STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

December 11, 2012

U.S. Army Corps of Engineers
Regulatory Field Office
2407 West 5th Street
Washington, NC 27889

Attention: Mr. Tom Steffens
NCDOT Coordinator

Dear Sir:

Subject: **Application for Section 404 Nationwide Permits (NWP) 23 & 12, and Section 401 Water Quality Certification** for the replacement of Bridge No. 65 over Contentnea Creek on SR 1163 in Wilson County; TIP Project B-5126; Federal Aid Project No. BRSTP-1163(8); Debit $240 from WBS No. 42283.1.1.

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 July 7 2011 and distributed shortly thereafter. Additional copies are available upon request. The NCDOT proposes to replace existing Bridge No. 65 over Contentnea Creek on SR 1163 in Wilson County. The project involves replacement of the existing structurally deficient bridge and approaches with a new structure. The replacement structure will be approximately 70 feet long providing a minimum 48 foot clear deck width. The bridge will include three 12-foot lanes and a minimum of 6-foot offsets. The approach roadway will extend approximately 500 feet from the southwest end and 400 feet from the northeast end of the new bridge. The southeast approach will begin as a 24-foot pavement width providing two 12-foot lanes, and will widen to three 12-foot lanes approximately 150 feet before the bridge. Eight-foot shoulders will be provided at this end of the approach. The northeast approach will be widened to include four 12-foot lanes. Eight-foot shoulders (11-foot shoulders where guardrail is included), including four-foot paved shoulders, will be provided at this end of the approach.

Proposed permanent impacts to riparian wetlands from bridge construction are 0.06 acre of fill. Utility relocations will require less than 0.01 acre of fill in wetlands. Traffic will be detoured off-site during construction.

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

This project calls for a letting date of June 18, 2013 and a review date of April 30, 2013; however, the let date may advance as additional funding becomes available.

Regulatory Approvals

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

Section 401 Permit: We anticipate 401 General Certification numbers 3891 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 two copies of this application to the NCDWQ for their approval.

Neuse Riparian Buffer Authorization: Although this projects lies in the Neuse River Basin, the NCDWQ has determined that this project is not subject to the Neuse Basin Riparian Buffer rules, therefore a Riparian Buffer Authorization will not be required.

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,

E. L. Lusk

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

cc

NCDOT Permit Application Standard Distribution List.

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

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	☒ Section 404 Permit	☐ Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 23 & 12	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:	Replacement of Bridge No. 65 over Contentnea Creek on SR 1163
2b. County:	Wilson
2c. Nearest municipality / town:	Wilson
2d. Subdivision name:	*not applicable*
2e. NCDOT only, T.I.P. or state project no:	B-5126

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 i f applicable):	*not applicable*
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:	☐ 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: 35.706963, Longitude: -77.952923
1c. Property size:	8.1 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Contentnea Creek
2b. Water Quality Classification of nearest receiving water:	WS IV; NSW; CA
2c. River basin:	Neuse 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: Urban, forested stream corridors, Wiggins Mill Reservoir	
3b. List the total estimated acreage of all existing wetlands on the property: 1.1	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 149 feet	
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 bridge 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: William Wescott visited the site on May 28, 2009, but no JD was issued. JD is requested with this application.	☒ 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): Richard Darling, Dwayne Huneycutt	Agency/Consultant Company: Baker Engineering 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)
Site 1 ☒ P ☐ T	Fill - bridge	riparian	☒ Yes ☐ No	☒ Corps ☐ DWQ	0.06
Site 1 ☒ P ☐ T	Fill - utilities	riparian	☒ Yes ☐ No	☒ Corps ☐ DWQ	<0.01
Site 2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 2 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
Site 6 ☐ P ☐ T			☐ Yes ☐ No	☐ Corps ☐ DWQ	
				2g. **Total wetland impacts**	0.06 Perm.

2h. Comments: There will be 0.08 ac of hand clearing due to bridge construction & 0.08 ac due to utility relocation. Additionally, there will be 0.01 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 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 2 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 3 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 4 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
Site 5 ☐ P ☐ T			☐ PER ☐ INT	☐ Corps ☐ DWQ		
					3h. **Total stream and tributary impacts**	0.0 Perm 0.0 Temp

3i. Comments:

4. Open Water Impacts

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

4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 ☒ P ☐ T	Contentnea Creek	Permanent		<0.01
O2 ☐ P ☐ T				
O3 ☐ P ☐ T				
O4 ☐ P ☐ T				
			4f. Total open water impacts	<0.01 Permanent

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 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 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 bridge 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?	☐ Yes ☒ 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):	☐ DWQ ☐ Corps	
2c. If yes, which mitigat ion option will be used for this project?	☐ Mitigation bank ☐ Payment to in-lieu fee program ☐ Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	☐ Yes	
4b. Stream mitigation requested:	linear feet	
4c. If using stream mitigation, stream temperature:	☐ warm ☐ cool ☐ cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	acres	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
5. Complete if Using a Permittee Responsible Mitigation Plan		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

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

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

F. Supplementary Information		
1. Environmental Documentation (DWQ Requirement)		
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	☒ Yes	☐ No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	☒ Yes	☐ No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	☒ Yes	☐ No
2. Violations (DWQ Requirement)		
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	☐ Yes	☒ No
2b. Is this an after-the-fact permit application?	☐ Yes	☒ No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):		
3. Cumulative Impacts (DWQ Requirement)		
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	☐ Yes ☒ No	
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.		
4. Sewage Disposal (DWQ Requirement)		
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable		

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

Dr. Gregory J. Thorpe, Ph D Applicant/Agent's Printed Name	E. L. Luck Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	12.10.12 Date

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR LINEAR ROADWAY PROJECTS

(Version 1.2; Released July 2012)

Project/TIP No.: B-5126 **County(ies):** Wilson

General Project Information

Project No.:	B-5126		**Project Type:**	Bridge Replacement	**Date:** 9/17/2012
NCDOT Contact:	Randy Henegar, P.E.		**Contractor / Designer:**		
	Address: 1590 Mail Service center Raleigh, NC 27699			**Address:**	
	Phone: 919-707-6726			**Phone:**	
	Email: rhenegar@ncdot.gov			**Email:**	
City/Town:	Wilson		**County(ies):**	Wilson	
River Basin(s):	Neuse		**CAMA County?**	No	
Primary Receiving Water:	Contentnea Creek		**NCDWQ Stream Index No.:**	27-86-(5.8)	
NCDWQ Surface Water Classification for Primary Receiving Water	**Primary:**		Water Supply IV (WS-IV)		
	Supplemental:		Nutrient Sensitive Waters (NSW)		
Other Stream Classification:	None		CA		
303(d) Impairments:	None				
Buffer Rules in Effect					

Project Description

Project Length (lin. Miles or feet):	0.184 MILES	**Surrounding Land Use:**	Swamp, woods.

	Proposed Project	**Existing Site**
Project Built-Upon Area (ac.)	1.05 ac.	0.77 ac.
Typical Cross Section Description:	48' FACE TO FACE @ NORMAL CROWN	24' FACE TO FACE @ NORMAL CROWN
Average Daily Traffic (veh/hr/day):	Design/Future: ADT 2035=14,700 TRK 3%	Existing: ADT 2009=8000

General Project Narrative:

B-5126 has a project # of 42283.1.1, Sta 21+36 _L_. Over Contentnea Creek. This is an overflow bridge, county brg. # 970065., on SR 1163 between 264 ByPass and SR 1165. Length of roadway project = 0.171 miles, Length of structure= 0.013 miles, total length of State Project = 0.184 miles, project is within Municipal boundaries of Wilson.

References

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR LINEAR ROADWAY PROJECTS

(Version 1.2; Released July 2012)

Project/TIP No.: B-5126 **County(ies):** Wilson

Swales

Sheet No.	Station (From / To)	Stream Crossing Station	Base Width (ft)	Front Slope (H:V)	Back Slope (H:V)	Drainage Area (ac)	Recommended Treatment Length (ft)	Actual Length (ft)	Longitudinal Slope (%)	Q2 (cfs)	V2 (fps)	Q10 (cfs)	V10 (fps)	Rock Checks Used
4	18+00 21+00 RT			max.3:1	3:1	0.97	97	300	0.30%	2.2	1.1	2.9	1.2	no
4	21+55 24+50 RT			max. 3:1	3:1	1.14	114	223	0.30%	3.9	1.3	5.0	1.3	no
4	22+12 23+00 LT			max. 3:1	3"1	0.66	66	88	0.30%	2.1	1.1	2.7	1.1	no
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☑ YES ☐ NO Have minimum design criteria, as presented in the NCDOT Best Management Practices Toolbox, Version 1 (March 2008), been met and verified? If No, provide further explanantion of why design criteria was not met.

Additional Comments

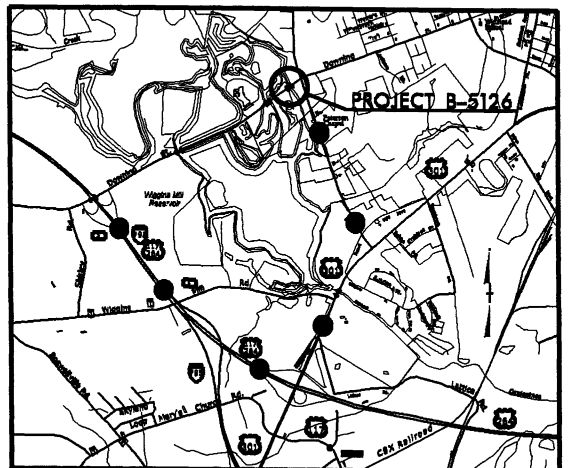
09/08/99

TIP PROJECT: B-5126

CONTRACT: C203157

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

See Sheet 1-A For Index of Sheets



VICINITY MAP

●—●—●—● *OFFSITE DETOUR*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

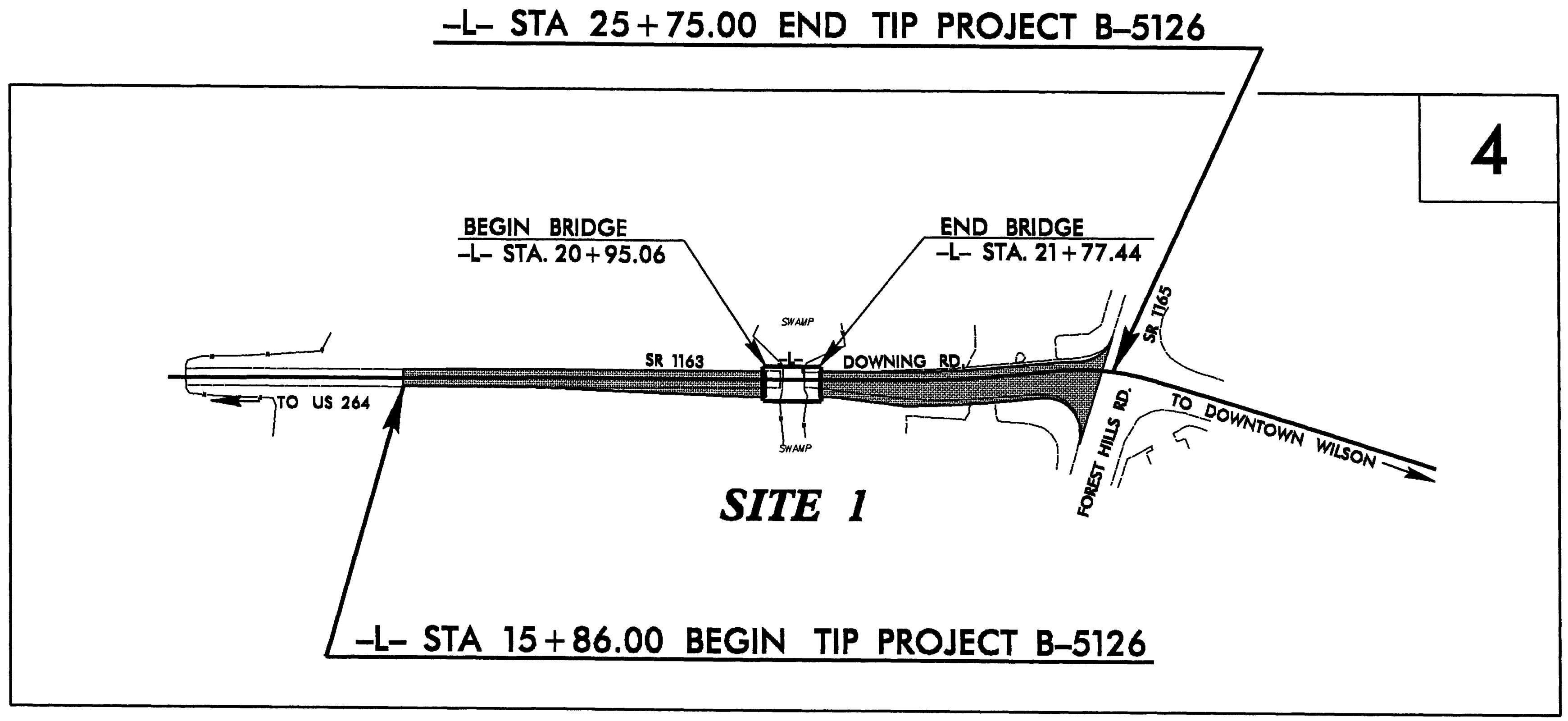
WILSON COUNTY

STATE	STATE PROJECT REFERENCE NO.		SHEET NO.	TOTAL SHEETS
N.C.	B-5126		1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION		
42283.1.1	BRSTP-1163(8)	PE		
42283.2.1	BRSTP-1163(8)	R/W & UTIL		

LOCATION: BRIDGE 65 OVER A SWAMP OF CONTENTNEA CK OVERFLOW/WIGGINS MILL RESERVOIR ON SR 1163 (DOWNING ROAD) IN WILSON

WETLAND AND SURFACE WATER IMPACTS

NAD 83/ NSRS 2007



Permit Drawing
Sheet 1 of 8

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

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF WILSON

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2012 = 8,774
ADT 2035 = 14,700
DHV = 14 %
D = 80 %
T = 3 % *
V = 60 MPH
* TTST = 1% DUAL = 2%
FUNC CLASS = LOCAL
SUB REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-5126 = 0.171 MILES
LENGTH OF STRUCTURE TIP PROJECT B-5126 = 0.016 MILES
TOTAL LENGTH OF STATE PROJECT B-5126 = 0.187 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JUNE 15, 2012

LETTING DATE:
JUNE 18, 2013

JAMES A. SPEER, PE
PROJECT ENGINEER

ALLISON K. WHITE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
SIGNATURE: ____ P.E.

ROADWAY DESIGN ENGINEER
SIGNATURE: ____ P.E.

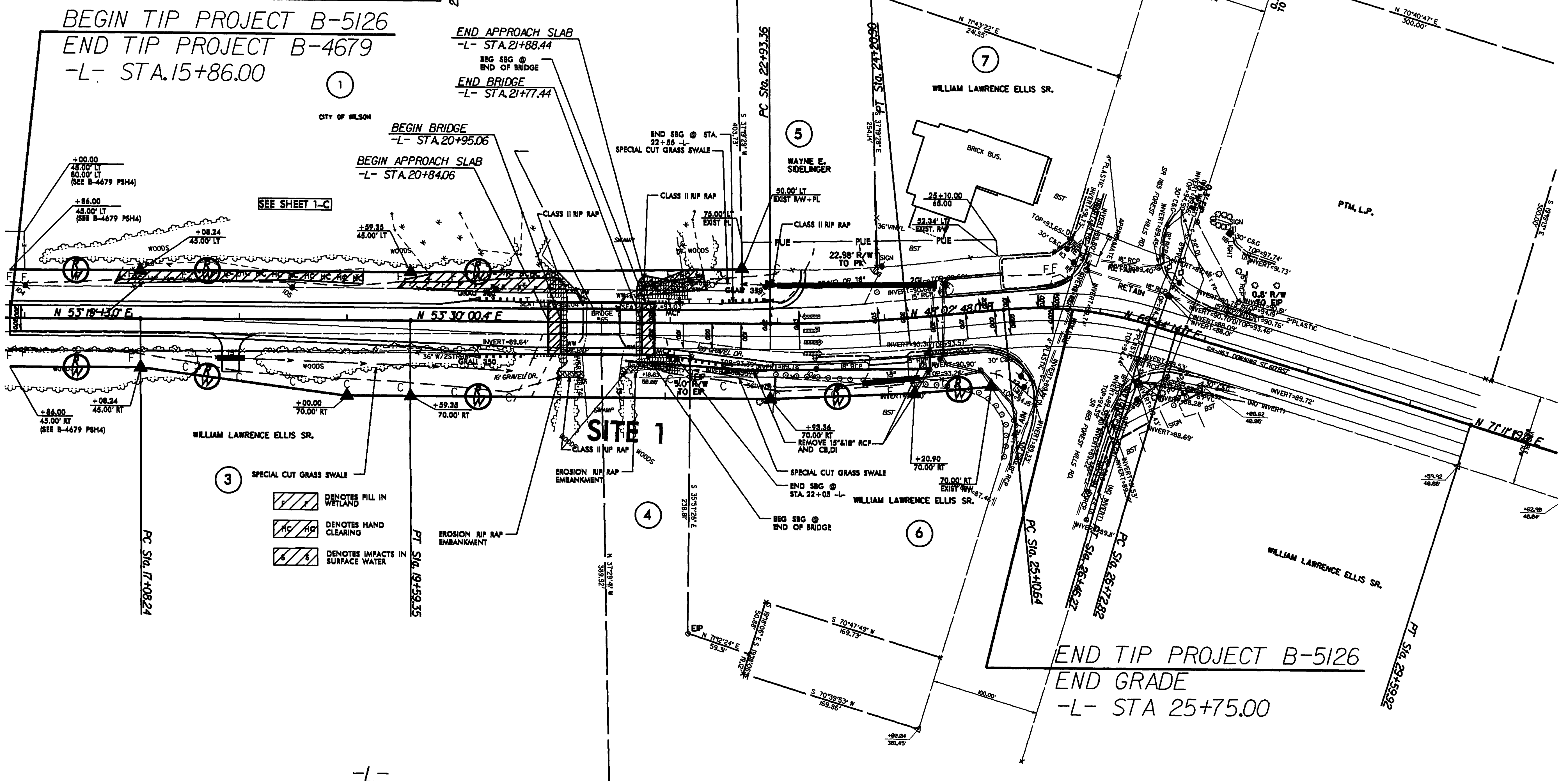
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROJECT REFERENCE NO.	SHEET NO.
B-5126	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

2012 ADT
2035 ADT

SR 1165: 21,900 / 36,400; 4300 / 9300; 3500 / 5000
SR 1163: 8800 / 14,700; 10,300 / 12,600
SR 1163: 900 / 2000; 3300 / 4200
SR 1165: 18,400 / 28,300



-L-

PI Sta 18+33.80	PI Sta 23+57.18	PI Sta 25+79.28	PI Sta 28+16.38
Δ = 0°10' 47.4" (RT)	Δ = 5°27' 12.4" (LT)	Δ = 21°42' 23.3" (RT)	Δ = 1°26' 07.9" (RT)
D = 0°04' 17.8"	D = 4°16' 32.9"	D = 16°00' 15.9"	D = 0°30' 00.0"
L = 251.11'	L = 127.54'	L = 135.63'	L = 287.10'
T = 125.56'	T = 63.82'	T = 68.64'	T = 143.56'
R = 80,000.00'	R = 1,340.00'	R = 358.00'	R = 11,459.16'
SE = NC	SE = 03		
	RO = SEE PLAN		

REVISIONS

Parcel 5 - Extended Proposed PUE to exist. PL   wod 7/25/12

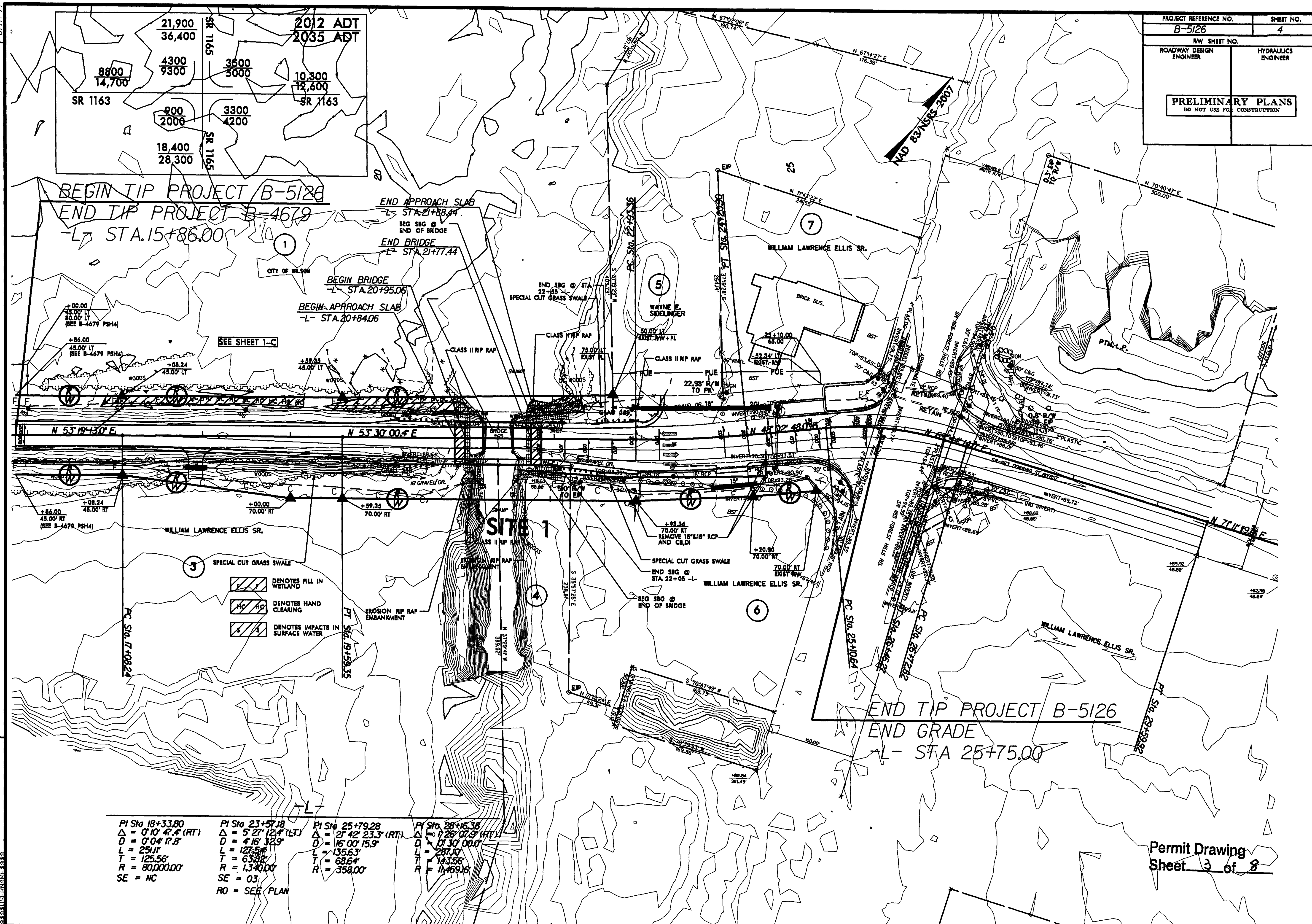
8/17/99

Permit Drawing
Sheet 2 of 8

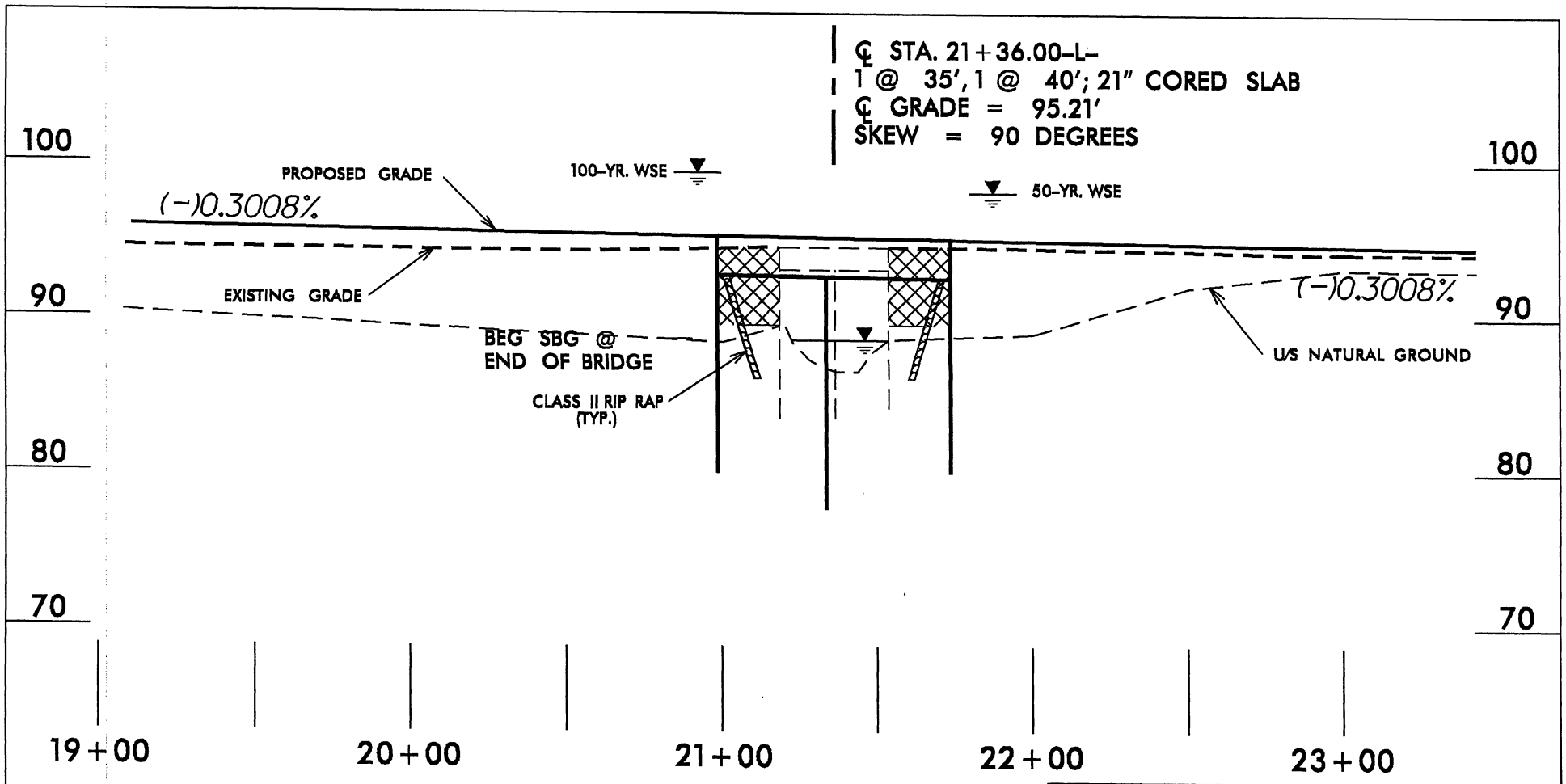
8/17/99

REVISIONS

Parcel 5 - Extended Proposed PUE to exist. PL wod 7/25/12



Permit Drawing
Sheet 3 of 8



PROFILE

NCDOT

DIVISION OF HIGHWAYS

WILSON COUNTY

PROJECT: 42283.1.1 (B-5126)

BRIDGE 65 OVER A

SWAMP ON CONTENTNEA CK

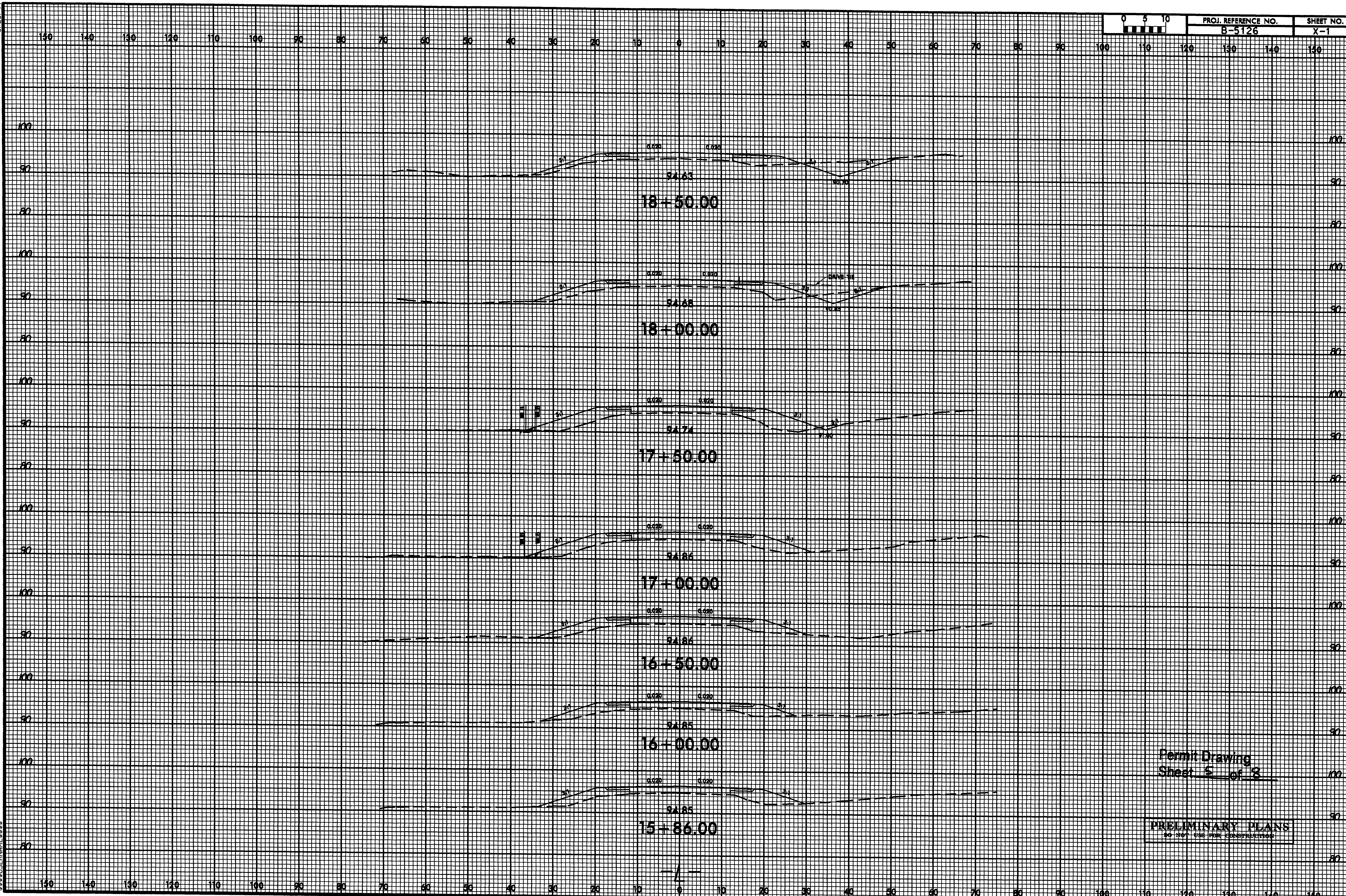
OVERFLOW / WIGGINS MILL RESERVOIR

ON SR1163 (DOWNING RD.) IN WILSON

SHEET OF 08 / 17 / 12

Permit Drawing
Sheet 4 of 8

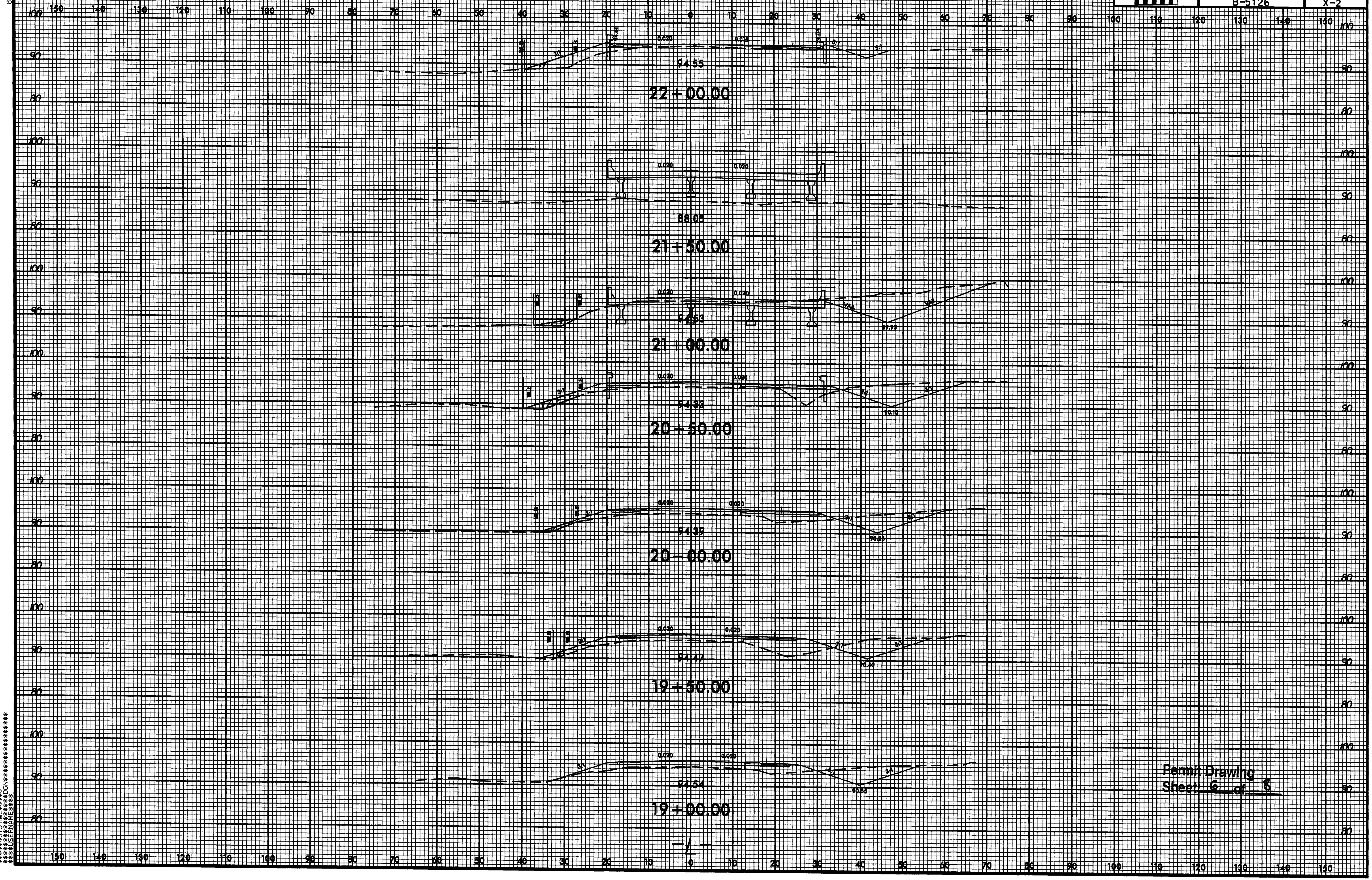
8/23/99



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

8/23/99

PROJ. REFERENCE NO.	SHEET NO.
B-5126	X-2



Permit Drawing
Sheet 6 of 8

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

PROPERTY OWNERS

Site	Last Name	First Name	Address	City/Town	State	Zip Code
1	CITY OF WILSON		PO Box 10	Wilson	NC	27894-0010

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CUMBERLAND COUNTY
WBS - 42283.1.1 (B-5126)

SHEET 8/17/2012

Permit Drawing
Sheet 7 of 8

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	21+36 -L-	BRIDGE	0.06				0.08	<0.01				
TOTALS:			0.06				0.08	<0.01				

There will be 0.01 acre of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

WILSON COUNTY

WBS - 42283.1.1 (B-5126)

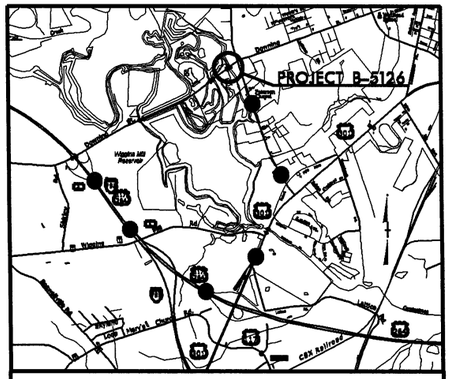
SHEET 8/17/2012

ATN Revised 3/31/05

Permit Drawing
Sheet 8 of 8

09/06/99

TIP PROJECT: B-5126



VICINITY MAP
OFFSITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

NEU UTILITY RELOCATION PLANS WILSON COUNTY

T.I.P. NO.	SHEET NO.
B-5126	UO-1

NEU UTILITY
RELOCATION PLANS

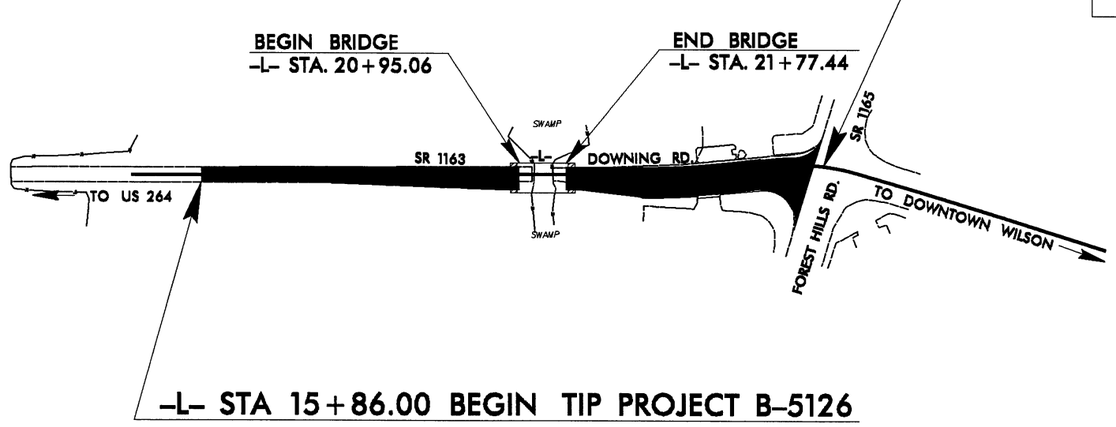
LOCATION: BRIDGE 65 OVER SWAMP ON SR 1163 DOWNING RD.

NAD 83/
NSRS 2007

TYPE OF WORK: RELOCATE POWER AND TELEPHONE POLE LINES

–L– STA 25+75.00 END TIP PROJECT B-5126

4



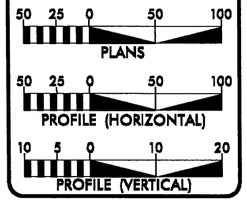
–L– STA 15+86.00 BEGIN TIP PROJECT B-5126

Utility Permit Drawing
Sheet 1 of 3

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.	*DESCRIPTION*
UO-1	*TITLE SHEET*
UO-2	*UTILITY BY OTHERS PLAN SHEET*

UTILITY OWNERS ON PROJECT

(1) CITY OF WILSON POWER
(2) CENTURYLINK TELEPHONE

PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING
1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. — *UTILITIES SECTION ENGINEER*
Corey Bousquet, P.E. — *UTILITIES SQUAD LEADER PROJECT ENGINEER*
Kelvin Martin — *UTILITIES PROJECT DESIGNER*

28-NOV-2012 14:16
R:\Utilities\RCS_Ut\Proj\NEU\B-5126_Ut_NEUtsh.dgn
$$$USERNAME$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
8-5126	UC-2
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CBB	
APPROVED BY: CBB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE:(919)707-8690 FAX:(919)250-4151	UTILITY CONSTRUCTION PLANS ONLY

NEU UTILITY RELOCATION PLANS

BEGIN TIP PROJECT B-5126
END TIP PROJECT B-4679
-L- STA.15+86.00

END APPROACH SLAB
-L- STA.21+88.44

AREA 1 HANDCLEARING IN WETLANDS = 0.02 ACRES

AREA 2 HANDCLEARING IN WETLANDS =.05 ACRES

AREA 2 PROPOSED POLE, FILL IN WETLANDS <.01 ACRES

AREA 3 HANDCLEARING IN WETLANDS <.01 ACRES

REMOVE EXISTING STRUCTURE

DO NOT DISTURB EXIST. SIGN AND VINYL FENCE

PC Sta. 22+93.36

PT Sta. 24+20.99

(1) CITY OF WILSON PB 31 PG 136 PB 15 PG 243

(3) WILLIAM LAWRENCE ELLIS SR. DB 1582 PG 727

(4) GEORGE HAYWOOD POWELL DB 1567 PG 34 PB 28 PG 17

(5) WAYNE E. SIDELINGER DB 1075 PG 287

(6) WILLIAM LAWRENCE ELLIS SR. DB 2000E PG 102

(7) WILLIAM LAWRENCE ELLIS SR. DB 2000E PG 102

PTM, L.P. DB 2203 PG 547 PB 35 PG 196

WILLIAM LAWRENCE ELLIS SR. DB 36 PG 261 PB 36 PG 261

PC Sta. 17+08.24

PT Sta. 19+59.35

PC Sta. 25+10.64

PC Sta. 26+72.82

PT Sta. 29+99.92

(THE FILL IN THE WETLAND IS DUE TO INSTALLATION OF MULTIUSE POLES.)

DENOTES FILL IN WETLAND

DENOTES HAND CLEARING

END TIP PROJECT B-5126
END GRADE
-L- STA 25+75.00

Utility Permit Drawing
Sheet 2 of 3

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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			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)
A1	18+75 to 19+16	O/H Pow/Tel Line					0.02					
A2	19+67 to 20+96	O/H Pow/Tel Line					0.05					
A2	20+31	Utl Pole	<0.01									
A3	22+09 to 22+31	O/H Pow/Tel Line					<0.01					
TOTALS:			<0.01				0.08					

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

WILSON COUNTY
PROJECT: B-5126

SHEET 1 OF 1 11/28/2012

ATN Revised 3/31/05

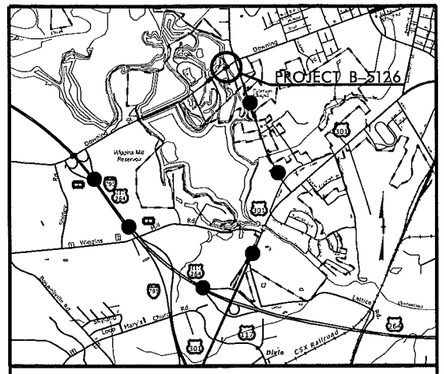
Utility Permit Drawing
Sheet 3 of 3

09/08/99

TIP PROJECT: B-5126

CONTRACT: C203157

See Sheet 1-A For Index of Sheets



VICINITY MAP

OFFSITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5126	1	

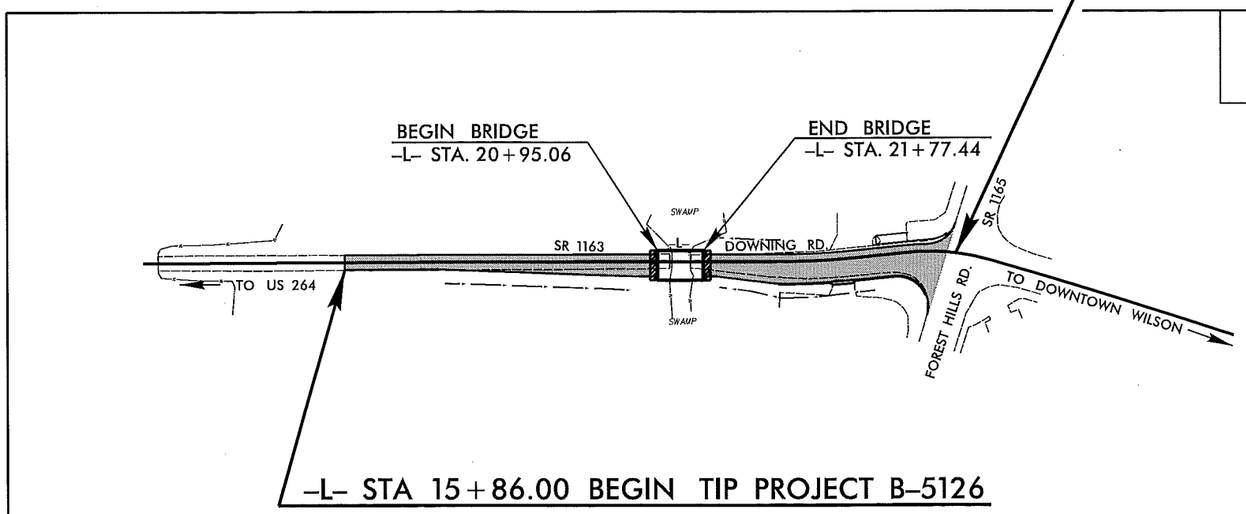
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
42283.1.1	BRSTP-1163(8)	PE
42283.2.1	BRSTP-1163(8)	R/W & UTIL

LOCATION: *BRIDGE 65 OVER A SWAMP OF CONTENTNEA CK OVERFLOW/WIGGINS MILL RESERVOIR ON SR 1163 (DOWNING ROAD) IN WILSON*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES*

NAD 83/
NSRS 2007

–L– STA 25+75.00 END TIP PROJECT B–5126



–L– STA 15+86.00 BEGIN TIP PROJECT B–5126

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

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF WILSON

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2012 = 8,774
ADT 2035 = 14,700
DHV = 14 %
D = 80 %
T = 3 % *
V = 60 MPH
* TTST =1% DUAL =2%
FUNC CLASS = LOCAL
SUB REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B–5126 = 0.171 MILES
LENGTH OF STRUCTURE TIP PROJECT B–5126 = 0.016 MILES
TOTAL LENGTH OF STATE PROJECT B–5126 = 0.187 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JUNE 15, 2012

LETTING DATE: JUNE 18, 2013

JAMES A. SPEER, PE
PROJECT ENGINEER

ALLISON K. WHITE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

17-SEP-2012 18:17
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$$$$USERNAME$$$$

04/16/11

PROJECT REFERENCE NO.	SHEET NO.

Note: Not to Scale

**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line
- Proposed Right of Way Line with Iron Pin and Cap Marker
- Proposed Right of Way Line with Concrete or Granite R/W Marker
- Proposed Control of Access Line with Concrete C/A Marker
- Existing Control of Access
- Proposed Control of Access
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

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

MINOR:

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

UTILITIES:

POWER:

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

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

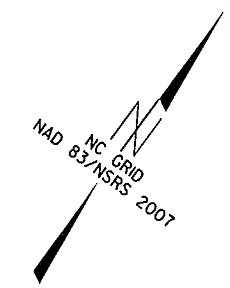
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — PUTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According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

PROJECT REFERENCE NO.	SHEET NO.
B-5126	1-C
Location and Surveys	

SURVEY CONTROL SHEET B5126

BASELINE DATA

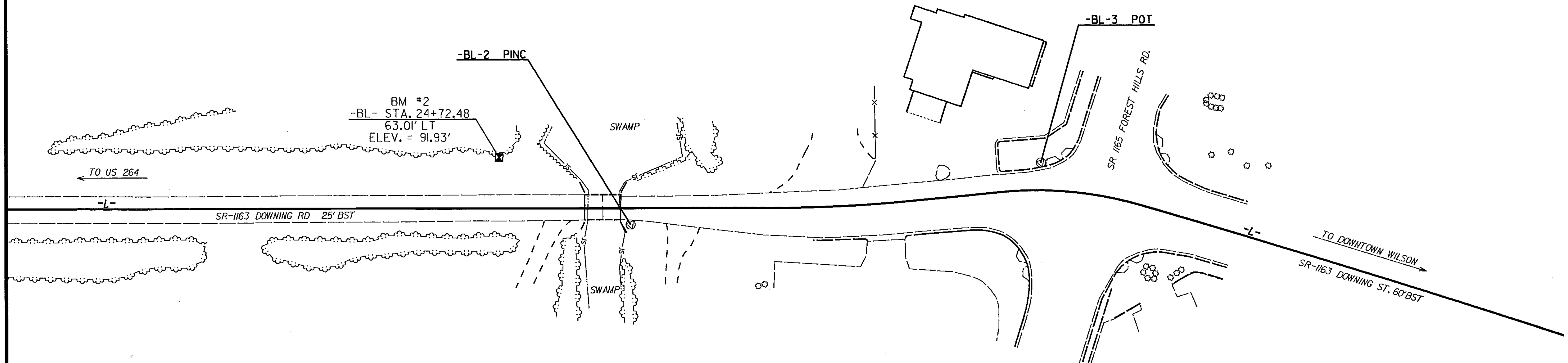
BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
10	GPS B5126-1	712627.6120	2309187.3540	93.87	OUTSIDE PROJECT LIMITS	
20	GPS B5126-2	713189.8860	2309934.5890	93.75	10+02.83	16.25 LT
1	BL-1	713338.7520	2310180.6970	94.48	12+88.99	13.03 RT
2	BL-2	713858.1680	2310883.2600	93.89	21+62.76	15.23 RT
3	BL-3	714134.3110	2311160.0090	94.77	25+49.77	25.95 LT



BENCHMARK DATA

100 ELEVATION = 93.72
N 713456 E 2310371
L STATION 15+12.00 33 RIGHT
BM#1 RR SPIKE IN BASE OF 20" PINE

101 ELEVATION = 91.93
N 713835 E 2310746
L STATION 20+39.00 48 LEFT
BM#2 RR SPIKE IN BASE OF 24" MAPLE



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B5126-2"
WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 713189.886(ft) EASTING: 2309934.589(ft)
ELEVATION: 93.753(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99990479
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS B5126-2" TO -L- STATION 10+00.00 IS
S 27°17'31.6" E 16.49'
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE

NOTES:

1. *THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT: HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/*

   THE FILES TO BE FOUND ARE AS FOLLOWS: B5126_LS_CONTROL_110914.TXT

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

⊗ *INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.*
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
NETWORK ESTABLISHED FROM NGS ONLINE POSITIONING SERVICE (OPUS)

6/2/99

17-SEP-2012 18:17
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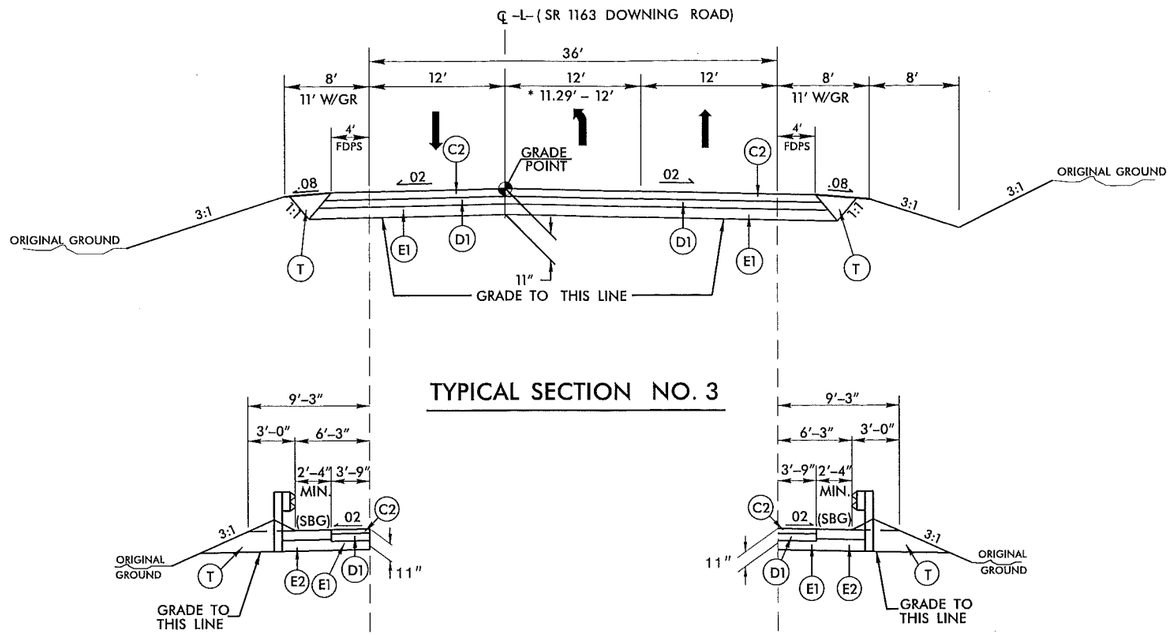
6/2/99

PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
C3	VAR. S9.5B
D1	4" I19.0B
D2	VAR. I19.0B
E1	5.5" B25.0B
E2	VAR. B25.0B
R	2'-6" C&G
T	EARTH MATERIAL.
U	EXIST. PAVEMENT.
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
B-5126	2A
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



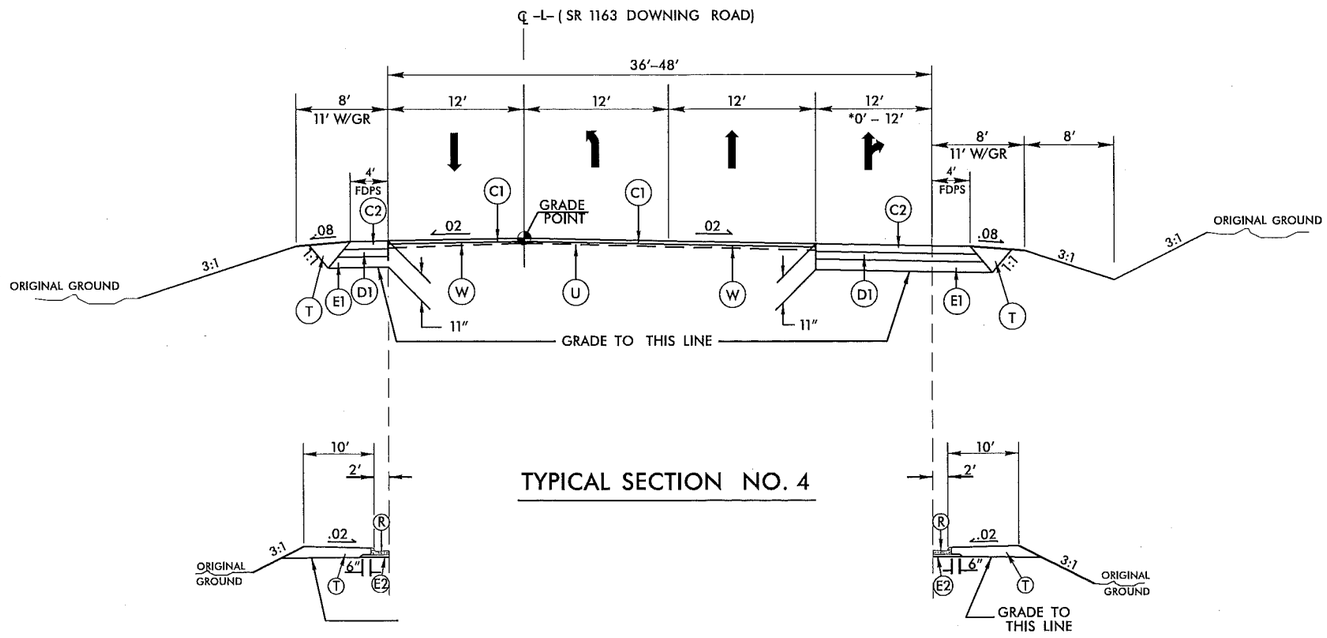
TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3 AS FOLLOWS:

*-L- STA. 20+50.00 TO STA. 20+69.97
-L- STA. 20+69.97 TO STA. 20+95.06 (BEGIN BRIDGE)
-L- STA. 21+77.44 (END BRIDGE) TO STA. 22+27.00

NOTE: SEE PLAN SHEET FOR PAVED SHOULDER LIMITS AT GUARDRAIL LOCATIONS

NOTE:
INSTALL SHOULDER BERM GUTTER (SBG) AS FOLLOWS.
-L- STA. 20+72.00 TO STA. 20+95.06 (BEGIN BRIDGE) LT & RT
-L- STA. 21+77.44 (END BRIDGE) TO STA. 22+05.00 RT
-L- STA. 21+77.44 (END BRIDGE) TO STA. 22+55.00 LT
SEE ROADWAY STD. DWG. NO. 846.03



TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4 AS FOLLOWS:

* -L- STA. 22+27.00 TO STA. 22+96.00
-L- STA. 22+96.00 TO STA. 25+75.00

NOTE: SEE PLAN SHEET FOR PAVED SHOULDER LIMITS AT GUARDRAIL LOCATIONS

NOTE:
INSTALL CONCRETE CURB AND GUTTER (C&G) AS FOLLOWS.
-L- STA. 25+14.00 TO STA. 25+71.11 LT
-L- STA. 22+96.00 TO STA. 25+35.96 RT

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6/2/99

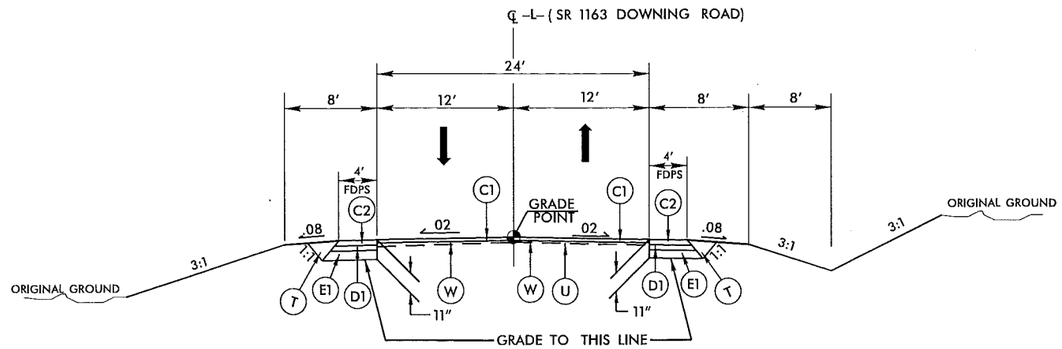
PROJECT REFERENCE NO.	SHEET NO.
B-5126	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 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 5.5" IN DEPTH.
R	2'-6" CONCRETE CURB AND GUTTER
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL NO.1)

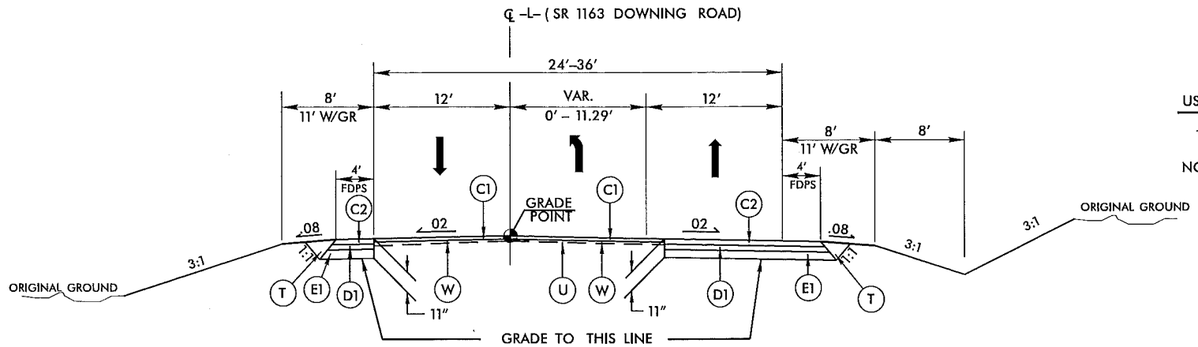
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1 AS FOLLOWS:

–L– STA. 15+86.00 TO STA. 17+39.97

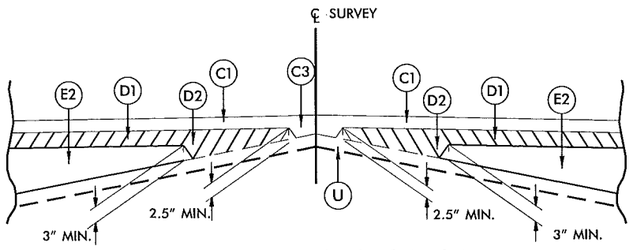


TYPICAL SECTION NO. 2

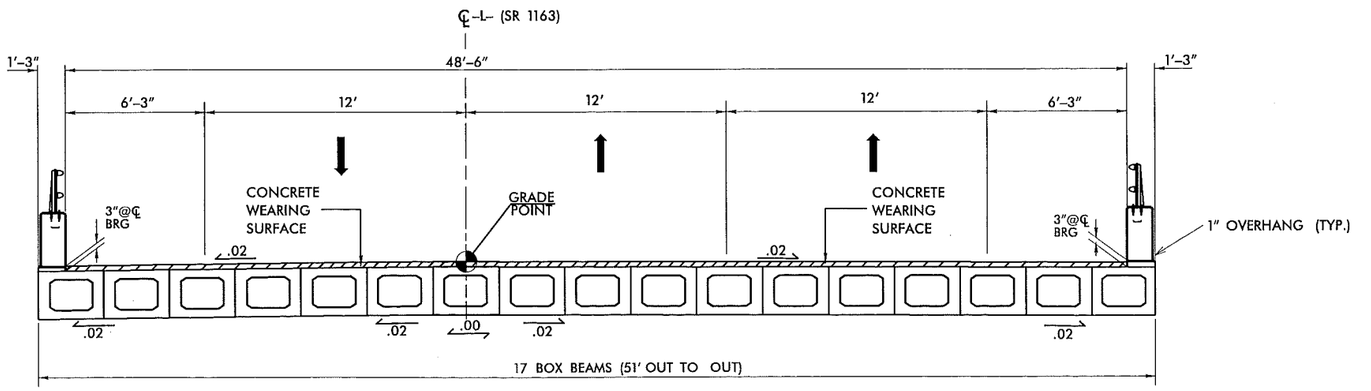
USE TYPICAL SECTION NO. 2 AS FOLLOWS:

–L– STA. 17+39.97 TO STA. 20+50.00

NOTE: SEE PLAN SHEET FOR PAVED SHOULDER LIMITS AT GUARDRAIL LOCATIONS



Detail Showing Method of Wedging



TYPICAL SECTION ON STRUCTURE

BEGIN BRIDGE –L– STA. 20+95.06 TO END BRIDGE –L– STA. 21+77.44

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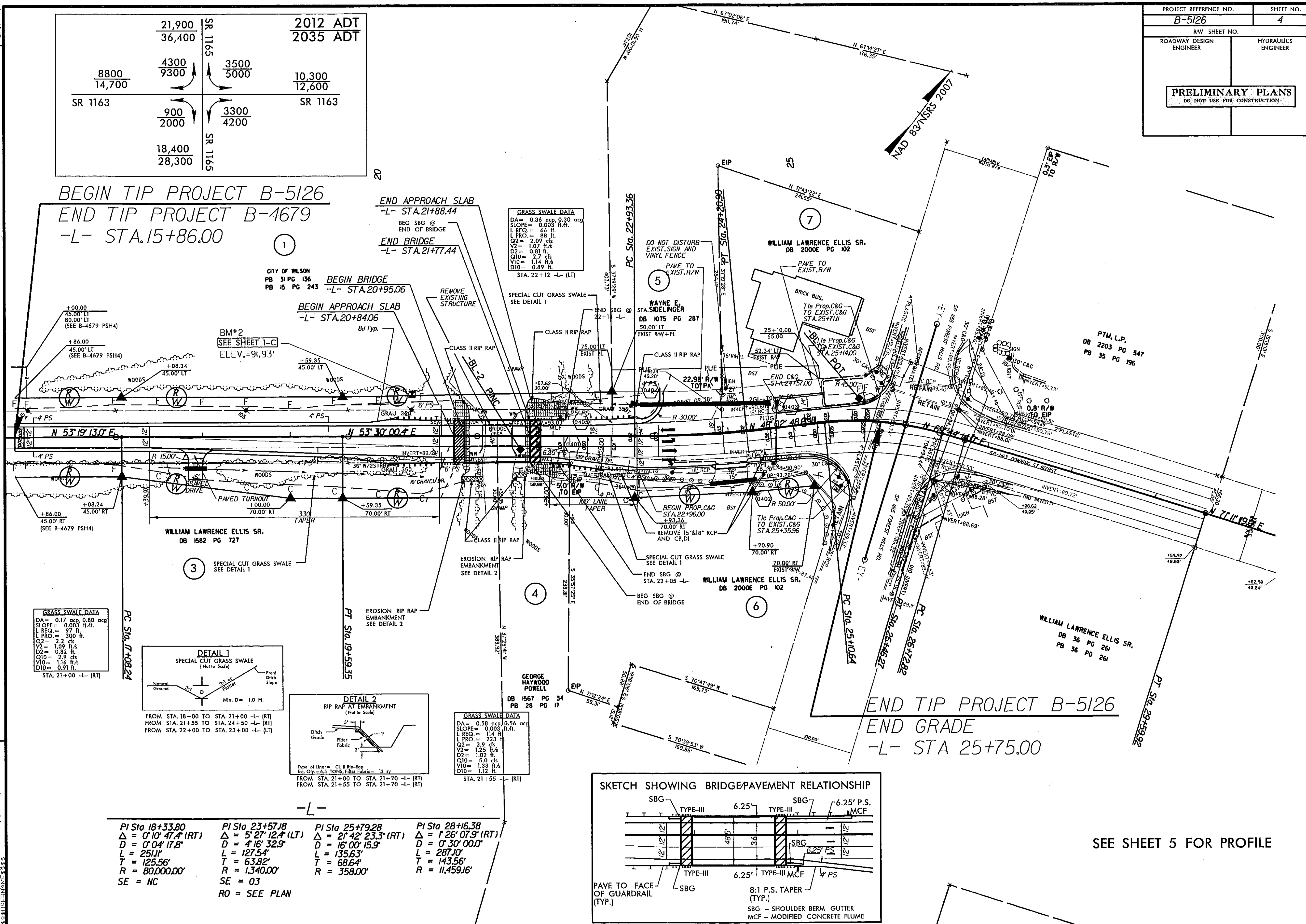
PROJECT REFERENCE NO. B-5126 | SHEET NO. 4

R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-5126	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SEE SHEET 4 FOR PLAN VIEW

BM #2 RR SPIKE IN
BASE OF 24" MAPLE
-L- STA. 20+38.76
47.83' LT
ELEV. = 91.93'

-L-

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 18,700	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 98.2	FT
BASE DISCHARGE	= 22,100	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 99.5	FT
OVERTOPPING DISCHARGE	= 5,500	CFS
OVERTOPPING FREQUENCY	= <10	YRS
OVERTOPPING ELEVATION	= 94.4	FT
	=	FT
DATE OF SURVEY	= 09-20-2011	
W.S. ELEVATION AT DATE OF SURVEY	= 89 +/-	FT

BRIDGE ℄ STA. 21+36.25 -L-
ELEV. = 95.21'
SKEW = 90°
PROPOSED 1 @ 75'
33" PRESTRESSED CONCRETE
BOX BEAM

BEGIN GRADE PROJECT B-5126
END GRADE PROJECT B-4679
-L- STA. 15+86.00
ELEV. = 96.41'

END GRADE PROJECT B-5126
-L- STA. 25+57.00
ELEV. = 94.77'

PI = 16+62.00
EL = 96.64'
VC = 100'
K = 166

PI = 24+60.00
EL = 94.24'
VC = 130'
K = 153

(+)0.3003%
(-)0.3008%
(-)0.2973%
(+)0.2973%
(+)0.2365%
(+)0.3030%
(+)0.5464%

BEGIN BRIDGE
-L- STA. 20+95.06

END BRIDGE
-L- STA. 21+77.44

CLASS II R.P. RAP (TYP.)

BEGIN RIGHT DITCH
-L- STA. 17+59
ELEV. = 91.05'

END RIGHT DITCH
-L- STA. 23+20
ELEV. = 89.80'

BEGIN LEFT DITCH
-L- STA. 23+40
ELEV. = 89.36'

END LEFT DITCH
-L- STA. 23+00
ELEV. = 89.40'

BEGIN RIGHT DITCH
-L- STA. 21+54
ELEV. = 92.10'

END RIGHT DITCH
-L- STA. 24+86
ELEV. = 92.80'

UNCLASSIFIED STRUCTURE EXCAVATION

UNCLASSIFIED STRUCTURE EXCAVATION

DITCH LEGEND
RIGHT DITCH - - - - -
LEFT DITCH — - - -

100 90 80 70 60 50 40 30

14 15 16 17 18 19 20 21 22 23 24 25 26 27

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-5126	X-1

94.63
18+50.00

94.68
18+00.00

94.74
17+50.00

94.86
17+00.00

94.86
16+50.00

94.85
16+00.00

94.85
15+86.00

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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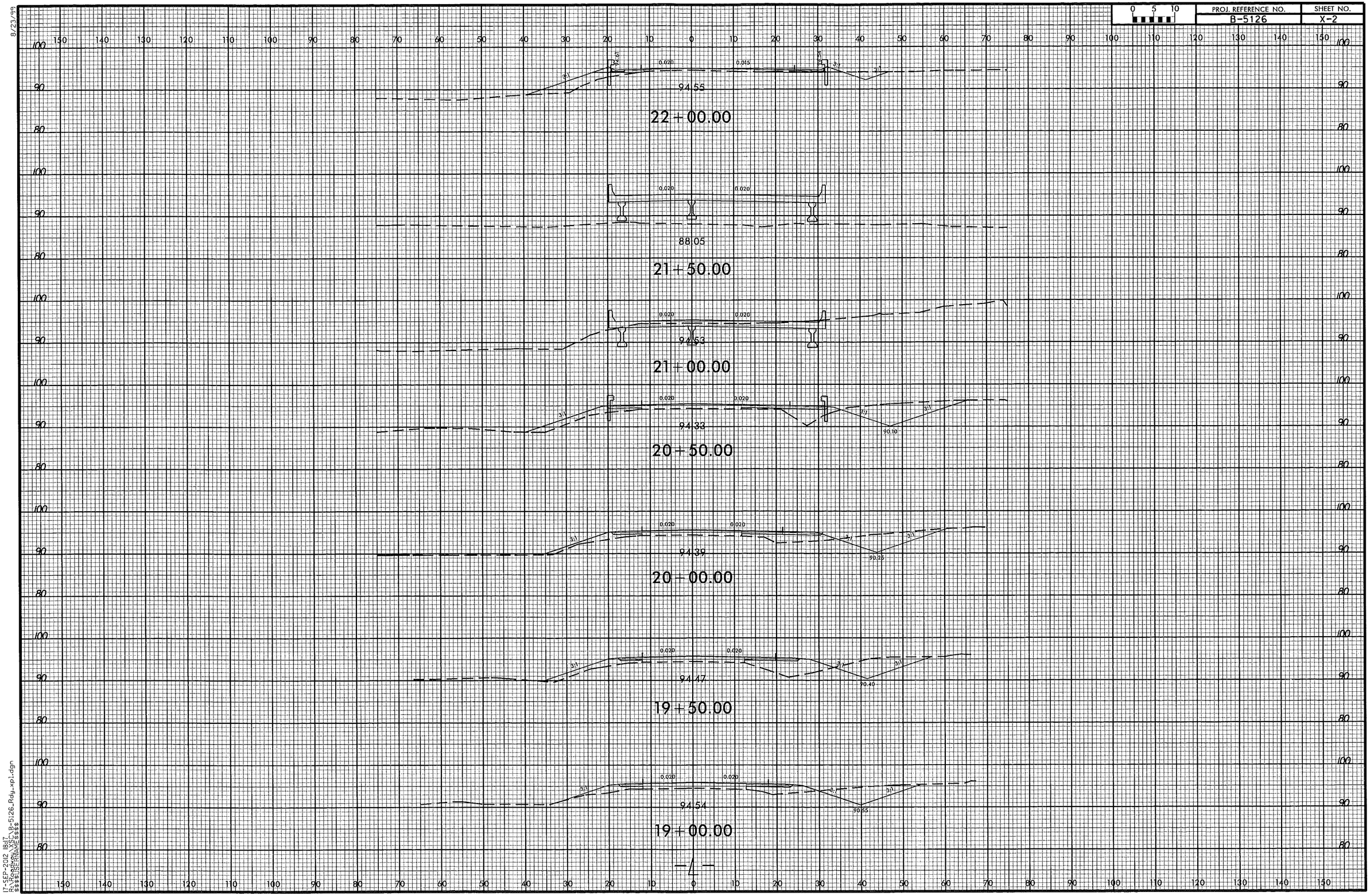
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-5126	X-2



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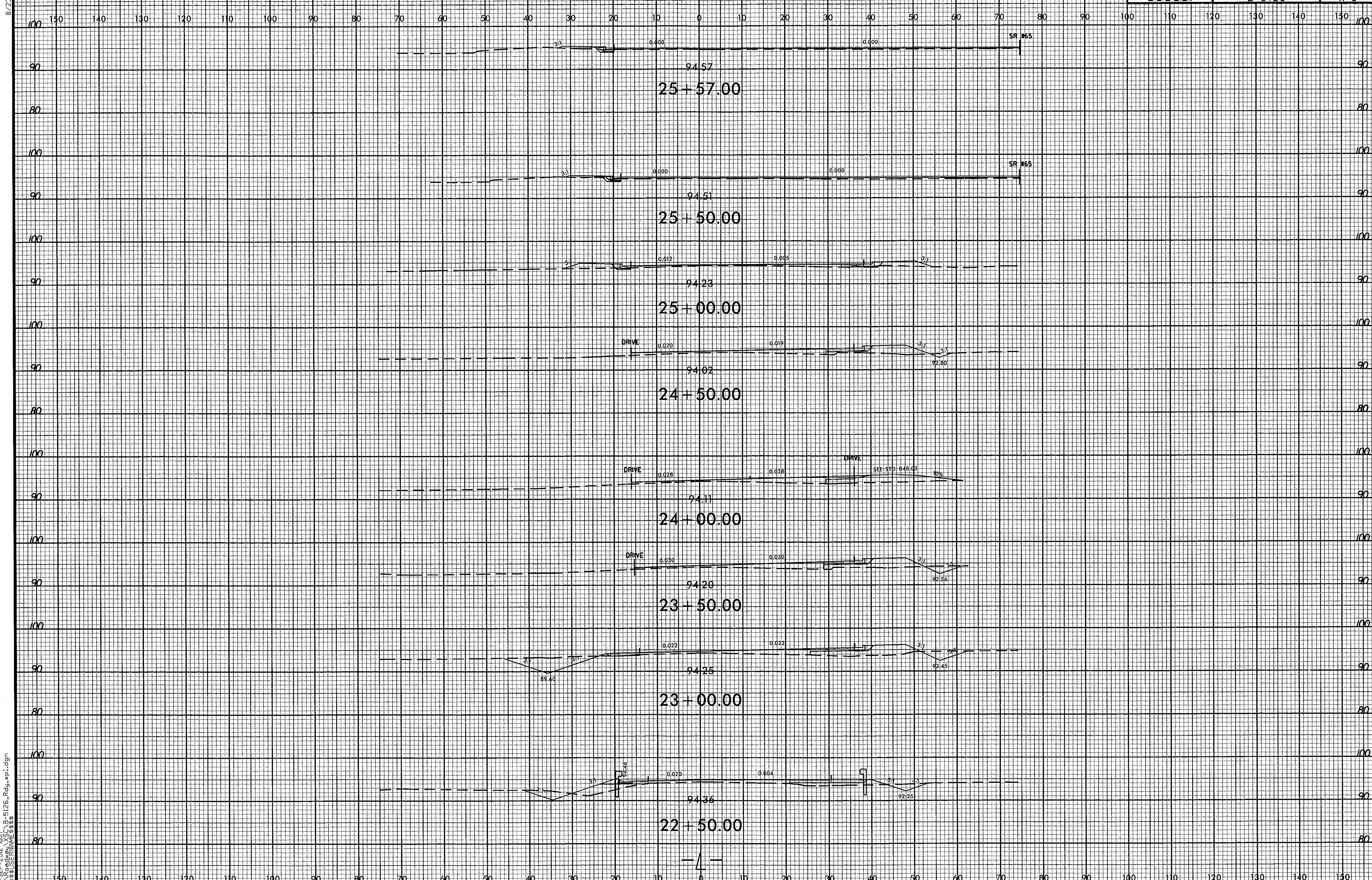
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	B-5126	X-3



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