

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

July 23, 2008

Eric Alsmeyer USACE Raleigh Regulatory Field Office 3331 Heritage Trade Drive, Suite 105 Wake Forest, NC 27857

Subject:

Request for USACE 404 NW 14 Permit and NCDWQ Section 401 and Riparian Buffer Authorization Modifications for Widening of Airport Boulevard (SR 3015) from NC 54 to McCrimmon Parkway in Durham County. TIP No. U-3344A

Debit \$240.00 from WBS No. 35012.1.1.

Reference:

- 1) USACE 404 Nationwide; Action ID 200320445 issued February 29, 2008.
- 2) Section 401 and Buffer Authorization; WQC 20060367 v.3 issued March 4, 2008.

### Dear Sir:

The North Carolina Department of Transportation (NCDOT) is in the process of widening Airport Boulevard (SR 3015) from NC 54 to McCrimmon Parkway. The project will widen the existing two-lane roadway equilaterally to five lanes with curb and gutter along both sides of the roadway. The improved facility will include a 12-foot wide center turn lane and 2 through lanes in each direction. The NCDOT proposes to modify the NW 14 and buffer permit for the above-mentioned project to provide a better transition from the culvert to the existing stream. After construction started on the project, it was discovered that the existing stream channel position had slightly changed and there was also an error in the construction design file. Accordingly, the culvert outlet does not align properly with the existing stream channel. Additional stream and buffer impacts are required to allow a stable transition from the culvert outlet into the channel.

The purpose of this letter is to request a modification to the U.S. Army Corps of Engineers (USACE) 404 Nationwide 14 permit and the North Carolina Department of Water Quality (NCDWQ) Section 401 and Buffer Authorization. There will be an increase of 2,320 ft<sup>2</sup> of buffer impacts in Zone 1, 2,367 ft<sup>2</sup> of buffer impacts in Zone 2, and 25 feet of stream impacts at Site 2. The revised permit drawings (Sheets 6, 6A and 8 of 8 for both the stream and buffers) are attached.

TELEPHONE: 919-715-1334 FAX: 919-715-5501 WEBSITE: WWW.NCDOT.ORG LOCATION: 2728 CAPITOL BOULEVARD PARKER LINCOLN BUILDING, SUITE 240 RALEIGH NC 27699 **Summary of Changes** 

Background: The existing buffer certification is for 9,222 ft<sup>2</sup> of buffer impacts in Zone 1 and 4,921 ft<sup>2</sup> of buffer impacts at Site 2. Additional impacts of 4,687 ft<sup>2</sup> of buffers will be necessary to transition the culvert with the existing stream channel. The total buffer impacts will be 11,542 ft<sup>2</sup> in Zone 1 and 7,288 ft<sup>2</sup> in Zone 2 at Site 2. The existing NW 14 permit is for 109 feet of stream impact at Site 2. An additional 25 feet is needed for a total of 134 feet of impacts at Site 2 for the above stated reason.

#### **MITIGATION**

This project is located in the Neuse River Basin within HUC 03020201. According to the Neuse Buffer Rules, buffer impacts resulting from road crossings are allowable with mitigation if they impact greater than 150 linear feet or one-third acre of riparian buffer. Total impacts at Site 2 are 0.43 acres. The NCDOT does plan to mitigate for the buffer impacts due to the impacts now being allowable with mitigation using on-site mitigation.

The Jeffreys Warehouse Mitigation Site was originally constructed as on-site mitigation for R-1030 US 117 from south of NC 581 in Goldsboro to the US 264 Bypass in Wilson. There are two parcels associated with this mitigation site. The west parcel (approximately 50.2 acres) is bounded on the northwest by the Little River and on the southeast by the US 117 right-of-way. The east parcel (approximately 37.5 acres) is bounded on the northwest by the US 117 right-of-way, on the northeast by a Wayne County Board of Education school bus maintenance shop, and on the east and southeast by private property. The site was constructed in 2006 and has undergone two year of hydrologic and vegetative monitoring.

To offset the unavoidable, 11,542 S.F. of Zone 1 buffer impacts and 7,288 S.F. of Zone 2, buffer impacts associated with T.I.P U-3344A, the Jeffreys Warehouse Mitigation Site will be debited 45,558 S.F. of Neuse Buffer Restoration. These debits are reflected in the table below.

Site name	Site TIP	HUC	River Basin	Division	County
Jefferey's	R-1030AA	3020201	Neuse	4	Wayne
Warehouse (JALO)					

Mitigation Type	As Built Quantity	Available	Debit	Debit
			B-3528	B-4300
Stream Restoration	3,731	3,279	452(226@2:1)	
Riverine Wetland Restoration	3.66	2.74		
Non-Riverine Wetland Restoration	23.02	23.02		
Riverine Wetland Preservation	12.36	12.36		
Neuse Buffer Restoration	689,607	466,528	75,577	40,075

Debit	Debit	Debit	Debit
R-2719A	B-4592	B-4304	U-3344 A
		0.92	
41,818	16,398	3,653	45,558

#### REGULATORY APPROVALS

<u>Section 404 Permit</u>: The NCDOT requests that the referenced NW 14 Permit be modified to reflect the revisions outlined in this letter.

<u>Section 401 Certification</u>: The NCDOT requests that the referenced Section 401 and Buffer Authorization be modified to reflect the revisions outlined in this letter.

A copy of this permit application will be posted on the NCDOT website at: http://www.ncdot.org/doh/preconstruct/pe/neu/default.html. If you have any questions or need additional information please call Ms. Deanna Riffey at (919) 715-1409.

Sincerely

Gregory J. Thorpe, Ph.D.

Environmental Management Director, PDEA

Cc: w/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)

Mr. J. Wally Bowman, PE., Division Engineer

Mr. Chris Murray, DEO

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics

Mr. Mark Staley, Roadside Environmental

Mr. Greg Perfetti, P.E., Structure Design

Mr. Victor Barbour, P.E., Project Services Unit

Mr. Jay Bennett, P.E., Roadway Design

Mr. Majed Alghandour, P. E., Programming and TIP

Mr. Art McMillan, P.E., Highway Design

Mr. Scott McLendon, USACE, Wilmington

Mr. Gary Jordan, USFWS

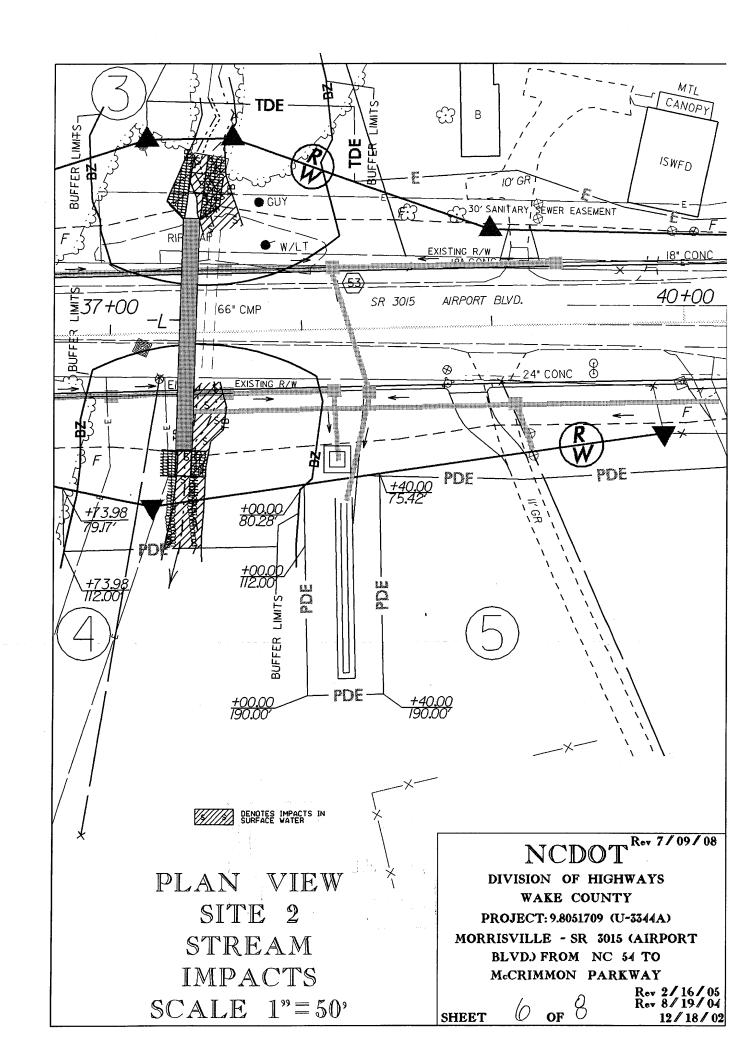
Mr. Travis Wilson, NCWRC

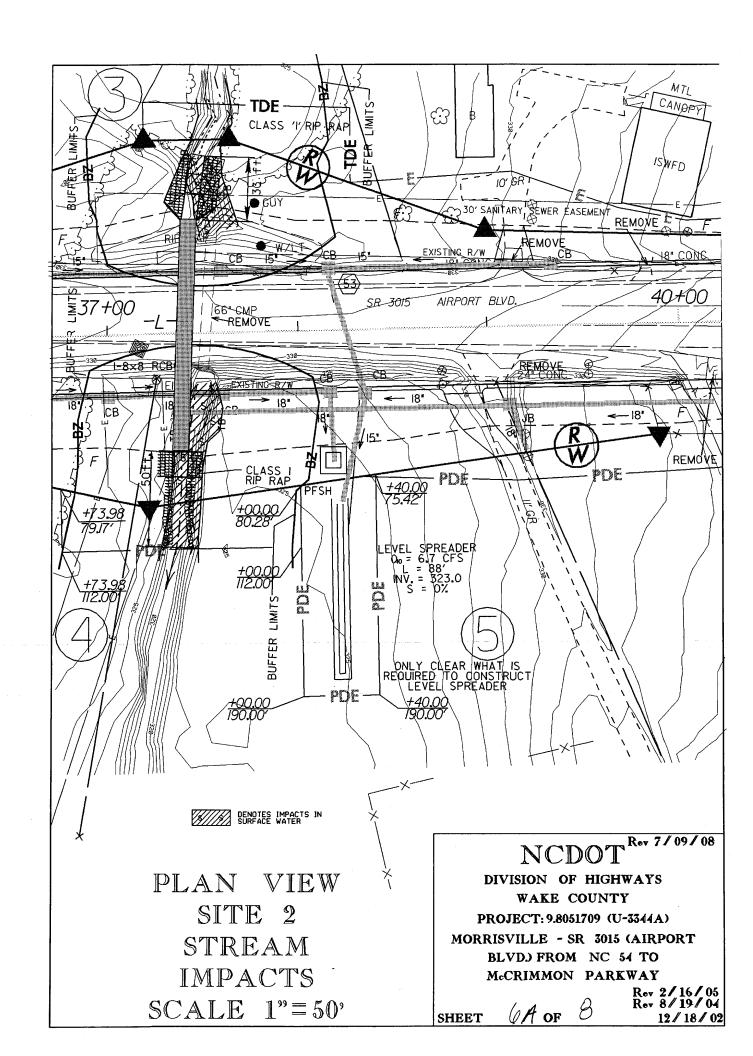
Mr. Derrick Weaver, Project Planning Engineer

Ms. LeiLani Paugh, NEU

Mr. Randy Griffin, NEU

File U-3344 A





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	Natural Stream Design	(#)													0
	Existing Channel	(ft)		134											134
	Temp. Fill	(ac)													0
RY	Fill In SW (Pond)	(ac)													0
CT SUMMAI	Excavation Clearing Fill In SW Fill In Methods (Method III) (Natural)	(ac)		0.0548											0.0548
ERMIT IMPA	Mechanized Clearing	(ac)	0.0411												0.0411
WETLAND P	Excavation In Wetlands	(ac)	0.0185												0.0185
	Temp. Fill	(ac)													0
	Fill In		0.0076											***	0.0076
	Structure Size / Type	orea type		8' x 8' RCBC											
	Station (From/To)		L 20+92 TO 22+25	L 37+30 TO 37+68											.;;
	Site			2											TOTALS

# NCDOT

REV 07/2008

9/4/2002

SHEET

Form Revised 3/22/01

