



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY PERDUE  
GOVERNOR

EUGENE CONTI  
SECRETARY

January 14, 2010

MEMORANDUM TO: Mr. Jay Swain, Jr., PE  
Division Thirteen Engineer

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

SUBJECT: Buncombe County, Replace Bridge No.134 over Stony Fork Creek; T.I.P.  
Number B-4034; Federal Aid Project No. BRSTP-151(10); State Project  
8.1845901

Attached is the U.S. Army Corps of Engineers Section 404 General Permit 31 and the N.C. Division of Water Quality Section 401 General Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:  
<http://www.ncdot.gov/doh/preconstruct/pe/neu/permit.html>

PSH/gyb

Attachment

Cc: W/attachment  
Mr. Randy Garris, P.E. State Contract Officer  
Mr. Roger Bryan, Division Environmental Officer

Cc: W/o attachment (see website for attachments)  
Mr. Majed Alghandour, P. E., Programming and TIP  
Mr. Jay Bennett, P.E., Roadway Design  
Dr. David Chang, P.E., Hydraulics  
Mr. Art McMillan, P.E., Highway Design  
Mr. Tom Koch, P.E., Structure Design  
Mr. Mark Staley, Roadside Environmental  
Mr. John F. Sullivan, FHWA  
Mr. Ron Hancock, P.E., State Roadway Construction Engineer  
Mr. Mike Robinson, P.E., State Bridge Construction Engineer  
Ms. Beth Harmon, EEP  
Mr. Bill Goodwin, P.E., PDEA Bridge Unit Head

## PROJECT COMMITMENTS

NC 151  
Buncombe County  
Bridge No. 134 over Stony Fork Creek  
Federal-Aid Project BRSTP-151 (10)  
WBS 34401.1.1  
State Project 8.1845901  
T.I.P. Project B-4034

### Commitments Developed Through Project Development and Design

#### Roadway Design Unit, Roadside Environmental Unit, Division 13 Construction

Since NCDWQ has classified Stony Fork as Trout Waters (Tr), in stream construction is prohibited from January 1 to April 15 to avoid impacts on trout reproduction. The NCWRC will be given the opportunity to review the project for additional measures to protect trout and trout habitat prior to the issuance of the Section 404 permit.

NCDOT will implement Guidelines for Construction of Highway Improvements Adjacent to or Crossing Trout Waters in North Carolina in the design and construction of this project.

*NOTE: In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.*

#### Right of Way Branch/Division Resident Engineer's Office – Geodetic Markers

A U.S. Geodetic Survey Monument located on the southwest corner of the bridge will be relocated by the proposed project. NC Geodetic Survey will be contacted one month prior to the start of construction.

#### Structure Design - TVA Permit

The proposed project is located in the Tennessee Valley Authority's (TVA) Land Management District. If the bridge is replaced along the existing alignment, as proposed, approval under Section 26a of the TVA Act will not be needed. However, TVA will review final bridge design plans to confirm this determination.

*CE completed as of September 2009.*

#### Roadside Environmental Unit, Division 13 Construction, Structure Design Unit

**Bridge Demolition:** Using standard demolition techniques, it is unlikely that removal of the existing bridge will result in any fill in waters of the U.S.

### **PDEA, Natural Environment Unit**

The Natural Environment Unit plans to survey for Virginia spiraea in June 2009.

*NOTE: During a field visit by NCDOT staff scientists on May 15, 2009, no Virginia spiraea specimens were observed. The biological conclusion for Virginia spiraea remains No Effect.*

### **Commitments Developed During Project Permitting**

#### **Division 13 and Roadside Environmental Unit**

In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.

Condition #4 on Section 404 permit:

“All conditions of the attached North Carolina Wildlife Resources Commission letter of September 11, 2009 are hereby incorporated as special conditions of this permit.”

#### **Roadside Environmental Unit**

Sediment and erosion control measures shall adhere to the Design Standards for Sensitive Watersheds and be strictly maintained until project completion.

### **PDEA, Natural Environmental Unit**

Condition #6 on Section 404 permit:

“The unavoidable impacts to 439 linear feet of stream associated with this project shall be mitigated by NCDOT by providing 439 linear feet of restoration equivalent cold water stream channel in the French Broad River basin (Hydrologic Cataloging Unit 06010105). NCDOT shall provide a plan to the USACE for addressing this mitigation requirement by November 16, 2009. It is recommended that NCDOT provide this mitigation in accordance with the procedures suggested in our letter dated September 1, 2004 from Mr. Ken Jolly to Dr. Gregory J. Thorpe.”

*A letter from the Ecosystem Enhancement Program outlining mitigation acceptance was forwarded to Dave Baker of the USACE on October 30, 2009. Mr. Baker sent an email acknowledging receipt on November 9, 2009.*

U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT

RECEIVED  
Division of Highways

Action ID: SAW-2009-1502 County: Buncombe USGS Quad: Dunsmore Mountain 2009

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Construction  
Project Development and  
Environmental Analysis Branch

Property Owner / Authorized Agent: Gregory J. Thorpe, Ph.D., NCDOT

Address: 1598 Mail Service Center  
Raleigh, NC 27699-1598

Telephone No.: 919-431-6680

Size and location of property (water body, road name/number, town, etc.): Bridge No. 134 over Stony Fork Creek on NC Highway 151 near Asheville, Buncombe County, NC. (TIP B-4034).

Description of projects area and activity: To replace Bridge No. 134 over Stony Fork Creek with a 135-foot box-beam spanning structure. 375 LF of a UT to Stony Fork Creek will be relocated due to the fill slopes for the new roadway approaches. Additional work will include the installation of riprap for bank stabilization. The project will result in a total of 439 LF of permanent stream impacts.

Leamer  
RECEIVED  
OCT 26 2009  
DIVISION OF HIGHWAYS  
PDEA-OFFICE OF NATURAL ENVIRONMENT

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

Authorization: Regional General Permit Number: General Permit No. 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.

**Special Conditions**

1. All work must be performed in strict compliance with the plans received by this office on August 6, 2009, which are a part of this permit. Any modification to the permit plans must be approved by the USACE prior to implementation
1. Failure to institute and carry out the details of these special conditions will result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with the permitted project, or such other remedies and/or fines as the District Engineer or his authorized representatives may seek.
2. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit, and any authorized modifications. A copy of this permit, and any authorized modifications, including all conditions, shall be available at the project site during construction and maintenance of this project.
3. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area.
4. All conditions of the attached North Carolina Wildlife Resources Commission letter of September 11, 2009 are hereby incorporated as special conditions of this permit.
5. The permittee will report any violation of these conditions or violations of Section 404 of the Clean Water Act in writing to the Wilmington District, U. S Army Corps of Engineers, within 24 hours of the permittee's discovery of the violation.
6. The unavoidable impacts to 439 linear feet of stream associated with this project shall be mitigated by NCDOT by providing 439 linear feet of restoration equivalent cold water stream channel in the French Broad River basin (Hydrologic Cataloging Unit 06010105). NCDOT shall provide a plan to the USACE for addressing this mitigation requirement by November 16, 2009. It is recommended that NCDOT provide this mitigation in accordance with the procedures suggested in our letter dated September 1, 2004 from Mr. Ken Jolly to Dr. Gregory J. Thorpe.

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

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 David Baker at 828-271-7980.

Corps Regulatory Official David Baker Date: **October 15, 2009**

Expiration Date of Verification: **October 31, 2013**

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit <http://regulatory.usacesurvey.com/> to complete the survey online.

### Determination of Jurisdiction:

- A.  Based on preliminary information, there appear to be waters of the US including wetlands 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).
- B.  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.
- C.  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.
- D.  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:** Stony Fork Creek is a tributary to the French Broad River which is a Section 10 navigable-in-fact waterway (TNW).

**Appeals Information:** (This information does not apply to preliminary determinations as indicated by paragraph A. above).

Attached to this verification is an approved jurisdictional determination. If you are not in agreement with that approved jurisdictional determination, you can make an administrative appeal under 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Program  
Attn: David Baker, Project Manager  
151 Patton Avenue, Room 208  
Asheville, North Carolina 28801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address within 60 days from the *Issue Date* below.

\*\*It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.\*\*

Corps Regulatory Official: David Baker

Issue Date: **October 15, 2009**  
**Date**

Expiration Date: **Five years from Issue**

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

**Copy Furnished:**  
**Roger Bryan, Division 13**

Permit Number: SAW-2009-1502  
Permit Type: General Permit No. 198200031  
Name of County: Buncombe  
Name of Permittee: **Gregory J. Thorpe, Ph.D., NCDOT**  
Date of Issuance: October 15, 2009  
Project Manager: David Baker

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:

U.S. Army Corps of Engineers  
Attention: CESA W-RG-A  
151 Patton Avenue, Room 208  
Asheville, North Carolina 28801-5006

Please note that your permitted activity is subject to a compliance inspection by an 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 conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

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Signature of Permittee

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Date

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL**

Applicant: Thorpe, Ph.D., NCDOT	File Number: SAW-2009-1502	Date: October 15, 2009
Attached is:		See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

**SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.**

**A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT: You may accept or appeal the permit**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.**

**D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.**

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:  David Baker, Project Manager USACE, Asheville Regulatory Field Office 151 Patton Ave, Room 208 Asheville, NC 28806 828-271-7980	If you only have questions regarding the appeal process you may also contact:  Mr. Michael F. Bell, Administrative Appeal Review Officer CESAD-ET-CO-R U.S. Army Corps of Engineers, South Atlantic Division 60 Forsyth Street, Room 9M15 Atlanta, Georgia 30303-8801
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RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:
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**For appeals on Initial Proffered Permits and approved Jurisdictional Determinations send this form to:**

**District Engineer, Wilmington Regulatory Division, Attn: David Baker, Project Manager, Asheville Regulatory Field Office, 151 Patton Avenue, Room 208, Asheville, NC 28801.**

**For Permit denials and Proffered Permits send this form to:**

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Mike Bell, Administrative Appeal Officer, CESAD-ET-CO-R, 60 Forsyth Street, Room 9M15, Atlanta, Georgia 30303-8801**

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: November 1, 2008**  
**Expiration Date: October 31, 2013**

**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:

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

l. 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 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 NCWRC in the following NC Trout Counties at:

Mr. Ron Linville Western Piedmont Region Coordinator 3855 Idlewild Road Kernersville, NC 27284-9180 Telephone: (336) 769-9453	Counties		
	Alleghany	Caldwell	Watauga
	Ashe	Mitchell	Wilkes
	Avery	Stokes	
	Burke	Surry	

Mr. Dave McHenry Mountain Region Coordinator 20830 Great Smoky Mtn. Expressway Waynesville, NC 28786 Telephone: (828) 452-2546 Fax: (828) 452-7772	Counties		
	Buncombe	Henderson	Polk
	Cherokee	Jackson	Rutherford
	Clay	Macon	Swain
	Graham	Madison	Transylvania
	Haywood	McDowell	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. 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 in connection with the construction activity. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

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. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The potential for destabilization of the channel and head cutting upstream should

be considered in the placement of the culvert. 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. Culverts placed in wetlands do not have to be buried.

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 consistency concurrence that the proposed project would be consistent with the state's coastal management program from the N.C. Division of Coastal Management (DCM). A copy of the state's consistency approval 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 approval 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 concurrence 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 30 September 2008.

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.

b. All activities authorized by this RGP that involve 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.

c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

d. All activities authorized by this RGP that involve the use of riprap material for bank stabilization, the following measures shall be applied:

(1) Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.

(2) The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

(3) The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

(4) It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

(5) The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

(6) A waiver from the specifications in this general 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 greater adverse impacts to the aquatic environment.

- e. 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.
- f. The activity must comply with applicable FEMA approved state or local floodplain management requirements.
- g. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- h. 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.
- i. 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.
- j. 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.
- k. 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.
- l. 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.
- m. 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.

n. 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.

o. 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.

p. 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 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.

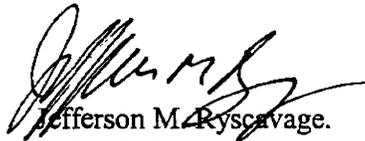
q. Permittees are advised that activities in or near a floodway may be subject to the National Flood Insurance Program, which prohibits any activities, including fill within a floodway that results in any increase in base flood elevations.

r. 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.

s. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

t. 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:



Jefferson M. Ryscavage.  
Colonel, Corps of Engineers  
District Commander



## ☒ North Carolina Wildlife Resources Commission ☒

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TO: David Baker, NCDOT Coordinator  
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Permit Coordinator *Marla Chambers*  
Habitat Conservation Program, NCWRC

DATE: September 11, 2009

SUBJECT: Review of NCDOT's application for Section 404 and 401 permits to replace Bridge No. 134 on NC 151 over Stony Fork Creek, Buncombe County, North Carolina. TIP No. B-4034.

North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the Division of Water Quality (NCDWQ). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the Categorical Exclusion (CE) and information provided. These comments are provided in accordance with the provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

The NCDOT proposes to replace Bridge No. 134 on NC 151 over Stony Fork Creek, relocate the adjacent unnamed tributary (UT), relocate the intersection with SR 1102 on the south end of the bridge and relocate a private drive on the north end, replacing the culvert underneath the drive. Proposed impacts include 439 feet of permanent impacts to surface waters, 375 feet for the stream relocation and 64 feet to Stony Fork Creek for bridge installation. The application indicated that natural channel design was investigated but not possible due to the steep topography. We question this, as natural channel designs exist for steep topography.

Stony Fork Creek is a tributary to South Hominy Creek, both classified as C Trout, and supports wild brown and rainbow trout in the project area. A moratorium prohibiting in-stream work and land disturbance within the 25-foot trout buffer should apply from October 15 to April 15, as we recommended in our scoping comments dated June 24, 2005 and verified in an email on April 27, 2009. The application and CE incorrectly indicated the shorter rainbow trout moratorium for this project. The CE acknowledged receipt of our scoping comments, but did not include a copy.

Another recommendation in our scoping comments was that a clear bank (riprap free) area of at least 10 feet should remain on each side of the stream underneath the bridge. If not already included, it should be incorporated into the project design to provide appropriate wildlife passage. Also, we would like to point out that while the CE indicated that on-site mitigation opportunities appeared to be minimal, it also noted that a property owner voiced concerns of drainage and erosion problems and requested bank stabilization along Stony Fork Creek just downstream of the project (page 17). This opportunity should be investigated.

NCWRC can concur with the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.
2. Sediment and erosion control measures shall adhere to the design standards for sensitive watersheds and be strictly maintained until project completion.
3. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
4. Tall fescue should not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting should be used on banks and steep slopes, instead of straw mulch and well anchored with 12" staples, wooden survey stakes or live stakes.
5. Stormwater, including deck drainage, should be directed to buffer areas or retention basins and should not be routed directly into the waterway.
6. Discharge of materials into the waterway from demolition of the old bridge should be avoided as much as practicable. Any materials that inadvertently reach the water should be removed.
7. The natural dimension, pattern, and profile of the waterway above and below the crossing should not be modified by widening the channel or changing the depth of the waterway.
8. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
9. Grading and backfilling should be minimized, and tree and shrub growth should be retained if possible to ensure long term availability of shoreline cover for fish and wildlife. Backfill materials should be obtained from upland sites.

10. Riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
11. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
12. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.
13. Heavy equipment should be operated from the bank rather than in the channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at (704) 485-8291.

cc: Troy Wilson, USFWS  
Brian Wrenn, NCDWQ  
Mike Parker, NCDWQ  
Carla Dagnino, NCDOT  
Elizabeth Lusk, NCDOT

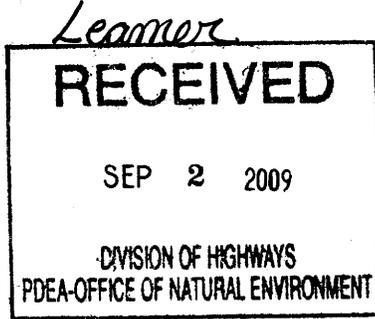


North Carolina Department of Environment and Natural Resources  
Division of Water Quality

Beverly Eaves Perdue  
Governor

Coleen H. Sullins  
Director

Dee Freeman  
Secretary



August 28, 2009  
Buncombe County  
DWQ Project 20090838  
Bridge 134, B-4034  
NC Highway 151

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

Dr. Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA  
North Carolina Department of Transportation  
Project Development and Environmental Analysis  
1598 Mail Service Center  
Raleigh, North Carolina, 28699-1548

RECEIVED  
Division of Highways

SEP 01 2009

Preconstruction  
Project Development and  
Environmental Analysis Branch

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, for the following impacts in Stony Fork Creek and in an unnamed tributary to Stony Fork Creek for the purpose of replacing the existing bridge across Stony Fork Creek on NC Highway 151 in Buncombe County:

**Stream Impacts in the French Broad River Basin**

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Impacts in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
Site 1	0	0	375	0	375	375
Site 2	0	0	64	0	64	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>439</b>	<b>0</b>	<b>439</b>	<b>375</b>

**Total Permanent Stream Impacts for Project: 439 linear feet.**

**Open Water Impacts (Pond) In The French Broad River Basin**

Site	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
Site 3	<0.01	0	<0.01
Total	<0.01	0	<0.01

**Total Open Water Impact for Project: <0.01acres.**

The project should be constructed in accordance with your application dated July 29, 2009 (received August 4, 2009), including the environmental commitments made in the application letter. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Nos. 3704, corresponding to the U.S. Army Corps of Engineers Nationwide Permit Number 31. 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 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 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 be valid, you must follow the conditions listed in the attached certification and any additional conditions listed below.*

**Condition(s) of Certification:**

1. 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, or access roads to 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.
2. The permittee shall use */Design Standards in Sensitive Watersheds/* [15A NCAC 4B.0124(a)-(e)] in areas draining to trout waters. However, due to the size of the project, NCDOT shall not be required to meet 15A NCAC 4B.0124(a) regarding the maximum amount of uncovered acres. Temporary cover (wheat, millet, or similar annual grain) or permanent herbaceous cover should be planted on all bare soil within 15 business days of ground disturbing activities, to provide erosion control. Coir fiber matting should be used in conjunction with appropriate seeding on disturbed soils in steep slope and riparian areas, and should be secured in place with staples and wherever possible, include live stakes of native trees.  
 Straw mulch and tall fescue shall not be used in the establishment of temporary or permanent groundcover within riparian zones. Coir fiber matting shall be used in conjunction with appropriate seeding for the establishment of permanent herbaceous cover on disturbed soils within the riparian area. Hydro seeding along with wood or cellulose based hydro mulch applied from a fertilizer and limestone free tank is allowable at the appropriate rate for the establishment of temporary groundcover within riparian zones. Discharging hydroseed mixtures and wood or cellulose mulch into surface waters is prohibited. Riparian areas are defined as a distance 25 feet landward from tope of stream bank.

3. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species.
4. Compensatory mitigation for impacts to 375 linear feet of streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated May 12, 2009 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.
5. NCDOT shall comply with the in-stream moratoriums requested by the NC Wildlife Resources Commission.
6. If multiple pipes or barrels are required, that shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.
7. Unless otherwise approved in this certification, placement of culverts and other structures in waters, streams, and wetlands shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.
8. Channel relocations shall be completed and stabilized, and approved on site by DWQ staff, prior to diverting water into the new channel. Stream banks shall be matted with coir-fiber matting. Vegetation used for bank stabilization shall be limited to native riparian vegetation, and should include establishment of a vegetated buffer on both sides of the relocated channel to the maximum extent practical. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. Once the stream has been turned into the new channel, it may be necessary to relocate stranded fish to the new channel to prevent fish kills.
9. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted area shall be revegetated with appropriate native species.
10. 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.
11. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from NCDWQ.
12. Bridge deck drains should not discharge directly into the streams. 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*.
13. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated and disposed of properly.
14. All pile driving or drilling activities shall be enclosed in turbidity curtains unless otherwise approved by NCDWQ in this certification.
15. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no circumstances should barges be dragged along the bottom of the surface water.

16. For projects impacting waters classified by the NC Environmental Management Commission as Trout (Tr), High Quality Waters (HQW) or Water Supply I or II (WS-I, WS-II), stormwater shall be directed to vegetated buffer areas, grass-lined ditches or other means appropriate to the site for the purpose of pre-treating stormwater runoff prior to discharging directly into streams. Please refer to the most current version of *Stormwater Best Management Practices*. Mowing of existing vegetated buffer areas is strongly discouraged.
17. The dimension, pattern and profile of the stream, above and below the bridge, shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.
18. Native riparian vegetation (e.g. rhododendron, dog hobble, willows, alders, sycamores, dogwoods, black walnut and red maple) must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
19. The use of riprap above the Normal High Water Mark shall be minimized. Any riprap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
20. Rip-rap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.
21. Heavy equipment shall be operated from the banks rather than in the stream channels in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
22. 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.
23. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
24. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
25. 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.
26. No rock, sand or other materials shall be dredged from the stream channel, except where authorized by this certification.
27. A copy of this Water Quality Certification shall be maintained on 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.
28. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.
29. 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.
30. 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.
31. 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 NCDWQ 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, NCDWQ may reevaluate and modify this certification.
32. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
33. The Permittee shall report any violations of this certification to the Division of Water Quality within 24-hours of discovery.

Dr. Greg Thorpe, Ph.D.  
August 28, 2009  
Page 5

34. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certificate of Completion Form" to notify NCDWQ when all work included in the §401 Certification has been completed. This form shall be returned to the Transportation Permitting Unit of the NC Division of Water Quality, 2321 Crabtree Blvd., Suite 250, Raleigh, North Carolina 27604.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please telephone Mr. Mike Parker of the Asheville Regional Office at 828.296.4500.

Sincerely,



 Coleen H. Sullins, Director  
Division of Water Quality

cc: David Baker, USACE, Asheville Field Office  
J.J. Swain, Division 12 Engineer  
Roger Bryan, Division 12 DEO  
Ed Ingle, Roadside Environmental  
Marla Chambers, NCWRC  
Transportation Permitting Unit  
Asheville Regional Office

# Water Quality Certification N<sup>o</sup>. 3704

**GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 14 (LINEAR TRANSPORTATION PROJECTS) AND REGIONAL GENERAL PERMIT 198200031 (WORK ASSOCIATED WITH BRIDGE CONSTRUCTION, MAINTENANCE OR REPAIR CONDUCTED BY NCDOT OR OTHER GOVERNMENT AGENCIES) AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)**

Water Quality Certification Number 3704 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and adjacent wetland areas or to wetland areas that are not a part of the surface tributary system to interstate waters or navigable waters of the United States (as described in 33 CFR 330 Appendix A (B) (14) of the Corps of Engineers regulations (Nationwide Permit No. 14 and Regional General Permit 198200031) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200.

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.

Any proposed fill or modification of wetlands and/or waters, including streams, under this General Certification requires application to, and written approval from the Division of Water Quality (the "Division") except for the single family lot exemption described below.

Application and written approval is *not required* for construction of a driveway to a single family lot as long as the driveway involves *less than 25 feet* of temporary and/or permanent stream channel impacts, including any in-stream stabilization needed for the crossing. This activity must meet all of the Conditions of Certification listed below. **If any of these Conditions cannot be met, or if the activity is associated with or in response to a Notice of Violation from the Division of Water Quality or the NC Division of Land Resources, then written approval from the Division is required.**

In accordance with North Carolina General Statute Section 143-215.3D(e), written approval for a 401 Water Quality General 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.

#### Conditions of Certification:

1. No Impacts Beyond those Authorized in the Written Approval or Beyond the Threshold for Use of this Certification

No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts authorized in the written approval or beyond the thresholds for use of this Certification, including incidental impacts. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of state water quality standards, statutes, or rules occur.

2. Standard Erosion and Sediment Control Practices

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:

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- a. 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.
  - b. 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*.
  - c. Reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
  - d. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times, except for publicly funded linear transportation projects when materials can be accessed offsite in a timely manner.
  - e. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNA's), Trout (Tr), SA, WS-I, WS-II, High Quality (HQW), or Outstanding Resource (ORW) waters, then the sediment and erosion control requirements contained within *Design Standards in Sensitive Watersheds* (15A NCAC 04B .0124) supercede all other sediment and erosion control requirements.
3. No Sediment and Erosion Control Measures in Wetlands or Waters

Sediment and erosion control measures should not be placed in wetlands or waters outside of the permitted impact areas without prior approval by the Division. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. All sediment and erosion control devices shall be removed and the natural grade restored within two (2) months of the date that the Division of Land Resources or locally delegated program has released the project.

4. Construction Stormwater Permit NCG010000

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

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit.

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## 5. Work in the Dry

All work in or adjacent to stream waters shall be conducted in a dry work area. Approved best management practices from the most current version of the NC Sediment and Erosion Control Manual, or the NC DOT Construction and Maintenance Activities Manual, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require submittal to, and approval by, the Division of Water Quality.

## 6. Construction Moratoriums and Coordination

If activities must occur during periods of high biological activity (i.e. sea turtle or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. This condition can be waived through written concurrence on a case-by-case basis upon reasonable justification.

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) to lessen impacts on trout, anadromous fish, larval/post-larval fishes and crustaceans, or other aquatic species of concern shall be implemented. This condition can be waived through written concurrence on a case-by-case basis upon reasonable justification.

Work within the twenty-five (25) designated trout counties or identified state or federal endangered or threatened species habitat shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

## 7. Riparian Area Protection (Buffer) Rules

Activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not), within the Neuse, Tar-Pamlico, Catawba, or Randleman (or any other basin with buffer rules), shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B .0233, .0259, .0250 and .0243, and 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. All buffer rule requirements, including diffuse flow requirements, must be met.

## 8. Water Supply Watershed Buffers

The 100-foot wide vegetative buffer (high-density development) or the 30-foot wide vegetative buffer (low density development) shall be maintained adjacent to all perennial waters except for allowances as provided in the Water Supply Watershed Protection Rules [15A NCAC 2B .0212 through .0215].

## 9. If concrete is used during the construction, then a dry work area should be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete should not be discharged to surface waters due to the potential for elevated pH and possible aquatic life/fish kills.

## 10. Compensatory Mitigation

In accordance with 15A NCAC 2H .0506 (h), compensatory mitigation may be required for losses of 150 linear feet or more of streams and/or one (1) acre or more of wetlands. For linear, public transportation projects, impacts equal to or exceeding 150 linear feet per stream may require mitigation.

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In watersheds classified as: ORW, HQW, Tr, WS-I, and WS-II, compensatory stream mitigation may be required at a 1:1 ratio for not only perennial but also intermittent stream impacts equal to or exceeding 150 feet, unless the project is a linear, publicly-funded transportation project, which has a 150-foot per-stream impact allowance.

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 Buffer Rules or require a variance under the Buffer Rules.

A determination of buffer, wetland and stream mitigation requirements shall be made by the Division for any application to use this Certification. Design and monitoring protocols shall follow the US Army Corps of Engineers Wilmington District *Stream Mitigation Guidelines* (April 2003), or its subsequent updates. Compensatory mitigation plans shall be submitted for written Division approval as required in those protocols. Alternatively, the Division will accept payment into an in-lieu fee program or credit purchase from a mitigation bank.

Finally, 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 public whenever practical or at the earliest reasonable time during the construction of the project. Proof of payment to an in-lieu fee program or mitigation bank must be provided to the Division to satisfy this requirement.

11. For all activities requiring re-alignment of streams, a stream relocation plan must be included for written Division approval. Relocated stream designs should include the same dimensions, patterns and profiles as the existing channel (or a stable reference reach if the existing channel is unstable), to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. Vegetation used for permanent bank stabilization shall be limited to native woody species, and should include establishment of a 30-foot wide wooded and an adjacent 20-foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating appropriate erosion control matting materials and seedling establishment is allowable. Rip-rap, A-Jacks, concrete, gabions or other hard structures may be allowed if it is necessary to maintain the physical integrity of the stream, however, the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage. Please note that if the stream relocation is conducted as a stream restoration as defined in the US Army Corps of Engineers Wilmington District, April 2003 *Stream Mitigation Guidelines*, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation.
12. Stormwater Management Plan Requirements
  - A. For applicants other than the North Carolina Department of Transportation, a Stormwater Management Plan in accordance with the version of *Stormwater Management Plan (SMP) Requirements for Applicants other than the North Carolina Department of Transportation* posted on the Division web site at the time of application shall be provided for any project that meets both of the following two criteria:
    - i. Requires this 401 Water Quality Certification, (regardless of whether written authorization is required by the Division), AND

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- ii. Contains one or more drainage areas that are anticipated to have impervious surface cover of equal to or greater than 24 percent. When drainage areas are difficult to delineate or when a pocket of high density exists within a drainage area, the Division shall use best professional judgment to apply the SMP requirement as appropriate. Use of this Certification to construct a private driveway to one single-family residential lot will not trigger the stormwater management plan requirement.

B. For the North Carolina Department of Transportation, compliance with NCDOT's Individual NPDES permit NCS000250 shall serve to satisfy this condition.

13. If this Water Quality Certification is used to access building sites, all lots owned by the applicant must be buildable without additional fill. For road construction purposes, this General Water Quality Certification shall only be utilized from natural high ground to natural high ground.

### 14. Placement of Culverts and Other Structures in Waters and Wetlands

The application must include construction plans with cross-sectional details in order to indicate that the current stability of the stream will be maintained or enhanced (i.e., not result in head cuts).

Culverts required for this project shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. Existing stream dimensions (including the cross section dimensions, pattern, and longitudinal profile) must be maintained above and below locations of each culvert. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life unless otherwise justified and approved by the Division

Installation of culverts in wetlands must ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. Additionally, when roadways, causeways or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

Any rip rap required for normal pipe burial and stabilization shall be buried such that the original stream elevation is restored and maintained.

The establishment of native, woody vegetation and other soft stream bank stabilization techniques must be used where practicable instead of rip-rap or other bank hardening methods.

15. Additional site-specific conditions may be added to the written approval in order to ensure compliance with all applicable water quality and effluent standards.
16. If an environmental document is required under the National or State Environmental Policy Act (NEPA or SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse.

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17. Deed notifications or similar mechanisms shall be placed on all retained jurisdictional wetlands, waters and protective buffers in order to assure compliance for future wetland, water and buffer impact. These mechanisms shall be put in place at the time of recording of the property, or of individual lots, whichever is appropriate. A sample deed notification can be downloaded from the 401/Wetlands Unit web site at <http://h2o.enr.state.nc.us/ncwetlands>. The text of the sample deed notification may be modified as appropriate to suit to a specific project.

### 18. Certificate of Completion

When written authorization is required for use of this certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return the certificate of completion attached to the approval. One copy of the certificate shall be sent to the DWQ Central Office in Raleigh at 1650 Mail Service Center, Raleigh, NC, 27699-1650.

19. This General Certification shall expire three (3) years from the date of issuance of the written approval from the Division or on the same day as the expiration date of the corresponding Nationwide Permit 14 or Regional General Permit 198200031. In accordance with General Statute 136-44.7B, certifications issued to the NCDOT shall expire only upon expiration of the federal 404 Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. If the construction process for approved activities will overlap the expiration and renewal date of the corresponding 404 Permit and the Corps allows for continued use of the 404 Permit, then the General Certification shall also remain in effect without requiring re-application and re-approval to use this Certification for the specific impacts already approved.

20. The applicant/permittee and their authorized agents shall conduct all 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 the Division determines that such standards or laws are not being met, including 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, then the Division may reevaluate and modify this General Water Quality Certification.

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

The Director of the North Carolina Division of Water Quality may require submission of a formal application for Individual Certification for any project in this category of activity, if it is determined that the project is likely to have a significant adverse effect upon water quality including state or federally listed endangered or threatened aquatic species or degrade the waters so that existing uses of the wetland or downstream waters are precluded.

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

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Effective date: November 1, 2007

DIVISION OF WATER QUALITY

By

A handwritten signature in black ink, appearing to read 'Coleen H. Sullins', with a long horizontal flourish extending to the right.

Coleen H. Sullins

Director

*History Note:* Water Quality Certification Number 3704 replaces Water Quality Certification Number 2177 issued on November 5, 1987; Water Quality Certification Number 2666 issued on January 21, 1992; Water Quality Certification Number 2732 issued on May 1, 1992; Water Quality Certification Number 3103 issued on February 11, 1997; Water Quality Certification Number 3289 issued on June 1, 2000; Water Quality Certification Number 3375 issued March 18, 2002, Water Quality Certification Number 3404 issued March 2003 and Water Quality Certification Number 3627 issued March 2007. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permit 14 or Regional General Permit 198200031 or when deemed appropriate by the Director of the Division of Water Quality.



DWQ Project No.: \_\_\_\_\_ County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: \_\_\_\_\_

**Certificate of Completion**

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

**Applicant's Certification**

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Agent's Certification**

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

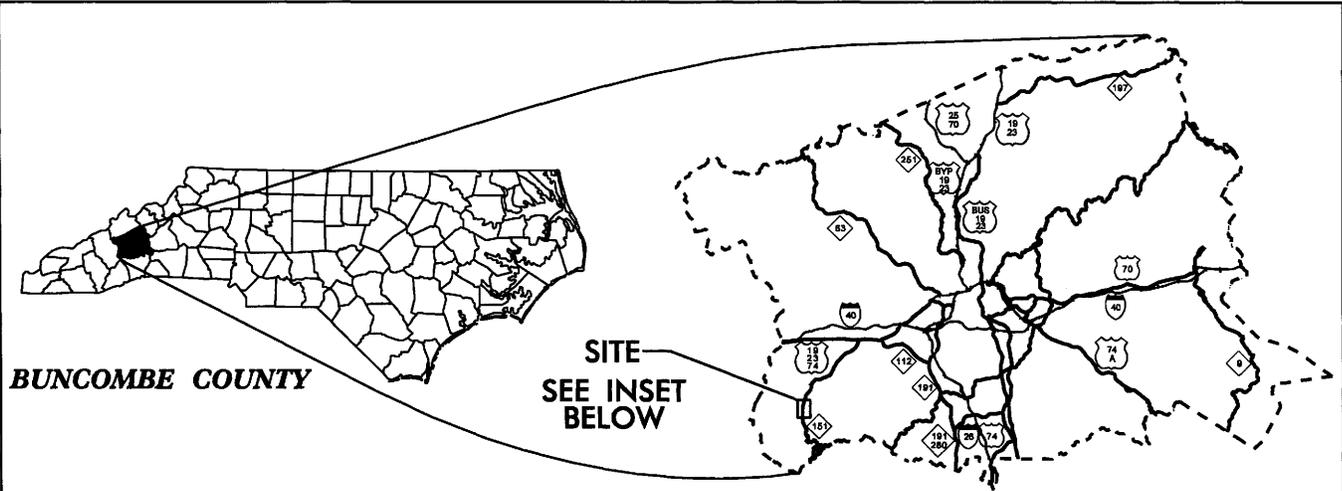
**Engineer's Certification**

\_\_\_\_\_ Partial \_\_\_\_\_ Final

I, \_\_\_\_\_, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

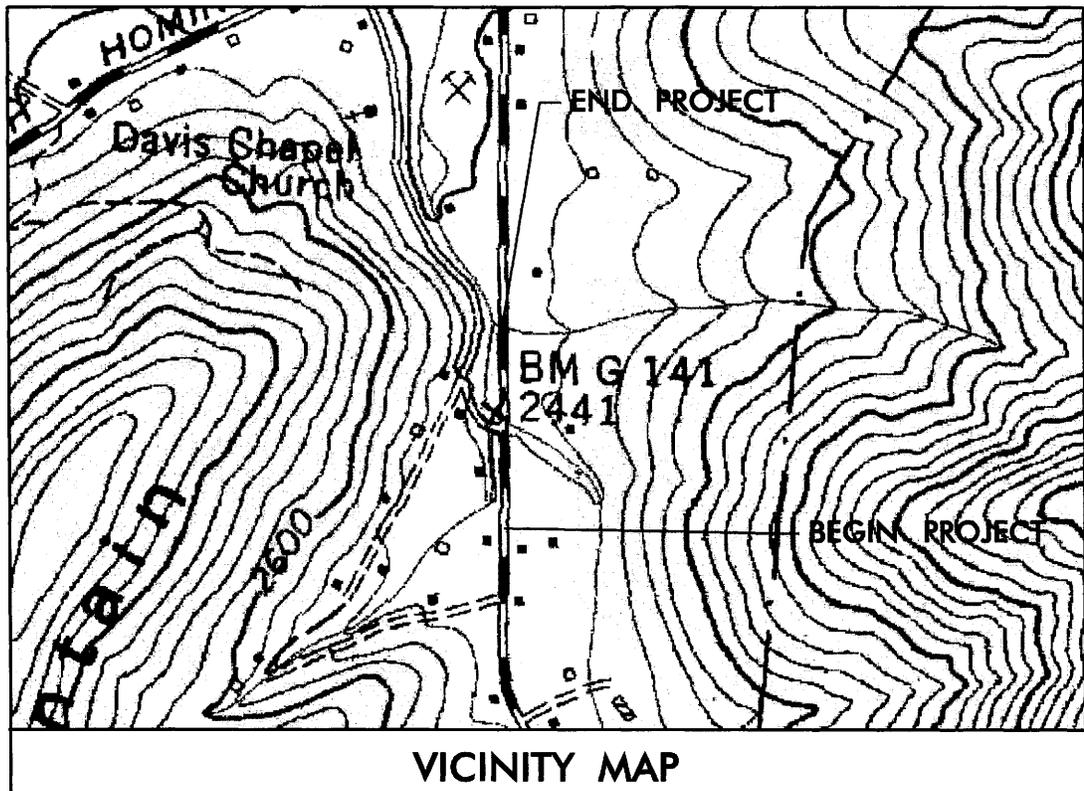
Signature \_\_\_\_\_ Registration No. \_\_\_\_\_

Date \_\_\_\_\_



BUNCOMBE COUNTY

SITE  
SEE INSET  
BELOW



VICINITY MAP

Permit Drawing  
Sheet 14 of 14

**WETLAND / STREAM  
IMPACTS  
VICINITY MAP**

**N. C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
BUNCOMBE COUNTY**

**PROJECT: 33401.1.1 (B-4034)**

**BRIDGE NO. 134 OVER STONY  
FORK CREEK ON NC 151**

# PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
8	NOREEN F. KLAUS	6768 Trammel Drive Milton, Fla 32570
9	KATHLEEN A. KLAUS	RR1, P.O. Box 665A Candler, NC 28715
10	BEN R. MORGAN AND DEBORAH H. MORRELL	87 Davis Chappel Rd. Candler, NC 28715
11	ROCKLAND D. MCKINNEY AND CELESTE S. MCKINNEY	1937 Pisgah Highway Candler, NC 28715

Permit Drawing  
Sheet 2 of 14

N. C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
BUNCOMBE COUNTY  
PROJECT: 33401.1.1 (B-4034)  
BRIDGE NO. 134 OVER  
STONY CREEK FORK  
ON NC 151

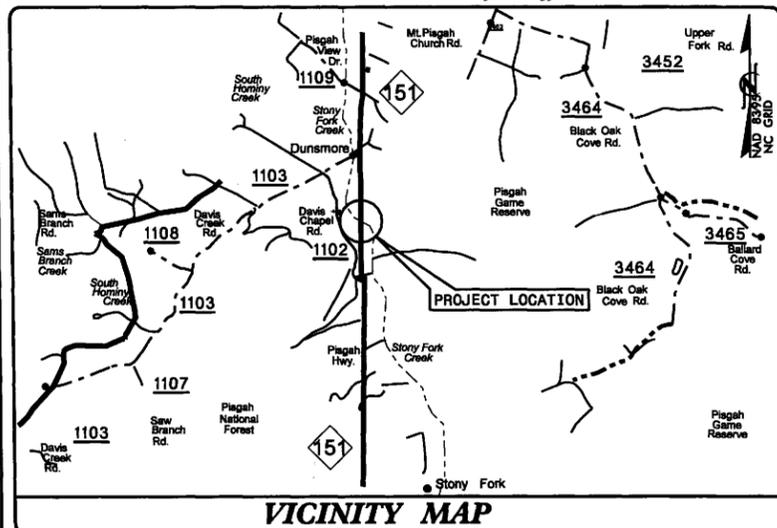
SHEET OF 2 / 07 / 09



09/28/09

**TIP PROJECT: B-4034**

See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Plan Sheet Symbolry



**RIGHT OF WAY PLANS**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

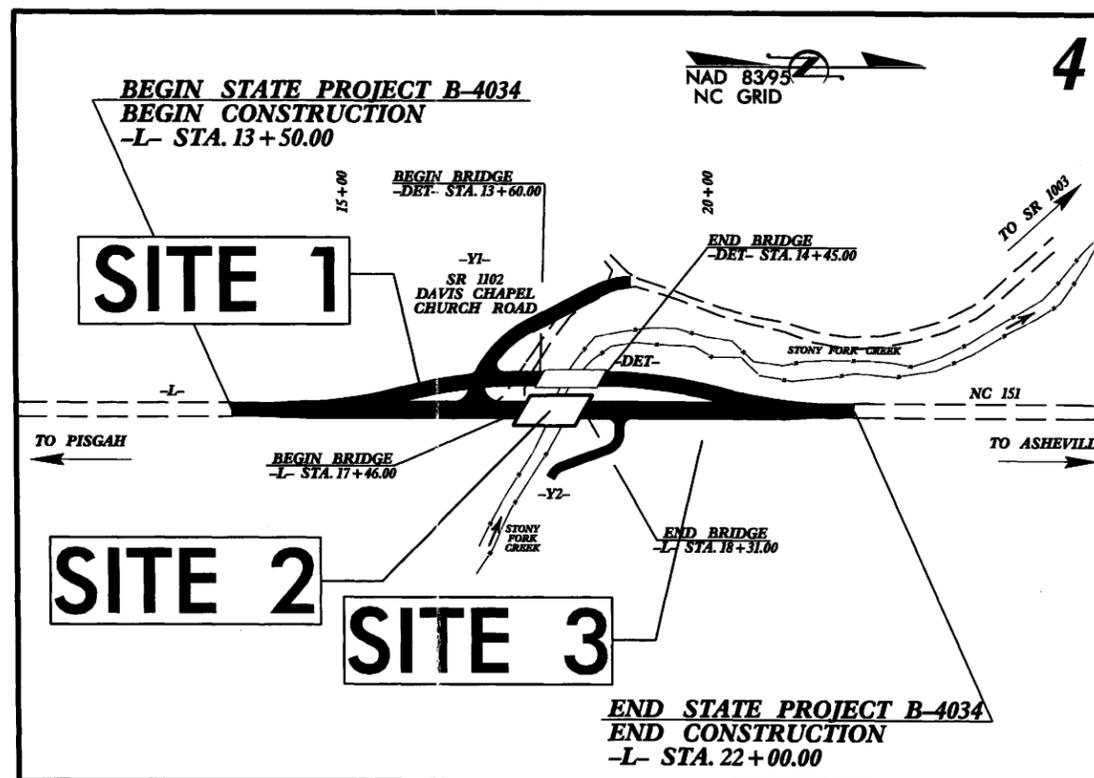
**BUNCOMBE COUNTY**

**LOCATION: BRIDGE NO. 134 OVER STONY FORK CREEK  
ON NC 151**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURES**

**WETLAND/STREAM IMPACTS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4034	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33401.1.1	BRSTP-151(10)	P.E.	
33401.2.1	BRSTP-151(10)	R/W & UTIL.	



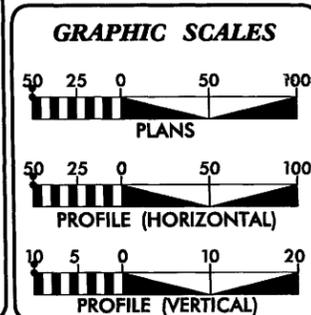
NOTE: A DESIGN EXCEPTION IS REQUIRED FOR THE PROPOSED BRIDGE WIDTH AND CREST VERTICAL CURVE K VALUE FOR -L-

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DGN\$\$\$\$\$  
\$\$\$\$\$USERNAME\$\$\$\$\$

**CONTRACT:**



**DESIGN DATA**

ADT 2010 =	1785
ADT 2030 =	2740
DHV =	10 %
D =	60 %
T =	3 % *
V =	60 MPH
* TTST 1% DUAL 2%	
FUNC. CLASS. =	RURAL MAJOR COLLECTOR

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT B-4034	=	0.145 MILES
LENGTH STRUCTURE TIP PROJECT B-4034	=	0.016 MILES
TOTAL LENGTH TIP PROJECT B-4034	=	0.161 MILES

Prepared for the North Carolina Department of Transportation in the Office of:

**WETHERILL ENGINEERING**  
559 JONES FRANKLIN ROAD  
SUITE 64  
Raleigh, N.C. 27606  
Tel: 919 851 8077  
Fax: 919 851 8072

2006 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE:	<b>EDWARD G. WETHERILL, PE</b> PROJECT ENGINEER
FEBRUARY 20, 2009	
LETTING DATE:	<b>BOB A. MAY, PE</b> PROJECT DESIGN ENGINEER
FEBRUARY 16, 2010	
NCDOT CONTACT	<b>DOUG TAYLOR, PE</b> ROADWAY DESIGN PROJECT ENGINEER

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**DIVISION OF HIGHWAYS**  
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

P.E.

Permit Drawing  
Sheet 4 of 14

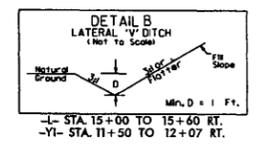
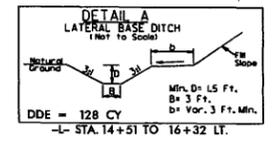
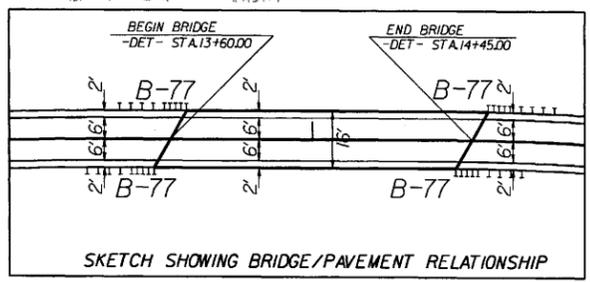
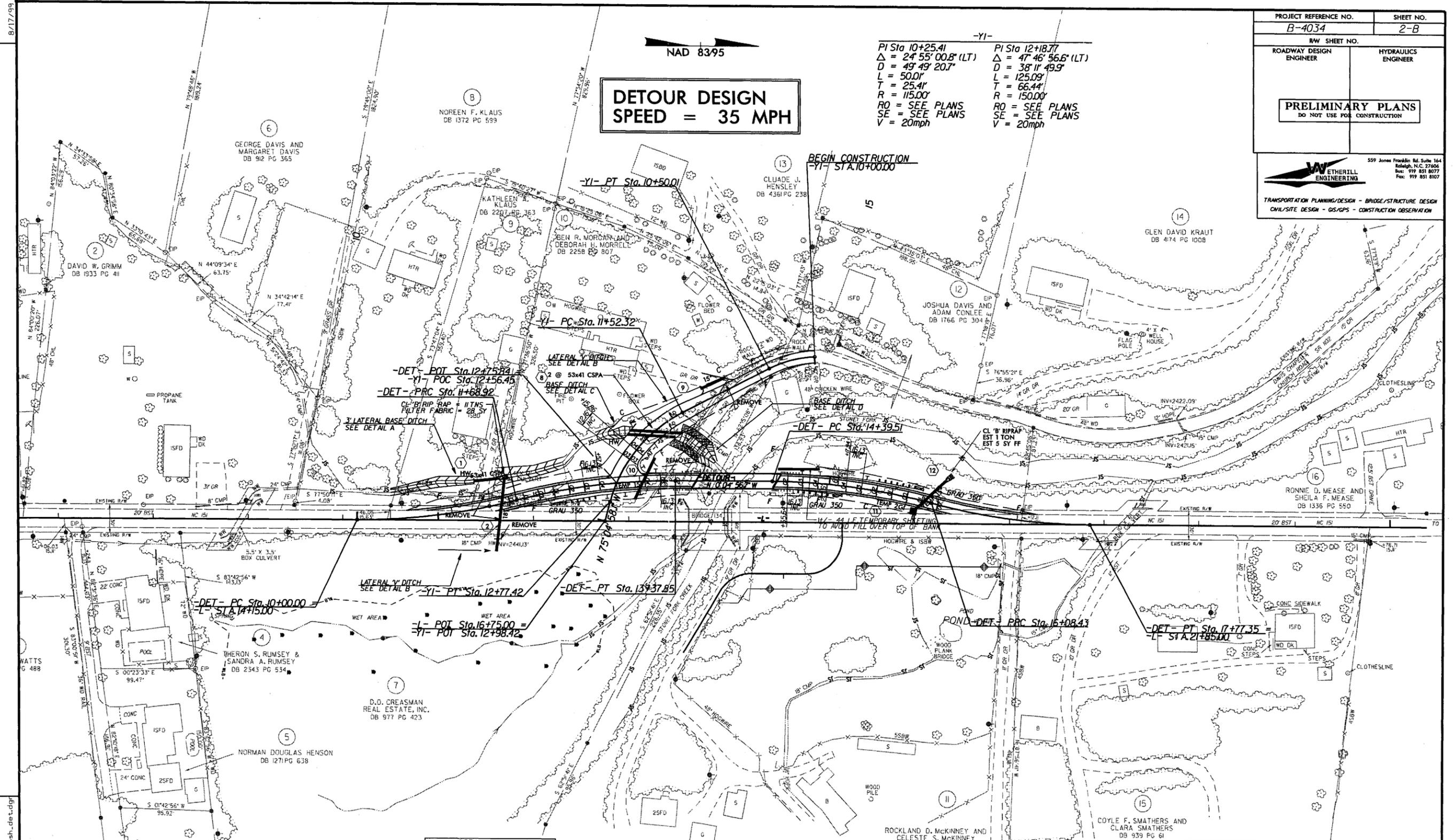
8/17/99

PROJECT REFERENCE NO. B-4034	SHEET NO. 2-B
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
<small>559 Jones Franklin Rd. Suite 164 Raleigh, N.C. 27606 Phone: 919 851 8077 Fax: 919 851 8107</small>	
<small>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</small>	

**DETOUR DESIGN  
SPEED = 35 MPH**

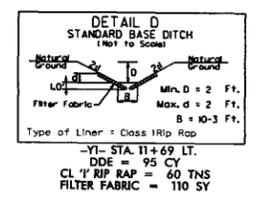
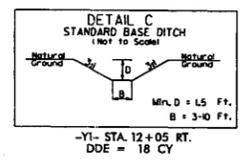
-YI-

PI Sta 10+25.41	PI Sta 12+18.77
$\Delta = 24' 55'' 00.8''$ (LT)	$\Delta = 47' 46'' 56.6''$ (LT)
D = 49' 49'' 20.7"	D = 38' 11'' 49.9"
L = 50.0'	L = 125.09'
T = 25.4'	T = 66.44'
R = 115.00'	R = 150.00'
RO = SEE PLANS	RO = SEE PLANS
SE = SEE PLANS	SE = SEE PLANS
V = 20mph	V = 20mph



-DET-

PI Sta 10+84.93	PI Sta 12+53.85	PI Sta 15+24.43	PI Sta 16+93.36
$\Delta = 14' 39'' 52.7''$ (LT)	$\Delta = 14' 39'' 53.3''$ (RT)	$\Delta = 14' 39'' 52.0''$ (RT)	$\Delta = 14' 39'' 52.6''$ (LT)
D = 8' 40'' 52.2"			
L = 168.92'	L = 168.93'	L = 168.92'	L = 168.92'
T = 84.93'	T = 84.93'	T = 84.93'	T = 84.93'
R = 660.00'	R = 660.00'	R = 660.00'	R = 660.00'
RO = SEE PLANS			
SE = SEE PLANS			
V = 45mph	V = 45mph	V = 45mph	V = 45mph



FOR -DET- PROFILE, SEE SHEET 5  
FOR TEMP. -YI- PROFILE, SEE SHEET 6  
FOR -L- PLAN VIEW, SEE SHEET 4  
FOR -YI- PLAN VIEW, SEE SHEET 4

REVISIONS

10:50:56 AM  
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 5/19/2004

Permit Drawing  
 Sheet 5 of 14



8/17/99

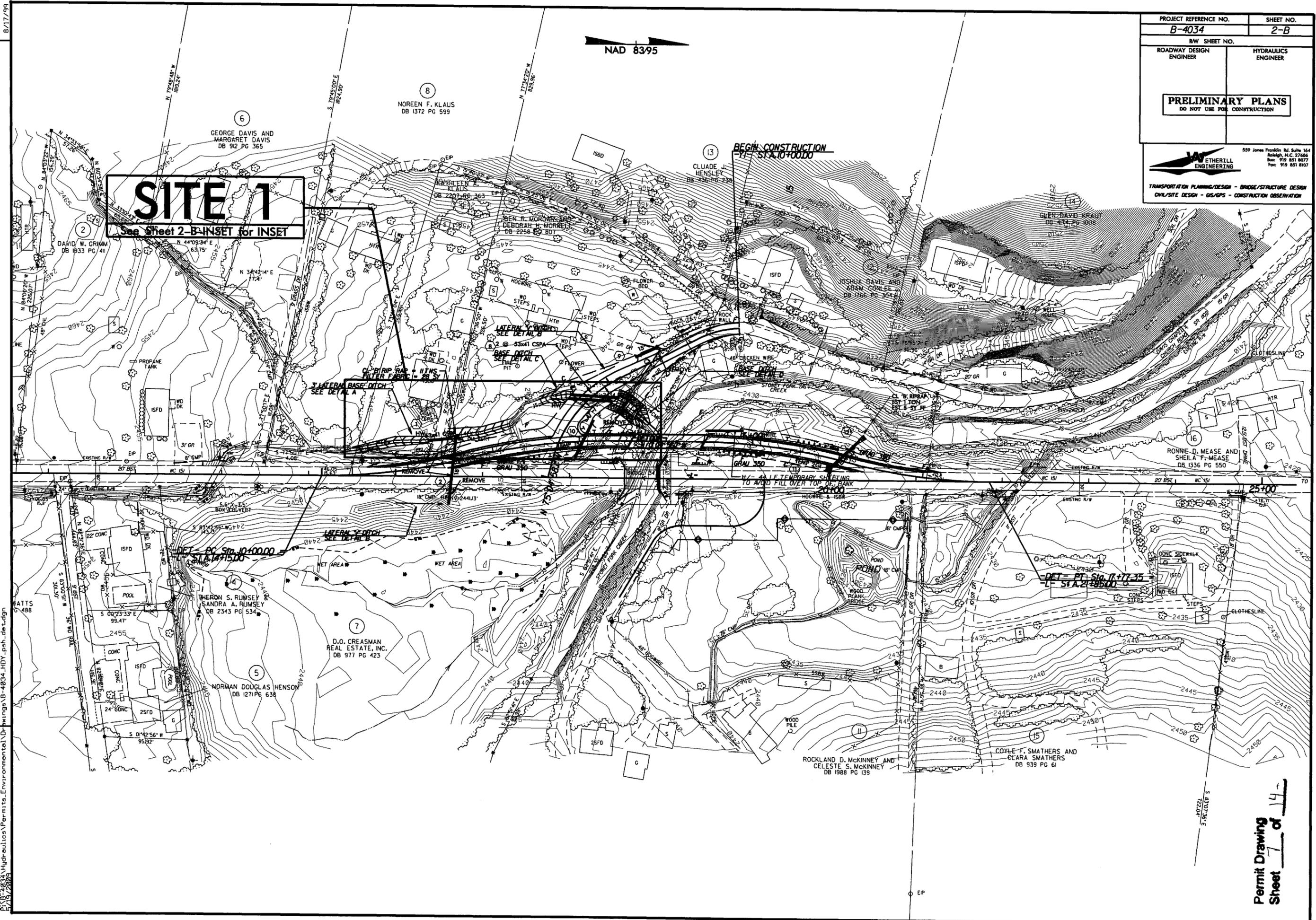
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8/17/99 11:53 AM

NAD 83/95

PROJECT REFERENCE NO. <b>B-4034</b>	SHEET NO. <b>2-B</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
	
<small>559 Jones Franklin Rd. Suite 164 Raleigh, N.C. 27604 Phone: 919 851 8077 Fax: 919 851 8107</small>	
<small>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</small>	

**SITE 1**  
See Sheet 2-B INSET for INSET

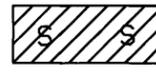
BEGIN CONSTRUCTION  
-71- STA. 10+00.00

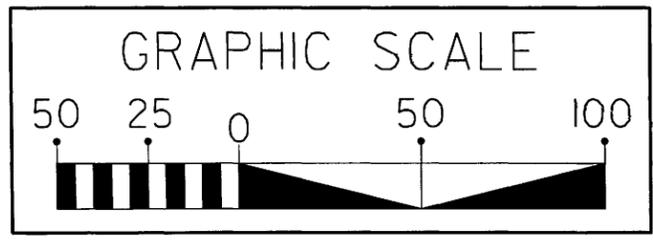
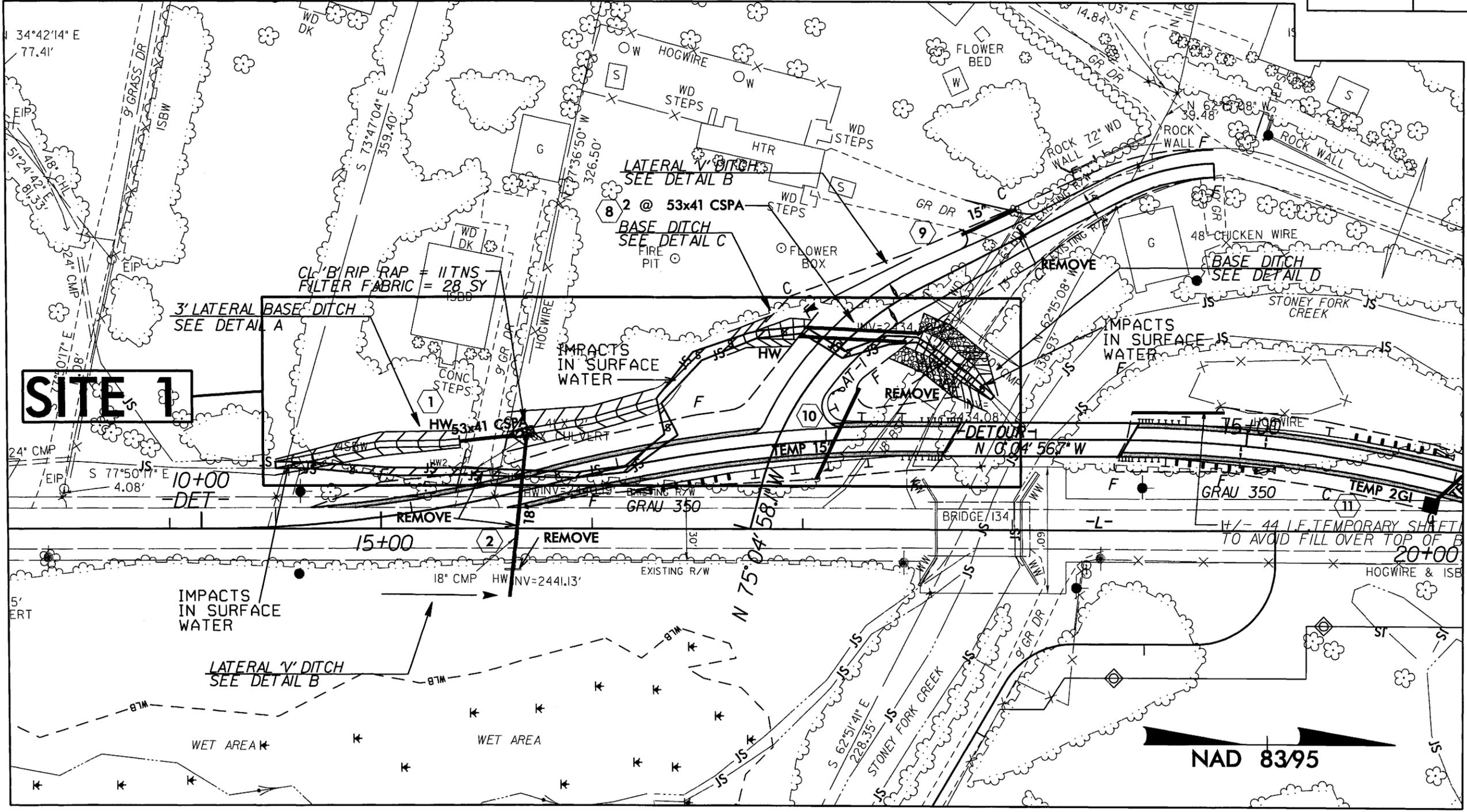


REVISIONS

Permit Drawing  
Sheet 2 of 14

PROJECT REFERENCE NO. <b>B-4034</b>	SHEET NO. <b>2-B-INSET</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

 DENOTES IMPACTS IN SURFACE WATER



PROJECT: 33401.1.1 (B-4034)  
SITE 1

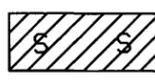
REVISIONS

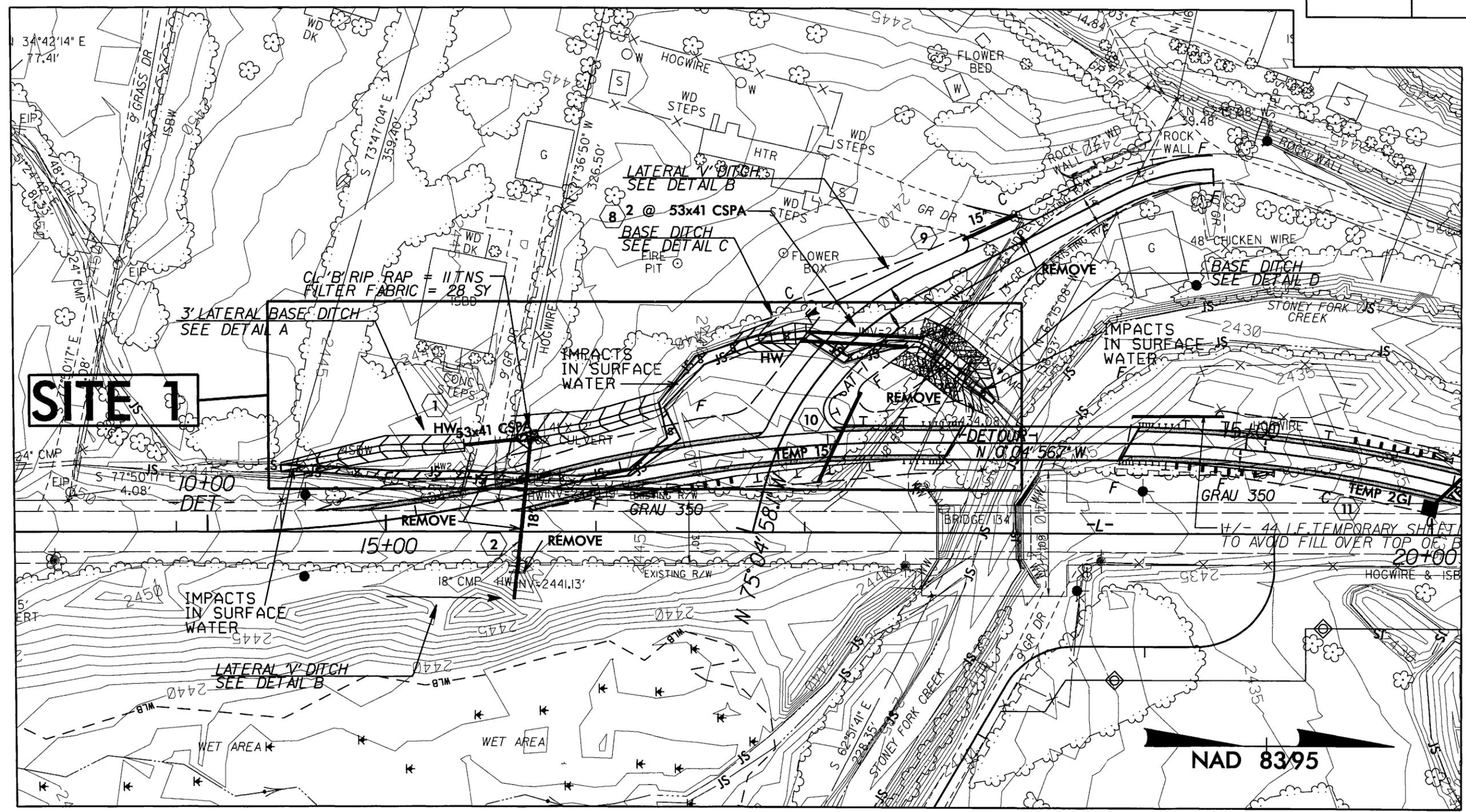
8/17/99

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 11/15/2009

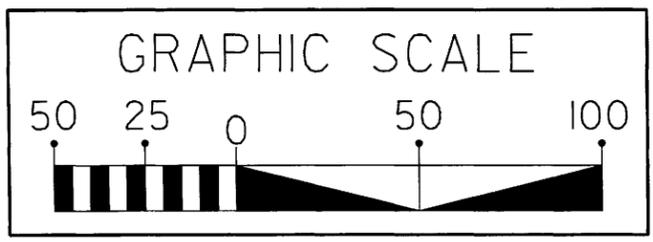
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REVISIONS  
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2/19/2009

PROJECT REFERENCE NO. <b>B-4034</b>	SHEET NO. <b>2-B-INSET</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

 DENOTES IMPACTS IN SURFACE WATER



**SITE 1**



PROJECT: 33401.I.I (B-4034)  
**SITE 1**

Permit Drawing  
Sheet 9 of 14



8/17/99

**ETHERILL ENGINEERING**  
 559 Jones Franklin Rd. Suite 154  
 Raleigh, N.C. 27604  
 Phone: 919 851 8077  
 Fax: 919 851 8107

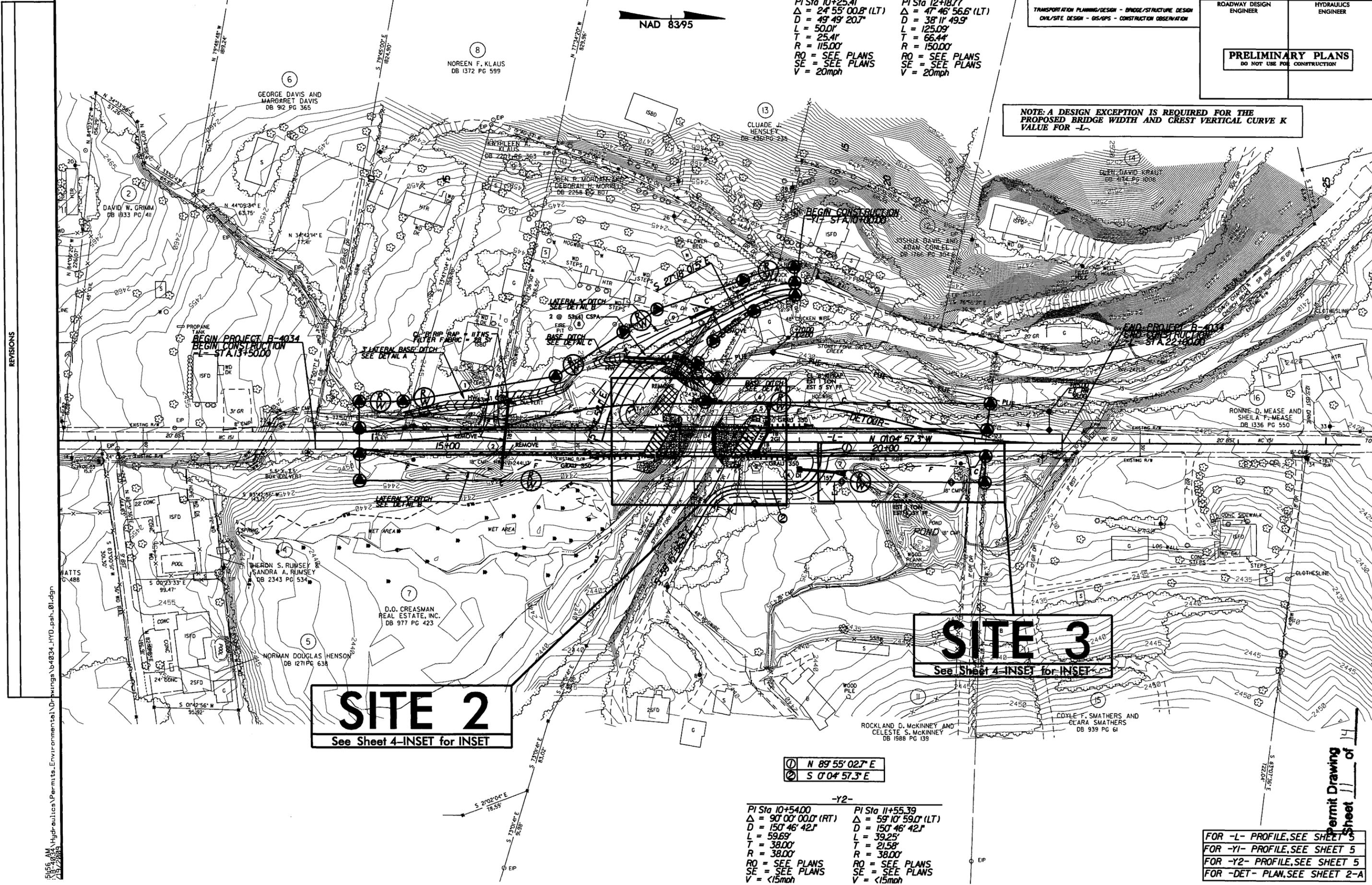
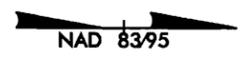
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. <b>B-4034</b>		SHEET NO. <b>4</b>	
RAW SHEET NO.			
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION			

**NOTE: A DESIGN EXCEPTION IS REQUIRED FOR THE PROPOSED BRIDGE WIDTH AND GREST VERTICAL CURVE K VALUE FOR -L-.**

**-Y1-**

PI Sta 10+25.41	PI Sta 12+18.77
$\Delta = 24^{\circ} 55' 00.8" (LT)$	$\Delta = 47^{\circ} 46' 56.6" (LT)$
$D = 49' 49' 20.7"$	$D = 38' 11' 49.9"$
$L = 500'$	$L = 125.09'$
$T = 25.41'$	$T = 66.44'$
$R = 115.00'$	$R = 150.00'$
RO = SEE PLANS	RO = SEE PLANS
SE = SEE PLANS	SE = SEE PLANS
V = 20mph	V = 20mph



**SITE 2**  
See Sheet 4-INSET for INSET

**SITE 3**  
See Sheet 4-INSET for INSET

① N 89° 55' 02.7" E  
 ② S 0° 04' 57.3" E

**-Y2-**

PI Sta 10+54.00	PI Sta 11+55.39
$\Delta = 90^{\circ} 00' 00.0" (RT)$	$\Delta = 59^{\circ} 10' 59.0" (LT)$
$D = 150' 46' 42.1"$	$D = 150' 46' 42.1"$
$L = 59.69'$	$L = 39.25'$
$T = 38.00'$	$T = 21.58'$
$R = 38.00'$	$R = 38.00'$
RO = SEE PLANS	RO = SEE PLANS
SE = SEE PLANS	SE = SEE PLANS
V = <15mph	V = <15mph

FOR -L- PROFILE, SEE SHEET 5  
 FOR -Y1- PROFILE, SEE SHEET 5  
 FOR -Y2- PROFILE, SEE SHEET 5  
 FOR -DET- PLAN, SEE SHEET 2-A

REVISIONS

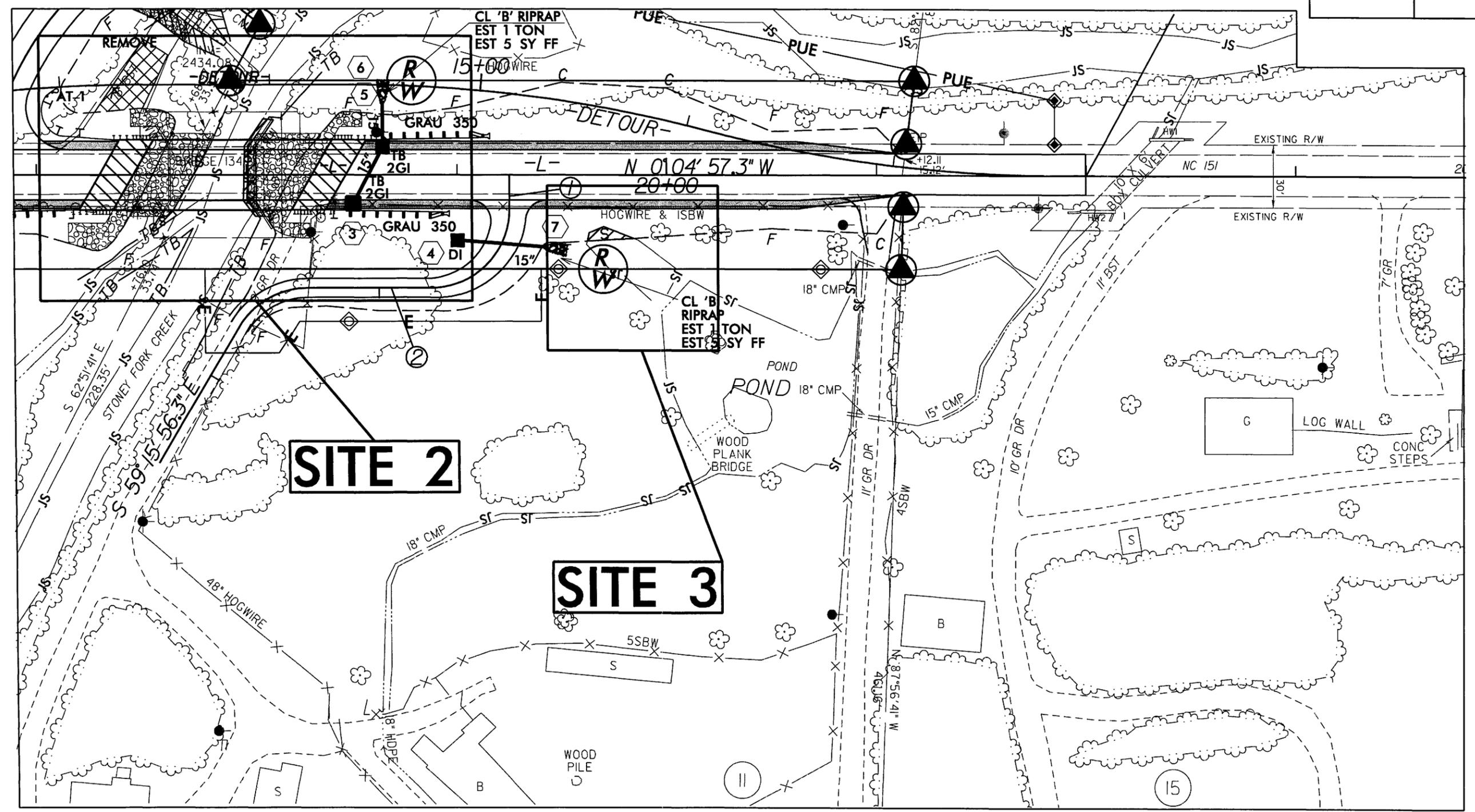
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Permit Drawing of sheet 11 of 14

B/17/99

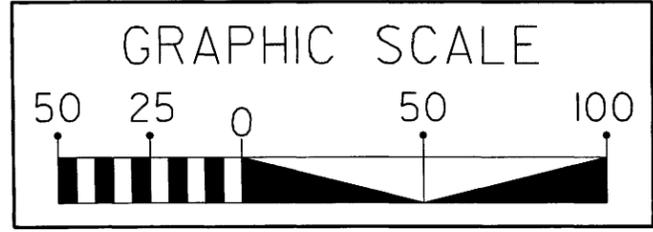
 DENOTES IMPACTS IN SURFACE WATER

PROJECT REFERENCE NO. <b>B-4034</b>	SHEET NO. <b>4-INSET</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



REVISIONS

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15/7/2005



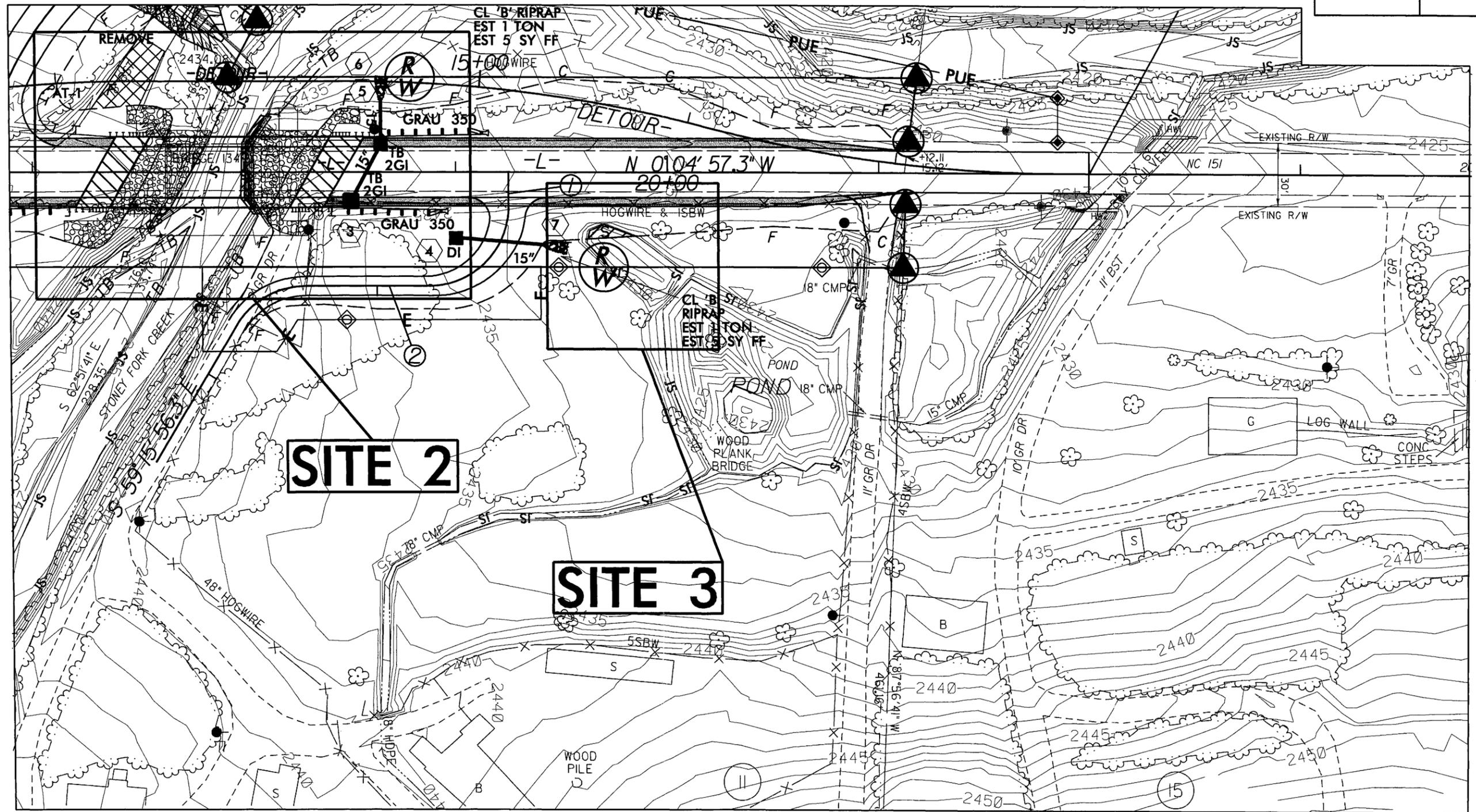
PROJECT: 33401.1.1 (B-4034)  
SITE 2 & 3

Permit Drawing  
Sheet 12 of 14

8/17/99

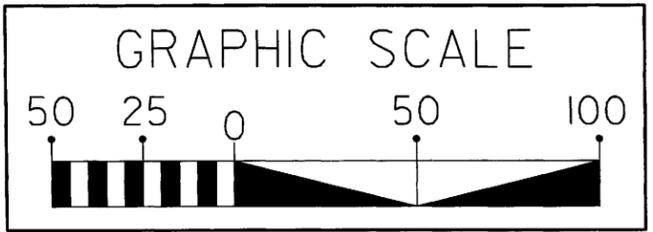
 DENOTES IMPACTS IN SURFACE WATER

PROJECT REFERENCE NO. B-4034	SHEET NO. 4-INSET
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**SITE 2**

**SITE 3**

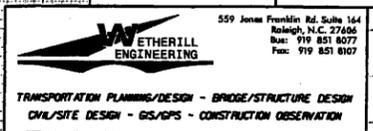


PROJECT: 33401.1.1 (B-4034)  
SITE 2 & 3

Permit Drawing  
Sheet 13 of 14

REVISIONS

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2/19/2009



**STRUCTURE HYDRAULIC DATA**

DESIGN DISCHARGE	= 1200	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 2441.40	FT
BASE DISCHARGE	= 1980	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2442.50	FT
OVERTOPPING DISCHARGE	= 1100	CFS
OVERTOPPING FREQUENCY	= 25 +/-	YRS
OVERTOPPING ELEVATION	= 2439.00	FT

BM#1 N 6479837954 E 8865107862  
EL = 2442.21  
-BL- STA.13+09 35' LEFT  
RAILROAD SPIKE SET IN 30' POPLAR  
-L- STA.16+47.34 (OFF 49.2652' LEFT)

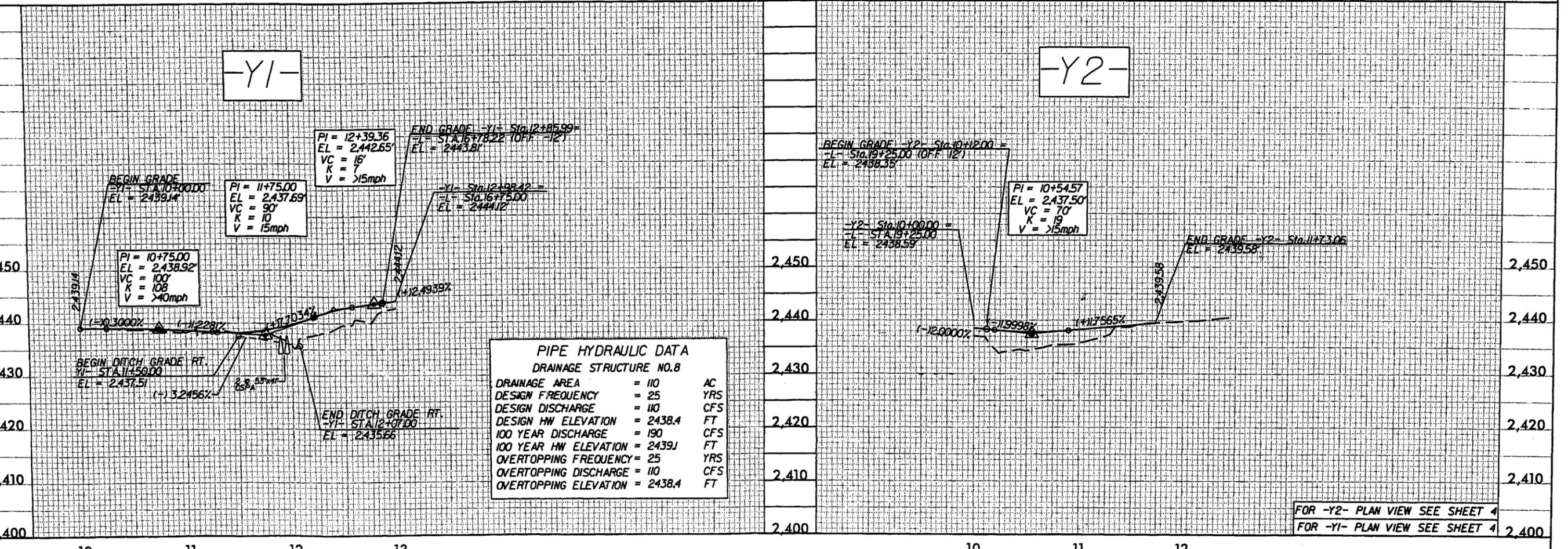
BM#2 N 648489.2496 E 886475.9051  
EL = 2430.35  
-BY- STA.5+55 17' LEFT  
RAILROAD SPIKE SET IN 1" SYCAMORE  
-L- STA.21+52.85 (OFF 83.4176' LEFT)

**PIPE HYDRAULIC DATA**  
DRAINAGE STRUCTURE NO.2

DRAINAGE AREA	= 0.2	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 0.71	CFS
DESIGN HW ELEVATION	= 2441.9	FT
100 YEAR DISCHARGE	= 0.84	CFS
100 YEAR HW ELEVATION	= 2441.9	FT
OVERTOPPING FREQUENCY	= >500	YRS
OVERTOPPING DISCHARGE	= 11	CFS
OVERTOPPING ELEVATION	= 2445.0	FT

\* NOTE: A DESIGN EXCEPTION IS REQUIRED FOR THE PROPOSED BRIDGE WIDTH AND CREST VERTICAL CURVE K VALUE FOR -L-.

FOR -L- PLAN VIEW SEE SHEET 4



**PIPE HYDRAULIC DATA**  
DRAINAGE STRUCTURE NO.8

DRAINAGE AREA	= 110	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 110	CFS
DESIGN HW ELEVATION	= 2438.4	FT
100 YEAR DISCHARGE	= 190	CFS
100 YEAR HW ELEVATION	= 2439.1	FT
OVERTOPPING FREQUENCY	= 25	YRS
OVERTOPPING DISCHARGE	= 110	CFS
OVERTOPPING ELEVATION	= 2438.4	FT

Permit Drawing  
Sheet 4 of 14

FOR -Y2- PLAN VIEW SEE SHEET 4  
FOR -Y1- PLAN VIEW SEE SHEET 4