

William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

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

# North Carolina Division of Water Quality 401 Water Quality Certification Summary of Permitted Impacts and Mitigation Requirements

In accordance with 15A NCAC 2H.0500, MAC Development has permission as outlined below to impact 224 linear feet of stream for the purpose(s) of constructing the proposed Cedar Grove Phase IV residential subdivision in Chatham County. All activities associated with these authorized impacts must be conducted with the conditions listed in the attached Permit transmittal letter. THIS PERMIT IS NOT VALID WITHOUT THE ATTACHMENTS.

COMPENSATORY MITIGATION REQUIREMENTS, ECOSYSTEM ENHANCEMENT PROGRAM

LOCATION:

Near Camboro, NC

COUNTY

Chatham

BASIN/ SUB BASIN

Cape Fear/03030002

As required by 15A NCAC 2H.0500, and the conditions of this Permit, you are required to compensate for the above impacts through the restoration, creation, enhancement or preservation of wetlands and surface waters as outlined below prior to conducting any activities that impact or degrade the waters of the state.

Note: Acreage requirements proposed to be mitigated through the Ecosystem Enhancement Program must be rounded to one-quarter acre increments and linear foot requirements must be rounded up to the nearest foot according to 15 2R.0503(b).

Impacts	Mitigation
224 Linear feet of stream	298 linear feet of streams

In correspondence dated October 3, 2005, the EEP indicated that up to 560 linear feet of mitigation will be conducted by EEP if necessary for the 401 Water Quality Certification and 404 Permit.

One of the options you have available to satisfy the compensatory mitigation requirement is through the payment of a fee to the Wetlands Restoration Fund per NCAC 2R.0503. If you choose this option, please sign this form and mail the form along with a copy of your 401 Certification or Buffer Approval to the Ecosystem Enhancement Program at the address below. An invoice for the appropriate amount of payment will be sent to you upon receipt of this form. PLEASE NOTE, THE ABOVE IMPACTS ARE NOT AUTHORIZED UNTIL YOU RECEIVE NOTIFICATION THAT YOUR PAYMENT HAS BEEN PROCESSED BY THE ECOSYTEM ENHANCMENT PROGRAM.

Signature

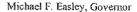
Date /- 9-06

ECOSYSTEM ENHANCEMENT PROGRAM 1652 Mail Service Center RALEIGH, N.C. 27699-1652 (919) 733-5205

Filename: 051890CedarGroveSDPhIV(Chatham)401 EEP

North Carolina
Naturally

Ch 2.2





William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

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

December 15, 2005

DWQ Project # 05-1890 Chatham County

Mr. Chuck Lewis MAC Development 124 Hidden Hills Drive Chapel Hill, NC 27517

Subject Property:

Cedar Grove Subdivision - Phase IV

Ut to Meadow Branch [030604, 16-32-1, WSIV, NSW]

#### Approval of 401 Water Quality Certification with Additional Conditions

Dear Mr. Lewis:

You have our approval, in accordance with the attached conditions and those listed below, to place fill within or otherwise impact 224 linear feet of stream for the purpose of accessing high ground for development of residential subdivision lots at the subject property, as described within your application dated October 10, 2005, and received by the N.C. Division of Water Quality (DWQ) on October 11, 2005, with more information received by the DWQ on November 23, 2005. After reviewing your application, we have decided that the impacts are covered by General Water Quality Certification Number(s) 3402 (GC3402). The Certification(s) allows you to use Nationwide Permit(s) NW39 when issued by the US Army Corps of Engineers (USACE). In addition, you should obtain or otherwise comply with any other required federal, state or local permits before you go ahead with your project including (but not limited to) Erosion and Sediment Control, Non-discharge, and other regulations. Also, this approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 or CAMA Permit.

This approval is for the purpose and design that you described in your application. If you change your project, you must notify us and you may be required to send us 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 conditions. If total fills for this project (now or in the future) exceed one acre of wetland or 150 linear feet of stream, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h). This approval requires you to follow the conditions listed in the attached certification and any additional conditions listed below.

#### The Additional Conditions of the Certification are:

#### Conditions of Certification:

#### 1. Impacts Approved

The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification (or Isolated Wetland Permit) are met. No other impacts are approved including incidental impacts:



1	Amount Approved (Units)	Plan Location or Reference
Stream	224 (linear feet)	PCN page 4 of 9

#### Mitigation:

2. Compensatory Mitigation Using the Ecosystem Enhancement Program (EEP)

Mitigation must be provided for the proposed impacts as specified in the table below. We understand that you wish to make a payment to the Wetlands Restoration Fund administered by the NC Ecosystem Enhancement Program (EEP) to meet this mitigation requirement. This has been determined by the DWQ to be a suitable method to meet the mitigation requirement. Until the EEP receives and clears your check (made payable to: DENR – Ecosystem Enhancement Program Office), no impacts specified in this Authorization Certificate shall occur. The EEP should be contacted at (919) 733-5205 if you have any questions concerning payment into a restoration fund. You have one month from the date of this approval to make this payment. For accounting purposes, this Authorization Certificate authorizes payment into the Wetlands Restoration Fund to meet the following compensatory mitigation requirement:

	Compensatory Mitigation Required	River and Sub-basin Number
Stream	224 (feet)	Cape Fear/03030002

#### Sediment and Erosion Control:

- 3. 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 protect surface waters standards:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
  - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The 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.
  - c. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
- 4. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the 404/401Permit Application. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best

The establishment of native, woody vegetation and other soft stream bank stabilization techniques must be used where practicable instead of rip rap or other bank hardening methods. If rip-rap is necessary, it shall not be placed in the stream bed, unless specifically approved by the Division of Water Quality.

Installation of culverts in wetlands must ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions.

Upon completion of the project, the Applicant shall complete and return the enclosed "Certificate of Completion" form to notify NCDWQ 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 NC Division of Water Quality upon completion of the project. Please send photographs upstream and downstream of each culvert site to document correct installation along with the Certificate of Completion form.

#### Certificate of Completion:

10. 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 the attached certificate of completion to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650.

Also, this approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 or CAMA Permit.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. The authorization to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application and as authorized by this Certification shall expire upon expiration of the 404 or CAMA Permit.

If you do not accept any of the conditions of this Certification (associated with the approved wetland or stream impacts), you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition, which conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

- 6. Protective Fencing The outside buffer, wetland or water boundary and along the construction corridor within these boundaries approved under this authorization shall be clearly marked with orange warning fencing (or similar high visibility material) for the areas that have been approved to infringe within the buffer, wetland or water prior to any land disturbing activities to ensure compliance with 15 NCAC 2H, Section .0500;
- 7. Deed Notifications Deed notifications or similar mechanisms shall be placed on all retained jurisdictional wetlands, waters and protective buffers in order to assure compliance for future wetland, water and buffer impact. These mechanisms shall be put in place prior to impacting any wetlands, waters and/or buffers approved for impact under this Certification Approval and Authorization Certificate. A sample deed notification can be downloaded from the 401/Wetlands Unit web site at http://h2o.enr.state.nc.us/ncwetlands. The text of the sample deed notification may be modified as appropriate to suit to this project;

#### Construction Stormwater Permit NCG010000

Upon the approval of an Erosion and Sedimentation Control Plan issued by the Division of Land Resources (DLR) or a DLR delegated local erosion and sedimentation control program, an NPDES General stormwater permit (NCG010000) administered by DWQ is automatically issued to the project. This General Permit allows stormwater to be discharged during land disturbing construction activities as stipulated by conditions in the permit. If your project is covered by this permit [applicable to construction projects that disturb one (1) or more acres], full compliance with permit conditions including the sedimentation control plan, self-monitoring, record keeping and reporting requirements are required. A copy of this permit and monitoring report forms may be found at <a href="http://h2o.enr.state.nc.us/su/Forms\_Documents.htm">http://h2o.enr.state.nc.us/su/Forms\_Documents.htm</a>;

#### 9. Culvert Installation

Culverts required for this project shall be installed in such a manner that the original stream profiles are not altered. Existing stream dimensions (including the cross section dimensions, pattern, and longitudinal profile) must be maintained above and below locations of each culvert. Culverts shall be designed and installed to allow for aquatic life movement as well as to prevent head cutting of the streams. If any of the existing pipes are or become perched, the appropriate stream grade shall be re-established or, if the pipes installed in a perched manner, the pipes shall be removed and re-installed correctly.

Culvert(s) shall not be installed in such a manner that will cause aggradation or erosion of the stream up or down stream of the culvert(s). Existing stream dimensions (including the cross section dimensions, pattern and longitudinal profile) shall be maintained above and below locations of each culvert.

Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches

MAC Development Page 5 of 3 December 15, 2005

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please telephone Cyndi Karoly or Ian McMillan in the Central Office in Raleigh at 919-733-1786 or Eric Kulz in the DWQ Raleigh Regional Office at 919-791-4200.

Sincerely,

Cyruhen F. Canber Wiele Jor Alan W. Klimek, P.E.

AWK/ijm

Enclosures: GC 3402

NCDWQ-EEP-Summary of Permitted Impacts and Mitigation Requirements

Certificate of Completion

cc: Jennifer A. Burdette, Natural Systems Engineering, 3719 Benson Drive, Raleigh, NC 27609

USACE Raleigh Regulatory Field Office Eric Kulz, DWQ Raleigh Regional Office

DLR Raleigh Regional Office

File Copy Central Files

Filename: 051890CedarGroveSDPhIV(Chatham)401

Lakes and Ponds – Impacts to waters other than streams and wetlands as
determined by the Division of Water Quality shall be measured as area. Permanent
and/or temporary water impacts shall be enumerated on the entire project for all
impacts proposed regardless of which 404 Nationwide Permits are used. Any activity
that results in a loss of use of aquatic functions including but not limited to filling and
dredging shall be considered waters impacts.

Application Thresholds - Stream, wetland and water impacts that exceed any of the thresholds below require a complete application and written concurrence to use this Certification:

- Total stream impacts of greater or equal to 150 cumulative feet of stream length for the entire project require written notification to and approval by the Division of Water Quality, and/or
- Impacts to waters of equal to or greater than 1/3 of an acre require written notification to and approval by the Division of Water Quality, and/or
- Wetland impacts of greater or equal to 1/3 of an acre east of I-95 and 1/10 of an acre west of I-95 require written notification to and approval by the Division of Water Quality except as specified below. Any impacts to wetlands adjacent to waters designated as ORW, SA, WS-I, WS-II or Trout or are designated as a North Carolina or National Wild and Scenic River and wetlands classified as SWL and/or UWL as well as wetlands described in 15A NCAC 2H .0506 (e) require a complete application and written concurrence from the Division of Water Quality to use this Certification. These thresholds apply for the entire project regardless of the number of Nationwide Permits applicable to the Certification that are issued by the USACE for the project;
- Written notification to DWQ is required for all applications that propose to use
  Nationwide Permit 18. This notification requirement will be satisfied by providing two
  (2) copies of the PCN form to DWQ at the same time that the PCN form is sent to the
  US Army Corps of Engineers. A formal application and fee is not required unless
  DWQ decides that an Individual Certification will be required for the project. In this
  case, the applicant will be notified in writing from DWQ within 30 days of the receipt
  of the written notification.
- Proposed fill or substantial modification of any amount of wetlands classified in accordance with 15A NCAC 2B .0101(e)(7) as Unique Wetlands (UWL) shall require written concurrence from the Division of Water Quality;
- 2. Impacts to any stream length in the Neuse, Tar-Pamlico or Randleman River Basins (or any other major river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence for this Certification from DWQ in accordance with 15A NCAC 2B.0200. Activities listed as "exempt" from these rules do not need to apply for written concurrence under this Certification. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse and Tar-Pamlico River Basins shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B.0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices;
- 3. Irrespective of other application thresholds in this General Certification, all impacts to perennial waters and their associated buffers require written approval from DWQ since such impacts are allowable as provided in 15A NCAC 2B. 0212 (WS-I), 2B .0213 (WS-II), 2B .0214 (WS-III) and 2B .0215 (WS-IV). Only water dependent activities, public projects and structures with diminimus increases in impervious surfaces will be allowed as outlined in those rules. All other activities require a variance from the delegated local government and/or the NC Environmental Management Commission before the 401 Water Quality Certification can be processed. In addition, a 30 foot wide vegetative buffer for low density development or a 100 foot wide vegetative buffer for high density development

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE
FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBERS 18 (MINOR DISCHARGES)
39 (RESIDENTIAL, COMMERCIAL AND INSTITUTIONAL DEVELOPMENTS),
41 (RESHAPING EXISTING DRAINAGE DITCHES), 42 (RECREATIONAL FACILITIES),
43 (STORMWATER MANAGEMENT FACILITIES) AND 44 (MINING ACTIVITIES),
AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)

This General 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 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and adjacent wetland areas or to wetland areas that are not a part of the surface tributary system to interstate waters or navigable waters of the United States (i.e., isolated wetlands) as described in 33 CFR 330 Appendix A (B) (18, 39, 41, 42, 43 and 44) of the Corps of Engineers regulations (i.e., Nationwide Permit No. 39) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. This Certification replaces Water Quality Certification Numbers 3106 and 3108 issued on February 11, 1997, and Water Quality Certification Number 3287 issued on June 1, 2000 and Water Quality Certification Number 3362 issued March 18, 2002. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permits 18, 39, 41, 42, 43 or 44 or when deemed appropriate by the Director of DWQ.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

#### Conditions of Certification:

- 1. Enumerating and Reporting of Impacts:
  - Streams Impacts to streams as determined by the Division of Water Quality shall be measured as length of the centerline of the normal flow channel. Permanent and/or temporary stream impacts shall be enumerated on the entire project for all impacts regardless of which 404 Nationwide Permits are used. Stream relocations and stream bed and/or bank hardening are considered to be permanent stream impacts. Any activity that results in a loss of use of stream functions including but not limited to filling, relocating, flooding, excavation, dredging and complete shading shall be considered stream impacts. Enumeration of impacts to streams shall include streams enclosed by bottomiess culverts, bottomiess arches or other spanning structures when a 404 Permit is used anywhere in a project unless the entire structure (including construction impacts) spans the entire bed and both banks of the stream. is only used for a road, driveway or path crossing, and is not mitered to follow the stream pattern. Impacts for dam footprints and flooding will count toward the threshold for stream impacts, but flooding upstream of the dam will not (as long as no filling, excavation, relocation or other modification of the existing stream dimension, pattern or profile occurs) count towards mitigation requirements. Any filling, excavation, relocation or other modification of the existing stream (other than flooding) must re-establish the same dimensions, patterns and profiles of the existing channel (or those of a stable reference reach if the existing channel is unstable) to the maximum extent practical.
  - Wetlands Impacts to wetlands as determined by the Division of Water Quality shall be measured as area. Permanent and/or temporary wetland impacts shall be enumerated on the entire project for all impacts regardless of which 404 Nationwide Permits are used. Any activity that results in a loss of use of wetland functions including but not limited to filling, excavating, draining, and flooding shall be considered wetland impacts. Enumeration of impacts to wetlands shall include activities that change the hydrology of a wetland when a 404 Permit is used anywhere in a project.

project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;

- 7. In accordance with 15A NCAC 2H .0506 (h) compensatory mitigation may be required for impacts to 150 linear feet or more of streams and/or one acre or more of wetlands for an entire project. For linear public transportation projects, impacts equal to or exceeding 150 feet per stream may require mitigation. In addition, buffer mitigation may be required for any project with Riparian Area Protection Rules (Buffer Rules) in effect at the time of application for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A determination of buffer, wetland and stream mitigation requirements shall be made for any Certification for this Nationwide Permit. The most current design and monitoring protocols from DWQ shall be followed and written plans submitted for DWQ approval as required in those protocols. When compensatory mitigation is required for a project, the mitigation plans must be approved by DWQ in writing before the impacts approved by the Certification occur, unless otherwise specified in the approval letter. The mitigation plan must be implemented and/or constructed before any permanent building or structure on site is occupied. In the case of public road projects, the mitigation plan must be implemented before the road is opened to the travelling public. Please note that if a stream relocation is conducted as a stream restoration as defined in The Internal Technical Guide for Stream Work in North Carolina, April 2001, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation;
- 8. For any project involving re-alignment of streams, a stream relocation plan must be included with the 401 application for written DWQ approval, Relocated stream designs should include the same dimensions, patterns and profiles as the existing channel (or a stable reference reach if the existing channel is unstable), to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. 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, A-Jacks, concrete, gabions or other hard structures 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. If suitable stream mitigation is not practical on-site, then stream impact will need to be mitigated elsewhere. Please note that if a stream relocation is conducted as a stream restoration as defined in The Internal Technical Guide for Stream Work in North Carolina, April 2001, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation;
- 9. 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 including open bottom or bottomless arch culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in aggradation, degradation or significant changes in hydrology of wetlands or stream beds 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 to do so in writing by DWQ. Additionally, when roadways, causeways or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in aggradation, degradation or significant changes in hydrology of streams or wetlands;

project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;

- 7. In accordance with 15A NCAC 2H .0506 (h) compensatory mitigation may be required for impacts to 150 linear feet or more of streams and/or one acre or more of wetlands for an entire project. For linear public transportation projects, impacts equal to or exceeding 150 feet per stream may require mitigation. In addition, buffer mitigation may be required for any project with Riparian Area Protection Rules (Buffer Rules) in effect at the time of application for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A determination of buffer, wetland and stream mitigation requirements shall be made for any Certification for this Nationwide Permit. The most current design and monitoring protocols from DWQ shall be followed and written plans submitted for DWQ approval as required in those protocols. When compensatory mitigation is required for a project, the mitigation plans must be approved by DWQ in writing before the impacts approved by the Certification occur, unless otherwise specified in the approval letter. The mitigation plan must be implemented and/or constructed before any permanent building or structure on site is occupied. In the case of public road projects, the mitigation plan must be implemented before the road is opened to the travelling public. Please note that if a stream relocation is conducted as a stream restoration as defined in The Internal Technical Guide for Stream Work in North Carolina. April 2001, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation;
- 8. For any project involving re-alignment of streams, a stream relocation plan must be included with the 401 application for written DWQ approval. Relocated stream designs should include the same dimensions, patterns and profiles as the existing channel (or a stable reference reach if the existing channel is unstable), to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. 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, A-Jacks, concrete, gabions or other hard structures 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. If suitable stream mitigation is not practical on-site, then stream impact will need to be mitigated elsewhere. Please note that if a stream relocation is conducted as a stream restoration as defined in The Internal Technical Guide for Stream Work in North Carolina, April 2001, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation;
- 9. 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 including open bottom or bottomless arch culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in aggradation, degradation or significant changes in hydrology of wetlands or stream beds 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 to do so in writing by DWQ. Additionally, when roadways, causeways or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in aggradation, degradation or significant changes in hydrology of streams or wetlands;

must be maintained adjacent to all perennial waters except for allowances as provided under the Water Supply Watershed Protection Rules. For the purposes of this condition, perennial waters are defined as those shown as perennial waters on the most recent USGS 1:24,000 topographic map or as otherwise determined by local government studies;

4. Additional site-specific stormwater management requirements may be added to this Certification at DWQ's discretion on a case by case basis for projects that have or are anticipated to have impervious cover of greater than 30 percent. Site-specific stormwater management shall be designed to remove 85% TSS according to the latest version of DWQ's Stormwater Best Management Practices manual at a minimum.

Additionally, in watersheds within one mile and draining to 303(d) listed waters, as well as watersheds that are classified as nutrient sensitive waters (NSW), water supply waters (WS), trout waters (Tr), high quality waters (HQW), and outstanding resource waters (ORW), the Division shall require that extended detention wetlands, bio-retention areas, and ponds followed by forested filter strips (designed according to latest version of the NC DENR Stormwater Best Management Practices Manual) be constructed as part of the stormwater management plan when a site-specific stormwater management plan is required.

For streams classified as Water Supply, High Quality Waters and Outstanding Resource Waters, post-construction, on-site stormwater management shall be required as appropriate and as outlined in 15A NCAC 2B .0104(m) and 2H .1000 to .1007, respectively, in addition to that required in this General Certification.

Alternative designs may be requested by the applicant and will be reviewed on a case-by-case basis by the Division of Water Quality.

Approval of stormwater management plans by the Division of Water Quality's other existing state stormwater programs including appropriate local programs are sufficient to satisfy this Condition as long as the stormwater management plans meet or exceed the design requirements specified in this condition. This condition applies unless more stringent requirements are in effect from other state water quality programs.

- Unless specified otherwise in the approval letter, the final, written stormwater management plan shall be approved in writing by the Division of Water Quality's Wetlands Unit before the impacts specified in this Certification occur.
- The facilities must be designed to treat the runoff from the entire project, unless otherwise explicitly approved by the Division of Water Quality.
- Also, before any permanent building or other structure is occupied at the subject site, the facilities (as approved by the Wetlands Unit) shall be constructed and operational, and the stormwater management plan (as approved by the Wetlands Unit) shall be implemented.
- The structural stormwater practices as approved by the Wetlands Unit as well as drainage patterns must be maintained in perpetuity.
- No changes to the structural stormwater practices shall be made without written

Non-compliance with or violation of the conditions herein set forth by a specific fill project may result in revocation of this Certification for the project and may also result in criminal and/or civil penalties.

The Director of the North Carolina Division of Water Quality may require submission of a formal application for Individual Certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland or downstream waters are precluded.

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: March 2003

**DIVISION OF WATER QUALITY** 

Ву

Alan W. Klimek, P.E.

Director

WQC # 3402

- 10. That 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;
- 11. All sediment and erosion control measures placed in wetlands and waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
- 12. That additional site-specific conditions may be added to projects proposed under this Certification in order to ensure compliance with all applicable water quality and effluent standards:
- 13. Measures shall be taken to prevent live or fresh concrete from coming into contact with waters of the state until the concrete has hardened:
- 14. If an environmental document is required, this Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse;
- 15. If this Certification is used to access building sites, all lots owned by the applicant must be buildable without additional fill beyond that explicitly allowed under other General Certifications. The applicant is required to provide evidence that the lots are buildable without requiring additional impacts to wetlands, waters or buffers if required to do so in writing by DWQ. For road construction purposes, this Certification shall only be utilized from natural high ground to natural high ground;
- 16. Deed notifications or similar mechanisms shall be placed on all lots with remaining jurisdictional wetlands and waters or areas within 50 feet of all streams and ponds. These mechanisms shall be put in place within 30 days of the date of issuance of the 401 Certification letter or the issuance of the 404 Permit (whichever is later). A sample deed notification format can be downloaded from the 401/Wetlands Unit web site at <a href="http://h2o.enr.state.nc.us/ncwetlands">http://h2o.enr.state.nc.us/ncwetlands</a>. DWQ shall be sent copies of all deed restrictions applied to these lots;
- 17. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed;
- 18. Concurrence from DWQ that this Certification applies to an individual project 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 Nationwide Permit 18, 39, 41, 42, 43 or 44, whichever is sooner.

## **Certification of Completion**

DWQ Project No.: County:
Applicant:
Project Name:
Date of Issuance of Isolated Wetland Permit:
Certificate of Completion
Upon completion of all work approved within the 401 Water Quality Certification and 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, 1650 Mail Service Center, Raleigh, NC, 27699-1650. 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 or these.
Applicant's Certification
I,
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:
If this project was designed by a Certified Professional
I,
Signature: Registration No Date