




STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

October 14, 2005

MEMORANDUM TO: Mr. Terry R. Gibson, PE
Division 6 Engineer

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

SUBJECT: Cumberland County, Improvements to SR 1400 (Cliffdale Road)
from US 401 to SR 1403 (Reilly Road); State Work Order
Number 8.2441701; T.I.P. No. U-2520

Attached is the modification to the U. S. Army Corps of Engineers 404 Individual Permit and the Division of Water Quality 401 Water Quality Certification for 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. Jay Bennett, P.E.
Mr. David Chang, P.E.
Mr. Randy Garris, P.E.
Mr. Greg Perfetti, P.E.
Mr. Mark Staley
Mr. Omar Sultan
Mr. John F. Sullivan, FHWA
Mr. Jim Rerko, Division 6 DEO

PROJECT COMMITMENTS

Improvements to SR 1400 (Cliffdale Road) from US 401 to SR 1403 (Reilly Road)
Cumberland County
Federal Aid No. STP-1400 (2)
State Project No. 8.2441701
TIP No. U-2520

In addition to the standard Individual Section 404 and 401 Permit Conditions, State Consistency Conditions, NCDOT's Guidelines for Best Management Practices for Protection of Surface Waters, the following special commitments have been agreed to by NCDOT:

Commitments Developed through Permit Modifications

Division 6/Roadside Environmental Unit

Clearing and grubbing of vegetation should not begin until all necessary equipment is onsite to begin construction of the step pool channel

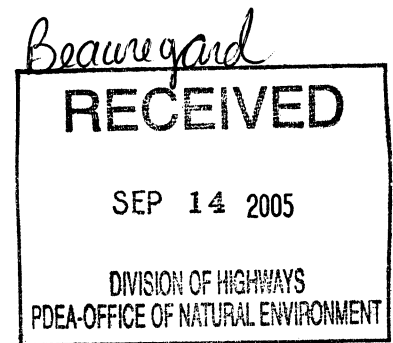
All other conditions written into previous Section 404 permits and Section 401 Water Quality Certifications for this project still apply.



REPLY TO
ATTENTION OF:

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

September 7, 2005



Regulatory Division

Subject: Action ID No. 200200640, TIP No. U-2520, SR 1400 (Cliffdale Road) from US 401 to SR 1403 (Reilly Road, Cumberland County, North Carolina.

Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development & Environmental Analysis
1548 Mail Service Center
Raleigh, N.C. 27699-1548

Dear Dr. Thorpe:

I am responding to your request dated August 16, 2005, for a modification to the existing Department of the Army (DA) permit issued for the above referenced project. The proposed project modifications are as follows:

REDESIGNED INLET AND OUTLET AT CULVERT

U-2520, permit drawing sheet 9, Station L 58+77, Site 4

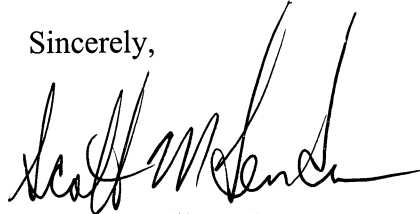
The referenced Section 404 permits authorized 92 linear feet of stream impact at this site. Due to culvert misalignment and high discharge velocities the stream is downcutting upstream and downstream. To control the headcutting and provide stability for the stream, a 58 linear foot, step pool control structure is proposed. To control the erosive velocities at the end of the culvert a 35 linear foot rip-rap outlet energy dissipater basin is proposed. This resulted in an increase in impact area of 0.01 acre or 95 linear feet of stream channel.

I have determined that the proposed project modifications described above are not contrary to the public interest and therefore, the DA permit is hereby modified to reflect the modified project as described in the information above and the drawings provided with the modification request.

Please note that a modified Water Quality Certification shall be obtained from NCDENR-DWQ. Furthermore, all unmodified terms and conditions of your original Department of the Army permit shall remain in effect and the original permit expiration date shall remain the same.

Should you have any questions, please contact Mr. Richard Spencer, Wilmington Field Office, Regulatory Division, at telephone (910) 251-4172.

Sincerely,

A handwritten signature in black ink, appearing to read "John E. Pulliam, Jr.", written in a cursive style.

John E. Pulliam, Jr.
Colonel, U.S. Army
District Engineer

Enclosures

Copies Furnished (with enclosures):

Mr. David Cox
North Carolina Wildlife Resources Commission
512 N. Salisbury Street
Raleigh, North Carolina 27604-1188

Mr. John Hennessy
NCDENR-DWQ
Wetlands Section
1621 Mail Service Center
Raleigh, NC 27699-1621

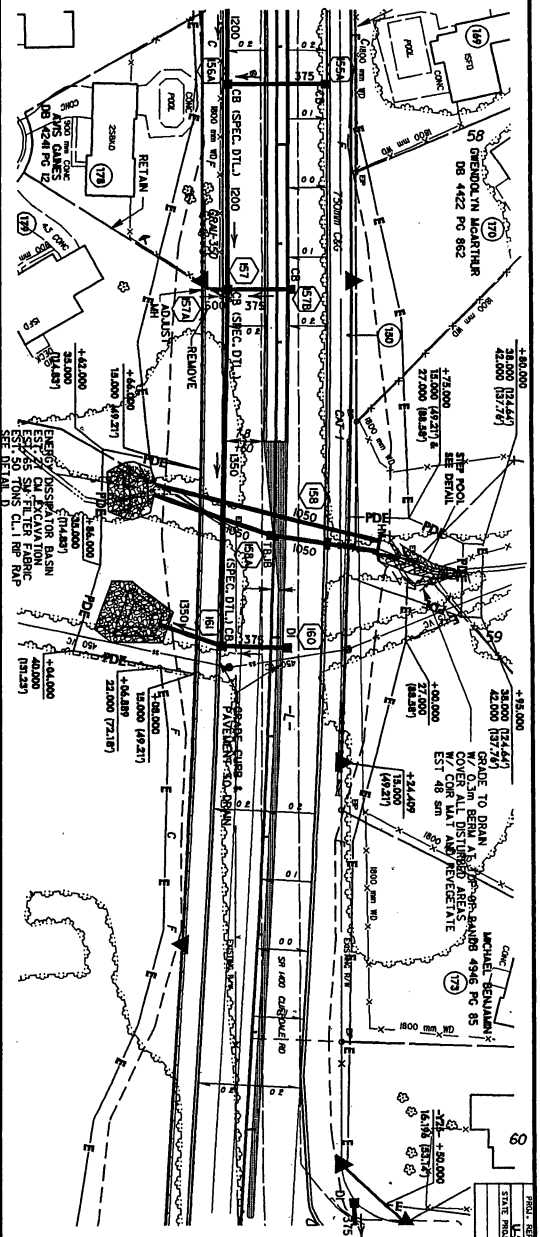
Mr. Pete Benjamin
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Chris Militcher
USEPA Raleigh Office
Care of FHWA
310 New Bern Avenue
Raleigh, NC 27601

Mr. Art King
Division Environmental Officer, Division 8
North Carolina Department of Transportation
P.O. Box 1067
Aberdeen, North Carolina 28315

Mr. James J. Rerko, PWS
Division Environmental Officer, Division 6
North Carolina Department of Transportation
P.O. Box 1150
Fayetteville, North Carolina 28302-1150

Ms. Beth Harmon
North Carolina Ecosystem Enhancement Program
1652 Mail Service Center
Raleigh, NC 27699-1652



S/A	NORTHING	EASTING
Begin Benchmark	648755.7	145580.2
ROCK VANE #1	648770.8	145577.8
ROCK VANE #2	648771.3	145574.6
ROCK VANE #3	648771.5	145582.4
ROCK VANE #4	648771.6	145579.2

Proposed Stream

Existing Stream

ROCK VANE #1
S/A 648770.8
ELEV 58.85

ROCK VANE #2
S/A 648771.3
ELEV 58.72

ROCK VANE #3
S/A 648771.5
ELEV 58.85

ROCK VANE #4
S/A 648771.6
ELEV 58.85

BRAIN RELOCATION
S/A 648755.7
ELEV 58.85

ROAD

PROPOSED

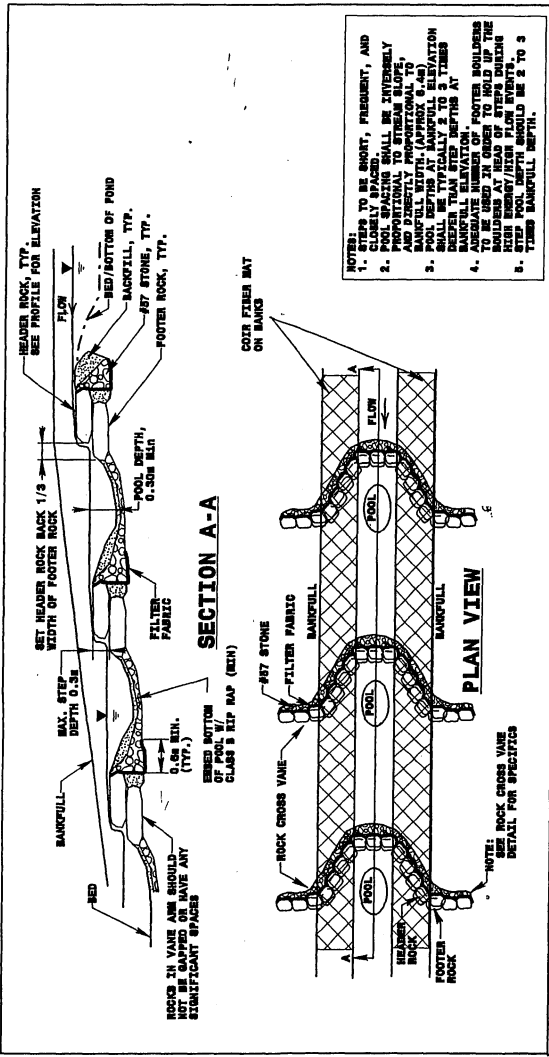
REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-2520	1
BY SHEET NO.	HYDRAULICS
DESIGNED BY	ENGINEER

Sta U-2520
58+85 - L - Lt

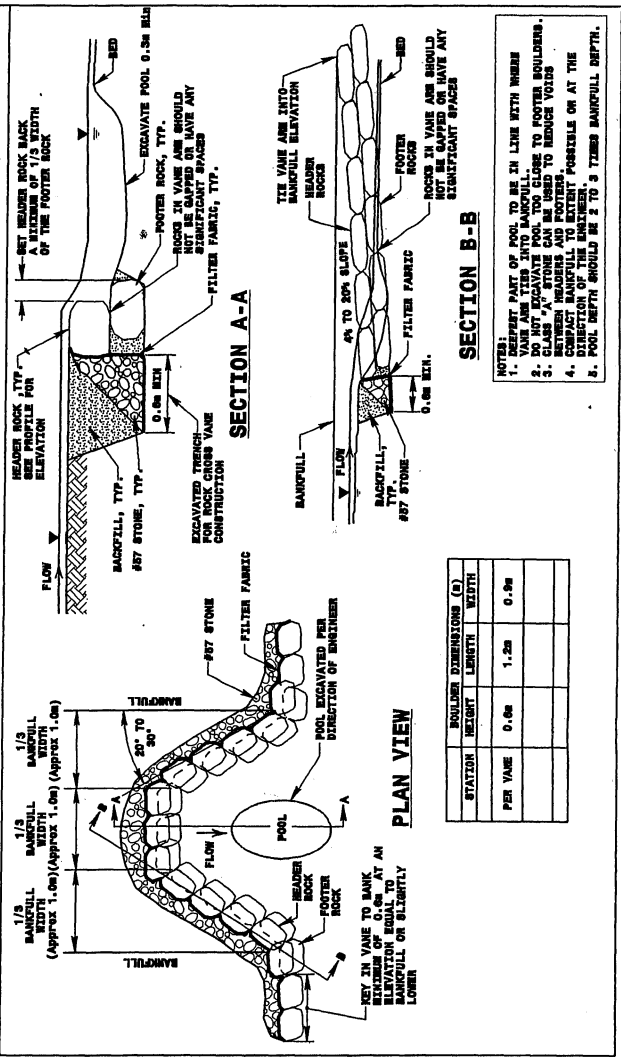
STEP POOL DETAIL

NOT TO SCALE

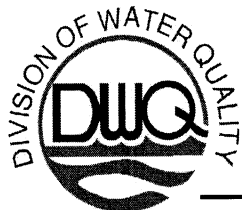


ROCK CROSS VANE DETAIL FOR STEP POOL

NOT TO SCALE



BOULDER DIMENSIONS (ft)			
STATION	HEIGHT	LENGTH	WIDTH
PER VANE	0.66	1.28	0.36



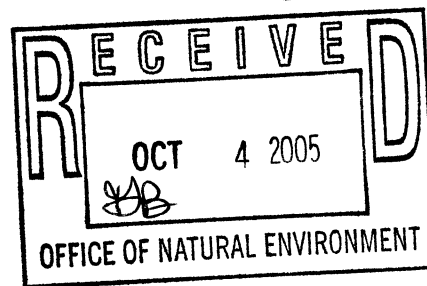
Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director
Division of Water Quality

Beauregard

September 29, 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 Widening and Realignment of SR 1400 (Cliffdale Road) from US 401 to SR
1403 (Reilly Road), Cumberland County, TIP No. U-2520, WQC Project No. 020400, WQC No.
3381

Dear Dr. Thorpe:

Attached hereto is a modification to Certification No. 3381 issued to the North Carolina Department of Transportation on September 29, 2005. This modification replaces the modification issued on September 7, 2005. The attached modification authorizes 95 linear feet of additional stream impacts at Site 4. 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 April 19, 2002 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. 3381

cc: Richard Spencer, US Army Corps of Engineers Wilmington Field Office
Travis Wilson, NC WRC
Gary Jordan, US FWS
Christopher Militscher, US Environmental Protection Agency – Region IV
Ken Averitte, NC DWQ Fayetteville Regional Office
Central Files
File Copy

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. The attached modification authorizes the NCDOT to incur the following impacts:

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

Section	Stream Impacts (linear feet)	Mitigation Required (linear feet)
Site 4 Impacts authorized under original WQC	92	0
Site 4 Impacts for this modification	95	0
Total Modified Impacts for Site 4	187	0

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 April 19, 2002 and all other corresponding modifications still apply except where superceded by this certification. The project shall be constructed pursuant to the application submitted on August 16, 2005 (received August 19, 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:

1. Clearing and grubbing of vegetation should not begin until all necessary equipment is on site to begin construction of the step pool channel.
2. All the authorized activities and conditions of the certification associated with the original Water Quality Certification dated April 19, 2002 and all other corresponding modifications still apply except where superseded by this certification.

Conditions from WQC No. 3381 issued April 19, 2002:

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 within 30 days after the project has been released;
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 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 incorporating coir fiber and seedling establishment is allowable. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.
7. Compensatory mitigation for impacts to streams shall be done for 576 linear feet of stream impact at a replacement ratio of 1:1. As such, compensatory mitigation for 576 linear feet of streams is required.

We understand that you have chosen to perform compensatory mitigation for impacts to streams through an in lieu payment to the North Carolina Wetland Restoration Program (NCWRP), and that the WRP has agreed to implement the mitigation for the project. Mitigation for unavoidable impacts to streams shall be provided through an in-lieu payment to the North Carolina Wetlands Restoration Program (NCWRP) at a rate of \$125 per linear foot. Therefore, a total payment of \$72,000 shall be submitted to the NCWRP to offset the impacts. No construction activities in jurisdictional streams shall begin until payment for stream mitigation is made and the Wetland Restoration Program receives and clears your check (made payable to DENR – Wetland Restoration Program). The payment to NCWRP shall be sent within two months of issuance of the 404 permit. If you have any questions concerning the Wetland Restoration Program, please contact them at 91-733-5208.

8. Compensatory mitigation for impacts to wetlands shall be done for 1.67 acres of impacts. Applying a replacement ratio of 2:1, total mitigation for 3.34 acres of riparian wetlands shall be provided. We understand that you have chosen to perform compensatory mitigation for impacts to streams through an in lieu payment to the North Carolina Wetland Restoration Program (NCWRP), and that the WRP has agreed to implement the mitigation for the project. Mitigation for unavoidable impacts to wetlands shall be provided through an in-lieu payment to the North Carolina Wetlands Restoration Program (NCWRP) at a rate of \$24,000 per acre for 3.25 acres of impacts (Acreage requirements proposed to be mitigated through the Wetland Restoration Program must be rounded to one-quarter increments according to 15A 2R .0503(b). Therefore, a total payment for 3.25 acres impact at \$24,000 per acre for a total payment of \$78,000 shall be submitted to the NCWRP to offset the impacts. No construction activities in jurisdictional streams shall begin until payment for wetland mitigation is made and the Wetland Restoration Program receives and clears your check (made payable to DENR – Wetland Restoration Program). The payment to NCWRP shall be sent within two months of issuance of the 404 permit. If you have any questions concerning the Wetland Restoration Program, please contact them at 91-733-5208.
9. 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.
10. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed 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.
11. The permittee shall require its contractors (and/or agents) to comply with all of the terms of this certification, and shall provide each of its contractors (an/or agents) a copy of this certification.

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 29th day of September 2005

DIVISION OF WATER QUALITY

Alan W. Klimek, P.E.
Director

WQC No. 3381

DWQ Project No.: _____

County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1621 Mail Service Center, Raleigh, NC, 27699-1621. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, 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: _____ Date: _____

Agent's Certification

I, _____, 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: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State 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 _____

Registration No. _____

Date _____