



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

November 4, 2004

NC Department of Environment and Natural Resources
Division of Water Quality
2321 Crabtree Blvd.
Raleigh, NC 27604

Attn: Ms. Nicole Thomson
NCDOT Coordinator, Division 5

Dear Madam:

Subject: **Supplemental Information for Permit Modification Application to Section 401** for the Northern Wake Expressway (I-540) from US 1 to US 64 in Wake County, Division 5. State Project No. 8.2401701, Federal Aid Project No. F-123-1(1), **TIP No. R-2000 F&G**; State Project No. 8.2401701, WBS Element No. 34365.1.1. NCDENR-DWQ Water Quality Certification Project No. 030114 and USACE Action ID 199920387.

The North Carolina Department of Transportation (NCDOT) proposes to construct a new controlled-access six-lane, divided highway to be known as the Northern Wake Expressway (I-540). The new location of the project is from US 1 to US 64 in Wake County. NCDOT submitted an individual Section 404 (of the Clean Water Act) Permit Application to the U.S. Army Corps of Engineers (USACE) for the subject project on March 29, 1996. On October 10, 1996, the Section 404 Permit was issued by the USACE (Action ID No. 199601917) and on September 27, 1996, a Section 401 Water Quality Certification was issued by the N.C. Division of Water Quality (DWQ Project 960319). NCDOT submitted a Section 404 and Section 401 Water Quality Certification modification application on January 31, 2003. The USACE issued the Section 404 Permit Modification on June 2, 2003 (Action ID No. 199920387) and The North Carolina Division of Water Quality (DWQ) issued a Section 401 Water Quality Certificate Modification on May 5, 2003 (DWQ Project No. 030114). The project has been let and construction has begun.

The purpose of this submittal is provide additional information to our permit modification application dated September 27, 2004 to the Section 401 Water Quality Certification, specifically for Sections F&G. This information is for the change to the placement of a pipe to match the current location of the stream channel. This information is provided to be in compliance with the Section 401 Water Quality Certification (dated May 5, 2003) Condition No. 13 which states "*No changes to the horizontal or vertical placement of the stormwater outfall locations, the*

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WEBSITE: WWW.NCDOT.ORG

LOCATION:
2728 CAPITAL BLVD.
PARKER LINCOLN BUILDING, SUITE 168
RALEIGH NC 27604

horizontal or vertical placement of the culverts, the horizontal or vertical placement of bridges, the horizontal or vertical placement of grassed swales, or the horizontal or vertical placement of open ditches is permitted without written approval from the NC Division of Water Quality (NCDWQ) 401 Wetlands Unit. In addition, no changes to the flow spreader locations or designs, preformed scour hole locations or designs are permitted without written approval for the NCDWQ 401 Wetlands Unit; Any request for changes to the referenced items above will require submittal of a modification request, with seven copies, and corresponding fees will need to be submitted to the NCDWQ.”

The revised design does not compromise NCDOT’s compliance with the existing permit conditions. The revision has been evaluated for compliance with the avoidance/minimization criteria and are in compliance with all previous issues, including the following:

- Protected Species
- Aquatic Life passage
- FEMA compliance
- Cultural Resources

Change to Pipe Location

Permit Drawing 7 of 90/Plan Sheet 8/Site 2

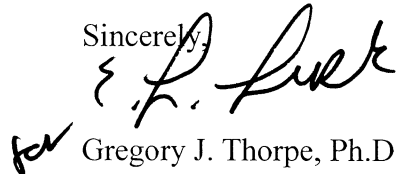
It has been determined through field investigations that the approved location for the pipe at this site did match up to the current conditions in the field. The approved design and elevations for the placement of the pipe on the outlet end did not match up to the current stream channel. The pipe needs to moved 6 to7 feet so it will lie within the current stream channel.

No additional jurisdictional or buffer impacts will occur due to the new placement of this pipe.

Regulatory Approvals

We hereby ask that the additional information provided in this letter be added to our Permit Modification Application dated September 27, 2004 to the Section 401 Water Quality Certification from the NCDENR-DWQ. No additional jurisdictional or buffer impacts will occur based on this new information.

If you have any questions or need additional information, please call Ms. Rachelle Beauregard at (919) 715-1383.

Sincerely,

for Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

cc: w/attachment

Mr. Mr. Eric Alsmeyer, USACE
Mr. Travis Wilson, NCWRC
Ms. Becky Fox, USEPA – Whittier, NC
Mr. Ronald Mikulak, USEPA – Atlanta, GA
Mr. Gary Jordan, USFWS
Mr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Jon Nance, P.E., Division 5 Engineer
Mr. Reese Briley, Division 5 Resident Engineer
Mr. Chris Murray, Division 5 Environmental Officer

w/o attachment

Mr. Jay Bennett, P.E., Roadway Design
Mr. Omar Sultan, Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Mark Staley, Roadside Environmental
Mr. David Franklin, USACE, Wilmington
Mr. Brian Yamamoto, PDEA Project Planning Engineer

DAY LIGHT GRASS SWALE @ EL = 71.10
 PLAN VIEW SITE 2

PSD 008-95-RW
 C. THOMAS HENDRICKSON
 DB 3911 PG 01

GRASS SWALE			
DA	0.07	ha	0.2
O2	0.009	m ³ /s	0.33
V2	0.36	m/s	1.18
O10	0.013	m ³ /s	0.45
V10	0.39	m/s	1.28
LENGTH	100	m	328
SLOPE	0.82%		
SIDE SLOPES	6		

ROCK CHECK DAM (TYP.)

RIP RAP AS PER NCDOT STD. 868.02

GRASS SWALE W/ 3:1 SIDES

FSR 2G1(B)

LEVEL SPREADER CANNOT BE UTILIZED EXISTING GROUND SLOPE = 15%

RIP-RAP AS PER NCDOT STD. 868.02

375 RCP

362+00

375 RCP 362+40

LREV

750 RCP

RIP RAP AS PER NCDOT STD. 868.02

DRAW DOWN STRUCTURE

5m UNDERDRAIN


LEVEL SPREADER
 5m(L)
 16.40ft(L)
 DA= 0.48 ha
 DA= 1.18 ac
 Q(1" in. R.O.) = 0.004 cms
 0.14 cfs

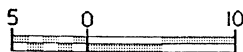
TOE PROTECTION

0.6m BASE TAIL DITCH
 CLASS "B" RIP RAP

DRY DETENTION BASIN

LEGEND

-  DENOTES MECHANIZED CLEARING
- NBZ1 - NEUSE BUFFER - ZONE 1
- NBZ2 - NEUSE BUFFER - ZONE 2



NORTH CAROLINA
 DEPARTMENT OF HIGHWAYS

WAKE COUNTY
 8.U4017121 (R-2000F)
 NORTH RALEIGH OUTER LOOP

REV. 11/03/04

SHEET 7 OF 90

SCALE AS SHOWN

DATE: 11/03/04
 TIME: 10:00 AM
 FILE: 3911 PG 01