

PROJECT SPECIAL PROVISION

(10-18-95)

Z-1

PERMITS

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<u>PERMIT</u>	<u>AUTHORITY GRANTING THE PERMIT</u>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Environmental Management, DENR State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by * are the responsibility of the department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *2012 Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such a manner as to not affect the waters or wetlands.



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
151 PATTON AVENUE
ROOM 208
ASHEVILLE, NORTH CAROLINA 28801-5006

REPLY TO
ATTENTION OF:

March 29, 2013

Regulatory Division

Action ID: SAW-2009-1449
NC DOT TIP No. R-2707 (Sections A and B)

North Carolina Department of Transportation
Dr. Gregory J. Thorpe
1598 Mail Service Center
Raleigh, North Carolina 27699

Dear Dr. Thorpe:

In accordance with your written request of July 2, 2012 and the ensuing administrative record, enclosed are two copies of a permit to discharge fill material into jurisdictional waters of the U.S. in association with the construction of a 19-mile new location, four lane divided highway with full control access, known as the Shelby Bypass, TIP no. R-2707, located north of the town of Shelby, in Cleveland County, North Carolina.

Sections R-2707 A and B are approximately 6.55 miles in length and will permanently impact 5,190 linear feet of jurisdictional stream channel and 4.05 acres of wetlands associated with the roadway construction. Temporary impacts associated with sections A and B total 0.06 acre of stream channel.

You should acknowledge that you accept the terms and conditions of the enclosed permit by signing and dating each copy in the spaces provided ("Permittee" on page 3). Your signature, as permittee, indicates that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit. All pages of both copies of the signed permit with drawings should then be returned to this office for final authorization. A self-addressed envelope is enclosed for your convenience.

This correspondence contains a proffered permit for the above described site. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR part 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 decision you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Division
Attn: Ms. Liz Hair Project Manager
69 Darlington Avenue
Wilmington, North Carolina 28403

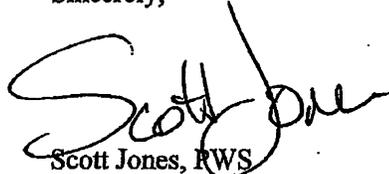
In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by May 28, 2013.

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

After the permit is authorized in this office, the original copy will be returned to you; the duplicate copy will be permanently retained in this office. If you have questions, please contact Ms. Liz Hair at the Asheville Regulatory Field Office, telephone 828-271-7980, extension 225.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our website at <http://per2.nwp.usace.army.mil/survey.html> and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

Sincerely,



Scott Jones, FWS
Chief, Asheville Regulatory Field Office

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OF PERMITS AND PERMITS AND PRELIMINARY JURISDICTIONAL DETERMINATION

Applicant: North Carolina Department of Transportation File Number: SAW-2009-1449 Date: March 29, 2013

Attached is:	See Section below
<input checked="" 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 type="checkbox"/> APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/> PRELIMINARY JURISDICTIONAL DETERMINATION	E

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 district 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.

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.

If you have questions regarding this decision and/or the appeal process you may contact:

**District Engineer, Wilmington Regulatory Division,
Attn: Ms. Liz Hair Project Mgr
USACE
151 Patton Avenue, Room 208
Asheville, NC 28801**

If you only have questions regarding the appeal process you may also contact:

**Mr. Jason Steele, Administrative Appeal Review Officer
CESAD-PDO
U.S. Army Corps of Engineers, South Atlantic Division
60 Forsyth Street, Room 10M15
Atlanta, Georgia 30303-8801
Phone: (404) 562-5137**

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:
---	-------	-------------------

For appeals on Initial Proffered Permits send this form to:

District Engineer, Wilmington Regulatory Division, Attn: Ms. Liz Hair Project Mgr, 69 Darlington Avenue, Wilmington, North Carolina 28403

For Permit denials, Proffered Permits and approved Jurisdictional Determinations send this form to:

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801
Phone: (404) 562-5137**

**U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form**

Permittee: North Carolina Department of Transportation
Project Name: R-2707 A Shelby Bypass

Action ID: SAW-2009-1449
County: Cleveland

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the appropriate ledger and provide a copy of the signed form to the Permittee and to the USACE Bank/In-Lieu Fee Program Manager. The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation* **8-digit HUC and Basin: 03050105, Broad River Basin**

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
1,489				0.43		

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements: **8-digit HUC and Basin: 03050105, Broad River Basin**

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
2,978				0.86		

Mitigation Site Debited: NC EEP

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCEEP, list NCEEP. If the NCEEP acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCEEP), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed by the mitigation Sponsor and USACE Project Manager. For questions regarding this form or any of the conditions of the permit authorization, contact the Project Manager at the address below.

USACE Project Manager: Liz Hair
 USACE Field Office: Asheville Regulatory Field Office
 US Army Corps of Engineers
 151 Patton Avenue, Room 208
 Asheville, North Carolina 28801-5006

Email:

USACE Project Manager Signature	February 26, 2013 Date of Signature
---------------------------------	--

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

**U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form**

Permittee: North Carolina Department of Transportation
Project Name: R-2707 B Shelby Bypass

Action ID: SAW-2009-1449
County: Cleveland

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the appropriate ledger and provide a copy of the signed form to the Permittee and to the USACE Bank/In-Lieu Fee Program Manager. The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation* **8-digit HUC and Basin: 03050105, Broad River Basin**

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
3,535				3.37		

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements: **8-digit HUC and Basin: 03050105, Broad River Basin**

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
7,070				6.74		

Mitigation Site Debited: NCEEP

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCEEP, list NCEEP. If the NCEEP acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor

Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCEEP), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

Comments/Additional Conditions:

This form is not valid unless signed by the mitigation Sponsor and USACE Project Manager. For questions regarding this form or any of the conditions of the permit authorization, contact the Project Manager at the address below.

USACE Project Manager: Liz Hair
 USACE Field Office: Asheville Regulatory Field Office
 US Army Corps of Engineers
 151 Patton Avenue, Room 208
 Asheville, North Carolina 28801-5006

Email:

USACE Project Manager Signature February 26, 2013
 Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>.

DEPARTMENT OF THE ARMY PERMIT

Permittee NC Department of Transportation – R-2707

Permit No. SAW-2009-01449

Issuing Office CESAW-RG-A

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: In order to facilitate construction of a 19-mile four lane divided highway with full control of access, known as the Shelby Bypass NC DOT TIP no. R-2707, located to the north of the town of Shelby, in Cleveland County, North Carolina.

Sections A and B: Permanent impacts to jurisdictional streams, wetlands, and ponds will be the result of roadway fill, the installation and/or replacement of pipes and culverts, and the placement of rip rap for bank stabilization. Total permanent impacts to jurisdictional waters of the U.S. are 5,190 linear feet of stream channels and 4.05 acres of wetlands. Temporary impacts include 0.06 acre of stream channel.

Sections C, D, and E: NC DOT's current design stage is preliminary, based on 25-foot slope stake limits and shows permanent impacts to wetlands of approximately 2.04 acres. Permanent impacts to jurisdictional streams total 16,034 linear feet. Additional impacts to open waters (ponds) total 2.43 acres. The permittee shall not commence any activity, including but not limited to, clearing, grubbing, excavation, filling of any stream or wetland, or rerouting of any stream channel until such time that the District Engineer has been provided a copy of a final design for Sections C, D, and E of the Shelby Bypass and the permittee has received written approval from the District Engineer that such work may commence.

Project Location: Located to the north of the town of Shelby, in Cleveland County, North Carolina.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **December 31, 2020**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit, Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

E. L. Lusk for Gregory J. Thome, PhD 4-3-13
 (PERMITEE) NC DEPARTMENT OF TRANSPORTATION (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

 (DISTRICT COMMANDER) STEVEN A. BAKER (DATE)
 COLONEL

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

 (TRANSFEE) (DATE)

SPECIAL CONDITIONS **Action ID: SAW-2009-1449**

Work Limits

- a) All work authorized by this permit must be performed in strict compliance with the attached plans dated 09/08/1999 (R-2707A) and 2/24/2012 (R-2707B), which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.
- b) The permittee shall not commence any activity, including but not limited to, clearing, grubbing, excavation, filling of any stream or wetland, or rerouting of any stream channel until such time that the District Engineer has been provided a copy of a final design for Sections C, D, and E of the Shelby Bypass and the permittee has received written approval from the District Engineer that such work may commence.
- c) Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.
- d) Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.
- * e) The permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Ms. Liz Hair, Asheville Regulatory Field Office prior to any active construction in waters or wetlands.
- * f) The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Asheville Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall provide the USACE, Asheville Regulatory Field Office, NCDOT Regulatory Project Manager, with a copy of the final plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the preconstruction meeting for a time when the USACE and North Carolina Division of Water Quality (NCDWQ) Project Managers can attend. The permittee shall invite the Corps and NCDWQ

Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.

Related Laws

- g) All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

Project Maintenance

- h) The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.
- i) Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.
- j) 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. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.
- k) The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).
- l) The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.
- m) During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

- n) No fill or excavation for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless it is included on the plan drawings and specifically authorized by this permit.
- o) The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

Enforcement

- * p) All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Asheville Regulatory Field Office, c/o Ms. Liz Hair, Field office address, and by telephone at: 828-271-7980. The Permittee shall reference the following permit number, SA W-2009-01449, on all submittals.
- * q) Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.
- * r) The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Asheville Regulatory Field Office prior to any active construction in waters or wetlands.
- * s) Prior to commencing construction within jurisdictional waters of the United States for any portion of the proposed project, the permittee shall forward the latest version of project construction drawings to the Corps of Engineers, Asheville Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.
- t) A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.
- u) Measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. 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 gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

- v) Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. 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 bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Destabilizing 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 be issued if it can be demonstrated that the proposal would result in the least impacts to the aquatic environment.
- w) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands.
- x) The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.

Mitigation

- * y) In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

Threatened and Endangered Species

- z) NCDOT shall implement the 8 conservation measures listed in US FWS November 9, 2012 Biological Opinion for this project, and shall reinitiate consultation with the US Fish and Wildlife Service under Section 7 of the Endangered Species Act for Sections C and D, and E when they are scheduled for construction.

R-2707 Project Commitments

- * aa) The following Project Commitments (Green Sheets) included in the R-2707 2008 FEIS and Record of Decision (Appendix C) are hereby incorporated as Special Conditions of this permit: PDEA, Highway Design Branch, Division 12: 1) Brushy Creek site: Trees will be cut at the base to create root wads to help stabilize the stream banks. During final design, the bridges will be designed with sufficient length to allow for wildlife passage and design will be coordinated with USFWS. Deck drainage will not be released directly into the waterway;

- * 2) First Broad River site: A temporary work bridge/causeway will be constructed. A drainage system will be utilized on the bridge for stormwater runoff. Coordination will be conducted with the local water supply administrator. Hazardous spill basins will be utilized. Vegetation will be left intact/in place as much is practicable. Deck drainage will not be released into the waterway; 3) Stream 4-13 and DFHL sites 10, 11, and 12: During culvert design and construction, consideration will be given to minimizing disturbance at these sites including minimizing clearing, minimal rip rap on the stream banks, and using native vegetation to revegetate the stream banks; 4) Impacts to cemeteries will be avoided and/or minimized to the extent practicable during final design phase. If required, graves will be relocated according to state guidelines; 5) Hamilton-McBrayer Farm: Along the existing portion of US 74 at the Hamilton-McBrayer Farm, widening will be to the north (away from the property). A service road will be added, extending from Broadway Road, all within existing right-of-way, to service the trailers in the mobile home park to the north and west of the Hamilton-McBrayer Farm; 6) Wildlife passage: During final design, the bridges over Brushy Creek will be designed with sufficient length to allow for wildlife passage. This will be coordinated with the USFWS during design.

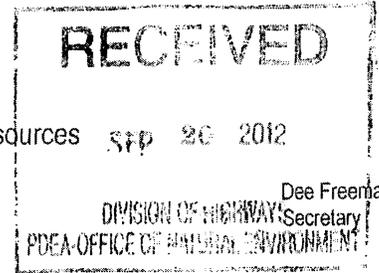
R-18



North Carolina Department of Environment and Natural Resources

Division of Water Quality
Charles Wakild, P.E.
Director

Beverly Eaves Perdue
Governor



September 18, 2012

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

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with
ADDITIONAL CONDITIONS for Proposed construction of US 74 Shelby Bypass in Cleveland County,
Federal Aid Project No. NHF-74(14), State Project No. 8.1801001, TIP # R-2707.
NCDWQ Project No. 20120673 ver. 1.

Dear Dr. Thorpe:

Attached hereto is a copy of Certification No. 3941 issued to The North Carolina Department of Transportation (NCDOT) dated September 18, 2012.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles Wakild".

Charles Wakild
Director

Attachments

cc: Liz Hair, US Army Corps of Engineers, Asheville Field Office
Trish Simon, Division 12 Environmental Officer
Travis Wilson, NC Wildlife Resources Commission
Beth Harmon, Ecosystem Enhancement Program (if applicable)
Alan Johnson, NCDWQ Mooresville Regional Office
Jeff Hemphill, NCDOT Natural Environment Unit
File Copy

Transportation and Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-807-6492
Internet: www.ncwaterquality.org

An Equal Opportunity / Affirmative Action Employer

One
North Carolina
Naturally

401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (NCDWQ) Regulations in 15 NCAC 2H .0500 . This certification authorizes the NCDOT to impact 6.04 acres of jurisdictional wetlands, and 21653 linear feet of jurisdictional streams Cleveland County. The project shall be constructed pursuant to the application dated received July 11, 2012. The authorized impacts are as described below:

Section A Stream Impacts in the Broad River Basin

Site	Permanent Impact to Intermittent Stream (linear ft)	Temporary Impact to Intermittent Stream (linear ft)	Riprap Stabilization to Intermittent Stream (linear ft)	Permanent Impact to Perennial Stream (linear ft)	Temporary Impact to Perennial Stream (linear ft)	Riprap Stabilization to Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	0	0	0	185	20	20	225	205
2	57	16	0	0	0	0	73	0
3	64	6	12	0	0	0	82	0
4	0	0	0	290	37	12	339	302
5	0	0	0	0	0	17	17	0
6	290	28	12	0	0	0	330	302
7	318	20	0	0	0	0	338	318
8	19	19	0	0	0	0	38	0
9	0	0	0	266	28	0	294	266
10	0	0	0	0	0	8	8	0
Total	748	89	24	741	85	57	1744	1393

Total Stream Impact for Section A: 1744 linear feet

Section B Stream Impacts in the Broad River Basin

Site	Permanent Impact to Intermittent Stream (linear ft)	Temporary Impact to Intermittent Stream (linear ft)	Riprap Stabilization to Intermittent Stream (linear ft)	Permanent Impact to Perennial Stream (linear ft)	Temporary Impact to Perennial Stream (linear ft)	Riprap Stabilization to Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	0	0	0	397	61	11	469	408
2	15	0	0	0	0	0	15	0
3	386	18	15	0	0	0	419	401
4	0	0	0	330	20	15	365	345
5	0	0	0	585	31	18	634	603
6	0	0	0	245	21	15	281	260
7	5	10	0	0	0	0	15	0
8	0	0	0	17	0	0	17	0
9	0	0	0	568	23	11	602	579
11	0	0	0	440	10	0	450	440
12	547	61	0	0	0	0	608	547
Total	953	89	15	2582	166	70	3875	3583

Total Stream Impact for Section B: 3875 linear feet

Preliminary Stream Impacts for Project:

Section C: 7274 linear feet

Section D: 5916 linear feet

Section E: 2844 linear feet

Section A Wetland Impacts in the Broad River Basin

Site	Permanent Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Total Wetland Impact (ac)	Wetland Impacts Requiring Mitigation (ac)
5	0.28	0.03	0.04	0.34	0.34
7	0.07	0	0.01	0.08	0.08
Total	0.35	0.03	0.05	0.43	0.43

Total Wetland Impact for Section A: 0.43 acres.

Section B Wetland Impacts in the Broad River Basin

Site	Permanent Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Total Wetland Impact (ac)	Wetland Impacts Requiring Mitigation (ac)
6	0.01	0	<0.01	0.01	0.02
7	3.29	0	0.25	3.54	3.54
8	0.05	0	0	0.05	0.05
11	0.01	0	0	0.01	0.01
12	0.01	0	0	0.01	0.01
Total	3.37	0	0.25	3.62	3.62

Total Wetland Impact for Section B: 3.62 acres.

Preliminary Wetland Impacts for Project:

Section C: 0.92 acres

Section D: 0.4 acres

Section E: 0.67 acres

The application provides adequate assurance that the discharge of fill material into the waters of the Broad River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received July 11, 2012. Should your project change, you are required to notify the NCDWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Conditions of Certification:

- * 1. When final design plans are completed for R-2707 Sections C, D, and E, a modification to the 401 Water Quality Certification shall be submitted with fees to the NC Division of Water Quality. Final designs shall reflect all appropriate avoidance, minimization, and mitigation for impacts to wetlands, streams, and other surface waters. No construction activities that impact any wetlands, streams, or surface waters in R-2707 Sections C, D, or E shall begin until after the permittee applies for, and receives a written modification of the 401 Water Quality Certification from the NC Division of Water Quality.
- * 2. Compensatory mitigation for impacts to 4.05 acres of wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands 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 July 3, 2012 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

- * 3. Compensatory mitigation for 4976 linear feet of impact to 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 July 3, 2012 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.
- * 4. Two copies of the final construction drawings shall be furnished to NCDWQ (one to Central Office and another to the Mooresville Regional Office) prior to the pre-construction meeting. The permittee shall provide written verification that the final construction drawings comply with the permit drawings contained in the application dated received July 22, 2012. Any deviations from the approved drawings are not authorized unless approved by the NC Division of Water Quality.
- 5. 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.
- 6. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species.
- 7. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*.
- 8. 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 first.
- 9. 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.
- 10. All pile driving or drilling activities in surface waters shall be enclosed in turbidity curtains unless otherwise approved by NCDWQ in this certification.
- 11. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams, 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.
- 12. If multiple pipes or barrels are required, they 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.
- 13. Riprap 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.
- 14. For all streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species.
- 15. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation.

16. For any areas of the project draining to Water Supply Critical Area waters (WS CA), the permittee shall use "Design Standards in Sensitive Watersheds" [15A NCAC 4B.0124(a)-(e)]. However, due to the size of the project, NC DOT 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 shall be planted on all bare soil within 15 business days of ground disturbing activities to provide erosion control.
17. 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.
18. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S.
19. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.
20. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
- * 21. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
22. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
23. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
24. 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.
25. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
26. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
27. 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.
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. 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.
30. The outside 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 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.

32. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.

- * 33. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify NCDWQ when all work included in the 401 Certification has been completed.

34. Native riparian vegetation (i.e. trees and shrubs native to your geographic region) must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction.

35. 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.

36. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:

- a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
- b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
- d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

37. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification.

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 you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission.

The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

A copy of the petition must also be served on DENR as follows:

Mr. William Cary, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center

This the 18th day of September 2012

DIVISION OF WATER QUALITY



 Charles Wakild
Director

WQC No. 3941



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Asheville Field Office
 160 Zillicoa Street
 Asheville, North Carolina 28801

November 9, 2012

Mr. John F. Sullivan, III
 Division Administrator
 Federal Highway Administration
 310 New Bern Avenue, Suite 410
 Raleigh, North Carolina 27601

Dear Mr. Sullivan:

Subject: Amendment to the Biological Opinion for the Proposed US 74 Shelby Bypass in
 Cleveland County, North Carolina, Federal Aid No. NHF-74(14), State Project
 No. 8.1801001, TIP No. R-2707

This document transmits the U.S. Fish and Wildlife Service's (Service) amended biological opinion (Opinion) based on our review of updated information for the proposed US 74 Shelby Bypass in Cleveland County, North Carolina, and its effects on the federally threatened dwarf-flowered heartleaf (*Hexastylis naniflora*) in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543) (Act). We received your October 16, 2012, request for reinitiation of formal consultation on October 17, 2012. This amendment is based on information provided in the October 16, 2012, amendment package and addresses specific changes from the 2004 Opinion.

The reinitiation of consultation was requested for the following reasons: (1) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in the Opinion and (2) the agency action has been modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the Opinion. More than 8 years have elapsed since the original Opinion was rendered. Resurveys of plant populations, coupled with more refined project plans, have changed the impacts considered in the 2004 Opinion. In addition, conservation of plants and habitat pledged within the rights-of-way (ROW) was reexamined since the North Carolina Department of Transportation (NCDOT) has not purchased the ROW or begun construction activities on this project.

FHWA-NC DIVISION	
REC'D	NOV 20 2012
DIV ADMIN	
ASST DIV ADMIN	
CONTRACTS	ENG COORD
QUAL CONTROL	
TRAINING	
STUDY/REPLENISH	
PERMITS	
FIN ASST	FIN ASST
PLANNING	COMP SPEC
PERMITS/LEADS	
PL-1	PL-2
PL-3	ARCLTY SPEC
CONTRACT	
SEC - STATE TEAM LEADER	
A-1	A-2
A-3	ROW OFFICR
ENV PROG SPEC	
ROW TEAM LEADER	
TE-1	IE-2
IE - SAFETY	P&M/ENG
ATTN/PROG MGR	
TRASH	

AMENDMENT TO THE 2004 BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The NCDOT proposes to construct the Shelby Bypass (Bypass) to bypass the Town of Shelby, in Cleveland County, North Carolina, from existing US 74 west of Shelby to existing US 74 east of Shelby. The Bypass is proposed to be a four-lane divided, full control of access facility, primarily on new location to the north and east of Shelby, for about 18 miles.

Although the Bypass was studied in total, the project has been divided into five sections (A-E) for the purposes of funding and construction. At the current time, sections A, B, and C are programmed, and sections D and E are post-year (Table 1). Project details are much more refined for sections A-C than they were in 2004.

Table 1. Shelby Bypass Sections and Dates.

Section of R-2707	Location of Section	Length (miles)	Right-of-Way Date	Let Date
A	Existing US 74 (West Dixon Blvd) from west of SR 1162 (Peachtree Rd) to west of SR 1314 (Hoyle Rd)	3.93	June 30, 2010	February 2013 (AA Section) and August 2013 (AB Section)
B	West of SR 1314 (Hoyle Rd) to west of NC 226 (Polkville Rd)	2.62	July 15, 2011	August 2013
C	West of NC 226 (Polkville Rd) to west of NC 150 (Cherryville Rd)	5.34	December 21, 2012	January 15, 2019
D	West of NC 150 (Cherryville Rd) to existing US 74 (East Dixon Blvd) west of SR 2238	4.09	Post-Year	Post-Year
E	Existing US 74 (East Dixon Blvd) from west of SR 2238 to west of SR 1001 (Stoney Point Rd)	2.64	Post-Year	Post-Year

Conservation Measures

The following list of conservation measures have been updated primarily to reflect changes in the plant sites receiving protection in the project ROW. Other minor changes also are included. This list supersedes the previous list of measures in the 2004 Opinion.

1. Pre-construction meeting - A Service biologist will attend the preconstruction meeting to discuss (a) the importance of avoiding dwarf-flowered heartleaf plants and (b) other environmental commitments that are a part of the project.
2. Dwarf-flowered heartleaf protective barriers - Before construction activities begin at dwarf-flowered heartleaf Sites 7, 10, 11, 15, 16, 20, 22, 24, 25, 28, 31, 32, and 49, the portion of occupied dwarf-flowered heartleaf habitat remaining intact from construction activities (i.e., adverse direct effects and indirect effects from drainage activities) will be protected by placing orange safety fencing or otherwise hardened barriers with

appropriate signage along the construction limits. The signed fencing or barriers will protect the remaining plants from accidental disturbance during construction. The portions of dwarf-flowered heartleaf sites that are protected will remain on the project's design plans throughout construction activities and will be labeled on the plans as "sensitive areas."

3. On-site protection - The portions of dwarf-flowered heartleaf Sites 7, 10, 11, 15, 16, 20, 22, 24, 25, 28, 31, 32, and 49 not lost from project construction will be protected in perpetuity. A protective buffer of up to 400 feet out from the limits of preserved occupied dwarf-flowered heartleaf habitat will be placed around these plant sites and also preserved in perpetuity. Final buffer widths will vary for each site. Design Plan Sheet Nos. 16 - 26 of 26 in the amended Biological Assessment (BA) depict the area of occupied dwarf-flowered heartleaf habitat to be protected and the approximate limits of the protective buffers. Final site configurations, including buffer limits, will be mapped and submitted to the Service when ROW acquisitions are complete.
4. Conservation easements - The NCDOT will attempt to enter into conservation easements with access points, where appropriate, for all or portions of dwarf-flowered heartleaf Sites 1, 8, 12, 13, 14, 26, 29, 33, 34, 35, 43, and 48. The portions of Sites 25 and 32 remaining intact upon project construction and not already protected by ROW extensions will also be pursued for potential conservation easements. Written documentation will be provided to the Service and North Carolina Natural Heritage Program once easements are successfully obtained at any of these sites.
5. On-site monitoring - For on-site conservation sites entered into a secured protective ownership, either through ROW extension via settlement/condemnation or through a conservation easement with a landowner, the NCDOT will quantitatively and qualitatively monitor occupied dwarf-flowered heartleaf habitat preserved in perpetuity. Monitoring efforts will begin with the acquisition of pre-construction/easement acquisition environmental baseline data. The preserved sites will then be monitored post-construction/easement acquisition once every 2 years over a 6-year period to ensure the protection, and detect trends in numbers, of dwarf-flowered heartleaf plants that may or may not be due to project construction. Monitoring reports detailing the monitoring results and any appropriate management activities undertaken will be submitted to the Service at the end of each monitoring period.
6. Management of nonnative, invasive species - For on-site conservation sites entered into a secured protective ownership, either through ROW extension via settlement/condemnation or through a conservation easement, adverse effects from biological pollution can be avoided and/or minimized on a case-by-case basis through effective efforts to manage the growth of nonnative, invasive species within the areas of occupied dwarf-flowered heartleaf habitat that is preserved.
7. Future anticipated adverse effects - The NCDOT has designated an expected 50-foot-wide greenway corridor through dwarf-flowered heartleaf Sites 12, 14, 22, 23, 25, and 26. Future anticipated adverse effects (not counting biological pollution)

associated with the planned greenway's footprint must remain excluded from the area of occupied dwarf-flowered heartleaf habitat that the NCDOT can protect at these sites.

8. Broad River Greenway Conservation Area - The NCDOT entered into a conservation easement on July 18, 2008, with the Broad River Greenway, Inc., of approximately 1,000 acres of land referred to as the Broad River Greenway Conservation Area (BRGCA). In accordance with the stated measures of the BRGCA's Conservation Plan as well as additional monitoring requirements and guidelines provided by the Service, the NCDOT will quantitatively and qualitatively monitor occupied dwarf-flowered heartleaf habitat within the BRGCA. Monitoring efforts began with the acquisition of environmental baseline data prior to obtaining the conservation easement. The BRGCA is then to be monitored once every 3 years over a 9-year period to ensure the protection, and detect trends in numbers, of dwarf-flowered heartleaf plants over time. Monitoring reports detailing the monitoring results and any appropriate management activities undertaken will be submitted to the Service at the end of each monitoring period.

EFFECTS OF THE ACTION

As depicted in Table 2, changes in the effects of the proposed action are relatively minor. The total number of plants has increased by 24 percent, mostly on the BRGCA. Acres of habitat have decreased only slightly.

Table 2. Impacts 2004 vs. 2012.

Action Area or Effects	As Noted in the 2004 BA and BO		As Noted in this 2012 Amended BA	
	Occupied DFHL Habitat (ac)*/ **	Number of DFHL Plants	Occupied DFHL Habitat (ac)*/ **	Number of DFHL Plants
Preferred Alternative Corridor and Adjoining Areas	27.41	16,405	34.00	18,177
Broad River Greenway Conservation Area	54.26***	10,796	54.13	15,750
Action Area (Total)	81.67	27,201	88.13	33,927
Direct Effects	4.1	3,337	4.13	3,060
Indirect Effects	7.2	5,524	3.65	2,267
Cumulative Effects	2.4	1,460	9.24	4,458
Adverse Effects (Total)	13.6	10,321	17.03	9,785
On-site Conservation	11.2	4,798	9.28	4,104
Off-site Conservation	54.26***	10,796	54.13	15,750
Beneficial Effects (Total)	65.46	15,594	63.41	19,854

*For conservation areas, excludes any protective buffer or conservation easement areas not containing dwarf-flowered heartleaf plants.

**Acreage totals rounded to nearest 0.01 acre and, consequently, may not equate because of rounding.

***The BA and Opinion of 2004 both incorrectly reported approximately 47 acres of occupied dwarf-flowered heartleaf habitat occurring within what is now referred to as the BRGCA.

The following specifics explain the changes in adverse and beneficial effects to occupied habitat and numbers of plants from the 2004 Opinion:

1. More refined preliminary roadway design plans are used to depict adverse and beneficial effects at a greater precision and accuracy;
2. The number of plants within the action area is greater because field surveys were updated;
3. More refined preliminary roadway design plans now account for adverse indirect effects caused by drainage impacts anticipated to occur within areas of occupied habitat situated outside of the project's proposed ROW but within areas designated in a drainage easement;
4. Indirect effects via biological pollution from the growth of nonnative, invasive species is modified to exclude those areas of occupied habitat situated in the 400-foot biological pollution zone with an existing low threat from such species;
5. Portions of occupied habitat where the area of indirect effects from biological pollution intersects the area proposed for on-site preservation through fee simple ROW extension are now depicted as actually incurring those adverse effects before any management activities on nonnative, invasive species are implemented;
6. Occupied habitat situated within assumed areas of a planned greenway are excluded from areas to be preserved on-site in perpetuity; and
7. Occupied habitat and associated protective buffer areas to be preserved on-site in perpetuity are analyzed down to a more detailed parcel level rather than at a less detailed occurrence level.

CONCLUSION

Total rangewide numbers of dwarf-flowered heartleaf plants and known occurrences have not changed significantly since the issuance of the 2004 Opinion. Given that the total negative impacts in the action area have remained virtually the same as in 2004, the overall impact to the dwarf-flowered heartleaf across its range has not changed. While the number of plants protected in ROW on the project has decreased slightly, numbers of plants on the conservation site have increased since 2004. The updated data provided has helped to refine the impacts analyzed in 2004 with the overall result being very little change.

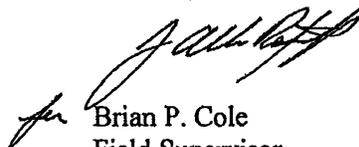
After reviewing the current status of the dwarf-flowered heartleaf, the environmental baseline for the action area, the effects of the proposed highway project, the cumulative effects, and the proposed conservation measures, it is our biological opinion that the project as proposed is not likely to jeopardize the continued existence of the dwarf-flowered heartleaf. No critical habitat has been designated for this species; therefore, none will be affected.

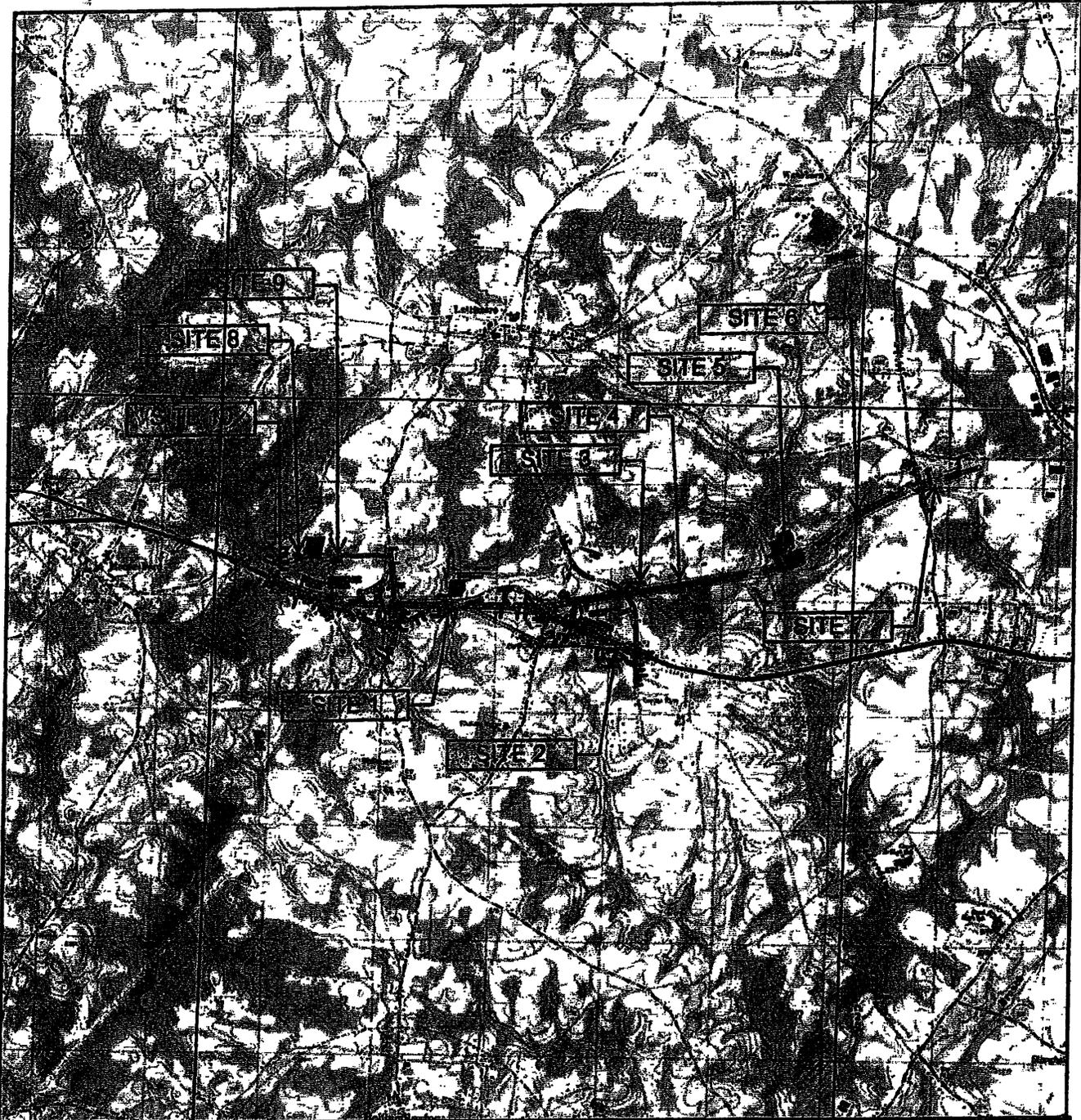
REINITIATION/CLOSING STATEMENT

This concludes formal consultation on the action outlined in your October 16, 2012, request for reinitiation of formal consultation. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over an action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this Opinion, (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this Opinion, or (4) a new species is listed or critical habitat is designated that may be affected by the action.

If you have any questions concerning this Opinion, please contact Ms. Marella Buncick of our staff at 828/258-3939, Ext. 237, or me, Ext. 223. We have assigned our Log No. 4-2-95-031 to this project; please refer to it in any future correspondence concerning this project.

Sincerely,


for Brian P. Cole
Field Supervisor



TOPO MAP
SCALE 1" = 4000'

NCDOT

**DIVISION OF HIGHWAYS
CLEVELAND COUNTY
PROJECT: R-2707A**

**US 74 - SHELBY BYPASS
FROM WEST OF SR 1162
(PEACHTREE ROAD)
TO WEST OF SR 1313
(WASHBURN SWITCH ROAD)**

SHEET OF 04/17/12

Permit Drawing
Sheet 1 of 35

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS						
			Permanent Fill in Wetlands (ac)	Temp. Fill in Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)	
1	58+07 TO 59+13LT -L-58+34LT	2 @ 8'x8' RCBC BANK STABILIZE						0.05	<0.01	185	20		
2	-SRV2- 15+78 TO 15+83 RT	48" RCP						0.01	<0.01	57	16		
3	-L- 114+11 LT TO 116+70 RT	36" RCP IV BANK STABILIZE						0.01	<0.01	64	6		
4	-L-127+10 LT TO 127+51 RT	36" RCP/36" CSP BANK STABILIZE						0.05	<0.01	290	37		
5	-L-159+60LT TO 160+28 RT -L-157+60LT -L-156+55LT	ROADWAY FILL BANK STABILIZE LATERAL DITCH	0.28		0.02	0.02				17			
6	-L- 182+12 TO 183+34 LT	42" LRPD DESIGN BANK STABILIZE			0.01	0.01		0.03	<0.01	290	28		
7	-L- 207+27LT TO 208+24RT -L- 208+18 RT	2 @ 36" RCP BANK STABILIZE	0.07			0.01		0.03	<0.01	318	8		
8	-SR6 18+36 TO 18+47 LT	30" RCP						<0.01	<0.01	19	19		
9	-SR6- 28+48 RT TO 31+00 LT	36" RCP OPEN CHANNEL						0.01	0.01	119	28		
10	-SR6 11+52 RT	BANK STABILIZE						0.02	0.01	147	28		
TOTALS:			0.35	0.00	0.03	0.05	0.00	0.20	0.03	1570	173	0	

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
COUNTY
WBS - 34497.1.2 (R-2707A)
SHEET

PROPERTY OWNERS

<u>PARCEL</u>	<u>OWNER NAME</u>	<u>ADDRESS</u>
28	JAMES STEPHEN CORNWELL	117 WESTLEE LATTIMORE NC 28089-0127
91	CHURCH OF GOD-LOUIS GRADY DAVIS-TRUSTEE	PO BOX 1986 SHELBY NC 28151-1986
34	HAMRICK BROTHERS INC.	PO BOX 802 BOILING SPRINGS NC 28017-0802
37	MARY JONES PARNELL	1038 RACE PATH CHURCH ROAD ELLENBORO NC 28040
41	JAMES A. BLACK II	2670 TOWERY ROAD SHELBY NC 28150-9157
42	HOWARD VICTOR BOWEN	3760 ROBERT RIDINGS SHELBY NC 28150

N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CLEVELAND COUNTY
 PROJECT:44971.2 (R-2707A)
 US 74 (SHELBY BYPASS) FROM WEST
 OF SR 1162 (PEACHTREE ROAD) TO
 WEST OF SR 1513
 (WASHBURN SWITCH ROAD)
 SHEET 1 OF 2 06/21/11

PROPERTY OWNERS

<u>PARCEL</u>	<u>OWNER NAME</u>	<u>ADDRESS</u>
44	MARIE ELAINE CULBERSON	131 RODEO DRIVE DALLAS NC 28034
43	ROBERT PERRY MCSWAIN	3641 TOWERY ROAD SHELBY NC 28150
50	LETHA RAY BEAVER	304 PLATO LEE ROAD SHELBY NC 28150
49	JOHN ROBERT MCBRAYER	4 YATES MCBRAYER DRIVE SHELBY NC 28152-1045
48A	ROBERT FRANCIS BODWELL SR.	408 PLATO LEE ROAD SHELBY NC 28150
48	MALCOLM KEITH & MARIE BEAVER	330 PLATO LEE ROAD SHELBY NC 28450-7037
12	JOHN JASON HUNT	138 PEACHTREE ST. LATTIMORE NC 28089-0277

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

CLEVELAND COUNTY
PROJECT: 34497.1.2 (R-2707A)

US 74 (SHELBY BYPASS) FROM WEST
OF SR 1162 (PEACHTREE ROAD) TO
WEST OF SR 1313
(WASHBURN SWITCH ROAD)

SHEET 2 OF 2 06/21/11

STATE	N.C.
PROJECT NO.	R-2707A
DATE	2/27/73
DESIGNER	NHR-ZARBA
CHECKER	
APPROVED	

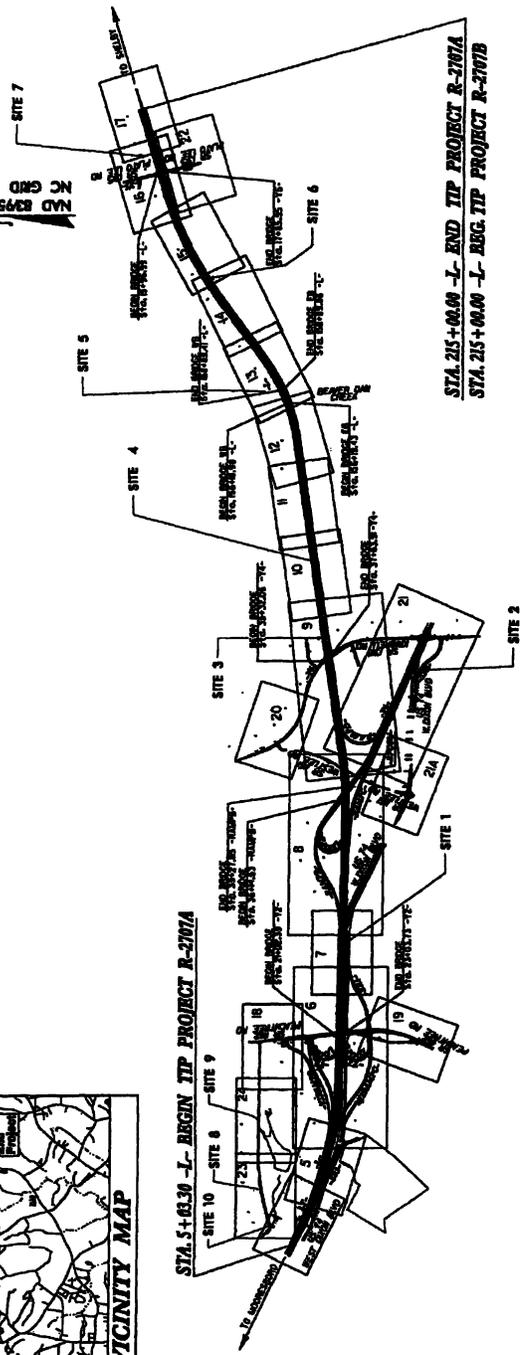
PERMIT DRAWINGS
WETLAND AND
STREAM IMPACTS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CLEVELAND COUNTY

LOCATION: US 74 (SHILBY BYPASS) FROM WEST OF SR 1162
(PEACHTREE ROAD) TO WEST OF SR 1313
(WASHBURN SWITCH ROAD)
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURES



See Sheet 1-A For Index of Sheets



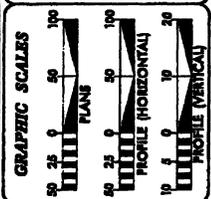
CLEARING ON THIS PROJECT SHALL BE
PERFORMED TO THE STANDARDS
BY METHOD III

THIS IS A FULL CONTROLLED-ACCESS PROJECT
WITH ACCESS BEING LIMITED TO INTERCHANGES

STA 25+00.00 -L- END TIP PROJECT R-2707A
STA 25+00.00 -L- REG. TIP PROJECT R-2707B

TIP R-2707A

CONTRACT:



DESIGN DATA

ADT 2002	= 24,000
ADT 2025	= 45,100
DH-V	= 12 %
D	= 60 %
T	= 14 %
V	= 70 MPH

* TST 8% DUAL 6%

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT R-2707A	= 1.977 miles
LENGTH OF STRUCTURE TIP PROJECT R-2707A	= 0.648 miles
TOTAL LENGTH TIP PROJECT R-2707A	= 2.625 miles

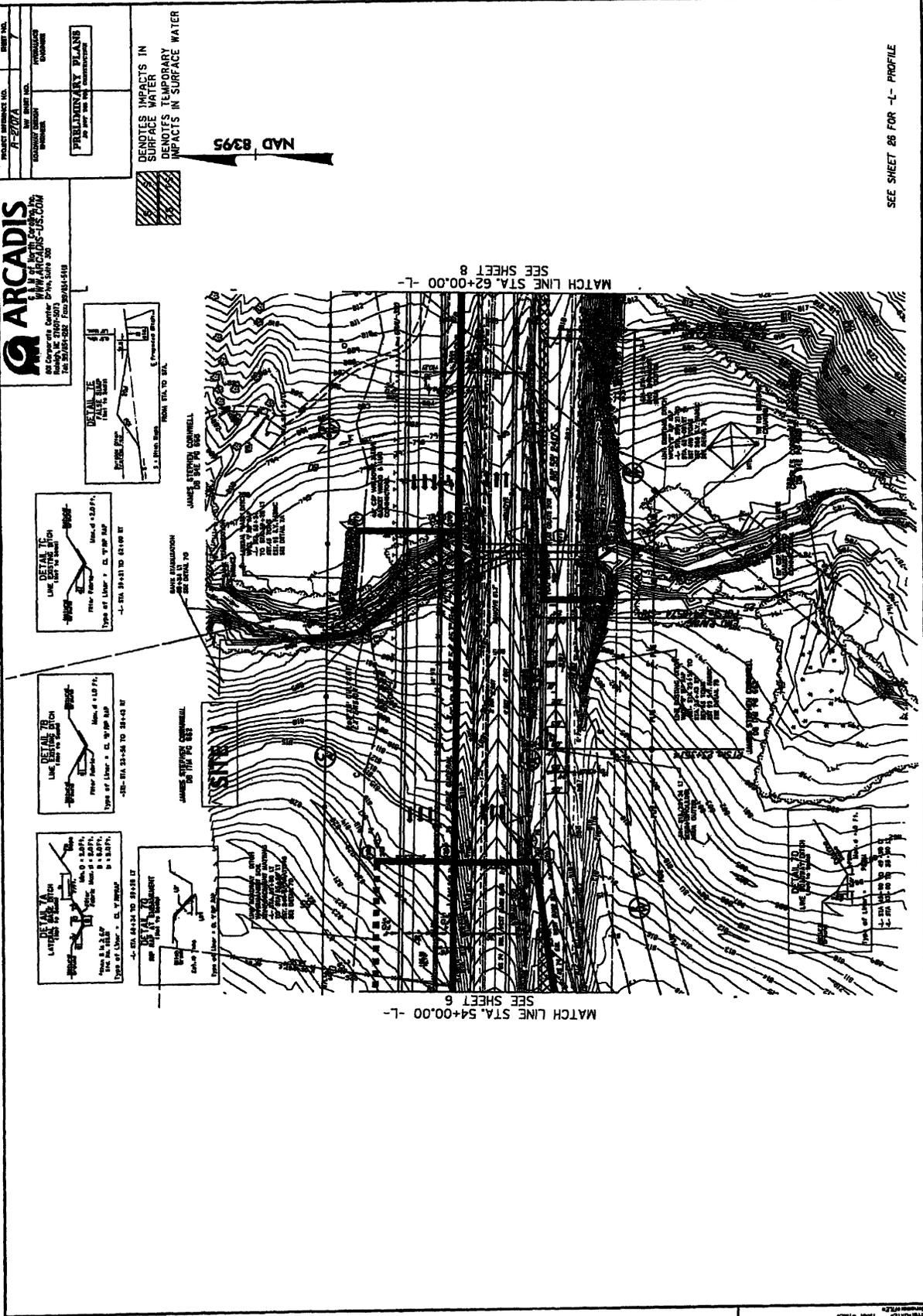
FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SECTION OF WAT IMPACTS

ARCADIS
INCORPORATED
1000 W. WILSON ST.
Raleigh, NC 27601

PROJECT ENGINEER: STEVE SMALLWOOD, P.E.
LEADING DATE:

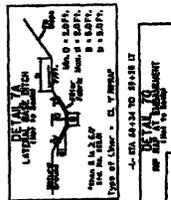
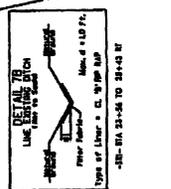
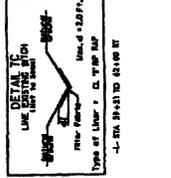
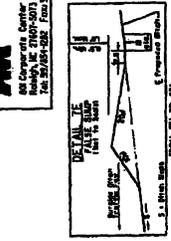
ROADWAY ENGINEER	DATE
STRUCTURAL ENGINEER	DATE
TRANSPORTATION ENGINEER	DATE
WETLAND AND STREAM IMPACTS ENGINEER	DATE

INCOMPLETE PLANS
PERMIT DRAWINGS
PRELIMINARY PLANS
NO CONTRACT



ARCADIS
 60 Corporate Center
 10000 Old Branch Rd
 Raleigh, NC 27607-0001
 TEL: 919/275-1500 FAX: 919/275-1510

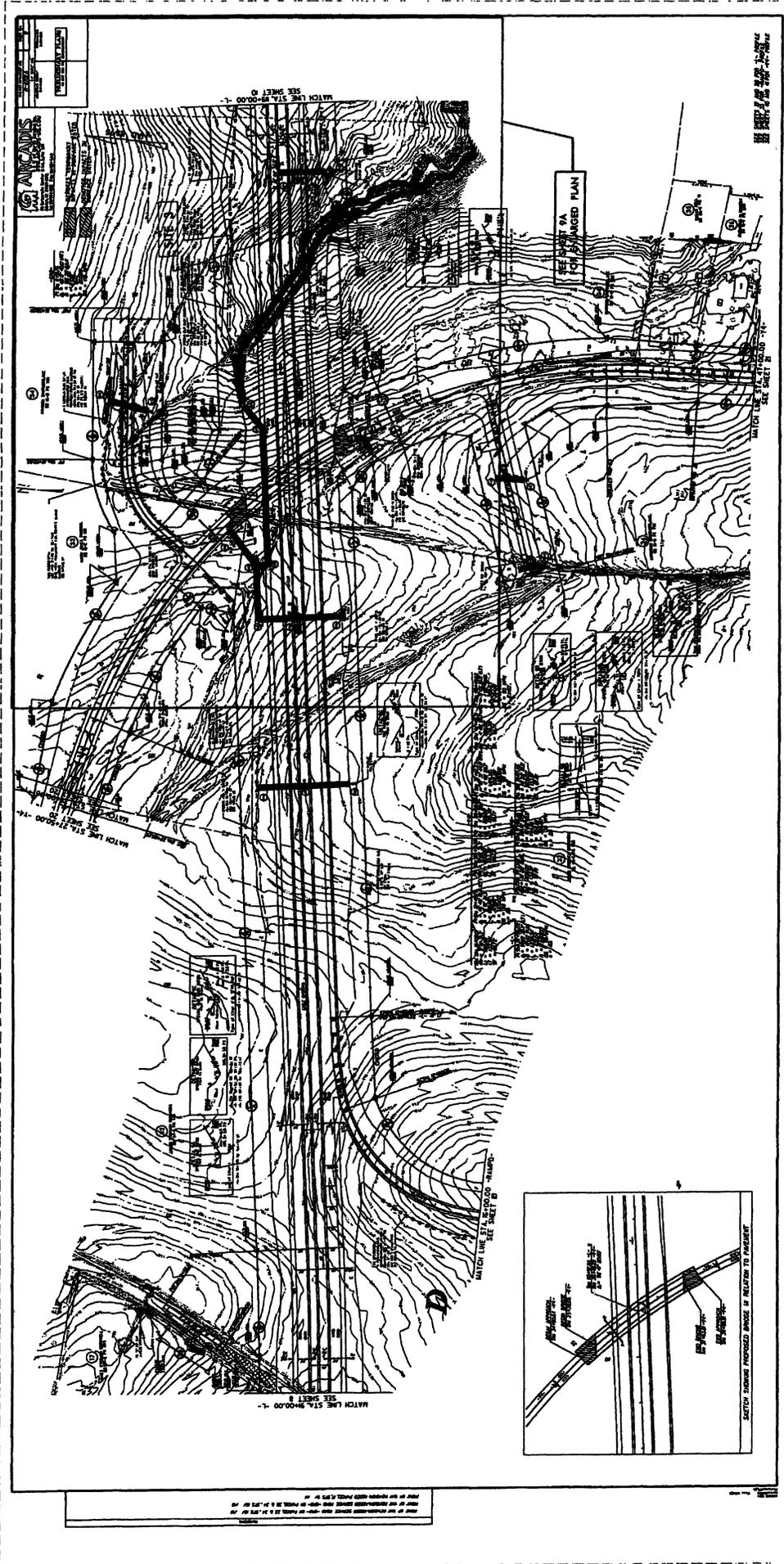
PROJECT NUMBER: 7-2077
 SHEET NO. 25
 PRELIMINARY PLANS
 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

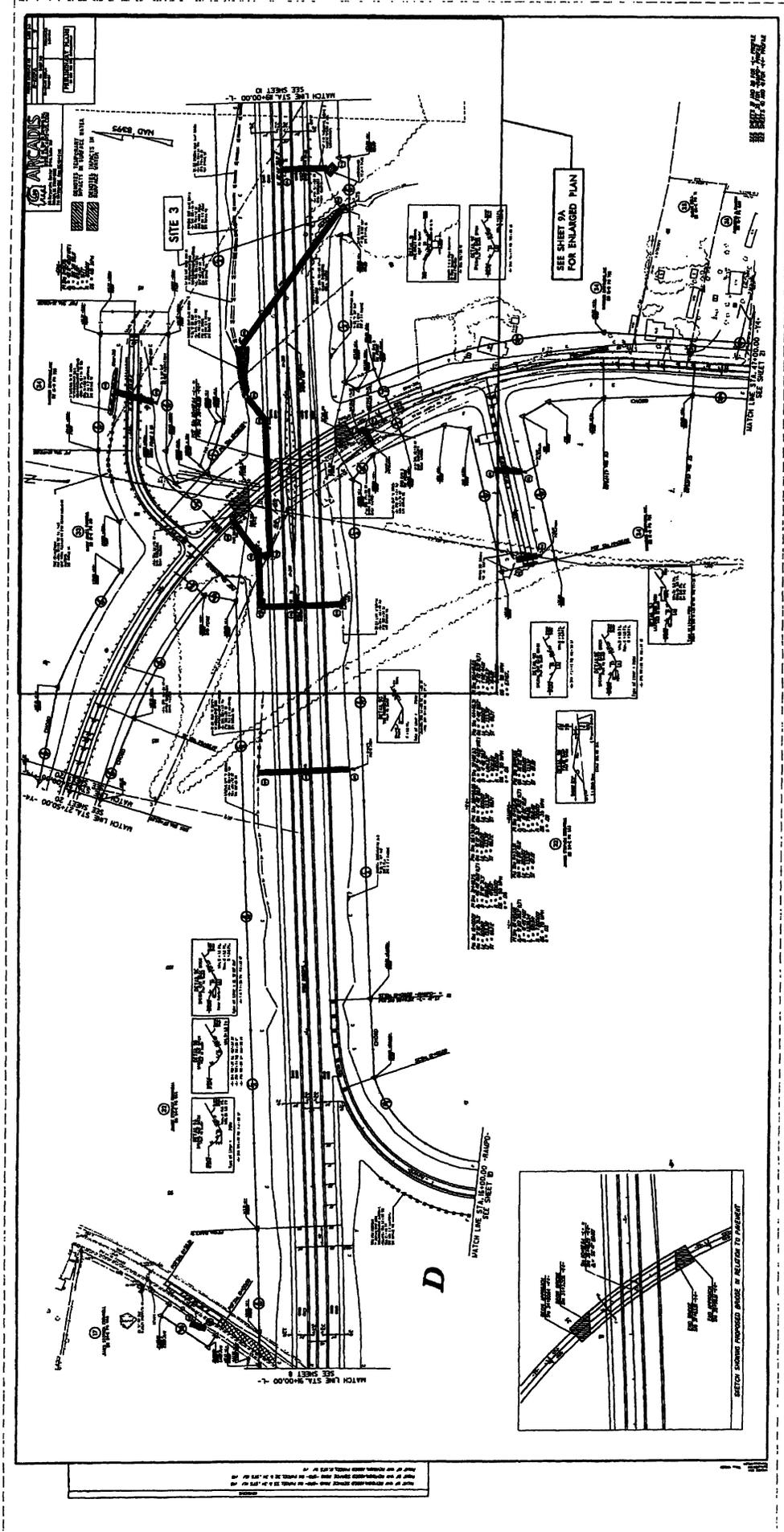


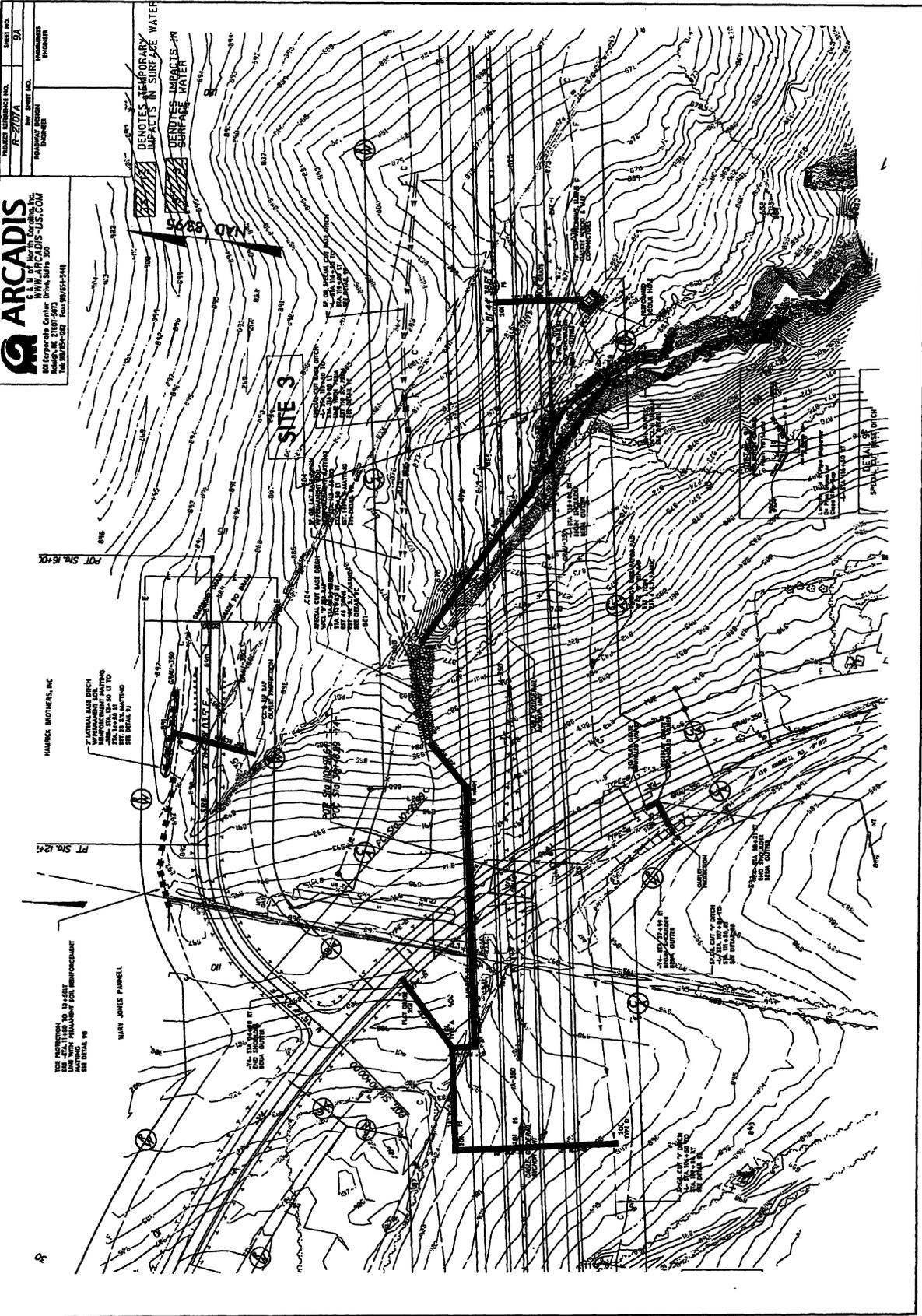
RIGHT OF WAY REVISION CHANGED STATION TO BE OFF CURVE PT STA 23+3574 -SM- IN (R/L) / NO STS
 RIGHT OF WAY REVISION CHANGED STATION TO BE OFF CURVE PT STA 23+3574 -SM- IN (R/L) / NO STS
 FROM IT TO SHADDED AREA / N/S

SEE SHEET 26 FOR -L- PROFILE

Permit Drawing
 Sheet 25 of 35







ARCADIS
 22 Corporate Center Drive
 Suite 200
 Fairfax, VA 22031
 Tel: 703.261.5000 Fax: 703.261.5001

PROJECT NUMBER	7-2707 A
SHEET NO.	3A
DATE	10/15/08
DESIGNED BY	THOMAS
CHECKED BY	THOMAS
APPROVED BY	THOMAS

FOR PROTECTION TO 18" ASBESTOS
 PIPE WITH PERMANENT GUN REINFORCEMENT
 SEE DETAIL 90

MARY JAMES FANHELL

HANRICK BROTHERS, INC
 2" LATERAL BASE DECK
 WITH REINFORCEMENT BARS
 SEE DETAIL 90

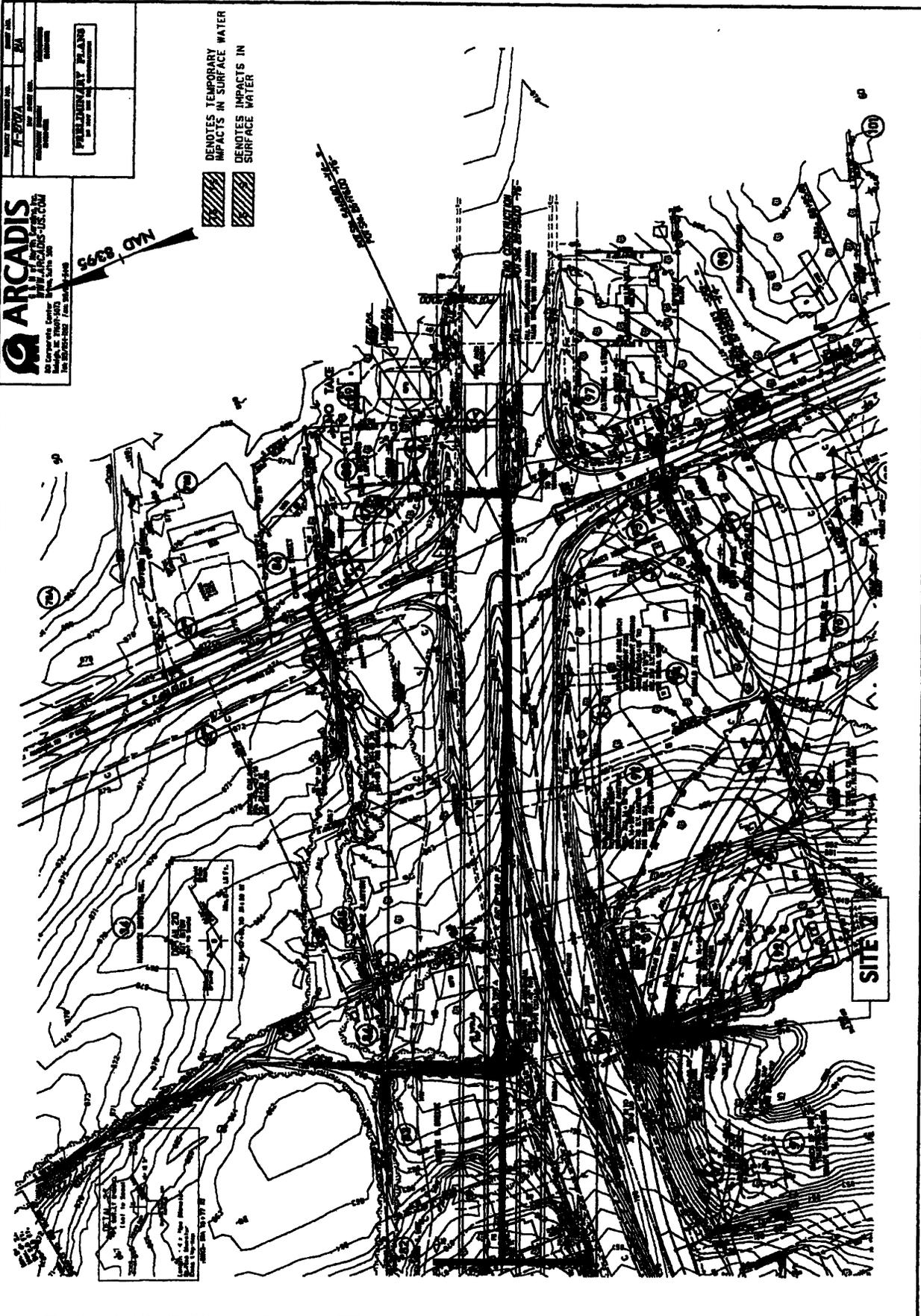
SITE 3

DEMOTES TEMPORARY
 IMPACTS IN SURFACE WATER

DEMOTES IMPACTS IN
 SURFACE WATER

REVISIONS

ARCADIS
 THOMAS



[Illegible text block]

