

BEGIN BRIDGE
-L- STA. 26+47

DETAIL A
NTS



DETAIL B
RIP RAP PAD
(Not to Scale)



PHASE 1 – CAUSEWAY PAD TO CONSTRUCT BENT #1. TO BE REMOVED AFTER BENT #1 HAS BEEI CONSTRUCTED.

PHASE 2 – CAUSEWAY PAD TO REMOVE EXISTING BENT & PLACE NEW GIRDERS..

B-4627 | 4
NW SHEET NO.
ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

STA. 30+50.00 -L- END TIP PROJECT B-4627

SITE 1

END APPROACH SLAB
-L- STA. 29+10

END BRIDGE
-L- STA. 28+86

END GRADE
-L- STA. 30+00

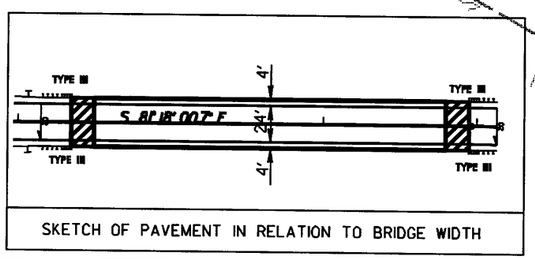
PC Sta. 28+96.81

PT Sta. 31+30.20

PCC Sta. 30+72.97

NAD 83/95

PROP. APPROACH SLAB



SKETCH OF PAVEMENT IN RELATION TO BRIDGE WIDTH

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

NOTE: SEE SHEET 5 FOR -L- PROFILE

REVISIONS

3/17/2009
C:\Projects\Hydraulics\Permits\b4627_rdy_psh_permit_contours.dgn

B-4627 | 5

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADII, VERTICAL CURVE K-FACTOR AND THE ASSOCIATED STOPPING SIGHT DISTANCE. THESE PROPOSED DESIGN ELEMENTS SUPPORT A 40-MPH DESIGN.

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 9300	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 669.3	FT
BASE DISCHARGE	= 13000	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 671.2	FT
OVERTOPPING DISCHARGE	= 16000	CFS
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING ELEVATION	= 672.6	FT
DATE OF SURVEY	= 01/29/08	
W.S. ELEVATION AT DATE OF SURVEY	= 651.3	FT

BM#1 ELEVATION = 697.11
N 745056 E 1525588
BL STATION 12+22 154 RIGHT
8" SPIKE IN ROOT OF DOUBLE BEECH TREE
-L- STA. 14+76.38 167.27' RIGHT

BM#2 ELEVATION = 664.63
N 744451 E 1526456
BL STATION 22+19 205 RIGHT
8" SPIKE IN ROOT OF 30" BIRCH TREE
-L- STA. 24+51.57 200.09' RIGHT

END GRADE
-L- STA. 30+00.00
ELEV. 694.19

BEGIN GRADE
-L- STA. 21+90.00
ELEV. 676.96

PI = 25+00.00
EL = 665.70'
VC = 620'
K = 66

BEGIN BRIDGE
-L- STA. 26+47 +/-

END BRIDGE
-L- STA. 28+86 +/-

PI = 29+50.00
EL = 691.58'
VC = 100'
K = 192

694.19

698.13

(-) 4.9610%

(-) 3.6332%

(-) 1.5000%

(+) 5.7501%

(+) 5.2290%

BEGIN LAT. V DITCH
STA. 21+50.00 RT
EL. 676.534'

STA. 23+50.00 RT
EL. 666.612'

END LAT. V DITCH
STA. 26+00.00 RT
EL. 662.862'

2' ABOVE NWS

NWS EL
651.3

1.5: FILL SLOPE

CL II RIP RAP

NOTE: SEE SHEET 4 FOR -L- DESIGN

710
700
690
680
670
660
650

18 19 20 21 22 23 24 25 26 27 28 29 30 31

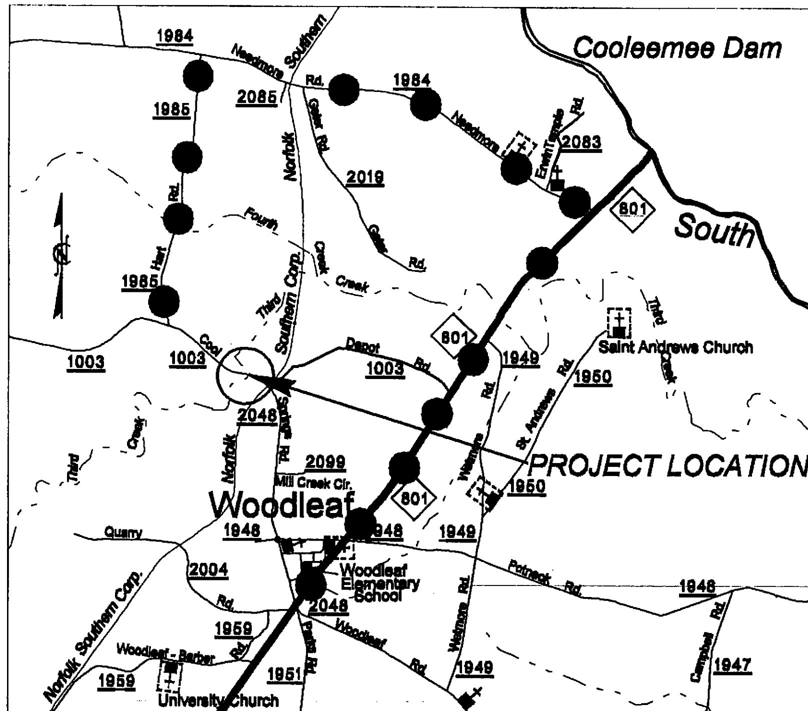
3/17/2009
F:\Hydraulics\permit\b4627_rdy_pfl_permit.dgn

09/08/99

TIP PROJECT: B-4627

CONTRACT:

See Sheet 1-A For Index of Sheets



VICINITY MAP

DENOTES OFF-SITE DETOUR

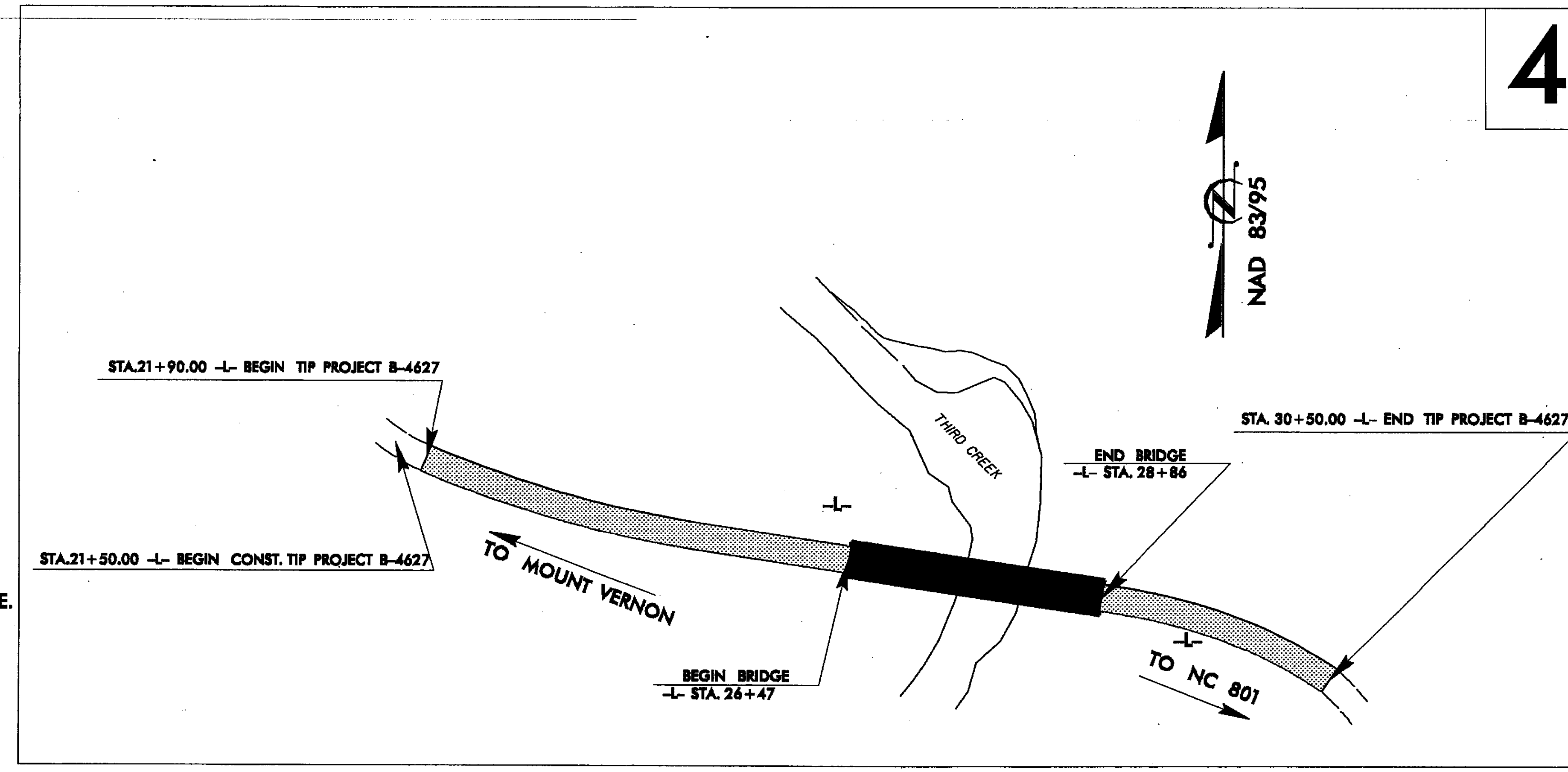
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ROWAN COUNTY

LOCATION: BRIDGE NO. 26 ON SR 1003 AND APPROACHES OVER THIRD CREEK

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

STATE	STATE PROJECT REFERENCE NO.		SHEET NO.	TOTAL SHEETS
N.C.	B-4627		1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION		
33802.1.1	BRZ-1003 (32)	PE		
33802.2.1	BRZ-1003 (32)	R/W & UTIL		



DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADII, VERTICAL CURVE K-FACTOR AND THE ASSOCIATED STOPPING SIGHT DISTANCE. THESE PROPOSED DESIGN ELEMENTS SUPPORT A 40-MPH DESIGN.

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 2008 = 3320 vpd
ADT 2030 = 5600 vpd
DHV = 11 %
D = 60 %
T = 3 % *
V = 55 MPH

* TTST 1 DUAL 2

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4627 = 0.125

LENGTH OF STRUCTURE TIP PROJECT B-4627 = 0.045

TOTAL LENGTH TIP PROJECT B-4627 = 0.170

Prepared In the Office of:

DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JANUARY 16, 2009

JIMMY GOODNIGHT PE
PROJECT ENGINEER

LETTING DATE: JANUARY 19, 2010

TIM GOINS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

P.E.

-MAR-2009 09:15
\roadway\proj\b4627_rdy_tsh.dgn
$$$USERNAME$$$

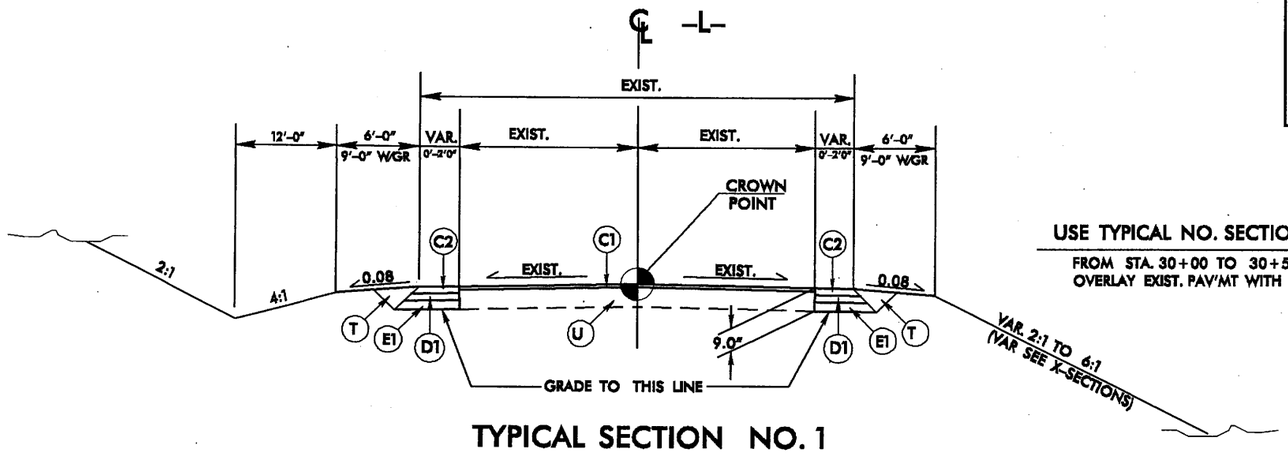
6/2/99

PROJECT REFERENCE NO.	SHEET NO.
B-4627	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 105 LBS. PER SQ. YD.
C2	PROP. APPROX. 2½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 197.50 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
J	PROP. VAR. DEPTH AGGREGATE BASE COURSE.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.

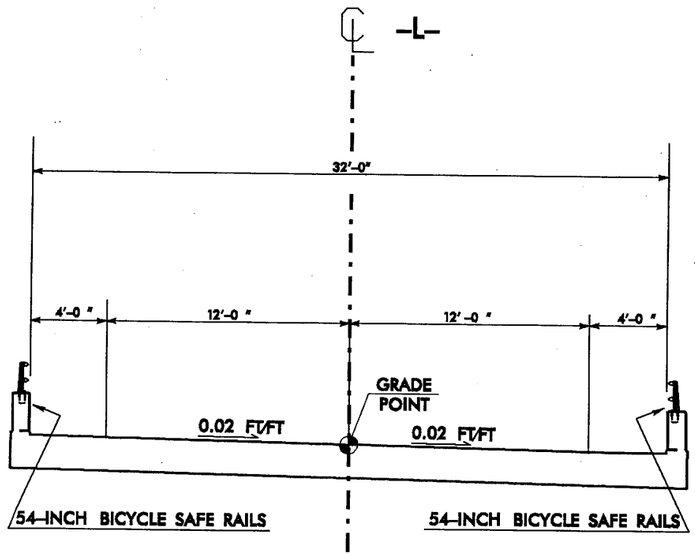
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

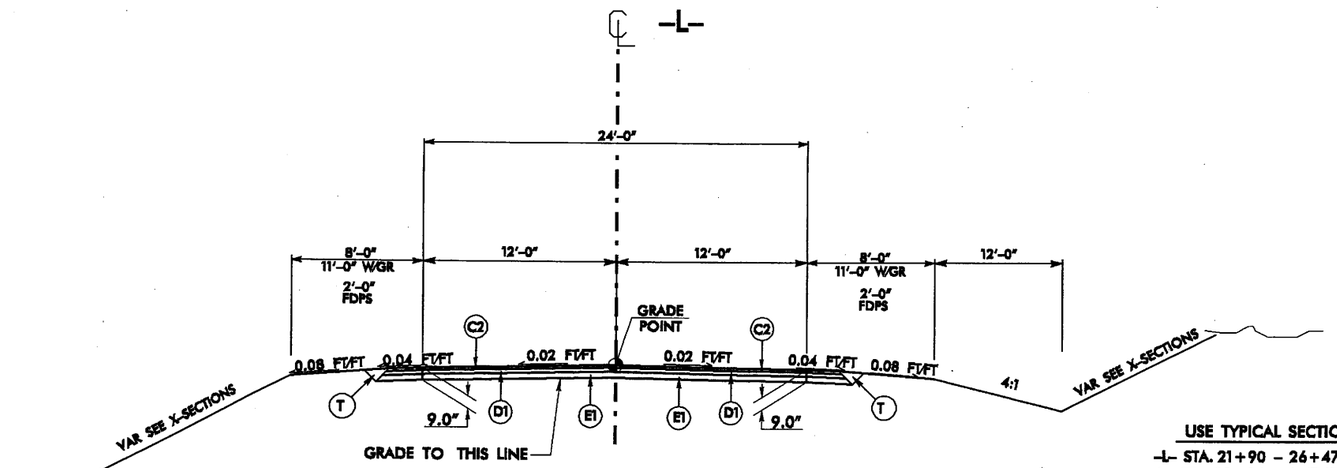
USE TYPICAL NO. SECTION NO. 1

FROM STA. 30+00 TO 30+50
OVERLAY EXIST. PAV'MT WITH 1 1/4" (SF9.5A)



TYPICAL SECTION ON BRIDGE

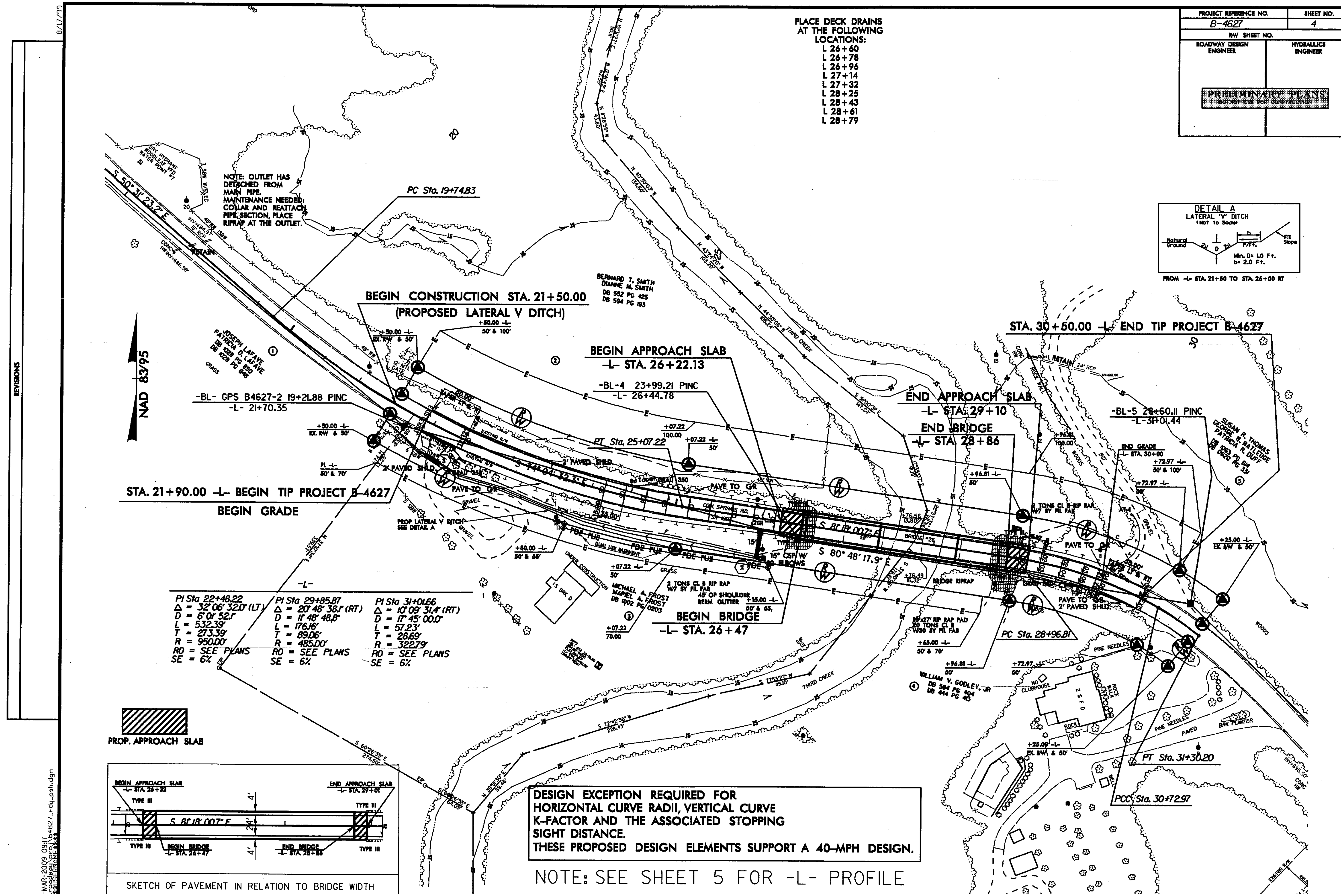
–L– STA. 26+47 TO 28+86



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2

–L– STA. 21+90 – 26+47 +/– (BEG. BRDG)
–L– STA. 28+86 +/– (END BRDG) – 30+00



PROJECT REFERENCE NO. B-4627
SHEET NO. 4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
PLACE DECK DRAINS AT THE FOLLOWING LOCATIONS:
L 26+60
L 26+78
L 26+96
L 27+14
L 27+32
L 28+25
L 28+43
L 28+61
L 28+79
DETAIL A
LATERAL 'V' DITCH
(Not to Scale)
Natural Ground
Fill Slope
Min. D= 1.0 Ft.
b= 2.0 Ft.
FROM -L- STA. 21+50 TO STA. 26+00 RT
NOTE: OUTLET HAS DETACHED FROM MAIN PIPE. MAINTENANCE NEEDED: COLLAR AND REATTACH PIPE SECTION, PLACE RIPRAP AT THE OUTLET.
PC Sta. 19+74.83
BEGIN CONSTRUCTION STA. 21+50.00
(PROPOSED LATERAL V DITCH)
BERNARD T. SMITH
DIANNE M. SMITH
DB 552 PG 425
DB 594 PG 193
JOSEPH LAFAVE
PATRICIA D. LAFAVE
NAD 83/95
-BL- GPS B4627-2 19+21.88 PINC
-L- 21+70.35
BEGIN APPROACH SLAB
-L- STA. 26+22.13
-BL-4 23+99.21 PINC
-L- 26+44.78
PT Sta. 25+07.22
STA. 30+50.00 -L- END TIP PROJECT B-4627
END APPROACH SLAB
-L- STA. 29+10
END BRIDGE
-L- STA. 28+86
-BL-5 28+60.11 PINC
-L- 31+01.44
SUSAN R. THOMAS
GEORGE R. RATLEDGE
PATRICIA R. DUFF
STA. 21+90.00 -L- BEGIN TIP PROJECT B-4627
BEGIN GRADE
S 50° 31' 23.2" E
S 74° 04' 32.3" E
S 81° 18' 00.7" E
S 80° 48' 17.9" E
PAVE TO GR
2' PAVED SHLD.
PROP LATERAL V DITCH SEE DETAIL A
THIRD CREEK
15" CSP W/ ELBOWS
2 TONS CL B RIP RAP W/ 7 SY FIL FAB
48' OF SHOULDER BERM GUTTER
BEGIN BRIDGE
-L- STA. 26+47
MICHAEL A. FROST
MARIEL A. FROST
DB 1002 PG 0203
BRIDGE RIPRAP
PC Sta. 28+96.81
WILLIAM V. GODLEY, JR
DB 584 PG 404
DB 444 PG 43
END GRADE -L- STA. 30+00
PT Sta. 31+30.20
PCC Sta. 30+72.97
-L-
PI Sta 22+48.22
Δ = 32° 06' 32.0" (LT)
D = 6° 01' 52.1"
L = 532.39'
T = 273.39'
R = 950.00'
RO = SEE PLANS
SE = 6%
PI Sta 29+85.87
Δ = 20° 48' 38.1" (RT)
D = 11° 48' 48.8"
L = 176.16'
T = 89.06'
R = 485.00'
RO = SEE PLANS
SE = 6%
PI Sta 31+01.66
Δ = 10° 09' 31.4" (RT)
D = 17° 45' 00.0"
L = 57.23'
T = 28.69'
R = 322.79'
RO = SEE PLANS
SE = 6%
PROP. APPROACH SLAB
BEGIN APPROACH SLAB -L- STA. 26+32
END APPROACH SLAB -L- STA. 29+01
TYPE III
S 81° 18' 00.7" E
BEGIN BRIDGE -L- STA. 26+47
END BRIDGE -L- STA. 28+86
SKETCH OF PAVEMENT IN RELATION TO BRIDGE WIDTH
DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADII, VERTICAL CURVE K-FACTOR AND THE ASSOCIATED STOPPING SIGHT DISTANCE.
THESE PROPOSED DESIGN ELEMENTS SUPPORT A 40-MPH DESIGN.
NOTE: SEE SHEET 5 FOR -L- PROFILE
REVISIONS
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
B-4627	5

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

5/14/99

DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADII,
VERTICAL CURVE K-FACTOR AND THE ASSOCIATED STOPPING SIGHT DISTANCE.
THESE PROPOSED DESIGN ELEMENTS SUPPORT A 40-MPH DESIGN.

-L-

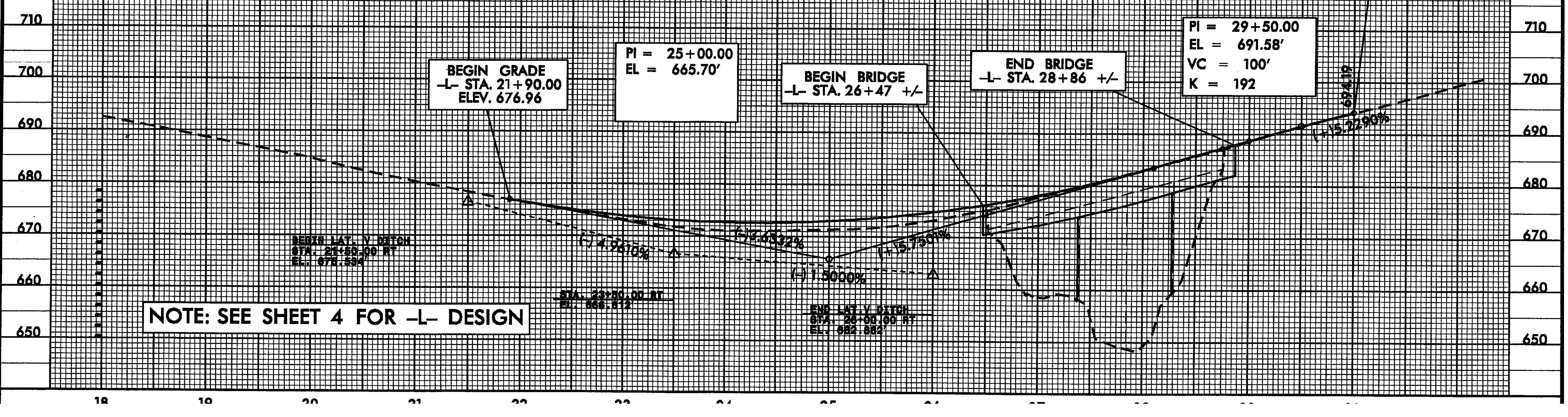
BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	*9300*	*CFS*
DESIGN FREQUENCY	=	*25*	*YRS*
DESIGN HW ELEVATION	=	*669.3*	*FT*
BASE DISCHARGE	=	*13000*	*CFS*
BASE FREQUENCY	=	*100*	*YRS*
BASE HW ELEVATION	=	*671.2*	*FT*
OVERTOPPING DISCHARGE	=	*16000*	*CFS*
OVERTOPPING FREQUENCY	=	*100+*	*YRS*
OVERTOPPING ELEVATION	=	*672.6*	*FT*
DATE OF SURVEY	=	*01/29/08*	
W.S. ELEVATION AT DATE OF SURVEY	=	*651.3*	*FT*

BM#1 ELEVATION = 697.11
N 745056 E 1525588
BL STATION 12+22 154 RIGHT
8" SPIKE IN ROOT OF DOUBLE BEECH TREE
-L- STA. 14+76.38 167.27' RIGHT

BM#2 ELEVATION = 664.63
N 744451 E 1526456
BL STATION 22+19 205 RIGHT
8" SPIKE IN ROOT OF 30" BIRCH TREE
-L- STA. 24+51.57 200.09' RIGHT

END GRADE
-L- STA. 30+00.00
ELEV. 694.19



NOTE: SEE SHEET 4 FOR -L- DESIGN

-MAR-2009 09:18
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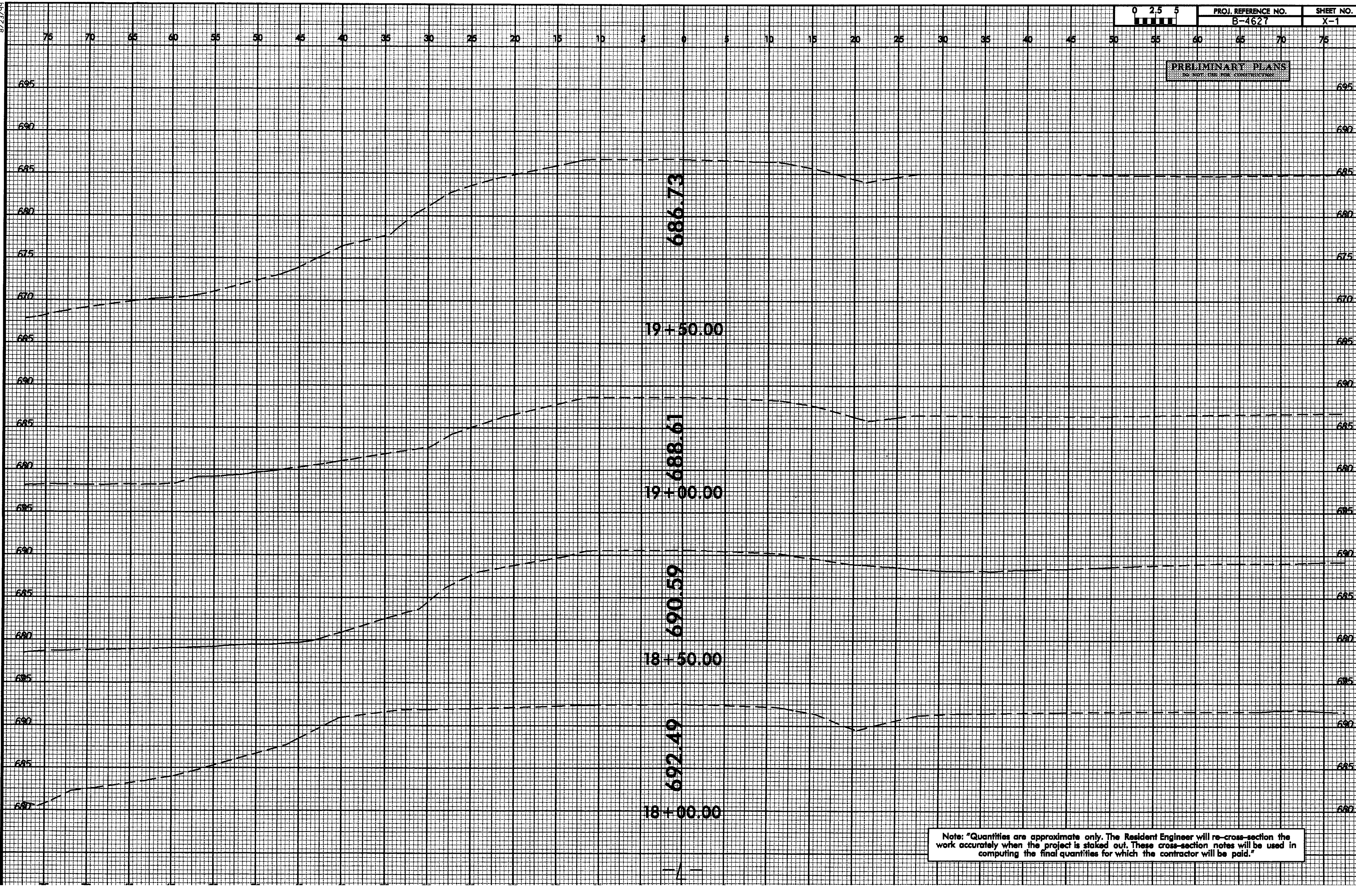
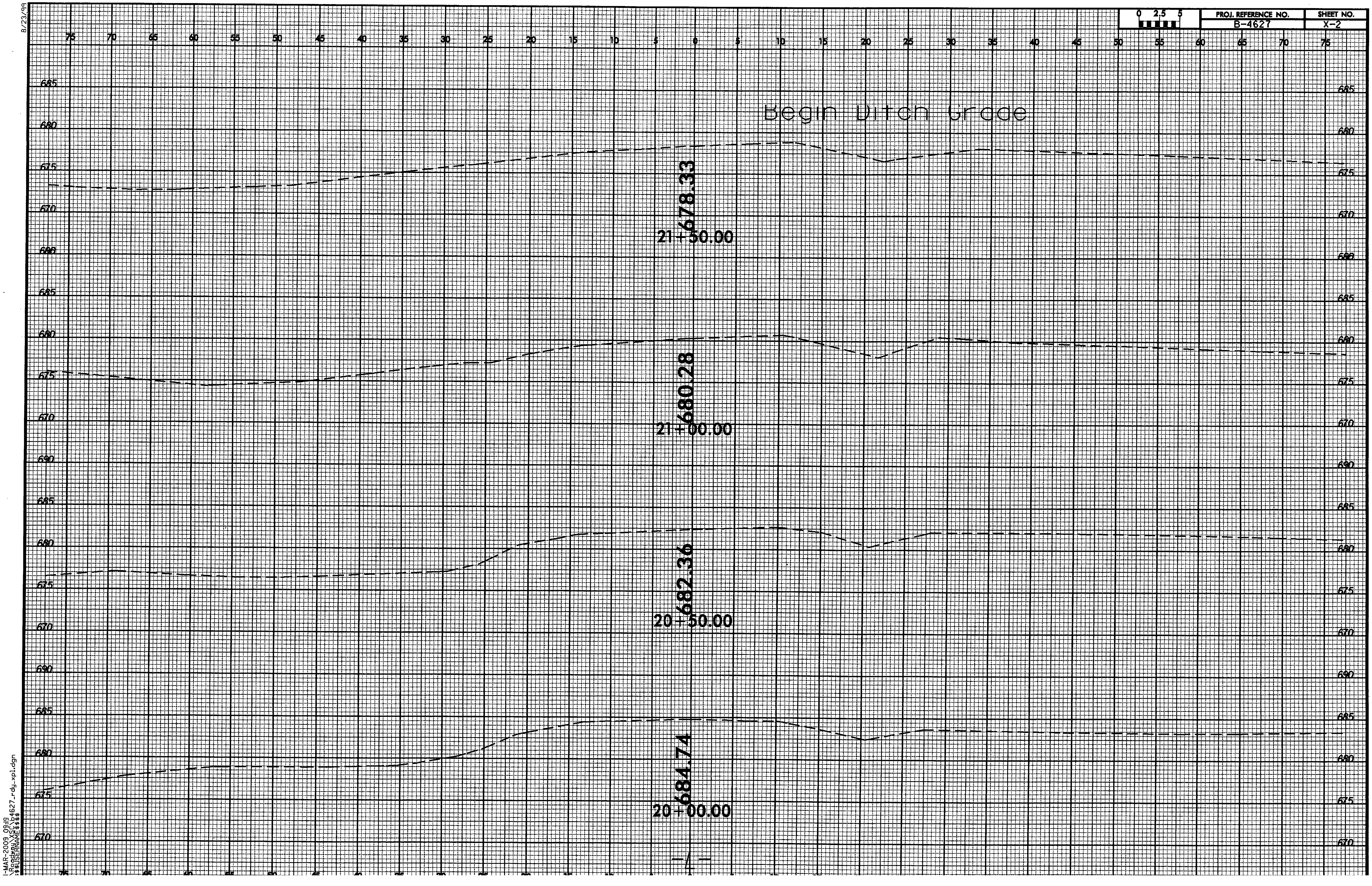
PROJ. REFERENCE NO.	SHEET NO.
B-4627	X-1



Note: "Quantities are approximate only. The Resident Engineer will re-cross-section the work accurately when the project is staked out. These cross-section notes will be used in computing the final quantities for which the contractor will be paid."

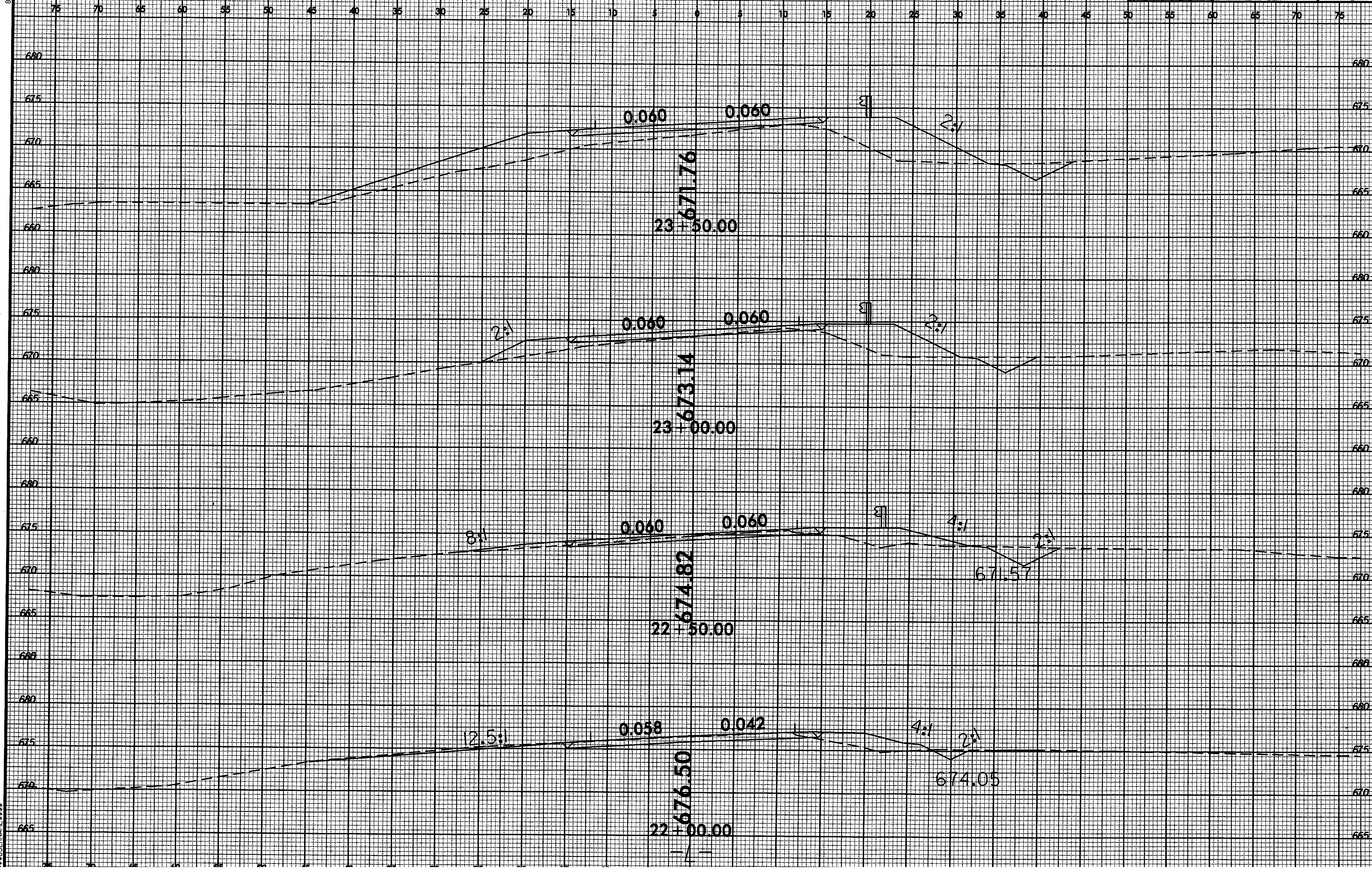
8/23/99



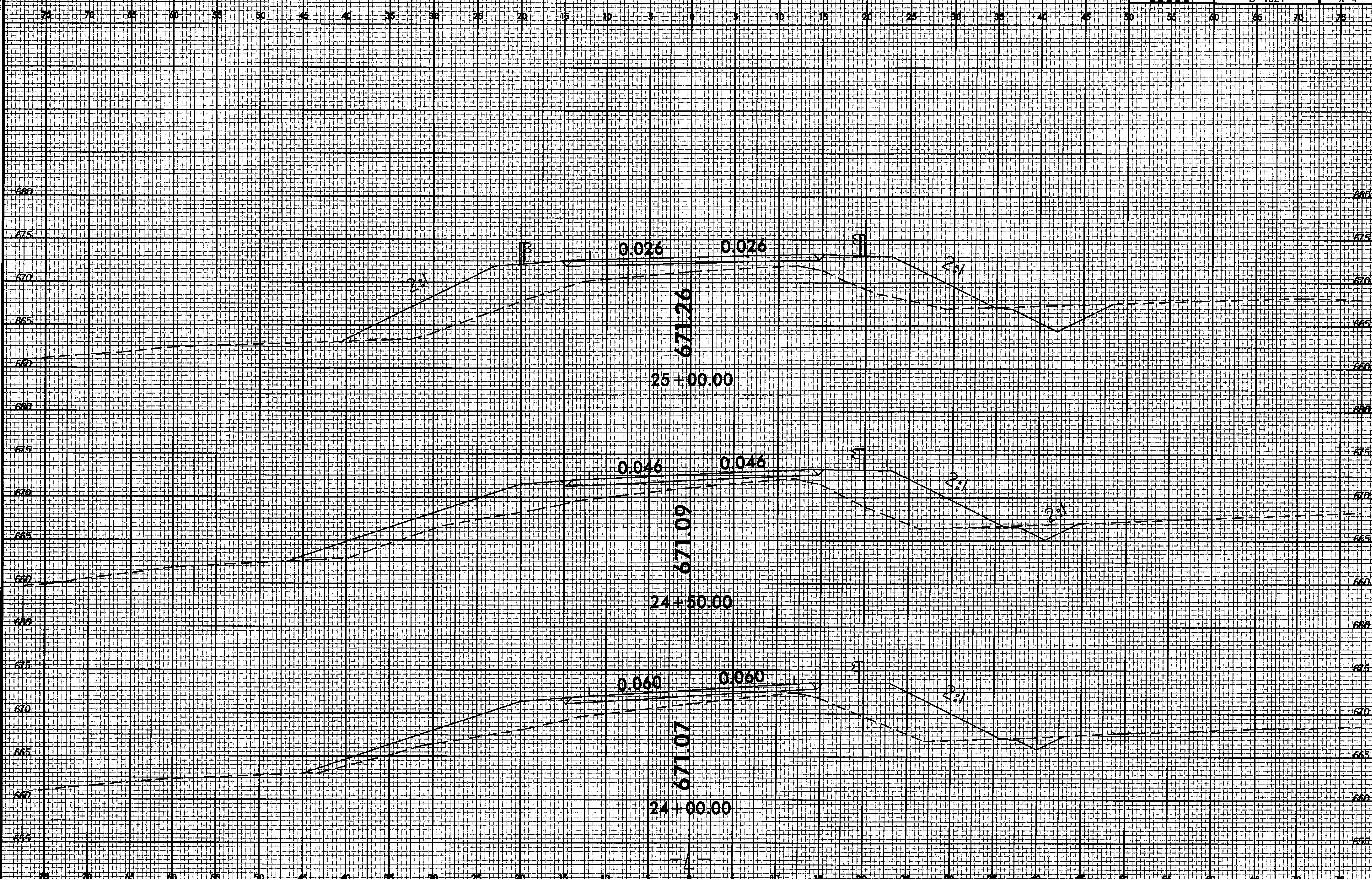
PROJ. REFERENCE NO.
B-4627
SHEET NO.
X-2
0 2.5 5
Begin Ditch Grade
678.33
21+50.00
680.28
21+00.00
682.36
20+50.00
684.74
20+00.00
8/23/99

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-4627	X-3



PROJ. REFERENCE NO.	SHEET NO.
B-4627	X-4



8/23/99

-MAR-2009 09:21
b4627_rdy_xpl.dgn
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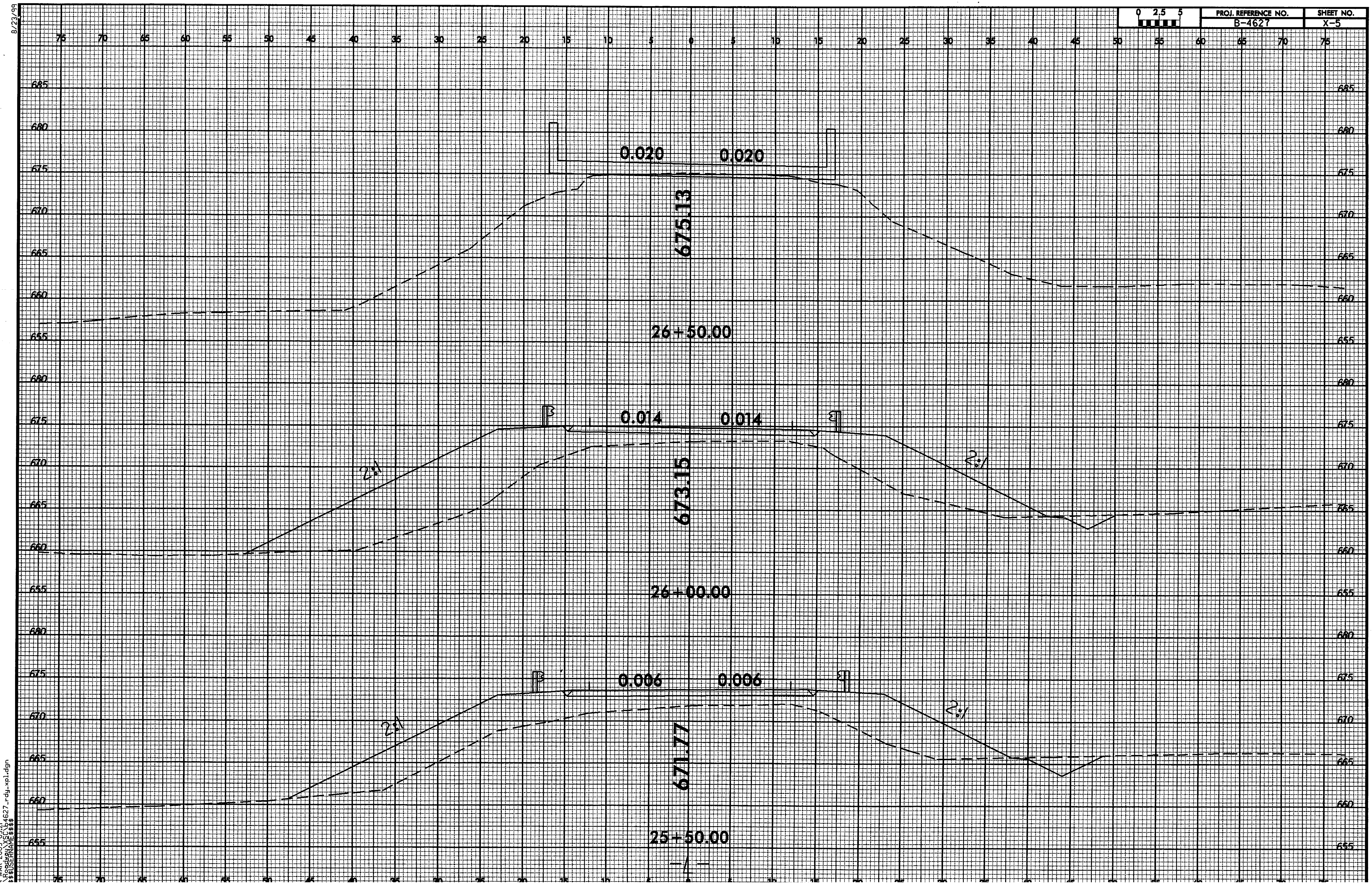
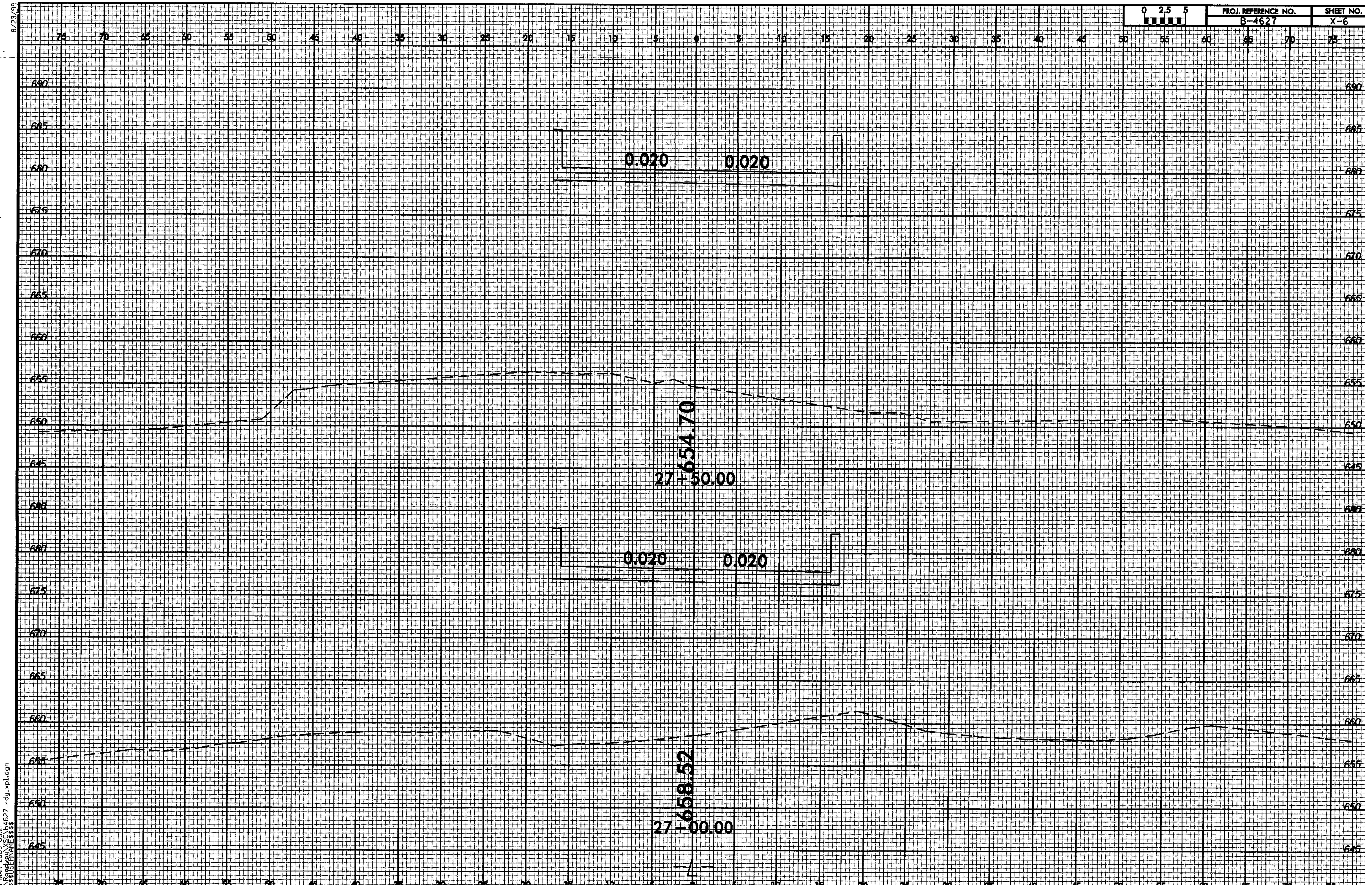

PROJ. REFERENCE NO.
B-4627
SHEET NO.
X-5
0 2.5 5
8/23/99
0.020
0.020
675.13
26+50.00
0.014
0.014
2:1
2:1
673.15
26+00.00
0.006
0.006
2:1
2:1
671.77
25+50.00


PROJ. REFERENCE NO.
B-4627
SHEET NO.
X-6
0 2.5 5
0.020
0.020
27+50.00
654.70
0.020
0.020
27+00.00
658.52
8/23/99

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	B-4627	X-7

0.020 0.020

28+70.12

0.020 0.020

28+00.00

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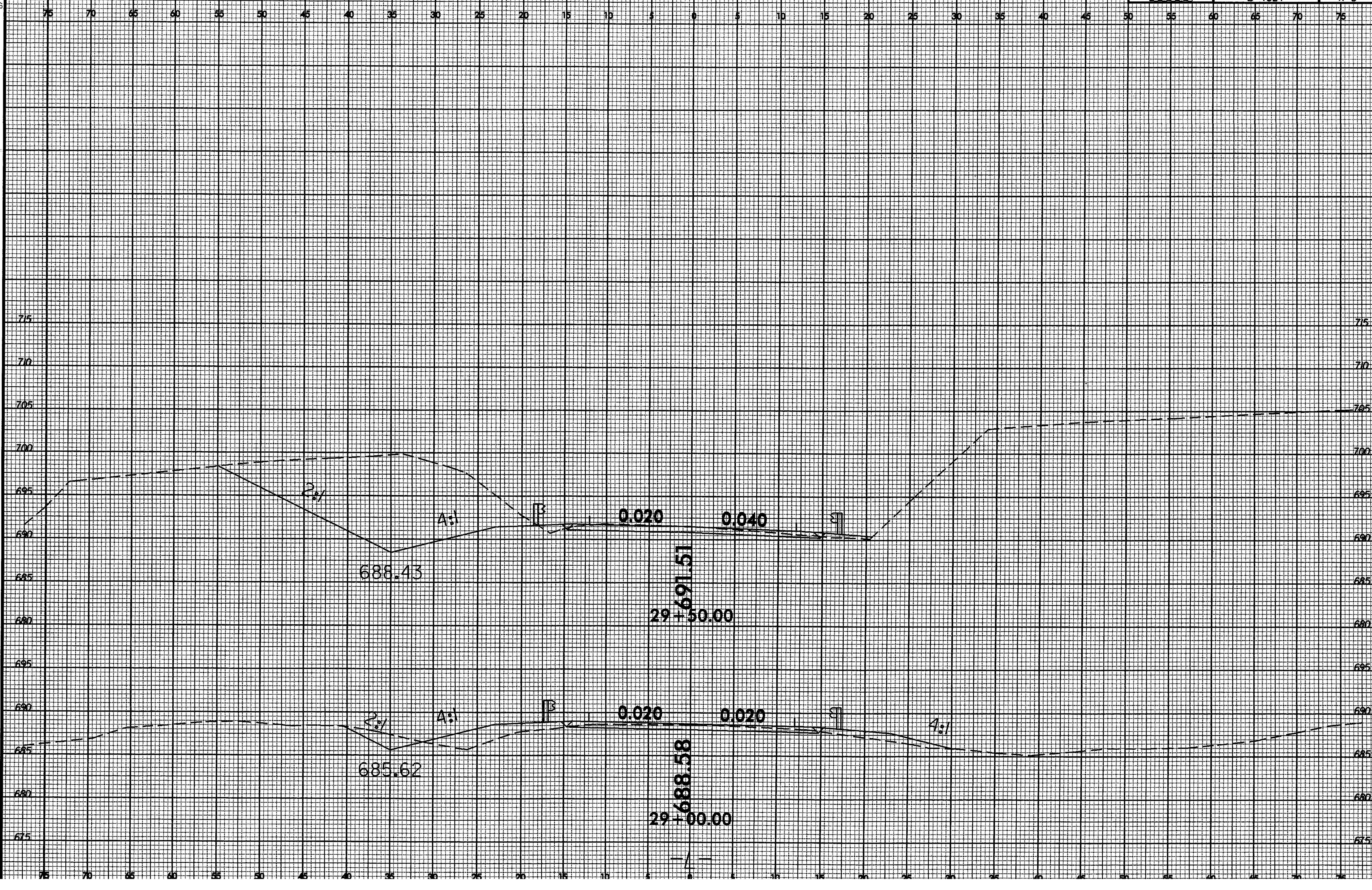

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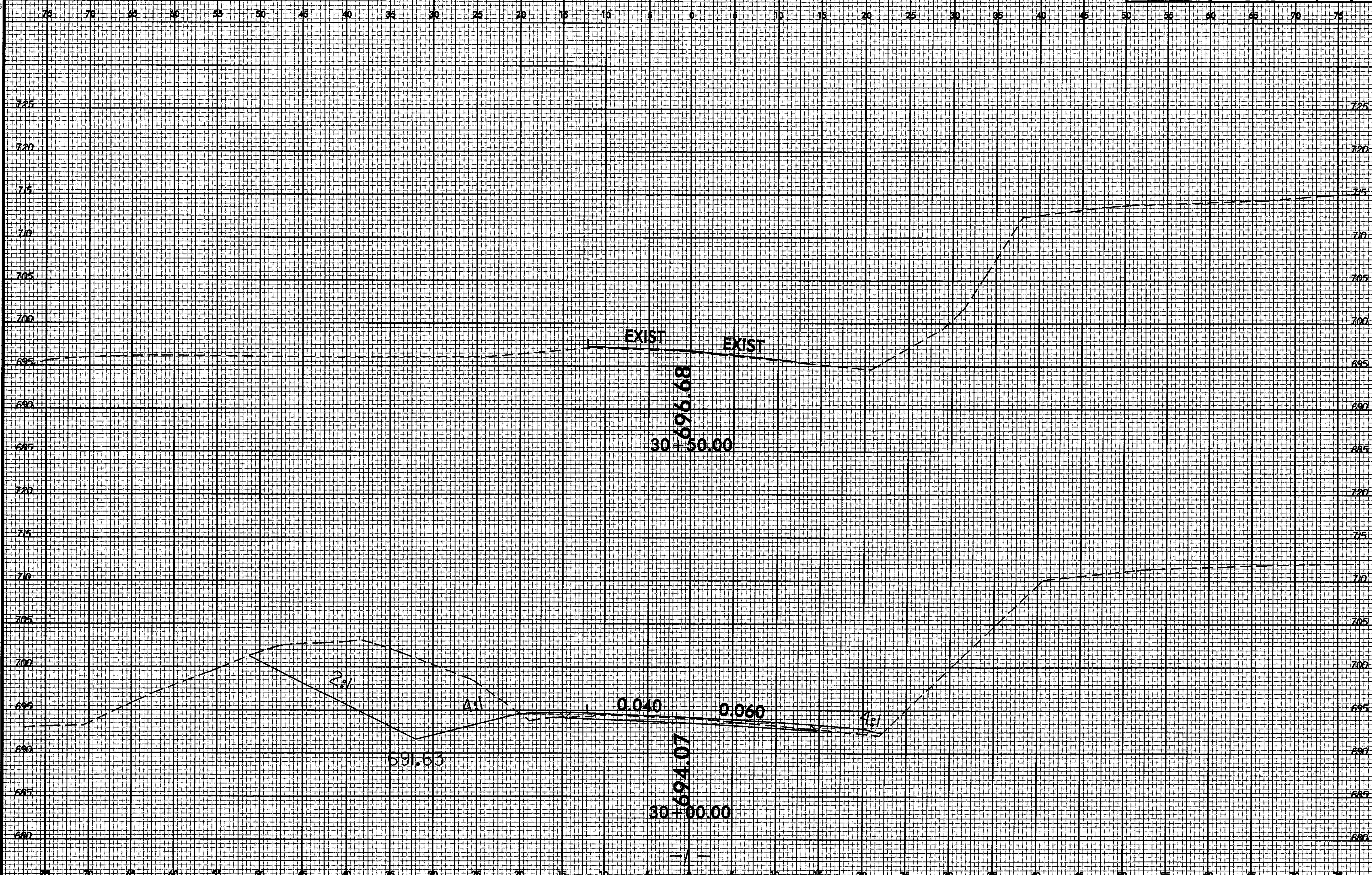

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Rowan County

Bridge No. 26 on SR 1003 (Cool Springs Road)

over Third Creek

Federal-Aid Project No. BRZ-1003 (32)

State Project No. 8.2634201

W.B.S. No. 33802.1.1

T.I.P. Project No. B-4627

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

APPROVED:

8/1/07
DATE

for William T. Hopkins
Gregory J. Thorpe, PhD.
Environmental Management Director
Project Development & Environmental Analysis Branch,
North Carolina Department of Transportation

8/2/07
DATE

for Felix Davila
John F. Sullivan III, PE
Division Administrator
Federal Highway Administration

Rowan County

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CATEGORICAL EXCLUSION

July 2007

Document Prepared By:
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07-26-2007

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Project Development & Environmental Analysis Branch

PROJECT COMMITMENTS

Rowan County
Bridge No. 26 on SR 1003 (Cool Springs Road)
over Third Creek
Federal-Aid Project No. BRZ-1003 (32)
State Project No. 8.2634201
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Off-site Detour

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

In order to have time to adequately reroute school buses, Rowan-Salisbury School System will be contacted at (704) 639-3051 at least one month prior to road closure.

Rowan County Emergency Services will be contacted at (704) 638-0911 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Length of Construction

Division 9 Construction, Resident Engineer's Office and Roadway Design Unit

In order to address specific requests from the School Transportation Director for Rowan-Salisbury School System, NCDOT will set the contract to achieve **minimum** reasonable road closure time.

Bicycle Accommodations

Roadway Design

Bicycle accommodations will be provided.

During the final design phase, the Roadway Design Unit will investigate minimizing impacts to the property in the SE quadrant.

Rowan County
Bridge No. 26 on SR 1003 (Cool Springs Road)
over Third Creek
Federal-Aid Project No. BRZ-1003 (32)
State Project No. 8.2634201
W.B.S. No. 33802.1.1
T.I.P. Project No. B-4627

INTRODUCTION: The replacement of Bridge No. 26 is included in the 2007-2013 North Carolina Department of Transportation (NCDOT) Transportation Improvement Program and in the Federal-Aid Bridge Replacement Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal "Categorical Exclusion".

I. PURPOSE AND NEED STATEMENT

The NCDOT Bridge Maintenance Unit records indicated the bridge has a sufficiency rating of 36.3 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to the substructure condition rating of 4 out of a possible 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA's Highway Bridge Replacement Program. This low rating can be attributed to the presence of open longitudinal cracks on the caps, vertical cracks in the columns, as well as the large areas of delaminated and spalled concrete on both the columns and caps.

The posted weight limit on the bridge is down to 32 tons for truck-tractor semi-trailers (TTST). By comparison, a new bridge would be designed for 45 tons TTST and for 25 tons for single vehicles (SV).

II. EXISTING CONDITIONS

Bridge No. 26 is located on SR 1003 in Rowan County over Third Creek. SR 1003 is classified as Rural Minor Collector in the Statewide Functional Classification System.

Bridge No. 26 was constructed in 1947. The existing structure is a two-lane, five-span bridge with an overall length of 225.5 ft. and a clear roadway width of 24.1 ft. The bridge superstructure consists of a reinforced concrete deck with an asphalt wearing surface on I-beams. The substructure consists of reinforced concrete post and beam bents with one reinforced concrete spill-through end bent and one reinforced concrete cap with steel piles end bent. There is no posted speed limit in the vicinity of this bridge, therefore the statutory speed of 55 mph applies. The approach roadway for Bridge No. 26 is a two-lane 19.0 ft. wide road with 4-foot grassed shoulders.

The creek bed to roadway crown point height is 34.0 ft. and the normal depth of Third Creek is 5.0 ft.

SR 1003 not currently a part of a designated bicycle route nor is it listed in the Transportation Improvement Program (TIP) as needing bicycle accommodations. However, this location is identified as a bicycle route on a draft version of the Rowan County Bicycle Route System to be approved in the summer of 2007.

Norfolk Southern "L" line has an at-grade crossing approximately 600 ft. east of Bridge No. 26. This line has two freight trains per day at a maximum speed of 35 mph.

Three accidents were reported in the vicinity of the bridge during a recent three year period.

Aerial power transmission lines run along the south side of SR 1003 in the vicinity of the bridge. However, aerial power service lines cross both bridge approaches. The transmission lines cross Third Creek well south of Bridge No. 26 but cross SR 1003 near the western approach of the bridge. A telephone hub is located at the intersection of SR 1003 and SR 1985. Telephone underground cable runs along the south side of SR 1003 from SR 1985 to the southwest quadrant of Bridge No. 26. The telephone cable goes aerial at this point and crosses SR 1003 continuing aerial to cross Third Creek, Norfolk Southern Railroad and into Woodleaf. Telephone fiber optic cables run along Norfolk Southern Railway under SR 1003 both east and west of the railroad's at-grade intersection with SR 1003.

The 2007 estimated average daily traffic (ADT) volume is 3200 vehicles per day (vpd). The projected ADT is 5600 vpd by the design year 2030. The percentages of truck traffic are 2% dual-tired vehicles and 1% TTST.

Four school buses cross Bridge No. 26 twice daily for a total of eight trips per day.

Land use within the project area is farmland and residential.

There are no known U.S. Geological Survey (USGS) geodetic survey markers or other survey monuments located within the vicinity of the bridge.

III. ALTERNATIVES

A. Project Description

The proposed structure will provide a 32-foot clear roadway width to allow for two 12-foot travel lanes and 4-foot shoulders on each side. The approach roadway will consist of two 12-foot travel lanes with 8-foot shoulders. A 2-foot width of each shoulder will be paved. To provide accommodations for bicycles, 4 ft. of each shoulder will be paved for 100 feet of each bridge approach. Bicycle-safe 54-inch rails will be provided on the bridge.

Based on field reconnaissance of the site and a preliminary hydraulic investigation, the existing structure can be replaced with a bridge of a similar hydraulic geometry as the

existing bridge. A minimum gradient of 0.3% will be utilized to facilitate deck drainage and deck drains should not be placed over the stream channel.

B. Reasonable and Feasible Alternatives

Alternative 1 (Preferred)
Alternative 1 proposes to construct the bridge at the existing location while utilizing an off-site detour for traffic during construction. The proposed structure length is approximately 230 ft. The skew angle of the structure would be approximately 80°.

NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 1985 (Hart Rd.), SR 1984 (Needmore Rd.), and NC 801. Although SR 1003 (Depot Road) would shorten the detour, it is a gravel road and cannot accommodate the required volume of traffic. In addition, the majority of traffic on Cool Springs Road is through traffic. Therefore, Depot Road would not be practical as part of the off-site detour. The detour for the average road user would result in 6.4 minutes additional travel time (4.75 miles additional travel). Anticipated construction time is eleven months.

Based on the Guidelines, the criteria above indicate that the preference of an offsite detour but with now stronger evaluation of other project variables. In this case, Rowan County Emergency Services along with Rowan-Salisbury School System's Transportation Department has indicated that an off-site detour is acceptable. NCDOT Division 9 has indicated that the condition of all roads, bridges and intersections along the detour are acceptable without improvement and concur with the use of the detour.

Alternative 2
Alternative 2 proposes to construct the bridge along a new alignment located approximately 45 ft. to the north of the existing roadway while maintaining traffic on the existing roadway. The proposed bridge will be approximately 230 ft. long and skew angle of the structure would be approximately 80°. In order to relocate the new bridge north of the existing bridge, the curve on the eastern bridge approach is sharper than the existing curve. This curve would provide an operating speed of 35 mph. Anticipated construction time is eighteen months.

Alternative 3
Alternative 3 proposes to replace the existing bridge while maintaining traffic on a temporary on-site detour. The proposed bridge would be approximately 230 ft. long with a skew angle of approximately 80°. The on-site detour would require the construction of a temporary detour bridge which is approximately 180 ft. long. Anticipated construction time is eighteen months.

C. Alternatives Eliminated from Further Consideration

The "do-nothing" alternative will eventually necessitate removal of the bridge effectively removing this section of SR 1003 from traffic service. This is not acceptable due to the traffic service provided by SR 1003.

Investigation of the existing structure by the Bridge Maintenance Unit indicates that rehabilitation of the old bridge is not feasible due to its age and deteriorated condition.

D. Preferred Alternative

Alternative 1, constructing the proposed replacement bridge at the existing location using an off-site detour during construction is the preferred alternative. Alternative 1 was selected because it has the lowest total cost of all of the alternatives, requires the shortest duration of traffic disruption, and has the least impacts to the natural environment.

Both Alternatives 2 and 3 would require a significant amount of excavation to relocate the bridge or build a temporary bridge downstream of the existing location. The horizontal alignment for Alternative 2 is less desirable than Alternative 1 due to the sharper radius curve on the eastern approach required by the relocation of the bridge. Alternative 1 can be built during one construction season whereas either of the other two feasible alternatives would require two seasons. Construction of the bridge in the existing location utilizing an off-site detour for traffic is the quickest and most economical way to replace the bridge.

Emergency services and the school system will be contacted prior to the closure of Bridge No. 26 to facilitate the re-routing of emergency services and school buses.

NCDOT Division 9 concurs with the selection of Alternative 1 as the preferred alternative.

E. Design Exceptions

Although the speed limit is statutory 55 mph, the operating speed due to the existing horizontal and vertical alignments is much lower. Due to the horizontal curves at both ends of the tangent bridge, the horizontal alignment supports an operating speed of 40 mph. Bridge No. 26 is between sag and crest vertical curves, neither of which meets a design speed of 60 mph. The existing vertical alignment provides an operating speed of 35 mph. Therefore, a design exception will be requested for a design speed of 40 mph.

IV. ESTIMATED COSTS

The estimated costs, based on 2007 prices, are shown in Table 1:

Table 1: Estimated Costs

	Alternative 1 (Preferred)	Alternative 2	Alternative 3
Structure Removal (existing)	93,000	93,000	93,000
Structure (proposed)	924,000	961,000	924,000
Temporary Detour Bridge	0	0	325,000
Roadway Approaches	368,000	520,000	548,000
Miscellaneous and Mobilization	318,000	391,000	448,000
Engineering and Contingencies	297,000	335,000	362,000
ROW/Const. Easements	148,000	53,000	152,000
Utilities	38,000	28,000	35,000
TOTAL	$ 2,186,000	$ 2,381,000	$ 2,887,000

There are no residential or business relocations.

V. NATURAL ENVIRONMENT

A. Physical Characteristics

1. Water Resources

Third Creek lies in the Yadkin-Pee Dee River Basin, within the NC Division of Water Quality subbasin designated 03-07-06 and the U.S. Geological Survey 8-digit Hydrologic Unit Code 03040102. Third Creek is the only water resource within the project study area (PSA). Third Creek is a perennial stream that is approximately 40 feet wide with an average depth of less than three feet.

Third Creek (DWQ Stream Index Number [12-108-20-4]) has been assigned a Best Usage Classification of class "C" (suitable for aquatic life, secondary recreation). NC Division of Water Quality has indicated that Third Creek has a use support rating of "Impaired", based on the monitored method. No waters classified as Water Supplies (WS-I: undeveloped watershed, or WS-II: predominantly undeveloped watersheds), High Quality Waters, or Outstanding Resource Waters occur within 1.0 mile of the Project Study Area. There are currently no riparian buffer regulations for the Yadkin-Pee Dee River Basin. Third Creek does not appear on the Final 2004 303(d) list. However, Third Creek is a tributary of Fourth Creek which is within one mile of the project study area and appears on the Final 303(d) list due to impaired biological integrity. Third Creek comes to a confluence with Fourth Creek approximately 1 mile downstream of Bridge No. 26. There are no jurisdictional wetlands in the project study area.

2. Biotic Resources

The predominant natural terrestrial communities found in the Project Study Area are Piedmont/Low Mountain Alluvial Forest and Cropland/Pasture. In addition to these natural vegetative communities, the Project Study Area includes areas altered by human activities and classified as Residential.

Table 2: Impacts to Natural Communities in Project Study Area

Natural Community Classification	Alternative 1 (Preferred)	Alternative 2	Alternative 3
Piedmont/Low Mountain Alluvial Forest	1.39 acres	1.62 acres	1.99 acres
Cropland/Pasture	0.14 acres	0.06 acres	0.13 acres
Residential	0.46 acres	0.73 acres	0.38 acres

* Impervious surfaces and roadsides account for the remainder.

The soils and land use patterns in Rowan County provide habitat for a large variety of game and non-game wildlife. Cropland that is interspersed with pine woods, hardwood stands, old fields, and numerous ponds and lakes create habitat that is suitable for many native, introduced, and migratory species. The soils are generally well suited to the production of plants that provide the food and cover needed by wildlife.

B. Jurisdictional Topics

1. Surface Waters and Wetlands

There were no jurisdictional wetlands identified within the Project Study Area during the site visit.

NC Department of Transportation will ensure that preventative and control Best Management Practices (BMPs) are employed to prevent or reduce water pollution as described in the NCDOT handbook *Best Management Practices for the Protection of Surface Waters*. Rowan County is not a mountain trout county and Third Creek does not support trout or smallmouth bass. Anadromous fish are not known to utilize Third Creek or its tributaries. Correspondence with the NC Wildlife Resources Commission has indicated that there are no trout, smallmouth bass, or anadromous fish moratoriums applicable to Bridge No. 26.

Table 3: Stream Impacts in Project Study Area

Stream Identification	Approximate Length in PSA (feet)	Direct Impacts (feet)		
		Alternative 1 (Preferred)	Alternative 2	Alternative 3
Third Creek	1215	35	35	64

Since the bridge is the same width in all three alternatives, all alternatives will have the same permanent impacts. However, Alternative 3 will have temporary impacts to Third Creek due to the temporary on-site detour.

2. Permits

This project may be processed as a Categorical Exclusion (CE) under Federal Highway Administration (FHWA) guidelines. The U.S. Army Corps of Engineers (USACE) has made available Nationwide Permit (NWP) 23 (33 CFR 330) for CEs due to minimal impacts to waters of the United States expected from bridge construction. The North Carolina Division of Water Quality (NCDWQ) has made available a General 401 Water Quality Certification for NWP 23 (GC 3403). If temporary structures are necessary for construction activities, access fills, or dewatering of the site, then a NWP 33 (33 CFR 330) permit and the associated General 401 Water Quality Certification (GC 3366) will be required.

3. Mitigation

In accordance with the "Memorandum of Agreement among the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U.S. Army Corps of Engineers. Wilmington District" (MOA) July 22, 2003, the North Carolina Department of Environment and Natural Resources Ecosystem Enhancement Program (EEP) will be requested to provide off-site mitigation if necessary, to satisfy the federal Clean Water Act (CWA) compensatory mitigation requirements of this project. Determination of final compensatory mitigation requirements rests with the USACE.

4. Federally Protected Species

Plants and animals with federal classification of Endangered (E), Threatened (T), Proposed Endangered (PE), and Proposed Threatened (PT) are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended.

The U.S. Fish and Wildlife Service have identified two threatened or endangered species in Rowan County: the Bald eagle (*Haliaeetus leucocephalus)* and Schweinitz's sunflower (*Helianthus schweinitzii).*

Table 4: Federally Protected Species for Rowan County

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Habitat Present	Biological Conclusion
Vertebrates						
Bald eagle	*Haliaeetus leucocephalus*	T	T	Mature forests near large bodies of water; lakes and sounds	No	No Effect
Vascular Plants						
Schweinitz's sunflower	*Helianthus schweinitzii*	E	E	Open woods and roadsides	Yes	No Effect

Notes: E - Endangered; T - Threatened.

Haliaeetus leucocephalus (Bald eagle) **Threatened**
Animal Family: Accipitridae
Date Listed: March 11, 1967
BIOLOGICAL CONCLUSION: NO EFFECT

Roughly, one-third of the Project Study Area has been disturbed by agriculture, or is residentially and commercially developed. It is unlikely that bald eagles would nest in the Project Study Area, and no nests were observed. A search of the NC Natural Heritage Program database showed no recorded occurrences of this species within the Project Vicinity. There are no major lakes close to the Project Study Area. Since no nesting sites were observed and suitable habitat is not present, it can be concluded that the construction of the proposed project will have no effect on the bald eagle.

Helianthus schweinitzii (Schweinitz's sunflower) **Endangered**
Plant Family: Aster (Asteraceae)
Date Listed: May 7, 1991
Flowers Present: Late August to October
BIOLOGICAL CONCLUSION: NO EFFECT

Suitable habitat for Schweinitz's sunflower is present in the Project Study Area due to its partially-disturbed nature, the presence of open woods and roadsides, and mafic rock origins of the Southern Outer Piedmont. The NC Natural Heritage Program has no records of any known populations of Schweinitz's sunflower within a one-mile radius of the Project Study Area. A survey of the entire Project Study Area for the presence of individuals was conducted on September 14, 2004, and no individuals were observed. It can be concluded that the construction of the proposed project will have no effect on Schweinitz's sunflower.

Rhus michauxii (Michaux's sumac) **Endangered**
Plant Family: Anacardiaceae
Date Listed: September 28, 1989
BIOLOGICAL CONCLUSION: NO EFFECT

Michaux's sumac is not on the threatened and endangered list for Rowan County, however it is on the list for nearby Davie County. Suitable habitat for Michaux's sumac is present in the Project Study Area due to its partially-disturbed nature, and the presence of open roadsides. NCDOT biologists conducted the Michaux's sumac survey on September 14, 2006, resulting in no occurrence of this species within the project study area. Additionally, a search of the NCNHP web site on September 14, 2006, found no occurrence of this species within a one-mile radius of the project study area. Therefore, this project will have no effect on Michaux's sumac.

5. Bridge Demolition

Dropping any portion of the structure into the waters of the United States will be avoided unless there is no practical method of removal. The existing superstructure consists of a concrete deck on steel I-beams. The substructure consists of reinforced

concrete abutments and reinforced concrete post and beam bents. The bridge will be removed without dropping components into waters of the United States.

VI. HUMAN ENVIRONMENT

A. Compliance Guidelines

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and afford the Advisory Council a reasonable opportunity to comment on such undertakings.

Historic Architecture

A field study of the Area of Potential Effect (APE) was conducted on February 28, 2006. The APE is defined as the geographic area or areas within which an undertaking or project may directly or indirectly cause alterations in the character or use of historic properties. All structures within the APE were photographed and reviewed by an NCDOT architectural historian and the staff at the State Historic Preservation Office (HPO). At that meeting on March 14, 2006, NCDOT and HPO agreed that there were no structures eligible for or included on the National Register of Historic Places within the APE. Therefore, no further compliance with Section 106 is required. A copy of the concurrence form is attached.

Archaeology

The State Historic Preservation Officer (SHPO), in a memorandum dated October 24, 2005 recommended that "no archaeological investigation be conducted in connection with this project." A copy of the SHPO memorandum is included in the Appendix.

B. Community Impacts

No adverse impact on families or communities is anticipated. Right of way acquisition will be limited. No relocatees are expected with implementation of the proposed alternative.

No adverse effect on public facilities or services is anticipated. The project is not expected to adversely affect social, economic, or religious opportunities in the area.

The studied route does not currently contain any bicycle accommodations nor is it currently a designated bicycle route. However, this section of SR 1003 is on the Rowan

County Bicycle Route System, expected to be approved in the summer of 2007. Therefore, bicycle accommodations will be provided.

The project is not in conflict with any plan, existing land use or zoning regulation. No change in land use is expected to result from the construction of this project.

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impacts to prime and important farmland soils by all land acquisition and construction projects. Prime and important farmland soils are defined by the Natural Resources Conservation Service (NRCS). According to a memorandum from the NRCS dated September 28, 2004, this project will have no impact to farmland since the bridge will be replaced in-place.

The project will not have a disproportionately high and adverse human health and environmentally effect on any minority or low income population.

C. Noise and Air Quality

This project is an air quality neutral project in accordance with 40 CFR 93.126. It is not required to be included in the regional emissions analysis (if applicable) and project level CO or PM2.5 analyses are not required. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. Therefore, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs. Any burning of vegetation shall be performed in accordance with applicable local laws and regulations of the North Carolina State Implementation Plan (SIP) for air quality compliance with 15 NCAC 2D.0520.

Noise levels may increase during project construction; however, these impacts are not expected to be substantial considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

VII. GENERAL ENVIRONMENTAL EFFECTS

The project is expected to have an overall positive impact. Replacement of an inadequate bridge will result in safer traffic operations.

The bridge replacement will not have an adverse effect on the quality of the human or natural environment with the use of current NCDOT standards and specifications.

The proposed project will not require right-of-way acquisition or easement from any land protected under Section 4(f) of the Department of Transportation Act of 1966. There are

no publicly owned recreational facilities, or wildlife and waterfowl refuges of national, state, or local significance in the vicinity of the project.

An examination of North Carolina Department of Environment and Natural Resources (DENR), Division of Water Quality (DWQ), Groundwater Section and the North Carolina Department of Human Resources, Solid Waste Management Section records by the NCDOT GeoEnvironmental Section revealed no hazardous waste sites or groundwater contamination incidents in the project area.

A field investigation by the NCDOT GeoEnvironmental Section and an examination of records of DENR's Division of Waste Management, Underground Storage Tank Section, revealed that no regulated underground storage tanks exist in the project study area.

Rowan County is a participant in the National Flood Insurance Program. Third Creek is in a flood hazard area but is not included in a detailed FEMA flood study. NCDOT Hydraulics Unit will coordinate with the FEMA and local authorities in the final design phase of the project to ensure compliance with applicable floodplain management ordinances.

No geodetic monuments will be impacted during construction of this project.

VIII. COORDINATION AND AGENCY COMMENTS

NCDOT has sought input from the following agencies as a part of the project development: U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, NC Department of Natural Resources, U.S. Fish & Wildlife Service, N.C Wildlife Resource Commission, North Carolina State Historic Preservation Office, and the Rowan County Planning Department.

The N.C. Wildlife Resource Commission and U.S. Fish & Wildlife Service in standardized letters provided a request that they prefer any replacement structure to be a spanning structure.

Response: Bridge No. 26 will be replaced with a bridge.

In addition, the U.S. Fish & Wildlife Service requested a habitat assessment and survey of any suitable habitat for the federally endangered Schweinitz's sunflower *(Helianthus schweinitzii)* and Michaux's sumac *(Rhus michauxii)* as well as the federal species of concern, Georgia aster *(symphyotrichum georgianum).*

Response: The Georgia aster is not federally listed as and endangered or threatened species and therefore is not afforded the protection of Section 7 and Section 9 of the Endangered Species Act of 1973. Michaux's sumac is not on the threatened and endangered list for Rowan County, however a survey was performed on September 14, 2006 and no occurrence of this species exists at the project site. A survey for Schweinitz's sunflower was performed on September 14, 2004, and no individuals were observed. In addition, a search of the North Carolina Natural Heritage Program (NCNHP)

website revealed no occurrence of either species within a 1.0-mile radius of the project site. Based on this information, the construction of the proposed project will have no effect on Schweinitz's sunflower or Michaux's sumac.

The North Carolina State Historic Preservation Office requested a architectural survey since the File-Rice-Rutledge House, a structure with architectural importance is within the general area of the project.

Response: The File-Rice-Rutledge house is not located within the APE. A survey of the APE was performed by NCDOT Architectural historians. No structures within the APE are included on or are eligible for inclusion in the National Register of Historic Places.

The Rowan County Planning Department and the Rowan County Emergency Services prefers (but does not insist) that traffic be maintained on-site during construction.

Response: Replacement in-place using an off-site detour has been determined to be the most economical solution for this project. The construction of a temporary bridge would cost over $600,000 in additional construction costs and right-of-way costs due to the additional easements that must be obtained. Rowan County Schools have not raised any objection to the temporary closing of these roads.

The following agencies have not responded to requests for input: U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, and the NC Department of Natural Resources.

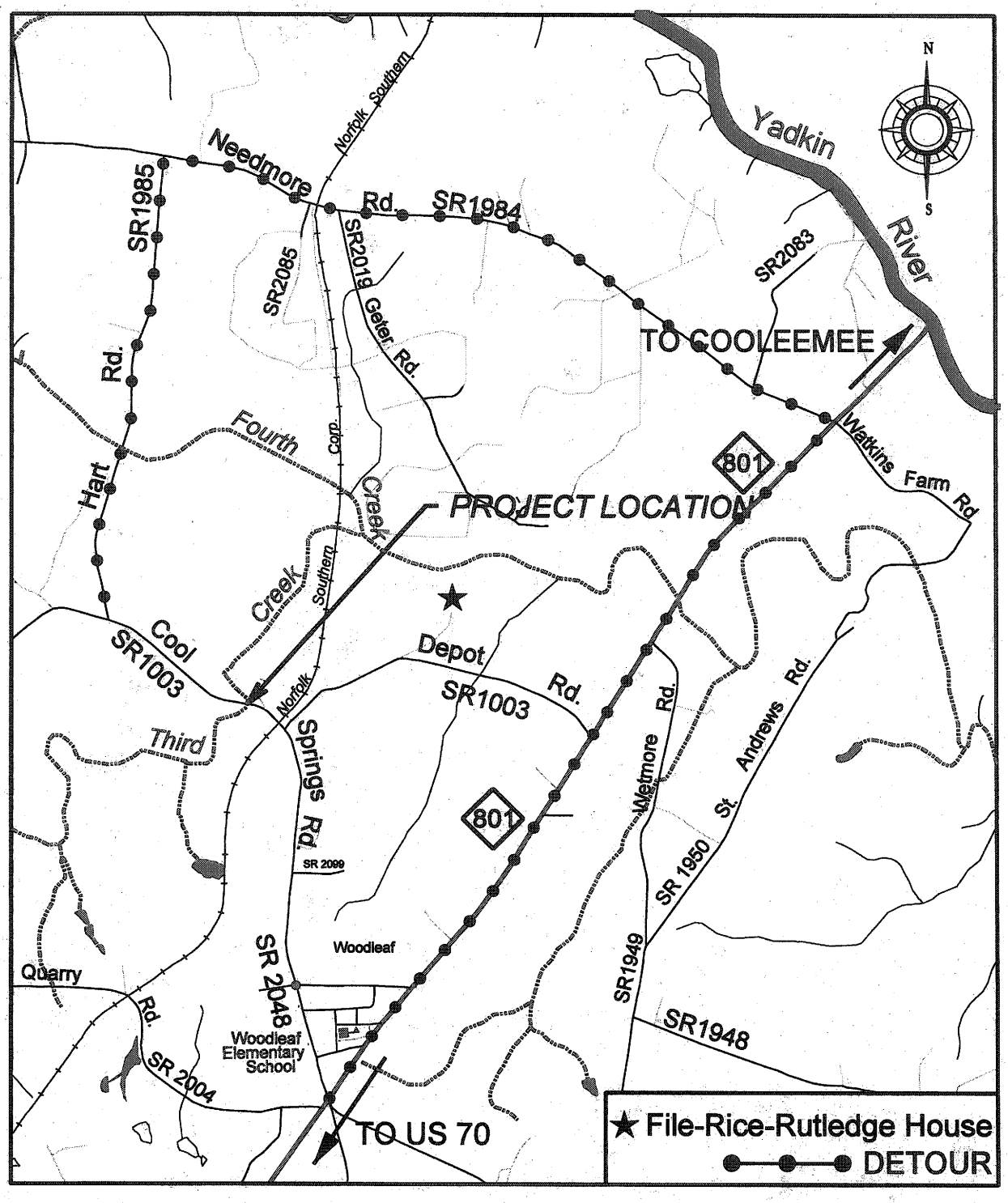
IX. PUBLIC INVOLVEMENT

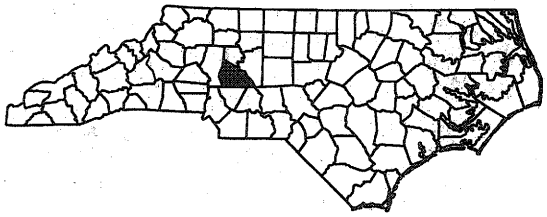
Efforts were undertaken early in the planning process to contact local officials to involve them in the project development with scoping letters. There are minimal impacts to surrounding properties and no anticipated relocatees, however a newsletter has been sent to all property owners within the project vicinity. No comments have been received to date.

Based on the lack of response, a Citizens' Informational Workshop was determined unnecessary. There is not substantial controversy on social, economic, or environmental grounds concerning the project.

X. CONCLUSION

On the basis of the above discussion, it is concluded that no significant adverse environmental effects will result from implementation of the project. The project is therefore considered to be a Federal "Categorical Exclusion" due to its limited scope and lack of substantial environmental consequences.





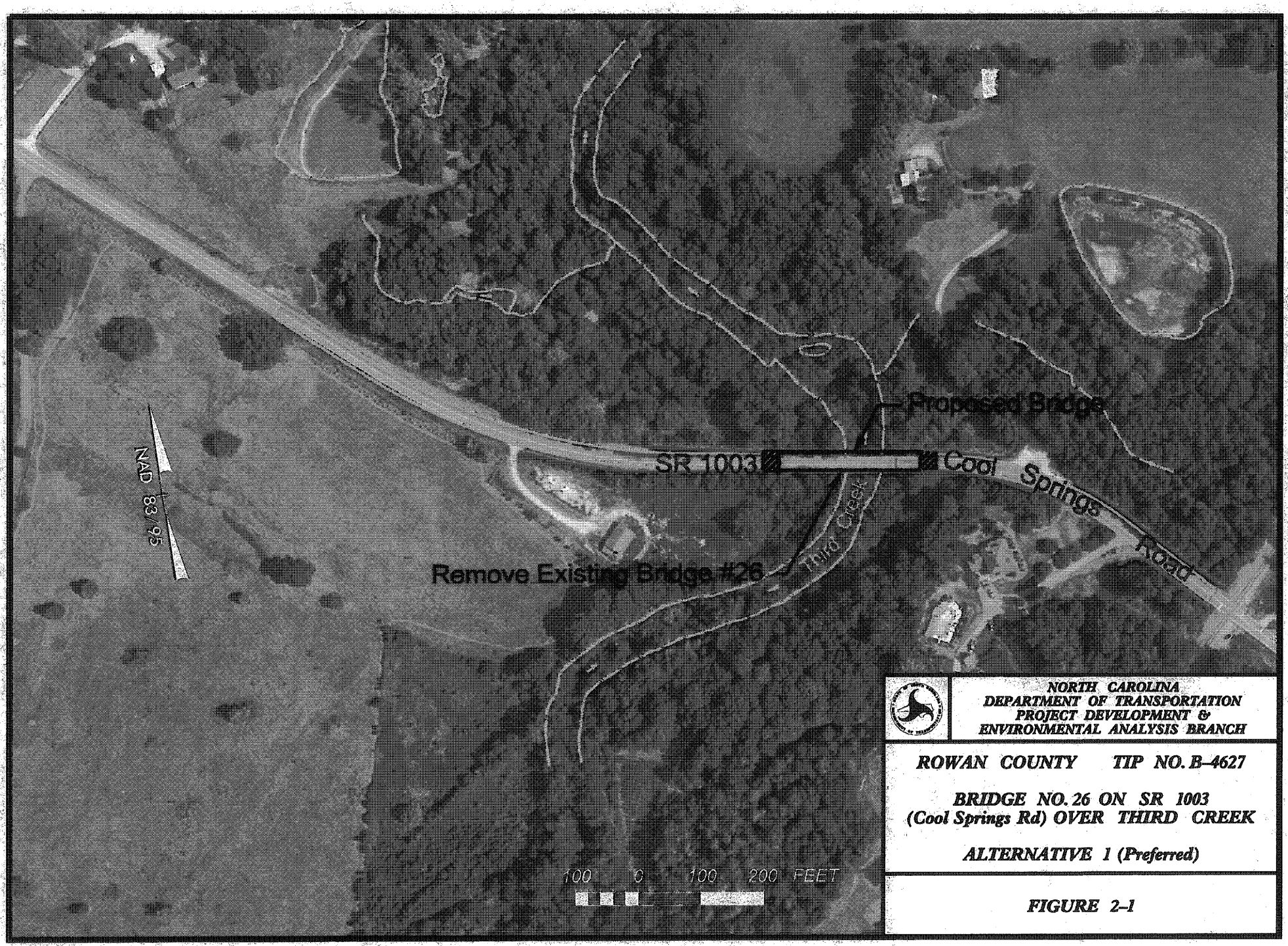
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH

ROWAN COUNTY TIP NO. B-4627

BRIDGE NO.26 ON SR 1003
(Cool Springs Rd) OVER THIRD CREEK

VICINITY MAP

FIGURE 1



NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
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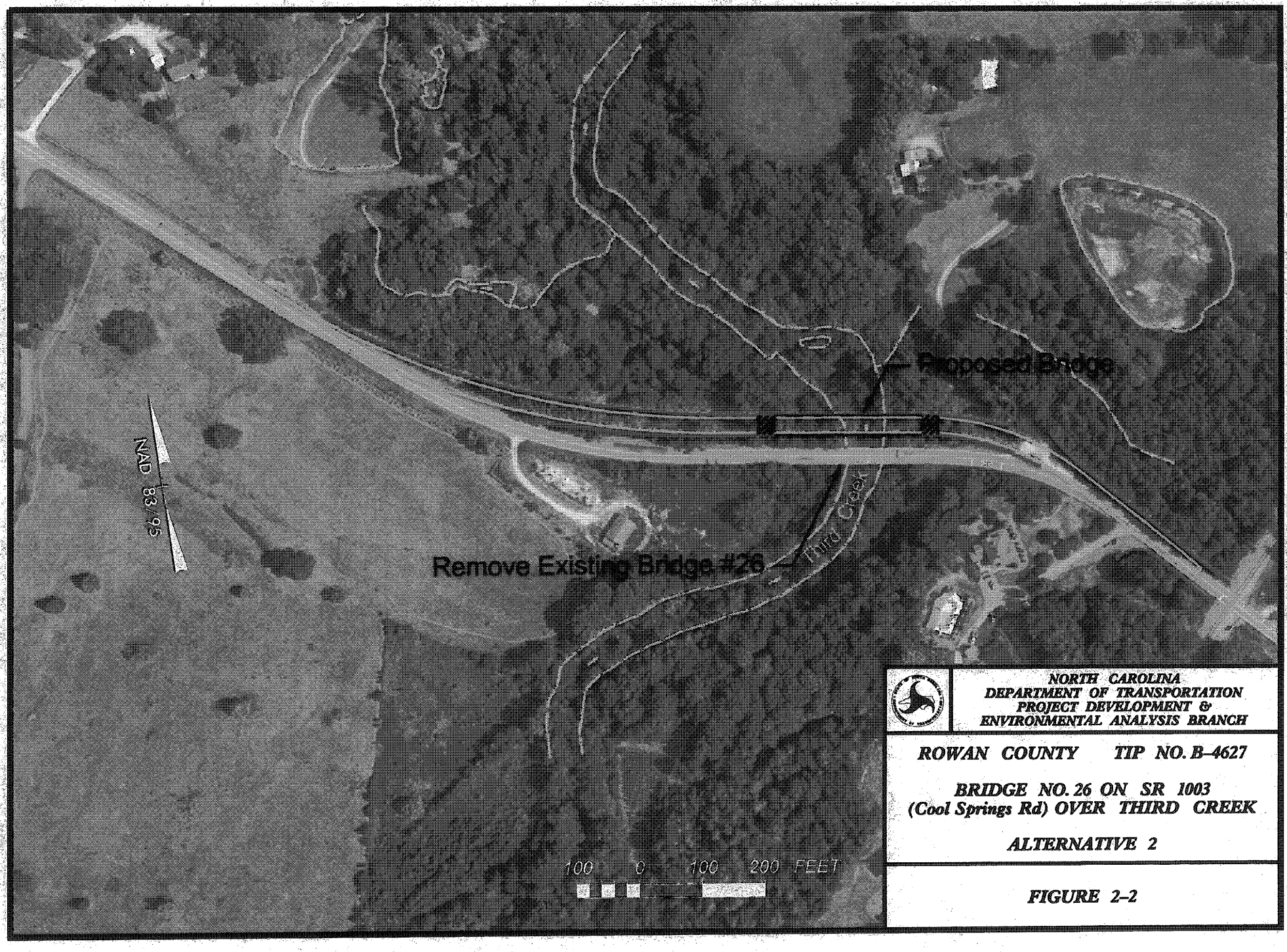
ENVIRONMENTAL ANALYSIS BRANCH

ROWAN COUNTY TIP NO. B-4627

BRIDGE NO. 26 ON SR 1003
(Cool Springs Rd) OVER THIRD CREEK

ALTERNATIVE 1 (Preferred)

FIGURE 2-1



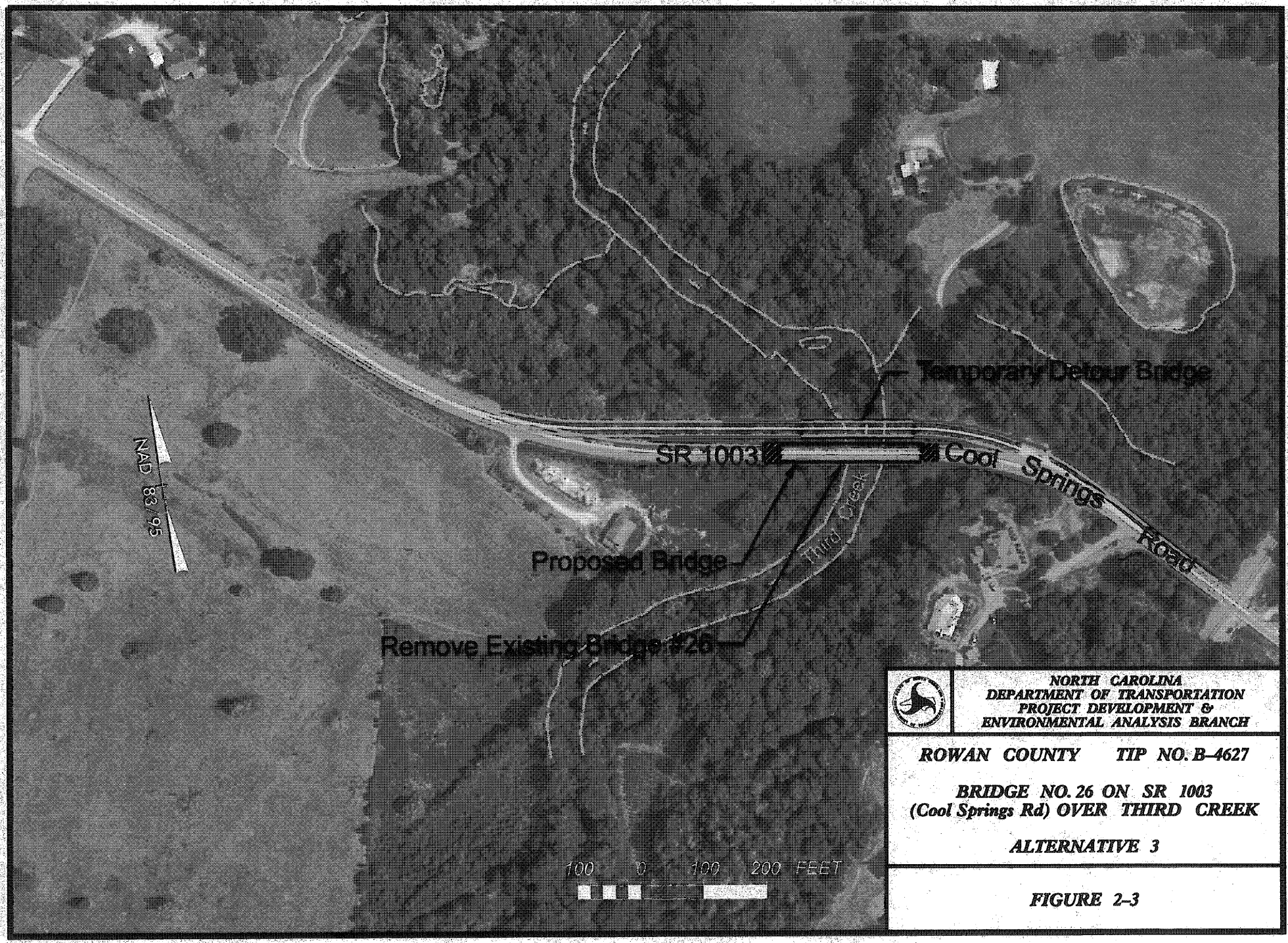
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH

ROWAN COUNTY TIP NO. B-4627

BRIDGE NO. 26 ON SR 1003
(Cool Springs Rd) OVER THIRD CREEK

ALTERNATIVE 2

FIGURE 2-2



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ENVIRONMENTAL ANALYSIS BRANCH

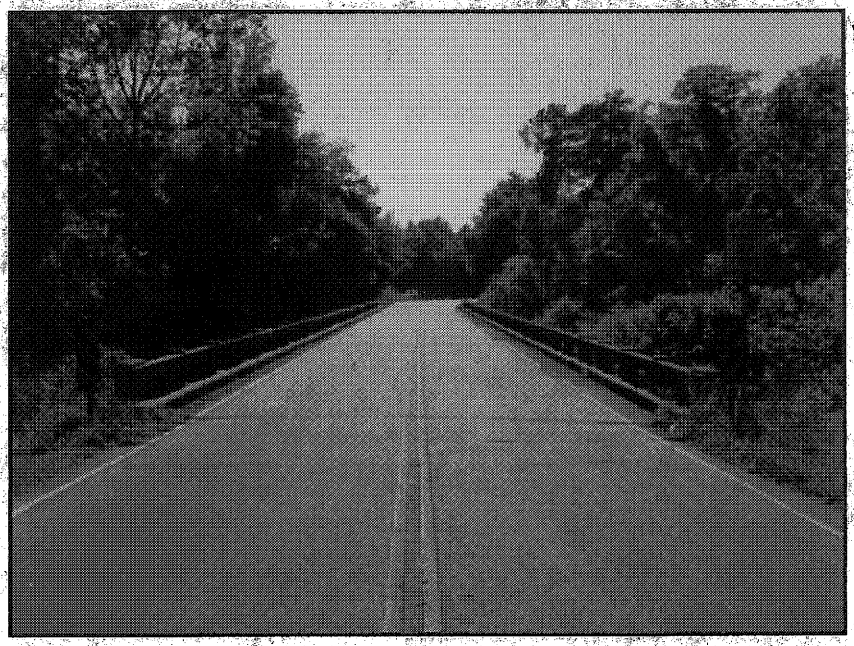
ROWAN COUNTY TIP NO. B-4627

BRIDGE NO. 26 ON SR 1003
(Cool Springs Rd) OVER THIRD CREEK

ALTERNATIVE 3

FIGURE 2-3

VIEW LOOKING WEST



VIEW LOOKING EAST

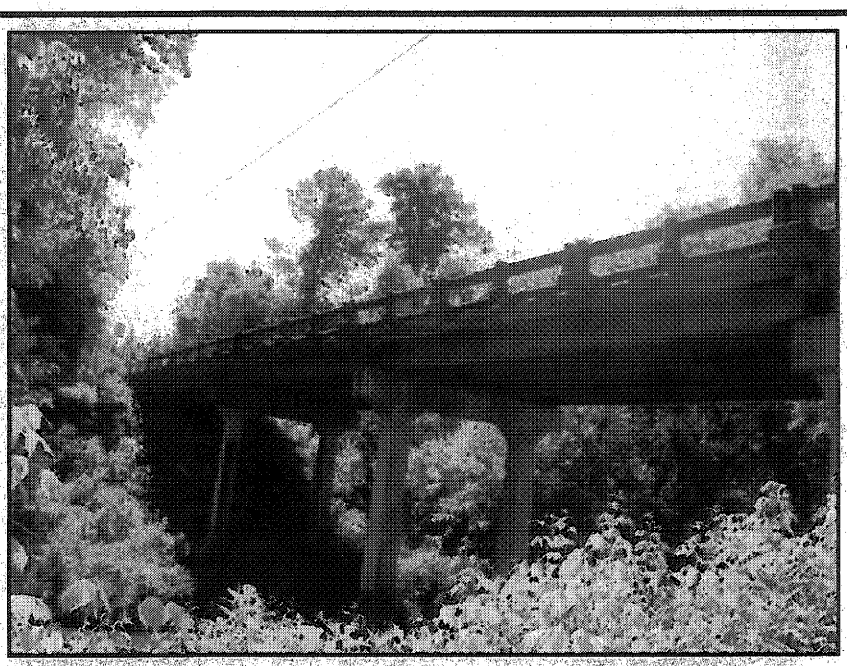
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS

ROWAN COUNTY TIP NO. B-4627

BRIDGE NO. 26 on SR 1003 (Cool Springs Road) over THIRD CREEK

PHOTOGRAPHS

Figure 3-1



VIEW OF DOWN-STREAM FACE OF BRIDGE (LOOKING SOUTH)

VIEW LOOKING WEST AT GRAVEL DRIVE

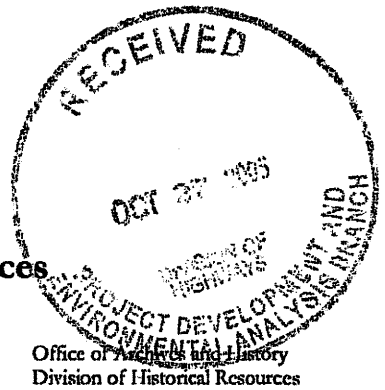
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS

ROWAN COUNTY TIP NO. B-4627

BRIDGE NO. 26 on SR 1003 (Cool Springs Road) over THIRD CREEK

PHOTOGRAPHS

Figure 3-2



North Carolina Department of Cultural Resources

State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

October 24, 2005

MEMORANDUM

TO: Greg Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: Peter Sandbeck RSE for Peter Sandbeck

SUBJECT: Bridge No. 26, on SR 1003 over Third Creek, B-4627, Rowan County, ER05-2410

Thank you for your letter of September 5, 2005, concerning the above project.

We have conducted a search of our maps and files and located the following structure of historical or architectural importance within the general area of this project:

File-Rice-Rutledge House (RW 1207), NE side of SR 1003, 0.4 miles E of junction with SR 1702

We recommend that a Department of Transportation architectural historian identify and evaluate any structures over fifty years of age within the project area, and report the findings to us.

There are no known archaeological sites within the proposed project area. Based on our knowledge of the area, it is unlikely that any archaeological resources that may be eligible for conclusion in the National Register of Historic Places will be affected by the project. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above-referenced tracking number.

cc: Mary Pope Furr, NCDOT
Matt Wilkerson, NCDOT

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-4763/733-8653
RESTORATION	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6547/715-4801
SURVEY & PLANNING	515 N. Blount Street, Raleigh, NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6545/715-4801

Federal Aid # **BRZ-1003** *TIP#* **B-4627** *County:* **Rowan**

CONCURRENCE FORM FOR PROPERTIES NOT ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

Project Description: **Replace Bridge No. 26 over Third Creek on SR 1003**

On **February 28, 2006** representatives of the

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

Reviewed the subject project at

- ☐ Scoping meeting
- ☒ Historic architectural resources photograph review session/consultation
- ☐ Other

All parties present agreed

- ☐ There are no properties over fifty years old within the project's area of potential effects.
- ☒ There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.
- ☒ There are properties over fifty years old within the project's Area of Potential Effects (APE), but based on the historical information available and the photographs of each property, the properties identified as 1 & 2 are considered not eligible for the National Register and no further evaluation of them is necessary.
- ☒ There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- ☒ All properties greater than 50 years of age located in the APE have been considered at this consultation, and based upon the above concurrence, all compliance for historic architecture with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.
- ☐ There are no historic properties affected by this project. (*Attach any notes or documents as needed*)

Signed:

Shelby Sadler — 3/14/06

Representative, NCDOT — Date

FHWA, for the Division Administrator, or other Federal Agency — Date

3-14-06

Representative, HPO — Date

Renee Gledhill-Earley — 3-14-06

State Historic Preservation Officer — Date

If a survey report is prepared, a final copy of this form and the attached list will be included.