

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR

LYNDO TIPPETT SECRETARY

March 28, 2005

**MEMORANDUM TO:** 

Mr. Jon G. Nance, P.E. **Division 5 Engineer** 

FROM:

SUBJECT:

Philip S. Harris, III, P.E., Manager Office of the Natural Environment Project Development and

Environmental Analysis Branch

Durham County; Division 5; Widening of US 15-501 From North of SR 2294 (Mt. Moriah Road) to South of SR 1116 (Garrett Road); State Project No. 8.1352301; TIP Project No. U-4012

Attached is the U.S. Army Corps of Engineers Permit No. 200020945 for the construction of the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

#### Attachment

Mr. Art McMillan, P.E. cc: Mr. Omar Sultan Mr. Jay Bennett, P.E. Mr. David Chang, P.E. Mr. Randy Garris, P.E. Mr. Greg Perfetti, P.E. Mr. Mark Staley Mr. John F. Sullivan, III, FHWA Mr. Chris Murray, Division 5 DEO Ms. Cathy Houser, PE

TELEPHONE: 919-733-3141 FAX: 919-733-9794

M. Haney



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

March 16, 2005

**Regulatory Division** 

Action ID. 200020945



Dr. 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:

Enclosed is a Department of the Army permit to authorize the discharge of dredged and fill material into waters of the United States, for construction of the widening of US 15-501 (T.I.P. No. U-4012), in Durham, Durham County, North Carolina, crossing New Hope Creek, and an unnamed tributary. The Corps is issuing this permit in response to your written request of December 13, 2004, and the ensuing administrative record.

If any change in the authorized work is required because of unforeseen or altered conditions or for any other reason, the plans revised to show the change must be sent promptly to this office. Such action is necessary, as revised plans must be reviewed and the permit modified.

Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant general conditions require that:

a. You must complete construction before December 31, 2008.

b. You must notify this office in advance as to when you intend to commence and complete work.

c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You should address all questions regarding this authorization to Mr. Eric Alsmeyer of my Raleigh Field Office regulatory staff at telephone (919) 876-8441, extension 23.

Sincerely,

F. Kerneth Charles R. Alexander, Jr.

Colonel, U.S. Army **District Engineer** 

Enclosures

Copy Furnished with enclosures:

Chief, Source Data Unit NOAA/National Ocean Service ATTN: Sharon Tear N/CS261 1315 East-West Hwy., Rm 7316 Silver Spring, MD 20910-3282

Copies Furnished with special conditions and plans:

Mr. Pete Benjamin U.S. Fish and Wildlife Service Fish and Wildlife Enhancement Post Office Box 33726 Raleigh, North Carolina 27636-3726

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

Mr. David Rackley National Marine Fisheries Service, NOAA 219 Fort Johnson Road Charleston, South Carolina 29412-9110 . . . .

 Mr. Ronald Mikulak, Chief Wetlands Section - Region IV Water Management Division U.S. Environmental Protection Agency Atlanta Federal Center
 Forsyth Street, SW Atlanta, Georgia 30303

Mr. Doug Huggett NC Division of Coastal Management Division of Coastal Management 400 Commerce Avenue Morehead City, NC 28557-3421

Mr. William D. Gilmore, P.E. EEP Transition Manager Ecosystem Enchancement Center 1652 Mail Service Center Raleigh, NC 27699-1652

MAR 1 4 2005

#### DEPARTMENT OF THE ARMY PERMIT

NC Department of Transportation

Permittee\_\_\_\_\_\_200020945

Permit No.

USAED, Wilmington

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

#### **Project Description:**

Place fill material impacting a total of 0.90 acre of wetlands, 0.02 acre of open water, and 164 linear feet of stream, for construction of the widening of a 0.9-mile long section of US 15-501 (T.I.P. No. U-4012), crossing New Hope Creek, an unnamed tributary, and adjacent wetlands.

#### **Project Location**:

From SR 2294 (Mt. Moriah Road), to SR 1116 (Garrett Road), in Durham, Durham County, North Carolina.

**Permit Conditions:** 

General Conditions:

December 31,2008

1. The time limit for completing the work authorized ends on \_\_\_\_\_\_. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

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EDITION OF SEP 82 IS OBSOLETE.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See enclosed sheet.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
  - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
  - b. This permit does not grant any property rights or exclusive privileges.
  - c. This permit does not authorize any injury to the property or rights of others.
  - d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

' d. Design or construction deficiencies associated with the permitted work.

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4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

3/7/05

#### NC DEPARTMENT OF TRANSPORTATION

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Kenneth ENGINEER) CHARLES R. ALEXANDER, JR. COLONEL

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE)

(DATE)



フェフ LUUL 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

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February 9, 2005 RECEIVED FEB 2005 **DIVISION OF HIGHWAYS** PDEA-OFFICE OF NATURAL ENVIRONMENT

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

Dear Dr. Thorpe:

Re: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act for the Proposed Widening of US 15-501 from north of SR 2294 (Mt. Moriah Road) to south of SR 1116 (Garrett Road) Durham County, TIP No. U-4012, State Project No. 8.1352301, Federal Aid Project No. NHF-15(8). WQC Project No. 042000

Attached hereto is a copy of Certification No. 3500 issued to The North Carolina Department of Transportation dated February 9, 2005.

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

Sincerely, Alan W. Klimek.

Director

Attachments

Wilmington District Corps of Engineers CC:

Mr. Eric Alsmeyer, Corps of Engineers Raleigh Field Office

Mr. Christopher Militscher, US EPA, Region IV

Mr. Jon Nance, PE, Division 5 Engineer, 2612 N. Duke St., Durham, NC 27704 Mr. Chris Murray, Division 5 Environmental Officer, 2612 N. Duke St., Durham, NC 27704 Mr. Matt Haney, ONE, 2728-168 Capital Blvd., Parker Lincoln Bldg., Raleigh, NC 27604

Mr. William Gilmore, Ecosystem Enhancement Program

NCDWQ Raleigh 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

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#### **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 The project shall be constructed pursuant to the application dated received December 16, 2004, to widen US 15-501 from north of SR 2294 (Mt. Moriah Road) to south of SR 1116 (Garrett Road), Durham County. The approved design is that submitted in your application dated received December 16, 2004. This certification authorizes the NCDOT to impact 0.71 acres of jurisdictional wetlands, permanently impact 164 linear feet of stream, temporarily impact 0.02 acres of stream and temporarily impact 0.19 acres of jurisdictional wetlands in Durham County. The authorized impacts are as described below:

		Wetland Im	ipacis in the Cap	e Fear River Basin	
Site	Fill	Fill (temporary).	Excavation	Mechanized Clearing	Hand Clearing
	(ac)	(ac)	(ac)	(ac)	(ac)
1 LSTA 70+58	0.376	0.194		0.331	
Total	0,376	0.194		0.331	

Surface	Water	Impacts in	the Cape	Fear River	· Basín

Site	Temporary Fill in Surface Water (ac)	Permanent Stream Impacts (ft)	Temporary Stream Impacts (ft)
1 L STA 70+58	0.02		
1 L STA 77+89		164	
Total	0.02	164	

The application provides adequate assurance that the discharge of fill material into the waters of the Cape Fear 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.

This approval is only valid for the purpose and design that you submitted in your application dated received December 16, 2004, 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 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, 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:

- Construction will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Erosion and sediment control practices must 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.
  - The erosion and sediment control measures for the project must equal or exceed the proper design,

installation, operation and maintenance outlined in the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual. These devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.

b. For borrow pit sites, the erosion and sediment control measures must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Surface Mining Manual. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

- 2. All 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;
- 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 this Certification;
- 4. No live or fresh concrete shall come 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. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify 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. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed, unless otherwise authorized by this certification, to allow low flow passage of water and aquatic life unless it can be shown to DWQ that providing passage would be impractical. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ.
- Compensatory mitigation for impacts to 0.71 acres of jurisdictional wetlands shall be done. Total
  mitigation shall be provided as described below:

#### Offsite Compensatory Mitigation

Compensatory mitigation for the unavoidable impacts to 0.71 acres of riverine wetlands in the Hydrologic Cataloging Unit 030030002 of the Cape Fear River Basin, associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated 9 December 2004, and in accordance with the Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003

Compensatory mitigation for impacts to 164 linear feet of streams shall be done at a replacement ratio of 1:1. Applying a replacement ratio of 1:1, total mitigation for 164 linear feet of streams shall be provided as described below:

#### Offsite Compensatory Mitigation

Compensatory mitigation for the unavoidable impacts to 164 linear feet of streams in the Hydrologic Cataloging Unit 03030002 associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated 9 December 2004, and in accordance with the Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003.

- 10. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S.
- 11. All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.
- 12. The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions.
- 13. Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.
- 14. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
- 15. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
- 16. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided to the NC Division of Water Quality that the final construction drawings comply with the attached permit drawings contained in your application dated July 22, 2004.
- 17. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
- 18. NCDOT, 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 law 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) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

19. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.

- 20. DOT shall schedule a preconstruction meeting for this project prior to incurring any impacts in jurisdictional waters including wetlands. The Division of Water Quality shall be notified a minimum of 30 days prior to the preconstruction conference.
- 21. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage, unless otherwise authorized by this certification. Culverts that are 48-inch in diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. These measurements must be based on natural thalweg depths.
- 22. 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.
- 23. Any violations, during the construction of the approved project, of this 401 Water Quality Certification or the North Carolina State Water Quality Standards as defined in 15A NCAC 2B 0200 Rules, shall be reported immediately to the North Carolina Division of Water Quality.
- 24. Pursuant to NCAC15A 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.

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 9<sup>th</sup> day of February 2005

DIVISION OF WATER QUALITY

Alan W. Klimek, P.E. Director

WQC No. 3500

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## SPECIAL CONDITIONS (Action ID. 200020945; NCDOT/TIP U-4012)

## COMPLIANCE WITH PLANS

a) All work must be performed in strict compliance with the attached plans, which are a part of this permit. Any modification to the permit plans must be approved by the USACE prior to implementation.

### ACTIVITIES NOT AUTHORIZED

b) Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, nor shall any activities take place that cause the degradation of waters or wetlands. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

This permit does not authorize temporary placement or double handling of excavated or fill material within jurisdictional waters, including wetlands, outside the permitted area. Additionally, no construction materials or equipment will be placed or stored within jurisdictional waters, including wetlands.

#### CONSTRUCTION PLANS

c) The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Raleigh Regulatory Field Office prior to any active construction in waters or wetlands.

d) Prior to commencing construction within jurisdictional waters of the United States for any portion of the proposed project, the permittee shall forward the latest version of project construction drawings to the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.

#### POLLUTION SPILLS

e) All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. No equipment staging or storage of construction material will occur in wetlands. Hydro-seeding equipment will not be discharged or washed out into any surface waters or wetlands. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

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#### NOTIFICATION

f) The permittee shall advise the Corps in writing at least two weeks prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

#### CLEAN FILL MATERIAL

g) Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

#### CONTRACTOR COMPLIANCE

h) The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications at the project site during construction and maintenance of this project.

#### SEDIMENTATION AND EROSION CONTROL MEASURES

i) The permittee shall use 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" to assure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices must 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 standards. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of nonerodable materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

No fill or excavation for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless it is included on the plan drawings and specifically authorized by this permit.

## **REPORTING OF VIOLATIONS**

j) The permittee will report any violation of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act in writing to the Wilmington District, U. S Army Corps of Engineers, within 24 hours of the permittee's discovery of the violation.

#### COMPLIANCE WITH SPECIAL CONDITIONS

k) Failure to institute and carry out the details of these special conditions, will result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with the permitted project, or such other remedies and/or fines as the District Engineer or his authorized representatives may seek.

#### WET CONCRETE

1) The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.

#### **CULVERTS**

m) All authorized culverts will be installed to allow the passage of low stream flows and the continued movement of fish and other aquatic life as well as to prevent headcutting of the streambed. For all box culverts and for pipes greater than 48 inches in diameter, the bottom of the pipe will be buried at least one foot below the bed of the stream unless burial would be impractical and the Corps of Engineers has waived this requirement. For culverts 48 inches in diameter or smaller, the bottom of the pipe must be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in disequilibrium of wetlands or streambeds or banks, adjacent to, upstream or downstream of the structures. In order to allow for the continued movement of bed load and aquatic organisms, existing stream channel widths and depths will be

maintained at the inlet and outlet ends of culverts. Riprap armoring of streams at culvert inlets and outlets shall be minimized above the ordinary high water elevation in favor of bioengineering techniques such as bank sloping, erosion control matting and revegetation with deep-rooted, woody plants.

#### PRECONSTRUCTION MEETING

n) The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Raleigh Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall provide the USACE, Raleigh Regulatory Field Office, NCDOT Regulatory Project Manager, with a copy of the final plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction meeting for a time when the USACE and North Carolina Division of Water Quality (NCDWQ) Project Managers can attend. The permittee shall invite the Corps and NCDWQ Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.

### BORROW AND WASTE

o) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. All jurisdictional wetland lines on borrow and waste sites shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with Special Condition b) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the Special Condition b). All information will be available to the USACE upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

## MITIGATION

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p) Compensatory mitigation for the unavoidable impacts to 0.71 acre of riverine wetlands, and 164 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated December 9, 2005 from William D. Gilmore, EEP Director. Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide 1.42 acres restoration-equivalent mitigation of riverine wetlands, and 328 linear feet of warm water stream restoration-equivalent mitigation in the Cape Fear River basin (Hydrologic Cataloging Unit 03030002) by July 22, 2005. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.









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# PROPERTY OWNERS

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NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
4	OAKRIDGE 58 INVESTORS A NORTH CAROLINA GENERAL PARTNERSHIP	3508 HORTON ST. RALEIGH, NC 27614
5	COUNTY OF DURHAM	200 E. MAIN ST. 4th FLOOR DURHAM, NC 27701
6	COUNTY OF DURHAM	200 E. MAIN ST. 4th FLOOR DURHAM, NC 27701
7	COUNTY OF DURHAM	200 E. MAIN ST. 4th FLOOR DURHAM, NC 27701
8	WELLINGTON PROPERTIES, LLC	2804 CASTLE PINES CREEK HAMPTON COVE, AL

NCDOT DIVISION OF HIGHWAY'S

DURHAM COUNTY PROJECT: WBS 35010.1.1 (U-4012)

US 15-501 WIDENING

Sheet 15 of 15

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## **PROJECT COMMITMENTS**

# US 15-501

From North of SR 2294 (Mt. Moriah Road) to South of SR 1116 (Garrett Road) Durham County WBS Element 35012.1.1 Federal Project No. NHF-15(8) State Project No. 8.1352301 **TIP PROJECT U-4012** 

# COMMITMENTS DEVELOPED THROUGH PROJECT DEVELOPMENT AND DESIGN

Current status, changes, or additions to the project commitments as shown in the environmental documents for the project are printed in *italics*.

## Roadway Design/ Structure Design/ Division 5- Construction

US 15-501 between Academy Road and Old Durham-Chapel Hill Road is identified as a bicycle route in the Durham-Chapel Hill MPO's Regional Bicycle Plan. The City of Durham has requested that the outside shoulders in each direction of US 15-501 throughout the project area be 10 feet (3.0 m) wide to allow for bicycle passage. Roadway Design will incorporate 10-foot (3.0 m) outside paved shoulders into the design where space allows. Structure Design will also design the bridge rails with a minimum height of 54 inches (1.4 m) in order to provide safe passage for bicyclists in accordance with the latest AASHTO guidelines.

The proposed bicycle accommodations have been incorporated into the design.

## Structure Design

The Triangle Transit Authority (TTA) is planning for a railway corridor near the project area. One alternative may be located parallel to US 15-501. If this alternative is chosen, TTA would like their railway to be positioned as close as possible to the bridge over New Hope Creek. Therefore, replacement bridge structures will use a standard wing-wall design, which calls for the wing-wall to extend approximately 3 feet (0.91 m) away from the superstructure. This would allow the railway bridge superstructure to be placed as close as 13 feet (4.0 m) to the U-4012 bridge superstructure.

The new bridges include the wing-wall design.

## Project Development and Environmental Analysis/ Roadway Design/ Structure Design/ Hydraulics

The dual bridges over New Hope Creek will be designed to accommodate wildlife crossings and greenway trails on both sides of the creek. A minimum vertical clearance of 10 feet (3.0 m) will be carried out underneath the entire bridge to accommodate future greenway trail uses. Use of a barrier/ source of cover will be investigated for the area between the greenway and wildlife crossing areas. Bridge columns of the permanent bridge will be kept out of New Hope Creek. Use of riprap will be limited to the slope stabilization areas near the bridge ends per current NCDOT design guidelines. A small amount of riprap may also be placed on the banks of New Hope Creek underneath the bridge in order to minimize scour. Riprap will be avoided in the areas reserved for greenway trails and wildlife crossings.

Space for wildlife crossings and planned greenway trails has been incorporated into the design. The greenway trail is not being constructed as part of this project; therefore, the construction of any barrier or source of cover should coincide with construction of the greenway.

Riprap is shown in the final plans in areas where the existing piers are to be removed. The riprap is needed to stabilize the stream bank, and it has been kept out of areas reserved for the wildlife crossings and greenway trails.

## Project Development and Environmental Analysis (PDEA)/ Roadway Design/ Division 5 Construction

High fencing (10 feet (3.0 m)) will be installed up to the developed areas along all four quadrants of New Hope Creek parallel to US 15-501; however, the installation of the fencing will be delayed until adequate wildlife crossing data can be collected following the completion of the New Hope Creek bridges. Use of deer ramps, constructed of dirt, will be investigated for installation along all fence lines if they can be constructed without creating a hazard to the travelling public.

Fencing will be installed after the NCDOT-sponsored research study, "Wildlife Use of an Underpass of the US 15-501 Highway Bridge over New Hope Creek" (Project 2004-007), is completed. The wildlife fencing will then be installed under a separate contract.

## Roadway Design/ Structure Design/ Hydraulics/ Division 5 Construction

The temporary detour bridge over New Hope Creek will be approximately 150 feet (46 m) in length and be located on the northwest side of US 15-501.

This commitment has been incorporated into the design. No bents for the detour bridge will be placed in the creek.

## **PROJECT COMMITMENTS**

## COMMITMENTS DEVELOPED THROUGH PERMITTING

## Roadside Environmental Unit (REU), Division 5 Construction

All 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.

All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its pre-construction contours and elevations. The re-vegetation of the impacted areas with appropriate native species will be required.

## Hydraulics, Division 5 Construction

The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions.

## Hydraulics, Division 5 Construction, Roadway Design

Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided to NCDWQ that the final construction drawings comply with the permit drawings contained in NCDOT's application dated July 22, 2004.

NCDOT will ensure that the construction design plans for this project do not deviate from the permit plans. Written verification shall be provided that the final construction drawings comply with the permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Raleigh Regulatory Field Office prior to any active construction in waters or wetlands.

Prior to commencing construction within jurisdictional waters of the United States for any portion of the proposed project, NCDOT shall forward the latest version of project construction drawings to the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.

## Hydraulics, Division 5 Construction

Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage, unless otherwise authorized by the Water Quality Certification. Culverts that are 48-inch in diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. These measurements must be based on natural thalweg depths.

## **Division 5 Construction, PDEA**

All work must be performed in strict compliance with the plans (submitted with the application dated July 22, 2004), which are a part of the Section 404 Individual Permit. Any modification to the permit plans must be approved by the USACE prior to implementation.

## <u>PDEA</u>

Compensatory mitigation for the unavoidable impacts to 0.71 acre of riverine wetlands, and 164 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated December 9, 2004 from William D. Gilmore, EEP Director. Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide 1.42 acres restoration-equivalent mitigation of riverine wetlands, and 328 linear feet of warm water stream restoration-equivalent mitigation in the Cape Fear River basin (Hydrologic Cataloging Unit 03030002) by July 22, 2005. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. The NCDOT shall, within 30 days of the issue date of the Section 404 permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.