

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT Secretary

July 28, 2005

MEMORANDUM TO:

Mr. H. Allen Pope, P.E. Division 3 Engineer

FROM:

Philip S. Harris, III, P.E. Natural Environment Unit Head Project Development and Environmental Analysis Branch

SUBJECT:

New Hanover County, US 117 Castle Hayne Road to 0.5 mi. East of 23<sup>rd</sup> Street; State Project Number 8.2250101; TIP Number U-92AB

Attached is the permit modification for the construction of the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

cc: Mr. Art McMillan, P.E.
Mr. Omar Sultan
Mr. Jay Bennett, P.E.
Mr. David Chang, P.E.
Mr. Randy Garris, P.E.
Mr. Greg Perfetti, P.E.
Mr. Njoroge Wainaina
Mr. Mark Staley
Mr. Mr. John F. Sullivan, III, FHWA
Mr. Mason Herndon, Division 3 Environmental Officer

TELEPHONE: 919-733-3141 FAX: 919-733-9794 LOCATION: TRANSPORTATION BUILDING 1 SOUTH WILMINGTON STREET RALEIGH NC

# **PROJECT COMMITMENTS**

New Hanover County Wilmington - Smith Creek Pkwy US 117 Castle Hayne Road to 0.5 mi. East of 23<sup>rd</sup> Street Federal Project MANHS-0332(8) State Project 8.2250101 TIP. No. U-92AB

## Division 3 Construction, Roadside Environmental Unit, Structure Design Unit, Project Development & Environmental Analysis (PDEA), Roadway Design Unit, Hydraulics Unit

All conditions stated in the original 404, 401 and CAMA permits, and modifications to those permits, remain in full force and effect. The only additional comments associated with this modification to DWQ Project No. 011117, WQC No. 3304 is as follows:

### **PDEA**

Compensatory mitigation for impacts to 0.015 acre of riverine wetlands shall be done on 0.015 acre. Applying replacement ratio of 2:1, total mitigation for 0.03 acre of riverine wetlands shall be provided as described below:

#### **Onsite Compensatory Mitigation**

Wetland mitigation will occur at the wetland mitigation site located between the Smith Creek Mitigation Site and the Bridge Maintenance Phase 2 Mitigation Site. This site has a total acreage of 0.17 acre of restored wetlands. This site has been debited 0.003 acre for impacts associated with the February 23, 2005 modification for this project.



#### DEPARTMENT OF THE ARMY WILMINGTON DISTRICT, CORPS OF ENGINEERS P.O. BOX 1890 WILMINGTON. NORTH CAROLINA 28402-1890

July 12, 2005

RECEIVED
JUL 14 2005
DIVISION OF HIGHWAYS PDEA-OFFICE OF NATURAL ENVIRONMENT

**Regulatory Division** 

Action ID No. 199603836 and TIP Project U-92AB, Smith Creek Parkway, New Hanover County, North Carolina.

Gregory J. Thorpe, Ph.D. Environmental Management Director, PDEA N.C. Department of Transportation 1548 Mail Service Center Raleigh, NC 27699-1548

Dear Dr. Thorpe:

Please reference the Department of the Army (DA) permit issued on December 12, 2000, for the subject project and your letter dated May 31, 2005, requesting a permit modification at Wetland Site 2 of Section U-92B to authorize additional riprap for bank stabilization and at Wetland Site 4 of Section U-92A to authorize replacement of the existing twin 600 mm pipes under Castle Hayne Road with three 900 mm x 25 m corrugated aluminum alloy pipes.

At Wetland Site 2 of U-92B, the original authorization allowed for construction of an equalizer pipe for maintenance of surface hydrology at this wetland. Following construction, it was found that riprap bank stabilization is needed at the pipe inlet due to the steep grade from the inlet to the adjacent wetland. This office has also expressed concerns that this steep grade will create a head-cut into the adjacent wetland resulting in future wetland impacts at this site. The proposed riprap will result in an additional 0.015 acre of permanent wetland impacts. At Wetland Site 4 of U-92A, the replacement of the existing twin pipes at STA 12+50 on Y-2 with three 900 mm x 25 m corrugated aluminum alloy pipes is shown in the current construction plans but is not included in the DA permit. The replacement of these pipes will not result in any additional wetland or stream impacts. You have requested a permit modification to authorize construction of the riprap bank stabilization at Wetland Site 2 of U-92B and replacement of the three existing corrugated aluminum alloy pipes at Wetland Site 4 of U-92A. These proposed modifications will result in 0.015 acre (672 square feet) of permanent impacts to riverine wetlands adjacent to with Smith Creek. To offset these wetland impacts you have proposed to provide 0.015 acre of on-site Coastal Small Stream Swamp restoration from a site located between the existing Bridge Maintenance Mitigation Site and Smith Creek Mitigation Site at STA 30+21 to STA 34+03m RT. This site was not included in the mitigation plans for this project but was restored to the same specifications as the Bridge Maintenance and Smith Creek mitigation sites during construction to connect these sites. The total area of restored riverine wetlands at this site is 0.17 acre.

Your DA permit is hereby modified to allow construction of the additional riprap at STA 12+50 on Y-2 as shown in the revised permit drawing for Wetland Site 2 of U-92B dated November 30, 2001, replacement of the existing twin pipes at STA 12+50 on Y-2 with three 900 mm x 25 m corrugated aluminum alloy pipes at Wetland Site 4 of U-92A as shown in Sheet 10 of the current construction plans for U-0092A, and authorization of the onsite compensatory mitigation proposal submitted with your letter dated May 31, 2005 (copy attached).

All other conditions of your Department of the Army permit shall remain in full force and effect. The expiration date of this permit shall remain at December 31, 2005.

Should you have any questions, please contact Mr. Dave Timpy, Wilmington Field Office, Regulatory Division, at telephone (910) 251-4634.

Sincerely,

J. Kenneth Jely

Charles R. Alexander, Jr. Colonel, U.S. Army District Engineer

Enclosure

Copies Furnished (without enclosure):

Mr. Allen Pope, PE Division Engineer North Carolina Department of Transportation Division 3 124 Division Drive Wilmington, North Carolina 28401

Mr. Travis Wilson Highway Coordinator North Carolina Wildlife Resources Commission 1142 I-85 Service Road Creedmoor, North Carolina 27522

Mr. John Hennessy NCDENR-DWQ Wetlands Section 1650 Mail Service Center Raleigh, NC 27699-1650 Mr. Gary Jordan U.S. Fish and Wildlife Service Fish and Wildlife Enhancement Post Office Box 33726 Raleigh, North Carolina 27636-3726

Christopher Militcher USEPA Raleigh Office Office of Environmental Assessment 310 New Bern Avenue, Room 206 Raleigh, NC 27601

Mr. Ron Sechler National Marine Fisheries Service Pivers Island Beaufort, North Carolina 28516

Mr. Mason Herndon North Carolina Department of Transportation Division 3 124 Division Drive Wilmington, North Carolina 28401







U-92A---REVISIONS SMITH CREEK PARKWAY ADDITIONAL MITIGATION ŧ (e:c) 2 COREETT PACKAGE COMPANY TRACK REMOVED TSSI.1.0+40\_CC0 DETAIL B TERAL 'Y' DITCH STSta.0+30LCO 34+420 5<u>60</u> 5000 (164047) - 413 SCSta.0+80,000 5- STA\_ 34+59.271 (R)Min. D= \_C ATERA 22453 INED STA 33+20 TO STA 34-00 -1- LT STA 34+00 TO STA 35-20 -1- LT STA 1+60 TO STA 3+20 -YIRPB- LT STA 1+20 TO STA 1+60 -YIRPB- LT -L-LT L LATERAL "Y" DITO GRASS LINED SEE DETAIL B Sta.34+35283 POC. BESIN SEG YIRPB Ŕ 12 N 63 16' 345 E-750 SM 2GI (36). 375 D=0.81 ¥ ..... <u>2대</u> -(37). -00 00-YCYER LL SLOPE 150 45D C Э. MAINTENANCE PHASE BRIDGE TIGATIÓN SITE ΜI 30.563 المناز د ١٠٠٠ 210F) DETAIL FSM SUMP • Mode IMIT 2:27 l'Hor'te 12014 S=Diton Q. ·. FIS 5 05 = LS = LT = ST = Pl;; Sia 33+07.24. &s = 410'40,1' Ls = 70,000 LT = 46,680 ST = 23345 FI SIA L = 3 L = 3 R = 4 7 35+34.802 46 05 57 5' (RT) 386201 201,239 0 Ø + + + 5

Michael F. Easley, Governor William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources Alan W. Klimek, P.E. Director Division of Water Quality

July 6, 2005

Dr. Gregory J. Thorpe, PhD., Manager Planning and Environmental Branch North Carolina Department of Transportation 1548 Mail Service Center Raleigh, North Carolina, 27699-1548



Re: Certification Pursuant to Section 401 of the Federal Clean Water Act. Modification to the Construction of Smith Creek Parkway from Northeast Cape Fear River to 0.5 miles East of 23<sup>rd</sup> Street, New Hanover County, TIP No. U-92A and B, Federal Aid Project No. MANHS-0332(8), WOC Project No. 01117, WBS Element 34747.1.6. WOC No. 3304

Dear Dr. Thorpe:

Attached hereto is a modification to Certification No. 3304 issued to the North Carolina Department of Transportation on July 6, 2005. The attached modification authorizes the placement of riprap in wetlands equaling 0.015 acres of additional wetland impacts at Site 2 on U-92B and the replacement of 2-600mm pipes with 3-900 mm pipes with no additional wetland impacts adjacent to Site 4 on U-92A. This modification is applicable only to the additional proposed activities. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated September 29, 2000 and all other corresponding modifications still apply except where superceded by this certification.

If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E. Director

Attachments Modifications to WQC No. 3304

cc: Dave Timpy, US Army Corps of Engineers Wilmington Field Office Christopher Militscher, US Environmental Protection Agency - Region IV Ken Averitte, NC DWQ Fayetteville Regional Office **Central Files** File Copy

Transportation Permitting Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604 Phone: 919-733-1786 / FAX 919-733-6893 / Internet: http://h2o.enr.state.nc.us/ncwetlands



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APPROVAL OF 401 Water Quality Certification and ADDITIONAL CONDITIONS

THIS FOR TIFICATION 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 NCAQ 2H, Section .0500, and 15 NCAC 2B .0233. This certification authorizes the TWNCDOF to incur the following impacts:

Site	Total (acres)	Mitigation Required (acres)
Section B, Site 2 Impacts authorized under original WQC	0.341	0.341
Section B, Site 2 Impacts for this modification		
Fill	0.015	0.015
<b>Total Modified Impacts for Section B, Site 2</b>	0.356	0.356

Table 1. – Wetland Impacts in the Cape Fear River Basin

In addition to the impacts listed in Table 1, NCDOT is authorized to replace two existing 600 mm pipes in Section A adjacent to Site 4 with three 900 mm pipes with no additional permanent impacts. The project shall be constructed pursuant to the application dated on May 31, 2005 (received June 1, 2005). The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear River Basins 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.

This approval is only valid for the purpose and design that you submitted in your application, as described in the Public Notice. 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 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, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Corps of Engineers Permit, whichever is sooner.

#### Condition(s) of Certification:

- Compensatory mitigation for impacts to 0.015 acres of riverine wetlands shall be done for 0.015 acres. Applying a replacement ration of 2:1, total mitigation credits of 0.03 acres of riverine wetlands shall be provided from an existing mitigation site located between the Smith Creek Mitigation Site and the Bridge Maintenance Phase 2 Mitigation Site. This site has a total acreage of 0.17 acres of restored wetlands. This site has been debited 0.003 acres for impacts associated with the February 23, 2005 modification for this project.
- 2. All the authorized activities and conditions of the certification associated with the original Water Quality Certification dated September 29, 2000 and all other corresponding modifications still apply except where superceded by this certification.

Conditions from WQC No. 3304 issued September 29, 2000:

- 1. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual*, whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard (50 NTUs in all fresh water streams and rivers not designated as trout waters; 25 NTUs in all lakes and reservoirs, and all saltwater classes; and 10 NTUs in trout waters).
- 2. Sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored after the Division of Land Resources has released the project.
- 3. If an environmental document is required, this Certification is not valid until a FONSI or ROD is issued by the State Clearinghouse. All water quality-related conditions of the FONSI or ROD shall become conditions of the this Certification.
- 4. Measures shall be taken to prevent live or fresh concrete from coming into contact with waters of the state until the concrete has hardened.
- 5. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit. Should waste or borrow sites be located in wetlands or stream, compensatory mitigation will be required since it is a direct impact from road construction activities.
- 6. All channel relocations will be constructed in a dry work area, and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase

#### **APPROVAL OF 401 Water Quality Certification and 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, Section .0500, and 15 NCAC 2B .0233. This certification authorizes the NCDOT to incur the following impacts:

Site	Total (acres)	Mitigation Required (acres)
Section B, Site 2 Impacts authorized under original WQC	0.341	0.341
Section B, Site 2 Impacts for this modification		
Fill	0.015	0.015
Total Modified Impacts for Section B, Site 2	0.356	0.356

#### Table 1. - Wetland Impacts in the Cape Fear River Basin

In addition to the impacts listed in Table 1, NCDOT is authorized to replace two existing 600 mm pipes in Section A adjacent to Site 4 with three 900 mm pipes with no additional permanent impacts. The project shall be constructed pursuant to the application dated on May 31, 2005 (received June 1, 2005). The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear River Basins 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.

This approval is only valid for the purpose and design that you submitted in your application, as described in the Public Notice. 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 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, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Corps of Engineers Permit, whichever is sooner.

- 12. Installation and removal of pilings to support all the temporary and permanent bridges for the project shall result in no changes to the surface elevations. No material associated with the construction of the referenced bridges shall be deposited into or removed from jurisdictional wetlands and waters.
- 13. All pilings fro the proposed permanent bridge over Smith Creek shall be installed by using standard pile driving techniques and standard sediment containment methods. This condition does not apply to the installation of any bents located outside jurisdictional areas. No material associated with the construction of the permanent bridge over the Smith Creek and associated wetlands shall be deposited into or removed from jurisdictional wetlands and waters. Use of other pile installation practices is not authorized without first acquiring written approval from the North Carolina Division of Water Quality.

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 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA 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, P.O. Box 27447, Raleigh, N.C. 27611-7447. 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 6<sup>th</sup> day of July 2005

DIVISION OF WATER QUALITY

John E. M

Alan W. Klimek, P.E. Director

WQC No. 3304

DWQ Project No.:	County:
Applicant:	
Project Name:	
Date of Issuance of 401 Water Q	uality Certification:
Rules, and any subsequent modific 401/Wetlands Unit, North Carolina 27699-1621. This form may be ret	oved within the 401 Water Quality Certification or applicable Buffer cations, the applicant is required to return this certificate to the a Division of Water Quality, 1621 Mail Service Center, Raleigh, NC, turned to DWQ by the applicant, the applicant's authorized agent, or essary to send certificates from all of these.
and diligence was used in the obse be built within substantial complia	, hereby state that, to the best of my abilities, due care ervation of the construction such that the construction was observed to ance and intent of the 401 Water Quality Certification and Buffer Rules, ons, and other supporting materials.
Signature:	Date:
and diligence was used in the obse	, hereby state that, to the best of my abilities, due care ervation of the construction such that the construction was observed to since and intent of the 401 Water Ouality Certification and Buffer Rules,

to iles, be built within substantial compliance and intent of the 401 Water Qua the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date:\_\_\_\_\_

#### **Engineer's Certification**

\_\_\_\_\_ Partial \_\_\_\_\_ Final

1 \_\_\_\_\_, as a duly registered Professional Engineer in the State I, of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature	
<b>Registration No.</b>	

Date \_\_\_\_\_



JUN 24 2005



Michael F. Easley, Governor

**Division of Coastal Management** Charles S. Jones, Director

June 15, 2005

Gregory J Thorpe, PhD, Environmental Management Director Project Development & Environmental Analysis Branch N.C. Department of Transportation 1548 Mail Service Center Raleigh, NC 27699-1548



RE: Request for a Letter of Refinement for Smith Creek Parkway (U-92A&B) Smith Creek, New Hanover County, TIP No. U-92. NCDOT Letter dated June 9, 2005, referencing May 31, 2005 NCDOT letter to USACE and DWQ requesting modification of 404 Individual Permit and 401 Water Quality Certification Permit, requesting a refinement of the existing CAMA Permit No. 178-00 with attached plan view drawings.

Dear Dr. Thorpe:

This letter is in response to the N.C. Department of Transportation's (NCDOT's) request dated June 9, 2005 requesting a Letter of Refinement for CAMA Major Permit No. 178-00. The NCDOT letter and accompanying request from Mason Herndon, Division 3 DEO, requests authorization to rip rap the inlet slope for the equalizer pipe near station 32+80 of the -Lalignment, and replace the two 600 mm pipes located at station 12+50 on the -Y2- alignment with three 900 mm pipes, referred to in the permit application, CAMA Permit No. 178-00, as follows:

The steep inlet slope for the equalizer pipe near station 32+80 of the -L- alignment will have rip rap installed to prevent erosion and head cutting of the wetland stream feeding the equalizer pipe. The approximately 672 square feet of 404 type wetlands filled by this request will be added to the debit of mitigation at the mitigation site adjacent to station 30+21 to 34+03 RT of the -L- alignment. Two 600 mm culverts located at station 12+50 on the -Y2- alignment will be replaced with three 900 mm pipes and cause no additional wetland impacts.

Please be advised that through this Letter of Refinement, DCM conveys its determination that this request as described in the June 9, 2005 NCDOT correspondence to Bill Arrington, is consistent with existing State rules and regulations and is in keeping with the original purpose and intent of the CAMA permit, with the following conditions.

1638 Mail Service Center, Raleigh, North Carolina 27699-1638 Phone: 919-733-2293 \ FAX: 919-733-1495 \ Internet: www.nccoastalmanagement.net

- 1. This letter does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.
- 2. This Letter of Refinement must be attached to the original of CAMA Permit No. 178-00, which was issued on November 28, 2000 and both documents must be readily available on site when a DCM representative inspects the project for compliance.
- 3. All conditions and stipulations of the active permit remain in force unless altered herein.

Please contact Bill Arrington at (252) 528-0019 if you have any questions or concerns.

Sincerely,

Jim Gregson, District Manager, WiRO

NC Division of Coastal Management.

Cc: Ted Tyndall, DCM Doug Huggett, DCM Tere Barrett, DCM Mason Herndon, NC DOT, Division 3 office, Wilmington Dave Timpey, USACE Nicole Thomson, DWQ