

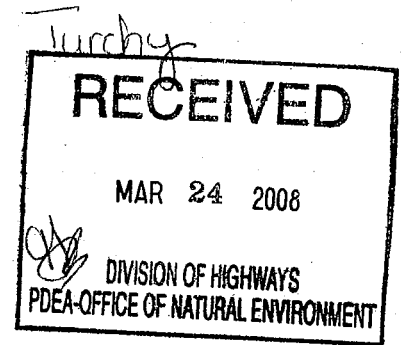


DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS

P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

IN REPLY REFER TO

March 19, 2008



Regulatory Division

Action ID No. 200530393, (TIP R-2616 A/B)

Gregory J. Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Reference the Department of the Army (DA) permit issued on August 15, 2006 to the North Carolina Department of Transportation to discharge dredged or fill material into 0.35 acres of wetland, 3202 linear feet of stream channel and 3.47 acres of man-made ponds in and adjacent to the waters of Wicker Branch, Cowpens Branch, Lanes Creek, Mill Creek and unnamed tributaries to facilitate the widening of 10.9 miles of US Highway 601 from the South Carolina State Line to north of SR 2105 (Marion Lee Road) southeast of Monroe, Union County, North Carolina (TIP No. R-2616 A/B, State Project No. 8.1690303). Also reference your written request of January 17, 2008 to modify culvert and bridge crossing designs at 17 locations (Permit Sites 1A, 1, 2, 3, 5, 8, 9, 10, 11, 12, 13, 15, 16, 22, 23, 23A and 25) to include increasing pipe and box culvert size, culvert realignment, lengthening bridge spans and replacing box culverts with bottomless culverts. These design changes will result in a small reduction of overall project impacts to waters and wetlands. The permit is hereby modified to include the work as shown on the enclosed plans. Under this modification, impacts are authorized to 0.34 acres of wetland and 3066 linear feet of stream channel. It is understood that all conditions of the original permit remain applicable and the expiration date is unchanged.

If you have any questions, please contact Mr. Steven Lund, Asheville Field Office, Regulatory Division, telephone (828) 271-7980, extension 223.

Sincerely,

John E. Pulliam, Jr.
Colonel, U.S. Army
District Commander

Enclosure

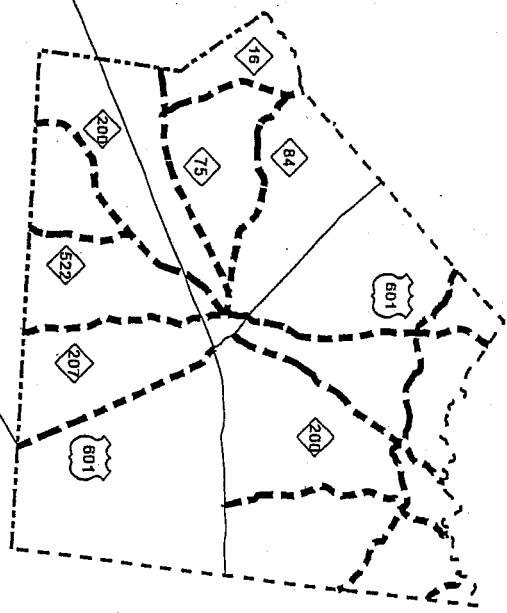
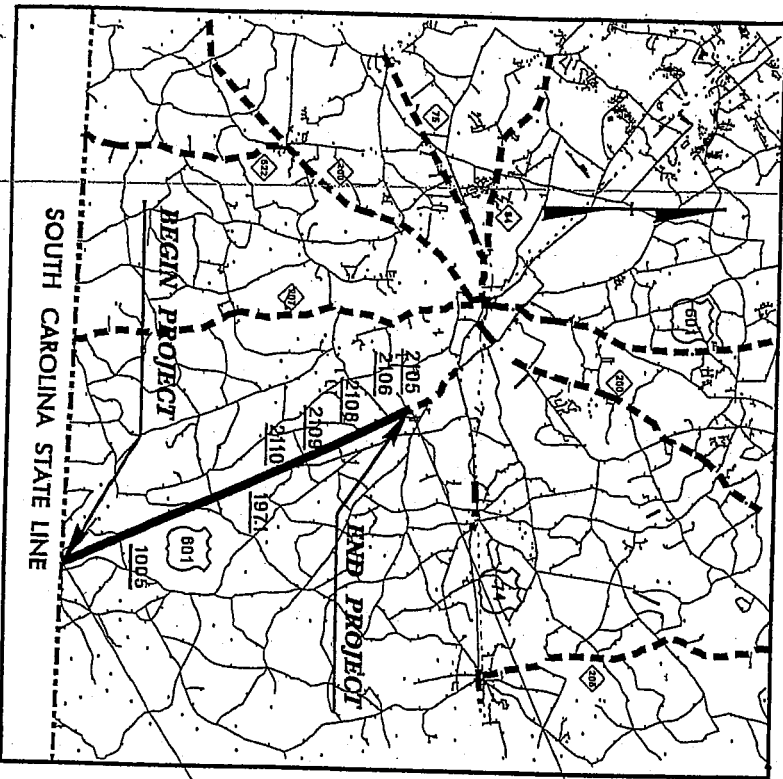
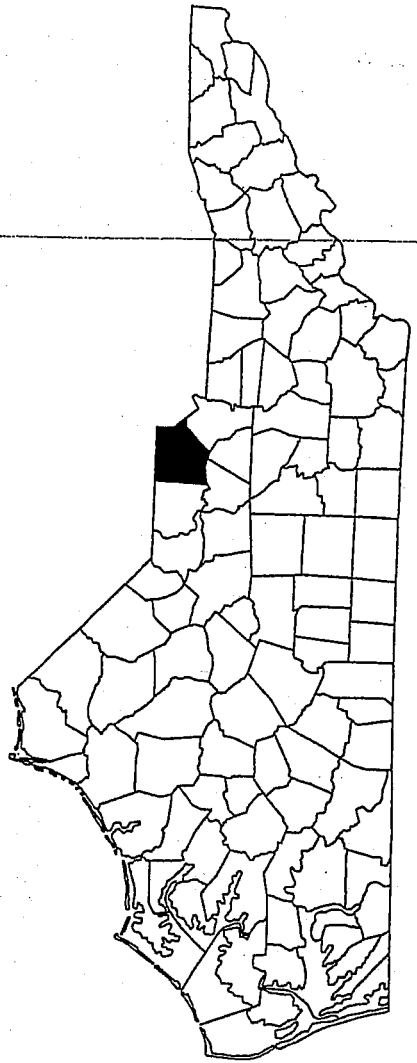
Copies furnished w/enclosure:

Director, Atlantic Marine Center
National Ocean Survey, NOAA
Attention: CAM04
439 West York Street
Norfolk, Virginia 23510

Copies furnished wo/enclosure:

Barry S. Moose, Division Engineer
NC Department of Transportation, Division 10
716 West Main Street
Albemarle, North Carolina 28001

Mr. Brian Wrenn
NC Division of Water Quality
Transportation Permitting Unit
1650 Mail Service Center
Raleigh, North Carolina 27699-1650



N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 UNION COUNTY
 PROJECT 34485.12 (R-2616 A&B)
 US 601 FROM THE SOUTH
 CAROLINA STATE LINE
 TO NORTH OF
 SR 2105 (MARION LEE RD.)

Permit Drawings Sheet 1 of 66

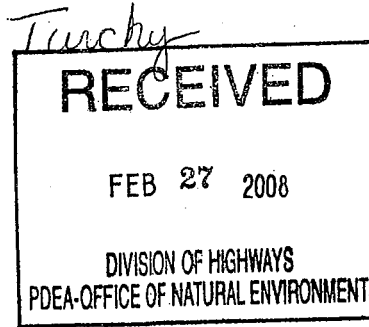
IMPACT SUMMARY

Site No.	Station (From/To)	Original Structure Size / Type	Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method II) (ac)	Hand Clearing In Wetlands (ac)	SURFACE WATER IMPACTS			WETLAND IMPACTS			Permit Modification	Comments
								Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts (ft)	Existing Channel Impacts (ft)	Existing Channel Impacts (ft)	Existing Channel Impacts (ft)		
1A	L 24+12	2 @ 42" RCP	0.012 (-)			0.008 (-)	0.003 (+)	0.007	0.001	104	10	75	150 *	Yes	Change to 2-48" RCP
1	L 102+00 to 106+50	2 @ 54" RCP						0.02	0.01	175 (-)	10	75	150 *	Yes	Change to 32" Con-Span
2	L 118+42	3 @ 10"x8" RCBC						0.08	0.03 (+)	166 (+)	66 (+)	66 (+)		Yes	Change to 1 @ 145 Single Span (Removed Beams from Channel)
3	L 129+50	2 @ 65" Bridge							0.15		150	150	39 **	Yes	Revised Drainage Layout
4	L 148+01 LT	42" RCP						0.003	0.001	49	10	10		No	No Change
5	L 180+30 LT & RT	48" RCP						0.02	0.001 (-)	192 (-)	20 (-)	20 (-)		Yes	Revised Drainage Layout
6	L 180+68 LT	48" RCP	0.008 (+)		0.008 (+)	0.003			0.004	215	10	10		No	No Change
7	L 180+30 TO 183+00 LT	Earthen Fill						0.03	0.004					No	No Change
8A	L 206+00	36" RCP						0.01	0.001	150	10	10		No	No Change
8	L 215+70 RT	24" RCP	0.007 (+)			0.003								Yes	Increase Pipe Size to 30" RCP
9	L 221+70 LT	Drain Pond												Yes	Saved Pond
10	L 231+30	54" RCP	0.03 (-)			0.013		0.02 (-)	0.81 (+)	160 (-)	32 (+)	20		Yes	Increase Pipe Size to 60" RCP
11	L 232+35	65" RCP						0.04	0.003	161	22	22		Yes	Lengthened Pipe for Driveway
12	L 248+30 TO 251+09	48" RCP						0.04	0.01	128	40	40		Yes	Change to 2 @ 3'x8" RCBC
13	L 281+51	12'x10' RCBC						0.04	0.01	124	62	62		No	No Change
14	L 288+06.5	2 @ 8'x7' RCBC						0.06	0.01	466	62	62		Yes	Revised Drainage Layout
15	L 290+00 to 294+30	2 @ 30" RCP												Yes	Change to 1 @ 36" RCP
16	L 315+56	16"x8" Bottomless Structure*						0.08 (+)	0.03 (+)	188 (+)	108 (+)	176 *		Yes	Realign Con-Span; Eliminate Band
17	L 342+00 LT	Drain Pond						0.31						No	No Change
18	L 348+50 RT	Road Fill; Temp Drain Pond	0.04					0.08	0.81					No	No Change
18	L 348+50 LT	Drain Pond						0.47						No	No Change
20	L 400+00 RT	Drain Pond			0.04***			0.58						No	No Change
21	L 422+00 RT	Drain Pond						0.45						No	No Change
22	L 426+03 to 430+50	54" RCP						0.03	0.001	460	30	30		Yes	Revised Drainage Layout
23	L 474+07 to 476+41	24" RCP	0.11			0.005								Yes	Change to 30" RCP and Revised Drainage Layout
23A	L 485+00	42" RCP						0.01	0.001	160	30	30		Yes	Change to 48" RCP Bury Pipe by 20%
24	L 534+20	48" RCP						0.01	0.001	151	30	30		No	No Change
25	L 569+60	36" RCP	0.03			0.027								Yes	Revised Drainage Layout
26	L 575+85 LT	24" RCP						0.29		3431	787	365		No	No Change
TOTALS:			0.227	0	0.048	0.059	0.003	2.73	1.891	3431	787	365			

* Stream replacement by addition of bottomless culvert
 ** Wetland adjacent to drained pond-dewatered wetland
 *** Impact Increased
 **** Impact Decreased



February 19, 2008



Dr. Greg Thorpe, Ph.D., Manager
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Subject: First Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for the Proposed Widening of US 601 from the South Carolina State Line to North of Marion Lee Road (SR 2105) South of Monroe in Union County, Federal Aid Project No. STP-NHS-601(4), State Project No. 8.1690303, TIP R-2616, DWQ Project No. 05-1396

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3579 issued to The North Carolina Department of Transportation (NCDOT) and dated June 27, 2006. This modification is applicable only to the additional proposed activities. All authorized activities and conditions of the certification associated with the original Water Quality Certification, dated June 27, 2006, still apply except where superceded by this certification.

If we can be of further assistance, please do not hesitate to contact Polly Lespinasse at (704) 663-1699.

Sincerely,

for Coleen H. Sullins
Director

Attachments

cc: Steve Lund, US Army Corps of Engineers Asheville Field Office
Michael Turchy, NCDOT PDEA
Larry Thompson, Division 10 Environmental Officer
Marla Chambers, NC Wildlife Resources Commission
Marella Buncick, US Fish and Wildlife Service
Sonia Gregory, DWQ Central Regional Office
File Copy

One
North Carolina
Naturally

This approval is only valid for the purpose and design that you submitted in your modified application received January 24, 2008, **and additional information received February 15, 2008**. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated June 27, 2006, still apply except where superceded by this certification. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. **The proposed modification will result in an additional 100 linear feet of stream impacts. We understand that you have chosen to perform compensatory mitigation for impacts to streams and wetlands through the North Carolina Ecosystem Enhancement Program (EEP). A copy of a letter from EEP, indicating that they will provide the additional mitigation, must be received by DWQ prior to the initiation of construction at the permitted sites.**
2. Two (2) culverts are proposed for Permit Site #1. As indicated in the additional information received by DWQ on February 15, 2008, a sill shall be installed on the high/flood flow culvert in order to maintain the natural stream dimension. A floodplain bench shall also be constructed on the high/flood flow culvert if construction of a floodplain bench is feasible.
3. Floodplain benches shall be constructed in the bottomless culverts at Permit Sites #2 and #13 as depicted in "Inlet Channel Detail GG", on Sheet 2N.
4. NCDOT shall use *Design Standards in Sensitive Watersheds* [15A NCAC 4B.0.124(a)-(e)] for the entire project. However, due to the size of the project, NCDOT shall not be required to meet 15A NCAC 4B.0124(a) regarding the maximum amount of uncovered acres. Temporary cover (wheat, millet, or similar annual grain) or permanent herbaceous cover should be planted on all bare soil within 15 working days of ground disturbing activities to provide long-term erosion control. Erosion control matting should be used in conjunction with appropriate seeding on disturbed soils in steep slope and riparian areas. Steep slopes are defined as those slopes graded at an angle which cannot retain vegetative cover. Matting shall be secured in place with staples or wherever possible, live stakes of native trees. Straw mulch and tall fescue shall not be used in riparian areas.
5. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such Best Management Practices in order to protect surface water standards:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow pit sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.

Wetland Impacts in the Yadkin River Basin

Site	Fill (permanent) (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Area under Bridge (ac)	Total Wetland Impact (ac)
1A (riverine)	0.012			0.008			0.036
2 (riverine)					0.003		0.003
6 (riverine)	0.008		0.008	0.003			0.019
8 (riverine)	0.007			0.003			0.010
10 (riverine)	0.030			0.013			0.043
18 (non-riverine)	0.040						0.040
19 (non-riverine)			0.04				0.040
23 (non-riverine)	0.110			0.005			0.115
25 (riverine)	0.030			0.027			0.057
Total	0.237		0.048	0.059	0.003		0.363

Total Wetland Impacts for Project: 0.363 acres (0.168 Riverine/0.195 Non-Riverine)

Open Water (Ponds) Impacts in the Yadkin River Basin

Site	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
9	0.02	0.81	0.83
17	0.31		0.31
18	0.08	0.81	0.89
19	0.47		0.47
20	0.58		0.58
21	0.45		0.45
26	0.29		0.29
Total	2.20	1.62	3.82

Total Open Water Impacts for Project: 3.82 acres

The application provides adequate assurance that the discharge of fill material into the waters and wetlands of the Yadkin River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 0.363 acres of jurisdictional wetlands, 3.82 acres of surface waters, and 3,531 linear feet of jurisdictional streams Lincoln and Catawba Counties. The project shall be constructed pursuant to the modification received January 24, 2008 and additional information received February 15, 2008. The authorized impacts are as described below:

Stream Impacts in the Yadkin River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1A			104	10	114	104
1			175	75	250	175
2			186	66	252	36*
3			100	150	211	61*
4			48	10	58	48
5			192	20	212	192
7			215	10	225	215
8A			150	10	160	150
10			160	32	192	160
11			161	20	181	161
12			363	22	385	363
13			128	40	168	128
14			124	62	186	124
15			466	62	528	466
16			188	108	296	148*
22			460	30	490	460
23A			160	30	190	160
24			151	30	181	151
Total			3,531	787	4,318	3,302

Total Stream Impacts for Project: 3,531 linear feet

*Mitigatable stream impacts at Site 2 will be reduced by 150 linear feet as a culvert will be replaced by a bottomless culvert. Mitigatable stream impacts at Site 3 will be reduced by 39 linear feet as a culvert will be replaced by a bridge. Mitigatable stream impacts at Site 16 will be reduced by 40 linear feet as a culvert will be replaced by a bottomless culvert.

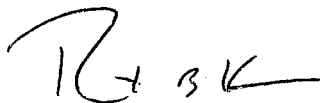
- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation of these measures must be in accordance with the requirements of the Sedimentation Pollution Control Act.
6. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify the DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.
 7. All other conditions written into the previous Water Quality Certification, dated June 27, 2006, for the project still apply.
 8. The permittee and its authorized agents shall conduct its activities in a manner consistent with State Water Quality Standards [including any requirements resulting from compliance with 303(d) of the Clean Water Act] and any other appropriate requirements of State and Federal Law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use), that State or Federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may re-evaluate and modify this certification.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 Permit. This Certification shall expire upon the expiration of the 404 Permit.

If this Certification is unacceptable to you, have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 19th day of February 2008

DIVISION OF WATER QUALITY



for Coleen H. Sullins
Director

WQC No. 3579