



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

June 18, 2013

ANTHONY J. TATA
SECRETARY

U. S. Army Corps of Engineers
Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

ATTN: Ms. Amanda Fuemmeler
NCDOT Coordinator

Dear Madam:

Subject: **Application for Section 404 Nationwide 13 & 33 Permits** for the proposed replacement of Bridge No. 72 over Chinkapin Creek on NC 200 in Union County, Federal Aid Project No. BRSTP-0200(2); Division 10; TIP No. B-5134; WBS 42293.1.1.

The North Carolina Department of Transportation (NCDOT) proposes to replace the two-span 47' Bridge No. 72 over Chinkapin Creek on NC 200, with a single span 100 foot long bridge. There will be 60 linear feet of permanent impact by way of bank stabilization, and 0.03 acre (58 linear feet) of temporary stream impact associated with 2 temporary causeways (installed and removed separately) necessary to remove a pier and abutment of the existing bridge.

Please see enclosed copies of the Pre-Construction Notification (PCN), Stormwater management plan, permit drawings, design plans, and jurisdictional determination for the above referenced project. The Programmatic Categorical Exclusion (PCE) was completed in April 2012. Documents were distributed shortly thereafter. Additional copies are available upon request.

This project calls for a letting date of March 18, 2014 and a review date of January 28, 2014.

A copy of this permit application and its distribution list will be posted on the NCDOT Website at: <http://207.4.62.65/PDEA/PermApps/>. If you have any questions or need additional information, please contact Michael Turchy at maturchy@ncdot.gov or (919) 707-6157.

Sincerely,

Gregory J. Thorpe

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

"cc" List: NCDOT Permit Application Standard Distribution List

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
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



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

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	<input checked="" type="checkbox"/> Section 404 Permit	<input type="checkbox"/> Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 13 33 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input checked="" type="checkbox"/> 401 Water Quality Certification – Regular <input type="checkbox"/> Non-404 Jurisdictional General Permit <input type="checkbox"/> 401 Water Quality Certification – Express <input type="checkbox"/> Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Project Information

2a. Name of project:	Replacement of Bridge No. 72 over Chinkapin Creek on NC 200.
2b. County:	Union
2c. Nearest municipality / town:	Fairview
2d. Subdivision name:	not applicable
2e. NCDOT only, T.I.P. or state project no.:	B-5134

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:	1 South Wilmington Street
3e. City, state, zip:	Raleigh, NC 27601
3f. Telephone no.:	(919) 707-6157
3g. Fax no.:	(919) 431-2002
3h. Email address:	maturchy@ncdot.gov

4. Applicant Information (if different from owner)	
4a. Applicant is:	<input type="checkbox"/> Agent <input type="checkbox"/> 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: 35.518 (DD.DDDDDD) Longitude: - 80.4962 (-DD.DDDDDD)
1c. Property size:	1.26 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Chinkapin Creek
2b. Water Quality Classification of nearest receiving water:	WS-III
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: Mixed use of agricultural, forested & rural low density residential.	
3b. List the total estimated acreage of all existing wetlands on the property: 1.2	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 120	
3d. Explain the purpose of the proposed project: To replace a structurally deficient and functionally obsolete bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: Replacement of bridge number 72, a 2 span, 47' structure, with a single span, 100' structure, over Chinkapin Creek on NC 200. Cranes, backhoes, excavators 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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input checked="" type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known): Mulkey/ Steven W. Lund	Agency/Consultant Company: Mulkey Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation. December 8, 2009.	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

C. Proposed Impacts Inventory						
1. Impacts Summary						
1a. Which sections were completed below for your project (check all that apply):						
<input type="checkbox"/> Wetlands		<input checked="" type="checkbox"/> Streams - tributaries		<input type="checkbox"/> Buffers		
<input type="checkbox"/> Open Waters		<input type="checkbox"/> 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 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
W5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
2g. Total wetland impacts						
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 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Bank Stabilization	Chinkapin Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	17.7' *	60
S2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Causeway 1	Chinkapin Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	17.7' *	29 (0.02 acre)
S1 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Causeway 2	Chinkapin Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	17.7' *	29 (<0.01 acre)
S4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
3h. Total stream and tributary impacts						60' Permanent 58' (0.03 ac) Temporary
3i. Comments: * This stream is unnaturally wide at the road crossing due to the bridge's center bent and the skew of the crossing. The average natural stream width upstream and downstream of the bridge is 17.7'.						

4. Open Water Impacts

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

4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 <input type="checkbox"/> P <input type="checkbox"/> T				
O2 <input type="checkbox"/> P <input type="checkbox"/> T				
O3 <input type="checkbox"/> P <input type="checkbox"/> T				
O4 <input type="checkbox"/> P <input type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, permit ID no:
5i. Expected pond surface area (acres):			
5j. Size of pond watershed (acres):			
5k. Method of construction:			

6. Buffer Impacts (for DWQ)

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

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

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The existing 47' two-span bridge will be replaced with a 100' single-span bridge at the same location. Traffic will be maintained on an off-site detour during construction. As Chinkapin Creek is classified as WS-III, a hazardous spill basin will be constructed on the project. No deck drains will be used and all the bridge drainage will be captured and routed into the hazardous spill basin.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. The project has a large mass- concrete pier directly in the center of Chinkapin Creek. This size and configuration of the bent is partially responsible for the unnatural over widening of the channel at the bridge crossing. The removal of this bent will require a temporary work pad to completely surround it, which will leave 9 feet of channel for approximately 1 month. The natural dimensions of Chinkapin creek upstream and downstream of the bridge averages to 17.7 feet. Therefore the temporary work pad will obstruct less than 50% of the natural channel. Once the center pier is removed, the first causeway will be removed and the second smaller causeway will be installed to remove the abutment. Once removal is complete, the banks will be stabilized with Class II rip-rap, and the new bridge will be constructed without permanent impact to Chinkapin Creek.		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank:		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity

3c. Comments:				
4. Complete if Making a Payment to In-lieu Fee Program				
4a. Approval letter from in-lieu fee program is attached.		<input type="checkbox"/> Yes		
4b. Stream mitigation requested:		0 linear feet The NCDOT does not propose mitigation for stream bank stabilization activities. Stabilizing the bank of a stream does not require fill in the stream bed and, therefore, under Section 404 of the Clean Water Act, does not constitute Loss of Waters of the U.S. and is not subject to compensatory mitigation. Furthermore, the proposed bank stabilization activities are necessary to prevent erosion and sedimentation, i.e. preventing bank destabilization and minimizing impacts to the environment.		
4c. If using stream mitigation, stream temperature:		<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold		
4d. Buffer mitigation requested (DWQ only):		n/a square feet		
4e. Riparian wetland mitigation requested:		0 acres		
4f. Non-riparian wetland mitigation requested:		0 acres		
4g. Coastal (tidal) wetland mitigation requested:		0 acres		
4h. Comments:				
5. Complete if Using a Permittee Responsible Mitigation Plan				
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.				
6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ				
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.				
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
6f. Total buffer mitigation required:				
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).				
6h. Comments:				

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

F. Supplementary Information	
1. Environmental Documentation (DWQ Requirement)	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments: PCE Signed April 2012.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Violations (DWQ Requirement)	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
3. Cumulative Impacts (DWQ Requirement)	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.	
4. Sewage Disposal (DWQ Requirement)	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input type="checkbox"/> Raleigh <input type="checkbox"/> Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? As of December 26, 2012 the USFWS lists 3 federally listed species for Union County. Of these species, Michaux's sumac and Schweinitz's sunflower have potential habitat within the project area. Surveys for this species were conducted by NCDOT biologists in September 2008, October 2010, and October 2013, and no individuals of these species were found. The biological conclusion for all species is "No Effect".		

6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat?		

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources?		

8. Flood Zone Designation (Corps Requirement)

8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics coordination with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA Maps		

<p>Gregory J. Thayer, PhD Applicant/Agent's Printed Name</p>	<p> Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)</p>	<p>6-18-13 Date</p>
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North Carolina Department of Transportation
Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
 FOR LINEAR ROADWAY PROJECTS



(Version 1.2; Released September 2011)

Project/TIP No.: B-5134 **County(ies):** UNION **Page** 1 **of** 3

General Project Information

Project No.:	B-5134	Project Type:	Bridge Replacement	Date:	4/11/2013
NCDOT Contact:	William S. Zerman	Contractor / Designer:	AMEC Environment & Infrastructure, Inc.		
Address:	Hydraulics Unit 1020 Birch Ridge Drive, Century Center Building B Raleigh, NC 27610	Address:	2801 Yorkmont Road, Suite 100 Charlotte, NC 28208		
Phone:	919-707-6755	Phone:	704-357-5599		
Email:	bzerman@ncdot.gov	Email:	richard.hiner@amec.com		
City/Town:		County(ies):	UNION		
River Basin(s):	Yadkin-Pee Dee	CAMA County?	No		
Primary Receiving Water:	Chinkapin Creek	NCDWQ Stream Index No.:	13-17-36-9-5-(0.7)		
NCDWQ Surface Water Classification for Primary Receiving Water	Primary:	Water Supply III (WS-III)	None		
	Supplemental:				
Other Stream Classification:	None				
303(d) Impairments:	None				
Buffer Rules in Effect	N/A				

Project Description

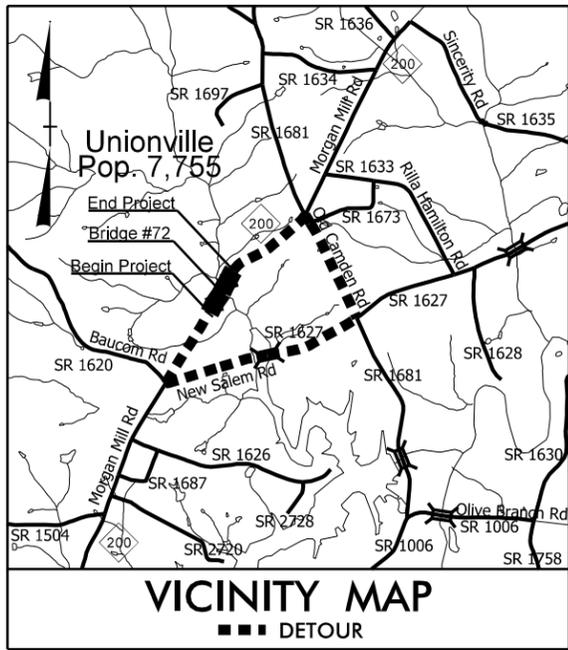
Project Length (lin. Miles or feet):	0.10	Surrounding Land Use:	Farmland and Residential		
	Proposed Project		Existing Site		
Project Built-Up Area (ac.)	ac.		ac.		
Typical Cross Section Description:	Proposed roadway consists of 2 12 ft travel lanes with 4 ft paved shoulders		Existing roadway consists of 2-10 ft lanes with 5 ft unpaved shoulders.		
Average Daily Traffic (veh/hr/day):	Design/Future:	9100	Existing:	4000	

General Project Narrative: The existing 47' two-span bridge (2-span RC slab widened with RC deck on I-beams) will be replaced with a 100' single-span 39" box-beam structure at the same location. Chinkapin Creek is classified as WS-III and a hazardous spill basin will be required. No deck drains have been proposed on the bridge structure and all bridge deck drainage will be captured in bridge drop inlets and routed to the hazardous spill basin and then be discharged to the stream bank in a lined channel.

References

09.08/99

See Sheet 1-A For Index of Sheets



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UNION COUNTY

**LOCATION: BRIDGE NO. 72 ON NC 200 (MORGAN MILL ROAD)
OVER CHINKAPIN CREEK**

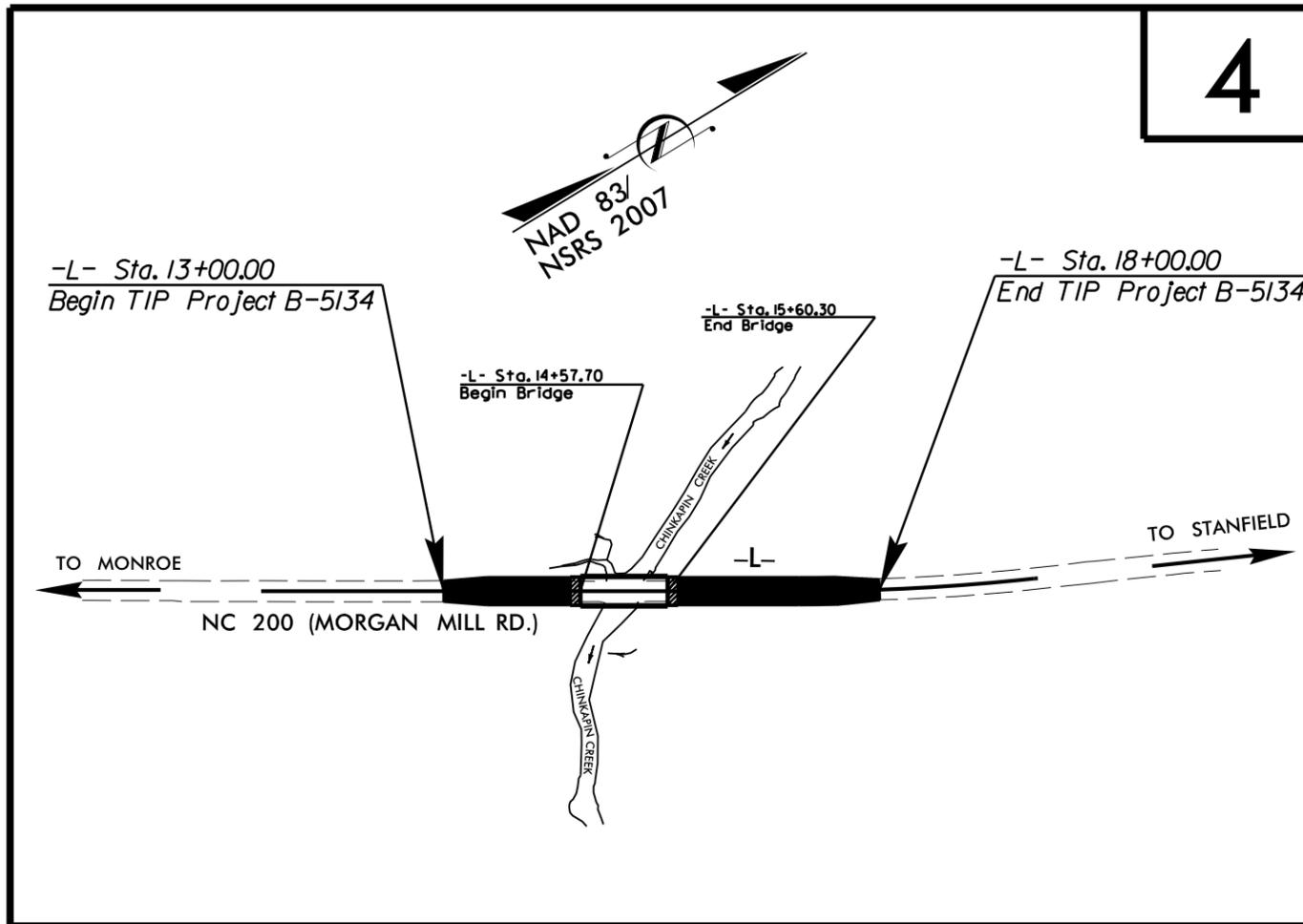
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5134	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42293.1.1	BRSTP - 0200(2)	PE	
42293.2.1	BRSTP - 0200(2)	RW & Util	

PERMIT DRAWING
SHEET 1 OF 5

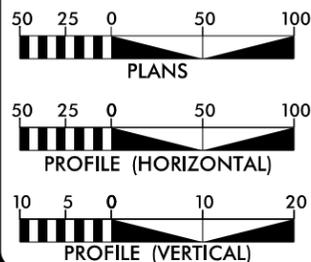
TIP PROJECT: B-5134



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF UNIONVILLE

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 4785
ADT 2035 = 9100
DHV = 11 %
D = 70 %
T = 10 % *
V = 55 MPH
* TTST 5% DUAL 5%
FUNC CLASS =
MAJOR COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-5134 = 0.076 MI
LENGTH OF STRUCTURE TIP PROJECT B-5134 = 0.019 MI
TOTAL LENGTH TIP PROJECT B-5134 = 0.095 MI

Prepared In the Office of:
DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 23, 2012

LETTING DATE:
MARCH 18, 2014

G. E. BREW, P.E.
PROJECT ENGINEER

W. T. BEST
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



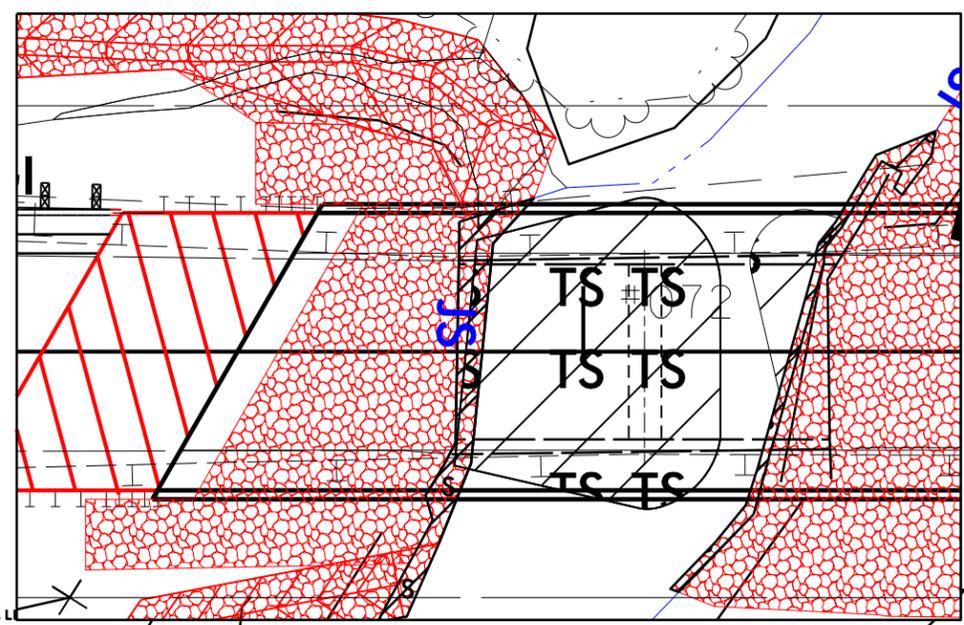
04/17/2013
B-5134-TSH.DGN
shirshant.sharma

CONTRACT:

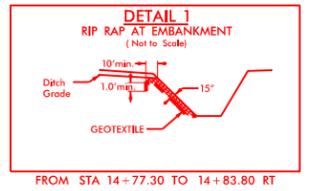
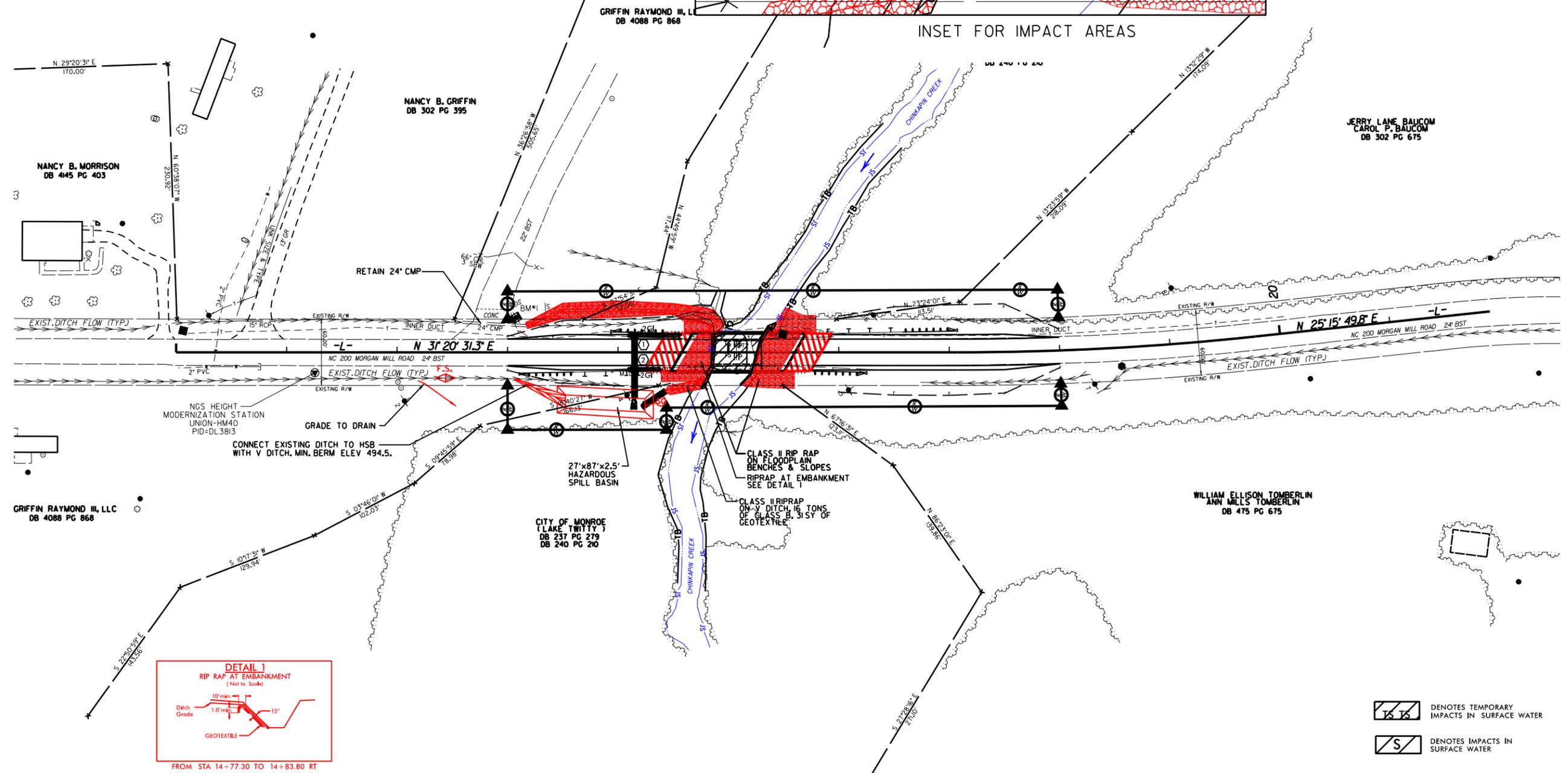
PROJECT REFERENCE NO.	SHEET NO.
B-5134	02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING
SHEET 2 OF 5

NAD 83/NSRS 2007



INSET FOR IMPACT AREAS



- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER

REVISIONS

04/17/2013
 P:\04\17\2013\02\02.dwg
 8/17/99

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
	14+84.5/15+15.23	Causeway 1						0.02			29	
	15+15.23/15+31.30	Causeway 2						< 0.01			29	
	14+83	Bank Stabilization								60		
TOTALS*:								0.03		60	58	0

*Rounded totals are sum of actual impacts

NOTES:

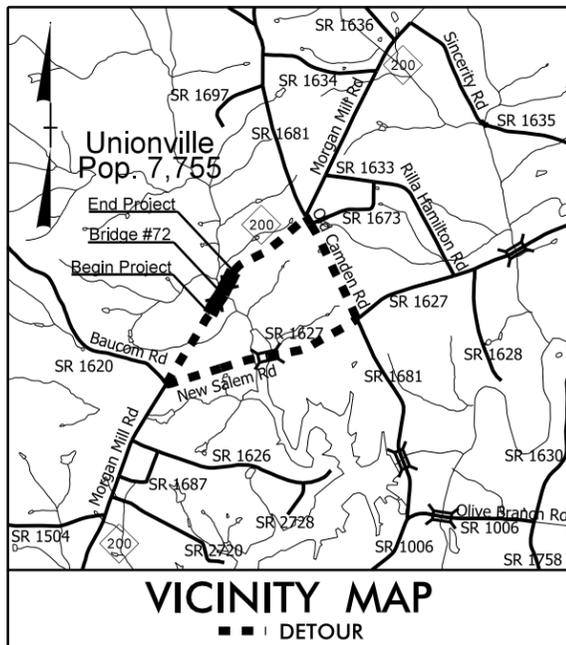
Note: The causeways are necessary for the removal of the existing pier and will be in place for approximately one month. Only one of the two causeways will be in place at any given time. The largest Causeway blocks out approximately 44% of the channel below the normal water surface elevation. The percentage is based on a natural channel width of about 17 feet upstream and downstream and takes into account tha the channel is unnaturally widened through the bridge opening.

Note that the temporary linear impacts for Causeway #1, Causeway #2, and the removal of the existing end bents and wingwalls all impact the same linear portion of Chinkapin Creek at different times and are not additive.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 41387
 UNION COUNTY
 BRIDGE 890072 (B-5134) ON NC 200
 OVER CHINKAPIN CREEK
 SHEET 5 OF 5

09/08/09

See Sheet 1-A For Index of Sheets



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

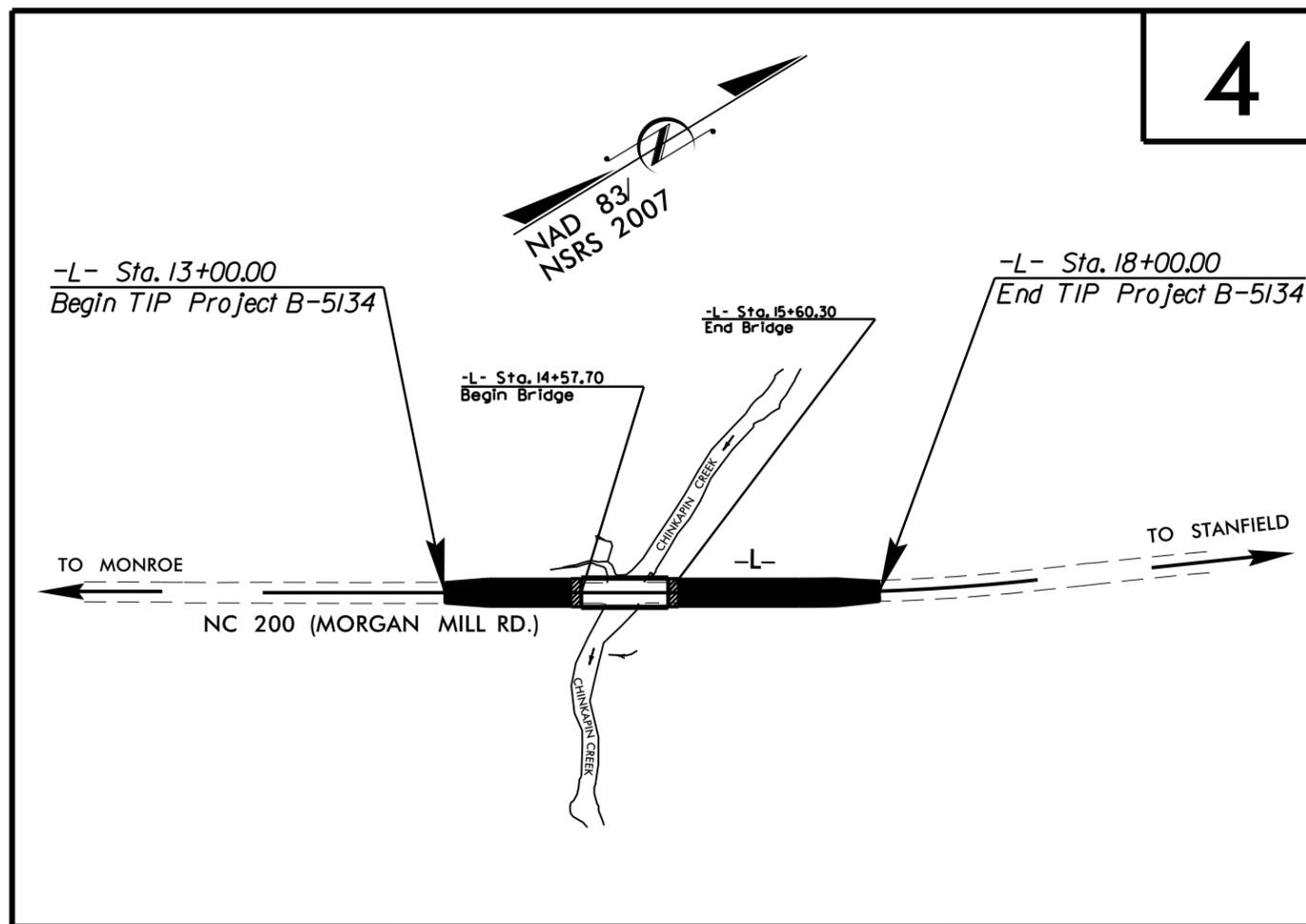
UNION COUNTY

**LOCATION: BRIDGE NO. 72 ON NC 200 (MORGAN MILL ROAD)
OVER CHINKAPIN CREEK**

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5134	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42293.1.1	BRSTP - 0200(2)	PE	
42293.2.1	BRSTP - 0200(2)	RW & Util	

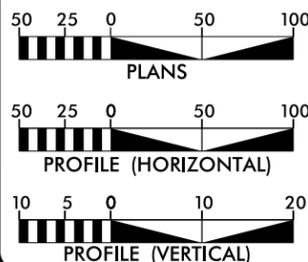
TIP PROJECT: B-5134



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF UNIONVILLE

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 4785
ADT 2035 = 9100
DHV = 11 %
D = 70 %
T = 10 % *
V = 55 MPH
* TTST 5% DUAL 5%
FUNC CLASS = MAJOR COLLECTOR REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-5134 = 0.076 MI
LENGTH OF STRUCTURE TIP PROJECT B-5134 = 0.019 MI
TOTAL LENGTH TIP PROJECT B-5134 = 0.095 MI

Prepared in the Office of:
DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 23, 2012

LETTING DATE:
MARCH 18, 2014

G. E. BREW, P.E.
PROJECT ENGINEER

W. T. BEST
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**



13-JUN-2013 07:51
R:\Roadway\Proj\B-5134_Rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

CONTRACT:

04/16/11

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	○ EP
Property Corner	-----*
Property Monument	□ EGM
Parcel/Sequence Number	①②③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	-----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	-----
False Sump	-----

RAILROADS:

Standard Gauge	-----
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	-----
Single Tree	○
Single Shrub	○
Hedge	-----
Woods Line	-----

VEGETATION:

Orchard	-----
Vineyard	-----

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	-----
Bridge Wing Wall, Head Wall and End Wall	-----
MINOR:	
Head and End Wall	-----
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	-----
Paved Ditch Gutter	-----
Storm Sewer Manhole	-----
Storm Sewer	-----

UTILITIES:

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

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

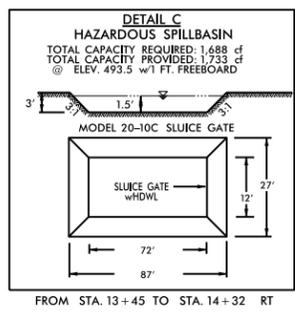
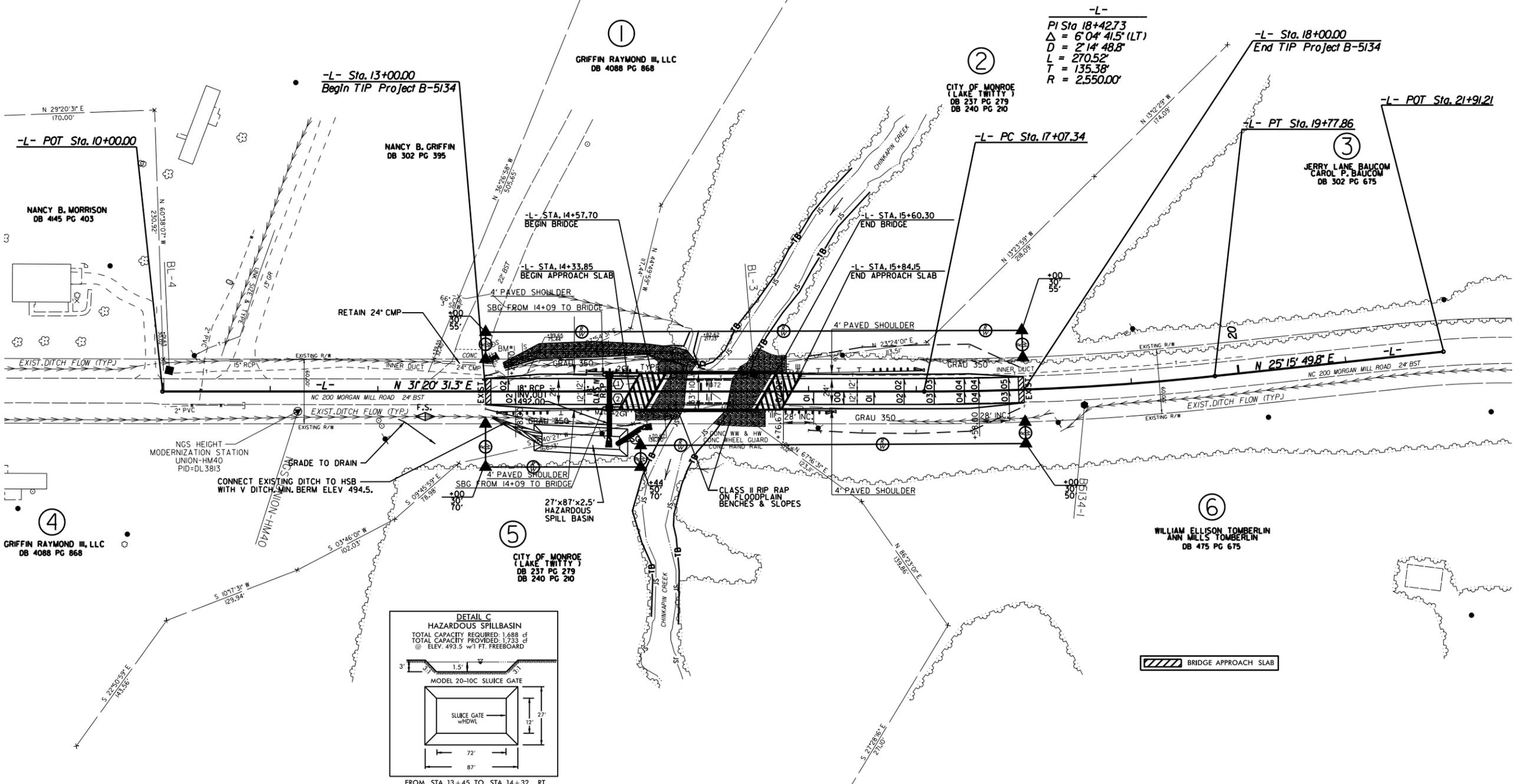
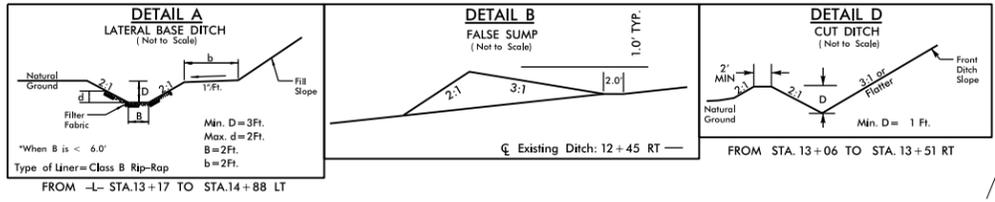
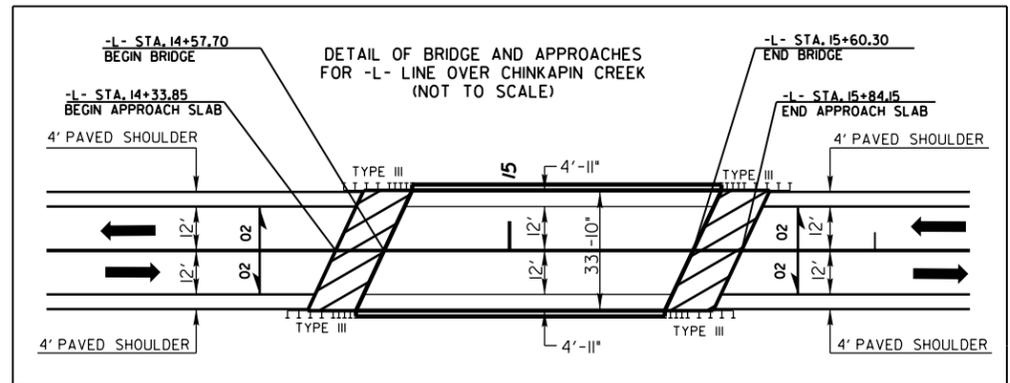
MISCELLANEOUS:

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

PROJECT REFERENCE NO.	SHEET NO.
B-5134	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS	
DO NOT USE FOR CONSTRUCTION	

NOTE: SEE SHEET 5 FOR -L- PROFILE

NAD 83 NSRS 2007



-L-
 PI Sta 18+42.73
 $\Delta = 6'04'41.5\"$ (LT)
 $D = 2'14'48.8\"$
 $L = 270.52'$
 $T = 135.38'$
 $R = 2550.00'$

REVISIONS

JUN-2013 07:54 B-5134_Rdu_psh.dgn
 8/17/99

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

NO Wetlands

Action Id. SAW-2009-1152

County: Union

U.S.G.S. Quad: Monroe

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Turchy

Property Owner/Agent: NC Department of Transportation, Attn: Gregory J. Thorpe

Address: Project Development and Environmental Analysis

1598 Mail Service Center

Raleigh, NC 27699-1548

Telephone No.: 919-715-1334

Property description:

Size (acres) 4 approx.

Nearest Town Monroe

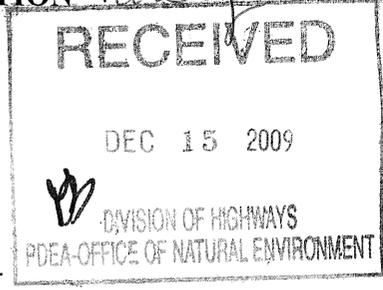
Nearest Waterway Chinkapin Creek

River Basin Yadkin

USGS HUC 03040105

Coordinates N 35.0518 W 80.4962

Location description Bridge No. 72, NC Hwy 200, TIP B-5134



Indicate Which of the Following Apply:

A. Preliminary Determination

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

B. Approved Determination

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

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

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

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

The surface waters and/or wetlands have been delineated and surveyed and are accurately depicted on the maps and GPS surveys from Mulkey, Inc. dated 29 May 2009. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

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

The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Washington, NC, at (252) 946-6481 to determine their requirements.

Action ID: _____
SAW-2009-1152

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact Steven Lund at 828-271-7980.

C. Basis For Determination

Stream Quality Assessment/Identification Forms, Wetland Determination Forms and Jurisdictional Determination Forms included with the submittal of 29 May 2009 from Mulkey Inc.

D. Remarks

Chinkapin Creek and unnamed tributaries are relatively permanent waters (RPWs) flowing to the Rocky River, a traditionally navigable water (TNW).

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

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

District Engineer, Wilmington Regulatory Division
Attn: Steven Lund, Project Manager,
Asheville Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006

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

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

Corps Regulatory Official: Steven W. Lund *SWL*

Date: December 8, 2009

Expiration Date: December 8, 2014

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit <http://www.saw.usace.army.mil/WETLANDS/index.html> to complete the survey online.

Copy furnished: Mark Mickley, Mulkey Engineers & Consultants, Inc., PO Box 33127, Raleigh, NC 27636