



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

August 9, 2007

MEMORANDUM TO: Mr. Tim Johnson, PE  
Division Eight Engineer

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

SUBJECT: Richmond County, US 1 (Fayetteville Road) from SR 1424  
(Roberdel Road) to SR 1640 (Wiregrass Road)/SR 1442  
(Ledbetter Road) Rockingham; T.I.P. Number U-3456;  
Federal Aid Project STP-0001(7); State Project 8.1581301

Attached is the U. S. Army Corps of Engineers 404 Nationwide Permit Number 14 and the general conditions for the 401 Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP  
Mr. Jay Bennett, P.E., Roadway Design  
Dr. David Chang, P.E., Hydraulics  
Mr. Randy Garris, P.E. State Contract Officer  
Mr. Art McMillan, P.E., Highway Design  
Mr. Greg Perfetti, P.E., Structure Design  
Mr. Mark Staley, Roadside Environmental  
Mr. John F. Sullivan, FHWA  
Mr. Eric Midkiff, P.E., PDEA Central Region Unit Head  
Mr. Art C. King, Division Environmental Officer  
Mr. William D. Gilmore, P.E., EEP



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To: File

From: Ashley Cox, Permit Specialist

Subject: U-3456 Section 404 Permit by Default

The Section 404 permit for this project has been issued by default, as the U.S. Army Corps of Engineers review time period has exceeded 45 days (per Nationwide Permit General Condition number 27). Therefore, NCDOT must comply with all conditions, descriptions, and mitigation allowance in the attached permit application dated 4/24/2007, Pre-Construction Notification Form, Permit Drawings, 404 General Conditions and Ecosystem Enhancement Program mitigation acceptance letter. A permit modification will be required if any of the above conditions, descriptions, and mitigation allowances cannot be met.

## **PROJECT COMMITMENTS**

**Richmond County**  
**US 1 (Fayetteville Road) from SR 1424 (Roberdel Road) to**  
**SR 1640 (Wiregrass Road)/SR 1442 (Ledbetter Road) Rockingham.**  
**Federal-Aid Project No. STP-0001(7)**  
**State Project No. 8.1581301**  
**WBS Element No. 34950.1.1**  
**TIP No. U-3456**

In addition to the standard Nationwide Permit #14 Conditions, the General Nationwide Permit Conditions, Section 404 Only Conditions, Regional Conditions, State Consistency Conditions, NCDOT's Guidelines for Best Management Practices for Protection of Surface Waters, NCDOT's Guidelines for Best Management Practices for Construction and Maintenance Activities, General Certifications, and Section 401 Conditions of Certification, the following special commitments have been agreed to by NCDOT.

### **Commitments developed through project development and design.**

#### **Hydraulics Unit:**

Hazardous spill catch basins will be required at stream crossings. SR 1424 (Roberdel Road) to SR 1640 (Wiregrass Road)/SR1442 (Ledbetter Road). This stretch of US 1 is within one mile of the water supply intake on Hinson Lake.

#### **Project Services Unit:**

Eleven-foot lanes and an 8-foot berm will be considered as a means to reduce impacts to properties along the proposed project. This issue will be resolved prior to right-of-way plan approval.

Sidewalks will be provided along both sides of US 1 from south of Roberdel Road to Richmond Senior High School. NCDOT will pay 80% of the cost of the sidewalks, the city of Rockingham will pay the remaining 20% for sidewalks within the city limits (Roberdel Road to Old Aberdeen Road) and the city and county will each pay 10% of the costs of sidewalks outside the city limits (Old Aberdeen Road to Richmond Senior High School).

The proposed median will be widened at Philadelphia Drive/Patterson Road to provide a pedestrian refuge area.

Left turn lanes will be provided at the Philadelphia Drive/Patterson Road intersection with US 1.

**Signing Section:**

Pedestrian signs will be installed along US 1 in the vicinity of Philadelphia Drive/Patterson Road.

**Utilities Coordination Unit/Division 8 Office:**

Streetlights will be provided by NCDOT at the Philadelphia Drive/Patterson Road intersection in order to improve visibility at night.

**Roadside Environmental Unit/Division 8 Office:**

Landscaping will be provided in the median of US 1. NCDOT will pay 100% of the cost of the landscaping and the city will assume responsibility for maintenance.

**Division 8:**

A signal is not proposed at the intersection of Philadelphia Drive and Patterson Road with US 1 at this time. NCDOT will continue to monitor this intersection and a signal will be installed when the intersection warrants a traffic signal.

**Program Development Branch:**

A municipal agreement will be prepared prior to construction regarding city and county participation in the cost of sidewalks for the project.

**Commitments developed through 401/404 permitting process.****Natural Environment Unit:**

NCDOT will use 1:1 off-site mitigation through EEP for 107 linear feet of the subject stream, located west of Patterson Road, which will be impacted during the project per the permit application.

**NATIONWIDE PERMIT 14**  
**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS**  
**FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS**  
**FEDERAL REGISTER**  
**AUTHORIZED MARCH 19, 2007**

**Linear Transportation Projects.** Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

## NATIONWIDE PERMIT CONDITIONS

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

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.  
(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.  
(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.
6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

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

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

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

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized

under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal “takes” of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State



Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWP. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWP.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate

the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

26. Compliance Certification. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty-five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained.

Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment

(after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

### **FURTHER INFORMATION**

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

### **DEFINITIONS**

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a

decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

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

*Establishment (creation):* The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

*Historic Property:* Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

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

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

*Loss of waters of the United States:* Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

*Non-tidal wetland:* A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

*Open water:* For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or



flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

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

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

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

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through

which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete project: The term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete project must have independent utility (see definition). For linear projects, a “single and complete project” is all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

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

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

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

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

*Waterbody:* For purposes of the NWPs, a waterbody is a jurisdictional water of the United States that, during a year with normal patterns of precipitation, has water flowing or standing above ground to the extent that an ordinary high water mark (OHWM) or other indicators of jurisdiction can be determined, as well as any wetland area (see 33 CFR 328.3(b)). If a jurisdictional wetland is adjacent--meaning bordering, contiguous, or neighboring--to a jurisdictional waterbody displaying an OHWM or other indicators of jurisdiction, that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

## **REGIONAL CONDITIONS FOR NATIONWIDE PERMITS IN THE WILMINGTON DISTRICT**

### **1.0 Excluded Waters**

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

#### **1.1. Anadromous Fish Spawning Areas**

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from NCDMF or NCWRC and the Corps.

#### **1.2. Trout Waters Moratorium**

Waters of the United States in the twenty-five designated trout counties of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC. (see Section I. b. 7. for a list of the twenty-five trout counties).

#### **1.3. Sturgeon Spawning Areas**

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the National Marine Fisheries Service (NMFS).

### **2.0 Waters Requiring Additional Notification**

The Corps has identified waters that will be subject to additional notification requirements for activities authorized by all NWP's. These waters are:

#### **2.1. Western NC Counties that Drain to Designated Critical Habitat**

Waters of the U.S. that requires a Pre-Construction Notification pursuant to General Condition 27 (PCN) and located in the sixteen counties listed below, applicants must provide a copy of the PCN to the US Fish and Wildlife Service, 160 Zillicoa Street, Asheville, North Carolina 28805. This PCN must be sent concurrently to the US Fish and Wildlife Service and the Corps Asheville Regulatory Field Office. Please see General Condition 17 for specific notification requirements related to Federally Endangered Species and the following website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville US Fish and Wildlife Service: Avery, Cherokee, Forsyth, Graham, Haywood,

Henderson, Jackson, Macon Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for applicants which provide guidelines on how to review linked websites and maps in order to fulfill NWP general condition 17 requirements.

<http://www.saw.usace.army.mil/wetlands/ESA>

Applicants who do not have internet access may contact the appropriate US Fish and Wildlife Service offices or the US Army Corps of Engineers office listed below.

US Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, NC 28801  
Telephone: (828) 258-3939

Asheville US Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsyth and Stokes Counties

US Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

Raleigh US Fish and Wildlife Service Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

## **2.2. Special Designation Waters**

Prior to the use of any NWP in any of the following North Carolina identified waters and contiguous wetlands, applicants must comply with Nationwide Permit General Condition 27 (PCN). The North Carolina waters and contiguous wetlands that require additional notification requirements are:

“Outstanding Resource Waters” (ORW) and “High Quality Waters” (HQW) (as designated by the North Carolina Environmental Management Commission), or  
“Inland Primary Nursery Areas” (IPNA) (as designated by the North Carolina Wildlife Resources Commission), or “Contiguous Wetlands” (as defined by the North Carolina Environmental Management Commission), or “Primary Nursery Areas” (PNA) (as designated by the North Carolina Marine Fisheries Commission).

### **2.3. Coastal Area Management Act (CAMA) Areas of Environmental Concern**

Non-Federal applicants for any NWP in a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA), must also obtain the required CAMA permit. Construction activities for non-Federal projects may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – P.O. Box 1890, Wilmington, NC 28402 or Washington Field Office – P.O. Box 1000, Washington, NC 27889).

### **2.4. Barrier Islands**

Prior to the use of any NWP on a barrier island of North Carolina, applicants must comply with Nationwide Permit General Condition 27 (PCN).

### **2.5. Mountain or Piedmont Bogs**

Prior to the use of any NWP in a “Mountain or Piedmont Bog” of North Carolina, applicants shall comply with Nationwide Permit General Condition 27 (PCN).

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

Mountain Bogs	Piedmont Bogs
Swamp Forest-Bog Complex	Upland depression Swamp Forest
Swamp Forest-Bog Complex (Spruce Subtype)	
Southern Appalachian Bog (Northern Subtype)	
Southern Appalachian Bog (Southern Subtype)	
Southern Appalachian Fen	

### **2.6. Animal Waste Facilities**

Prior to use of any NWP for construction of animal waste facilities in waters of the US, including wetlands, applicants shall comply with Nationwide Permit General Condition 27 (PCN).

### **2.7. Trout Waters**

Prior to any discharge of dredge or fill material into streams or waterbodies within the twenty-five (25) designated trout counties of North Carolina, the applicant shall comply with

Nationwide Permit General Condition 27 (PCN). The applicant shall also provide a copy of the notification to the appropriate NCWRC office to facilitate the determination of any potential impacts to designated Trout Waters. Notification to the Corps of Engineers will include a statement with the name of the NCWRC biologist contacted, the date of the notification, the location of work, a delineation of wetlands, a discussion of alternatives to working in the mountain trout waters, why alternatives were not selected, and a plan to provide compensatory mitigation for all unavoidable adverse impacts to mountain trout waters.

#### NCWRC and NC Trout Counties

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

Mr. Dave McHenry			
Mountain Region Coordinator	Buncombe	Henderson	Polk
20830 Great Smoky Mtn. Expressway	Cherokee	Jackson	Rutherford
Waynesville, NC 28786	Clay	Macon	Swain
Telephone: (828) 452-2546	Graham	Madison	Transylvania
Fax: (828) 452-7772	Haywood	McDowell	Yancey

### 3.0 List of Corps Regional Conditions for All Nationwide Permits

The following conditions apply to all Nationwide Permits in the Wilmington District:

#### 3.1. Limitation of Loss of Perennial Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of perennial streams. The NWPs may not be used for activities that may result in the loss or degradation of greater than 300 total linear feet of ephemeral and intermittent streams that exhibit important aquatic function(s)\* Loss of stream includes the linear feet of stream bed that is filled, excavated, or flooded by the proposed activity. The District Commander can waive the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis if he determines that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Waivers for the loss of ephemeral and intermittent streams must be in writing. This waiver only applies to the 300 linear feet threshold for NWPs. Mitigation may still be required for impacts to ephemeral and intermittent streams, on a case-by-case basis, depending on the impacts to the aquatic environment of the proposed project. [\*Note: The Corps uses the Stream Quality Assessment Worksheet, located with Permit Information on the Regulatory Program Web Site, to aid in the determination of aquatic function within the intermittent stream channel.]

### **3.2. Mitigation for Loss of Stream Bed Exceeding 150 Feet.**

For any NWP that results in a loss of more than 150 linear feet of perennial and/or ephemeral/intermittent stream, the applicant shall provide a mitigation proposal to compensate for the loss of aquatic function associated with the proposed activity. For stream losses less than 150 linear feet, that require a PCN, the District Commander may determine, on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

### **3.3. Pre-construction Notification for Loss of Streambed Exceeding 150 Feet.**

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream or ephemeral/ intermittent stream, the applicant must comply with Nationwide Permit General Condition 27 (PCN). This applies to NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

### **3.4. Restriction on Use of Live Concrete**

For all NWPs which allow the use of concrete as a building material, measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the state until the concrete has hardened.

### **3.5. Requirements for Using Riprap for Bank Stabilization**

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

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

**3.5.2.** The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

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

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

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

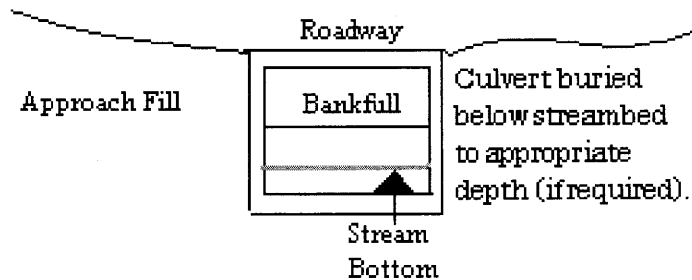


**3.5.6.** A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional condition would result in greater adverse impacts to the aquatic environment.

### **3.6. Safe Passage Requirements for Culvert Placement**

For all NWP's that involve the construction/installation of culverts, 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 gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

In the twenty (20) counties of North Carolina designated as coastal counties by the Coastal Area Management Act (CAMA): All pipe and culvert bottoms shall be buried at least one foot below normal bed elevation when they are placed within the Public Trust Area of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by CAMA, and/or all streams appearing as blue lines on United States Geological Survey (USGS) quad sheets.



In all other counties: 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.

All counties: Culverts placed in wetlands do not have to be buried.

### **3.7. Notification to NCDENR Shellfish Sanitation Section**

Applicants shall notify the NCDENR Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps of Engineers Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued.

### **3.8. Preservation of Submerged Aquatic Vegetation**

Adverse impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP within any of the twenty coastal counties defined by North Carolina's Coastal Area Management Act of 1974 (CAMA).

### **4.0 Additional Regional Conditions Applicable to Specific Nationwide Permits**

The following regional conditions are required for NWP #14 - Linear Transportation Crossings:

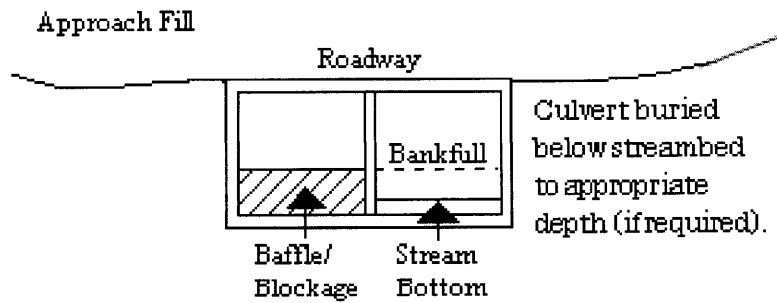
#### **4.1. Natural Channel Design**

Applicants shall employ natural channel design (see definition below) to the maximum extent practicable for stream relocations. In the event it is not practicable to employ natural channel design, any stream relocation shall be considered a permanent impact and the applicant shall provide a mitigation plan to compensate for the loss of aquatic function associated with the proposed activity.

Natural Channel Design: A geomorphologic approach to stream restoration based on an understanding of valley type, general watershed conditions, dimension, pattern, profile, hydrology and sediment transport of natural, stable channels (reference condition) and applying this understanding to the reconstruction of a stable channel.

#### **4.2. Maintenance of Bank-full Flows**

Bank-full flows (or less) shall be accommodated through maintenance of the existing bank-full channel cross sectional area. Additional culverts at such crossings shall be allowed only to receive flows exceeding bank-full.

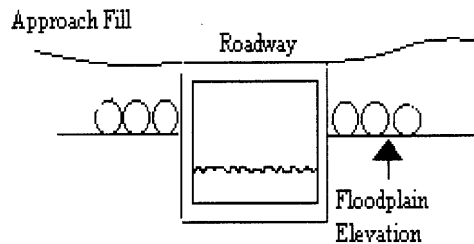


#### 4.3. Maintenance of Floodplain Elevation

Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation.

#### 4.4. Prohibition to Create Upland from Waters of the US

This NWP authorizes only upland to upland crossings and cannot be used in combination with Nationwide Permit 18 to create upland within waters of the United States, including wetlands.



#### 4.5. Tidal Water Restrictions

This NWP cannot be used for private projects located in tidal waters or tidal wetlands.

## **NC DIVISION OF WATER QUALITY - GENERAL CERTIFICATION CONDITIONS**

For the most recent General Certification conditions, call the NC Division of Water Quality, Wetlands/401 Certification Unit at (919) 733-1786 or access the following website:  
<http://h2o.enr.state.nc.us/newetlands/certs.html>

## **NC DIVISION OF COASTAL MANAGEMENT - STATE CONSISTENCY**

In a letter dated May 7, 2007, the North Carolina Division of Coastal Management found this NWP consistent with the North Carolina Coastal Zone Management Program. Updates on CAMA Consistency for NC can be found on the NC DCM web site at:  
<http://dcm2.enr.state.nc.us/Permits/consist.htm>

## **EASTERN BAND OF THE CHEROKEE INDIANS TRIBAL WATER QUALITY CERTIFICATIONS**

In a letter dated May 8, 2007, US EPA, on behalf of the Eastern Band of Cherokee Indians, provided Tribal General Conditions for Nationwide Permits on Cherokee Indian Reservation. These Tribal General Conditions are located on the Corps website at:  
<http://www.saw.usace.army.mil/WETLANDS/NWP2007/EBCI-certs.html>

### **Citations:**

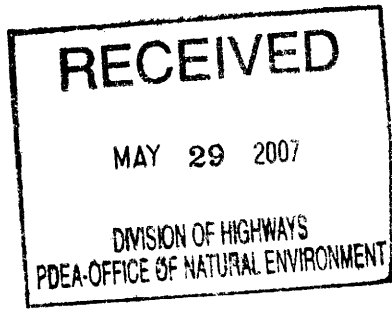
2007 Nationwide Permits Public Notice for Final Issue Date: March 15, 2007

Correction Notice for Nationwide Permits, Federal Register / Vol. 72, No. 88 / Tuesday, May 8, 2007 / Notices p.26082

2007 SAW Regional Conditions – Authorized June 1, 2007

This and other information can be found on the Corps web site at:  
<http://www.saw.usace.army.mil/WETLANDS/NWP2007/nationwide-permits.html>

Lox



Michael F. Easley, Governor

William G. Ross Jr., Secretary  
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director  
Division of Water Quality

May 25, 2007  
DWQ# 07-0743  
Richmond County

U-3456

Dr. Gregory Thorpe, Ph.D.  
NCDOT, Project Development and Environmental Unit  
Natural Environment Unit  
1598 Mail Service Center  
Raleigh, NC 27699-1598

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

Dear Dr. Thorpe:

You have our approval, in accordance with the attached conditions and those listed below, to **permanently impact a total of 107 linear feet of stream and 0.21 acres of wetlands** as listed in the table below:

Permit Site No.	Stream Name	Length of Stream Impact	Acreage of Wetland Impact
Site #1	Unnamed tributary to Falling Creek	107 linear feet for culvert extension	0.13 Acres of Forested Wetlands (0.10 acres of fill, 0.03 acres of mechanized clearing)
Site #2	N/A	N/A	0.08 Acres of Forested Wetlands (0.05 acres of fill, 0.03 acres of mechanized clearing)

The impacts will be for the purpose of widening an existing road as described in your application received by the Division of Water Quality (DWQ) on April 30, 2007. The location of the project is US 1 (Fayetteville Road) west of State Road (SR)1424 (Roberdel Road) to just east of SR 1640 (Wiregrass Road) in Richmond County. After reviewing your application, we have determined that this project is covered by Water Quality General Certification Number 3627. Please note that you should get any other federal, state or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations. This approval will expire with the associated 404 permit unless otherwise specified in the Water Quality Certification.

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



1. Hazardous spill basins must be constructed as depicted on the plans on the western section of the project. Hazardous spill basins are required due to the project location within the Critical Area of the Hinson Lake water supply watershed. ✕
2. Placement of culverts and other structures in waters, streams and wetlands must be below the elevation of the streambed by one (1) 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 for low flow passage of water and aquatic life, as well as prevent headcutting of the streams. The design and placement of culverts and other structures including temporary erosion control measures shall be installed in such a manner that the original stream profiles are not altered (i.e., the depth of the channel must not be reduced by a widening of the streambed). Existing stream dimensions (including pattern and profile) are to be maintained above and below locations of each culvert. The applicant may be required to provide evidence that the equilibrium has been maintained, if requested in writing by the DWQ.
3. All fill slopes located in jurisdictional wetlands shall be placed on slopes no flatter than 3:1, unless otherwise authorized by this certification.
4. The wetland 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.
5. The use of riprap above the normal high water mark shall be minimized. Any riprap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
6. Heavy equipment shall be operated from the banks rather than in the stream channel in order minimize sedimentation and reduce the introduction of other pollutants into the stream.
7. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
8. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the current version of the 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.
9. Temporary dewatering sites must be restored to pre-existing conditions unless more natural geomorphic conditions can be provided.
10. If concrete is used during construction, a dry work area should be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete should not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
11. 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 the 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.
12. The dimension, pattern and profile of the stream above and below the crossing should not be modified. Disturbed floodplains and streams should be restored to natural geomorphic conditions.
13. 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.

14. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
15. A copy of this Water Quality Certification shall be posted 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.
16. Native riparian vegetation must be re-established within the construction limits of the project by the end of the growing season following completion of construction.
17. Sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored within 30 days after the Division of Land Resources has released the project.
18. 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.
19. The North Carolina Department of Transportation (NCDOT) and its contractors and/or agents shall not excavate, fill or perform mechanized land clearing at any time in the construction or maintenance of this project within waters and/or wetlands, except as authorized by this Certification, or any modification to this Certification (e.g., no work shall occur outside of the footprint of the plans provided). In addition, there shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this Certification without appropriate modification. If this occurs, compensatory mitigation may be required since it is a direct impact from road construction activities.
20. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certificate of Completion" form to notify DWQ when all work included in the 401 Certification has been completed. Please include photographs upstream and downstream of the structure to document correct installation.
21. Continuing Compliance. NCDOT shall conduct its activities in a manner so as not to contravene any state water quality standard [including any requirements for compliance with section 303(d) of the Clean Water Act] and any other appropriate requirements of state and federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that state or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15 A NCAC 2H.0507(d).

Dr. Gregory Thorpe  
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Before codifying the certification, DWQ shall notify NCDOT and the USACE, provide public notice in accordance with 15A NCAC 2H.0503, and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the USACE for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

If you do not accept any of the conditions of this Certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This Certification and its conditions are final and binding unless you ask for a hearing.

This letter completes the review by the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, **please telephone Polly Lespinasse in the Mooresville Regional Office** at 704-663-1699.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. W. Klimek', written over a horizontal line.

for Alan W. Klimek, P.E.

Attachments

cc: Richard Spencer, USACE Wilmington Field Office  
Ken Averitte, DWQ Fayetteville Regional Office  
Sonia Gregory, DWQ Wetlands Unit  
File Copy



## WQC #3627

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

This General Certification is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and adjacent wetland areas or to wetland areas that are not a part of the surface tributary system to interstate waters or navigable waters of the United States (i.e., isolated wetlands) as described in 33 CFR 330 Appendix A (B) (14) of the Corps of Engineers regulations (Nationwide Permit No. 14 and Regional General Permit 198200031) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. The category of activities shall include any fill activity for road crossings and is limited to fill less than one-third acre in tidal waters and less than one-half acre in non-tidal waters. This Certification replaces Water Quality Certification Number 2177 issued on November 5, 1987, Water Quality Certification Number 2666 issued on January 21, 1992, Water Quality Certification Number 2732 issued on May 1, 1992, Water Quality Certification Number 3103 issued on February 11, 1997, Water Quality Certification Number 3289 issued on June 1, 2000 and Water Quality Certification Number 3375 issued March 18, 2002 and WQC 3404 issued March 28, 2003. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permit 14 or Regional General Permit 198200031 or when deemed appropriate by the Director of DWQ.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

### Conditions of Certification:

#### 1. Enumerating and Reporting of Impacts:

- Streams - Impacts to streams as determined by the Division of Water Quality shall be measured as length of the centerline of the normal flow channel. Permanent and/or temporary stream impacts shall be enumerated on the entire project for all impacts regardless of which 404 Nationwide Permits are used. Stream relocations and stream bed and/or bank hardening are considered to be permanent stream impacts. Any activity that results in a loss of use of stream functions including but not limited to filling, relocating, flooding, dredging and complete shading shall be considered stream impacts. Enumeration of impacts to streams shall include streams enclosed by bottomless culverts, bottomless arches or other spanning structures when a 404 Permit is used anywhere in a project unless the entire structure (including construction impacts) spans the entire bed and both banks of the stream, is only used for a road, driveway or path crossing, and is not mitered to follow the stream pattern. Impacts for dam footprints and flooding will count toward the threshold for stream impacts, but flooding upstream of the dam will not (as long as no filling, excavation, relocation or other modification of the existing stream dimension, pattern or profile occurs) count towards mitigation requirements.
- Wetlands - Impacts to wetlands as determined by the Division of Water Quality shall be measured as area. Permanent and/or temporary wetland impacts shall be enumerated on the entire project for all impacts regardless of which 404 Nationwide Permits are used. Any activity that results in a loss of use of wetland functions including but not limited to filling, draining, and flooding shall be considered wetland impacts. Enumeration of impacts to wetlands shall include activities that change the hydrology of a wetland when a 404 Permit is used anywhere in a project.

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- Lakes and Ponds – Lake and Pond Impacts Enumeration- Impacts to waters other than streams and wetlands as determined by the Division of Water Quality shall be measured as area. Permanent and/or temporary water impacts shall be enumerated on the entire project for all impacts proposed regardless of which 404 Nationwide Permits are used. Any activity that results in a loss of use of aquatic functions including but not limited to filling and dredging shall be considered waters impacts;
2. Proposed fill or substantial modification of wetlands or waters (including streams) under this General Certification requires application to and prior written concurrence from the Division of Water Quality;
  3. Application to and payment of a fee to DWQ is not required for construction of a driveway to a single family lot as long as the driveway impacts less than 25 feet of stream channel including any in-stream stabilization needed for the crossing;
  4. Impacts to any stream length in the Neuse, Tar-Pamlico or Randleman River Basins (or any other major river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence for this Certification from DWQ in accordance with 15A NCAC 2B.0200. Activities listed as “exempt” from these rules do not need to apply for written concurrence under this Certification. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse and Tar-Pamlico River Basins shall be limited to “uses” identified within and constructed in accordance with 15A NCAC 2B .0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices;
  5. Irrespective of other application thresholds in this General Certification, all impacts to perennial waters and their associated buffers require written approval from DWQ since such impacts are allowable as provided in 15A NCAC 2B. 0212 (WS-I), 2B .0213 (WS-II), 2B .0214 (WS-III) and 2B .0215 (WS-IV). Only water dependent activities, public projects and structures with diminimus increases in impervious surfaces will be allowed as outlined in those rules. All other activities require a variance from the delegated local government and/or the NC Environmental Management Commission before the 401 Water Quality Certification can be processed. In addition, a 30 foot wide vegetative buffer for low density development or a 100 foot wide vegetative buffer for high density development must be maintained adjacent to all perennial waters except for allowances as provided under the Water Supply Watershed Protection Rules. For the purposes of this condition, perennial waters are defined as those shown as perennial waters on the most recent USGS 1:24,000 topographic map or as otherwise determined by local government studies;
  6. Additional site-specific stormwater management requirements may be added to this Certification at DWQ's discretion on a case by case basis for projects that have or are anticipated to have impervious cover of greater than 30 percent. Site-specific stormwater management shall be designed to remove 85% TSS according to the latest version of DWQ's Stormwater Best Management Practices manual at a minimum.

Additionally, in watersheds within one mile and draining to 303(d) listed waters, as well as watersheds that are classified as nutrient sensitive waters (NSW), water supply waters (WS), trout waters (Tr), high quality waters (HQW), and outstanding resource waters (ORW), the Division shall require that extended detention wetlands, bio-retention areas, and ponds followed by forested filter strips (designed according to latest version of the NC DENR Stormwater Best Management Practices Manual) be constructed as part of the stormwater management plan when a site-specific stormwater management plan is required.

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Alternative designs may be requested by the applicant and will be reviewed on a case-by-case basis by the Division of Water Quality.

Approval of stormwater management plans by the Division of Water Quality's other existing state stormwater programs including appropriate local programs are sufficient to satisfy this Condition as long as the stormwater management plans meet or exceed the design requirements specified in this condition. This condition applies unless more stringent requirements are in effect from other state water quality programs.

- Unless specified otherwise in the approval letter, the final, written stormwater management plan shall be approved in writing by the Division of Water Quality's Wetlands Unit before the impacts specified in this Certification occur.
  - The facilities must be designed to treat the runoff from the entire project, unless otherwise explicitly approved by the Division of Water Quality.
  - Also, before any permanent building or other structure is occupied at the subject site, the facilities (as approved by the Wetlands Unit) shall be constructed and operational, and the stormwater management plan (as approved by the Wetlands Unit) shall be implemented.
  - The structural stormwater practices as approved by the Wetlands Unit as well as drainage patterns must be maintained in perpetuity.
  - No changes to the structural stormwater practices shall be made without written authorization from the Division of Water Quality.
7. Compensatory stream mitigation shall be required at a 1:1 ratio for not only perennial but also intermittent stream impacts that require application to DWQ in watersheds classified as ORW, HQW, Tr, WS-I and WS-II unless the project is a linear, publicly-funded transportation project, which has a 150-foot per-stream impact allowance;
8. In accordance with North Carolina General Statute Section 143-215.3D(e), any application for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted through the Division of Coastal Management and will be the higher of the two fees;
9. In accordance with 15A NCAC 2H .0506 (h) compensatory mitigation may be required for impacts to 150 linear feet or more of streams and/or one acre or more of wetlands. For linear public transportation projects, impacts equal to or exceeding 150 feet per stream may require mitigation. In addition, buffer mitigation may be required for any project with Buffer Rules in effect at the time of application for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A determination of buffer, wetland and stream mitigation requirements shall be made for any Certification for this Nationwide Permit. The most current design and monitoring protocols from DWQ shall be followed and written plans submitted for DWQ approval as required in those protocols. When compensatory mitigation is required for a project, the mitigation plans must be approved by DWQ in writing before the impacts approved by the Certification occur, unless otherwise specified in the approval letter. The mitigation plan must be implemented and/or constructed before any permanent building or structure on site is occupied. In the case of public road projects, the mitigation plan must be implemented before the road is opened to the travelling public. Projects may also be implemented once payment is made to a private mitigation bank or other in-lieu fee program, as specified in the written concurrence of 401 Certification for a project. Please note that if a stream relocation is conducted as a stream restoration as defined in *The Internal Technical Guide for Stream Work in North Carolina*, April 2001, the restored length can be used as compensatory mitigation for the impacts resulting from the relocation;

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10. For any project involving re-alignment of streams, a stream relocation plan must be included with the 401 application for written DWQ approval. Relocated stream designs should include the same dimensions, patterns and profiles as the existing channel, to the maximum extent practical. The new channel should be constructed in the dry and water shall not be turned into the new channel until the banks are stabilized. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating coir fiber and seedling establishment is allowable. 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. If suitable stream mitigation is not practical on-site, then stream impact will need to be mitigated elsewhere;
11. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed to allow low flow passage of water and aquatic life unless it can be shown to DWQ that providing passage would be impractical. Design and placement of culverts including open bottom or bottomless arch culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in aggradation, degradation or significant changes in hydrology of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested to do so in writing by DWQ. Additionally, when roadways, causeways or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in aggradation, degradation or significant changes in hydrology of streams or wetlands;
12. That appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;
13. All sediment and erosion control measures placed in wetlands and waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
14. That additional site-specific conditions may be added to projects proposed under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
15. Measures shall be taken to prevent live or fresh concrete from coming into contact with freshwaters of the state until the concrete has hardened;
16. If an environmental document is required, this Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse;
17. If this Certification is used to access building sites, all lots owned by the applicant must be buildable without additional fill beyond that explicitly allowed under other General

## WQC #3627

Certifications. For road construction purposes, this Certification shall only be utilized from natural high ground to natural high ground;

18. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed;
19. Concurrence from DWQ that this Certification applies to an individual project shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Nationwide Permit 14 or Regional General Permit 198200031, whichever is sooner.

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

The Director of the North Carolina Division of Water Quality may require submission of a formal application for Individual Certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland or downstream waters are precluded.

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

Effective date: 19 March 2007

DIVISION OF WATER QUALITY

By



Alan W. Klimek, P.E.

Director

**Certificate of Completion**

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

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

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

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

Upon completion of all work approved within the 401 Water Quality Certification and Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1621 Mail Service Center, Raleigh, NC, 27699-1621. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

***Applicant's Certification***

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

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

***Agent's Certification***

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

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

***If this project was designed by a Certified Professional***

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

Signature: \_\_\_\_\_ Registration No.: \_\_\_\_\_ Date: \_\_\_\_\_



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

April 24, 2007

U. S. Army Corps of Engineers  
Regulatory Field Office  
Post Office Box 1890  
Wilmington, NC 28402-1890

ATTN: Mr. Richard Spencer  
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 14 and Section 401 Water Quality Certification.** Widening of US 1 (Fayetteville Road) to a curb and gutter facility in Rockingham, Richmond County, North Carolina. Federal Aid Project No. STP-0001(7), State Project No. 8.1581301, WBS Element 34950.1.1, TIP No. U-3456

\$200.00 Debit from WBS Element 34950.1.1.

Please see the enclosed Pre-Construction Notification, permit drawings, design plans, and EEP acceptance letter for the subject project. The North Carolina Department of Transportation (NCDOT) proposes to widen US 1 (Fayetteville Road) to a facility utilizing curb and gutter. The proposed improvements will begin 800 ft west of SR 1424 (Roberdel Road) and end 600 ft east of SR 1640 (Wiregrass Road)/SR 1442 (Ledbetter Road). The roadway will be widened to a combined five-lane curb and gutter facility from Roberdel Road to Old Aberdeen Road and a four-lane 18-foot median divided curb and gutter facility from Old Aberdeen Road to Wiregrass Road/Ledbetter Road.

The purpose of this project is to improve safety and provide better traffic carrying capacity along US 1. US 1 is designated as a Major Thoroughfare on the Rockingham-Hamlet Thoroughfare Plan. The proposed improvements are in conformance with the thoroughfare plan. Construction of this project will be a step toward implementation of these long-range plans, which were adopted by local governments and NCDOT.

**MAILING ADDRESS:**

NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS  
NATURAL ENVIRONMENT UNIT  
1598 MAIL SERVICE CENTER  
RALEIGH NC 27699-1598

TELEPHONE: 919-715-1334 or  
919-715-1335

FAX: 919-715-5501

WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

**LOCATION:**

2728 CAPITAL BLVD. SUITE 240  
RALEIGH NC 27604

## NEPA DOCUMENT STATUS

An Environmental Assessment (EA) was completed for the project in May of 2001, the Federal Highway Administration (FHWA) issued an administrative action, Finding of No Significant Impact (FONSI) in December of 2002. Additional copies of these documents are available upon request.

## IMPACTS TO WATERS OF THE UNITED STATES

The project is located in sub basin 03-07-16 of the Yadkin River Basin. This area is part of Hydrologic Cataloging Unit 03040201. The project area lies along a low ridge separating two watersheds. To the north side of the project, water drains towards Hitchcock Creek, while on the south side of the project, water drains towards Falling Creek. There is one perennial stream, with a best usage classification of WS-III, located within the project area, and is a tributary of Falling Creek. This stream, UT-A, will be piped under the proposed roadway widening. Most of the project area lies in protected water supply watersheds for either Hitchcock Creek (Roberdel Lake) to the north or Falling Creek (Hinson Lake) to the south. The western portion of this project is within half a mile of the critical area for the water supply of Hinson Lake. Hazardous spill catch basins will be implemented along this stretch of the project. Both lakes supply water to the city of Rockingham. Roberdel Lake (DWQ Index No. 13-39-9-(0.3)) and all of its tributaries have best usage classifications of WS-III. Below the dam at Roberdel Lake, Hitchcock Creek (DWQ Index No. 13-39-(10)) is classified as Class C. Hinson Lake (DWQ Index No. 13-39-12-(1)) and all of its tributaries have best usage classifications of WS-III. Tributaries within the project study area are located outside of the ½ mile radius of the critical area for this watershed.

There are two streams listed on the 2004 Final 303(d) list within 1.0 mile of the project study area. Hitchcock Creek (DWQ Index No. 13-39-1) is listed due to the fish consumption advisory pertaining to mercury levels. Falling Creek (DWQ Index No. 13-39-12-(7.5)) is listed due to aquatic weeds.

**Neither High Quality Waters (HQW), Water Supplies (WS-I or WS-II), nor Outstanding Resource Waters (ORW) occur within 1.0 mile of the project area.**

There are two wetlands located within the project corridor. Both wetlands originate inside of the project study area and expand well beyond the limits of the corridor. Wetland-1 (Site 1) is located on the south side of US 1, approximately 400 feet west of the intersection of SR 1645 and US 1. Wetland-2 (Site 2) is also situated south of US 1, and is approximately 200 feet west of the intersection of SR 1682 and US 1. Wetland-1 is classified as non-riverine, while wetland-2 has been determined to be a riverine wetland. Both wetlands are best classified as palustrine, forested, temporarily flooded communities (PF01A Cowardin classification).

### *Temporary Impacts*

There are no anticipated temporary impacts to surface waters or wetlands associated with this project.



## ***Permanent Impacts***

### ***Site 1:***

Approximately 0.13 acre of non-riverine wetland will be impacted on Site 1. Roadway fill will account for 0.10 acre while mechanized clearing will be responsible for the remaining 0.03 acre.

### ***Site 2:***

There will be approximately 107 linear feet of jurisdictional stream impacts (Site 2). This will occur through the extension of a piped culvert for the unnamed tributary to Falling Creek (UT-A) that is crossed by the proposed roadway.

At Site 2, 0.05 acre and 0.03 acre of riverine wetland will be impacted due to roadway fill and mechanized clearing, respectively. Mechanized clearing is necessary at both sites to provide access for equipment and construction of the new fill slopes.

## ***Utility Impacts***

Power lines and other utilities are located within wetland areas in the project corridor. However, there will be no new construction of, nor relocation of existing utilities performed in jurisdictional areas.

## **MITIGATION OPTIONS**

### ***Avoidance and Minimization and Compensatory Mitigation***

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional impacts, and to provide full compensatory mitigation of all remaining, unavoidable jurisdictional impacts. Avoidance measures were taken during the planning and NEPA compliance stages; minimization measures were incorporated as part of the project design. With the exception of not building the project, there are no feasible means of avoiding this stream taking. NCDOT will minimize impacts on the stream through the use of best management practices.

According to the Clean Water Act (CWA) §404(b)(1) guidelines, NCDOT must avoid, minimize, and mitigate, in sequential order, impacts to waters of the US. The following is a list of the project's jurisdictional stream avoidance/minimization activities proposed or completed by NCDOT:

### ***Avoidance/Minimization***

- Temporary construction impacts due to erosion and sedimentation will be minimized through implementation of stringent erosion control methods and use of Best Management Practices (BMPs) highlighted in NCDOT's "Best Management Practices for Construction and Maintenance Activities".
- Maintain 2:1 fill slopes in jurisdictional areas.

- No staging of construction equipment or storage of construction supplies will be allowed in wetlands or near surface waters.
- Best Management Practices for Protection of Surface Waters will be implemented.
- Curb and gutter will be constructed to collect storm water, utilizing catch basins and drop inlets, from the highway.
- Hazardous spill basins will be implemented along the western portion of the project corridor.
- Preformed scour holes are located along the project corridor.

**Compensatory Mitigation**

NCDOT has avoided and minimized impacts to jurisdictional resources to the greatest extent possible. Unavoidable, permanent impacts to 107 feet of jurisdictional stream will be offset by compensatory mitigation provided by the EEP program. NCDOT is proposing 1:1 mitigation for the subject stream based on degradation. The stream in question is formed by a spring that surfaces approximately 45 feet north of the existing highway and flows southward, is piped under the highway, and feeds an adjacent wetland. During site visits, stream flow has been extremely low, constricted by leaf debris and roadside refuse. The stream channel has minimal meandering and a silty substrate beneath the detritus. Two wetlands will be impacted during the construction of this project. There will be 0.08 acre of riparian wetland impacted and 0.13 acre of non-riparian impacts. An acceptance letter dated March 15, 2007 from EEP is attached.

**FEDERALLY PROTECTED SPECIES**

Plants and animals with federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE), and Proposed Threatened (PT) are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. The United States Fish and Wildlife Service (USFWS) lists 5 species for Richmond County. Table 1 lists the species and their federal status.

**Table 1. Federally Protected Species in Richmond County, NC**

<b>Common Shortnose Name</b>	<b>Scientific Name</b>	<b>Federal Status*</b>	<b>Biological Conclusion</b>	<b>Habitat Present</b>
Sturgeon	<i>Acipenser brevirostrum</i>	E	No Effect	No
Rough-leaved loosestrife	<i>Lysimachia asperulaefolia</i>	E	No Effect	No
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	No Effect	No
Michaux’s sumac	<i>Rhus michauxii</i>	E	No Effect	No
Carolina heelsplitter	<i>Lasmigona decorata</i>	E	No Effect	No

\*E= endangered

Biological conclusions of “No Effect” were issued for the shortnose sturgeon, rough-leaved loosestrife, red-cockaded woodpecker, Michaux’s sumac, and Carolina heelsplitter due to lack of appropriate habitat in the study area, per the Environmental Assessment. On August 21, 2001

the USFWS issued a concurrence letter for the five species listed above and the biological conclusion for each. This concurrence letter is located in the appendix of the FONSI document for this project. As Michaux's sumac is considered to be a plant that can migrate, a follow-up species survey was performed on September 19, 2005 by NCDOT biologists. No individuals were observed during the survey, so the biological conclusion of No Effect in the Environmental Assessment remains valid.

### **SCHEDULE**

The project calls for a let date of October 16, 2007 and has a review date of August 28, 2007. This project has a date of availability of November 27, 2007. It is expected that the contractor will begin construction shortly after that date.

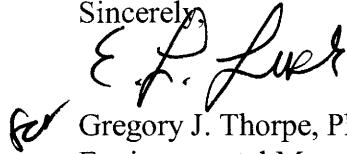
### **REGULATORY APPROVALS**

Section 404 Permit: The project has been processed by the Federal Highway Administration and has been issued an administrative action of, "Finding of No Significant Impact" (FONSI) in accordance with 23 CFR 771.115(b). The NCDOT requests that these activities be authorized by a Nationwide Permit 14 (67 FR 2020; January 15, 2002).

Section 401 Permit: General Water Quality Certification 3627 will apply to this project. All general conditions of the Water Quality Certifications will be met. Written concurrence is required for this certification. In accordance with 15A NCAC 2H, Section .0500 and 15A NCAC 2B.0200 we are providing five copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for their review and approval.

A copy of this permit application will be posted on the NCDOT website at:  
<http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>. If you have any questions or need additional information, please contact Ashley Cox at 919-715-5534 or [acox@dot.state.nc.us](mailto:acox@dot.state.nc.us).

Sincerely,



Gregory J. Thorpe, Ph.D.  
Environmental Management Director, PDEA

Cc:

w/attachment

- Mr. John Hennessy, NCDWQ (5 copies)
- Mr. Travis Wilson, NCWRC
- Mr. Gary Jordan, USFWS
- Dr. David Chang, P.E., Hydraulics
- Mr. Mark Staley, Roadside Environmental
- Mr. Greg Perfetti, P.E., Structure Design
- Mr. Victor Barbour, Project Services Unit
- Mr. Tim Johnson, P.E, Division 8 Engineer
- Mr. Art King, Division 8 Environmental Officer

w/o attachment

- Mr. Jay Bennett, P.E., Roadway Design
- Mr. Majed Alghandour, P.E., Programming and TIP
- Mr. Art McMillan, P.E., Highway Design
- Mr. Scott McLendon, USACE, Wilmington
- Ms. Beverly Robinson, PDEA
- Ms. Beth Harmon, EEP
- Mr. Todd Jones, NCDOT External Audit Branch

**Office Use Only:**

Form Version March 05

**USACE Action ID No.** \_\_\_\_\_ **DWQ No.** \_\_\_\_\_

(If any particular item is not applicable to this project, please enter "Not Applicable" or "N/A".)

**I. Processing**

1. Check all of the approval(s) requested for this project:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Section 404 Permit              | <input type="checkbox"/> Riparian or Watershed Buffer Rules      |
| <input type="checkbox"/> Section 10 Permit                          | <input type="checkbox"/> Isolated Wetland Permit from DWQ        |
| <input checked="" type="checkbox"/> 401 Water Quality Certification | <input type="checkbox"/> Express 401 Water Quality Certification |

2. Nationwide, Regional or General Permit Number(s) Requested: Nationwide Permit 14

3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here:

4. If payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed for mitigation of impacts, attach the acceptance letter from NCEEP, complete section VIII, and check here:

5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here:

**II. Applicant Information**

1. Owner/Applicant Information

Name: North Carolina Department of Transportation

Mailing Address: Gregory J. Thorpe, Ph.D., Manager

Project Development and Environmental Analysis Branch

1598 Mail Service Center

Raleigh, NC 27699-1598

Telephone Number: 919-733-3141 Fax Number: 919-733-9794

E-mail Address: gthorpe@dot.state.nc.us

2. Agent/Consultant Information (A signed and dated copy of the Agent Authorization letter must be attached if the Agent has signatory authority for the owner/applicant.)

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

Company Affiliation: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

### III. Project Information

Attach a **vicinity map** clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed **site plan** showing property boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1. Name of project: Proposed Widening of US 1 From SR 1424 to SR 1640/SR 1442
2. T.I.P. Project Number or State Project Number (NCDOT Only): U-3456
3. Property Identification Number (Tax PIN): N/A
4. Location  
County: Richmond Nearest Town: Rockingham  
Subdivision name (include phase/lot number): N/A  
Directions to site (include road numbers/names, landmarks, etc.): US 1 South, just east of Rockingham. Site is approximately 160 feet west of intersection of SR 1682 ( Peterson Rd) and SR 1504 (Philadelphia Dr).
5. Site coordinates (For linear projects, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)  
Decimal Degrees (6 digits minimum): \_\_\_\_\_ °N \_\_\_\_\_ °W
6. Property size (acres): Please refer to attached drawings.
7. Name of nearest receiving body of water: Falling Creek (Hinson Lake)
8. River Basin: Yadkin River  
(Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at <http://h2o.enr.state.nc.us/admin/maps/>.)
9. Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: The local area surrounding the proposed project consists of gently rolling hills and land use is best described as residential development, natural forest vegetation, and wetlands.

10. Describe the overall project in detail, including the type of equipment to be used: NCDOT proposes to widen US 1 to a five-lane facility from SR 1424 (Roberdel Rd) to SR 1426 (Old Aberdeen Rd) and a four-lane median divided facility from SR 1426 (Old Aberdeen Rd) to SR 1640 (Wiregrass Rd)/SR 1442 (Ledbetter Rd) utilizing curb and gutter.
11. Explain the purpose of the proposed work: The purpose of this project is to improve safety and provide better traffic carrying capacity along US 1. US 1 is designated as a Major Thoroughfare on the Rockingham-Hamlet Thoroughfare Plan.

#### **IV. Prior Project History**

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules. Notification of JD was issued on November 25, 2002. Site was initially inspected on June 29, 2000. Action ID: 200101026

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#### **V. Future Project Plans**

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application.

N/A

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#### **VI. Proposed Impacts to Waters of the United States/Waters of the State**

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. Each impact must be listed separately in the tables below (e.g., culvert installation should be listed separately from riprap dissipater pads). Be sure to indicate if an impact is temporary. All proposed impacts, permanent and temporary, must be listed, and must be labeled and clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) should be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

1. Provide a written description of the proposed impacts: There will be approximately 107 linear feet of warm perennial stream impacted using a pipe culvert. A total of 0.21 acres of wetland will be impacted from roadway fill, 0.13 acres of non-riverine and 0.08 acres of riverine wetland.

2. Individually list wetland impacts. Types of impacts include, but are not limited to mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

Wetland Impact Site Number (indicate on map)	Type of Impact	Type of Wetland (e.g., forested, marsh, herbaceous, bog, etc.)	Located within 100-year Floodplain (yes/no)	Distance to Nearest Stream (linear feet)	Area of Impact (acres)
Site 1	Roadway fill, clearing	Forested	No	@ 1950	0.13
Site 2	Roadway fill, clearing	Forested	No	0	0.08
Total Wetland Impact (acres)					0.21

3. List the total acreage (estimated) of all existing wetlands on the property: 1.2 acres

4. Individually list all intermittent and perennial stream impacts. Be sure to identify temporary impacts. Stream impacts include, but are not limited to placement of fill or culverts, dam construction, flooding, relocation, stabilization activities (e.g., cement walls, rip-rap, crib walls, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included. To calculate acreage, multiply length X width, then divide by 43,560.

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
1	UT to Falling Creek	Culvert	Perennial	2.5 – 3 feet	107	0.01
Total Stream Impact (by length and acreage)					107	0.01



5. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.). Open water impacts include, but are not limited to fill, excavation, dredging, flooding, drainage, bulkheads, etc.

Open Water Impact Site Number (indicate on map)	Name of Waterbody (if applicable)	Type of Impact	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)	Area of Impact (acres)
N/A				
Total Open Water Impact (acres)				0

6. List the cumulative impact to all Waters of the U.S. resulting from the project:

Stream Impact (acres):	0.01
Wetland Impact (acres):	0.21
Open Water Impact (acres):	0
Total Impact to Waters of the U.S. (acres)	0.22
Total Stream Impact (linear feet):	107

7. Isolated Waters

Do any isolated waters exist on the property?  Yes  No

Describe all impacts to isolated waters, and include the type of water (wetland or stream) and the size of the proposed impact (acres or linear feet). Please note that this section only applies to waters that have specifically been determined to be isolated by the USACE.

N/A

8. Pond Creation

If construction of a pond is proposed, associated wetland and stream impacts should be included above in the wetland and stream impact sections. Also, the proposed pond should be described here and illustrated on any maps included with this application.

Pond to be created in (check all that apply):  uplands  stream  wetlands

Describe the method of construction (e.g., dam/embankment, excavation, installation of draw-down valve or spillway, etc.): N/A

Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond, local stormwater requirement, etc.): N/A

Current land use in the vicinity of the pond: N/A

Size of watershed draining to pond: N/A Expected pond surface area: N/A

## VII. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction techniques to be followed during construction to reduce impacts.

With the exception of not building the project, there are no means of avoiding this stream taking. NCDOT will minimize impacts to the stream and wetlands through the use of Best Management Practices.

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### **VIII. Mitigation**

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE – In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on January 15, 2002, mitigation will be required when necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCEEP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ's Draft Technical Guide for Stream Work in North Carolina, available at <http://h2o.enr.state.nc.us/ncwetlands/strmgide.html>.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.

Compensatory mitigation will be derived from an inventory of assets already in existence within the same 8-digit cataloguing unit, through NCEEP.

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2. Mitigation may also be made by payment into the North Carolina Ecosystem Enhancement Program (NCEEP). Please note it is the applicant's responsibility to contact the NCEEP at (919) 715-0476 to determine availability, and written approval from the NCEEP indicating that they are will to accept payment for the mitigation must be attached to this form. For

additional information regarding the application process for the NCEEP, check the NCEEP website at <http://h2o.enr.state.nc.us/wrp/index.htm>. If use of the NCEEP is proposed, please check the appropriate box on page five and provide the following information:

Amount of stream mitigation requested (linear feet): 107  
Amount of buffer mitigation requested (square feet): N/A  
Amount of Riparian wetland mitigation requested (acres): 0.08  
Amount of Non-riparian wetland mitigation requested (acres): 0.13  
Amount of Coastal wetland mitigation requested (acres): N/A

**IX. Environmental Documentation (required by DWQ)**

1. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? Yes  No
2. If yes, does the project require preparation of an environmental document pursuant to the requirements of the National or North Carolina Environmental Policy Act (NEPA/SEPA)?  
Note: If you are not sure whether a NEPA/SEPA document is required, call the SEPA coordinator at (919) 733-5083 to review current thresholds for environmental documentation.  
Yes  No
3. If yes, has the document review been finalized by the State Clearinghouse? If so, please attach a copy of the NEPA or SEPA final approval letter. Yes  No

**X. Proposed Impacts on Riparian and Watershed Buffers (required by DWQ)**

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to required state and local buffers associated with the project. The applicant must also provide justification for these impacts in Section VII above. All proposed impacts must be listed herein, and must be clearly identifiable on the accompanying site plan. All buffers must be shown on a map, whether or not impacts are proposed to the buffers. Correspondence from the DWQ Regional Office may be included as appropriate. Photographs may also be included at the applicant's discretion.

1. Will the project impact protected riparian buffers identified within 15A NCAC 2B .0233 (Neuse), 15A NCAC 2B .0259 (Tar-Pamlico), 15A NCAC 02B .0243 (Catawba) 15A NCAC 2B .0250 (Randleman Rules and Water Supply Buffer Requirements), or other (please identify \_\_\_\_\_)? Yes  No

2. If “yes”, identify the square feet and acreage of impact to each zone of the riparian buffers. If buffer mitigation is required calculate the required amount of mitigation by applying the buffer multipliers.

Zone*	Impact (square feet)	Multiplier	Required Mitigation
1			
2			
Total			

\* Zone 1 extends out 30 feet perpendicular from the top of the near bank of channel; Zone 2 extends an additional 20 feet from the edge of Zone 1.

If buffer mitigation is required, please discuss what type of mitigation is proposed (i.e., Donation of Property, Riparian Buffer Restoration / Enhancement, or Payment into the Riparian Buffer Restoration Fund). Please attach all appropriate information as identified within 15A NCAC 2B .0242 or .0244, or .0260.

N/A

**XI. Stormwater (required by DWQ)**

Describe impervious acreage (existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property. If percent impervious surface exceeds 20%, please provide calculations demonstrating total proposed impervious level.

N/A

**XII. Sewage Disposal (required by DWQ)**

Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility.

N/A

**XIII. Violations (required by DWQ)**

Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules?

Yes  No

Is this an after-the-fact permit application? Yes  No

**XIV. Cumulative Impacts (required by DWQ)**

Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? Yes  No

If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at

<http://h2o.enr.state.nc.us/ncwetlands>. If no, please provide a short narrative description:  
N/A

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**XV. Other Circumstances (Optional):**

It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).

N/A

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*E. P. Luck*

4.24.07

**Applicant/Agent's Signature**

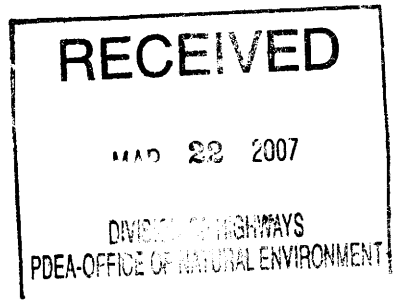
**Date**

(Agent's signature is valid only if an authorization letter from the applicant is provided.)



PROGRAM

March 15, 2007



Mr. Gregory J. Thorpe, Ph.D.  
Environmental Management Director  
Project Development and Environmental Analysis Branch  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:  
  
U-3456, Widening of US 1, Richmond County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the wetland and stream mitigation for the subject project. Based on the information supplied by you in a letter dated February 19, 2007, the impacts are located in CU 03040201 of the Yadkin River Basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

Riparian Wetland Impacts:	0.08 acre
Non-Riparian Wetland Impacts:	0.13 acre
Stream Impacts:	107 feet

This project is included in the NCDOT's Design Build Program. EEP commits to implementing sufficient compensatory stream and wetland mitigation to offset the impacts associated with this project by the end of the MOA Year in which this project is permitted, in accordance with Section X of the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, signed on July 22, 2003. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

William D. Gilmore, P.E.  
EEP Director

cc: Mr. Richard Spencer, USACE – Wilmington  
Mr. John Hennessy, Division of Water Quality, Wetlands/401 Unit  
File: U-3456

*Return to: [illegible]*





March 15, 2007

Mr. Richard Spencer  
U. S. Army Corps of Engineers  
Wilmington Regulatory Field Office  
Post Office Box 1890  
Wilmington, North Carolina 28402

Dear Mr. Spencer

Subject: EEP Mitigation Acceptance Letter:

**U-3456, Widening of US 1, Richmond County; Yadkin River Basin (CU 03040201); Southern Piedmont (SP) Eco-Region**

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide mitigation for the unavoidable impacts associated with the above referenced project as requested by NCDOT in a letter dated February 19, 2007. This project is included in the NCDOT's Design Build Program. The impacts as reported by the NCDOT are as follows:

Riparian Wetland Impacts:	0.08 acre
Non-Riparian Wetland Impacts:	0.13 acre
Stream Impacts:	107 feet

Compensatory wetland and stream mitigation associated with this project will be provided in accordance with Section X of the Memorandum of Agreement between the N. C. Department of Environment and Natural Resources, the N. C. Department of Transportation, and the U. S. Army Corps of Engineers signed on July 22, 2003 (Tri-Party MOA). EEP commits to implement sufficient compensatory riparian and non-riparian wetland mitigation up to 0.16 and 0.26 wetland credits, respectively and stream mitigation up to 214 stream credits to offset the impacts associated with this project by the end of the MOA year in which this project is permitted. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

A handwritten signature in black ink, appearing to read "William D. Gilmore, P.E.", written in a cursive style.

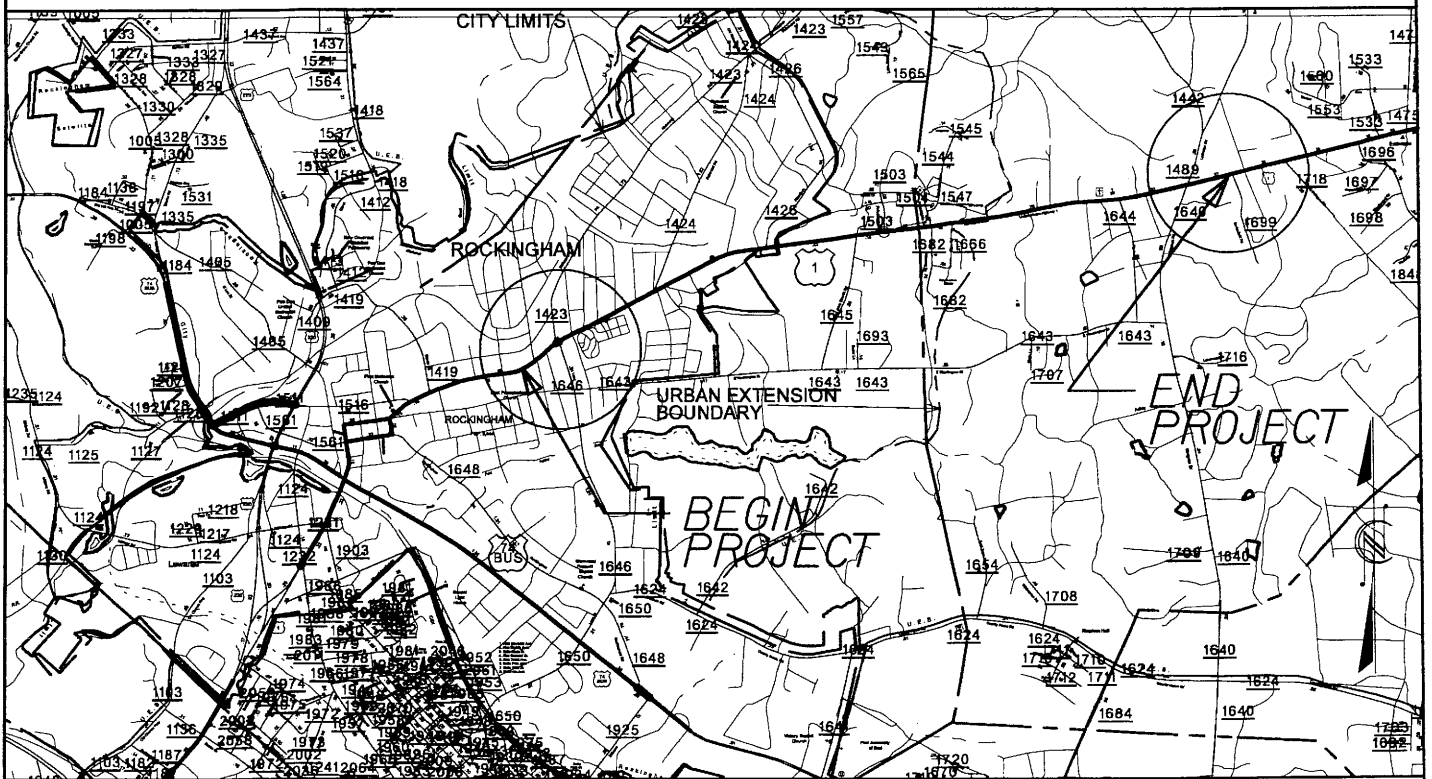
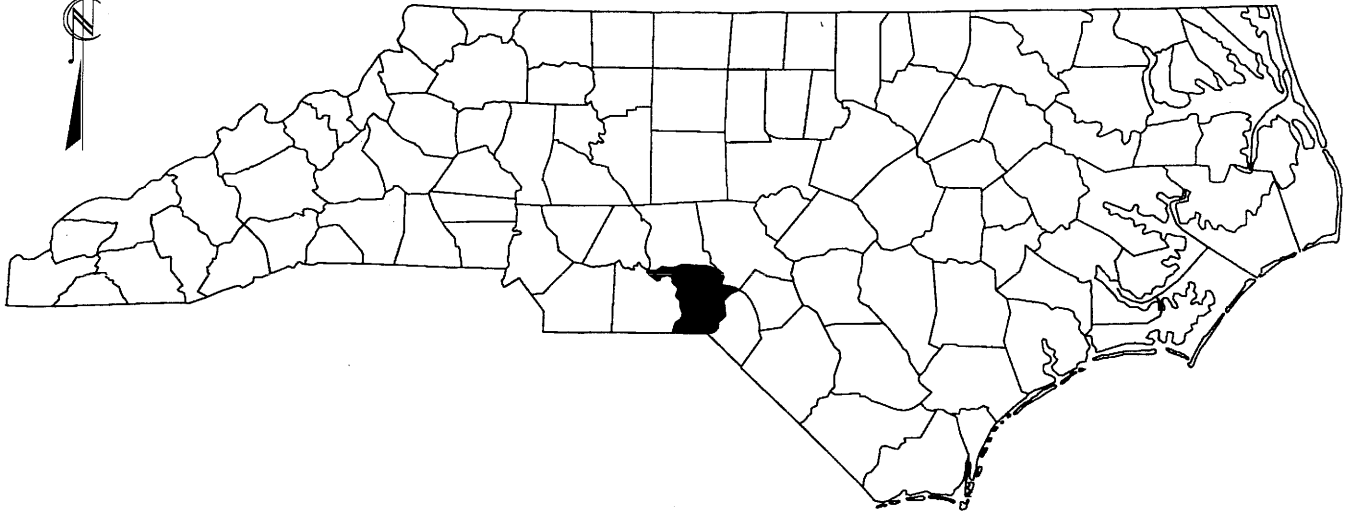
William D. Gilmore, P.E.  
EEP Director

cc: Mr. Gregory J. Thorpe, Ph.D., NCDOT-PDEA  
Mr. John Hennessy, Division of Water Quality, Wetlands/401 Unit  
File: U-3456

*Restoring... Enhancing... Protecting Our State*



# NORTH CAROLINA



VICINITY  
MAPS

**NCDOT**

**DIVISION OF HIGHWAYS**

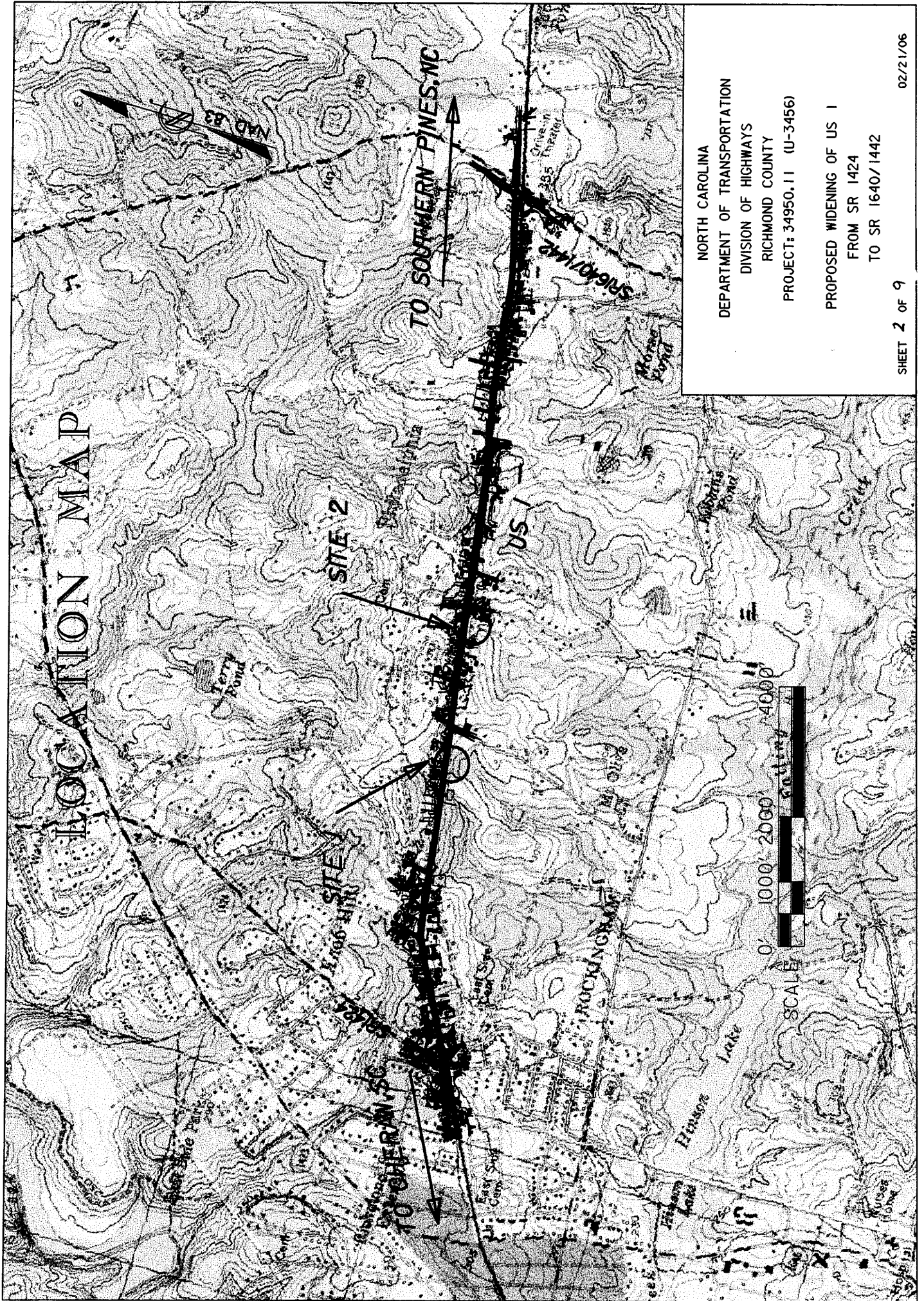
**RICHMOND COUNTY**

**PROJECT: 34950.1.1 (U-3456)**

**PROPOSED WIDENING OF US 1  
FROM SR 1424 TO SR 1640/1442**


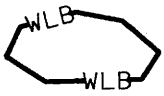




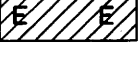
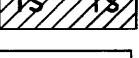


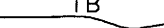

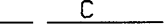

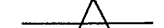
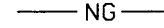
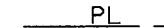



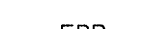

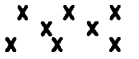




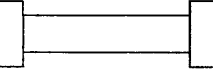
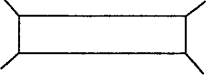

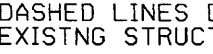
# LOCATION MAP


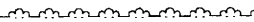

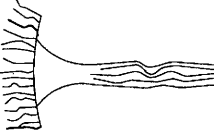



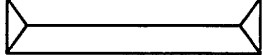
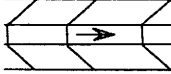


NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RICHMOND COUNTY  
PROJECT: 34950.11 (U-3456)  
PROPOSED WIDENING OF US 1  
FROM SR 1424  
TO SR 1640/1442

# WETLAND LEGEND

-  WETLAND BOUNDARY
-  WETLAND
-  DENOTES FILL IN WETLAND
-  DENOTES FILL IN SURFACE WATER
-  DENOTES FILL IN SURFACE WATER (POND)
-  DENOTES TEMPORARY FILL IN WETLAND
-  DENOTES EXCAVATION IN WETLAND
-  DENOTES TEMPORARY FILL IN SURFACE WATER
-  DENOTES MECHANIZED CLEARING
-  FLOW DIRECTION
-  TOP OF BANK
-  EDGE OF WATER
-  PROP. LIMIT OF CUT
-  PROP. LIMIT OF FILL
-  PROP. RIGHT OF WAY
-  NATURAL GROUND
-  PROPERTY LINE
-  TEMP. DRAINAGE EASEMENT
-  PERMANENT DRAINAGE EASEMENT
-  EXIST. ENDANGERED ANIMAL BOUNDARY
-  EXIST. ENDANGERED PLANT BOUNDARY
-  WATER SURFACE
-  LIVE STAKES
-  BOULDER
-  COIR FIBER ROLLS

-  PROPOSED BRIDGE
-  PROPOSED BOX CULVERT
-  PROPOSED PIPE CULVERT  
12"-48" PIPES  
54" PIPES & ABOVE
-  (DASHED LINES DENOTE EXISTING STRUCTURES)

-  SINGLE TREE
-  WOODS LINE
-  DRAINAGE INLET
-  ROOTWAD
-  RIP RAP
-  ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE
-  PREFORMED SCOUR HOLE
-  LEVEL SPREADER (LS)
-  DITCH / GRASS SWALE

**NCDOT**  
**DIVISION OF HIGHWAYS**  
**RICHMOND COUNTY**  
**PROJECT: 34950.11 (U-3456)**

**PROPOSED WIDENING OF US 1**  
**FROM SR 1424 TO SR 1640/1442**

SHEET 3 OF 9

05/10/06

# PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
60	KENNETH J.LAYTON INC.	P.O.BOX 1205 ROCKINGHAM, NC 28380
97	UNKNOWN	
99	LEON WALL	P.O.BOX 1502 ROCKINGHAM, NC 28380

**NCDOT**

**DIVISION OF HIGHWAYS**

**RICHMOND COUNTY**

**PROJECT: 34950.1.1 (U-3456)**

**PROPOSED WIDENING OF US 1  
FROM SR 1424 TO SR 1640/1442**

**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS							
			Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Temp. Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)				
1	L- Sta 67+90 RT to Sta. 70+45 RT	Roadway Fill	0.10			0.03									
2	L- Sta. 88+90 RT to L- Sta. 91+50 RT	Roadway Fill	0.05			0.03	0.01						107		
<b>TOTALS:</b>			<b>0.15</b>	<b>0</b>	<b>0</b>	<b>0.06</b>	<b>0.01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>0</b>	<b>0</b>

**METHOD II CLEARING USED IN WETLANDS**

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RICHMOND COUNTY  
 PROJECT 34950.1.1 (U-3456)  
 PROPOSED WIDENING OF US 1 FROM  
 SR 1424 TO SR 1640/SR 1442  
 SHEET **5** OF **9** 2/6/2007

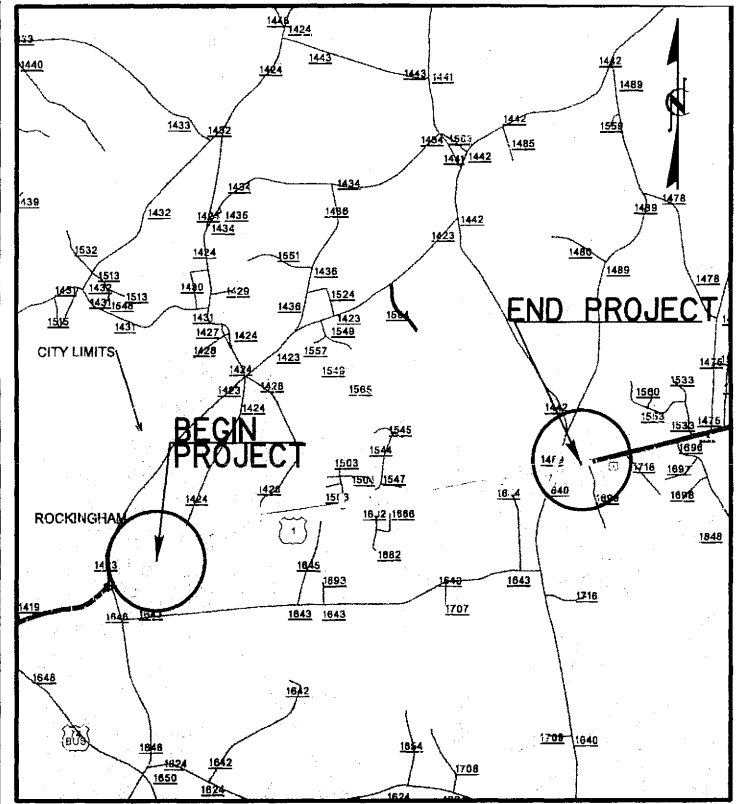
**CONTRACT: A304351 T.I.P. PROJECT: U-3456**

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**STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
RICHMOND COUNTY**

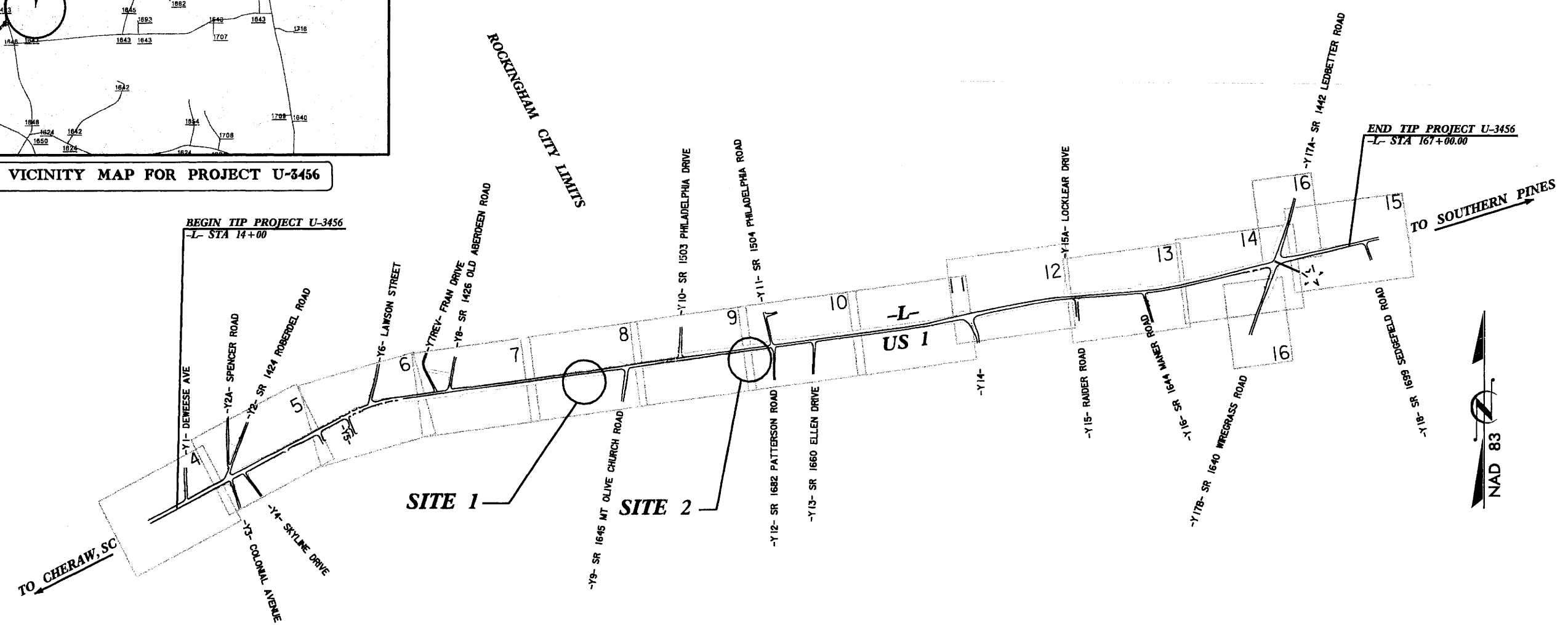
Permit Drawing  
Sheet 6 of 9

N.C.	U-3456	1
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
34950.1.1	STP-0001(7) STP-0001(7)	PE RW



VICINITY MAP FOR PROJECT U-3456

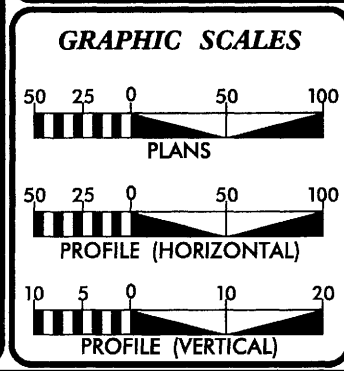
**R/W PLANS**  
**LOCATION: US 1 FROM SR 1424 (ROBERDEL ROAD)  
 TO SR 1640 (WIREGRASS ROAD)/SR 1442  
 (LEDBETTER ROAD) IN ROCKINGHAM**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIDEWALKS  
 AND SIGNALS**



See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols

A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF ROCKINGHAM.  
 CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III, EXCEPT IN WETLANDS.  
 NCDOT CONTACT : TERESA M. BRUTON, P.E., PROJECT ENGINEER, PROJECT SERVICES

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION



**DESIGN DATA**

ADT 2005 =	13900
ADT 2025 =	22100
DHV =	10%
D =	60%
T =	11%
TTST 6% DUAL 5%	
V =	50mph

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT U-3456	= 2.898 MILES
LENGTH STRUCTURES TIP PROJECT U-3456	= 0.000 MILES
TOTAL LENGTH OF TIP PROJECT U-3456	= 2.898 MILES

2002 STANDARD SPECIFICATIONS
R/W DATE:
LETTING DATE: <b>October 17, 2006</b>

**G.T. SHEARIN, P.E.**  
EARTH TECH PROJECT MANAGER

Prepared in the Office of:

**EarthTech**  
A Tyco International Ltd. Company

FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

701 Corporate Center Drive  
Suite 475  
Raleigh, N.C. 27607  
(919)-854-6200  
FAX (919)-854-6259

**HYDRAULICS ENGINEER**

\_\_\_\_\_  
JOHN MARK KAMPRATH, P.E.  
SIGNATURE:

**ROADWAY DESIGN ENGINEER**

\_\_\_\_\_  
G. T. SHEARIN, P.E.  
SIGNATURE:

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

\_\_\_\_\_  
ART McMILLAN, P.E.  
STATE DESIGN ENGINEER

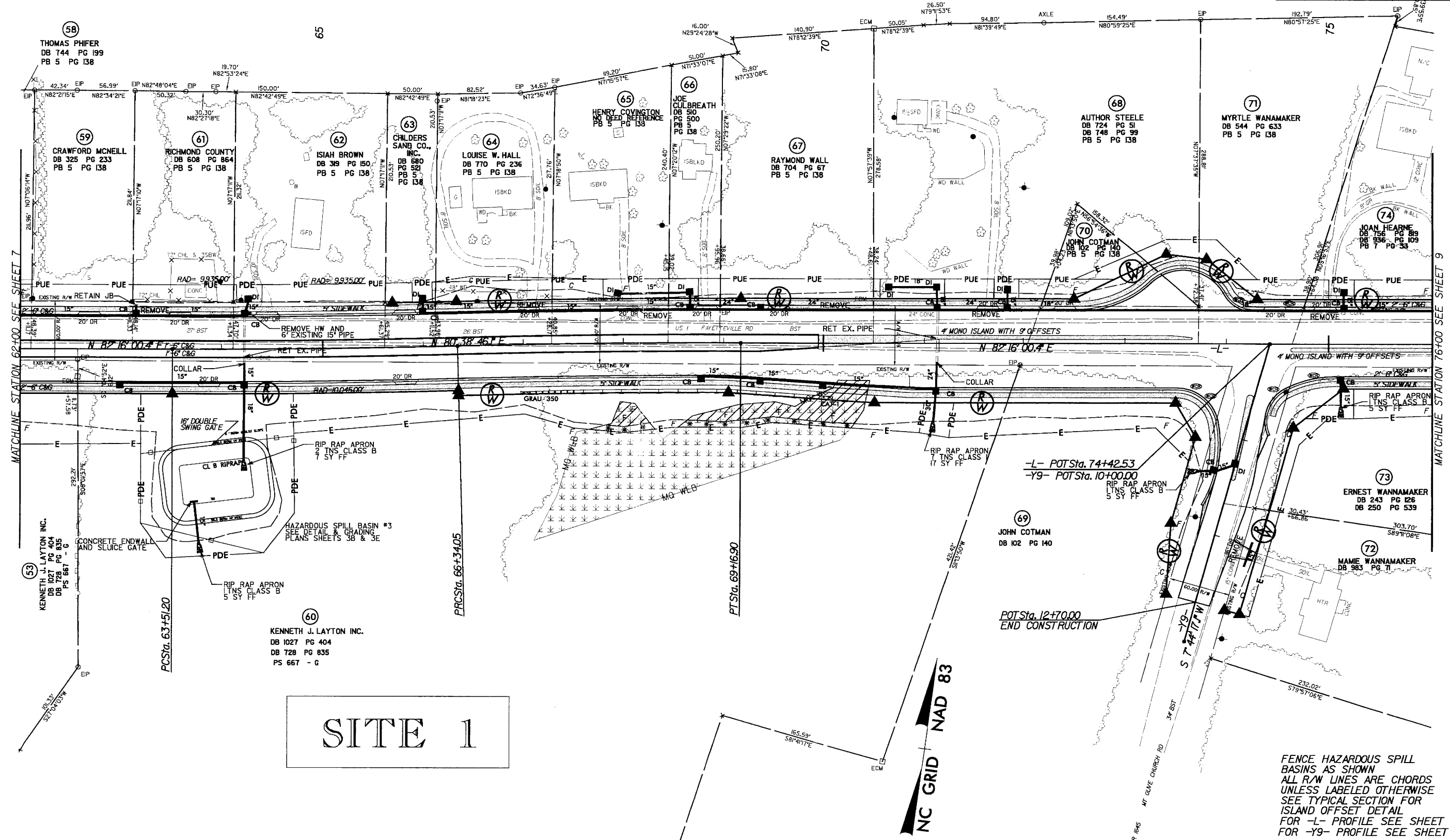
**DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION**

APPROVED  
DIVISION ADMINISTRATOR

DATE

PROJECT REFERENCE NO. U-3456	SHEET NO. 8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
Prepared in the Office of: <b>EARTH TECH</b> 701 Corporate Center Drive, Suite 475 Raleigh, NC 27607 (919) 854-6202 • (919) 854-8259(FAX)	
GRAPHIC SCALE 25' 0 50'	

-L-  
 PI Sta 64+92.63    PI Sta 67+75.48  
 $\Delta = 1'37"14.2"$  (LT)     $\Delta = 1'37"14.2"$  (RT)  
 $D = 0'34"22.6"$      $D = 0'34"22.6"$   
 $L = 282.85'$      $L = 282.85'$   
 $T = 141.44'$      $T = 141.44'$   
 $R = 10,000.00'$      $R = 10,000.00'$   
 SE = NC    SE = NC



SITE 1

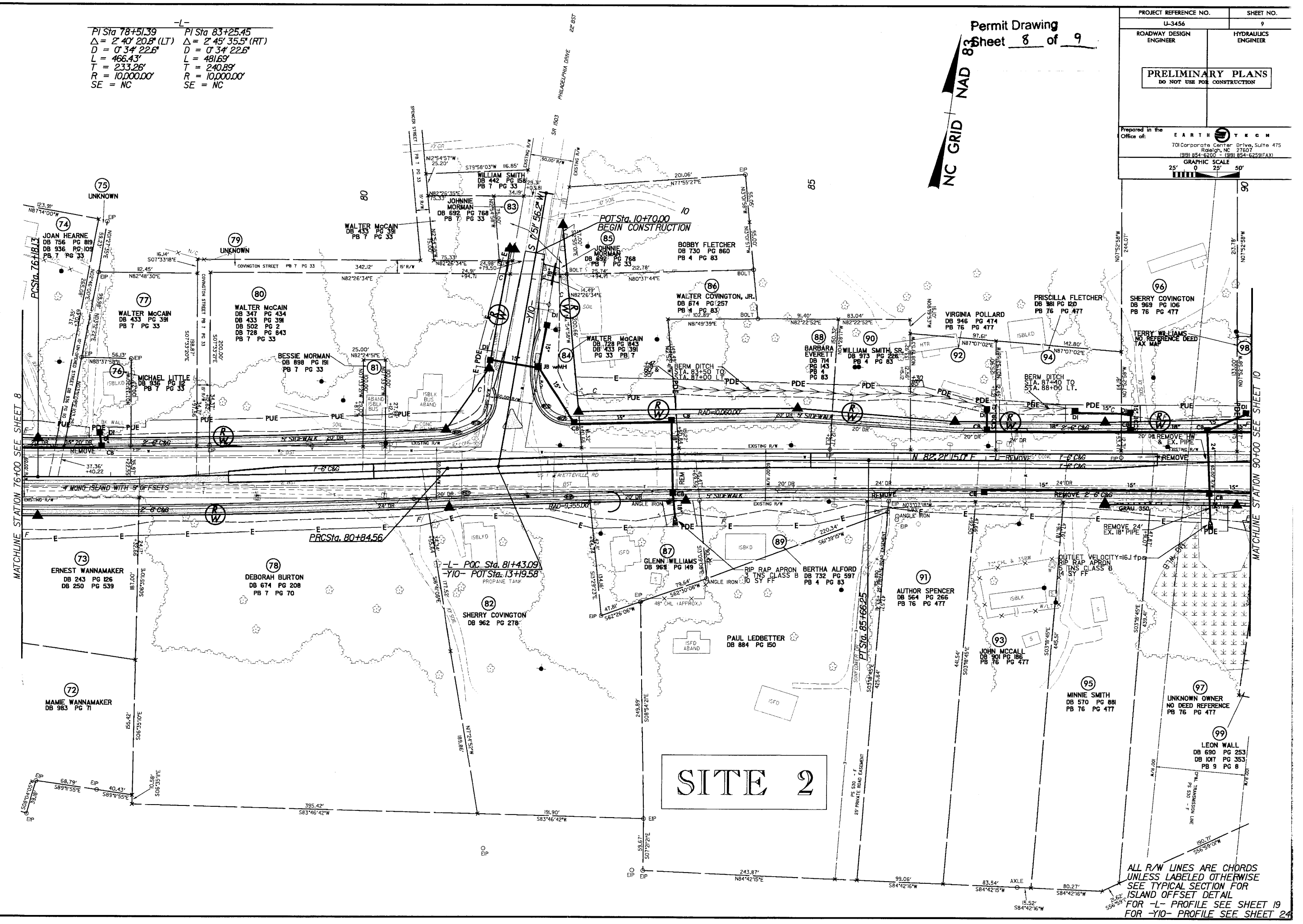
FENCE HAZARDOUS SPILL BASINS AS SHOWN  
 ALL R/W LINES ARE CHORDS UNLESS LABELED OTHERWISE  
 SEE TYPICAL SECTION FOR ISLAND OFFSET DETAIL  
 FOR -L- PROFILE SEE SHEET 19  
 FOR -Y9- PROFILE SEE SHEET 24

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 11/29/2006 11:54:53 AM

-L-  
 PI Sta 78+51.39    PI Sta 83+25.45  
 $\Delta = 2' 40'' 20.8'' (LT)$      $\Delta = 2' 45'' 35.5'' (RT)$   
 $D = 0' 34'' 22.6''$      $D = 0' 34'' 22.6''$   
 $L = 466.43'$      $L = 481.69'$   
 $T = 233.26'$      $T = 240.89'$   
 $R = 10,000.00'$      $R = 10,000.00'$   
 $SE = NC$      $SE = NC$

Permit Drawing  
 Sheet 8 of 9

PROJECT REFERENCE NO.	SHEET NO.
U-3456	9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
Prepared in the Office of:	
<b>EARTH TECH</b> 701 Corporate Center Drive, Suite 475 Raleigh, NC 27607 (919) 854-6200    (919) 854-6259(FAX)	
GRAPHIC SCALE 25' 0 25' 50'	



SITE 2

ALL R/W LINES ARE CHORDS  
 UNLESS LABELED OTHERWISE  
 SEE TYPICAL SECTION FOR  
 ISLAND OFFSET DETAIL  
 FOR -L- PROFILE SEE SHEET 19  
 FOR -Y10- PROFILE SEE SHEET 24

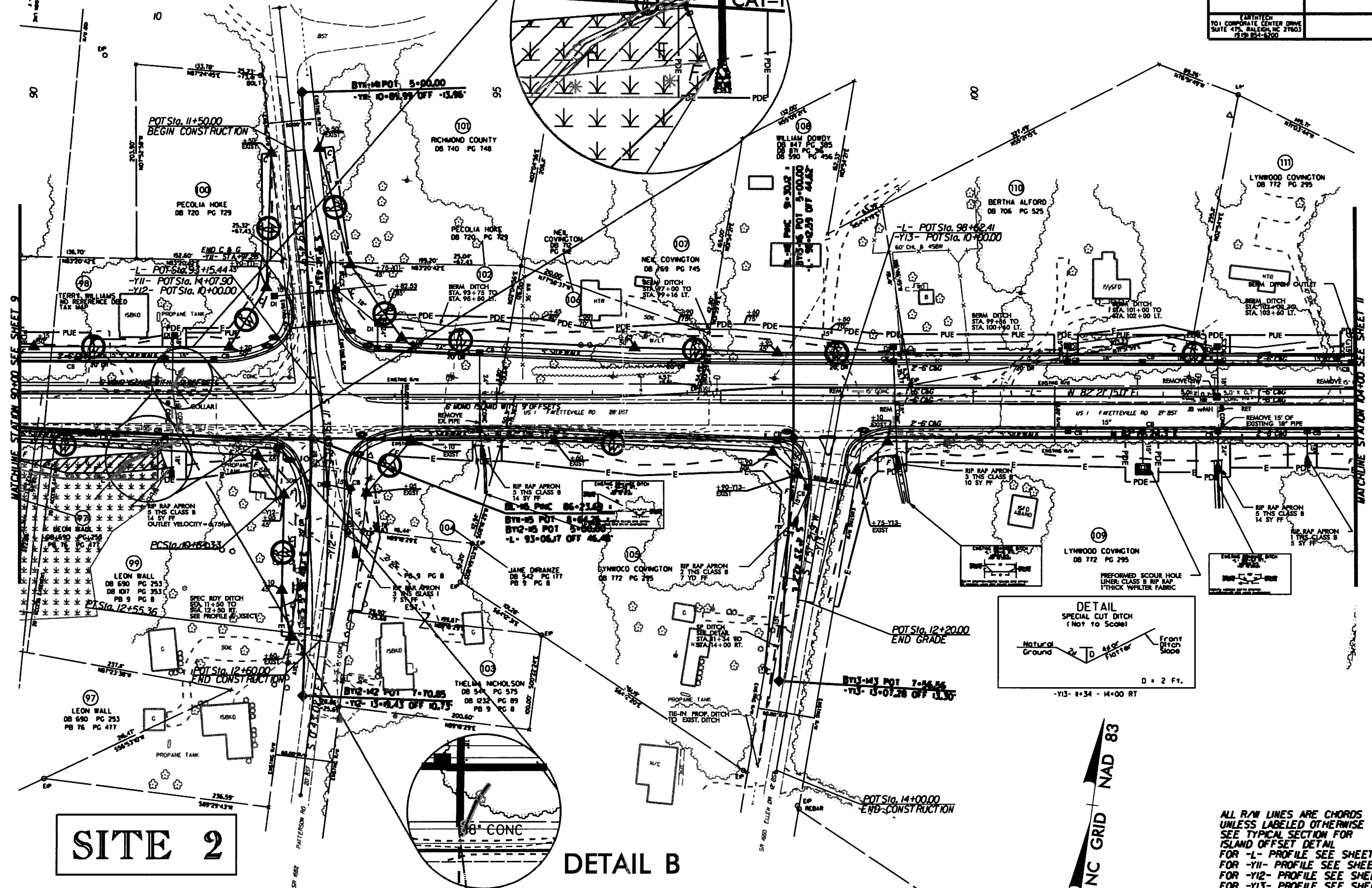
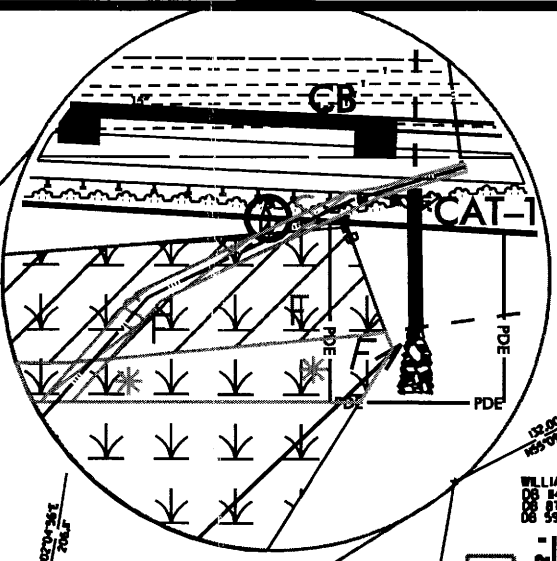
e:\61820\U-3456\Hydraulics\permit submittal\U3456\_HUY\_PSH09.dgn  
 11/29/2006 11:55:18 AM

-Y12-  
 PI Sta 11+60.14  
 $\Delta = 10' 56" 43.7' (RT)$   
 $D = 5' 43" 46.5'$   
 $L = 191.03'$   
 $T = 95.81'$   
 $R = 1,000.00'$   
 $S_e = .03$   
 $R_o = 60.00'$

Permit Drawing  
 Sheet 9 of 9

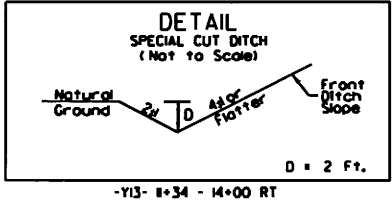
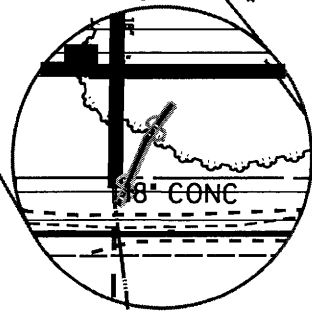
PROJECT REFERENCE NO. <b>U-3456</b>	SHEET NO. 10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
<small>EMTECH        101 CORPORATE CENTER DRIVE        SUITE 475, BALBOA, NC 27603        (704) 854-6200</small>	

# DETAIL A



# SITE 2

# DETAIL B



ALL R/W LINES ARE CHORDS UNLESS LABELED OTHERWISE SEE TYPICAL SECTION FOR ISLAND OFFSET DETAIL FOR -L- PROFILE SEE SHEET 20 FOR -Y11- PROFILE SEE SHEET 24 FOR -Y12- PROFILE SEE SHEET 24 FOR -Y13- PROFILE SEE SHEET 24

REVISIONS

USER: [unclear]  
 DATE: 4/27/2021  
 TIME: 10:37 AM  
 CDR: [unclear]