

PROJECT COMMITMENTS

TIP Project No. U-2525B and U-2525C
Greensboro Eastern Loop from US 70 Relocation
to SR 2303 (Lawndale Drive)
Guilford County
WBS Element 34821.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Project Development and Environmental Analysis Unit/ Human Environment Section

Noise abatement measures will continue to be considered throughout the design phase of the project.

NOTES: Based on the noise wall survey results, the noise wall at the SR 2827 (Four Mile Loop Road) – Relocated US 70(Burlington Road) interchange will not be built. Landscape screening will be utilized instead of a noise wall. The landscape plans will be developed and planting will occur after the roadway construction is completed. Also, based on the noise analyses performed for the SR 2568 (Assembly Road) area at the US 29 interchange, the results showed that there are no anticipated noise impacts in accordance with NCDOT's Traffic Noise Abatement Policy. Noise abatement is not required for Quail Oaks subdivision.

The Kerenoff neighborhood service road redesign developed in 2011 was reviewed, and noise abatement is not required for Kerenoff subdivision.

The southeast quadrant of the US 29/Greensboro Loop interchange was reviewed since this interchange quadrant was not included in previous studies. A noise barrier was predicted to provide at least a 5 dB (A) noise reduction for three receptors, and as much as a 7 dB (A) noise level reduction for one front row receptor. However, the total area of the barrier per predicted benefited receptor was above the allowable square footage per benefit; therefore, a noise barrier in this location would not be reasonable and is not recommended for construction.

Sidewalks will be incorporated into the project. Further coordination is needed with the City of Greensboro regarding the specific sidewalk locations. A municipal agreement will be executed for Greensboro's participation.

NOTES: According to NCDOT's Pedestrian Policy guidelines, any pedestrian facilities that the City of Greensboro wishes to incorporate into the project plans must be sent in writing to NCDOT by the Project Final Field Inspection (FFI) date.

The City of Greensboro has verbally requested that sidewalks be incorporated into all proposed curb and gutter construction along –Y- lines. NCDOT will provide the City with cost estimates to initiate the municipal agreement process.

Response to NOTES: The municipal agreement is currently being finalized for signatures.

Hydraulics Unit

The final designs will be coordinated with appropriate state and local officials and the Federal Emergency Management Agency (FEMA) to assure compliance with FEMA, state, and local floodway and floodplain regulations.

NOTE: Standard Commitment.

The design of any necessary drainage structures at greenways will be coordinated with the Guilford County Parks and Recreation Department.

NOTE: There are no greenways located within the U-2525B project limits.

Bridges will be considered during the design phase at major waterway and floodplain crossings.

NOTE: Bridges span North Buffalo Creek and the bridge at SR 2825 (Camp Burton Road) was lengthened to span an unnamed tributary of North Buffalo Creek and wetlands.

Location & Survey Unit

Geodetic survey control monuments will be located during design and the U.S. Coastal and Geodetic Survey and North Carolina Geodetic Survey will be notified of their location.

NOTE: Standard commitment.

Roadside Environmental Unit, Hydraulics Unit, and Division 7

NCDOT's "Best Management Practices for Protection of Surface Waters" will be implemented, where applicable, including hazardous spill catch basins in water supply watershed critical areas where the roadway crosses a water supply.

NOTE: Standard commitment.

Geotechnical Unit and Division 7

Any underground storage tanks discovered during construction will be reported to the North Carolina Division of Environmental Management.

NOTE: Standard Commitment.

Project Development and Environmental Analysis Unit

Mitigation for unavoidable wetland loss will be provided through implementation of a wetland mitigation plan developed during the permitting phase of the project.

NOTE: Standard Commitment.

Recommendations to restore stream segments to resemble the destroyed habitat will be considered where practicable. Banks and beds of relocated channels will be stabilized with vegetation or other protective devices as practicable, including consideration of using logs to line banks.

NOTE: NCDOT plans to use on-site stream mitigation, including relocation, restoration, and enhancement to offset unavoidable impacts to existing streams caused by the Greensboro Eastern Loop construction.

Response to NOTE: The on-site mitigation commitment has been fulfilled. NCDOT has provided 2,055 LF of on-site stream mitigation at three sites through stream relocation and restoration. The remainder of the mitigation will be provided by the Ecosystem Enhancement Program (EEP).

Surveys for small whorled pogonia will be required for U-2525B due to the presence of potential, but limited, habitat. These surveys will be conducted within two to three years of the project Let date.

NOTE: Small whorled pogonia surveys will be conducted within the project area later this year (2012) in the appropriate season.

Response to NOTE: Surveys for small whorled pogonia were conducted by Atkins, Inc. biologists on June 13-15 and June 18-19, 2012 in areas of suitable habitat. No specimens were found. A review of the North Carolina Natural Heritage Program (NCNHP) database on November 13, 2013, indicated no occurrences of small whorled pogonia within one mile of the project study area. Therefore, the biological conclusion of 'No Effect' was determined for small whorled pogonia which will remain valid for five years.

A combined Screening ICE and ICE Land Use Scenario Assessment will be completed prior to obtaining permits for the project.

NOTE: The ICE and ICE Land Use Scenario Assessment report was completed on October 30, 2009.

NCDOT will mitigate for all of the wetland and stream impacts contained within Quadrant D of the US 29 interchange including areas not directly impacted by construction.

NOTE: The permit included this mitigation.

U-2525 B and C will be permitted together using a phased permit. Preliminary plans for U-2525 C will need to be submitted when permit drawings for U-2525 B are submitted.

NOTE: The permit included this commitment.

Project Development and Environmental Analysis Unit and Division 7
Historic Architecture Stipulations:

1. *Recordation:*

Prior to the initiation of construction, NCDOT will record the existing condition of the Schoolfield-Hatcher Farm and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan.

NOTE: The Schoolfield-Hatcher Farm Historic Structures and Landscape Recordation Plan was completed in October 2010.

2. *Landscape Plan:*

In consultation with SHPO and the property owner, NCDOT will develop a landscape plan for the Schoolfield-Hatcher property. Installation of plantings will be limited to the non-wooded areas of the parcel north and east of the roadway. As the installed plantings mature, they are intended to form a natural buffer between the roadway and the farm's primary structures. NCDOT will replace in kind any landscape elements which die within two years of installation.

NOTE: The Schoolfield-Hatcher Farm landscape plan was developed and approved by the State Historic Preservation Office on January 21, 2014. See Appendix A for the landscape plan. A separate contract for landscaping will be developed by Division 7, and the landscaping will be installed after the roadway construction is completed. NCDOT will replace in kind any landscape elements planted as a buffer for the Schoolfield-Hatcher property which die within two years of installation.

3. *Shifted Roadway Alignment:*

The original middle alternative alignment (ALT-1) will be shifted away from the farm's primary structures as described in the shifted alternative (ALT-2).

NOTE: The alignment was shifted as described in the shifted alternative (ALT-2) to reduce impacts to the Schoolfield-Hatcher Farm.

4. *Access:*

The new transportation facility with control-of-access fencing will divide the farm into two discontinuous parcels. Access to the first parcel, containing the house and primary farm structures, will be retained via the current driveway. NCDOT will provide a cul-de-sac to allow access to the second parcel.

NOTE: The driveway and cul-de-sac are included in the U-2525B final design plans.

Project Development and Environmental Analysis Unit, Division 7 and Project Services Unit

Archaeological Commitments:

1. Archaeological Monitoring

*The NCDOT will monitor initial ground-disturbing activities within the property limits of Sites 31GF452** (Schoolfield-Hatcher Farm, U-2525B) and 31GF466 (Site in SE Quadrant of the proposed SR 2352 (North Elm Street) interchange, U-2525C) in accordance with the attached Archaeological Monitoring Plan.*

Archaeological Monitoring Plan (to be included in the construction contract proposal)

NCDOT (Archaeology Group) Contact Information: Matt Wilkerson, 919-707-6089.

- The contractor will contact the NCDOT (Archaeology Group) when ground-disturbing activities are anticipated within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange).*
- The contractor will provide 48-hours' notice to the NCDOT (Archaeology Group) prior to ground-disturbing activities within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange). The 48-hour period will begin upon acknowledgment by the NCDOT (Archaeology Group) that the contractor has contacted them.*
- The NCDOT (Archaeology Group) will be on-site during ground-disturbing activities in order to monitor said activities within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange). Monitoring activities may include, but not be limited to: 1) cleaning and photographing areas exposed during construction, 2) mapping both plan and profile views of open trenches, and 3) collecting materials or artifacts exposed during construction. The NCDOT (Archaeology Group) will have the authority to halt all construction work within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange) in order to assess the need for further archaeological excavations.*
- Should archaeological resource(s) deemed eligible for the National Register of Historic Places (NRHP) be discovered during the monitoring phase as determined by the NCDOT (Archaeology Group), then all work will be halted within the limits of the NRHP resource and the State Historic Preservation Office will be contacted. As per the Memorandum of Agreement (MOA), the SHPO will consult with the NCDOT (Archaeology Group), on-site if necessary, in order to develop appropriate protection/mitigation measures for the resource(s). Appropriate measures for the resource(s) may include preservation in place, photographing and mapping, and/or additional archaeological excavations.*
- Both the SHPO and the NCDOT (Archaeology Group) will agree upon and provide to the contractor a written description of the measures required for the resource(s). The description will include a schedule for implementing and completing the measures. Upon receipt of written confirmation from the NCDOT (Archaeology Group) that the resource measures have been completed, construction activities may resume in the location containing the resource.*

2. *Archaeological Data Recovery*
Sites 31GF456 (Site near Summit Avenue, U-2525C) and 31GF466 (Site in SE Quadrant of the proposed SR 2352 (North Elm Street) interchange, U-2525C) are recommended as eligible for the National Register of Historic Places (NRHP). Both archaeological sites will be avoided by the Undertaking as currently designed; however, if design plans change prior to construction thereby causing an adverse impact to either of these sites, the NCDOT, in consultation with the SHPO and USACE will develop archaeological Data Recovery Plans (DRPs) in order to mitigate the adverse impact(s) to these sites. Given their proximity to the Undertaking, a visual barrier will be placed along the proposed ROW in order to avoid and prevent any disturbance(s) to these sites.

NOTE: Both sites are located within the U-2525C project limits and will be reviewed during future consultations for U-2525C.

3. *Cemetery Removal and Relocation*
*The May/Hudson Cemetery (Site 31GF445** in the NE quadrant of the proposed interchange at SR 2770 (Huffine Mill Road), U-2525 B) cannot be avoided and will be relocated in accordance with the provisions of NCGS Chapter 65.*
4. *Access-Denied Areas*
Of the five (5) areas not surveyed during the study due to denial of access, only the Louise Coble parcel (15.64 acres within the proposed SR 2770 (Huffine Mill Road) interchange, U-2525 B) is to be affected by the Undertaking and will require additional investigations once access has been granted or ROW has been acquired and prior to any construction activities.

NOTE: The Coble Parcel archaeological survey was completed in January 2014 and identified one archaeological site and two isolated finds with unknown prehistoric lithic components. None of the sites are recommended eligible for the NRHP, and no further archaeological investigation is recommended for this project as it is currently defined.

Project Development and Environmental Analysis Unit, Roadside Environmental Unit and Division 7

NCDOT will adhere to Design Standards for Sensitive Watersheds in the areas of the 5 unnamed tributaries (UTs) of South Buffalo Creek that drain into a section of the creek designated as Section 303(d) waters due to turbidity.

NOTE: Since South Buffalo Creek and its UTs are not listed on the 2012 303(d) Final List of Impaired Waters of North Carolina for turbidity or sedimentation, NCDOT will not need to adhere to Design Standards for Sensitive Watersheds as previously mentioned.

COMMITMENTS FROM PERMITTING

Division 7, Natural Environment Section, and Hydraulics Unit

This permit only authorizes work on Section B of TIP U-2525. Construction on Section C of TIP U-2525 shall not commence until final design has been completed for this section, the permittee has minimized impacts to waters and wetlands to the maximum extent practicable, any modifications to the plans, and a compensatory mitigation plan, have been approved by the US Army Corps of Engineers (the Corps). Preliminary plans for U-2525C were provided with the August 28, 2013 application (Sheets 1-89) however, these plans are not to be used for construction purposes.

When final design plans are completed for U-2525C, a modification to the 401 Water Quality Certification shall be submitted with two copies and fees to the NC Division of Water Quality. Final designs shall reflect all appropriate avoidance, minimization, and mitigation for impacts to wetlands, streams, and other surface waters, and buffers. No construction activities that impact any wetlands, streams, surface waters, or buffers located in U-2525C shall begin until after the permittee applies for, and receives a written modification of the 401 Water Quality Certification from the NC Division of Water Quality.

Natural Environment Section and Division 7

The Permittee shall fully implement the compensatory mitigation plan, entitled, Mitigation Plan Greensboro Eastern Loop, Guilford County North Carolina T.I.P Number U-2525B dated August 12, 2013 and revised March 17, 2014. The mitigation plan includes 14 plan sheets received on August 28, 2013 (OSM-1, OSM-1A, OSM-1B, OSM-2, OSM-2A, OSM-2B, OSM-2C, OSM-2D, OSM-2E, OSM-2F, OSM-3, OSM-4, OSM-5, OSM-6, OSM-7). These mitigation plans are for the unavoidable impacts to 2,055 linear feet of streams. Activities prescribed by this plan shall be initiated prior to, or concurrently with, commencement of any construction activities within jurisdictional areas authorized by this permit. The permittee shall relocate and restore 2,055 linear feet of streams in accordance with the plan with the following conditions:

- a) The permittee, NCDOT, is the party responsible for the implementation, performance and long term management of the compensatory mitigation project.
- b) Any changes or modifications to your mitigation plan shall be approved by the Corps.
- c) The permittee shall maintain the entire mitigation site in its natural condition, as altered by the work in the mitigation plan, in perpetuity. Prohibited activities within the mitigation site specifically include, but are not limited to: Filling; grading; excavating; earth movement of any kind; construction of roads, walkways, buildings, signs, or any other structure; any activity that may alter the drainage patterns on the property; the destruction, cutting, removal, mowing, or other alteration of vegetation on the property; disposal or storage of any garbage, trash, debris or other waste material; graze or water animals, or use for any agricultural or horticultural purpose;

or any other activity which would result in the property being adversely impacted or destroyed, except as specifically authorized by this permit.

d) All mitigation areas shall be monitored for a minimum of 5 years or until deemed successful by the Corps in accordance with the monitoring requirements included in the mitigation plan.

Compensatory mitigation for impacts to 8,083 linear feet of streams at a replacement ratio of 1:1 is required. Partial compensatory mitigation for impacts to jurisdictional streams shall be provided by onsite stream relocations of 2,055 linear feet of stream. The onsite stream relocation shall be constructed in accordance with the design submitted in the August 27, 2013 application. All on-site mitigation sites shall be protected in perpetuity by a conservation easement or through NCDOT fee simple acquisition and recorded in the NCDOT Natural Environment Section mitigation geodatabase. Please be reminded that as-builts for the completed streams shall be submitted to the North Carolina Division of Water Resources 401 Wetlands Unit with the as-builts for the rest of the project. If the parameters of this condition are not met, then the permittee shall supply additional stream mitigation for the 2,055 linear feet of impacts. All channel relocations shall be allowed to stabilize for an entire growing season. All stream relocations shall have a 50-foot wide native wooded buffer planted on both sides of the stream unless otherwise authorized by this Certification. A transitional phase incorporating rolled erosion control product (RECP) and appropriate temporary ground cover is allowable. The stream mitigation site shall be monitored annually for five years or until success criteria are satisfied. Monitoring protocols shall follow the Monitoring Level I outlined in the Stream Mitigation Guidelines, April 2003. Success of the mitigation site shall be determined by the NCDWR during an on-site visit at or near the end of the monitoring period.

Human Environment Section and Division 7

The Permittee shall fully implement the Archaeological Monitoring Plan, which was one of the environmental commitments agreed to by NCDOT, and is listed on Page 5 of 8 of this Greensheet.

Permit Modification:

No new special conditions were added.



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

October 31, 2014

Regulatory Division

Action ID: SAW-2005-21386

Mr. Richard W. Hancock, P.E.
Manager, Project Development and Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

Reference the Department of the Army (DA) permit issued on April 15, 2014, to Ms. Deborah Barbour, of the North Carolina Department of Transportation for impacts associated with the new location project identified as U-2525BC. The project is a 9.7 mile, four-lane/six-lane divided facility on new location extending from the US 70 relocation to SR 2303 (Lawndale Drive) in Greensboro, Guilford County, North Carolina. Section B of this project begins at the US 70 relocation and terminates at US 29 and Section C begins at US 29 and ends at SR 2303 (Lawndale Drive). Coordinates (in decimal degrees) for the site are: 36.089772° North, -79.697302° West for the eastern terminus and 36.141773° North, -79.825120° West for the western terminus. The site contains portions of four (4) unnamed tributaries to South Buffalo Creek, twenty (20) unnamed tributaries to North Buffalo Creek, five (5) unnamed tributaries to an unnamed tributary at Camp Herman, fourteen (14) unnamed tributaries to Reedy Fork, a portion of Richland Creek, and ten (10) unnamed tributaries to Richland Creek, as well as 50 (50) adjacent wetland areas and five (5) open water ponds in the Cape Fear River Basin (8-Digit Cataloging Unit 03030002).

Impacts authorized by the permit include: 1) The permanent placement of fill material into 22,901 linear feet of jurisdictional stream channel, 9.94 acres of adjacent riparian wetlands, 2.32 acres of jurisdictional open waters and, 2) the temporary placement of fill material into 607 linear feet of jurisdictional stream channel and 0.12 acre of adjacent riparian wetlands associated with the relocation of utility lines. Mitigation was implemented for the unavoidable impacts by payment into the North Carolina Ecosystem Enhancement Program as well as permittee responsible mitigation referenced in the permit special conditions.

A permit modification dated June 18, 2014 authorized an additional temporary discharge of fill material into 0.14 acres of riparian wetlands associated with construction staging and access for a 10 inch Piedmont Natural Gas natural gas pipeline relocation via directional drill under the permitted project roadway.

Also reference your letter to the Corps, received via email on October 8, 2014, requesting modification of the permit for additional impacts to U-2525B including permanent discharge of fill material into 111 linear feet of stream and <0.01 acre of riparian wetlands, and temporary discharge of fill material into 21 linear feet of stream, associated with constructing an additional road crossing to connect Sanctuary Drive to Whiterock Road to maintain residential access. Plans for U-2525C remain unchanged.

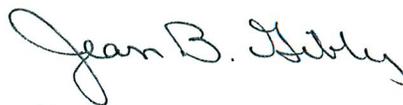
The Corps has completed the evaluation of your request and determined that it is appropriate and reasonable, and no public notice is required for this modification. Therefore, the permit is modified as listed and shown as Site 36 in the modified drawings of the October 8, 2014 modification request, consisting of revised Permit Drawing Sheets 1, 86A, 86B, and 93, and Roadway plan Sheet 39. The U-2525BC project now totals permanent impacts to 23,012 linear feet of jurisdictional stream channel, 9.94 acres of adjacent riparian wetlands, and 2.32 acres of jurisdictional open waters and, 2) the temporary placement of fill material into 628 linear feet of jurisdictional stream channel and 0.26 acre of adjacent riparian wetlands associated with the relocation of utility lines

Further, and given the increase in overall permanent stream impacts associated with this modification, as well as your proposal sent via email on October 8, 2014, the following special condition regarding modified compensatory mitigation has been incorporated, replacing Special Condition 26A of the April 15, 2014 DA Permit:

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

All other conditions of the permit, including the permit expiration date of December 31, 2019, remain in effect as written. Should you have questions, contact Mr. David E. Bailey, Raleigh Regulatory Field Office at telephone (919) 554-4884, Extension 30.

Sincerely,



Per Kevin P. Landers
Colonel, U.S. Army
District Commander

Attachment: Revised permit drawings**Copy Furnished with Attachment:**

Mr. Dave Wanucha
Transportation Permitting Unit
Division of Water Resources
North Carolina Department of
Environment and Natural Resources
585 Waughtown Street
Winston-Salem, North Carolina 27107

Mr. Jerry Parker
Division Environmental Supervisor, Division 7
North Carolina Department of Transportation
Post Office Box 14996
Greensboro, North Carolina 27415

Ms. Greg Price
North Carolina Department of Transportation
Division of Highways
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Copy Furnished without Attachment:

U.S. Fish and Wildlife Services
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 28516

Mr. Todd Bowers
U.S. Environmental Protection Agency Region 4
Wetlands and Marine Regulatory Section
61 Forsyth Street, Southwest
Atlanta, Georgia 30303

U.S. ARMY CORPS OF ENGINEERS

Wilmington District

Compensatory Mitigation Responsibility Transfer Form

Permittee: North Carolina Department of Transportation
Project Name: NCDOT/U-2525 B and C/Division 7

Action ID: SAW-2005-21386
County: Guilford

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

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation* **8-digit HUC and Basin:** 03030002, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
20,470				9.94		

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

Compensatory Mitigation Requirements:

8-digit HUC and Basin: 03030002, Cape Fear River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
37,963				19.86		

Mitigation Site Debited: North Carolina Ecosystem Enhancement Program (NCEEP)

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

Section to be completed by the Mitigation Sponsor

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

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

Signature of Sponsor's Authorized Representative

Date of Signature

**USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2**

Conditions for Transfer of Compensatory Mitigation Credit:

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

Comments/Additional Conditions:

- **This Form supersedes the Compensatory Mitigation Responsibility Transfer Form dated April 14, 2014 that was included as part of the DA Permit dated April 15, 2014.**
- **This modification results in a net INCREASE in the number of stream credits required relative to the original DA Permit dated April 15, 2014, consisting of additional permanent loss of 101 linear feet of stream at a 2:1 ratio. The wetland credits required have not changed as a result of this modification.**
- **Additional on site mitigation was required by special permit condition included in the original DA Permit dated April 15, 2014. This requirement has not changed as a result of this modification.**

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. *Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 11405 Falls of Neuse Road, Wake Forest, NC 27587 (email: todd.tugwell@usace.army.mil).* Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

USACE Project Manager: David Bailey
USACE Field Office: Raleigh Regulatory Field Office
US Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587
Email: David.E.Bailey2@usace.army.mil



USACE Project Manager Signature

October 31, 2014

Date of Signature

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



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

October 15, 2014

Mr. Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and Jordan Lake Buffer Rules for the proposed Greensboro Eastern Loop from US 70 Relocation to SR 2303 (Lawndale Drive) Guilford County; WBS No. 34821.1.1; TIP No. U-2525B and U-2525C; NCDWR Project No. 20130918 version 3.

Dear Mr. Hancock:

Attached hereto is a modification of Certification No. 3978 originally issued to The North Carolina Department of Transportation (NCDOT) dated February 6, 2014 and modification version 2 of No. 3978 dated June 24, 2014.

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

Sincerely,

Thomas A. Reeder, Director
Division of Water Resources

Attachments

cc: Colin Mellor, Supervisor, NCDOT PDEA
Rachelle Beauregard, Regional Manager, NCDOT PDEA
David Bailey, US Army Corps of Engineers, Raleigh Field Office (electronic copy only)
Jerry Parker, Division 7 Environmental Officer (electronic copy only)
Dr. Cynthia Van Der Wiele, Environmental Protection Agency (electronic copy only)
Travis Wilson, NC Wildlife Resources Commission (electronic copy only)
Beth Harmon, Ecosystem Enhancement Program (electronic copy only)
Dave Wanucha, NCDWR Winston-Salem Regional Office (electronic copy only)
File Copy

Transportation and Permitting Unit
1617 Mail Service Center, Raleigh, North Carolina 27699-1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-733-1290
Internet: www.ncwaterquality.org

An Equal Opportunity \ Affirmative Action Employer

One
North Carolina
Naturally

Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and Jordan Lake Buffer Rules

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500 and 15A NCAC 2B .0267. This certification authorizes the NCDOT to revise impacts to jurisdictional wetlands and streams in Guilford County as detailed in Tables 1 and 2 below. This project is **not subject** to the Jordan Lake Rules per 15A NCAC 2B .0267 because this project was authorized prior to the adoption of the Jordan Lake Riparian Buffer Rules. The project shall be constructed pursuant to the modification dated received October 8, 2014. The revised authorized impacts are as described below:

Table 1. Stream Impacts in the Cape Fear River Basin

Location	Revised Impacts	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
Site 36	RCP	101	21	122	-
	Bank Stabilization	10	0	10	
Total	-	110	21	132	-

Total Stream Impact for Modification: 132 linear feet

Table 2. Wetland Impacts in the Cape Fear River Basin

Location	Permanent Fill (acre)	Mechanized Clearing (acre)	Total Wetland Impact (acre)	Wetland Impacts Requiring Mitigation (acre)
Site 36	<0.01	-	<0.01	-
Total	<0.01	-	<0.01	-

Total Wetland Impact for Modification: <0.01 acres.

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

This approval is only valid for the purpose and design that you submitted in your modified application dated received October 8, 2014. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated February 6, 2014 and modification dated June 24, 2014 still apply except where superseded by this certification. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval

letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC 02B.0268. For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

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

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

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

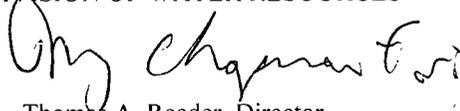
Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

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

Mr. John Evans, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center

This the 15th day of October 2014

DIVISION OF WATER RESOURCES



Thomas A. Reeder, Director
Division of Water Resources



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

NCDWR Project No.: _____

County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

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

Signature _____ Registration No. _____ Date _____

Transportation and Permitting Unit
1617 Mail Service Center, Raleigh, North Carolina 27699-1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-733-1290
Internet: www.ncwaterquality.org



09/08/14

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Plan Sheet Symbols
See Sheet 1-C and 1-D For Survey Control Sheets

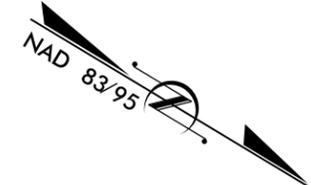
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS GUILFORD COUNTY

**LOCATION: GREENSBORO EASTERN LOOP FROM NORTH OF US 70
RELOCATION TO US 29 NORTH OF GREENSBORO**

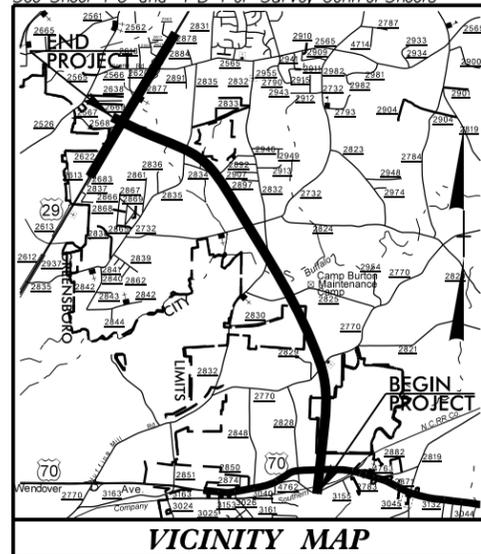
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, CULVERTS,
RETAINING WALLS, AND STRUCTURES**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2525B	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34821.1.3		PE	
34821.2.3		RW & UTILITIES	

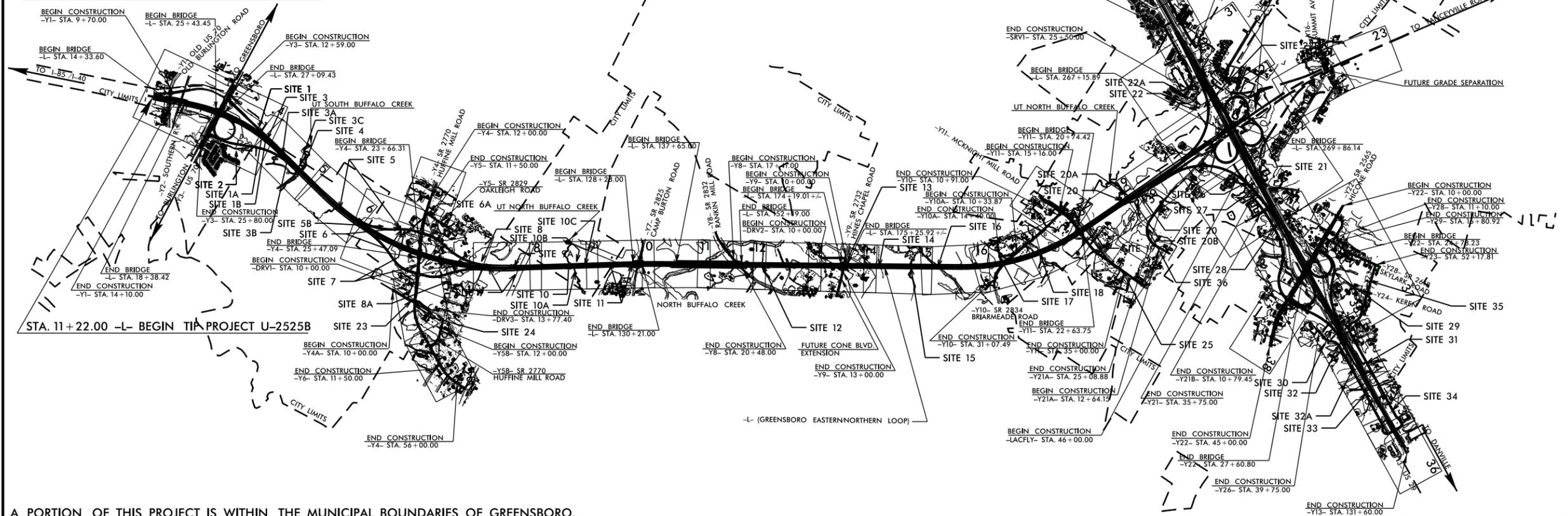
PERMIT DRAWING
SHEET 1 OF 93
Revised 10/01/2014



TIP PROJECT: U-2525B



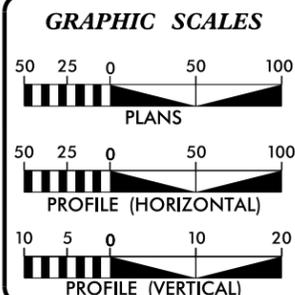
WETLAND AND SURFACE WATER IMPACTS PERMIT



A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GREENSBORO.
THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2014 =	N/A
ADT 2030 =	20000
DHV =	10 %
D =	60 %
T =	16 % *
V =	70 MPH
* TTST 5% DUAL 11%	
FUNC CLASS=INTERSTATE "STATEWIDE TIER"	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-2525B =	4.504 Miles
LENGTH STRUCTURE TIP PROJECT U-2525B =	0.492 Miles
TOTAL LENGTH OF TIP PROJECT U-2525B =	4.996 Miles

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MAY 22, 2012	JAMES A. SPEER, PE PROJECT ENGINEER
LETTING DATE: MAY 20, 2014	DANIEL W. GARDNER JR., PE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

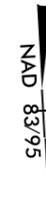


\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DCN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

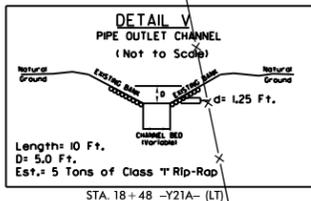
SITE 36

PERMIT DRAWING
SHEET 86A OF 93

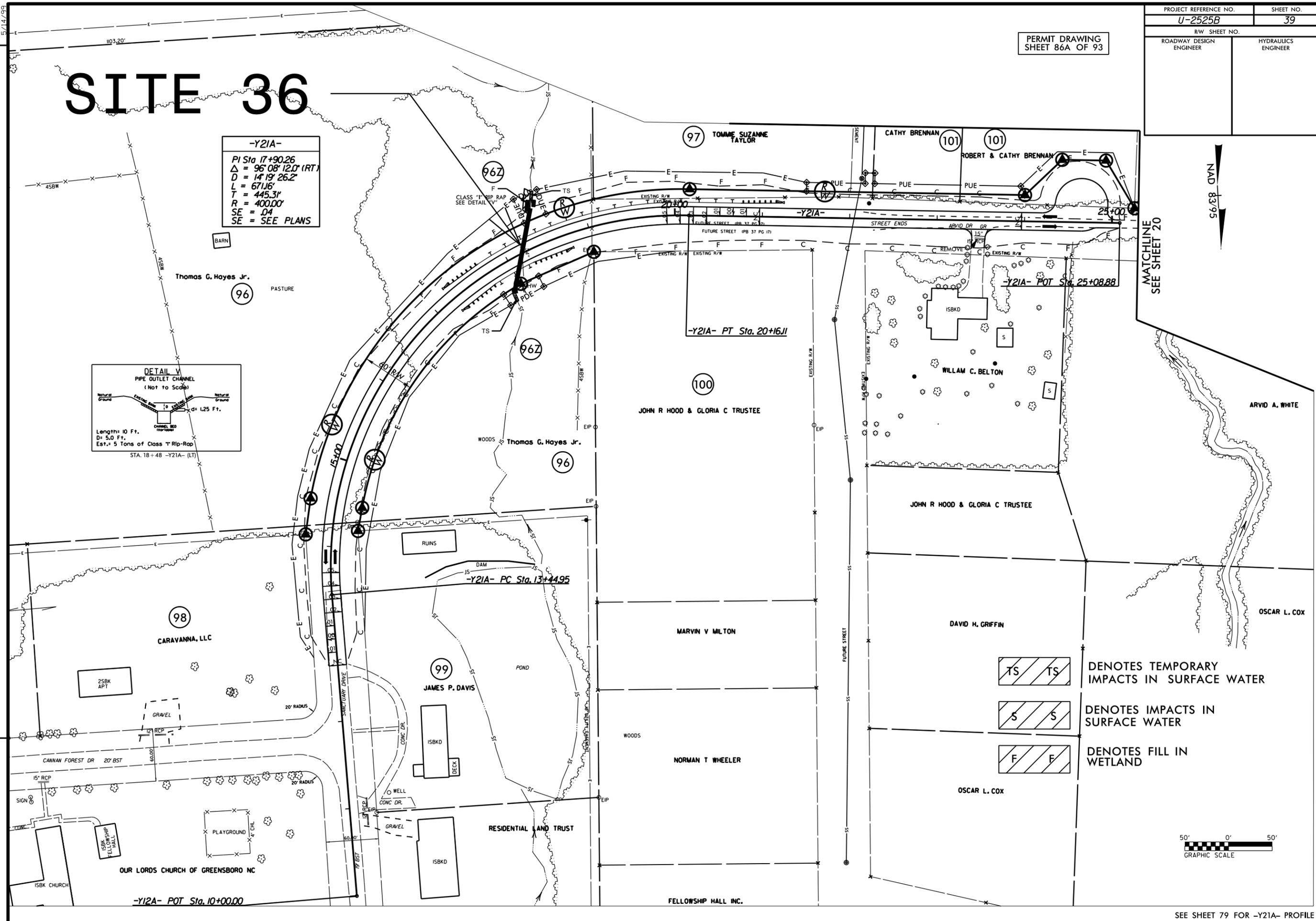
PROJECT REFERENCE NO. U-2525B	SHEET NO. 39
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-Y2IA-
 PI Sta 17+90.26
 $\Delta = 96^{\circ} 08' 12.0''$ (RT)
 $D = 14^{\circ} 19' 26.2''$
 $L = 671.16'$
 $T = 445.31'$
 $R = 400.00'$
 $SE = .04$
 SE = SEE PLANS

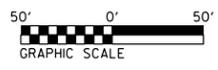


REVISIONS
 10-2-14 R/W REVISION ON A LET PROJECT (DMG) - ADDED A SECOND CLAIM (96Z) OF DUE, PUE, AND TCE ON PARCEL 96 (THOMAS G. HAYES JR.) AT -Y2IA- STA. 18+3500 LT. AND STA. 17+1500 RT.



MATCHLINE
 SEE SHEET 20

- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND



SEE SHEET 79 FOR -Y2IA- PROFILE

SITE 36

PERMIT DRAWING
SHEET 86B OF 93

PROJECT REFERENCE NO. U-2525B	SHEET NO. 39
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

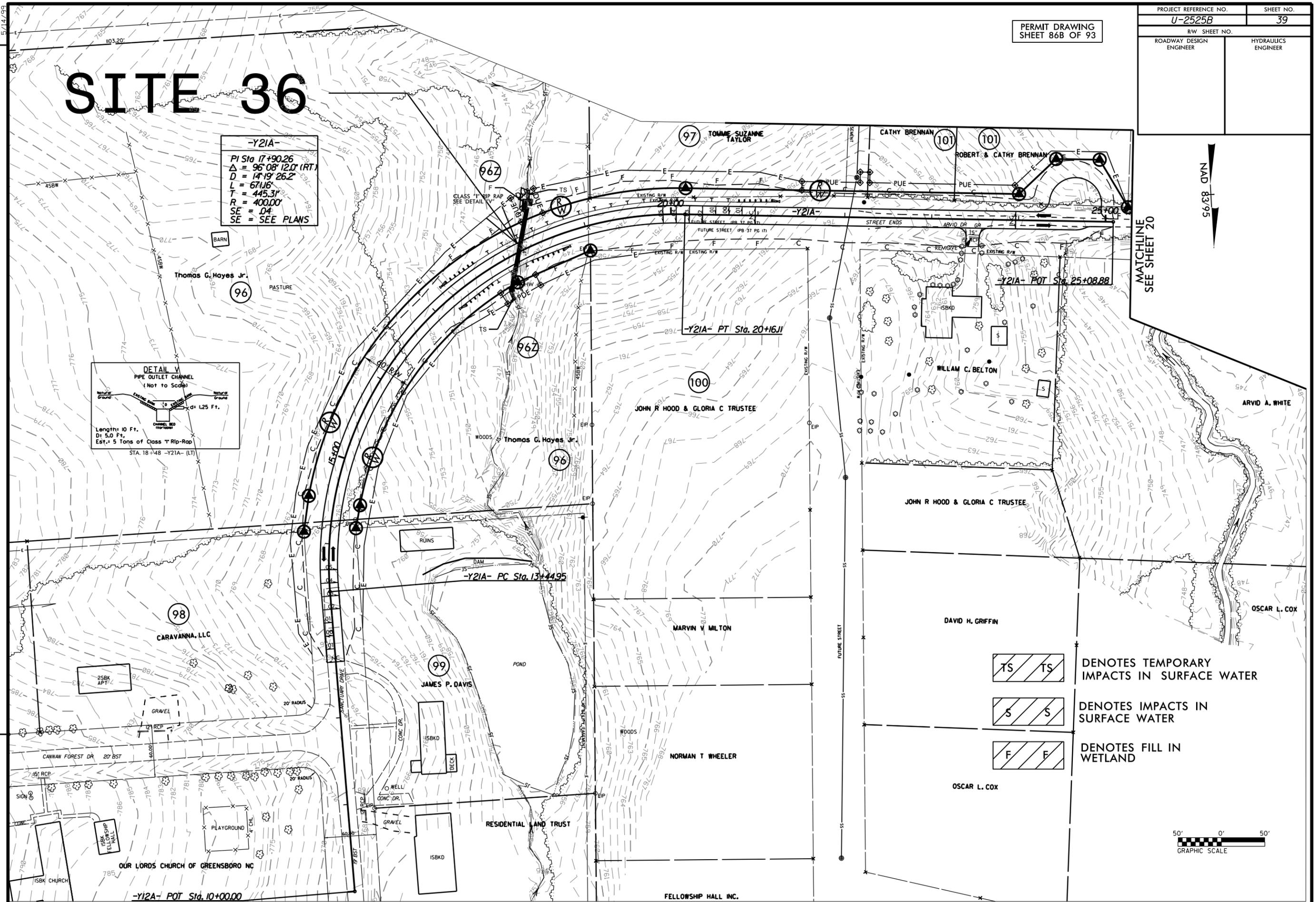


MATCHLINE
SEE SHEET 20

-Y2IA-
PI Sta 17+90.26
 $\Delta = 96'08''12.0''$ (RT)
 $D = 14'19''26.2''$
 $L = 671.16'$
 $T = 445.31'$
 $R = 400.00'$
 $SE = .04$
 $SE = \text{SEE PLANS}$

DETAIL V
PIPE OUTLET CHANNEL
(Not to Scale)
Length: 10 Ft.
D: 5.0 Ft.
Est.: 5 Tons of Class "1" Rip-Rap
STA. 18+48 -Y2IA- (LT)

REVISIONS
10-2-14 P.W. REVISION ON A LET PROJECT (DMG) - ADDED A SECOND CLAIM (6627) OF DUE, PUE, AND TCE ON PARCEL 96 (THOMAS G. HAYES JR.) AT -Y2IA- STA. 18+35.00 LT. AND STA. 17+500 RT.



TS TS

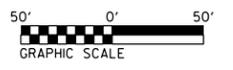
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

S S

DENOTES IMPACTS IN SURFACE WATER

F F

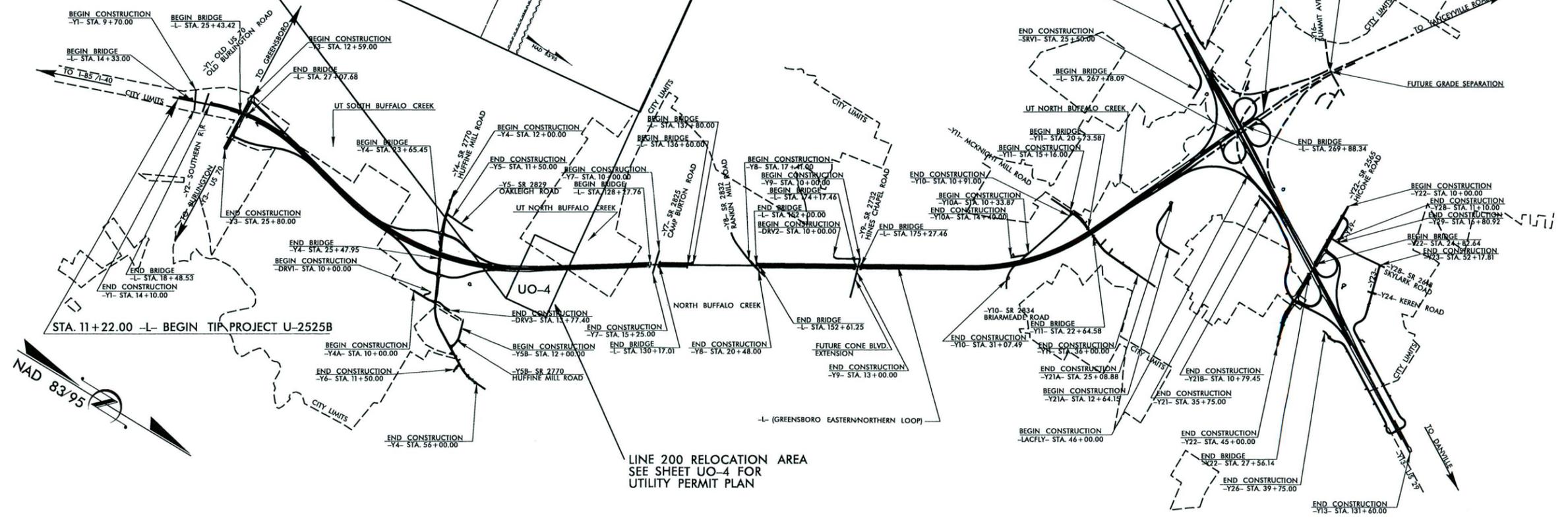
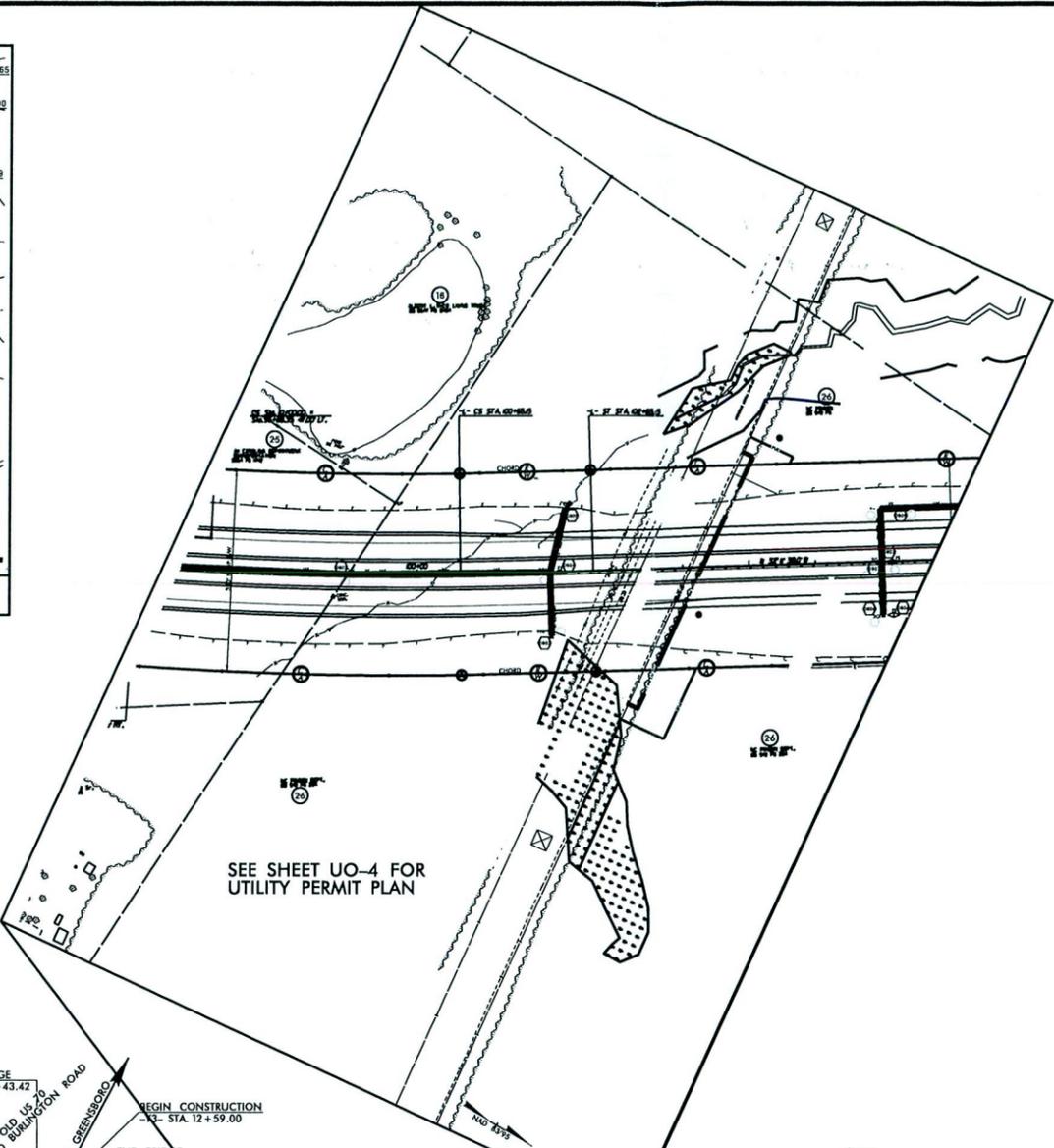
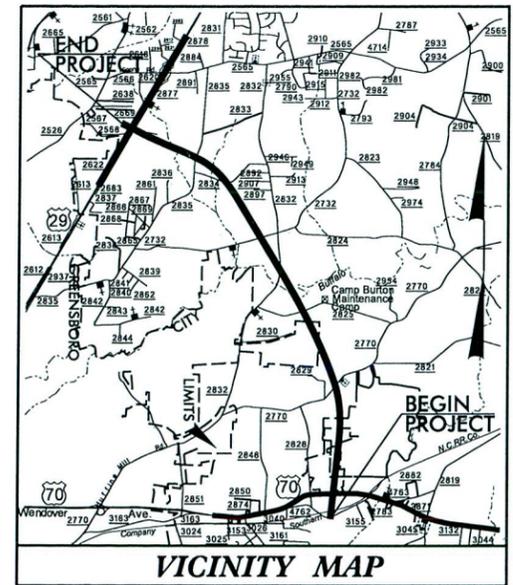
DENOTES FILL IN WETLAND



SEE SHEET 79 FOR -Y2IA- PROFILE

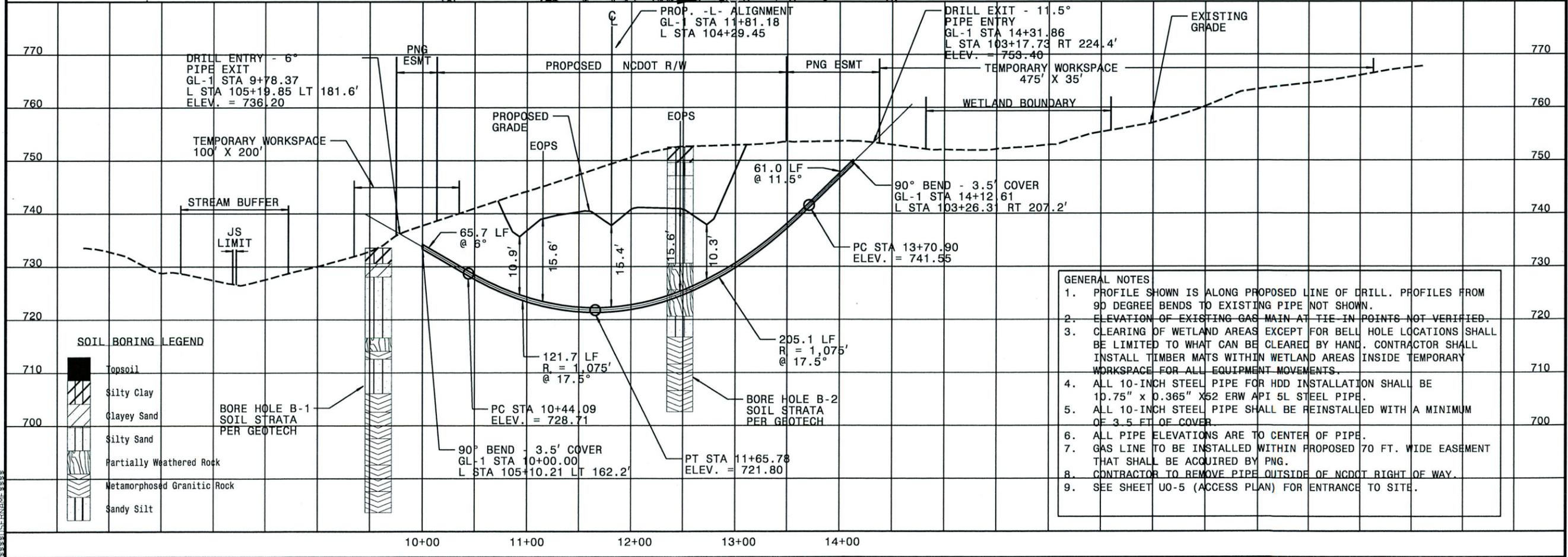
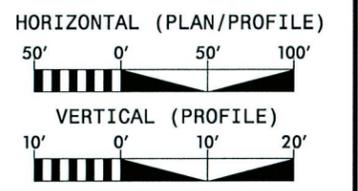
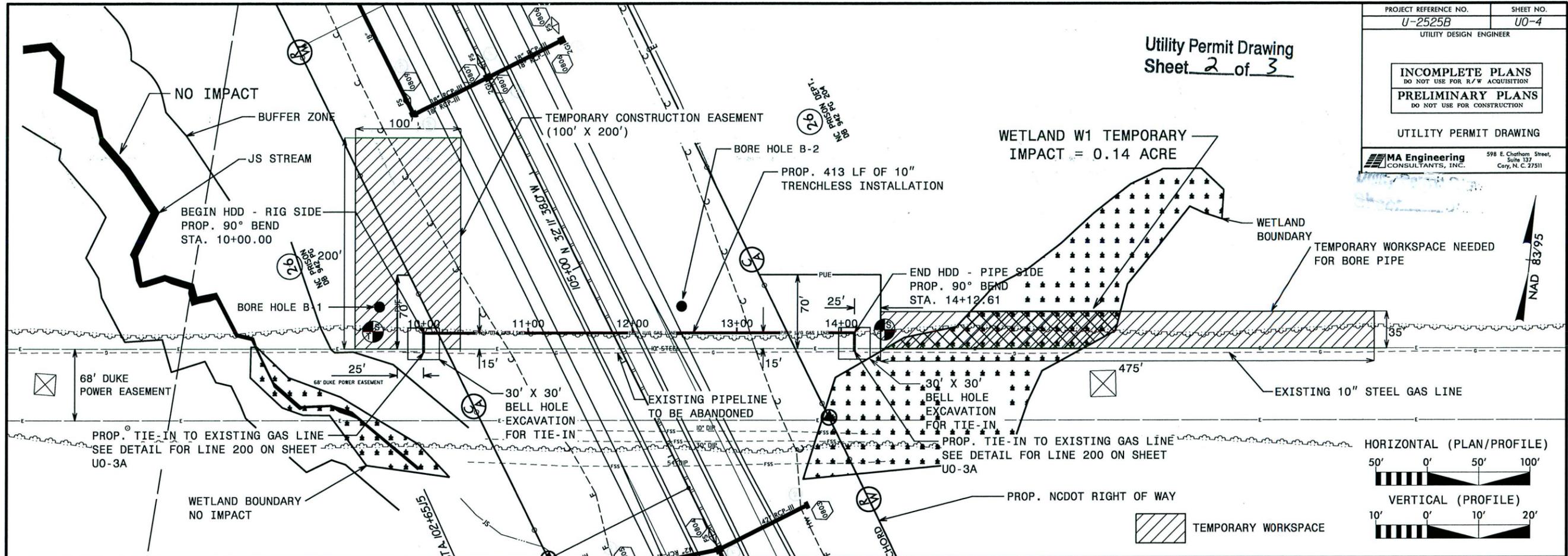
UTILITY DESIGN BY:
MA Engineering
 CONSULTANTS, INC.
 598 East Chatham Street Suite 137 Cary, NC 27511
 Phone: 919 297 0220 Fax: 919 297 0221

Utility Permit Drawing
 Sheet 1 of 3



\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$DDON\$\$\$\$\$
 \$\$\$USERNAME\$\$\$\$\$

Utility Permit Drawing
 Sheet 2 of 3



- GENERAL NOTES
1. PROFILE SHOWN IS ALONG PROPOSED LINE OF DRILL. PROFILES FROM 90 DEGREE BENDS TO EXISTING PIPE NOT SHOWN.
 2. ELEVATION OF EXISTING GAS MAIN AT TIE IN POINTS NOT VERIFIED.
 3. CLEARING OF WETLAND AREAS EXCEPT FOR BELL HOLE LOCATIONS SHALL BE LIMITED TO WHAT CAN BE CLEARED BY HAND. CONTRACTOR SHALL INSTALL TIMBER MATS WITHIN WETLAND AREAS INSIDE TEMPORARY WORKSPACE FOR ALL EQUIPMENT MOVEMENTS.
 4. ALL 10-INCH STEEL PIPE FOR HDD INSTALLATION SHALL BE 10.75" x 0.365" X52 ERW API 5L STEEL PIPE.
 5. ALL 10-INCH STEEL PIPE SHALL BE REINSTALLED WITH A MINIMUM OF 3.5 FT. OF COVER.
 6. ALL PIPE ELEVATIONS ARE TO CENTER OF PIPE.
 7. GAS LINE TO BE INSTALLED WITHIN PROPOSED 70 FT. WIDE EASEMENT THAT SHALL BE ACQUIRED BY PNG.
 8. CONTRACTOR TO REMOVE PIPE OUTSIDE OF NCDOT RIGHT OF WAY.
 9. SEE SHEET UO-5 (ACCESS PLAN) FOR ENTRANCE TO SITE.

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
W1	-L-105+19.85 TO 103.17.73	HDD Pullback, WS	-	0.14	-	-		-	-	-	-	-
								-	-	-	-	-
								-	-	-	-	-
TOTALS:			0	0.14	0	0.00	0.00	0	0	0	0	0

Notes: HDD = Horizontal Directional Drill
 Pullback = Area where pipe will be staged for drill
 WS = Workspace

**Piedmont Natural Gas
 10" Natural Gas Pipeline Relocation
 for NCDOT Project U2525B
 Guilford County, N.C.**

Utility Permit Drawing
 Sheet 3 of 3

CJF

6/3/2014