



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.
GOVERNOR

DAVID MCCOY
SECRETARY

July 19, 2000

Mr. David Timpy
Wilmington Regulatory Field Office
U.S. Army Corps of Engineers
P.O. Box 1890
Wilmington, NC 28402-1890

Dear Mr. Timpy:

Subject: Mitigation plan for permanent wetland impacts resulting from fill and mechanized clearing in wetlands and details regarding temporary causeway removal and bridge demolition due to replacement of Bridges No. 4 & 27 over Little River and Little River Overflow on NC 73, Richmond County, F.A. Project No. BRSTP-73(3), State Project No. 8.1581001, TIP No. B-2608.

As was discussed in the phone conversation between David Timpy of the U.S. Army Corps of Engineers and Lynn Smith of NCDOT on July 10, 2000, a mitigation plan is being prepared for permanent wetland impacts resulting from TIP No. B-2608. This portion of the plan outlines key points concerning the on-site wetland restoration and upland buffer proposed to compensate for permanent wetland impacts. Removal of the temporary causeways and bridge demolition are also discussed.

The Department proposes to use on-site restoration of wetlands and upland buffers to mitigate for the 1.2 acres of permanent wetland loss. The NCDOT will grade the existing roadbed down to meet the elevation of the adjacent land. Areas adjacent to wetlands will be replanted with black willow (*Salix nigra*), river birch (*Betula nigra*), water oak (*Quercus nigra*), southern red oak (*Q. falcata*) and cherrybark oak (*Q. falcata* var. *pagodifolia*). Areas graded down but not adjacent to wetlands will be replanted with the same vegetation and will serve as upland buffers. The mitigation area will be comprised of 1.5 acres of wetland restoration and 1.3 acres of upland buffer. The Department asks that this mitigation plan be used to satisfy wetland mitigation requirements for 1.2 acres of permanent wetland impacts due to the replacement of Bridges No. 4 & 27.

Please find attached a portion of the wetland mitigation plan including a map defining the mitigation area, bridge demolition information and the species which will be planted after the old roadbed and the temporary causeway associated with the overflow are removed. Photographs of the site can be found in the CE. Supplemental information including final design plans and planting details will be forwarded to you as soon as they are available. Thank for your continued

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assistance and cooperation. If you have any questions or concerns, please call Ms. Lynn Smith at (919) 733-0374.

Sincerely,



for William D. Gilmore, P.E., Manager
Project Development and Environmental Analysis Branch

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Enclosures

Cc: Mr. David Franklin, COE, Wilmington
Mr. John Hennessy, DWQ, Raleigh
Mr. Bruce Ellis, Natural Systems Unit Head
File: B-2608

Wetland Mitigation Plan
Bridges No. 4 & 27 over Little River & Little River Overflow on NC 73
TIP No. B-2608, Richmond County

Existing Conditions

The project area is dominated by a pine plantation with the exception of a portion of the Little River Overflow. The pine plantation consists primarily of loblolly pine (*Pinus taeda*). The overflow area supports a greater diversity of vegetation including black willow (*Salix nigra*), red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), river birch (*Betula nigra*), green ash (*Fraxinus pennsylvanica*), deciduous holly (*Ilex decidua*) and rush (*Juncus* spp.).

Summary of Impacts

The project will result in 1.2 ac of permanent fill and mechanized clearing (Method III) in wetlands due to the replacement of Bridges No. 4 & 27 on new alignment. Temporary impacts to surface waters, including wetlands, totaling 0.3 ac, will occur from the construction of two temporary causeways. No stream relocation or channel change will be involved. The causeways will consist of Class II Rip Rap topped with smaller Class B Rip Rap with 1.5:1 slopes. After the project is completed the causeway in the Little River will be removed to the extent practicable without disturbing the creek bottom. The temporary fill associated with the causeway in the Little River Overflow will be placed on geo-textile fabric and the area will be restored to its original elevation and replanted with vegetation, listed below, at 320 stems per acre.

Bridge Demolition

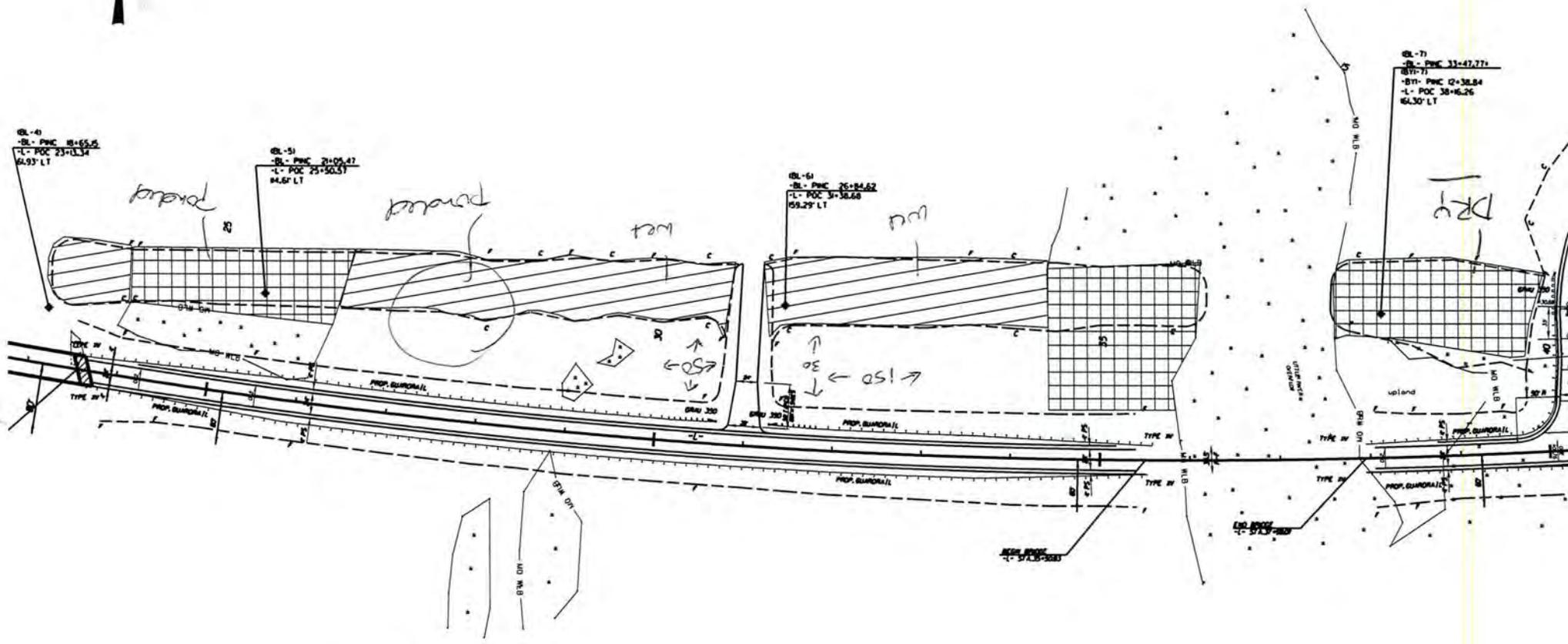
The NCDOT's Best Management Practices for Bridge Demolition and Removal will be adhered to for this project. It is NCDOT's intent not to drop any bridge components into Waters of the U.S. According to a July 18, 2000 email from the NCDOT's Structure Design Project Engineer, Allen Raynor, PE, the following is a standard policy for bridge demolition. "The existing bridge shall be removed by sawing and/or non-shattering methods such that debris will not fall into the water. The contractor shall submit the plan for the bridge demolition to the engineer for review and approval." Should any portion of the structure fall into the water during demolition, it will be removed immediately.

Restoration Parameters

- Areas between the northern side of the existing road toe of slope and the northern side of the new location toe of slope will be graded to meet adjacent land elevations and replanted, restoring 1.5 acres of wetlands and 1.3 acres of upland buffer (see attached map).
- Pictorially measured, photos will be provided at annual monitoring meetings. 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.
- Temporary causeway will be removed within thirty (30) days following completion of construction.

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- Trees will be planted 320 stems per acre consisting of black willow, river birch, water oak, southern red oak and cherry bark oak.
 - Replanting will occur between December 15, 2000 – March 15, 2001.

B-2608 Onsite Mitigation Richmond County



LEGEND

Wetland Mitigation Area (1.5 acres)	
Upland Buffer (1.3 acres)	

