

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

June 16, 2003

MEMORANDUM TO:

Mr. H. Allen Pope, P.E.

Division 3 Engineer

FROM:

Philip S. Harris, III, P.E., Manager

Office of the Natural Environment

Project Development and

Environmental Analysis Branch

SUBJECT:

Brunswick County, Replace Bridge Number 56 over Allen

(Lilliput) Creek on NC 133; Work Order Number 8.1231501;

TIP Number B-3116

Attached are the U. S. Army Corps of Engineers Nationwide Permit Number 23 (Approved Categorical Exclusion), the general conditions for the DWQ 401 Water Quality Certification, and the CAMA Major permit for the above referenced project. All environmental permits have been received for the construction of this project.

#### PSH/eah

#### Attachment

cc:

Ms. Debbie Barbour, P.E.

Mr. Omar Sultan

Mr. Jay Bennett, P.E.

Mr. David Chang, P.E.

Mr. Randy Garris, P.E.

Mr. Greg Perfetti, P.E.

Mr. Mark Staley

Mr. Mr. John F. Sullivan, III, FHWA

Mr. Mason Herndon, Division 3 Environmental Officer

WEBSITE: WWW.NCDOT.ORG

#### PROJECT COMMITMENTS

Replacement of Bridge No. 56 on NC 133 over Allen (Lilliput) Creek in Brunswick County, NCDOT Division 3. Federal Project No. BRSTP-133(2) State Project No. 8.1231501

#### TIP Project No. B-3116

In addition to the standard Section 404 Nationwide Permit 23 General Conditions, Section 401 Water Quality Certification (WQC) Conditions, and Coastal Resources Commission (CAMA) permit the following special commitments have been agreed to by NCDOT.

#### COMMITMENTS DEVELOPED THROUGH PERMITTING

#### O.N.E, Roadside Environmental Unit

404 Condition 1. Compensatory mitigation and annual monitoring for the 0.33 acres of wetland impacts associated with the proposed project shall be performed as described in the letter from NCDOT dated April 7, 2003 and as detailed in the on-site mitigation plan dated April 7, 2003 and Wetland Mitigation Plan dated May 27, 2003.

## <u>Roadway Design Unit, Structure Design Unit, Project Development and Environmental Analysis Branch (Permits), Division 3 Construction</u>

<u>404 Condition 2</u>. Bridge Demolition and removal will be accomplished in accordance with "North Carolina Department of Transportation Policy: Bridge Demolition and Removal in Waters of the United States" dated September 20, 1999.

#### **Division 3 Construction**

404 Condition 3. Installation of the permanent bridge foundations by any method other than drilled shaft construction with turbidity curtains shall result in a moratorium on any work within waters of Allen Creek (Lilliput Creek) from February 15 and June 30 of any year to protect shortnose sturgeon, anadromous fish, and nursery area activity.

#### **CAMA Permit Conditions.**

Due to the presence of the endangered shortnose sturgeon, other anadromous fish, and classification of this area as a primary nursery area by the NC Wildlife Resources Commission (WRC), and in accordance with the Project Commitments contained within the Categorical Exclusion document dated 12/4/01 and the CAMA permit application cover letter dated 4/7/03, no in-water or in-marsh activity shall be conducted from February 15th to September 30th of any year, including pile installation, without prior approval of the NC Division of Coastal Management (DCM), in consultation with the WRC and the NC Division of Marine Fisheries (DMF), except as allowed through permit conditions contained herein.

#### **CAMA Permit Conditions**

2) For the purposes of expediting this project, the fisheries moratorium required by Condition No. 1 of this CAMA permit shall not apply to wetland restoration activities conducted within the causeway restoration area provided that the causeway restoration area is fully contained by silt fence, and turbidity curtains are used to contain bottom disturbing activities.

#### Hydraulics Unit, Structure Design Unit, Division 3 Construction

3) In accordance with environmental commitments made within the Categorical Exclusion document dated 12/4/01, NC DOT's Stream Crossing Guidelines for Anadromous Fish Passage will be followed.

#### **Division 3 Construction**

- 4) The bridge will be constructed using top down construction methodologies.
- 5) All pilings for the permanent bridge shall be installed using drilled shaft construction and turbidity curtains.

# NOTE: DCM considers vibratory hammering as a construction method subset under the broader category of pile driving and DCM considers an encasement pipe as a pile. This interpretation will remain in effect until DOT can demonstrate to the satisfaction of DCM, WRC, DMF, DWQ and other interested state and federal agencies that the impacts from vibratory hammering are substantially less than the impacts of pile driving and that an encasement pipe is substantially different than a pile.

- 6) Drilling fluids shall be disposed of in an upland disposal site. Water returning to waters of the United States shall be of sufficient quality so as to not pose a threat to aquatic organisms or otherwise violate State water quality standards.
- 7) Excavated material from the drilled-shaft construction will be removed from the encasements directly into containment vessels.
- Turbidity curtains shall be used to contain all bottom disturbing activities, including pile or casement installation, placement of riprap, excavation or filling within the watercourse of Allen (Lilliput) Creek. The permittee shall install turbidity curtains along the banks of Allen (Lilliput) Creek to prevent sediment from the causeway restoration area from entering the watercourse. The turbidity curtains are to be properly maintained and retained in the water until construction is complete and turbidity within the curtains reaches ambient levels.
- 9) Placement of riprap shall be limited to the slopes underneath the proposed bridge, as depicted on the attached workplan drawings. The riprap material must be free from loose dirt or any pollutant. It must be of a size sufficient to prevent its movement from the site by wave or current action. The riprap material must consist of clean rock or masonry materials such as but not limited to granite or broken concrete.

#### **CAMA Permit Conditions**

- 10) Live concrete shall not be allowed to contact the water in or entering into the stream.
- 11) No vegetated wetlands will be excavated.
- 12) The temporary placement or double handling of excavated or fill materials within waters or vegetated wetlands is not authorized.
- No excavated or fill material will be placed at any time in any vegetated wetlands or surrounding waters outside of the alignment of the fill area indicated on the workplan drawings.
- 14) All fill material must be clean and free of any pollutants, except in trace quantities.
- 15) If the permittee determines that additional permanent and/or temporary impacts will occur that are not shown on the attached permit drawings for any activities related to the bridge replacement, off-site detour and/or utilities, then additional authorization from DCM will be required.
- 16) All excavated materials will be confined above normal high water and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.
- Debris resulting from demolition of the existing bridge, including deck components, shall not enter wetlands or waters of the United States, even temporarily.
- All excavated materials and debris associated with the removal of the existing bridge and existing causeway fill material will be disposed of on an approved upland site.

#### **Sedimentation and Erosion Control**

- 19) In accordance with Environmental Commitments made within the Categorical Exclusion document dated 12/4/01, Design Standards in Sensitive Watersheds (15A NCAC 4B .0124) will be used to ensure the project will not adversely affect the endangered shortnose sturgeon.
- 20) The permittee shall follow Best Management Practices for the protection of Surface Waters and sedimentation and erosion control measures sufficient to protect aquatic resources.
- This project must conform to all requirements of the NC Sedimentation Pollution Control Act and NC DOT's Memorandum of Agreement with the Division of Land Resources.
- In order to protect water quality, runoff from construction must not visibly increase the amount of suspended sediments in adjacent waters.
- Appropriate sedimentation and erosion control devices, measures or structures must be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses and property (e.g. silt fence, diversion swales or berms, sand fence, etc.).
- All disturbed areas shall be properly graded and provided a ground cover sufficient to restrain erosion within thirty days of project completion.

#### Division 2 Construction, O.N.E, Roadside Environmental Unit

#### **Mitigation**

#### **NOTE:**

Mitigation for the approximately 0.33 acres of permanent coastal wetland impacts on this project will be provided through the on-site wetland restoration and wetland enhancement that will result from the removal of approximately 220 linear feet of existing causeway fill material. The wetland mitigation provided by this project will not generate any excess mitigation credits for use on future projects.

On-site mitigation will be carried out as described in the document titled "On-site mitigation plan for the proposed replacement of Bridge No. 56 on NC 133 over Allen Hock Creek in Brunswick County, North Carolina" dated April 7, 2003 and the document titled "Wetland Mitigation Plan Bridge No. 56 over Allen Creek on NC 133, Brunswick County TIP No. B-3116" dated as received on 5/28/03.

#### NOTE:

The permittee is strongly encouraged not to attempt planting vegetation within that part of the causeway restoration area which will be under the new bridge upon project completion. Shading effects of the new bridge over the causeway restoration area will likely prohibit vegetative success in these areas.

- 26) The causeway restoration area will be fully contained by silt fence until all of the unsuitable fill material has been removed and the restoration area has been restored to the approximate natural elevation of the adjacent coastal wetlands.
- The permittee will remove all unsuitable fill material within the wetland restoration area, and fill any void left by the removal of this unsuitable material with suitable organic wetland substrate to the same approximate elevation as the adjacent natural wetlands or to an appropriate reference wetland elevation.
- The permittee will provide DCM with verification that the wetland restoration area has been restored to the approximate natural elevation of the adjacent coastal wetlands.
- 29) The mitigation must be approved and in place prior to the expiration date of this permit.
- Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent the temporary wetland impact area from re-attaining wetland jurisdictional status, the permittee shall provide an annual update on the wetland areas temporarily impacted by this project. This annual update will consist of photographs provided during the agency monitoring report meeting and a brief report on the progress of these temporarily impacted areas in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with DCM, the NC Division of Water Quality and the NC Wildlife Resources Commission to determine if the wetland areas temporarily impacted by this project have re-attained jurisdictional wetland status. If at the end of 3 years the wetland areas temporarily impacted by this project have not re-attained jurisdictional wetland status, DCM and the above listed agencies shall determine whether a compensatory wetland mitigation plan will be required.

#### **CAMA Permit Conditions**

#### General

- Any relocation of utility lines that are not already described within the permit application will require additional authorization, either by way of a modification of this permit or by the utility company obtaining separate authorization.
- This permit does not eliminate the need to obtain any additional permits, approvals or authorizations that may be required.

#### COMMITMENTS DEVELOPED THROUGH PROJECT DEVELOPMENT AND DESIGN

#### **Division 3**

The U.S. Fish and Wildlife Service has developed a list of "Precautions for the general construction in areas which may be used by the West Indian manatee in North Carolina." These precautions will be considered in all aspects of project construction.

<u>Construction Moratorium</u>: There will be no in-water or in marsh activity during the months of February 15 through September 30. This is considered the in-migration, spawning and outmigration period for the endangered shortnose sturgeon and other anadromous fish.

NCDOT agreed to delay closing NC 133 until after Labor Day.

## Roadway Design Unit, Structure Design Unit, Project Development & Environmental Analysis Branch (Permits), Division 3

Bridge Demolition: Bridge No. 56 is 61 feet (18.5 meters) in length. It has a reinforced concrete deck on steel I-beams and the sub structure is concrete caps on timber piles. Thus, there is a potential for components of the bridge to be dropped into Waters of the United States during construction. The resulting temporary fill associated with the bridge demolition will be as much as approximately 27.4 cubic yards (20.9 cubic meters). This calculation is based on the entire length of the bridge extending over surface waters as well as jurisdictional wetlands. All deposited components will be removed from the Practices for Bridge Demolition and Removal will be followed. To ensure the project will not adversely affect the endangered shortnose sturgeon, explosives will not be used in the bridge demolition.

#### Hydraulics Unit, Structure Design Unit, Division 3

<u>Stream Crossing Guidelines</u>: NCDOT's "Stream Crossing Guidelines for Anadromous Fish Passage" will be followed in the design & construction phases.

#### Roadside Environmental Unit

<u>Design Standards in Sensitive Watersheds</u>: To ensure the project will not adversely affect the endangered shortnose sturgeon, Design Standards for Sensitive Watersheds (formerly High Quality Water Guidelines) will be used.

#### Project Development & Environmental Analysis Branch

- 1) NCDOT will investigate whether any improvements are needed for NC 87 to be used as a detour route, including additional traffic signals and/or resurfacing.
- 2) NCDOT will provide Carolina Power and Light Company and Brunswick County Emergency Management Officials with an estimate of the amount of time the closure of NC 133 will add to evacuation times for the Brunswick Nuclear Plant.
- 3) In response to local government requests, NCDOT will provide further public notification regarding this bridge replacement, road closure and detour route. This will be coordinated with Brunswick County Emergency Management.

#### **PERMIT EXPIRATION DATES:**

404 Permit (AID 200100913) expires on December 31, 2005

401 WQC expires upon expiration of 404

CAMA Major Development Permit (Number 73-03) expires on December 31, 2006

#### U.S. ARMY CORPS OF ENGINEERS WILMINGTON DISTRICT



**Action ID:** 200100913 TIP No. B-3116 State Project No. 8.1231501 County: Brunswick

#### GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Gregory J. Thorpe, Ph.D 1 **Property Owner:** 

Environmental Management Director, PDEA Address:

N.C. Department of Transportation

1548 Mail Service Center Raleigh, NC 27699-1548

**Telephone Number:** (910) 733-3141

Size and Location of project (waterway, road name/number, town, etc.): Bridge No. 56 on NC 133 over Allen Creek (Lilliput Creek), Brunswick County, North Carolina.

Description of Activity: Discharge of fill material permanently impacting a total of 0.33 acres of waters of the United States, including wetlands, for construction of TIP Project No. B-3116 for replacement of Bridge No. 56 over Allen Creek, Brunswick County, North Carolina, as described in NCDOT letter dated April 7, 2003 and supplemental project information faxed May 27, 2003. Bridge No. 56 is 60 feet long and 24 wide and has a reinforced concrete deck on steel I-beams and supported on timber piles. Top-down construction methods will be used to replace Bridge No. 56 in its existing location with a new bridge that will be 300 feet long and 39 feet wide. During construction NC 133 traffic will be detoured onto NC 87. Work associated with the proposed project shall be accomplished in accordance with the attached special conditions.

X Section 404 (Clean Water Act, 33 U.S.C. 1344) Applicable Law:

Section 10 (River and Harbor Act of 1899)

23 Nationwide Permit Number **Authorization:** 

Regional General Permit Number

Your work is authorized by this Regional General (RGP) or Nationwide (NWP) Permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. If your activity is subject to Section 404 (if Section 404 block above is checked), before beginning work you must also receive a Section 401 water quality certification from the N.C. Division of Environmental Management, telephone (919) 733-1786. For any activity within the twenty coastal counties, before beginning work you must contact the N.C. Division of Coastal Management, telephone (919) 733-2293.

Please read and carefully comply with the attached conditions of the RGP or NWP. Any violation of the conditions of the RGP or NWP referenced above may subject the permittee to a stop work order, a restoration order, and/or appropriate legal action.

This Department of the Army RGP or NWP verification does not relieve the permittee of the responsibility to obtain any other required Federal, State, or local approvals/permits. The permittee may need to contact appropriate State and local agencies before beginning work.

If there are any questions regarding this authorization or any of the conditions of the RGP or NWP, please contact the Corps Regulatory Official specified below.

Date May 30, 2003

**Telephone No.** (910) 251-4634 Corps Regulatory Official Www.

Expiration Date of Verification May 30, 2005

CF: FHWA, NCDENR-Division of Water Quality, NCDOT Division 3, ATTN Mason Herndon.

#### **SPECIAL CONDITIONS**

- 1. Compensatory mitigation and annual monitoring for the 0.33 acres of wetland impacts associated with the proposed project shall be performed as described in the letter from NCDOT dated April 7, 2003 and as detailed in the on-site mitigation plan dated April 7, 2003 and Wetland Mitigation Plan dated May 27, 2003 (fax date). Copies of these plans are attached.
- 2. Bridge demolition and removal will be accomplished in accordance with "North Carolina Department of Transportation Policy: Bridge Demolition and Removal in Waters of the United States" dated September 20, 1999 (copy attached).
- 3. Installation of the permanent bridge foundations by any method other than drilled shaft construction with turbidity curtains shall result in a moratorium on any work within waters of Allen Creek (Lilliput Creek) from February 1 and June 30 of any year to protect shortnose sturgeon, anadromous fish, and nursery area activity.

### On-site Mitigation Plan for the Proposed Replacement of Bridge No. 56 on NC 133 over Allen Creek in Brunswick County, North Carolina.

TIP No. B-3116

April 7, 2003

#### Overview:

The NCDOT will replace the existing 60-foot long bridge over Allen Creek (Lilliput Creek) with a new bridge approximately 300 feet in length. The additional bridge length will allow for the removal of 220 linear feet of causeway in previously filled wetlands. The existing causeway will be removed and returned to an elevation resembling that of the adjacent wetlands.

#### Causeway Removal:

The removal of the old causeway will mean that approximately 0.24 acre of fill will be removed from wetlands associated with Allen Creek (Lilliput Creek). Approximately 1450 yd3 of existing causeway will be lifted, restoring the riverine wetland underneath. It is anticipated that the removal of the existing causeway will in turn enhance the high quality riverine wetlands upstream and downstream of the bridge, since water will be able to flow unimpeded beneath the new structure, allowing the natural wetland hydrologic conductivity to return. Therefore, in addition to the 0.24 acre of restoration, the NCDOT proposes riverine wetland enhancement extending outward from the lifted causeway. The area of potential enhancement has been calculated based on the "Cox" halfcircle proposal set forth by the NCWRC, where the length of fill removed is the radius of the circle (115 feet from southern causeway section and 105 feet from the northern causeway section). Enhancement areas were calculated within the quadrants surrounding the existing bridge and causeway for a total of 0.76 acre, with 0.25 acre within the proposed right-of-way limit and 0.51 acre beyond the right-of-way limits.

#### Vegetation:

Wetland grass (*Spartina alterniflora*) will be planted in areas where the existing causeway fill is removed down to the adjacent marsh elevation, as directed by the Engineer. Elevations will be restored to pre-disturbance contours, mimicking the elevation of the adjacent healthy natural areas of *Spartina alterniflora*. NCDOT proposes to monitor vegetation through annual photographs.

The proposed enhancement area is currently a coastal swamp community dominated by cordgrass (*Spartina alterniflora*). The NCDOT does not propose any vegetative manipulation in this area as it is expected that the greatest benefit to the system will be realized through the return of the natural hydrologic processes.

#### Hydrology:

Restored elevations and the proximity of the enhancement and restoration areas to Allen Creek (Lilliput Creek) ensures that both areas will be saturated and/or inundated for extended periods of time. The NCDOT requests that post construction elevation verification be allowed in place of tide gauge monitoring.

#### Credits:

With a 4:1 ratio, the 0.76 acre of enhancement would serve as 0.19 acre of proposed enhancement credit. Combined with the 0.24 acre proposed from credits from a 1:1 ratio for onsite restoration, NCDOT proposes to offer 0.43 acre of onsite mitigation to compensate for the 0.33 acre of permanent wetland fill.

NCDOT does not propose to offer mitigation for the 0.20 acre of mechanized clearing as listed on Sheet 9 of 10 from the attached permit drawings. Please note that the mechanized clearing limits are merely included on the drawings to allow room for the installation and maintenance of sediment and erosion control devices. No clearing or grubbing of marsh grasses is proposed within this five feet zone. Therefore, NCDOT does not anticipate a permanent impact will result from the activity within this area and proposes confirmation of maintained jurisdictional criteria through annual photographs.

## Wetland Mitigation Plan Bridge No. 56 over Allen Creek on NC 133 Brunswick County TIP No. B-3116

#### Existing Conditions

Present site conditions include a coastal swamp community dominated by cordgrass (Spartina alterniflora).

#### Summary of Impacts

The project will result in 0.33 acre of permanent fill in wetlands and 0.21 acre of mechanized clearing. Please note that the mechanized clearing limits are merely included on the drawings to allow room for the installation and maintenance of sediment and erosion control devices. No clearing or grubbing of marsh grasses is proposed within this five feet zone. NCDOT does not anticipate a permanent impact will result from the activity within this area.

#### Mitigation Parameters

- Pictorially measured, photos will be provided at annual monitoring meeting. At the
  end of the third year, NCDOT, regulatory and resource agencies will meet on site and
  determine 75% survivability. If wetland areas temporarily impacted by this project
  have not re-attained wetland jurisdictional status, NCDOT and the U.S. Army Corps
  of Engineers shall determine whether compensatory wetland mitigation will be
  required.
- Spartina alterniflora will be planted in areas were the existing causeway will be removed. The area shown for mechanized clearing will be replanted only if installation and maintenance of sediment and erosion control devices results in the removal and/or death of existing plant material.
- Wetland grasses will come from an approved source depending on selected construction contracting firm (see Planting Details).
- Wetland grass replanting shall be on an average spacing of 3 foot on center, with approximately 4,840 plants per acre.
- Optimal planting will occur between April 15 May 15.

## North Carolina Department of Transportation Best Management Practices For Bridge Demolition and Removal

The following Best Management Practices for Bridge Demolition and Removal (BMP-BDR) was developed in coordination with the Army Corps of Engineers (COE), the Wildlife Resource Commission, the National Marine Fisheries Service, and others with the goal of establishing a consistent, environmentally sound approach to the demolition and removal of bridges on North Carolina's public road systems. These Practices shall be an addendum to (not a replacement for) NCDOT's Best Management Practices for the Protection of Surface Waters.

The primary objective of these guidelines shall be to protect the water quality and aquatic life of the affected environment in the vicinity of a project. The Department shall use these BMP-BDR consistently on all projects involving bridge removal over a water body.

All projects shall fall into one of the following three categories.

Case 1 - "In water" work is restricted to an absolute minimum, due to the presence of Outstanding Resource Waters (ORW) or Threatened and/or Endangered Species (T&E Species). All work potentially effecting the resource will be carefully coordinated with the agency having jurisdiction.

Case 2 - allows no work at all in the water during moratorium periods associated with fish migration, spawning, and larval recruitment into nursery areas.

Case 3 - there are no special restrictions beyond those outlined in Best Management Practices for Protection of Surface Waters and the supplements added by this document on Bridge Demolition. All three Cases are subject to BMP-BDR's.

It is not the intention of these guidelines to prevent the creativity of the contractor in the removal of the bridge. If the contractor or Resident Engineer devises a means of removal that retains the spirit of these guidelines but does not adhere to the letter, such a means will be considered by the NCDOT Resident Engineer, the NCDOT Natural Systems Specialist, and the federal and/or state agency representative(s). With that caveat in mind, the following guidelines will be applied as appropriate during the construction and demolition stages of a project:

- The **contractor** shall be required to submit a plan for bridge demolition and debris removal to the Resident Engineer, and must receive written approval from the **Resident Engineer** prior to any demolition work beginning.
- If there is a special resource, Case 1 (for example a Threatened or Endangered Species), pointed out in the document, special provisions will apply to both the construction of the new structure and demolition and removal of the old structure. Such special provisions may supersede the guidelines herein.

#### Bridge Shall Be Removed Without Dropping Components Into The Water

- If a bridge is to be removed in a fashion such that there is a practical alternative to dropping bridge components into the water, that alternative shall be followed. In the case of a concrete deck, the bridge deck shall be removed by sawing completely through the concrete thickness. Removal may be in sections out between the beams or a cut full length of span between the beams. No part of the structure will be allowed to fall into the water. The concrete shall be removed from the site intact and placed/retained in an upland disposal area.
- If it is determined that components of the bridge must be dropped into the water, all efforts will be made to minimize the overall impact to the surface waters. If the bridge is composed of several spans, the demolition shall occur one span at a time. Components from a given span which have been dropped into the water must be removed from the water before demolition can proceed to the next span.
- If it is determined that components of the bridge must be dropped into the water, any and all asphalt wearing surface shall be removed and not dropped into the water.
- If a CAMA permit is required, dropping any component of a bridge into the water will not be acceptable unless it is proven that there is no feasible alternative. Such an activity would require coordination with and approval of CAMA.
- Every bridge to be removed which is constructed completely of timber shall be removed without dropping components of the bridge into the water. If an unusual circumstance arises where the contractor believes that a bridge component must be dropped into the water, the contractor must alert the Resident Engineer. The Resident Engineer shall coordinate with the Army Corps of Engineers and the Natural Systems Specialist who obtained the permit to discuss the necessary course of action. This is anticipated to be a rare occurrence.
- If the substructure of a bridge includes timber or steel piles, they shall be removed by cutting them off level with surface of the streambed. In no circumstance are the piles to remain above the surface of the streambed. This shall be accomplished in a fashion which minimizes the increase of sediment into the surface waters. As an exception, piles that are in conflict with the proposed piers may be completely removed by pulling. Timber or steel piles will be removed in a fashion that does not allow the pile to fall into the water. In tidal areas it may be necessary to remove the piers completely or to some depth below the substrate because of sand/current movement over time. Such a need will be established in the Greensheet(s) Project Commitments.

#### Non Shattering Methods

• Every bridge demolition shall be accomplished by non-shattering methods. Shattering means any method which would scatter debris. A wrecking ball is no longer an acceptable tool for bridge removal. Explosives, a "hoe-ram", or other comparable tools may be used in such a fashion that fractures but does not shatter and

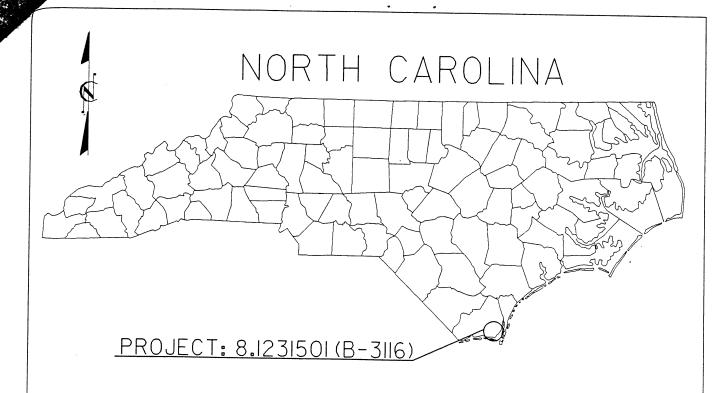
scatter bridge components into the water. A possible exception to this rule might be a concrete arch bridge in which case a method shall be found which minimizes impact to the extent practical and feasible. In the case of an exception, the method of demolition will be developed in consultation with the appropriate federal and state agencies.

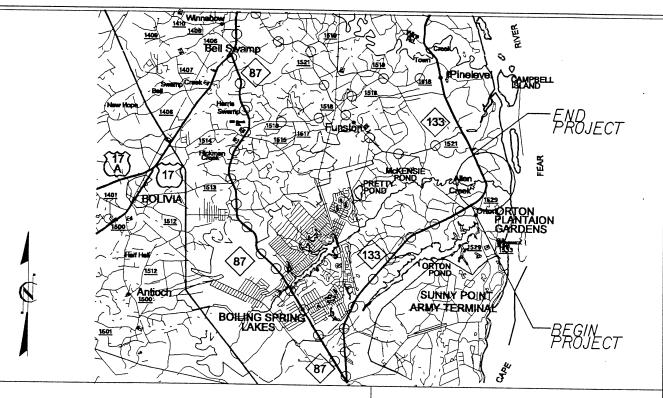
#### Use of Explosives

- In the event that there is not a practical alternative to non-shattering, alternate methods of bridge demolition shall be discussed with and approved by the Army Corps of Engineers and other federal and state resource agencies having jurisdiction over the resource.
- All parties involved recognize that explosives are sometimes required to remove components of a bridge. However, at the present, the proper means of applying those explosives is not agreed upon. The various agencies involved agree that over time, we will come to agreement on the use of explosives in a form that will be included in these BMP's for Bridge Demolition and will not require special consultation. For the present, if it is determined that explosives are required to remove any component of a bridge, that activity shall be coordinated with the Army Corps of Engineers in addition to the state or federal agency with jurisdiction over that particular water. This issue shall be revisited at the earliest time possible to determine appropriate measures to include in these BMP's which shall minimize or eliminate the consultations required in the future.

#### General

- Where there are sedimentation concerns the Greensheet Project Commitments may identify the need for turbidity curtains (or similar devices) in the demolition and construction phases of a project in the area of concern to limit the impacts.
- If damage is done to the bank as a result of debris removal, the COE shall be consulted and the bank shall be re-stabilized to natural contours using indigenous vegetation prior to completion of activities in that period of construction.
- If the new bridge does not go back on the original alignment, the banks shall be restored to original contours revegetated with indigenous species as appropriate.
- Any machine operating in an area which could leak engine fluids into the water shall be inspected visually on a daily basis for leakage. If leakage is found, the fluid(s) shall be contained and removed immediately in accordance with applicable state regulations and guidelines, as well as the equipment repaired prior to further use.
- When pumping to de-water a drilled shaft pier, the discharge shall be into an acceptable sediment containment bin to minimize siltation in the water.





O O DETOUR ROUTE

VICINITY MAPS

### NCDOT

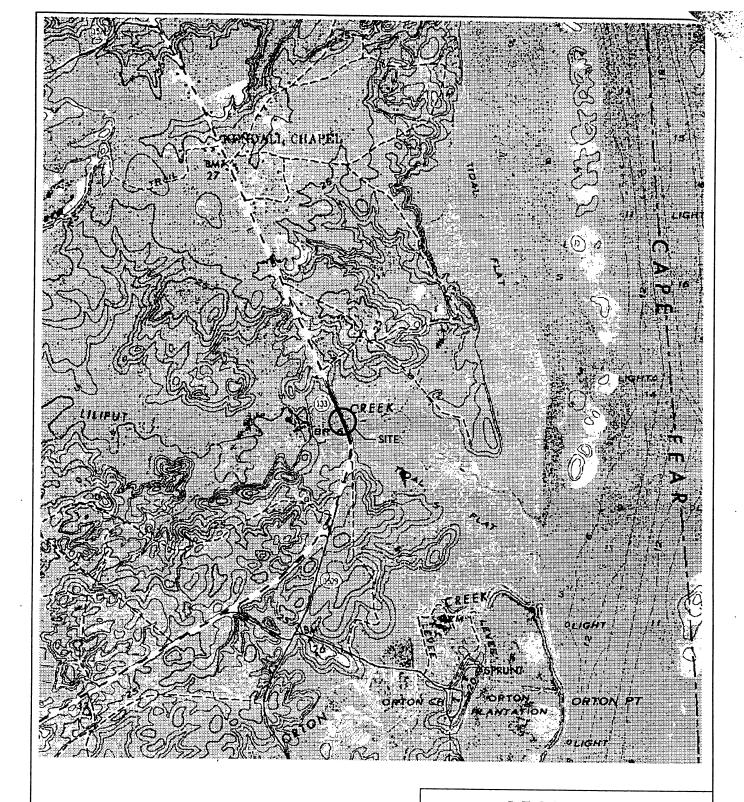
DIVISION OF HIGHWAYS
BRUNSWICK COUNTY
PROJECT: 8.1231501 (B-3116)

REPLACE BRIDGE #56 ON NC 133 OVER ALLEN CREEK

SHEET

OF 10

7 / 24 / 02



SITE MAP

### NCDOT

DIVISION OF HIGHWAYS BRUNSWICK COUNTY PROJECT: 8.1231501 (B-3116)

REPLACE BRIDGE #56 ON NC 133 OVER ALLEN CREEK

SHEET 2 OF 10

10/22/02

#### WETLAND LEGEND — -WLB-- — - WETLAND BOUNDARY PROPOSED BRIDGE WLB -> WETLAND PROPOSED BOX CULVERT DENOTES FILL IN WETLAND PROPOSED PIPE CULVERT 12"-48" (DASHED LINES DENOTE EXISTNG STRUCTURES) PIPES DENOTES FILL IN SURFACE WATER 54" PIPES & ABOVE DENOTES FILL IN SURFACE WATER (POND) SINGLE TREE DENOTES TEMPORARY FILL IN WETLAND WOODS LINE DENOTES EXCAVATION IN WETLAND DRAINAGE INLET DENOTES TEMPORARY FILL IN SURFACE WATER ROOTWAD DENOTES MECHANIZED CLEARING - --- FLOW DIRECTION RIP RAP TΒ - TOP OF BANK . - WE - - EDGE OF WATER ADJACENT PROPERTY OWNER 5 OR PARCEL NUMBER - - $^{\text{C}}$ - PROP. LIMIT OF CUT IF AVAILABLE - — <sup>F</sup>— — PROP.LIMIT OF FILL PREFORMED SCOUR HOLE (PSH) - PROP. RIGHT OF WAY — — NG — — NATURAL GROUND \_ <u>PL</u> \_ PROPERTY LINE LEVEL SPREADER (LS) TDE - TEMP. DRAINAGE EASEMENT --- PDE ---- PERMANENT DRAINAGE EASEMENT GRASS SWALE - EAB - · EXIST. ENDANGERED ANIMAL BOUNDARY - EPB - EXIST. ENDANGERED PLANT BOUNDARY ---- WATER SURFACE LIVE STAKES BOULDER

CORE FIBER ROLLS

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRUNSWICK COUNTY

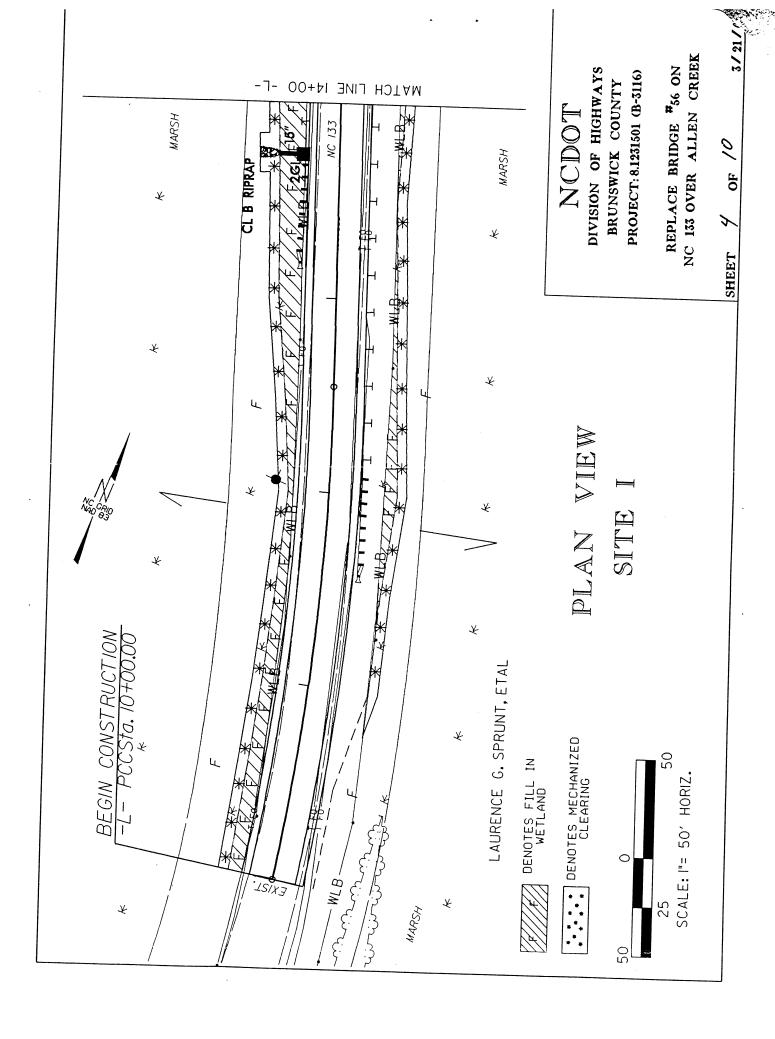
PROJECT: 8.1231501 (B-3116)

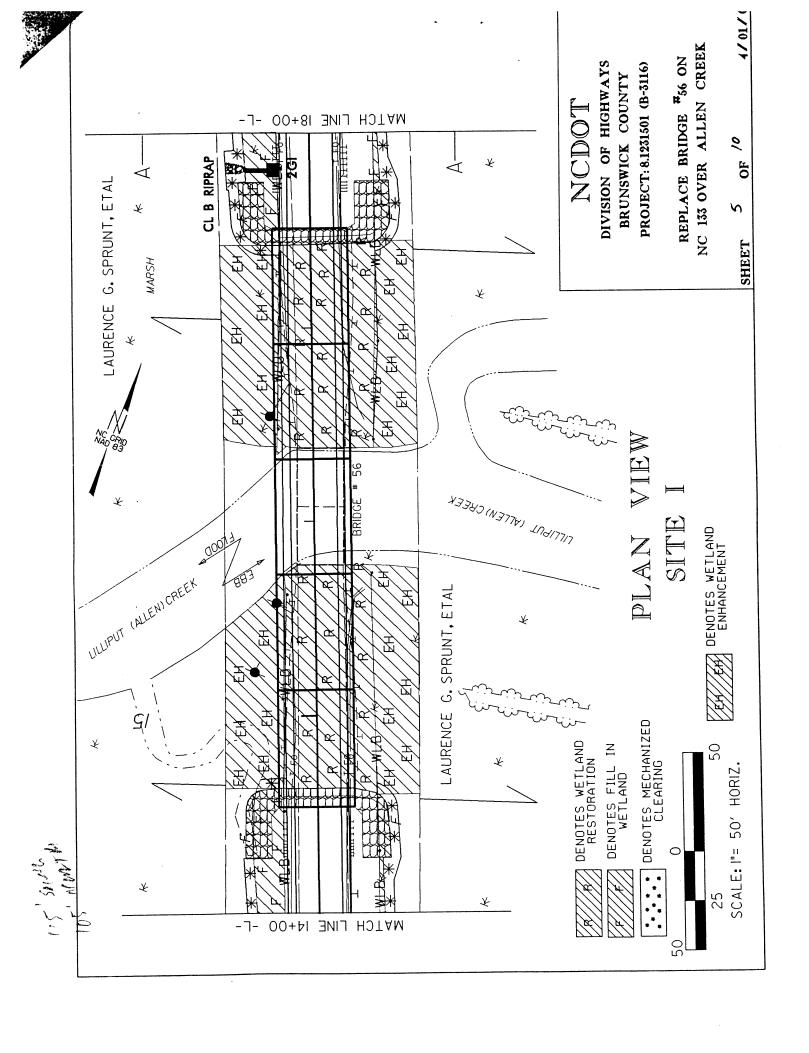
REPLACE BRIDGE #56 ON

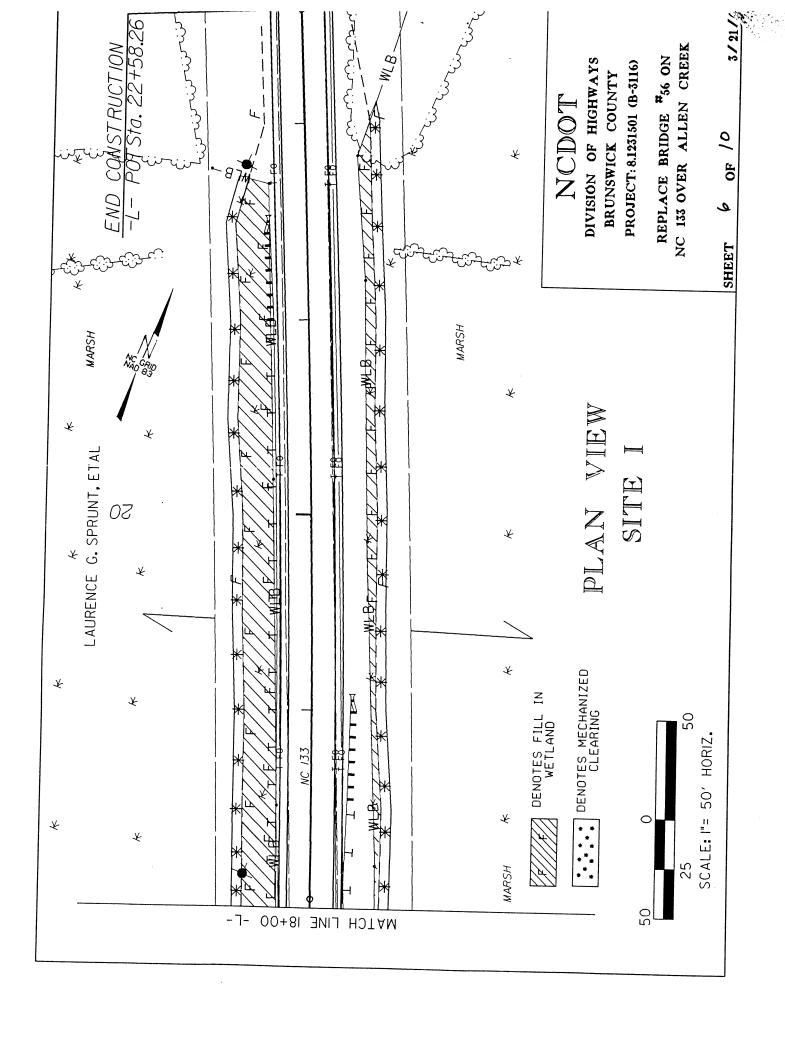
NC 133 OVER ALLEN CREEK

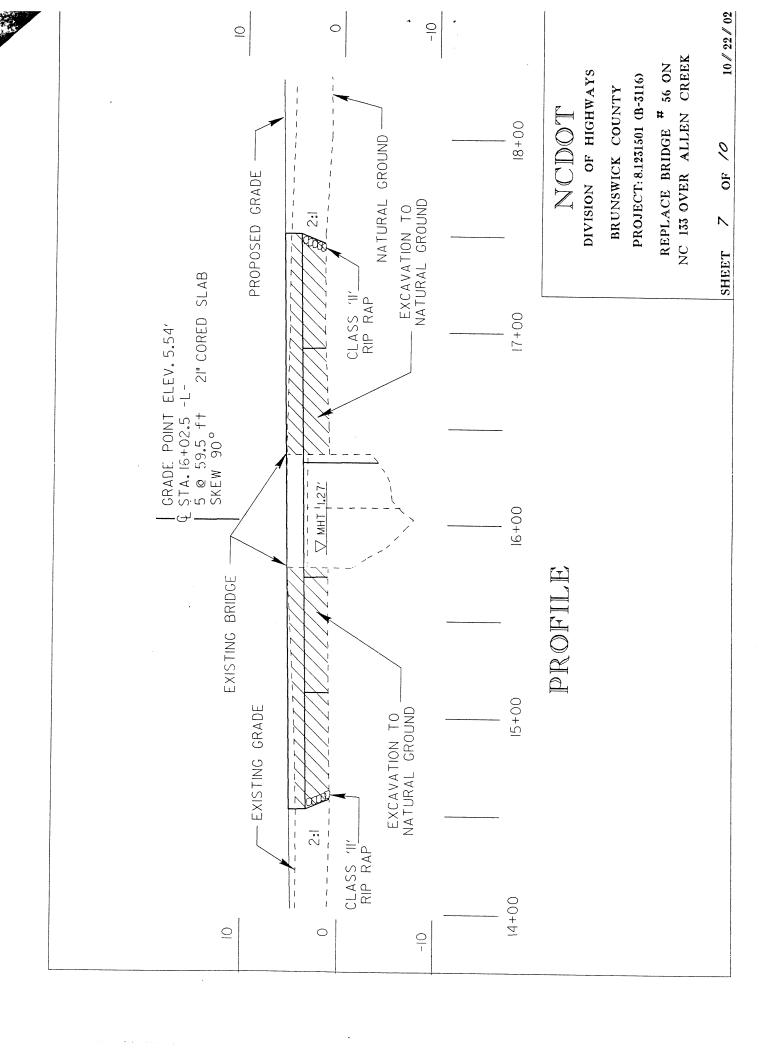
SHEET 3 OF 10

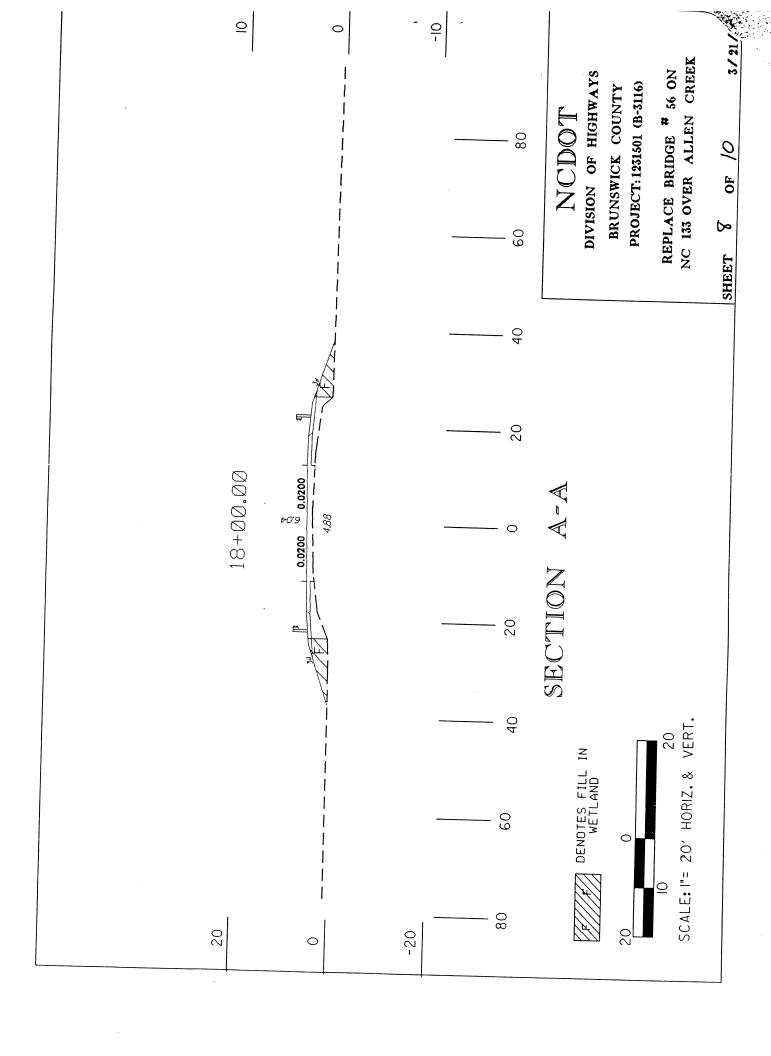
7 / 24 / 02













WETLAND PERMIT IMPACT SUMMARY		Natural Stream Design	(E)												0
	APACTS	Existing Channel Impacted	(11)												0
	SURFACE WATER IMPACTS	Temp. Fill In SW	(ac)												0
	SURFAC	Fill In SW (Pond)	(ac)												0
		Fill In SW (Natural)	(an)												0
	WETLAND IMPACTS	Mechanized Clearing (Method III)	0.21												0.21
		Excavation In Wetlands													0
		Temp. Fill In Wetlands (ac)													0
		Fill In Wetlands (ac)	0.33												0.33
		Structure Size / Type	5 @ 59.5'; 21" Cored Slab	( O.A.L 297.5' )											
		Station (From/To) (-L-)	10+00 TO	21+75											
		Site No.	-											0 10 101	IOTALS:

N.C. DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS

NOTE: THERE IS 0.24 Ac. +/- OF WETLAND RESTORATION
AND 0.25 Ac. OF WETLAND ENHANCEMENT ON THIS PROJECT

**BRUNSWICK COUNTY** 

PROJECT: 8.1231501 ( B-3116 )

SHEET

9 OF 10

(4/01/03)

## PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.

NAMES

**ADDRESSES** 

1

LAURENCE G.SPRUNT

4528 RIVER RD. SE WINNABOW, N.C. 28479

NCDOT

DIVISION OF HIGHWAYS BRUNSWICK COUNTY PROJECT: 8.1231501 (B-3116)

REPLACE BRIDGE #56 ON NC 133 OVER ALLEN CREEK

SHEET (0 OF (0

7 / 24 / 02

#### **NATIONWIDE PERMIT 23**

## DEPARTMENT OF THE ARMY CORPS OF ENGINEERS FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS FEDERAL REGISTER AUTHORIZED MARCH 18, 2002

Approved Categorical Exclusions: Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where that agency or department has determined, pursuant to the Council on Environmental Quality Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (40 CFR part 1500 et seq.), that the activity, work, or discharge is categorically excluded from environmental documentation because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment, and the Office of the Chief of Engineers (ATTN: CECW-OR) has been furnished notice of the agency's or department's application for the categorical exclusion and concurs with that determination. Before to approval for purposes of this nationwide permit of any agency's categorical exclusions, the Chief of Engineers will solicit public comment. In addressing these comments, the Chief of Engineers may require certain conditions for authorization of an agency's categorical exclusions under this nationwide permit. (Sections 10 and 404)

#### NATIONWIDE PERMIT GENERAL CONDITIONS

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

- 1. Navigation. No activity may cause more than a minimal adverse effect on navigation.
- 2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
- 3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 4. Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
- 5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 6. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality Certification and Coastal Zone Management Act consistency determination.
- 7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a 'study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
  - 9. Water Quality.

- a. In certain states and tribal lands an individual 401 Water Quality Certification must be obtained or waived (See 33 CFR 330.4(c)).
- b. For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the state or tribal 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (refer to General Condition 21 for stormwater management requirements). Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams (refer to General Condition 19 for vegetated buffer requirements for the NWPs).

This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures or to require monitoring.

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see 33 CFR 330.4(d)).

#### 11. Endangered Species.

a. No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS the District Engineer may add species-specific regional endangered species conditions to the NWPs.

b. Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the

USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their World Wide Web pages at http://www.fws.gov/r9endspp/endspp.html and http://www.nfms.noaa.gov/prot res/overview/es.html respectively.

12. Historic Properties. No activity that may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

#### 13. Notification.

- a. Timing; where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the notification is complete within 30 days of the date of receipt and can request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:
- 1. Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or
- 2. If notified in writing by the District or Division Engineer that an Individual Permit is required; or
- 3. Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
  - b. Contents of Notification: The notification must be in writing and include the

#### following information:

- 1. Name, address and telephone numbers of the prospective permittee;
- 2. Location of the proposed project;
- 3. Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);
- 4. For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));
- 5. For NWP 7 (Cutfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed;
- 6. For NWP 14 (Linear Transportation Projects), the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses of waters of the US will be minimized to the maximum extent practicable;
- 7. For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;
- 8. For NWP 27 (Stream and Wetland Restoration Activities), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee;
  - 9. For NWP 29 (Single-Family Housing), the PCN must also include:
- i. Any past use of this NWP by the Individual Permittee and/or the permittee's spouse;
- ii. A statement that the single-family housing activity is for a personal residence of the permittee;

- iii. A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring \1/4\-acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than \1/4\-acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));
- iv. A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;
- 10. For NWP 31 (Maintenance of Existing Flood Control Facilities), the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five-year (or less) maintenance plan. In addition, the PCN must include all of the following:
- i. Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;
  - ii. A delineation of any affected special aquatic sites, including wetlands; and,
  - iii. Location of the dredged material disposal site;
- 11. For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;
- 12. For NWPs 39, 43 and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US were achieved on the project site;
- 13. For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal to offset losses of waters of the US or justification explaining why compensatory mitigation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;
- 14. For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the US. This NWP does not authorize the

relocation of greater than 300 linear feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent nontidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;

- 15. For NWP 43 (Stormwater Management Facilities), the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with state and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the US. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;
- 16. For NWP 44 (Mining Activities), the PCN must include a description of all waters of the US adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the US, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for all aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities);
- 17. For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and
- 18. For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.
- c. Form of Notification: The standard Individual Permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.
- d. District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP

and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary. The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either:

- 1. That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit;
- 2. that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or
- 3. that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.
- e. Agency Coordination: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than \1/2\-acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of

- NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.
- f. Wetland Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than (\1/4\-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.
- 14. Compliance Certification. Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:
- a. A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
- b. A statement that any required mitigation was completed in accordance with the permit conditions; and
  - c. The signature of the permittee certifying the completion of the work and mitigation.
- 15. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed \ 1/3\-acre).
- 16. Water Supply Intakes. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

- 17. Shellfish Beds. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.
- 18. Suitable Material. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the CWA).
- 19. Mitigation. The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.
- a. The project must be designed and constructed to avoid and minimize adverse effects to waters of the US to the maximum extent practicable at the project site (i.e., on site).
- b. Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- c. Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.
- d. Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWPs. For example, \1/4\-acre of wetlands cannot be created to change a,\3/4\acre loss of wetlands to a \1/2\-acre loss associated with NWP 39 verification. However, \1/2\-acre of created wetlands can be used to reduce the impacts of a \1/2\-acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWPs.
- e. To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

- f. Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer .will be 25 to 50 feet wide on each side of the stream, but the District Engineers may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment or, a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.
- g. Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.
- h. Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.
- 20. Spawning Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.
- 21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

- 22. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the US, or discharges of dredged or fill material.
- 23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
- 24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.
- 25. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.
- a. Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.
- b. For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 26. Fills Within 100-Year Floodplains. For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

- a. Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the US within the mapped 100year floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, 43, and 44.
- b. Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, and 44.
- c. The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.
- 27. Construction Period. For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12-months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps.

For projects that have been verified by the Corps, an extension of a Corps approved completion date maybe requested. This request must be submitted at least one month before the previously approved completion date.

#### **FURTHER INFORMATION**

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of a NWP.
- 2. NWPs do not obviate the need to obtain other Federal, State, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project.

#### **DEFINITIONS**

<u>Best Management Practices (BMPs)</u>: BMPs are policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting

from development. BMPs are categorized as structural or nonstructural. A BMP policy may affect the limits on a development.

<u>Compensatory Mitigation</u>: For purposes of Section 10/404, compensatory mitigation is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts, which remain, after all appropriate and practicable avoidance and minimization has been achieved.

<u>Creation</u>: The establishment of a wetland or other aquatic resource where one did not formerly exist.

<u>Enhancement</u>: Activities conducted in existing wetlands or other aquatic resources that increase one or more aquatic functions.

<u>Ephemeral Stream</u>: An ephemeral stream has *flowing* water only during and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runnoff from rainfall is the primary source of water for stream flow.

<u>Farm Tract</u>: A unit of contiguous land under one ownership that is operated as a farm or part of a farm.

<u>Flood Fringe</u>: That portion of the 100-year floodplain outside of the floodway (often referred to as "floodway fringe").

<u>Floodway</u>: The area regulated by Federal, state, or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program) within the 100-year floodplain.

<u>Independent Utility</u>: A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multiphase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

<u>Intermittent Stream</u>: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the US: Waters of the US that include the filled area and other waters that are permanently adversely affected by flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent above-grade, at-grade, or below-grade fills that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the US is the threshold measurement of the impact to existing waters for determining whether a project may qualify for a NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and values. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the US temporarily filled, flooded, excavated, or drained, but restored to preconstruction contours and elevations after construction, are not included in the measurement of loss of waters of the US. Impacts to ephemeral waters are only not included in the acreage or linear foot measurements of loss of waters of the US or loss of stream bed, for the purpose of determining compliance with the threshold limits of the NWPs.

*Non-tidal Wetland:* An area that, during a year with normal patterns of precipitation has standing or flowing water for sufficient duration to establish an ordinary high water mark. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. The term "open water" includes rivers, streams, lakes, and ponds. For the purposes of the NWPs, this term does not include ephemeral waters.

<u>Perennial Stream</u>: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for the most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

<u>Permanent Above-grade Fill</u>: A discharge of dredged or fill material into waters of the US, including wetlands, that results in a substantial increase in ground elevation and permanently converts part or all of the waterbody to dry land. Structural fills authorized by NWPs 3, 25, 36, etc. are not included.

<u>Preservation</u>: The protection of ecologically important wetlands or other aquatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the overall aquatic ecosystem.

<u>Restoration</u>: Re-establishment of wetland and/or other aquatic resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state.

Riffle and Pool Complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Single and Complete Project: The term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers (see definition of independent utility). For linear projects, the "single and complete project" (i.e., a single and complete crossing) will apply to each crossing of a separate water of the US (i.e., a single waterbody) at that location. An exception is for linear projects crossing a single waterbody several times at separate and distant locations; each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies.

<u>Stormwater Management</u>: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

<u>Stormwater Management Facilities</u>: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and BMPs, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

<u>Stream Channelization</u>: The manipulation of a stream channel to increase the rate of water flow through the stream channel. Manipulation may include deepening, widening, straightening, armoring, or other activities that change the stream cross-section or other aspects of stream channel geometry to increase the rate of water flow through the stream channel. A channelized stream remains a water of the US, despite the modifications to increase the rate of water flow.

<u>Tidal Wetland</u>: A tidal wetland is a wetland (i.e., water of the US) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line (i.e., spring high tide line) and are inundated by tidal waters two times per lunar month, during spring high tides.

Vegetated Buffer: A vegetated upland or wetland area next to rivers, streams, lakes, or other

open waters, which separates the open water from developed areas, including agricultural land. Vegetated buffers provide a variety of aquatic habitat functions and values (e.g., aquatic habitat for fish and other aquatic organisms, moderation of water temperature changes, and detritus for aquatic food webs) and help improve or maintain local water quality. A vegetated buffer can be established by maintaining an existing vegetated area or planting native trees, shrubs, and herbaceous plants on land next to openwaters. Mowed lawns are not considered vegetated buffers because they provide little or no aquatic habitat functions and values. The establishment and maintenance of vegetated buffers I a method of compensatory mitigation that can be used in conjunction with the restoration, creation, enhancement or preservation of aquatic habitats to ensure that activities authorized by NWPs result in minimal adverse effects to the aquatic environment. (See General Condition 19.)

<u>Vegetated Shallows</u>: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

<u>Waterbody</u>: A waterbody is any area that in a normal year has water flowing or standing above ground to the extent that evidence of an ordinary high water mark is established. Wetlands contiguous to the waterbody are considered part of the waterbody.

# FINAL REGIONAL CONDITIONS FOR NATIONWIDE PERMITS IN THE WILMINGTON DISTRICT

- 1. Waters Excluded from NWP or Subject to Additional Notification Requirements:
  - a. The Corps identified waters that will be excluded from use of this NWP. These waters are:
- 1. Discharges into Waters of the United States designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning area are prohibited during the period between February 15 and June 30, without prior written approval from NCDMF or NCWRC and the Corps.
- 2. Discharges into Waters of the United States designated as sturgeon spawning areas are prohibited during the period between February 1 and June 30, without prior written approval from the National Marine Fisheries Service (NMFS).
- b. The Corps identified waters that will be subject to additional notification requirements for activities authorized by this NWP. These waters are:
- 1. Prior to the use of any NWP in any of the following North Carolina *designated waters*, applicants must comply with Nationwide Permit General Condition 13. In addition, the applicant must furnish a written statement of compliance with all of the conditions of the applicable

Nationwide Permit. The North Carolina designated waters that require additional notification requirements are "Outstanding Resource Waters" (ORW) and "High Quality Waters" (HQW) (as defined by the North Carolina Division of Water Quality), or "Inland Primary Nursery Areas" (IPNA) (as defined by the North Carolina Wildlife Resources Commission), or contiguous wetlands (as defined by the North Carolina Division of Water Quality), or "Primary Nursery Areas" (PNA) (as defined by the North Carolina Division of Marine Fisheries).

- 2. Applicants for any NWP in a designated "Area of Environmental Concern" (AEC) in the twenty (20) coastal counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA), must also obtain the required CAMA permit. Construction activities may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office P.O. Box 1890, Wilmington, NC 28402 or Washington Field Office P.O. Box 1000, Washington, NC 27889) for authorization to begin work.
- 3. Prior to the use of any NWP on a Barrier Island of North Carolina, applicants must comply with Nationwide Permit General Condition 13. In addition, the applicant shall furnish a written statement of compliance with all of the conditions listed of the applicable Nationwide Permit.
- 4. Prior to the use of any NWP in a "Mountain or Piedmont Bog" of North Carolina, applicants shall comply with Nationwide Permit General Condition 13. In addition, the applicant shall furnish a written statement of compliance with all of the conditions listed of the applicable NWP.

Note: The following wetland community types identified in the N.C. Natural Heritage Program document, "Classification of Natural communities of North Carolina (Michael P. Schafale and Alan S. Weakley, 1990), are subject to this regional condition.

#### Mountain Bogs

Swamp Forest-Bog Complex Swamp Forest-Bog Complex (Spruce Subtype) Southern Appalachian Bog (Northern Subtype) Southern Appalachian Bog (Southern Subtype) Southern Appalachian Fen <u>Piedmont Bogs</u> Upland Depression Swamp Forest

5. Prior to the use of any NWP in Mountain Trout Waters within twenty-five (25) designated counties of North Carolina, applicants shall comply with Nationwide General Condition 13. In addition, the applicant shall furnish a written statement of compliance with all of the conditions listed of the applicable NWP. Notification will include a letter of comments and recommendations from the North Carolina Wildlife Resources Commission (NCWRC), the

location of work, a delineation of wetlands, a discussion of alternatives to working in the Mountain Trout Waters, why other alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to the Mountain Trout Waters. To facilitate coordination with the NCWRC, the proponent may provide a copy of the notification to the NCWRC concurrent with the notification to the District Engineer. The NCWRC will respond both to the proponent and directly to the Corps of Engineers.

The twenty-five (25) designated counties are:

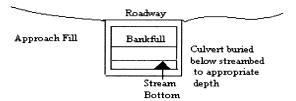
Alleghany	Ashe	Avery	Yancey
Buncombe	Burke	Caldwell	Wilkes
Cherokee	Clay	Graham	Swain
Haywood	Henderson	Jackson	Surry
Macon	Madison	McDowell	Stokes
Mitchell	Polk	Rutherford	
Transylvania	Watauga		

6. Applicants shall notify the NCDENR Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination of the disposal area and allow a temporary shellfish closure to be made. Any disposal of sand to the beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas. If beach disposal was to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swim advisory shall be posted and a press release shall be made. NCDENR Shellfish Sanitation Section must be notified before commencing this activity.

#### 2. List of Final Corps Regional Modifications and Conditions for All Nationwide Permits

- a. Individual or multiple NWPs may not be used for activities that result in the cumulative loss or degradation of greater than 300 total linear feet of perennial streambed or intermittent streambed that exhibits important aquatic function(s).
- b. Prior to the use of any NWP (except 13, 27, and 39) for any activity that has more than a total of 150 total linear feet of perennial streambed impacts or intermittent streambed impacts (if the intermittent stream has important aquatic function), the applicant must comply with Nationwide Permit General Condition 13. In addition, the applicant shall furnish a written statement of compliance with all of the conditions listed of the applicable NWP. Compensatory mitigation is typically required for any impact that requires such notification. [Note: The Corps uses the Intermittent Channel Evaluation Form, located with Permit Information on the Regulatory Program Web Site, to aid in the determination of the intermittent channel stream status. Also, NWPs 13, 27 and 39 have specific reporting requirements.]

- c. For all Nationwide Permits which allow the use of concrete as a building material, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the state until the concrete has hardened.
- d. For all Nationwide Permits that allow for the use of riprap material for bank stabilization, filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.
- e. For all NWPs that involve the construction of culverts, measures will be included in the construction that will promote the safe passage of fish and other aquatic organisms. All culverts in the 20 CAMA coastal counties must be buried to a depth of one foot below the



bed of the stream or wetland. For all culvert construction activities, the dimension, pattern, and profile of the stream, (above and below a pipe or culvert), should not be modified by widening the stream channel or by reducing the depth of the stream. Culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, culverts 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. Bottomless arch culverts will satisfy this condition. A waiver from the depth specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional Condition would result in more adverse impacts to the aquatic environment.

# NORTH CAROLINA DIVISION OF WATER QUALITY GENERAL CERTIFICATION CONDITIONS GC3361

- 1. Proposed fill or substantial modification of wetlands or waters (including streams) under this General Certification requires notification to the Division of Water Quality. Two copies shall be submitted to DWQ at the time of notification in accordance with 15A NCAC 2H .0501(a). Written concurrence from DWQ is not required unless any standard conditions of this Certification cannot be met;
- 2. 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;

- 3. 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. In addition, buffer mitigation may be required for any project with 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. 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 traveling public;
- 4. Compensatory stream mitigation shall be required at a 1:1 ratio for all perennial and intermittent stream impacts equal to or exceeding 150 feet and that require application to DWQ in watersheds classified as ORW, HQW, Tr, WS-I and WS-II;
- 5. All sediment and erosion control measures placed in wetlands or waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
- 6. Measures shall be taken to prevent live or fresh concrete from coming into contact with waters of the state until the concrete has hardened;
- 7. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;
- 8. Impacts to any stream length in the Neuse, Tar-Pamlico, Randleman and Catawba River Basins (or any other river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence 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, Tar-Pamlico, Randleman and Catawba 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;
- 9. Additional site-specific conditions may be added to projects for which written concurrence is

required or requested under this Certification in order to ensure compliance with all applicable water quality and effluent standards;

- 10. 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 and Regional General Permits, whichever is sooner;
- 11. 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.

# NORTH CAROLINA DIVISION OF COASTAL MANAGEMENT STATE CONSISTENCY

Consistent.

#### Citations:

2002 Nationwide Permits - Federal Register Notice 15 Jan 2002

2002 Nationwide Permits Corrections - Federal Register Notice 13 Feb 2002

2002 Regional Conditions – Authorized 17 May 2002

Permit Class NEW Permit Number 73-03

## STATE OF NORTH CAROLINA

Department of Environment and Natural Resources and

Coastal Resources Commission



X Major Development in an Area of Environmental Concern pursuant to NCGS 113A-118

X Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1548	Mail Service Center, Raleigh, NC 27699-1548			
Authorizing development in Brunswick	County at Allen (Lilliput) Creek, Bridge No. 56 on			
NC 133, north of Orton , as requested in the	permittee's application dated 4/5/03 and 5/30/03, including			
the attached workplan drawings (11): 3 dated 3/21/03; 1 dated 4/1/0	03; 1 dated 10/22/02; 3 dated 3/20/03; and 3 dated 3/6/03			
This permit, issued on $6/2/03$ , is with the permit), all applicable regulations, special conditions be subject to fines, imprisonment or civil action; or may caus	subject to compliance with the application (where consistent s and notes set forth below. Any violation of these terms may be the permit to be null and void.			
B-3116, Bridge	e Replacement			
1) Due to the presence of the endangered shortnose sturgeon, other anadromous fish, and classification of this area as a primary nursery area by the NC Wildlife Resources Commission (WRC), and in accordance with the Project Commitments contained within the Categorical Exclusion document dated 12/4/01 and the CAMA permit application cover letter dated 4/7/03, no in-water or in-marsh activity shall be conducted from February 15 <sup>th</sup> to September 30 <sup>th</sup> of any year, including pile installation, without prior approval of the NC Division of Coastal Management (DCM), in consultation with the WRC and the NC Division of Marine Fisheries (DMF), except as allowed through permit conditions contained herein.				
(See attached sheets for	Additional Conditions)			
This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance as the case may be.	Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.			
This permit must be accessible on-site to Department personnel when the project is inspected for compliance.	Surf VHuggett  Found D. Moffitt, Director  Division of Goodfel Management			
Any maintenance work or project modification not covered hereunder requires further Division approval.	Division of Coastal Management			
All work must cease when the permit expires on	This permit and its conditions are hereby accepted.			
December 31, 2006				
In issuing this permit, the State of North Carolina agrees				
that your project is consistent with the North Carolina Coastal	Signature of Permittee			

#### ADDITIONAL CONDITIONS

- For the purposes of expediting this project, the fisheries moratorium required by Condition No. 1 of this CAMA permit shall not apply to wetland restoration activities conducted within the causeway restoration area provided that the causeway restoration area is fully contained by silt fence, and turbidity curtains are used to contain bottom disturbing activities.
- In accordance with environmental commitments made within the Categorical Exclusion document dated 12/4/01, NC DOT's Stream Crossing Guidelines for Anadromous Fish Passage will be followed.
- 4) The bridge will be constructed using top down construction methodologies.
- 5) All pilings for the permanent bridge shall be installed using drilled shaft construction and turbidity curtains.

## **NOTE:**

DCM considers vibratory hammering as a construction method subset under the broader category of pile driving and DCM considers an encasement pipe as a pile. This interpretation will remain in effect until DOT can demonstrate to the satisfaction of DCM, WRC, DMF, DWQ and other interested state and federal agencies that the impacts from vibratory hammering are substantially less than the impacts of pile driving and that an encasement pipe is substantially different than a pile.

- Drilling fluids shall be disposed of in an upland disposal site. Water returning to waters of the United States shall be of sufficient quality so as to not pose a threat to aquatic organisms or otherwise violate State water quality standards.
- 7) Excavated material from the drilled-shaft construction will be removed from the encasements directly into containment vessels.
- Turbidity curtains shall be used to contain all bottom disturbing activities, including pile or casement installation, placement of riprap, excavation or filling within the watercourse of Allen (Lilliput) Creek. The permittee shall install turbidity curtains along the banks of Allen (Lilliput) Creek to prevent sediment from the causeway restoration area from entering the watercourse. The turbidity curtains are to be properly maintained and retained in the water until construction is complete and turbidity within the curtains reaches ambient levels.
- Placement of riprap shall be limited to the slopes underneath the proposed bridge, as depicted on the attached workplan drawings. The riprap material must be free from loose dirt or any pollutant. It must be of a size sufficient to prevent its movement from the site by wave or current action. The riprap material must consist of clean rock or masonry materials such as but not limited to granite or broken concrete.
- 10) Live concrete shall not be allowed to contact the water in or entering into the stream.
- 11) No vegetated wetlands will be excavated.
- 12) The temporary placement or double handling of excavated or fill materials within waters or vegetated wetlands is not authorized.

#### ADDITIONAL CONDITIONS

- No excavated or fill material will be placed at any time in any vegetated wetlands or surrounding waters outside of the alignment of the fill area indicated on the workplan drawings.
- 14) All fill material must be clean and free of any pollutants, except in trace quantities.
- 15) If the permittee determines that additional permanent and/or temporary impacts will occur that are not shown on the attached permit drawings for any activities related to the bridge replacement, off-site detour and/or utilities, then additional authorization from DCM will be required.
- All excavated materials will be confined above normal high water and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.
- 17) Debris resulting from demolition of the existing bridge, including deck components, shall not enter wetlands or waters of the United States, even temporarily.
- All excavated materials and debris associated with the removal of the existing bridge and existing causeway fill material will be disposed of on an approved upland site.

#### **Sedimentation and Erosion Control**

- 19) In accordance with Environmental Commitments made within the Categorical Exclusion document dated 12/4/01, Design Standards in Sensitive Watersheds (15A NCAC 4B .0124) will be used to ensure the project will not adversely affect the endangered shortnose sturgeon.
- 20) The permittee shall follow Best Management Practices for the protection of Surface Waters and sedimentation and erosion control measures sufficient to protect aquatic resources.
- This project must conform to all requirements of the NC Sedimentation Pollution Control Act and NC DOT's Memorandum of Agreement with the Division of Land Resources.
- In order to protect water quality, runoff from construction must not visibly increase the amount of suspended sediments in adjacent waters.
- Appropriate sedimentation and erosion control devices, measures or structures must be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses and property (e.g. silt fence, diversion swales or berms, sand fence, etc.).
- All disturbed areas shall be properly graded and provided a ground cover sufficient to restrain erosion within thirty days of project completion.

#### ADDITIONAL CONDITIONS

#### Mitigation

#### NOTE:

Mitigation for the approximately 0.33 acres of permanent coastal wetland impacts on this project will be provided through the on-site wetland restoration and wetland enhancement that will result from the removal of approximately 220 linear feet of existing causeway fill material. The wetland mitigation provided by this project will not generate any excess mitigation credits for use on future projects.

On-site mitigation will be carried out as described in the document titled "On-site mitigation plan for the proposed replacement of Bridge No. 56 on NC 133 over Allen Hock Creek in Brunswick County, North Carolina" dated April 7, 2003 and the document titled "Wetland Mitigation Plan Bridge No. 56 over Allen Creek on NC 133, Brunswick County TIP No. B-3116" dated as received on 5/28/03.

#### **NOTE:**

The permittee is strongly encouraged not to attempt planting vegetation within that part of the causeway restoration area which will be under the new bridge upon project completion. Shading effects of the new bridge over the causeway restoration area will likely prohibit vegetative success in these areas.

- The causeway restoration area will be fully contained by silt fence until all of the unsuitable fill material has been removed and the restoration area has been restored to the approximate natural elevation of the adjacent coastal wetlands.
- 27) The permittee will remove all unsuitable fill material within the wetland restoration area, and fill any void left by the removal of this unsuitable material with suitable organic wetland substrate to the same approximate elevation as the adjacent natural wetlands or to an appropriate reference wetland elevation.
- 28) The permittee will provide DCM with verification that the wetland restoration area has been restored to the approximate natural elevation of the adjacent coastal wetlands.
- 29) The mitigation must be approved and in place prior to the expiration date of this permit.
- Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent the temporary wetland impact area from re-attaining wetland jurisdictional status, the permittee shall provide an annual update on the wetland areas temporarily impacted by this project. This annual update will consist of photographs provided during the agency monitoring report meeting and a brief report on the progress of these temporarily impacted areas in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with DCM, the NC Division of Water Quality and the NC Wildlife Resources Commission to determine if the wetland areas temporarily impacted by this project have re-attained jurisdictional wetland status. If at the end of 3 years the wetland areas temporarily impacted by this project have not re-attained jurisdictional wetland status, DCM and the above listed agencies shall determine whether a compensatory wetland mitigation plan will be required.

#### ADDITIONAL CONDITIONS

### **General**

- Any relocation of utility lines that are not already described within the permit application will require additional authorization, either by way of a modification of this permit or by the utility company obtaining separate authorization.
- 32) This permit does not eliminate the need to obtain any additional permits, approvals or authorizations that may be required.

NOTE: The N.C. Division of Water Quality (DWQ) has assigned the proposed project DWQ Project No. 03-0490.

NOTE: The U.S. Army Corps of Engineers authorized the proposed project under Nationwide Permit Number 23 (COE Action ID No. 200100913), which was issued on 5/30/03.

**NOTE:** NCDOT has assigned this project TIP No. B-3116.

NOTE: The permittee is encouraged to contact the Public Health Pest Management Section at (919) 733-6407 to discuss mosquito control measures.

#### WQC #3403

# GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 23 (APPROVED CATEGORICAL EXCLUSIONS) 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 Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and wetland areas as described in 33 CFR 330 Appendix A (B) (23) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. This Certification replaces Water Quality Certification Number 2670 issued on January 21, 1992, Certification Number 2734 issued on May 1 1993, Certification Number 3107 issued on February 11, 1997 and Water Quality Certification Number 3361 issued March 18, 2002. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permit 23 or when deemed appropriate by the Director of the 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:

- Proposed fill or substantial modification of wetlands or waters (including streams) under this General Certification requires notification to the Division of Water Quality. Two copies shall be submitted to DWQ at the time of notification in accordance with 15A NCAC 2H .0501(a). Written concurrence from DWQ is not required unless any standard conditions of this Certification cannot be met;
- 2. 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;
- 3. 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. In addition, buffer mitigation may be required for any project with 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. The mitigation plan must be implemented and/or constructed before any permanent building or structure on

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- 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;
- 4. Compensatory stream mitigation shall be required at a 1:1 ratio for not only perennial but also intermittent stream impacts equal to or exceeding 150 feet and that require application to DWQ in watersheds classified as ORW, HQW, Tr, WS-I and WS-II unless the project is a linear, publicly-funded transportation project, which has a 150-foot per-stream impact allowance;
- 5. All sediment and erosion control measures placed in wetlands or waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project:
- 6. Measures shall be taken to prevent live or fresh concrete from coming into contact with freshwaters of the state until the concrete has hardened;
- 7. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;
- 8. Impacts to any stream length in the Neuse, Tar-Pamlico, Randleman and Catawba River Basins (or any other river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence 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, Tar-Pamlico, Randleman and Catawba 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;
- 9. Additional site-specific conditions may be added to projects for which written concurrence is required or requested under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
- 10. 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 and Regional General Permits, whichever is sooner;
- 11. 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.

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

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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, stream 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

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