



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

June 29, 2007

MEMORANDUM TO: Mr. Michael L. Holder, PE  
Division 12 Engineer

FROM: Philip S. Harris, III, P.E., Unit Head *for Mark C. RIM #*  
Natural Environment Unit  
Project Development and Environmental Analysis Branch

SUBJECT: Alexander County, Replace Bridge No.70 on SR 1331  
(Little River Church Road) over Grassy Creek; T.I.P.  
Number B-4005; Federal Aid Project BRZ-1331(9); State  
Project 8.2780801

Attached is the U. S. Army Corps of Engineers Regional General Permit Number 31 and the 401 Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP  
Mr. Jay Bennett, P.E., Roadway Design  
Dr. David Chang, P.E., Hydraulics  
Mr. Randy Garris, P.E. State Contract Officer  
Mr. Art McMillan, P.E., Highway Design  
Mr. Greg Perfetti, P.E., Structure Design  
Mr. Mark Staley, Roadside Environmental  
Mr. John F. Sullivan, FHWA  
Ms. Teresa Hart, P.E., PDEA Western Region Unit Head  
Ms. Trish Simon, Division Environmental Officer

# PROJECT COMMITMENTS

Alexander County  
Bridge No. 70 on SR 1331 (Little River Church Road)  
Over Grassy Creek  
Federal Aid Project No. BRZ-1331 (9)  
State Project No. 8.2780801  
T.I.P Project No. B-4005

**NCDOT will comply with the General Permit #31 Conditions, the Section 401 General Water Quality Certification #3627 Conditions, NCDOT's Guidelines for Best Management Practices for Bridge Demolition and Removal and NCDOT's Best Management Practices for Protection of Surface Waters.**

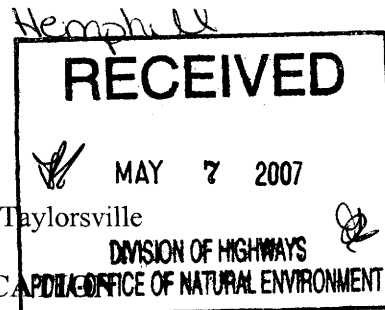
## **Commitments Developed Through Project Development**

No commitments developed

## **Commitments Developed Through Permitting**

No new commitments were developed during the permitting process

U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT



Action ID: SAW-2007-1288-302

County: Alexander

USGS Quad: Taylorsville

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

Property Owner / Authorized Agent: NC Department of Transportation, Project Development and Environmental Analysis Branch, Attn: Gregory J. Thorpe, Director  
Address: 1548 Mail Service Center  
Raleigh, North Carolina  
27699-1548

Telephone No.: 919-733-3141

Size and location of property (water body, road name/number, town, etc.): Bridge No. 70 over Grassy Creek on SR 1331 (Little River Church Road), north of Taylorsville, TIP B-4005.

Description of projects area and activity: Replace the existing bridge with a single span, 122-foot long bridge on the same alignment as the existing structure. Construct a temporary rock causeway to facilitate removal of the existing bridge bents. Place riprap bank stabilization on a ditch off Grassy Branch north of the bridge. Approximately 0.01 acres of surface waters will be permanently impacted and 0.04 acres will be temporarily impacted by the proposed work. Traffic will be maintained with an offsite detour during construction. **SPECIAL CONDITION: All temporary fill will be removed from surface waters immediately upon completion of the work and disposed of on uplands**

Applicable Law:  Section 404 (Clean Water Act, 33 USC 1344)  
 Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number: 198200031  
Nationwide Permit Number:

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order and/or appropriate legal action.

This verification will remain valid until the Nationwide Permit (NWP) is modified, reissued or revoked prior to March 18, 2007. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWP's are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP. If, prior to the expiration date identified below, the authorized NWP is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all new and/or modified terms and conditions. The District Engineer may, at any time, exercise his discretionary authority to modify, suspend or revoke a case specific activity's authorization under any NWP.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Quality (telephone (919) 733-1786) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Mr. Steven Lund at telephone (828) 271-7980 x 223.

Corps Regulatory Official: Steven Lund *SLW*

Date: 5/1/2007

Expiration Date of Verification: 8/31/2008

### Determination of Jurisdiction:

- Based on preliminary information, there appear to be waters of the US within the above described project area. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process ( Reference 33 CFR Part 331).
- There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are waters of the US and/or wetlands within the above described project area subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued \_\_\_\_\_. Action ID \_\_\_\_\_

Basis of Jurisdictional Determination: \_\_\_\_\_

Corps Regulatory Official: Steven Lund *SL*

Date: 5/1/2007

SURVEY PLATS, FIELD SKETCH, WETLAND DELINEATION FORMS, PROJECT PLANS, ETC., MUST BE ATTACHED TO THE FILE COPY OF THIS FORM, IF REQUIRED OR AVAILABLE.

**Action ID Number: SAW-2007-1288-302, TIP B-4005**

**County: Alexander**

**Permittee: NCDOT, PD&EA, Attn: Gregory J. Thorpe, Director**

**Date Permit Issued: 5/1/2007, GP 198200031, Bridge No. 70, SR 1331**

**Project Manager: Lund**

**Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:**

**US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
ASHEVILLE REGULATORY FIELD OFFICE  
151 PATTON AVENUE, ROOM 208  
ASHEVILLE, NORTH CAROLINA 28801-5006**

**Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.**

**I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.**

\_\_\_\_\_  
**Signature of Permittee**

\_\_\_\_\_  
**Date**

DEPARTMENT OF THE ARMY  
Wilmington District, Corps of Engineers  
Post Office Box 1890  
Wilmington, North Carolina 28402-1890

**Regional General Permit No. 198200031**

**Name of Permittee: General Public**

**Effective Date: September 1, 2003**

**Expiration Date: August 31, 2008**

**DEPARTMENT OF THE ARMY  
REGIONAL GENERAL PERMIT**

A regional general permit (RGP) to perform work in or affecting navigable waters of the United States and waters of the United States, upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby modified and re-issued by authority of the Secretary of the Army by the

District Engineer  
U.S. Army Engineer District, Wilmington  
Corps of Engineers  
Post Office Box 1890  
Wilmington, North Carolina 28402-1890

**TO AUTHORIZE THE DISCHARGE OF DREDGED OR FILL MATERIAL IN WATERS OF THE UNITED STATES, INCLUDING WETLANDS, ASSOCIATED WITH THE CONSTRUCTION, MAINTENANCE AND REPAIR OF BRIDGES, INCLUDING COFFERDAMS, ABUTMENTS, FOUNDATION SEALS, PIERS, APPROACH FILLS, DETOUR FILLS, BOX CULVERT INSTALLATION AND TEMPORARY CONSTRUCTION AND ACCESS FILLS, IN WATERS OF THE UNITED STATES AS PART OF WORK CONDUCTED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) OR OTHER STATE, FEDERAL OR LOCAL GOVERNMENTAL ENTITY, IN THE STATE OF NORTH CAROLINA.**

1. Special Conditions.

a. Written confirmation that the proposed work complies with this RGP must be received from the Wilmington District Engineer prior to the commencement of any work. To enable this determination to be made, the permittee must furnish the Wilmington District Engineer a pre-construction notification with the following information:

(1) A map indicating the location of the work.

(2) Plans of the proposed work showing all pertinent structures, elevations, dimensions and quantities of materials and locations of all structures and/or fill in wetlands or waterward of the normal/high water elevation contours.

(3) A brief discussion of the affected aquatic resources, including streams and wetlands. The discussion shall include the identification and types of vegetation present.

(4) Approximate commencement and completion dates.

(5) A description of methods to be employed to avoid and/or minimize permanent and temporary impacts to aquatic resources caused by the proposed work.

(6) Plans, including timetables and techniques, for construction, stabilization and removal of all unavoidable temporary fills.

(7) Names and addresses of adjoining property owners.

b. In the case of fills of one acre or less, including permanent approach fills, detour fills and fills associated with culvert installation, the Corps of Engineers' Project Manager will determine, after appropriate onsite visits and review of plans, if the impacts on aquatic resources, including streams and wetlands, are likely to be such as to require review by Federal and State agencies. If it is determined that impacts are minimal or can be made minimal by changes agreed to by the applicant, a letter of authorization to proceed will be provided. If it is determined that review by Federal and State agencies is necessary to fully evaluate impacts, copies of all plans and materials will be forwarded to the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the U.S. Environmental Protection Agency (EPA) and the North Carolina Department of Environment and Natural Resources (NCDENR). These agencies will furnish comments to the Wilmington District Engineer within thirty (30) days.

c. In cases of fills greater than one acre, copies of all plans and materials will be forwarded to the USFWS, the NMFS, the EPA and the NCDENR. These agencies will furnish comments to the Wilmington District Engineer in thirty (30) days. In cases of land disturbing activities comprising more than one acre, a Sedimentation/Erosion Control Plan will be filed with the North Carolina Division of Land Resources, Land Quality Section, thirty (30) days prior to commencing work.

d. Where work is proposed within the twenty (20) coastal counties, as defined by the North Carolina Division of Coastal Management, the applicant shall forward a copy of the pre-construction notification to:

**National Marine Fisheries Service  
101 Pivers Island Road  
Beaufort, North Carolina 28516**

The counties in which this condition applies are:

Beaufort	Hertford	Bertie	Hyde	Brunswick
New Hanover	Camden	Onslow	Carteret	Pamlico
Chowan	Pasquotank	Craven	Pender	Currituck
Perquimans	Dare	Tyrrell	Gates	Washington

e. In the event that any Federal agency maintains an objection or any required State authorization is outstanding, no notice to proceed will be given until objections are resolved and State authorizations are issued.

f. No work will proceed until after the applicant has received written notice to proceed from the Wilmington District Engineer. This notice may include additional conditions and/or restrictions. Copies of the notice to proceed will be furnished to the USFWS, the NMFS, the EPA and the NCDENR with a brief description of the work, including the area of wetlands affected and the quantity of fill material.

g. Upon completion of any work authorized by this RGP, all temporary fills will be completely removed and the area reestablished as a wetland by restoring natural hydrology and native vegetation. Stream contours and riparian vegetation will be reestablished upon the removal of temporary culverts. In such instances, a restoration plan will be submitted to the Wilmington District Engineer for approval. Information in the restoration plan will be in accordance with special condition i. below.

h. Appropriate soil and erosion control measures must be established and maintained during construction. All fills, temporary and permanent, must be adequately stabilized at the earliest practicable date to prevent erosion of fill material into adjacent waters or wetlands.

i. In cases where new alignment approaches are to be constructed and the existing wetland approach fill is to be abandoned and no longer to be maintained as a roadway, the abandoned fill shall be removed and the area reestablished as a wetland. In such instances, a restoration plan will be submitted to the Wilmington District Engineer for approval. Information in the restoration plan will be in accordance with special condition i. below.

j. Discharges of dredged or fill material into waters of the United States, including wetlands, must be minimized or avoided to the maximum extent practicable. In reviewing an activity, the Wilmington District Engineer will first determine whether the activity will result in more than minimal adverse environmental affects. For activities that are determined to have more than minimal impacts, compensatory mitigation will be required. To expedite the process, the applicant will provide a mitigation plan with the request for authorization. Site specific mitigation proposals will include, but are not necessarily limited to, a description of work, a



schedule of work and a monitoring plan, and they will be in accordance with currently approved Wilmington District and/or Corps-wide mitigation guidelines. The applicant may propose other forms of mitigation, such as mitigation bank credits or in-lieu fee mitigation with the notification, which in some situations and at the discretion of the Wilmington District, may be considered acceptable mitigation.

k. Activities in any North Carolina designated "Mountain Trout Waters" must comply with all pH, temperature and turbidity criteria established for such waters by the North Carolina Wildlife Resources Commission (NCWRC) and/or the North Carolina Division of Water Quality (NCDWQ). Work that may result in the sedimentation of trout waters will generally be prohibited from October 15 to April 15, of any year, to avoid impacts on trout spawning.

1. Before discharging dredged or fill material into waters of the United States, including wetlands, in the twenty-five (25) mountain counties of North Carolina that contain trout waters, the applicant will obtain and provide a letter of comments and recommendations from the North NCWRC on the proposed activities. A discussion of alternatives to working in the mountain trout waters and why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to the mountain trout waters shall also be submitted with the letter from NCWRC. 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 applicant should contact:

**North Carolina Wildlife Resources Commission  
Habitat Conservation Program Manager  
1721 Mail Service Center  
Raleigh, North Carolina 27699-1721  
Telephone (919) 733-7638**

The counties in which this condition applies are:

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

m. This permit does not authorize the use of culverts in areas designated as anadromous fish spawning areas by the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC).

n. Discharges into Waters of the United States designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the 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. Discharges into waters of the United States designated by NCDMF as primary nursery areas and discharges into waters of the United States designated by NCWRC as inland nursery areas shall be coordinated with NCDMF and NCWRC prior to being authorized by this RGP. Coordination with NCDMF and NCWRC may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

The Applicant should contact:

**NC Division of Marine Fisheries**  
3441 Arendell Street  
Morehead City, NC 28557  
Telephone 252-726-7021  
or 800-682-2632

**North Carolina Wildlife Resources Commission**  
Habitat Conservation Program Manager  
1721 Mail Service Center  
Raleigh, NC 27699-1721  
Telephone (919) 733-7638

o. No activity may result in substantial permanent disruption of the movement of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.

p. This permit generally allows the permanent installation of culverts to 100 feet in length. For culverts longer than 100 feet, the proposed application will be closely evaluated to determine if unacceptable impacts on movement of aquatic organisms would result. In such cases, approval may not be provided.

q. If the project is located within the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA), then all pipe and culvert inverts will be buried at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by CAMA, and/or all streams appearing as blue lines on United States Geological Survey (USGS) quad sheets. If the project is not located within the twenty (20) counties of North Carolina designated as coastal counties by CAMA, then 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 condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this condition would result in more adverse impacts to the aquatic environment.

r. All activities authorized by this RGP shall, to the extent practicable, be conducted "in the dry", with barriers installed between work areas and aquatic habitat to protect that habitat from cement or other pollutants. Where concrete is utilized, 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. Water in the work area will be pumped to holding and settling ponds as practicable, and water will not be allowed to re-enter the water column until decanted.

s. If the project authorized by this RGP is proposed by a Federal or State agency, and is located within the twenty (20) counties of North Carolina designated as coastal counties by the CAMA, then prior to project initiation the proponent must obtain a determination of consistency with the state's coastal management program from the N.C. Division of Coastal Management (DCM). A copy of the state's consistency determination must be provided to the appropriate Wilmington District Regulatory Office at the following address:

**Wilmington Regulatory Field Office**  
**P.O. Box 1890**  
**Wilmington, NC 28402**

**Washington Regulatory Field Office**  
**P.O. Box 1000**  
**Washington, NC 27889**

The state's consistency determination will be conveyed in the form of a CAMA permit if the project is located within a designated CAMA Area of Environmental Concern (AEC), and will be conveyed in the form of a Consistency Determination letter from DCM if the project is not located within a designated CAMA AEC.

t. No work shall be authorized by the RGP within the twenty coastal counties, as defined by the North Carolina Division of Coastal Management, without prior consultation with NOAA Fisheries. For each activity reviewed by the Corps of Engineers where it is determined that the activity may affect Essential Fish Habitat (EFH) for Federally managed species, an EFH Assessment shall be prepared by the applicant and forwarded to the Corps of Engineers and NOAA Fisheries for review and comment prior to authorization of work.

u. All work will comply with Water Quality Certification No. 3404, issued by the NCDWQ on 28 March 2003.

v. 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 and the structure or discharge of dredged or fill material must withstand expected high flows

## 2. General Conditions.

a. All activities authorized by this RGP that involve the discharge of dredged or fill material in waters of the United States will be consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pre-treatment standards and management practices established pursuant to the Clean Water Act (33 U.S.C. 1344) and applicable State and local law. If the proposed activity involves the discharge of dredged or fill material in waters of the United States, prior to the commencement of any work, the applicant will satisfy the NCDWQ regarding the need for a Water Quality Certification pursuant to Section 401 of the Clean Water Act.

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b. There will be no unreasonable interference with navigation or the right of the public to riparian access by the existence or use of activities authorized by this RGP.

c. A permittee, upon receipt of written notice from the Wilmington District Engineer of failure to comply with the terms or conditions of this RGP, will, within 60 days, without expense to the U.S. Government, and in such manner as the Wilmington District Engineer may direct, affect compliance with the terms and conditions or return the worksite to a pre-work condition.

d. The permittee must make every reasonable effort to perform the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife and natural environmental values.

e. The permittee must perform the work authorized herein in a manner so as to minimize any degradation of water quality. The activity will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Increases such that the turbidity in the water body is 50 NTU's or less in all rivers not designated as trout waters by the North Carolina Division of Environmental Management (NCDEM), 25 NTU's or less in all saltwater classes and in all lakes and reservoirs, and 10 NTU's or less in trout waters, are not considered significant.

f. The permittee will permit the Wilmington District Engineer or his representative to make periodic inspections at any time deemed necessary in order to assure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.

g. This RGP **does not** convey any rights, either in real estate or material, or any exclusive privileges; and it does not authorize any injury to property or invasion of rights or any infringement of Federal, State or local laws or regulations, nor does it obviate the requirement to obtain State or local assent required by law for the activity authorized herein. These may include, but are not necessarily limited to, a Dredge and/or Fill Permit (N.C.G.S. 113-229), a CAMA Permit (N.C.G.S. 113A-118), an Easement to Fill (N.C.G.S. 146-12) and a Water Quality Certification pursuant to Section 401 of the Clean Water Act.

h. Authorization provided by this RGP may be modified, suspended or revoked in whole or in part if the Wilmington District Engineer, acting on behalf of the Secretary of the Army, determines that such action would be in the best public interest. Unless subject to modification, suspension or revocation, the term of this RGP shall be five years. Any modification, suspension or revocation of this authorization will not be the basis for any claim for damages against the U.S. Government.

i. This RGP does not authorize the interference with any existing or proposed Federal project and the permittee will not be entitled to compensation for damages or injury to the structures or work authorized herein which may be caused by or results from existing or future operations undertaken by the United States in the public interest.

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j. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines that the proposed activity would significantly affect the quality of the human environment and determines that an Environmental Impact Statement (EIS) must be prepared.

k. This RGP will not be applicable to proposed construction when the Wilmington District Engineer determines, after any necessary investigations, that the proposed activity would adversely affect areas that possess historic, cultural, scenic, conservation or recreational values. Application of this exemption applies to:

(1) Rivers named in Section 3 of the Wild and Scenic Rivers Act (15 U.S.C. 1273), those proposed for inclusion as provided by Sections 4 and 5 of the Act and wild, scenic and recreational rivers established by State and local entities.

(2) Historic, cultural or archeological sites listed in or eligible for inclusion in the National Register of Historic Places as defined in the National Historic Preservation Act of 1966 as amended, the Abandoned Shipwreck Act of 1987 and the Native American Graves Protection and Repatriation Act.

(3) Sites included in or determined eligible for listing in the National Registry of Natural Landmarks.

(4) Endangered or threatened species or critical habitat of such species as determined by the Secretaries of Interior or Commerce and concerned in accordance with the Endangered Species Act (16 U.S.C. 1531).

(5) NOAA designated marine sanctuaries, National Estuarine Research Reserves, and coral reefs.

l. Permittees are advised that activities in or near a floodway may be subject to the National Flood Insurance Program, which prohibits any activities, including fill within a floodway that results in any increase in base flood elevations.

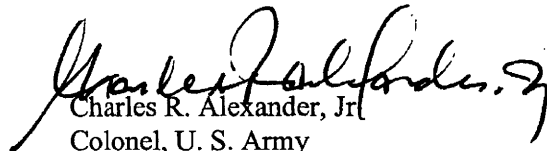
m. At his discretion, the Wilmington District Engineer may determine that this RGP will not be applicable to a specific construction proposal. In such case, the procedure for processing an individual permit in accordance with 33 CFR 325 will be available.

n. The permittee or the permittee's successors will maintain the authorized work in good condition and in conformance with the terms and conditions of the RGP.

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o. The discharge of dredged or fill material shall consist of suitable material free from toxic pollutants in toxic amounts.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

A handwritten signature in cursive script, appearing to read "Charles R. Alexander, Jr.", is written over the typed name.

Charles R. Alexander, Jr  
Colonel, U. S. Army  
District Engineer



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

Coleen H. Sullins, Director  
 Division of Water Quality

June 28, 2007

Alexander County  
 DWQ Project No. 20070474  
 Bridge No. 70 on SR 1331  
 TIP Project No. B-4005

### APPROVAL of 401 Water Quality Certification

Dr. Greg Thorpe, PhD., Branch Manager  
 Project Development and Environmental Analysis  
 North Carolina Department of Transportation  
 1548 Mail Service Center  
 Raleigh, North Carolina, 27699-1548

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge No. 70 over Grassy Creek on SR 1331 in Alexander County:

**Stream Impacts in the Catawba River Basin**

Site	Stream Name	Stream Type	Stream Classification/ Index No.	Impact Type	Impacts (acres)
1	Grassy Creek	Perennial	Class C/11-69-2	Permanent	0.01
				Temporary	0.04
<b>Total</b>					<b>0.05</b>

The project shall be constructed in accordance with your application dated received March 14, 2007. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 3627. This certification corresponds to the General Permit 31 issued by the Corps of Engineers. In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or if total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification.

**Conditions of Certification:**

1. Temporary causeways used for construction of the bridge shall not obstruct more than 50 percent of the stream channel at any time. These temporary causeways shall be constructed to an elevation no greater than the bankfull elevation of the stream.
2. The post-construction removal of the causeways must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species.
3. Strict adherence to the most recent version of NCDOT's Best Management Practices For Bridge Demolition and Removal approved by the US Army Corps of Engineers is a condition of the 401 Water Quality Certification.
4. Bridge deck drains should not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*.
5. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
6. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
7. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.
8. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
9. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
10. Heavy equipment shall be operated from the banks or temporary causeways rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
11. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.



12. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
13. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
14. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification.
15. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.
16. A copy of this Water Quality Certification shall be maintained on site at the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
17. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
18. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed.
19. Native riparian vegetation (ex. river birch, green ash, black gum, sycamore, tag alder, ironwood, buttonbush, common pawpaw, winter berry, carex sp., bottlebrush grass, boneset, juncus sp.) must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
20. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.
21. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.

- b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored upon completion of the project.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699. This certification and its conditions are final and binding unless you ask for a hearing. This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please Brian Wrenn at 919-733-5715.

Sincerely,

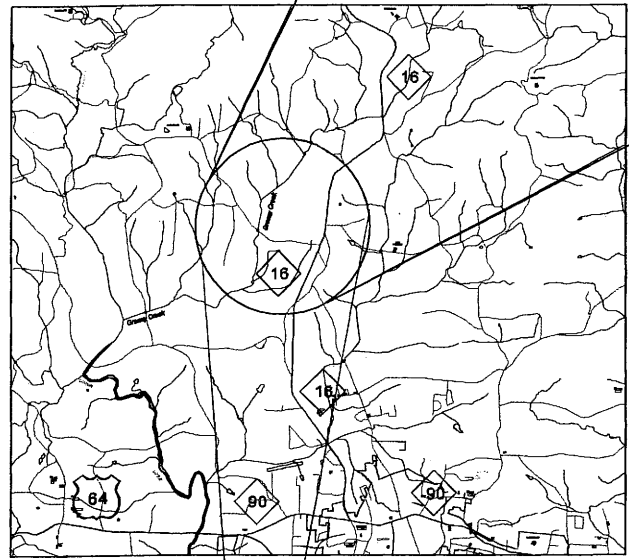
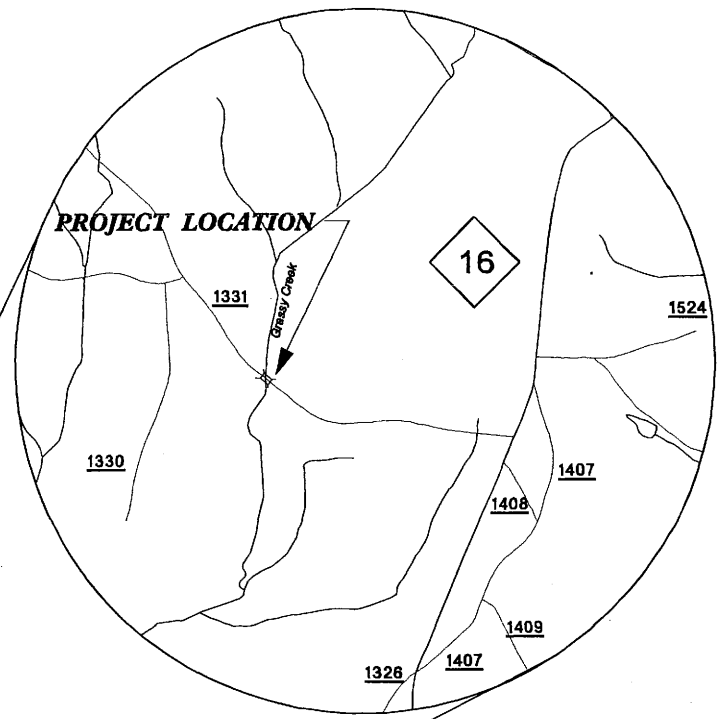
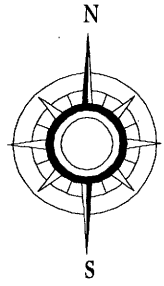
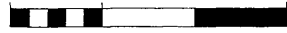


for Coleen H. Sullins

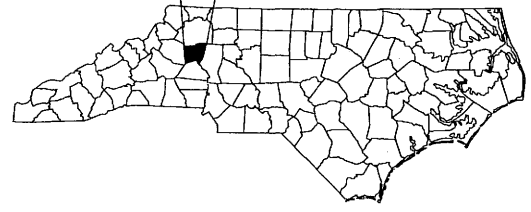
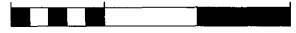
Attachment

cc: Steve Lund, Amy Corps of Engineers Asheville Regulatory Field Office  
Polly Lespinasse, DWQ Mooresville Regional Office  
Marla Chambers, NC WRC  
Marella Buncick, US FWS  
Chris Militscher, US EPA  
Kathy Matthews, US EPA  
File Copy

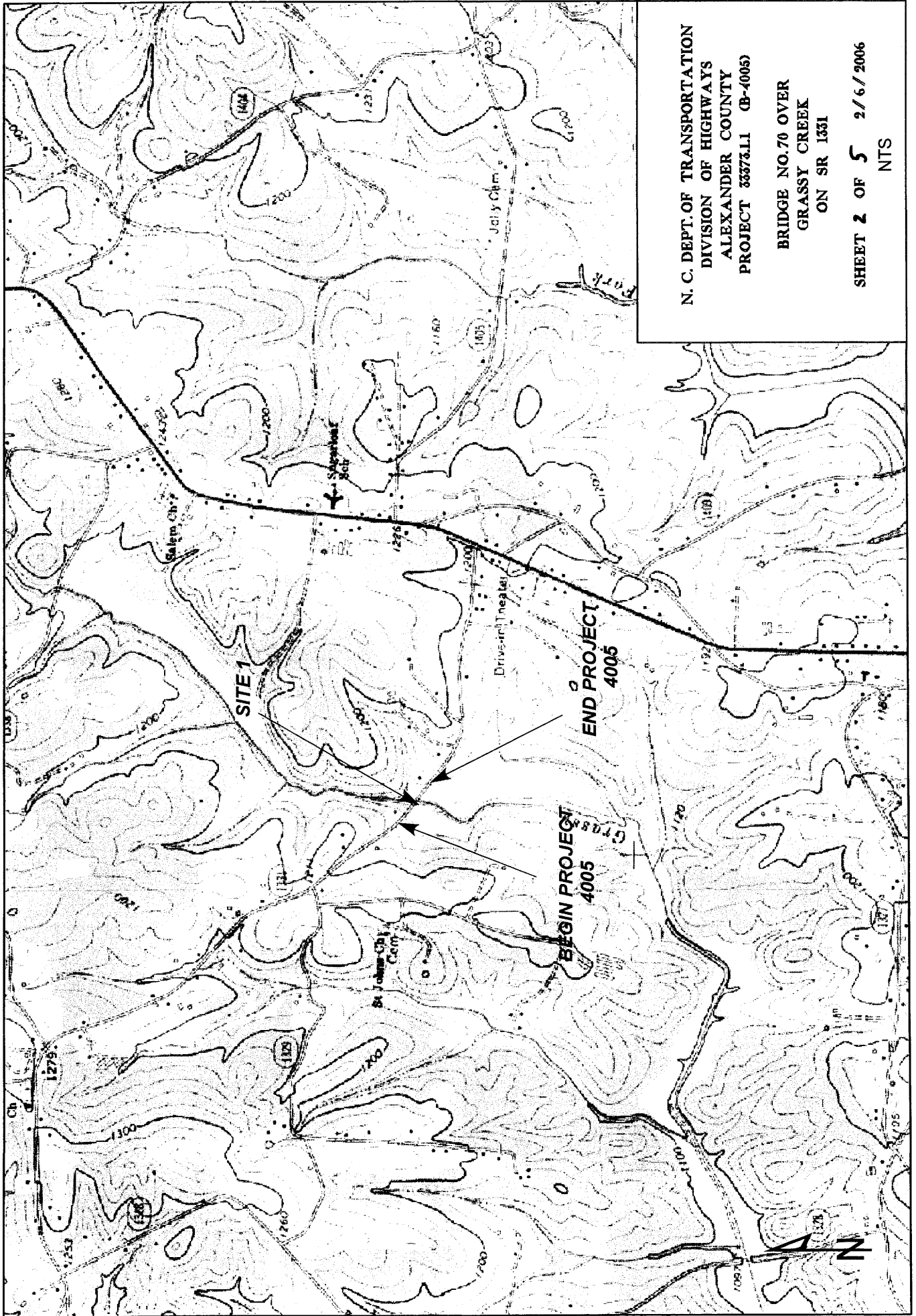
0.25 0 0.25 0.5 MILES



1 0 1 2 MILES



	<b>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS</b>
	<b>ALEXANDER COUNTY PROJECT 33373.1.1 (B-4005)</b>
<b>BRIDGE NO. 70 OVER GRASSY CREEK ON SR 1331</b>	
<b>VICINITY MAP</b>	
<b>FIGURE 1</b>	
<b>SHEET 1 OF 5</b>	

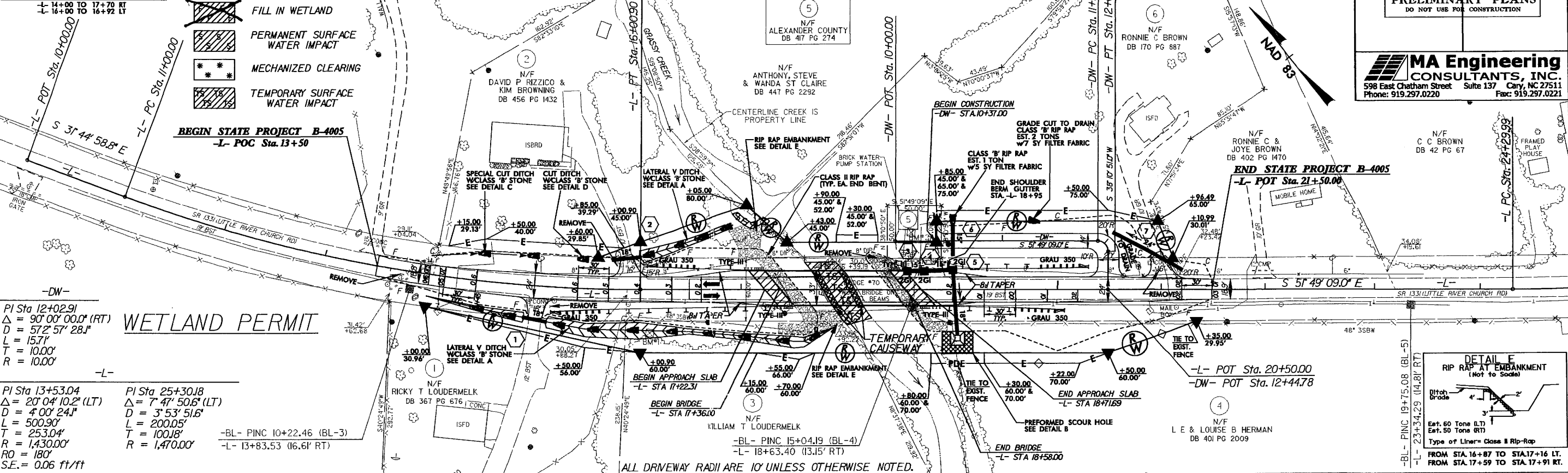
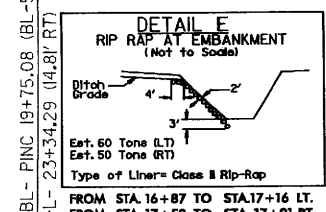
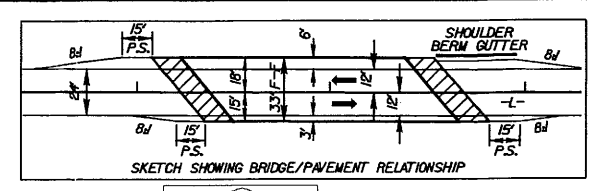
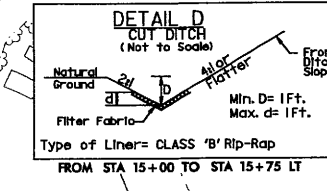
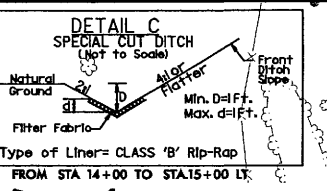
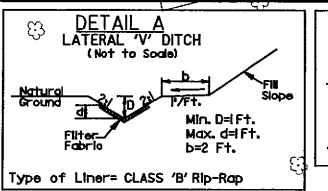


N. C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
ALEXANDER COUNTY  
PROJECT 33373.11 (B-4005)

BRIDGE NO. 70 OVER  
GRASSY CREEK  
ON SR 1331

SHEET 2 OF 5 2/6/2006  
NTS





**WETLAND PERMIT**

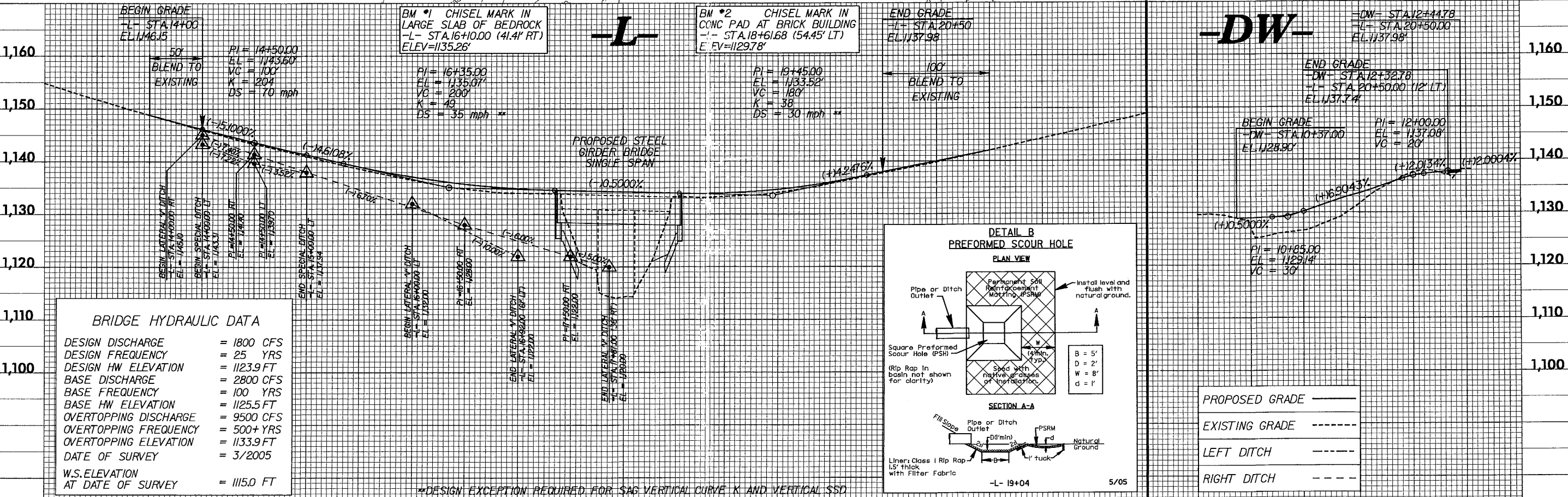
PI Sta 12+02.91  
 $\Delta = 90^\circ 00' 00.0''$  (RT)  
 $D = 572' 57.28''$   
 $L = 157'$   
 $T = 10.00'$   
 $R = 10.00'$

PI Sta 13+53.04  
 $\Delta = 20^\circ 04' 10.2''$  (LT)  
 $D = 400' 24.4''$   
 $L = 500.90'$   
 $T = 253.04'$   
 $R = 1,430.00'$   
 $RO = 180'$   
 $S.E. = 0.06$  ft/ft

PI Sta 25+30.18  
 $\Delta = 7^\circ 47' 50.6''$  (LT)  
 $D = 3' 53' 51.6''$   
 $L = 200.05'$   
 $R = 1,470.00'$

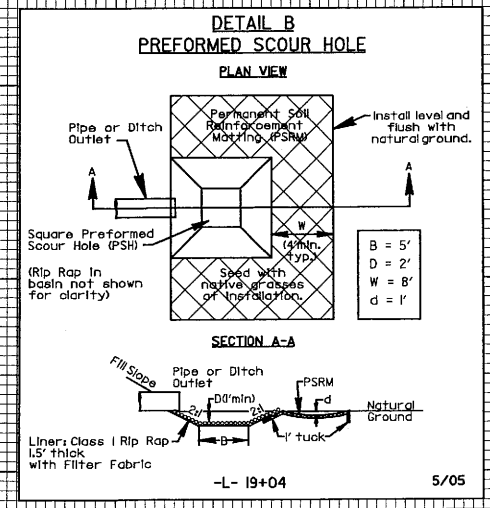
-BL- PINC 10+22.46 (BL-3)  
 -L- 13+83.53 (16.6' RT)

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED.



**BRIDGE HYDRAULIC DATA**

DESIGN DISCHARGE	= 1800 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1123.9 FT
BASE DISCHARGE	= 2800 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1125.5 FT
OVERTOPPING DISCHARGE	= 9500 CFS
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING ELEVATION	= 1133.9 FT
DATE OF SURVEY	= 3/2005
W.S. ELEVATION AT DATE OF SURVEY	= 1115.0 FT



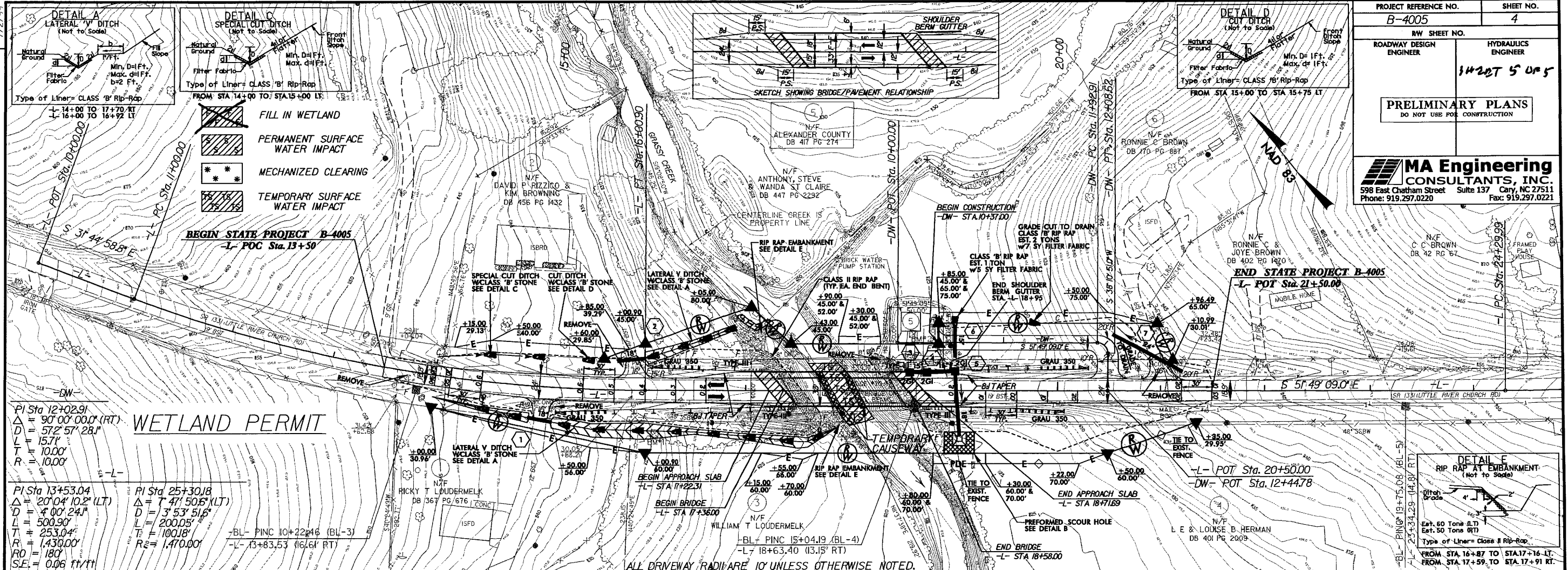
PROPOSED GRADE ———

EXISTING GRADE - - - - -

LEFT DITCH - - - - -

RIGHT DITCH - - - - -





**WETLAND PERMIT**

PI Sta 12+02.91  
 $\Delta = 90'00''00.0''$  (RT)  
 $D = 572'57''28.1''$   
 $L = 15.71'$   
 $T = 10.00'$   
 $R = 10.00'$

PI Sta 13+53.04  
 $\Delta = 20'04''10.2''$  (LT)  
 $D = 4'00''24.1''$   
 $T = 253.04'$   
 $R = 1,430.00'$   
 $RO = 180'$   
 $S.E.L. = 0.06$  ft/ft

PI Sta 25+30.18  
 $\Delta = 7'47''50.6''$  (LT)  
 $D = 3'53''51.6''$   
 $L = 200.05'$   
 $T = 1100.18'$   
 $R = 1,470.00'$

-BL- PINC 10+22+46 (BL-3)  
 -L- 43+83.53 (16.64' RT)

