



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

November 8, 2004

US Army Corps of Engineers
Raleigh Field Office
6508 Falls of Neuse Road, Suite 120
Raleigh, NC 27615-6814

Attn: Mr. Eric Alsmeyer
NCDOT Coordinator, Division 5

Dear Sir:

Subject: Supplemental Information for Permit Modification Application to Section 404 and Section 401 permits and Neuse Buffer Certificate 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 AA, AB, AC**; State Project No. 8.U401711, WBS Element No. 34365.1.1. NCDENR-DWQ Water Quality Certification Project No. 030918 and USACE Action ID 200021863 (Previous Action ID No. 199920387 and Action ID No. 199601917).

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 NC 55 west of Morrisville to 0.7 km northeast of I-40 in Wake and Durham Counties. On October 10, 1996, the U.S. Army Corps of Engineers (USACE) issued a Section 404 Permit (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). The USACE issued a Section 404 Permit Modification on November 25, 2003 (Action ID No. 199920387) and The North Carolina Division of Water Quality (DWQ) issued a Section 401 Water Quality Certificate Modification on October 7, 2003. 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 404 permit and Section 401 Water Quality Certification and Neuse Buffer Certificate, specifically for Section AC, Site 1. This information is for the change in design for the additional linear footage of rip rap needed to stabilize the stream bank.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-715-1500
FAX: 919-715-1501
WEBSITE: WWW.NCDOT.ORG

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

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

Changes at Site 1, Section AC

Permit Drawing 4 of 9/Plan Sheets 4/Site 1

The permit drawing and summary sheet indicates that a total of 577 linear feet of stream loss has been permitted at this site associated with construction of a culvert and lateral ditches. The culvert conveys an unnamed perennial tributary to Stirrup Iron Creek in the Neuse River Basin. The permitted stream loss (as depicted in the attached permit drawing 4 of 9) can be described as extending from the Temporary Drainage Easement to Temporary Drainage Easement both above and below the culvert. The change is restricted to the placement of Class I rip rap along the west and east streambank at the inlet of the culvert and is entirely contained within the permitted footprint.

West streambank: A total of 23 linear feet (scaled) had been previously permitted for placement of rip rap along the west bank at the inlet. Field measurement of this rip rap indicated that an additional 23 linear feet of rip rap has been placed along the west bank at the inlet.

East streambank: A total of 33 linear feet (scaled) had been previously permitted for placement of rip rap along the west bank at the inlet. Field measurement of this rip rap indicated that an additional 10 linear feet of rip rap has been placed along the west bank at the inlet.

During construction of the grassed swale on the west streambank it was apparent that the Class I rip rap was needed to stabilize the existing streambank upstream of the grassed swale. The existing stream meanders as depicted on the plans. Additionally, the existing streambank configuration was essentially vertical as this area was undercutting and eroding. The additional 23 linear feet of rip rap was placed in an attempt to stabilize the existing bank in this area.

The additional 10 linear feet of rip rap placed along the east streambank was to stabilize the reconstructed streambank that was excavated for the temporary diversion channel. Stabilization fabric would not have stabilized this slope.

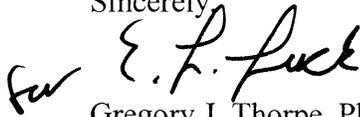
Please note that NCDOT has already provided mitigation for the entire length of stream loss permitted at this site (577 linear feet). The construction of the project has not exceeded the permitted footprint at the site. The change in design as described above is associated with the placement of additional rip rap along the west and east streambank at the inlet of the culvert in an effort to provide adequate streambank stabilization.

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 404 Permit from the USACE and Section 401 Water Quality Certification and Neuse Buffer 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,

A handwritten signature in black ink that reads "Gregory J. Thorpe". The signature is written in a cursive style with a large "G" and "T".

Gregory J. Thorpe, Ph.D.

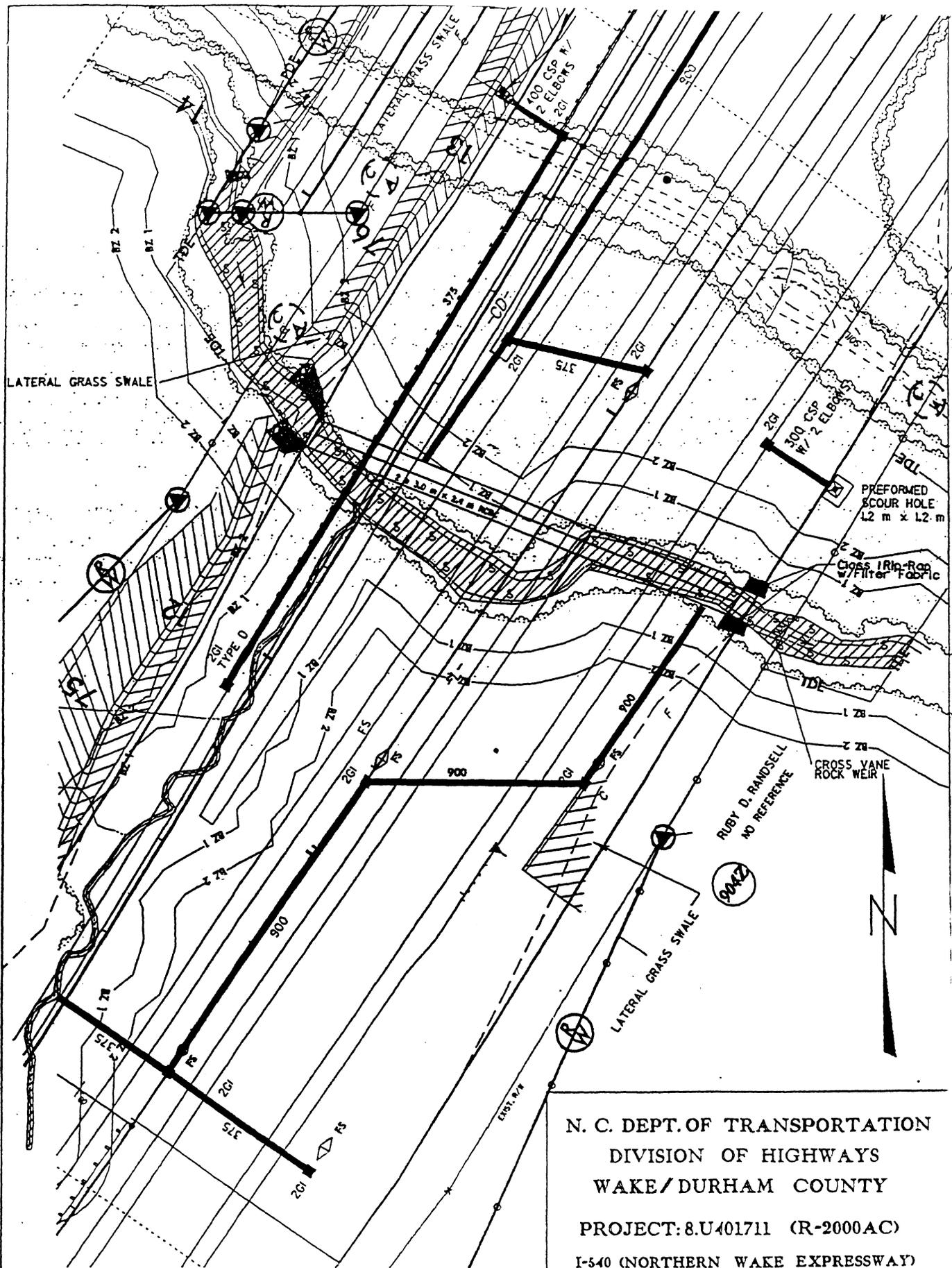
Environmental Management Director, PDEA

cc: w/attachment

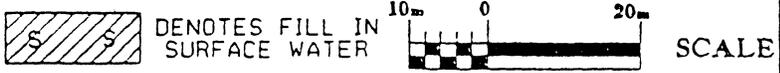
- Mr. John Hennessy, NCDWQ (7 copies)
- Mr. Travis Wilson, NCWRC
- Ms. Becky Fox, USEPA – Whittier, NC
- Mr. Ronald Mikulak, USEPA – Atlanta, GA
- Mr. Gary Jordan, USFWS
- Mr. David Chang, P.E., Hydraulics
- Mr. Greg Perfetti, P.E., Structure Design
- Mr. Jon Nance, P.E., Division 5 Engineer
- Mr. Tracy Parrot, P.E., Division 5 Construction Engineer
- Mr. Wayne Currie, 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



PLAN VIEW



N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE/DURHAM COUNTY

PROJECT: 8.U401711 (R-2000AC)

I-540 (NORTHERN WAKE EXPRESSWAY)
 FROM 0.9 KM SOUTHWEST OF I-40 TO 0.7 KM
 NORTHEAST OF I-40