



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

December 2, 2011

U. S. Army Corps of Engineers
Wilmington Regulatory Field Office
69 Darlington Ave.
Wilmington, NC 28402-1890

Attn: Mr. Ronnie Smith
NCDOT Coordinator

Subject: **Additional Information for Permit Modifications for Section 404 Individual Permit and Section 401 Water Quality Certification** for the US 421/NC 87 (Sanford Bypass) from west of SR 1400 to west of US 1/15/501 in Lee County, Division 8. Federal Aid Project No. STPNHF-421(2), State Project No. 8.T540402, WBS Element No. 34431.1.1, TIP No. R-2417AA.

Reference: Section 404 Individual Permit, issued May 28, 2002, USACE Action ID 2002-20899
Section 404 Individual Permit Modification for R-2417C, issued March 25, 2009, USACE Action ID 2002-20899
Section 401 Individual Water Quality Certification, issued April 10, 2002, NCDENR-DWQ Water Quality Certification Project No. 001432.
Section 401 Individual Water Quality Certification Modification for Section R-2417C, issued January 21, 2009, NCDENR-DWQ Water Quality Certification Project No. 001432.
Section 404 Individual Permit Modification for R-2417AA, issued March 18, 2010, USACE Action ID 2002-20899
Section 401 Individual Water Quality Certification, issued September 15, 2009. NCDENR_DWQ Water Quality Certification Project No. 001432.

Additional information was requested from DWQ and USACE from the permit modification request dated October 14, 2011. A field visit was held November 15, 2012 with Ronnie Smith with the USACE, Mason Herndon with DWQ, Art King with Division 8 and Galen Cail with NCDOT Hydraulics Unit. The issues with Sites 5, 6 and 9 were discussed.

An updated summary sheet is enclosed to show the additional impacts.

- Site 5 50 ft additional permanent stream impacts (only 1:1 mitigation ratio required)
- Site 6 30 ft additional temporary stream impacts
- Site 9 10 ft additional temporary stream impacts

Total permanent stream impacts to R-2417 AA is 2821 feet and total temporary stream impacts are 517 feet. The total amount of streams that require mitigation is 234 feet at 1:1 and 15 feet at 2:1.

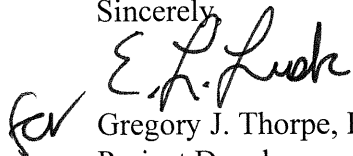
Site 5

It was agreed that Division 8 would submit an As Built plan per the agencies' recommendations after the installation of a series of rock veins to be installed instead of the log cross veins. During our last visit to the site it was determined that because of the shallow to rock structure in the stream bed, that logs could not be installed and "sealed" to the bottom of the channel so that the water would not undercut them. Mason Herndon with DWQ had agreed to a number of grouted in place rock veins that would be shot for height as they were installed to get the proper step sequence. Because this work would have to be fitted and field adjusted to match the site, he agreed that an "as built" drawing would be better than a preconstruction plan drawing that would most likely have to be re-drawn after construction to match what was installed. NCDOT will mitigate for the 50 feet of additional stream impacts using the Ecosystem Enhancement Program. The confirmation letter is attached.

Site 6 and Site 9

It was discussed for both of these sites that NCDOT will pull the crossing out and the dike upstream will stay in until vegetation is established.

A copy of this information will be posted on the NCDOT website at: <http://www.ncdot.org/doh/preconstruct/pe/>. If you have any questions or need additional information, please call Rachelle Beaugard at (919) 707-6105 or Art King at (901) 944-2344.

Sincerely,

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

Cc: NCDOT Standard Permit Application Distribution List
File R-2417AA



November 22, 2011

Mr. Gregory J. Thorpe, Ph.D.
Manager, Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

R-2417AA, US 421/NC 87 (Sanford Bypass) from west of SR 1400 to near US 1/15/501,
Lee County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the stream and riparian wetland mitigation for the subject project. Based on the information supplied by you on November 16, 2011, the impacts are located in CU 03030003 of the Cape Fear River Basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

Cape Fear 03030003 SP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	249	0.20	0	0	0	0

This mitigation acceptance letter replaces the mitigation acceptance letter issued on May 4 and November 5, 2009. EEP commits to implementing sufficient compensatory stream mitigation credits to offset the impacts associated with this project in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

Michael Ellison
EEP Deputy Director

cc: Mr. Ronnie Smith, USACE – Wilmington Regulatory Field Office
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: R-2417AA Revised

Restoring... Enhancing... Protecting Our State



WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS							
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)			
1	-L- 22+30/26+80 (LT)	Roadway Embankment	0.02	---	< 0.01	0.02	---	---	< 0.01	---	---	---	---	---	---
	-L- 23+32 (RT)	Bank Stabilization	---	---	---	---	---	---	---	---	---	---	---	---	---
2	-L- 33+00/33+65 (LT)	Roadway Embankment	0.16	---	0.21	0.05	---	---	---	---	---	---	---	---	---
2a**	-L- 33+00/33+65 (LT)	42" CMP w/ 54" STL Suppl	---	---	---	---	---	---	0.08	---	---	---	---	14	---
2b	-L- 33+00/33+65 (RT)	42" CMP w/ 54" STL Suppl	---	---	---	---	---	---	0.03	---	---	---	---	15	---
3	-L- 35+20/36+30 (RT)	Roadway Embankment	0.11	---	---	0.01	---	---	---	---	---	---	---	---	---
4	-L- 52+08 (LT/RT) & -L- 63+00 (RT)	Bank Stabilization	---	---	---	---	---	---	---	---	---	---	---	---	---
5	-L- 87+90 (LT/RT)	54" RCP	---	---	---	---	---	---	0.02	---	---	---	---	---	---
6**	-L- 120+20 (LT)	Bank Stabilization	---	---	---	---	---	---	< 0.01	---	---	---	---	---	---
		36" RCP	---	---	---	---	---	---	0.01	---	---	---	---	---	---
6	-L- 120+57 (LT/RT)	8' x 6' RCBC	---	---	---	---	---	---	0.02	---	---	---	---	---	---
7**	-L- 142+67 (LT/RT)	Bank Stabilization	---	---	---	---	---	---	0.01	---	---	---	---	---	---
		8' x 6' RCBC	---	---	---	---	---	---	0.02	---	---	---	---	---	---
8	-L- 153+50/160+00 (RT)	54" RCP	0.73	---	0.01	0.08	---	---	0.04	---	---	---	---	---	---
9	-L- 177+29 (LT/RT)	(2) 9' x 7' RCBC	0.12	---	0.03	0.03	---	---	0.01	---	---	---	---	---	---
9**	-L- 178+82 (LT)	Bank Stabilization	---	---	---	---	---	---	0.01	---	---	---	---	---	---
10	-L- 194+60/196+10 (LT/RT)	54" RCP	---	---	---	---	---	---	< 0.01	---	---	---	---	---	---
10**	-L- 195+65 (RT)	36" RCP	---	---	---	---	---	---	0.66	---	---	---	---	---	---
			---	---	---	---	---	---	< 0.01	---	---	---	---	---	---
TOTALS:			1.14		0.25	0.19			0.91		0.04		2821	517	

** Intermittent Stream - No Mitigation Required

Perennial & Intermittent Total - Mitigation Req'd: 1130 ft
 Perennial & Intermittent Total - Bank Stabilization: 288 ft
 ** Intermittent Total - Not Requiring Mitigation: 1403 ft

NOTES:

- SITE 2 - ADDITIONAL IMPACT DUE TO DRAWDOWN = 0.10 AC.
- SITE 4 - ADDITIONAL IMPACT DUE TO TEMPORARY CONSTRUCTION BENTS [2 @ 55' x 5'] = 0.01 AC (550 SF).
- SITE 8 - ADDITIONAL IMPACT DUE TO TOTAL TAKE AT L-STA 154+00 LT = 0.02 AC.
- Revised 11/17/11 -- Site 5 (+50' permanent); Site 6 (+30' temp); Site 9 (+10' temp)

ATN Revised 3/3/05

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 LEE COUNTY
 WBS - 34431.1.2 (R-2417AA)
 SHEET OF 11/28/2011

