




PAT McCrory
Governor

NICHOLAS J. TENNYSON
Secretary

August 23, 2016

MEMORANDUM TO: Mr. John Rouse, P.E.
Division 2 Engineer

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

SUBJECT: Pitt County; Bridge Greenville Southwest Bypass, US 264 from
South of SR 1149 to the US 264;
WBS 34411.1.2; **TIP R-2250.**

Attached are the US Army Corps of Engineers Individual Permit, N.C. Division of Water Resources (NCDWR) Water Quality Certification, and Neuse River Buffer Authorization. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:
<https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>
Quick Links>Permit Documents> Issued Permits.

cc: w/o attachment (see website for attachments)

Mr. Randy Garris, P.E. State Contract Officer
Mr. Byron Kyle, Design Build
Mr. Jay Johnson, Division Environmental Officer
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Ms. Brenda Moore, P.E., Roadway Design
Mr. Barry Whitaker, Utilities Unit
Mr. Jay Twisdale, P.E., Hydraulics
Mr. Tom Koch, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Ron Hancock, P.E., State Roadway Construction Engineer
Mr. Jay McInnis, P.E., PDEA Eastern Section
Mr. Philip Ayscue, State Audit Compliance
Ms. LeiLani Paugh, ICI/Onsite Mitigation



PROJECT COMMITMENTS

T.I.P Project No. R-2250
Greenville Southwest Bypass
US 264 from South of SR 1149 to the US 264 Interchange
Pitt County
NCDOT Project Definition No. 34411
WBS Element 34411.1.2

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Project Development and Environmental Analysis Unit (PDEA)

New surveys for the Tar River spiny mussel will be conducted on the preferred alternative prior to construction. NCDOT will coordinate with the USFWS regarding the biological conclusion for this species.

Following the selection of the Preferred Alternative, the USFWS determined that the project would have No Effect on the Tar River spiny mussel. Therefore, further surveys for the Tar River spiny mussel are not required.

NCDOT will work with the residents of the Renston Community and the Winterville Historical Association to compile a collective history of the rural historic district. NCDOT will contract with a cultural resources consultant who will be responsible for the following tasks:

- Gathering oral histories from the residents of the Renston Rural Historic District
- Providing training to residents of the Renston community to learn how to record oral histories and gather documentary materials
- Compile documentary materials and digitize images such as photos, scrapbooks, and other artifacts

Finally, the cultural resources consultant will produce a digital document which contains the recorded oral histories and documentary materials. The compilation will be provided on a CD-ROM to the following:

- Winterville Historical and Arts Society, Inc. in Winterville
- North Carolina Museum of the Coastal Plain in Wilson
- Eastern North Carolina Digital Library (Joyner Library) at East Carolina University in Greenville
- State Historic Preservation Office in Raleigh
- Concurring parties to the Section 106 MOA

The final product shall be completed and distributed within three (3) years of the execution of the Section 106 MOA.

Although the MOA was executed in August 2008, subsequent delays in project funding have delayed initiation of the stipulations of the MOA. PDEA currently expects to contract with a

cultural resources consultant prior to the end of 2014. The expected time needed to complete the items listed above is approximately 4 months.

PDEA/Roadway Design

Noise Abatement barriers for the preferred alternative will be investigated in more detail in the design study phase of the project after the Record of Decision (ROD) is issued.

NCDOT completed a Design Noise Report in March 2009 and recommended that a noise wall be included at the southeast quadrant of the US 264 interchange in the Park West neighborhood. The analysis was reviewed in April 2013 to ensure conformance with the current 2011 Noise Abatement Policy, and the recommendation for a noise wall in that location remains valid.

Although the 2008 Record of Decision identified potential provision of a noise barrier along the west side of The Pines subdivision near the south end of the project as an “Unresolved Issue,” no other noise barriers besides the Park West neighborhood have been identified to be reasonable under the current policy and no additional barriers are recommended.

Roadway Design/Alternative Delivery/Roadside Environmental

NCDOT will use two-bar, galvanized metal rails and galvanized guardrails on the four bridges within the Renston Rural Historic District. In addition, the abutments for the bridges will be sloped and constructed of concrete. The earthen slopes on either side of the bridges will be planted with native shrubs. Designs for the bridges will be reviewed by the State Historic Preservation Office (HPO) and the Section 106 Memorandum of Agreement (MOA) concurring parties prior to 80% completion of the final Roadway Design Plans.

This commitment is included as Stipulation I in the 2008 Memorandum of Agreement among the US Army Corps of Engineers, the NCDOT, and the North Carolina State Historic Preservation Officer. The NCDOT will hire a design build firm to produce the final plans for the project and perform construction activities. The NCDOT Roadside Environmental Unit will be responsible for ensuring that the earthen slopes of the bridges will be planted with native shrubs; however, the Design Build contractor will be responsible for fulfilling stipulations related to the bridge railings and abutments.

PDEA/Right-of-Way

Within the limits of the Renston Rural Historic District, NCDOT will lease, or make available to lease, property acquired during the Right-of-Way Acquisition process back to the original owners for continued maintenance until construction commences.

This commitment is included as Stipulation IV in the 2008 Memorandum of Agreement among the US Army Corps of Engineers, the NCDOT, and the North Carolina State Historic Preservation Officer. Although the Right of Way Unit is still responsible for carrying out this commitment as needed, it is expected the time between right of way acquisition and construction will be one year or less. In most cases the time between right of way acquisition and construction will only be 3 or 4 months.

PDEA/Roadside Environmental/Division 2

NCDOT will work with HPO and the Section 106 MOA concurring parties to develop and install two signs on NC 903, one on each end of the Renston Rural Historic District. The purpose of these signs is to identify entry into the historic district and will contain text that describes the

historic significance of Renston. They will not identify individual properties within the district. NCDOT will install the signs and negotiate individual agreements about their continued maintenance with the owners of the property on which the sign is placed.

This commitment is included as Stipulation III in the 2008 Memorandum of Agreement among the US Army Corps of Engineers, the NCDOT, and the North Carolina State Historic Preservation Officer. NCDOT PDEA Unit Cultural Resources staff will work with Division 2 personnel to develop the text and design specifications for the signs. Division 2 personnel will install the signs once construction activities are completed in the Renston Rural Historic District.

Division 2

NCDOT will not allow the erection of billboards along the new facility within NCDOT's Right of Way.

This commitment will apply following construction of the project and is also a part of Stipulation III in the 2008 Memorandum of Agreement among the US Army Corps of Engineers, the NCDOT, and the North Carolina State Historic Preservation Officer. It is hereby clarified that this commitment is relevant only within the limits of the Renston Historic District.

Alternative Delivery/Geotechnical Engineering Unit

When the final proposed centerline is established and right of way determined, a hazardous materials site assessment will be performed to the degree necessary to determine levels of contamination at any potential hazardous materials sites along the preferred alternate. The assessment will be made prior to right of way acquisition. Resolution of problems associated with contamination will be coordinated with appropriate agencies.

NCDOT began the process of performing detailed site assessments in the Spring of 2013, and completed preliminary assessments between Forlines Road and US 264 (formerly R-2250C). Once the design build team has completed Right of Way plans for the entire project, the Alternative Delivery Unit will notify the Geotechnical Engineering Unit and request that final assessments be completed. It is expected that the Geotechnical Engineering Unit will complete these assessments approximately 90 days from the time Alternative Delivery requests the assessments be completed and removal of contaminated materials will follow the assessments in advance of right of way acquisition.

Roadside Environmental/ Alternative Delivery/ Location & Surveys

Plantings will be planted in accordance with NCDOT's Guidelines for Planting within Highway Right-of-Way. Within the Renston Rural Historic District, the slopes on either side of the four bridges will be planted with native shrubs, and a wood and wire fence will be erected along the control of access for the length of the project through the historic district. Along this control of access fence there may be native trees and shrubs planted in groupings similar to those found in the surrounding rural landscape. Preliminary Post-Construction Landscape Design plans will be provided to HPO and the Section 106 MOA concurring parties for their review and comment. In addition, NCDOT shall stake the Right-of-Way limits within the Renston Rural Historic District once the Right-of-Way plans are finalized. This will allow property owners to install landscaping along their property lines before construction begins on the undertaking.

This commitment is included as Stipulation II in the 2008 Memorandum of Agreement among the US Army Corps of Engineers, the NCDOT, and the North Carolina State Historic Preservation Officer. The NCDOT Roadside Environmental Unit is responsible for all landscaping requirements included in this commitment. It will be the responsibility of the Design Build contractor to fulfill other requirements of the commitment as further plans are developed.

PDEA/ Roadway Design/ Alternative Delivery/ Division 2

NCDOT will coordinate with the Town of Ayden regarding the design modifications requested in April 2007. These concerns will be resolved prior to the completion of the final design.

The design modifications requested by the Town of Ayden were specifically identified in Section 9 as “Unresolved Issues” in the project’s State Record of Decision. All of the identified items have been addressed since the Record of Decision and coordinated with the Town of Ayden. The current design plans for the project include access from NC 102 to The Pines subdivision through an extension to Gumberry Road that has already been constructed. The intersection with the extended Gumberry Road and NC 102, which lies between the proposed Greenville Southwest Bypass and existing NC 11 will be monitored for potential signalization in the future. If and when the warrants for provision of a traffic signal at this intersection or met, a signal will be installed.

Access from Old Snow Hill Road to NC 11, once proposed to be grade separated, has been re-designed as a full movement at grade intersection.

The Town of Ayden had identified the planned closure of the Wildwood Drive/Old Snow Hill Road intersection originally proposed by NCDOT as an attraction for potential cut through traffic within The Pines subdivision. NCDOT subsequently re-designed the interchange of NC 11 with the proposed Greenville Bypass such that closure of the Wildwood Drive intersection with Old Snow Hill road is no longer required.

Lastly, the Town of Ayden requested provision of a noise barrier on the west side of The Pines subdivision. The NCDOT performed design noise studies in accordance with current Noise Abatement Policies. The results of the studies indicated that a noise barrier was neither feasible nor practical in this location. Therefore, a noise barrier will not be provided in this location as part of the Greenville Southwest Bypass project.

COMMITMENTS FROM PERMITTING

PDEA/ Roadway Design/ Alternative Delivery/ Division 2

Special Condition No. 20 of the U.S. Army Corps of Engineers Section 404 permit stipulates that “The Permittee shall fully implement the Memorandum of Agreement between the Permittee, the North Carolina State Historic Preservation Officer and the Wilmington District US Army Corps of Engineers, dated August 25, 2008, which is incorporated herein by reference.”



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

August 8, 2016

Regulatory Division/1200A

Action ID: SAW-2006-40466

North Carolina Department of Transportation (NCDOT)
Attn: Philip S. Harris III, P.E., C.P.M.
NCDOT – Project Development and Environmental Analysis
1598 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Harris:

In accordance with the written request of March 28, 2016, and the ensuing administrative record, enclosed is a Department of the Army (DA) Permit to authorize the construction a new roadway from Memorial Drive (NC 11) in the vicinity of NC 102, continuing northwest to connect with the existing US 264/Stantonsburg Road (US 264 Business) interchange. Project construction includes 3 new interchanges with grade separations at the intersections of NC 102, SR 1126 (Fourlines Rd) and US 13/US 264A. Nine potential at-grade intersections with secondary roads would be bridged including one over a single Coastal Carolina railway track. Construction would include several culvert extensions as well as several new location culverts. The length of the project is approximately 12.3 miles.

Any deviation in the authorized work will likely require modification of this permit. If a change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notified you that your permit has been modified.



Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant general conditions require that:

- a. You must complete construction before December 31, 2021.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You should address all questions regarding this authorization to Mr. Thomas Steffens in the Washington Regulatory Field Office, telephone number (910) 251-4615.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our web-site at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0 and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

Sincerely,


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

Enclosures

Copy Furnished (with enclosures):

Chief, Source Data Unit
NOAA/National Ocean Service
Attn: Sharon Tear N/CS261
1315 East-West Hwy., Rm 7316
Silver Spring, Maryland 20910-3282

Copies Furnished with special conditions and plans:

Mr. Pete Benjamin
U.S. Fish and Wildlife Service
Raleigh Ecological Service Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Fritz Rohde
Habitat Conservation Division – Atlantic Branch
101 Pivers Island Road
Beaufort, North Carolina 28516

Mr. Todd Bowers
Oceans, Wetlands and Streams Protection Branch
Wetlands and Streams Regulatory Section
U.S. Environmental Protection Agency – Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8931

Mr. Doug Huggett
Division Coastal Management
N.C. Department of Environment
And Natural Resources
400Commerce Avenue
Morehead City, North Carolina 28557

Dr. Pace Wilber
Habitat Conservation Division – Atlantic Branch
NOAA Fisheries Service
219 Fort Johnston Road
Charleston, South Carolina 29412

DEPARTMENT OF THE ARMY PERMIT

Permittee: **NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT)**
ATTN: PHILIP S. HARRIS III, PE, CPM

Permit No.: **SAW-2006-40466**

Issuing Office: **CESAW-RG-W**

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

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

Project Description: The applicant proposes to construct a new roadway from Memorial Drive (NC 11) in the vicinity of NC 102, continuing northwest to connect with the existing US 264/Stantonsburg Road (US 264 Business) interchange. Project construction includes 3 new interchanges with grade separations at the intersections of NC 102, SR 1126 (Fourlines Rd) and US 13/US 264A. Nine potential at-grade intersections with secondary roads would be bridged including one over a single Coastal Carolina railway track. Construction would include several culvert extensions as well as several new location culverts. The length of the project is approximately 12.3 miles.

Project Location: The site location for TIP R-2250 is a 12.3 mile controlled-access freeway facility on new alignment from south of Old NC 11 to US 264 (Stantonsburg Road) in Pitt County, North Carolina.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **December 31, 2021**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

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

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

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

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

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

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

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


(PERMITTEE) **NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**
ATTN: PHILIP S. HARRIS III, PE, CPM
for

08/08/2016
(DATE)

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


(DISTRICT COMMANDER) **KEVIN P. LANDERS, SR., COLONEL**

08 Aug 2016
(DATE)

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

(TRANSFeree)

(DATE)

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

Permittee: NCDOT, Attn: Phil Harris
Project Name: R-2250, Greenville Southwest Bypass

Action ID: SAW-2006-40466
County: Pitt

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 Division of Mitigation Services (NCDMS), 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: 03020202, Neuse River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
233						

*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: 03020202, Neuse River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
466						

Mitigation Site Debited: NCDMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS 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 NCDMS), 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:

NCDMS

Name of Sponsor's Authorized Representative:

Beth Harmon

Signature of Sponsor's Authorized Representative

Beth Harmon

Date of Signature

08/16/2016

**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:

Mitigation Transfer Form #1 of 3 for this project. Please see other forms for complete mitigation responsibilities.

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: Tom Steffens
USACE Field Office: Washington Regulatory Field Office
US Army Corps of Engineers
2407 West Fifth Street
Washington, NC 27889
Email: Thomas.A.Steffens@usace.army.mil



USACE Project Manager Signature

For Tom Steffens

August 5, 2016
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>.

Page 2 of 2

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

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

Permittee: NCDOT, Attn: Phil Harris
Project Name: R-2250, Greenville Southwest Bypass

Action ID: SAW-2006-40466
County: Pitt

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 Division of Mitigation Services (NCDMS), 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: 03020203, Neuse River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
1971						

*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: 03020203, Neuse River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
2410						

Mitigation Site Debited: NCDMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS 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 NCDMS), 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: NCDMS

Name of Sponsor's Authorized Representative: Beth Harmon

Beth Harmon
Signature of Sponsor's Authorized Representative

08/16/2016
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:

Mitigation Transfer Form #2 of 3 for this project. Please see other forms for complete mitigation responsibilities.

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: Tom Steffens
USACE Field Office: Washington Regulatory Field Office
US Army Corps of Engineers
2407 West Fifth Street
Washington, NC 27889

Email: Thomas.A.Steffens@usace.army.mil



USACE Project Manager Signature

For Tom Steffens

August 5, 2016
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>.

Page 2 of 2

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

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

Permittee: NCDOT, Attn: Phil Harris
Project Name: R-2250, Greenville Southwest Bypass

Action ID: SAW-2006-40466
County: Pitt

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 Division of Mitigation Services (NCDMS), 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: 03020103, Tar-Pamlico River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
					0.33	

*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: 03020103, Tar-Pamlico River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
					0.33	

Mitigation Site Debited: NCDMS

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS 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 NCDMS), 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:

NCDMS

Name of Sponsor's Authorized Representative:

Beth Harmon

Beth Harmon

Signature of Sponsor's Authorized Representative

08/10/2016

Date of Signature

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

Conditions for Transfer of Compensatory Mitigation Credit:

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- 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:

Mitigation Transfer Form #3 of 3 for this project. Please see other forms for complete mitigation responsibilities.

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: Tom Steffens
USACE Field Office: Washington Regulatory Field Office
US Army Corps of Engineers
2407 West Fifth Street
Washington, NC 27889

Email: Thomas.A.Steffens@usace.army.mil


USACE Project Manager Signature

For Tom Steffens

August 5, 2016

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>.

Page 2 of 2

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SPECIAL CONDITIONS
ACTION ID: SAW-2006-40466
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
TIP-R-2250 S.W. GREENVILLE BYPASS

1. CONSTRUCTION PLANS: All work authorized by this permit must be performed in strict compliance with the attached plans dated March 28, 2016, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

2. UNAUTHORIZED DREDGE OR FILL: Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

3. MAINTAIN CIRCULATION AND FLOW OF WATERS: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

4. DEVIATION FROM PERMITTED PLANS: Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or shall any activities take place that cause the degradation of waters or wetlands. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

5. BORROW AND WASTE: To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent waters and wetlands, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material or to dispose of dredged, fill or waste material. The permittee shall provide the Corps of Engineers with appropriate maps indicating the locations of proposed borrow or waste sites as soon as such information is available. The permittee will coordinate with the Corps of Engineers before approving any borrow or waste sites that are within 400 feet of any stream or wetland. All jurisdictional wetland delineations on borrow

SPECIAL CONDITIONS
ACTION ID: SAW-2006-40466
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
TIP-R-2250 S.W. GREENVILLE BYPASS

within 400 feet of any stream or wetland. All jurisdictional wetland delineations on borrow and waste areas shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with Special Condition 4 of this permit and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This documentation will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with Special Condition 4. All information will be available to the Corps of Engineers upon request. The permittee shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

6. PRECONSTRUCTION MEETING: The permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors representatives, and the Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions contained with this Department of Army Permit. The permittee shall provide the USACE, Washington Regulatory Field Office, NCDOT Project Manager, with a copy of the final permit plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the preconstruction meeting for a time frame when the Corps and NCDWR Project Managers can attend. The permittee shall provide the Corps and NCDWR Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.

7. SEDIMENTATION/EROSION CONTROL PLAN:

- a.) During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.
- b.) No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the plan drawings and specifically authorized by this permit.

SPECIAL CONDITIONS
ACTION ID: SAW-2006-40466
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
TIP-R-2250 S.W. GREENVILLE BYPASS

c.) The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades on those areas, prior to project completion.

d.) The permittee shall use 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" to assure compliance with the appropriate turbidity water quality standard. 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 assure compliance with the appropriate turbidity water quality standards. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4). Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

8. WATER CONTAMINATION: All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Resources at (919) 707-8787 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

9. NOTIFICATION OF CONSTRUCTION COMMENCEMENT AND

COMPLETION: The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

a.) Prior to construction within any jurisdictional areas, the permittee must correctly install silt fencing (with or without safety fencing) parallel with the construction corridor, on both sides of the jurisdictional crossing. This barrier is to serve both as an erosion control measure and a visual identifier of the limits of construction within any jurisdictional area. The permittee must maintain the fencing, at minimum, until the wetlands have re-vegetated and stabilized.

SPECIAL CONDITIONS
ACTION ID: SAW-2006-40466
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
TIP-R-2250 S.W. GREENVILLE BYPASS

10. CLEAN FILL: Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act.

11. PERMIT DISTRIBUTION: The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

12. SILT-FENCING: The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

13. PERMIT REVOCATION: The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

14. EROSION CONTROL MEASURES IN WETLANDS: The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

15. TEMPORARY DISCHARGES: Temporary discharge of excavated or fill material into wetlands and waters of the United States will be for the absolute minimum period of time necessary to accomplish the work. All authorized temporary wetland, stream, and tributary impacts will be returned to pre-disturbance grade and contour, and re-vegetated.

SPECIAL CONDITONS
ACTION ID: SAW-2006-40466
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
TIP-R-2250 S.W. GREENVILLE BYPASS

16. REPORTING ADDRESS: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Washington Regulatory Field Office, c/o Mr. Thomas Steffens 2407 West 5th Street, Washington, North Carolina 27889, and by telephone at: 910-251-4615. The Permittee shall reference the following permit number, SAW-2006-40466 on all submittals.

17. REPORTING VIOLATIONS OF THE CLEAN WATER ACT: Violation of these conditions or violation of Section 404 of the Clean Water Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the discovery of the violation.

18. COMPLIANCE INSPECTION: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

19. COMPENSATORY MITIGATION: North Carolina Division of Mitigation Services In-Lieu Fee program: 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.

20. CULTURAL RESOURCES: The Permittee shall fully implement the attached Memorandum of Agreement between the Permittee, the North Carolina State Historic Preservation Officer and the Wilmington District US Army Corps of Engineers, dated August 25, 2008, which is incorporated herein by reference.

21. CONCRETE CONDITION: The permittee shall take measures to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with any water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms (concrete is set and cured).

SPECIAL CONDITIONS
ACTION ID: SAW-2006-40466
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TIP-R-2250 S.W. GREENVILLE BYPASS

22. CULVERTS: For construction of culverts, measures will be included in the construction that will promote the safe passage of fish and other aquatic organisms. For all culvert construction activities, 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. Culvert inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, culverts must be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert.

23. NOTE: All utility work performed under a non-reporting Nationwide Permit 12 (NWP 12 - Utility Lines) associated with this project is subject to all applicable terms and conditions of the NWP 12 and Wilmington District Regional Conditions.

24. NLEB CONDITION: The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Biological Opinion (BO) titled "Northern Long-eared Bat (NLEB) Programmatic Biological Opinion for North Carolina Department of Transportation (NCDOT) Activities in Eastern North Carolina (Divisions 1-8)," dated March 25, 2015, and adopted on April 10, 2015, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that are specified in the BO. As such, this permit verification contains a special condition requiring compliance with all the mandatory terms and conditions (incorporated by reference into this permit verification) associated with incidental take of the BO. Reasonable and prudent measures are actions necessary to minimize the impacts of incidental take that is anticipated to result from implementing the project that the Service regarded as not likely to jeopardize the species or adversely modify designated critical habitat.

Failure to institute and carry out the details of special conditions 1-24, may result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with TIP No. R-2250, or such other remedy as the District Engineer or his authorized representatives may seek.

RECEIVED
OCT 11 2000

**MEMORANDUM OF AGREEMENT
AMONG
THE UNITED STATES ARMY CORPS OF ENGINEERS,
WILMINGTON DISTRICT,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
GREENVILLE SOUTHWEST BYPASS
PITT COUNTY, NORTH CAROLINA
TIP PROJECT R-2250**

WHEREAS, the Regulatory Division of the United States Army Corps of Engineers (USACE), Wilmington District, is considering issuance of a permit to the North Carolina Department of Transportation (NCDOT) pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), for construction of the Greenville Southwest Bypass, Pitt County, North Carolina (the Undertaking); and

WHEREAS, the USACE and NCDOT have determined that the Undertaking will adversely affect the Renston Rural Historic District, a property listed in the National Register of Historic Places (NRHP) under Criteria A and C; and

WHEREAS, the USACE and NCDOT have consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and 33 CFR 325 Appendix C; and

WHEREAS, property owners within the Renston Historic District have participated in the consultation and have been invited to concur in this Agreement; and

WHEREAS, by signing this Memorandum of Agreement (MOA), the Signatory or Concurring Party(ies) does not necessarily signify that the party approves of the Undertaking, but rather that the provisions of the MOA are an appropriate means to mitigate effects on the Renston Rural Historic District; and

WHEREAS, the USACE has notified the Advisory Council on Historic Preservation (Council) of the adverse effect and it has declined to comment or participate in the consultation; and

WHEREAS, Signatory or Concurring Party(ies) status is achieved only through signing this MOA.

NOW, THEREFORE, the USACE, NCDOT, and the North Carolina SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on the historic property.

STIPULATIONS

The USACE will include the following conditions in any permit issued to NCDOT for the Undertaking:

I. Bridge Design

NCDOT shall utilize two-bar, galvanized metal rails and galvanized guardrails on the four bridges within the Renston Rural Historic District. In addition, the abutments for the bridges will be sloped and constructed of concrete. The earthen slopes on either side of the bridges will be planted with native shrubs. Designs for the bridges shall be reviewed by SHPO and the concurring parties prior to 80% completion of the final Roadway Design Plans to insure compliance with this provision.

II. Landscaping

Plantings will be planted in accordance with NCDOT's Guidelines for Planting within Highway Right-of-Way. Within the Renston Rural Historic District, the slopes on either side of the four bridges will be planted with native shrubs, and a wood and wire fence will be erected along the control of access for the length of the project through the historic district. Along this control of access fence there may be native trees and shrubs planted in groupings similar to those found in the surrounding rural landscape. Preliminary Post-Construction Landscape Design plans will be provided to SHPO and the concurring parties for their review and comment. In addition, NCDOT shall stake the Right-of-Way limits within the Renston Rural Historic District once the Right-of-Way plans are finalized. This will allow property owners to install landscaping along their property lines before construction begins on the undertaking.

III. Signage

NCDOT will work with SHPO and the concurring parties to develop and install two signs on NC 903, one on each end of the Renston Rural Historic District. The purpose of these signs is to identify entry into the historic district and will contain text that describes the historic significance of Renston. They will not identify individual properties within the district. NCDOT will install the signs and negotiate individual agreements about their continued maintenance with the owners of the property on which the sign is placed.

NCDOT's will not allow the erection of billboards along the new facility within NCDOT's Right of Way.

IV. Maintenance of Land Purchased for Construction

Within the limits of the Renston Rural Historic District, NCDOT will lease, or make available to lease back to the original owners any property acquired during the Right-of-Way Acquisition process so that the owners may continue to use or maintain the property until construction commences.

V. Oral History/Material Culture Documentation

NCDOT will work with the residents of the Renston Community and the Winterville Historical and Arts Society, Inc. to compile a collective history of the rural historic district. NCDOT will contract with a cultural resources consultant who will be responsible for the following tasks.

1. Gathering oral histories from the residents of the Renston Rural Historic District

2. Providing training to residents of the Renston community to learn how to record oral histories and gather documentary materials
3. Compile documentary materials and digitize images such as photos, scrapbooks, and other artifacts

The cultural resources consultant will produce a digital document which contains the recorded oral histories and documentary materials. The compilation will be provided on a CD-ROM to the following:

1. Winterville Historical and Arts Society, Inc. in Winterville
2. North Carolina Museum of the Coastal Plain in Wilson
3. Eastern North Carolina Digital Library (Joyner Library) at East Carolina University in Greenville
4. State Historic Preservation Office in Raleigh
5. Concurring parties to this MOA

The final digital product shall be completed and distributed within three (3) years of the execution of this MOA.

VI. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), if NCDOT identifies additional cultural resource(s) during construction and determine them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the USACE and SHPO contacted. If after consultation with the Signatory and Concurring Party(ies) additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory and Concurring Party(ies), will develop and implement appropriate protection/mitigation measures for the resource(s). Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70 as well as 33 CFR 325 Appendix C .

VII. Dispute Resolution

Should any of the Signatory or Concurring Party(ies) object within (30) days to any plans or documentation provided for review pursuant to this Agreement, the USACE shall consult with the objecting party(ies) to resolve the objection. If the USACE or objecting party(ies) determines that the objection cannot be resolved, the USACE will forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide the USACE with recommendations which the USACE will take into account in reaching a final decision regarding the dispute, or
- B. Notify the USACE that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the USACE, in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USACE's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

VIII. Amendments

Should any of the Signatory or Concurring Party(ies) to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agree upon, the dispute resolution process set forth in Stipulation VII will be followed.

IX. Termination

Any of the Signatory or Concurring Party(ies) may terminate the MOA by providing notice to the other party(ies), provided that the party(ies) will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800 and 33 CFR 325 Appendix C. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

X. Duration

Unless terminated pursuant to Stipulation IX above, this MOA will be in effect until USACE, in consultation with the other Signatory and Concurring Party(ies), determines that all of its terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to seek issuance of a permit from USACE for construction of the Undertaking.

Execution of this Memorandum of Agreement by the USACE, North Carolina SHPO, and other Concurring Party(ies), its subsequent filing with the Council and implementation of its terms evidence that USACE, has afforded the Council an opportunity to comment on the Undertaking, and that the USACE, has taken into account the effects of the Undertaking on this National Register-listed historic district.

AGREED

By:  Date: 25 August 2008
United States Army Corps of Engineers, Wilmington District

By:  Date: 8/12/08
North Carolina State Historic Preservation Officer

By:  Date: 8 Aug 08
North Carolina Department of Transportation

FILED:

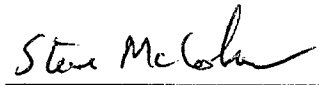
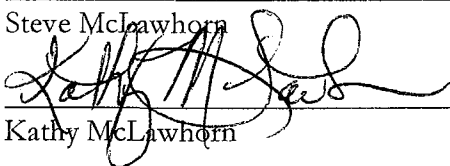
By: _____
Advisory Council on Historic Preservation

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG
THE UNITED STATES ARMY CORPS OF ENGINEERS,
WILMINGTON DISTRICT,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
GREENVILLE SOUTHWEST BYPASS
PITT COUNTY, NORTH CAROLINA
TIP PROJECT R-2250**

Execution of this Memorandum of Agreement by the USACE, North Carolina SHPO, and other Concurring Parties, its subsequent filing with the Council and implementation of its terms evidence that USACE, has afforded the Council an opportunity to comment on the Undertaking, and that the USACE, has taken into account the effects of the Undertaking on this National Register-listed historic district.



CONCUR:

 _____ Steve McLawhorn	Date: <u>9-10-08</u>
 _____ Kathy McLawhorn	Date: <u>9.11.8</u>

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CONCUR:

 _____ Joe Nelson	Date: <u>9/9/08</u>
 _____ Catherine Nelson	Date: <u>9-9-08</u>



PAT MCCRORY

Governor

DONALD R. VAN DER VAART

Secretary

S. JAY ZIMMERMAN

Director

July 7, 2016

Mr. Philip S. Harris, III, P.E., CPM
Natural Environment Section Head
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and NEUSE
BUFFER RULES with ADDITIONAL CONDITIONS for the Construction of the Greenville Southwest
Bypass from south of Old NC 11 to US 264 in Pitt County, TIP R-2250.
NCDWR Project No. 20160191

Dear Mr. Harris:

Attached hereto is a copy of Certification No. 004060 issued to The North Carolina Department of Transportation (NCDOT) dated July 6, 2016.

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

Sincerely,

S. Jay Zimmerman, Director
Division of Water Resources

Attachments

Electronic copy only distribution:

Tom Steffens, US Army Corps of Engineers, Washington Field Office
Jay Johnson, Division 2 Environmental Officer
Rodger Rochelle, NC Department of Transportation
Chris Rivenbark, NC Department of Transportation
Dr. Cynthia Van Der Wiele, US Environmental Protection Agency
Gary Jordan, US Fish and Wildlife Service
Travis Wilson, NC Wildlife Resources Commission
Beth Harmon, Division of Mitigation Services
Garcy Ward, NC Division of Water Resources Washington Regional Office
File Copy

401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and NEUSE BUFFER RULES, with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500 and 15A NCAC 2B .0233. This certification authorizes the NCDOT to impact 0.33 acres of jurisdictional wetlands, 3,513 linear feet of jurisdictional streams and 274,745 square feet of protected riparian buffers in Pitt County. The project shall be constructed pursuant to the application dated received February 25, 2016 and revised application dated March 15, 2016. The authorized impacts are as described below:

Stream Impacts in the Neuse River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	1,532	92	--	--	1,624	
2	--	--	--	50	50	
3	--	--	246	117	363	246
5	128	20	--	--	148	
6	383	75	--	--	458	
7	233	244	--	--	477	
9	--	--	132	38	170	132
10	38	46	--	--	84	
11	61	59	--	--	120	
Moye Pit	--	19	--	--	19	
Total	2,375	555	378	205	3,513	378

Total Stream Impact for Project: 3,513 linear feet

Wetland Impacts in the Tar-Pamlico River Basin

Site	Type	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
8	Non-riverine	0.33	--	--	--	--	0.33

Total Wetland Impact for Project: 0.33 acres.

Neuse Riparian Buffer Impacts

Site	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)		Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
1	89,889	0	89,889	269,667		60,675	0	60,675	91,013
2	7,825*	0	7,825	23,475		806*	0	806	n/a
3	17,579	0	17,579	52,737		12,145	0	12,145	18,218
5	8,453	0	8,453	n/a		5,414	0	5,414	n/a
7 temp	6,557	0	6,557	n/a		4,476	0	4,476	n/a
7 road crossing	15,578	0	15,578	46,734		10,057	0	10,057	15,086
9	12,010	0	12,010	36,030		5,172	0	5,172	7,758
10	4,619	0	4,619	n/a		3,095	0	3,095	n/a
11	3,261	0	3,261	n/a		4,934	0	4,934	n/a
Moye Pit	1,440	0	1,440	n/a		760	0	760	n/a
Totals	167,211	0	167,211	428,643		107,534	0	107,534	132,074

Total Buffer Impact for Project: 274,745 square feet.

n/a = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required

*= mitigable impacts zone 1 for non-electric utility, allowable impacts zone 2 for non-electric utility

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

This approval is only valid for the purpose and design that you submitted in your application dated received February 25, 2016 and revised application dated March 15, 2016. 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 2B.0233. 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.

Condition(s) of Certification:

1. Compensatory mitigation for **378 linear feet** of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Division of Mitigation Service (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. The DMS has indicated in a letter dated April 21, 2015 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the DMS Mitigation Banking Instrument signed July 28, 2010.
2. Compensatory mitigation for impacts to **142,881** square feet of protected riparian buffers in Zone 1 and **88,049** square feet of protected riparian buffers in Zone 2 shall be required. We understand that you have chosen to perform compensatory mitigation for impacts to protected buffers through use of the North Carolina Division of Mitigation Services (DMS) (formerly NCEEP). Mitigation for unavoidable impacts to Neuse Riparian Buffers shall be provided in the Neuse River Basin and done in accordance with 15A NCAC .02B .0295. The DMS has indicated in a letter dated April 21, 2015 that they will assume responsibility for satisfying the compensatory mitigation requirements for the above-referenced project, in accordance with DMS's Mitigation Banking Instrument signed July 28, 2010.
3. Channel relocations shall be completed and stabilized, and approved on site by NCDWR staff, prior to diverting water into the new channel. Stream banks shall be matted with coir-fiber matting. Vegetation used for bank stabilization shall be limited to native riparian vegetation, and should include establishment of a vegetated buffer on both sides of the relocated channel to the maximum extent practical. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. Once the stream has been turned into the new channel, it may be necessary to relocate stranded fish to the new channel to prevent fish kills. [15A NCAC 02H .0506(b)(3)]
4. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
5. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
6. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
7. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
8. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
9. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
10. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [15A NCAC 02H.0506(b)(3) and (c)(3)]

11. 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 [15A NCAC 02H.0506(b)(3) and (c)(3)]:
 - 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.
12. Erosion control matting in riparian areas shall not contain a nylon mesh grid which can impinge and entrap small animals. Matting should be secured in place by staples, stakes, or wherever possible live stakes of native trees. Riparian areas are defined as a distance 25 feet from top of stream bank. [15A NCAC 02B.0224, .0225]
13. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
14. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]
15. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation. [15A NCAC 02H.0506(b)(2)(3)]
16. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
17. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
18. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]

19. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
20. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
21. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
22. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
23. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. [15A NCAC 02B.0233]
24. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. [15A NCAC 2B.0233]
25. Pursuant to 15A NCAC 2B .0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWR. At this time, the NCDWR has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
26. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0506(b)(2)]
27. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
28. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR 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, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
29. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
30. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

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 DEQ as follows:

Mr. Sam M. Hayes, General Counsel
Department of Environmental Quality
1601 Mail Service Center

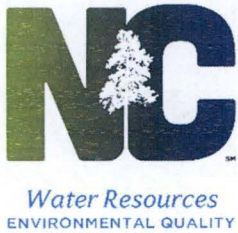
This the 7th day of July, 2016

DIVISION OF WATER RESOURCES

A handwritten signature in blue ink, appearing to read "S. Jay Zimmerman".

S. Jay Zimmerman, Director

WQC No. 004060



PAT MCCRORY

Governor

DONALD R. VAN DER VAART

Secretary

S. JAY ZIMMERMAN

Director

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

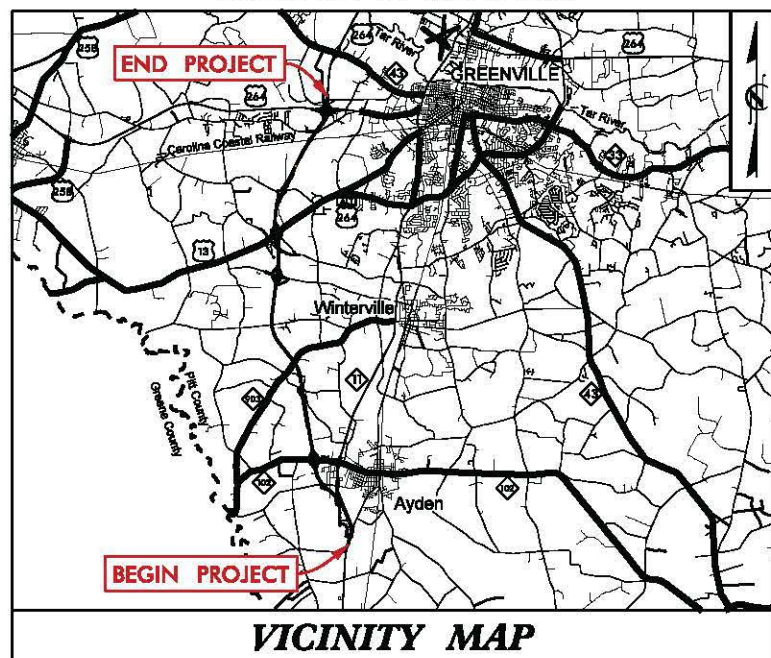
I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation 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 _____

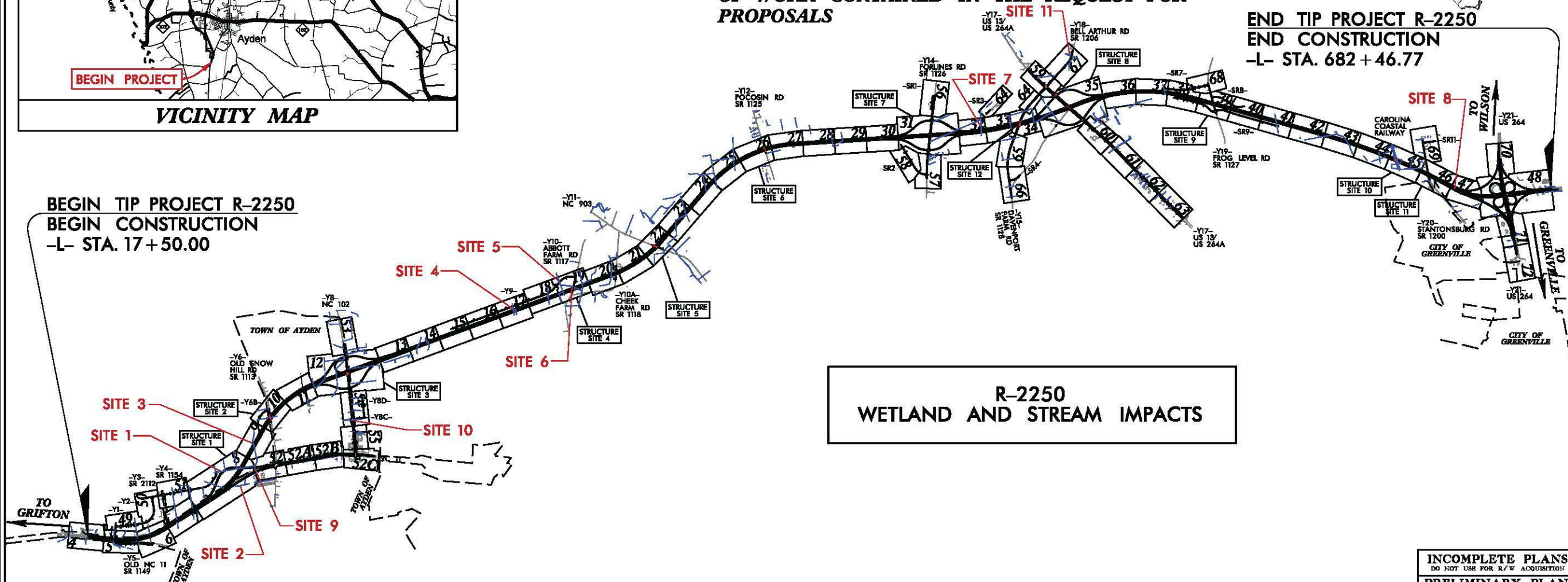
66/80/99

CONTRACT: C 203609

See Sheet 1A-1 For Index of Sheets



BEGIN TIP PROJECT R-2250
BEGIN CONSTRUCTION
-L- STA. 17+50.00



R-2250 WETLAND AND STREAM IMPACTS

**A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES
OF THE TOWN OF AYDEN AND THE CITY OF GREENVILLE.**

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

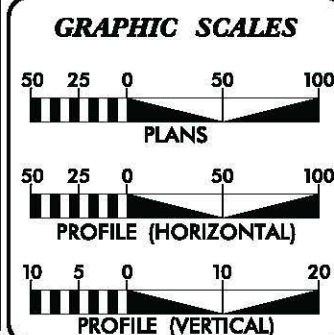
PERMIT DRAWINGS
SHEET 1 OF 30

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION


**BARNHILL
CONTRACTING
COMPANY**

HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116



DESIGN DATA

ADT 2014 = 19,700 VPD
ADT 2040 = 34,000 VPD
DHV = 10 %
D = 60 %
* T = 8 %
V = 70 MPH
*(TTST 3% + DUALS 5%)
FUNC. CLASS. = FREEWAY
STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2250 = 12.333 MILES
LENGTH STRUCTURE TIP PROJECT R-2250 = 0.261 MILES
TOTAL LENGTH TIP PROJECT R-2250 = 12.594 MILES

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

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:
APRIL 21, 2015

PAUL A. MEEHAN, PE
PROJECT ENGINEER

DOMINIC M. WAINWRIGHT, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ **P.E.**

**ROADWAY DESIGN
ENGINEER**

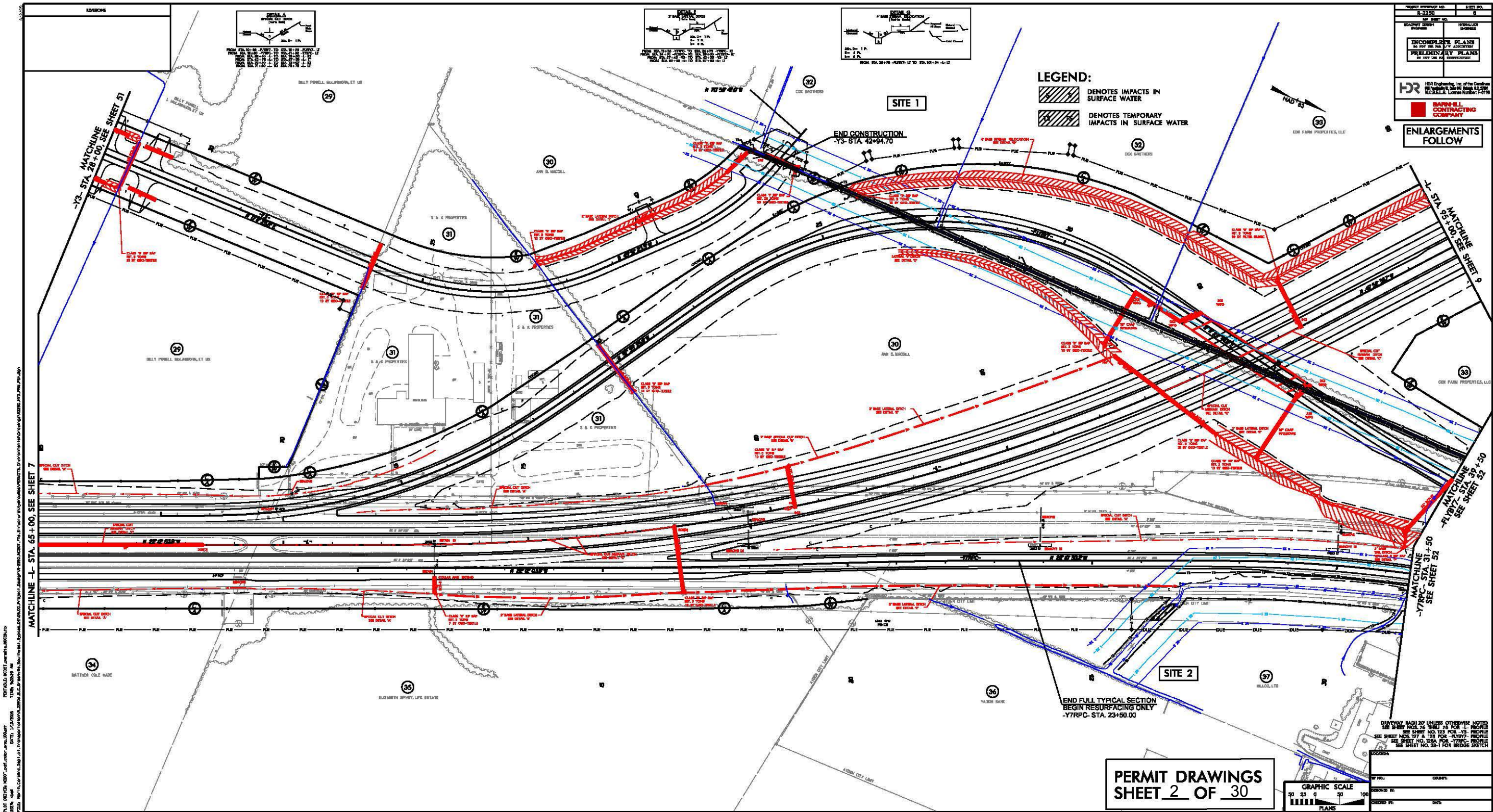
SIGNATURE: _____ **P.E.** _____

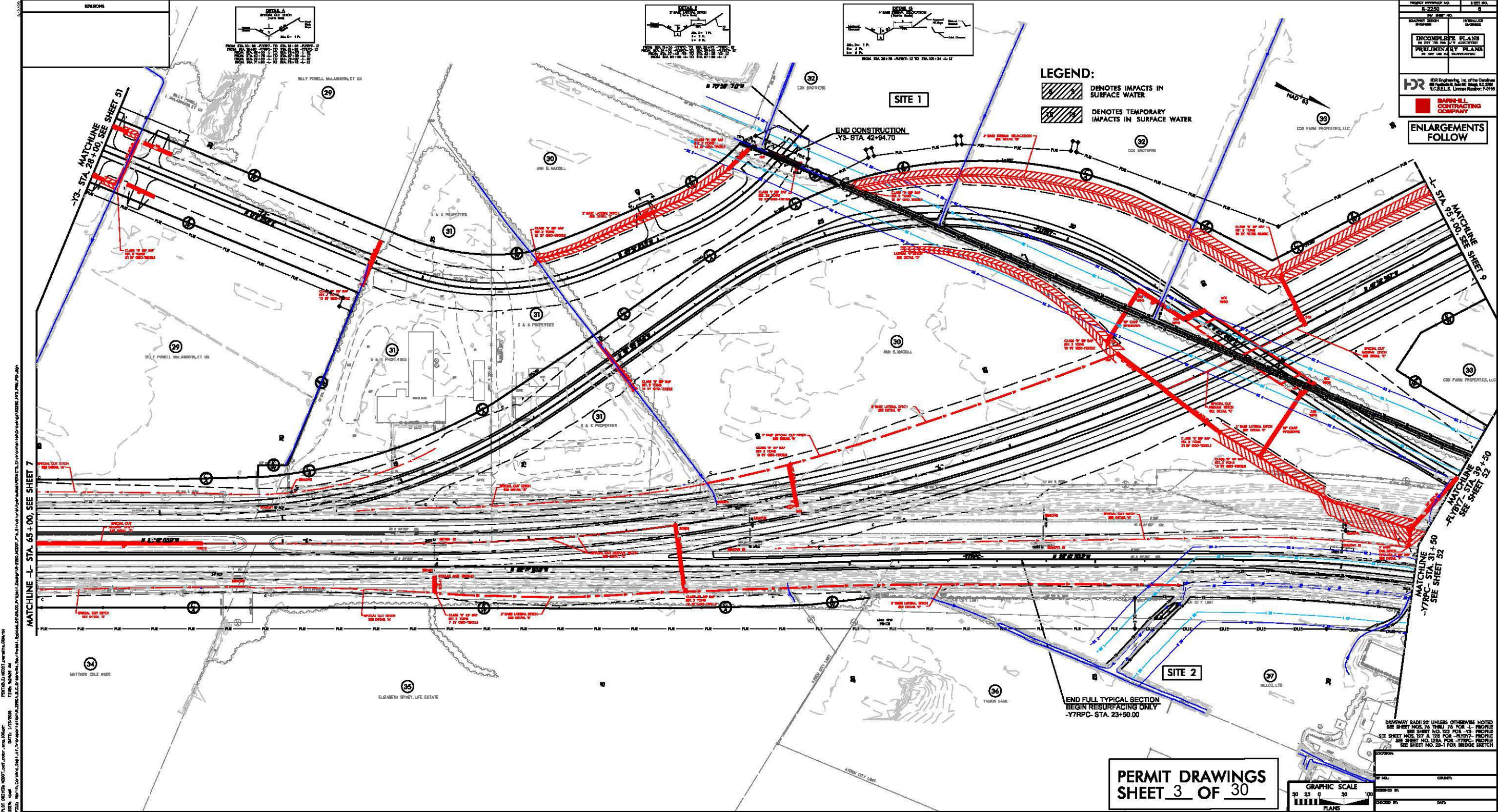
DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA



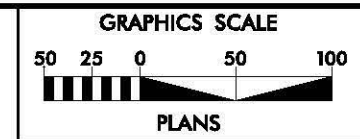
P.E.

STATE HIGHWAY DESIGN ENGINEER

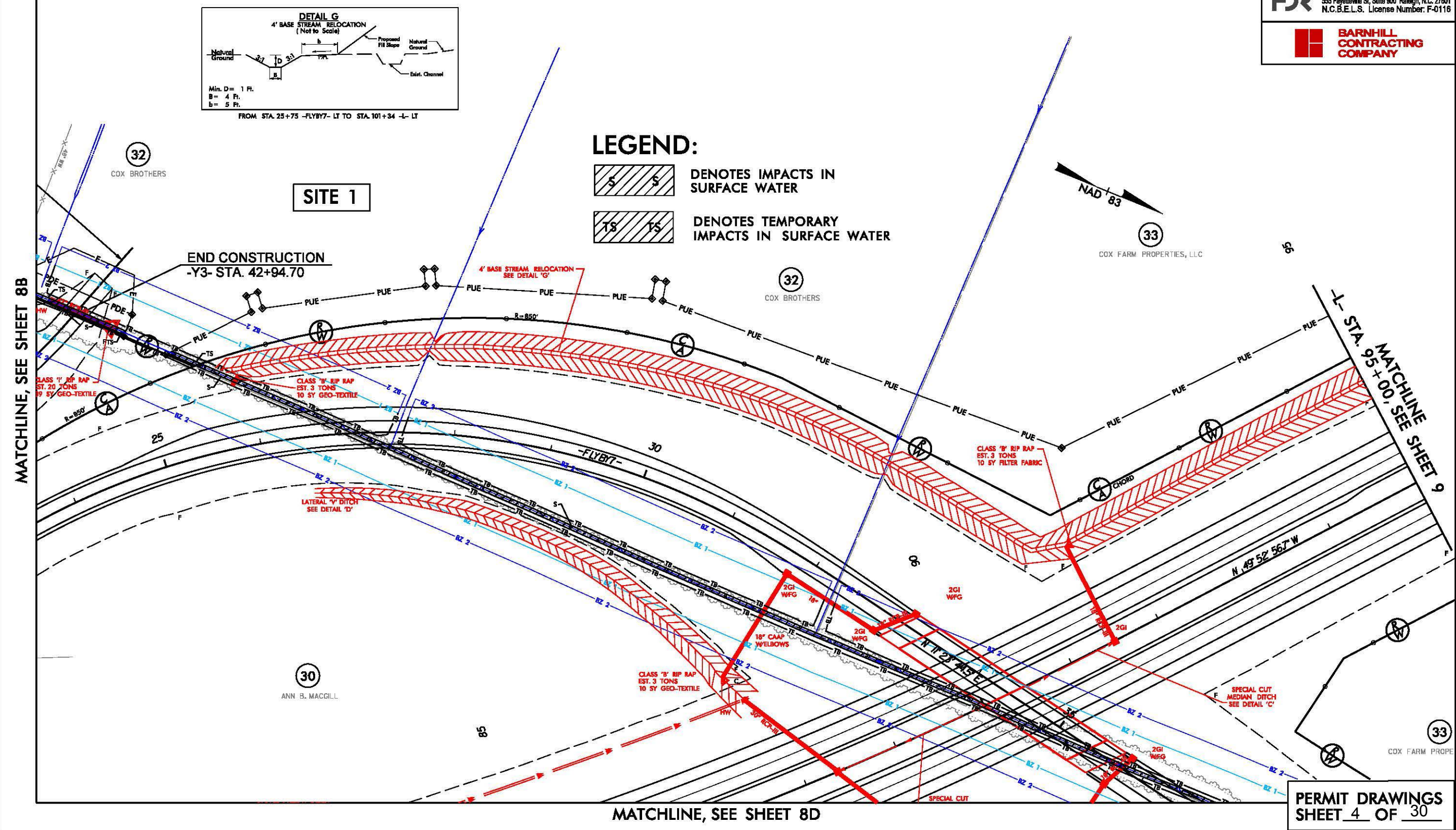




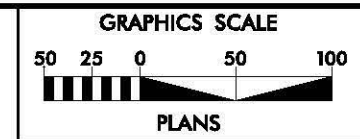
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USER: kbell
FILE: North_Carolina_Dept_of_Transportation\R-2250A.B.C.Greenville_Southwest_Bypass.DWG
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TIME: 3:20:10 PM
DATE: 1/12/2016



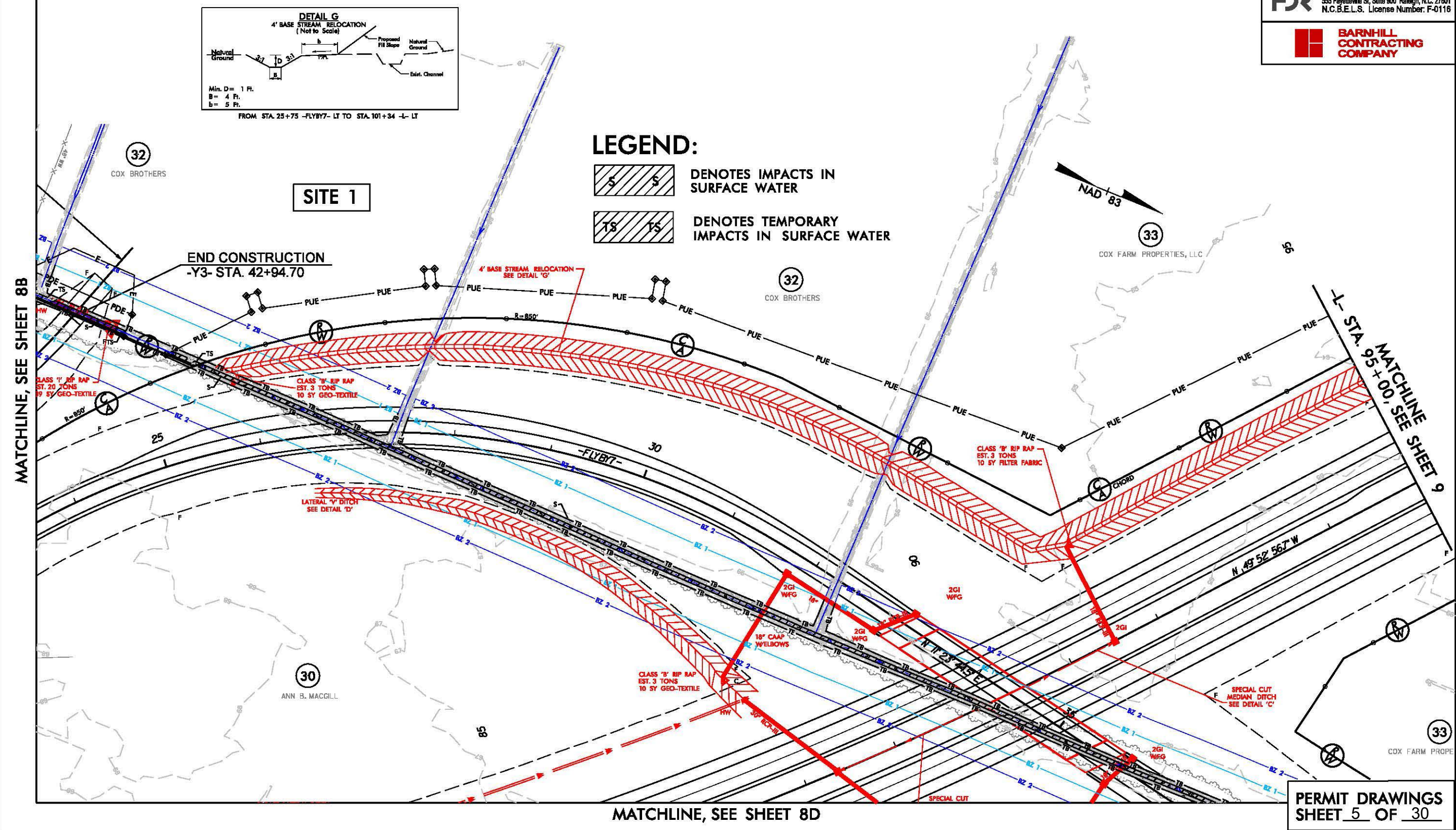
PROJECT REFERENCE NO.	SHEET NO.
R-2250	8A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
BARNHILL CONTRACTING COMPANY	



PLOT DRIVER: NCDOT_pdr_color_eng_100.plt
USER: kbell
FILE: North.Carolina.Dept.of.Transportation\R-2250A.B.C.Greenville.Southwest.Bypass.DB\06.00_Project_Design\R-2250.NCDOT.File.Structure\Hydraulics\PERMITS\Environmental\Drawings\R2250.HYD.PRM.PSH.dgn
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DATE: 1/12/2016

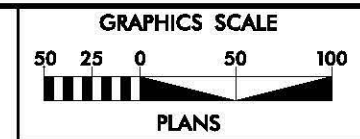




PROJECT REFERENCE NO.	SHEET NO.
R-2250	8A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
BARNHILL CONTRACTING COMPANY	



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TIME: 2:19:12 PM

REVISIONS



PROJECT REFERENCE NO. R-2250		SHEET NO. 88					
R/W SHEET NO.							
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER					
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION							
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION							
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED							
<div><div>HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116</div></div>							
<div><div>BARNHILL CONTRACTING COMPANY</div></div>							

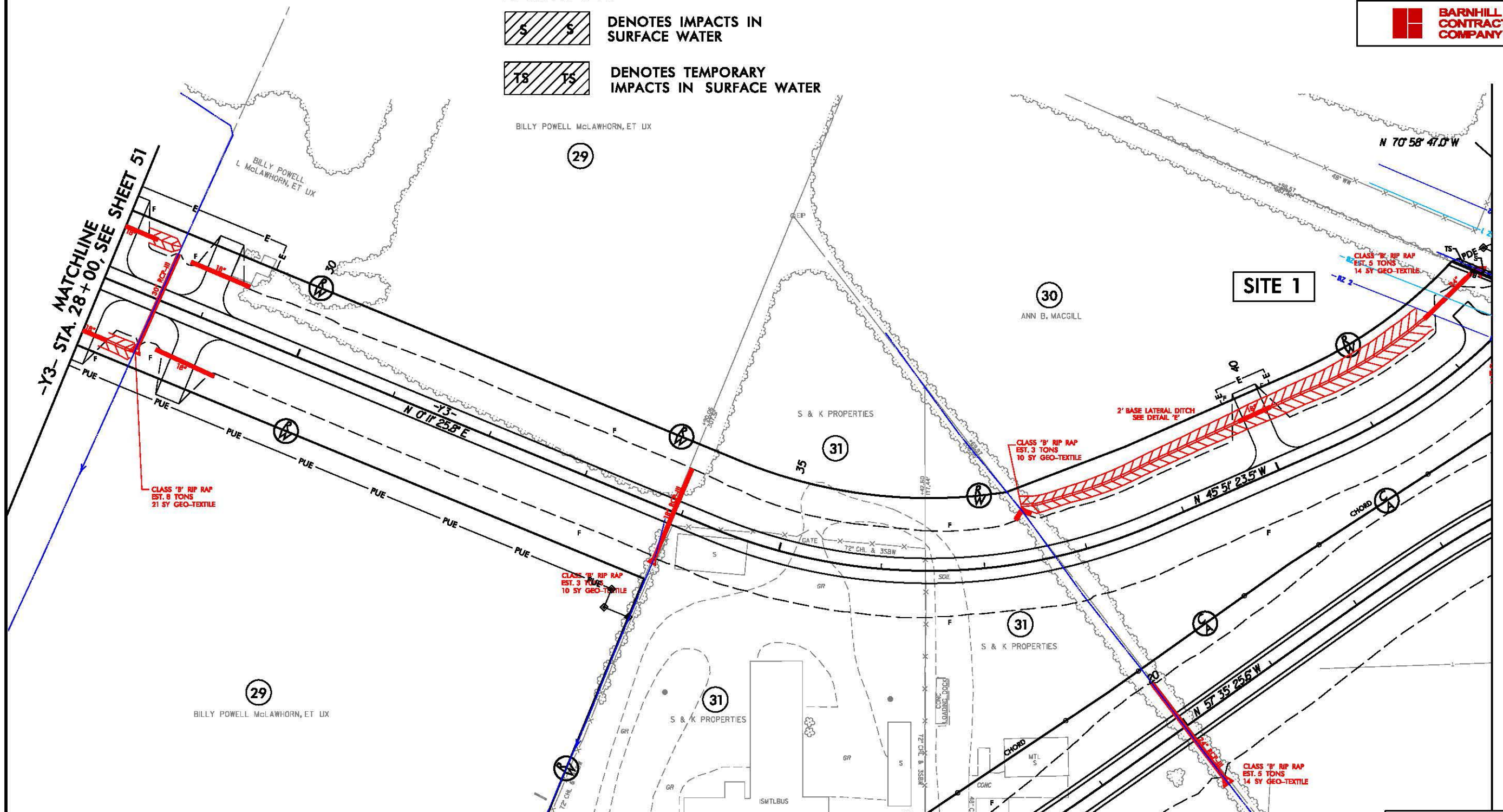
LEGEND:



DENOTES IMPACTS IN
SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER

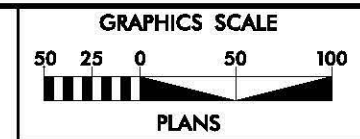








MATCHLINE, SEE SHEET 8C

MATCHLINE, SEE SHEET 8A

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REVISIONS



PROJECT REFERENCE NO. R-2250		SHEET NO. 88					
RW SHEET NO.							
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER					
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION							
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION							
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED							
<table><tr><td></td><td>HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116</td></tr></table>					HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116		
	HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116						
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	BARNHILL CONTRACTING COMPANY						

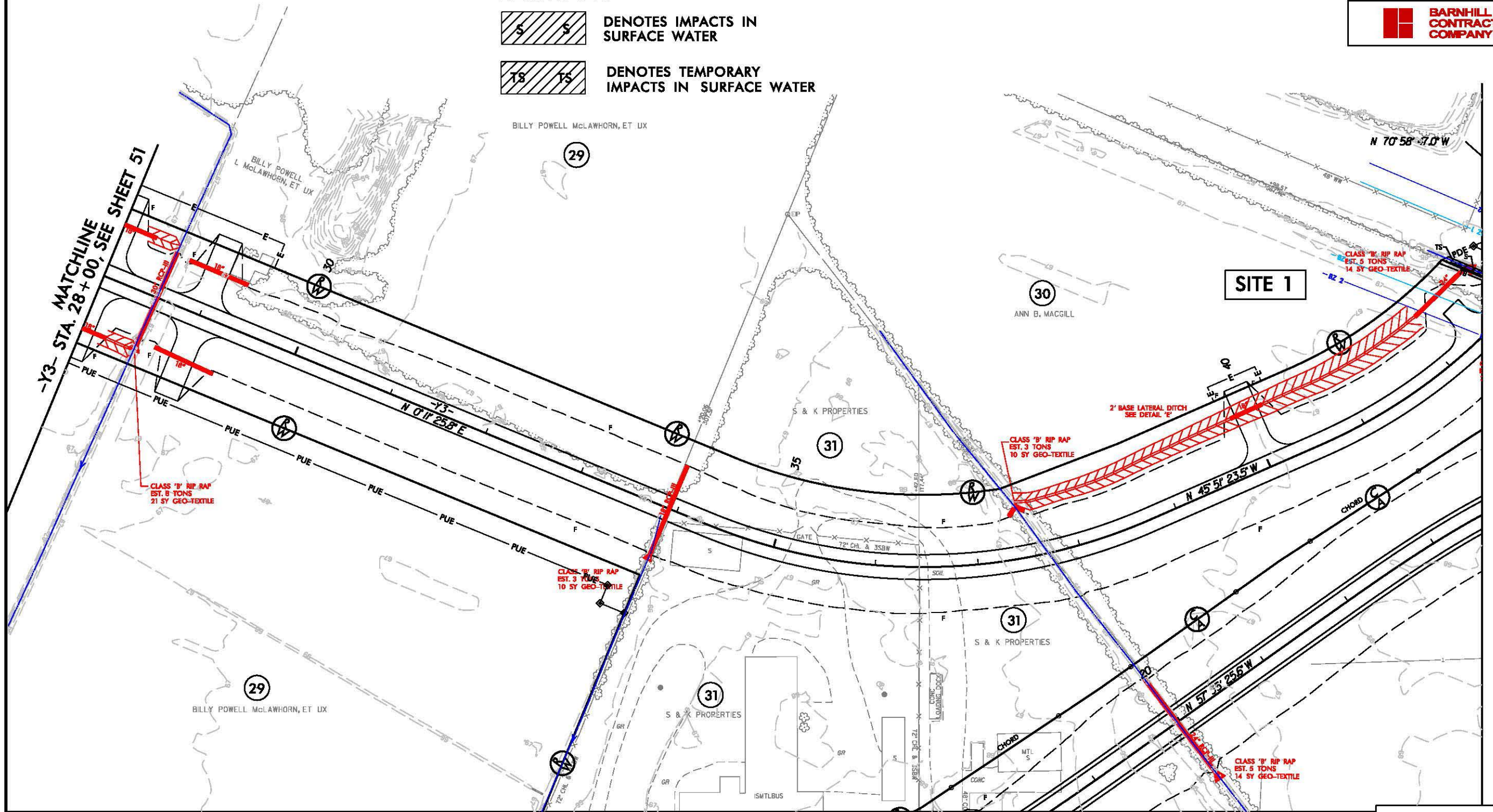
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DENOTES IMPACTS IN
SURFACE WATER



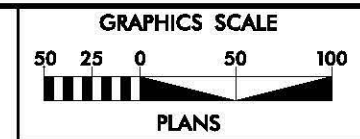
DENOTES TEMPORARY
IMPACTS IN SURFACE WATER





MATCHLINE, SEE SHEET 8C

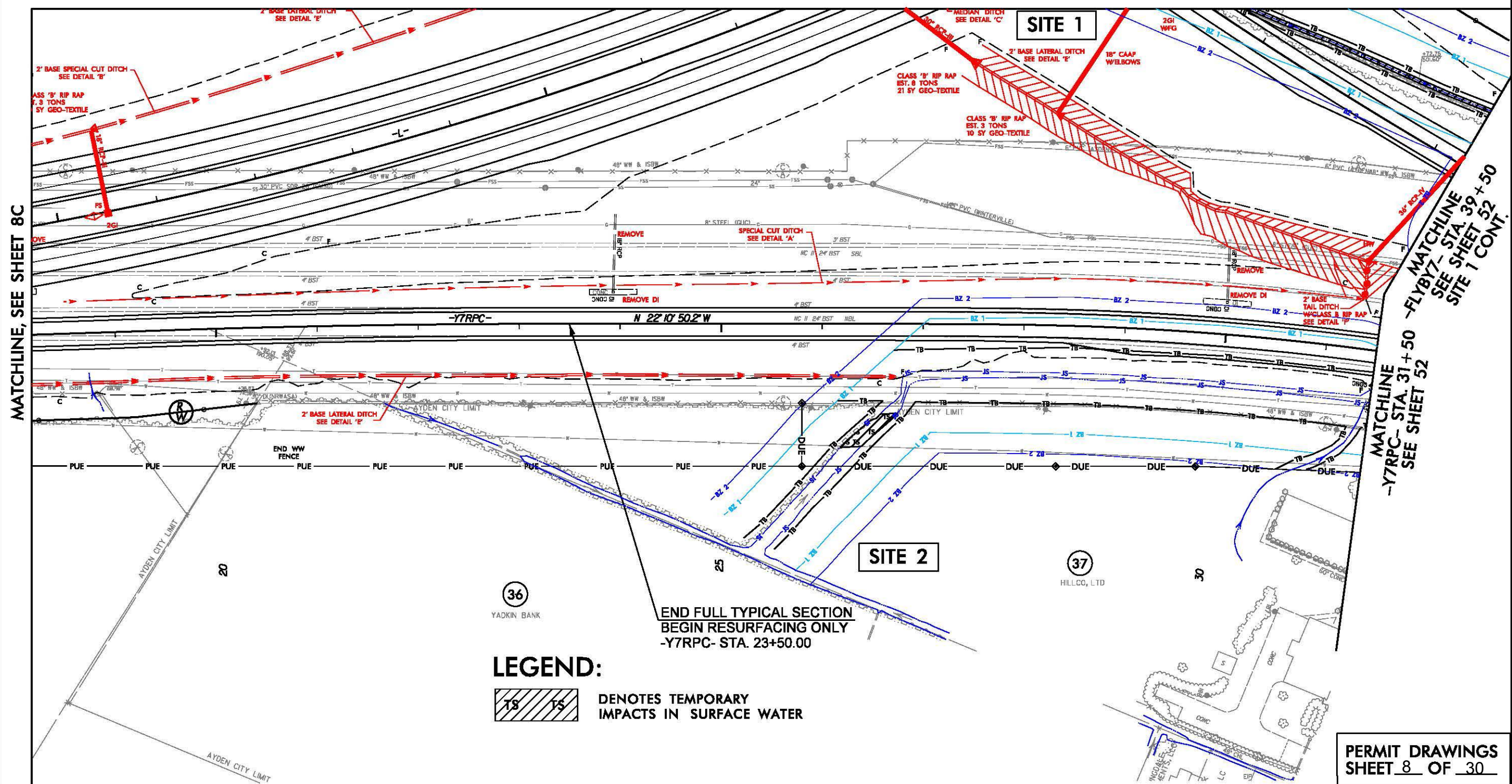
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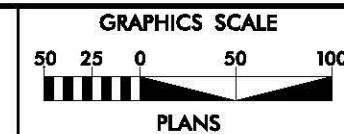
REVISIONS





PROJECT REFERENCE NO. R-2250		SHEET NO. 8D			
RW SHEET NO.					
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER			
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION					
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION					
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED					
 <div>HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116</div>					
 <div>BARNHILL CONTRACTING COMPANY</div>					

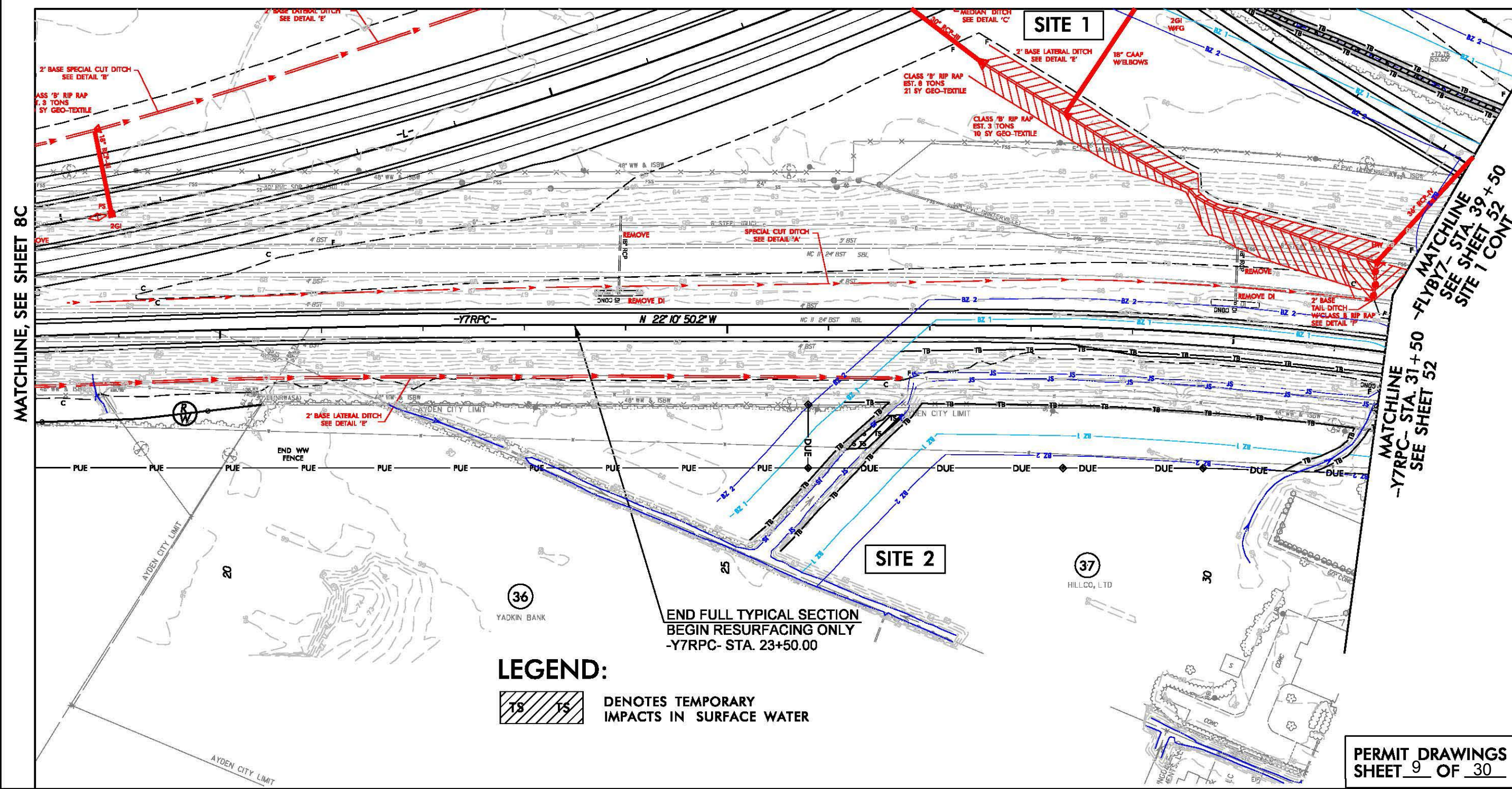
MATCHLINE, SEE SHEET 8A





PROJECT REFERENCE NO.		SHEET NO.					
R-2250		8D					
R/W SHEET NO.							
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER					
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION							
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION							
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED							
		HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0111					
		BARNHILL CONTRACTING COMPANY					

MATCHLINE, SEE SHEET 8A

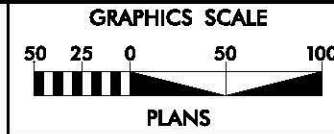




PERMIT DRAWINGS
SHEET 9 OF 30

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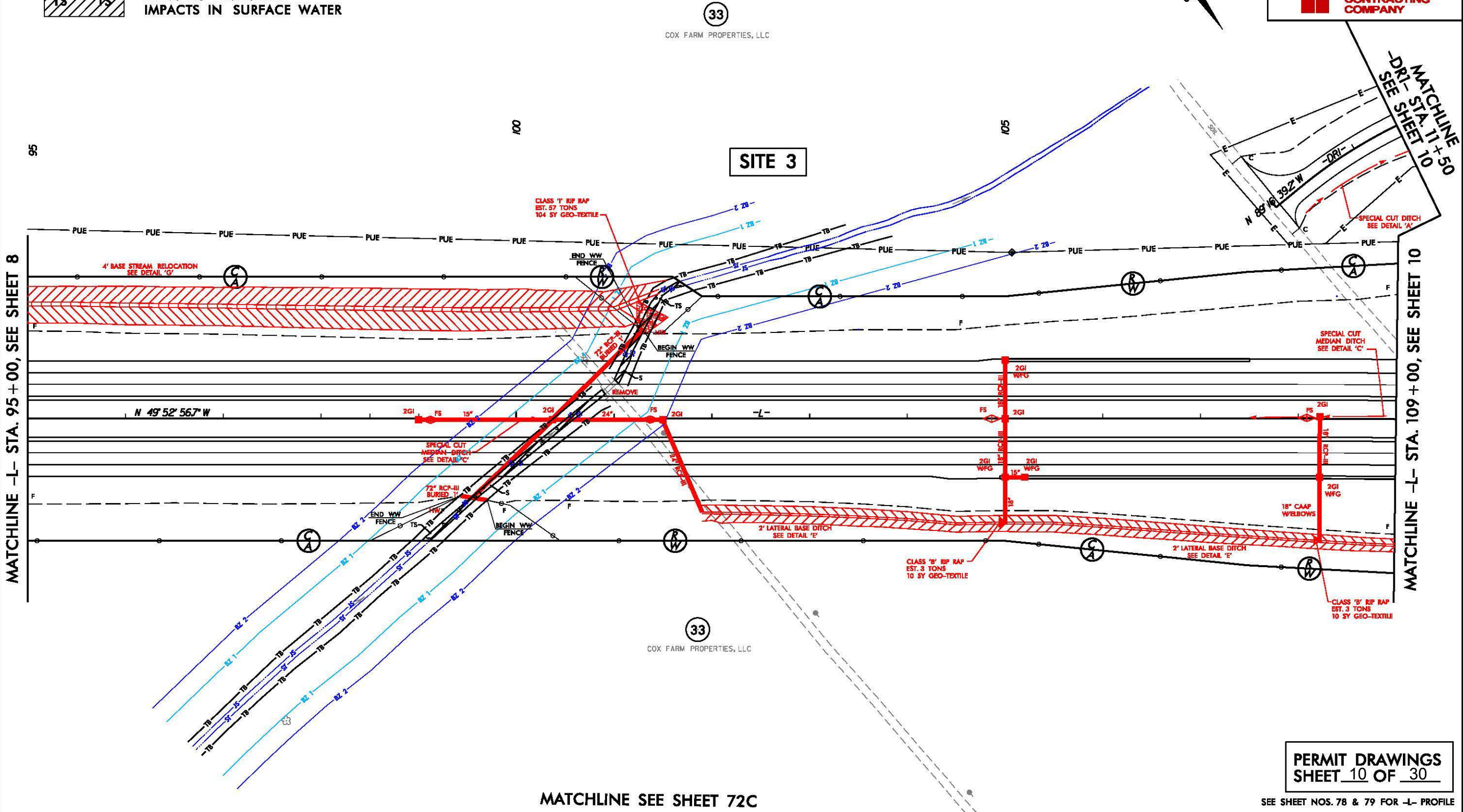
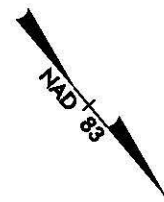
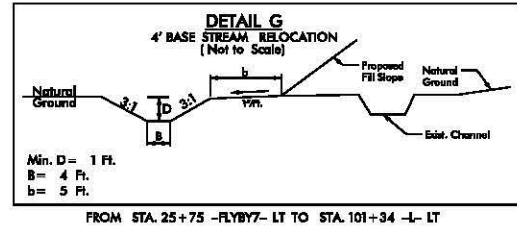
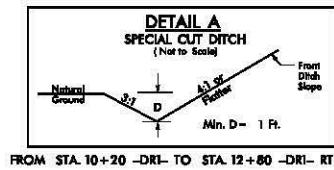
MATCHLINE SEE SHEET 72A





PROJECT REFERENCE NO. R-2250		SHEET NO. 9	
RDW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
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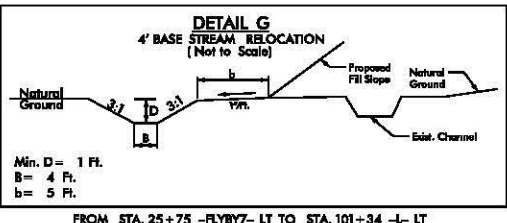
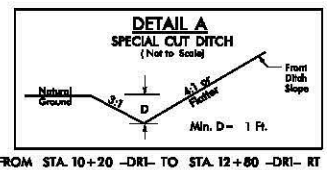
LEGEND:

- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER




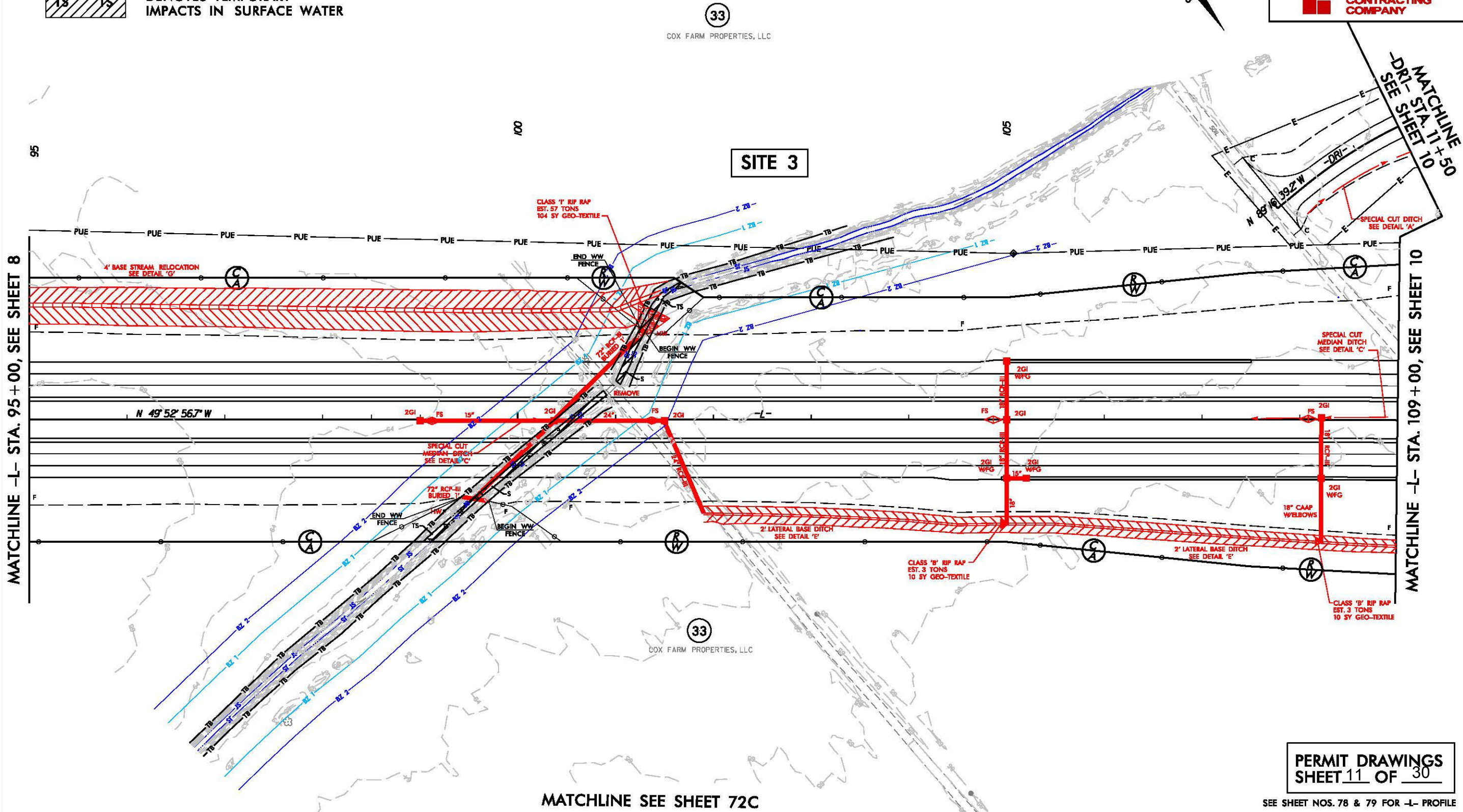
MATCHLINE SEE SHEET 72C

PROJECT REFERENCE NO.	SHEET NO.
R-2250	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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LEGEND:

-  DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER



SEE SHEET NOS. 78 & 79 FOR -L- PROFILE

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LEGEND:



DENOTES IMPACTS IN
SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER

SITE 5

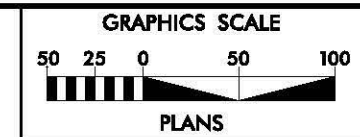
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MATCHLINE -L- STA. 66+50, SEE SHEET 18

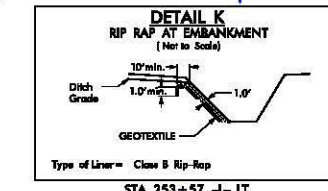
MATCHLINE -L- STA. 243+00, SEE SHEET 18

MATCHLINE SEE SHEET 72F

BROWNIE D. McLAWHORN



BEGIN CONSTRUCTION
-Y10- STA. 13+25/00



PROJECT REFERENCE NO. R-2250	SHEET NO. 19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
BARNHILL CONTRACTING COMPANY	

NAD 83

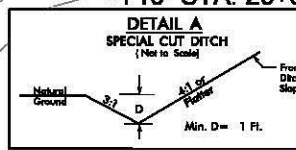
63
FORK SWAMP LAND LLC

SITE 6

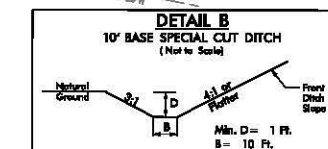
BROWNIE D. McLAWHORN

MATCHLINE -L- STA. 256+00, SEE SHEET 20

END CONSTRUCTION
-Y10- STA. 20+55.00



FROM STA. 74+00 -Y9- TO STA. 75+50 -Y9- LT
FROM STA. 73+50 -Y9- TO STA. 75+50 -Y9- RT
FROM STA. 13+25 -Y10- TO STA. 17+35 -Y10- LT
FROM STA. 13+00 -Y10- TO STA. 16+85 -Y10- LT



FROM STA. 248+55 -L- TO STA. 049+70 -L- LT
FROM STA. 250+65 -L- TO STA. 251+00 -L- LT

PERMIT DRAWINGS
SHEET 13 OF 30

DRIVEWAY RADII 20' UNLESS OTHERWISE NOTED
SEE SHEET NOS. 89 & 90 FOR -L- PROFILE
SEE SHEET NOS. 139 & 140 FOR -Y9- PROFILE
SEE SHEET NO. 140 FOR -Y10- PROFILE
SEE SHEET NO. 2B-2 FOR BRIDGE SKETCH

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REVISIONS

LEGEND:



DENOTES IMPACTS IN
SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER

SITE 5

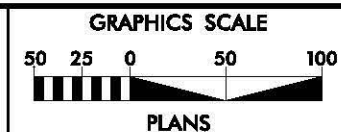
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MATCHLINE SEE SHEET 18
-Y9- STA. 66+50

MATCHLINE SEE SHEET 72F

BROWNIE D. McLAHWORN

62

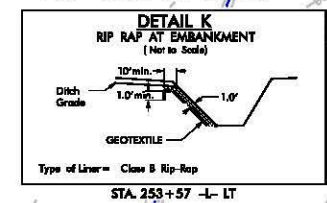


PROJECT REFERENCE NO. R-2250	SHEET NO. 19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

BARNHILL CONTRACTING COMPANY

BEGIN CONSTRUCTION
-Y10- STA. 13+25/00



NAD 83

SITE 6

BROWNIE D. McLAHWORN

62

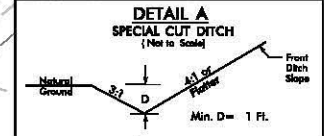
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FORK SWAMP LAND LLC

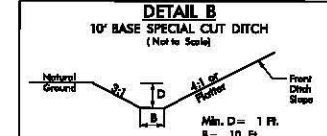
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MATCHLINE -L- STA. 256+00, SEE SHEET 20

END CONSTRUCTION
-Y10- STA. 20+55.00



FROM STA. 74+00 -Y9- TO STA. 75+50 -Y9- LT
FROM STA. 73+50 -Y9- TO STA. 75+50 -Y9- RT
FROM STA. 13+25 -Y10- TO STA. 17+35 -Y10- LT
FROM STA. 13+00 -Y10- TO STA. 16+85 -Y10- LT



FROM STA. 248+55 -L- TO STA. 049+70 -L- LT
FROM STA. 250+65 -L- TO STA. 251+00 -L- LT

PERMIT DRAWINGS
SHEET 14 OF 30

DRIVEWAY RADII 20' UNLESS OTHERWISE NOTED
SEE SHEET NOS. 89 & 90 FOR -L- PROFILE
SEE SHEET NOS. 139 & 140 FOR -Y9- PROFILE
SEE SHEET NO. 140 FOR -Y10- PROFILE
SEE SHEET NO. 2B-2 FOR BRIDGE SKETCH

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REVISIONS

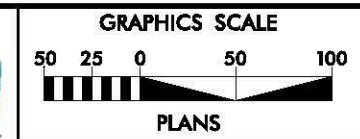
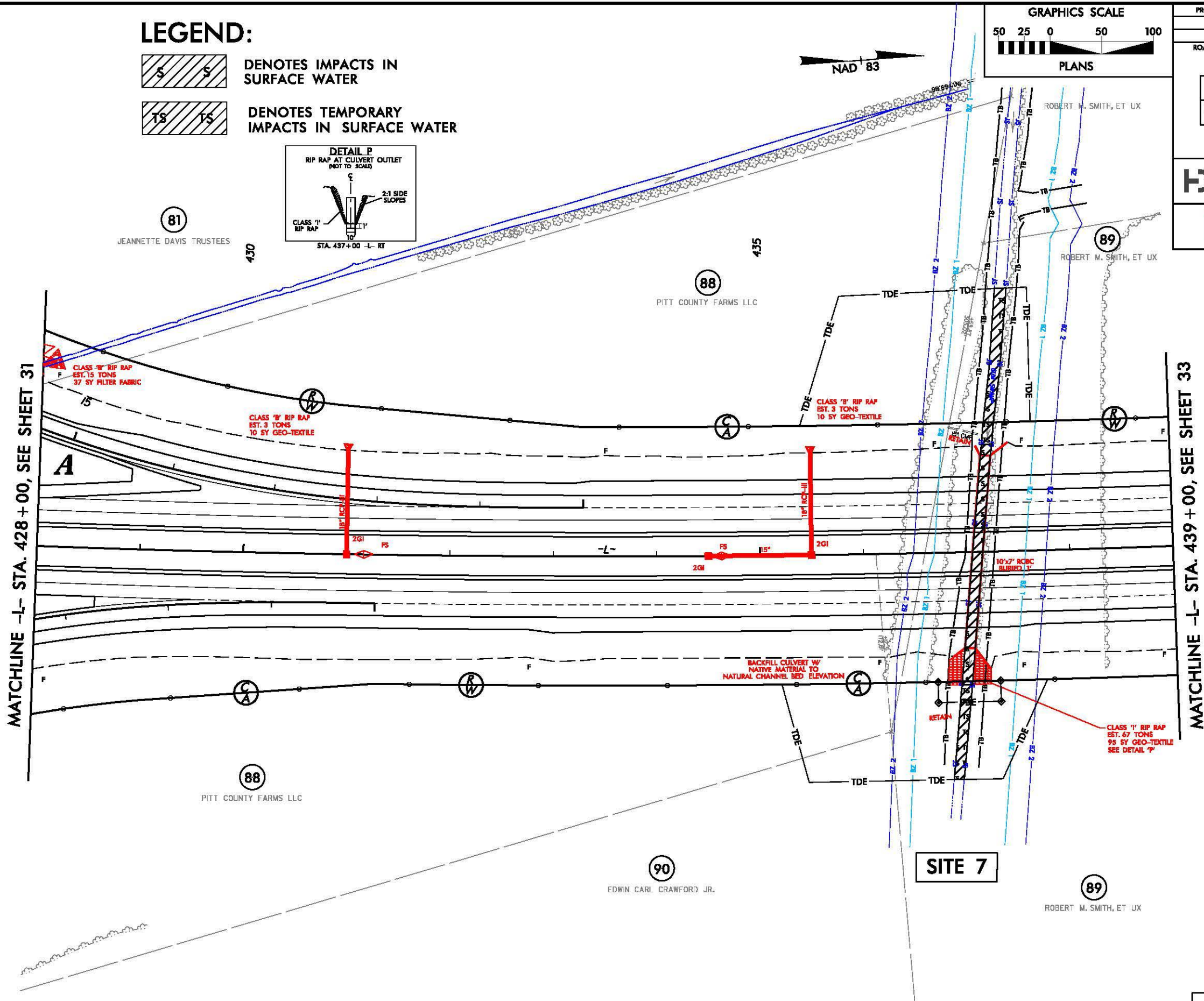
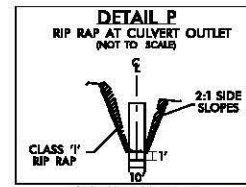
LEGEND:



DENOTES IMPACTS IN
SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER



PROJECT REFERENCE NO. R-2250		SHEET NO. 32	
RDW SHEET NO.		RDW SHEET NO.	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116		BARNHILL CONTRACTING COMPANY	

PERMIT DRAWINGS
SHEET 15 OF 30

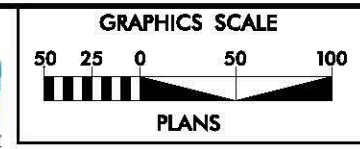
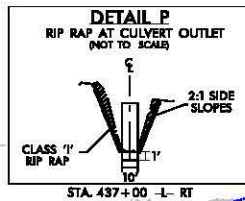
SEE SHEET NOS. 102 & 103 FOR -L- PROFILE
SEE SHEET NO. 144 FOR -Y14RPA- PROFILE
SEE SHEET NO. 147 FOR -Y14RPD- PROFILE

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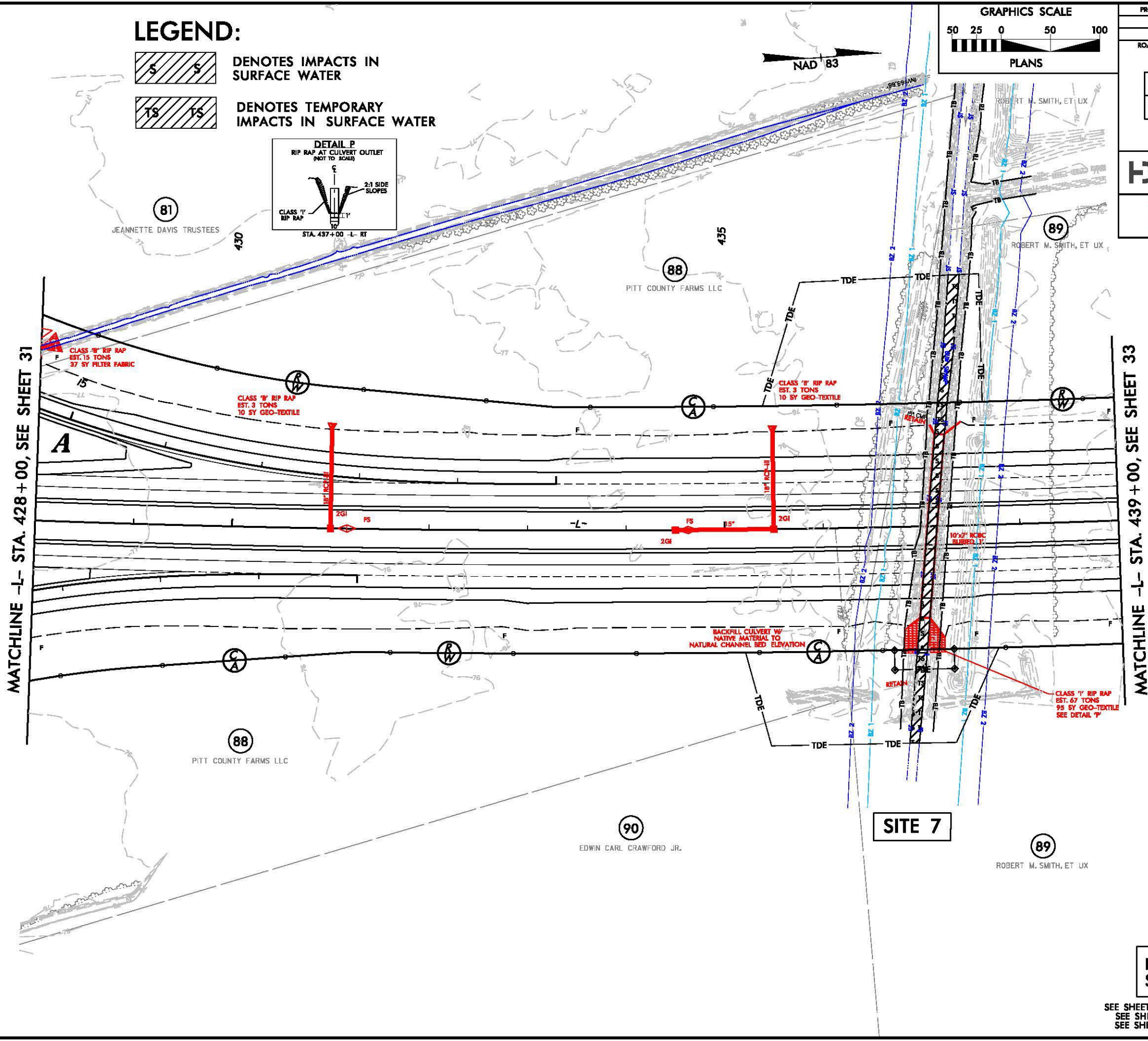
REVISIONS

LEGEND:

- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER



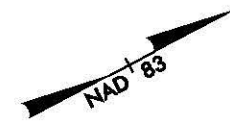
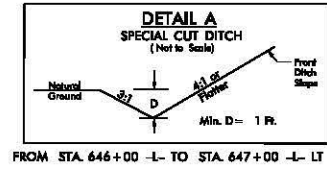
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RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION			
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116			
BARNHILL CONTRACTING COMPANY			



SEE SHEET NOS. 102 & 103 FOR -L- PROFILE
SEE SHEET NO. 144 FOR -Y14RPA- PROFILE
SEE SHEET NO. 147 FOR -Y14RPD- PROFILE

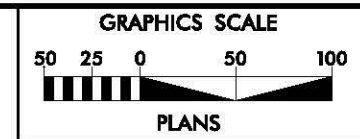
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REVISIONS

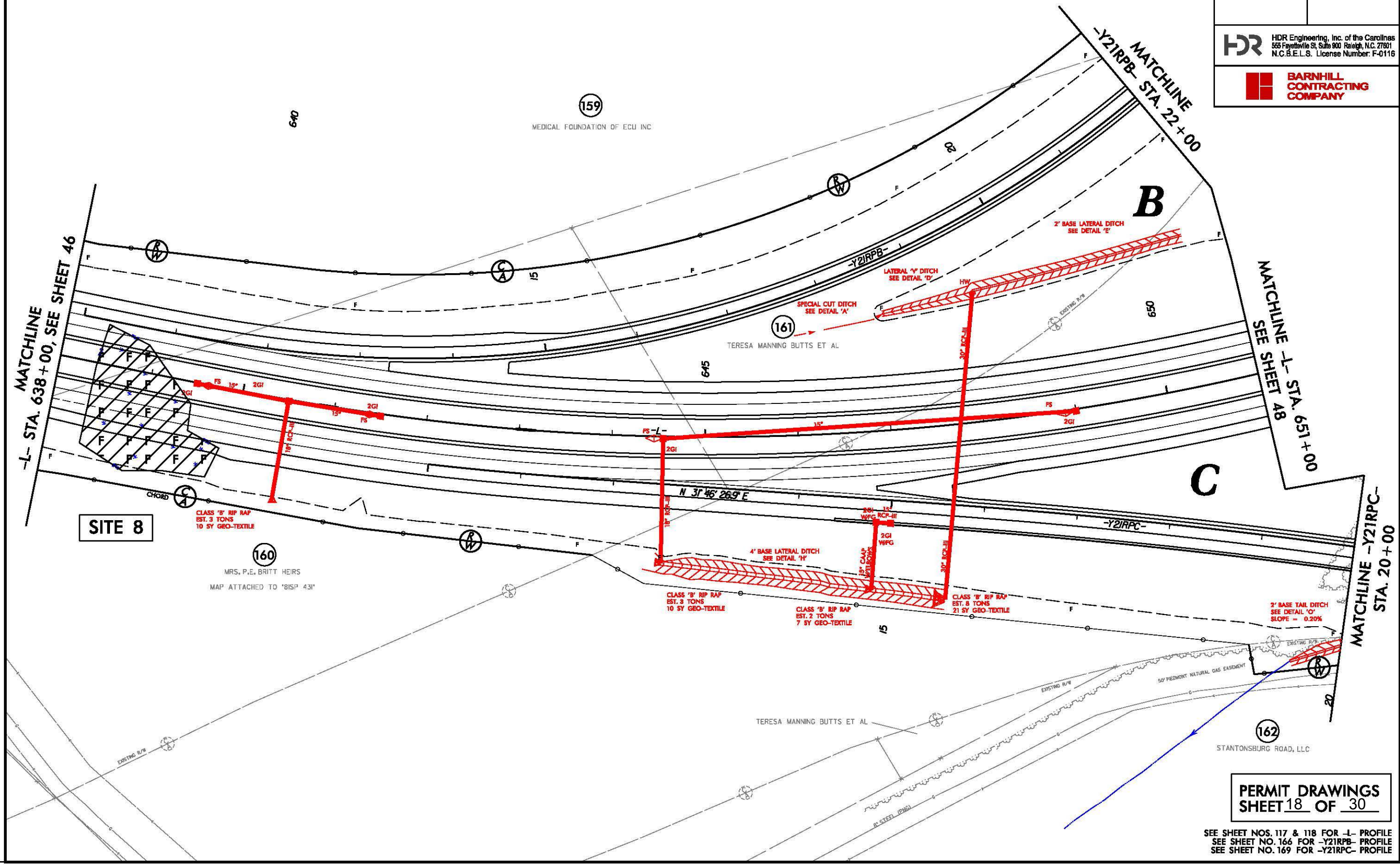


LEGEND:

DENOTES FILL IN WETLAND



PROJECT REFERENCE NO. R-2250		SHEET NO. 47	
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ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION			
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116			
BARNHILL CONTRACTING COMPANY			

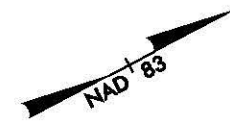
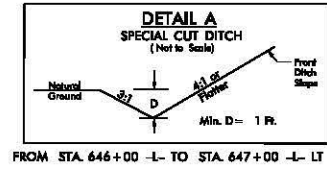


PERMIT DRAWINGS
SHEET 18 OF 30

SEE SHEET NOS. 117 & 118 FOR -L- PROFILE
SEE SHEET NO. 166 FOR -Y21RPB- PROFILE
SEE SHEET NO. 169 FOR -Y21RPC- PROFILE

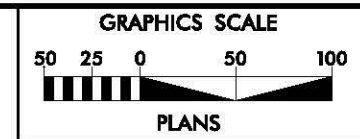
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REVISIONS

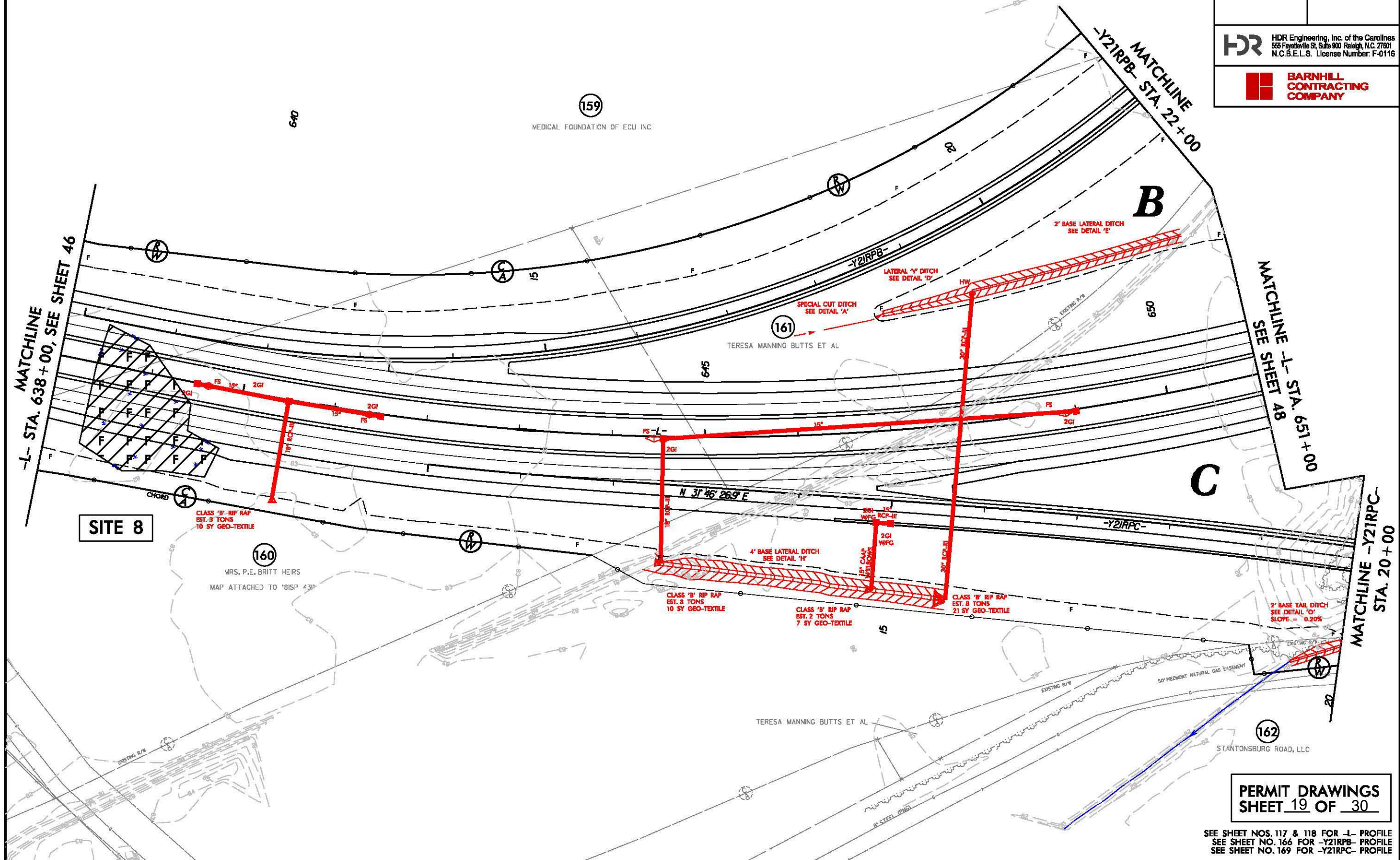


LEGEND:

DENOTES FILL IN WETLAND



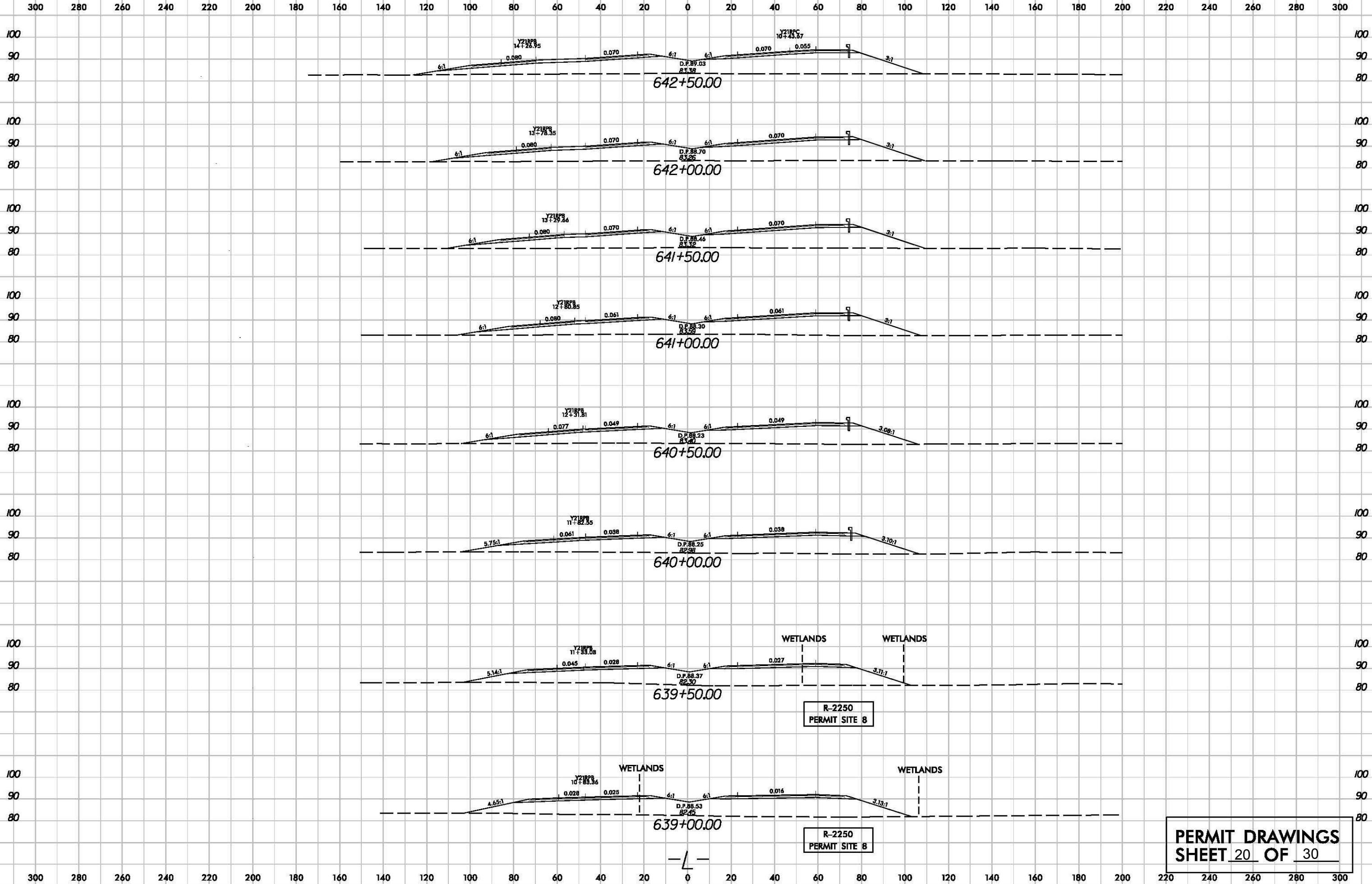
PROJECT REFERENCE NO. R-2250		SHEET NO. 47
RDW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION		
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION		
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116		
BARNHILL CONTRACTING COMPANY		



PERMIT DRAWINGS
SHEET 19 OF 30

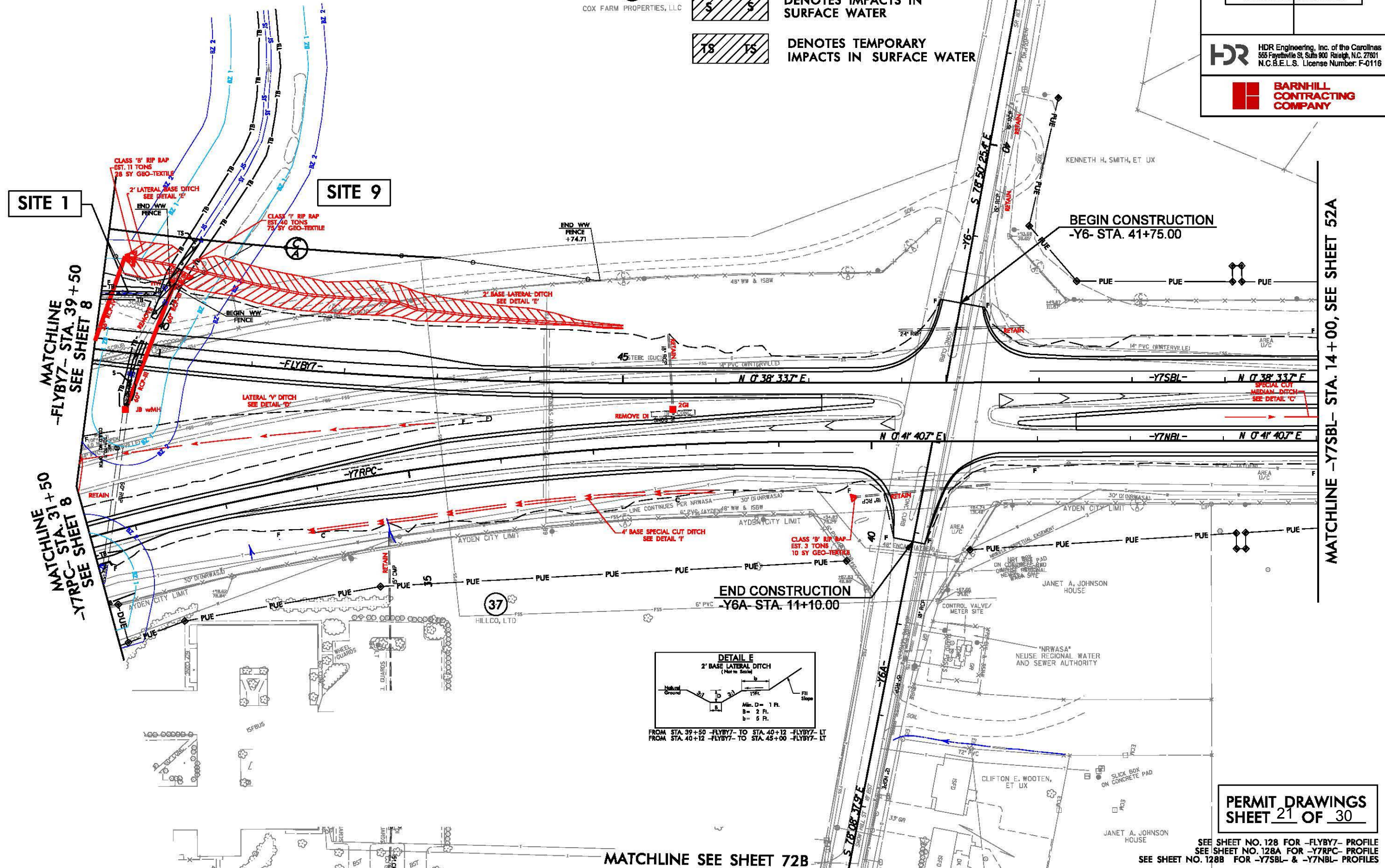
SEE SHEET NOS. 117 & 118 FOR -L- PROFILE
SEE SHEET NO. 166 FOR -Y21RPB- PROFILE
SEE SHEET NO. 169 FOR -Y21RPC- PROFILE

8/23/99



3:09:41 PM
R-2250 HYD.PRM.XSC-L-C.dgn
33666USERNAME\$3366

**DENOTES TEMPORARY
IMPACTS IN SURFACE WATER.**

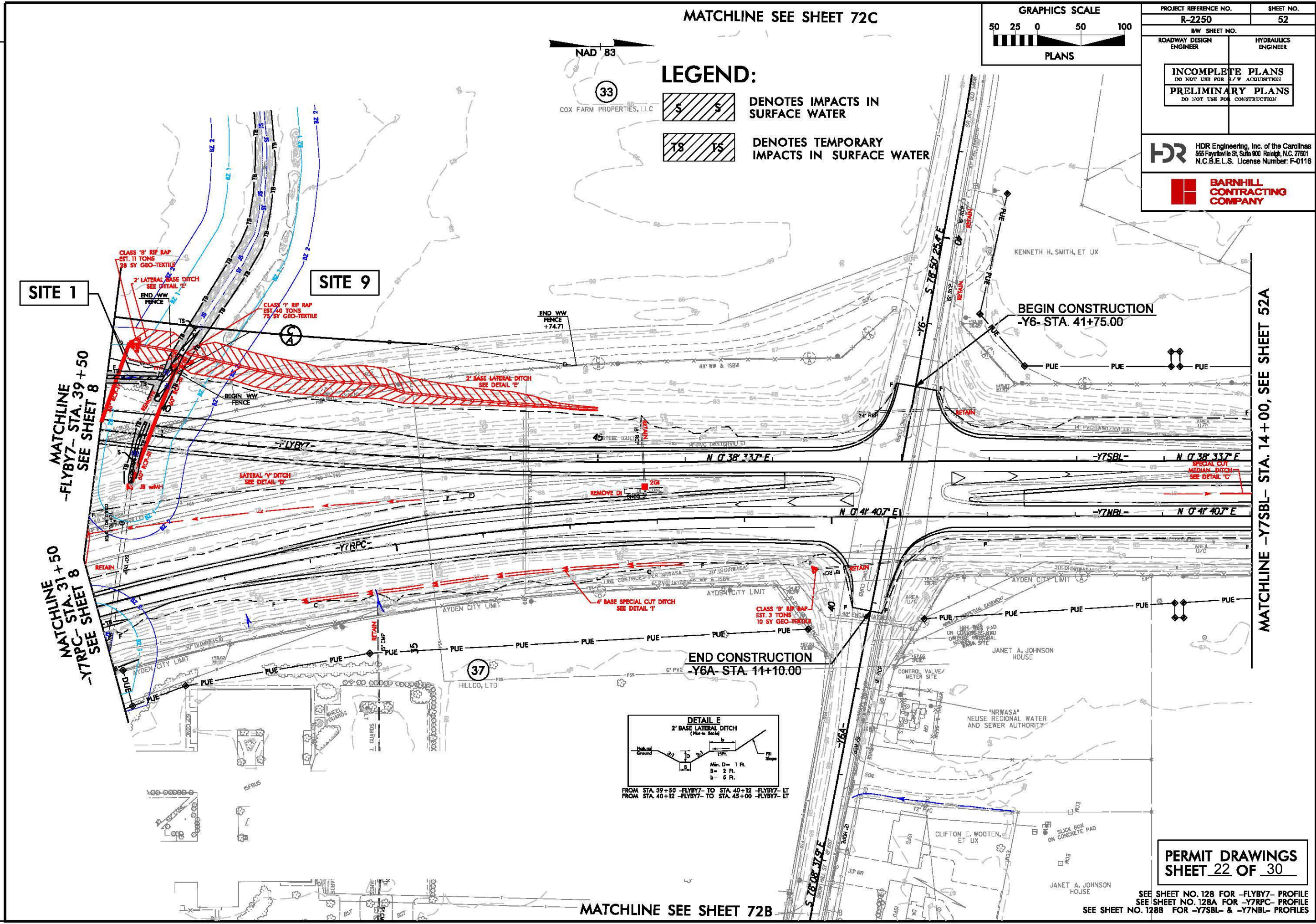


PERMIT DRAWINGS
SHEET 21 OF 30

SEE SHEET NO. 128 FOR -FLYBY- PROFILE
SEE SHEET NO. 128A FOR -Y7RPC- PROFILE
SEE SHEET NO. 128B FOR -Y7SBL- & -Y7NBL- PROFILES

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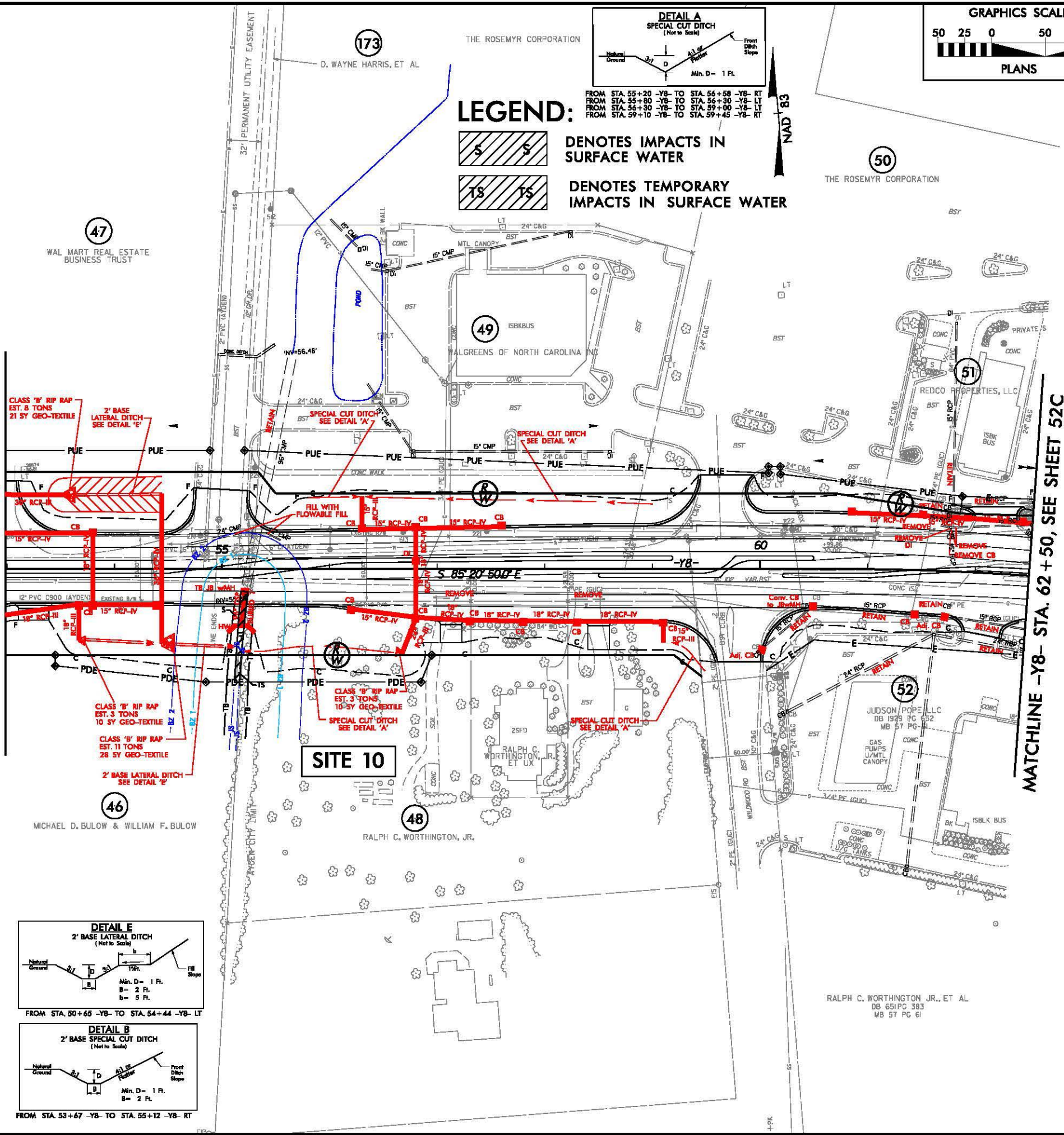
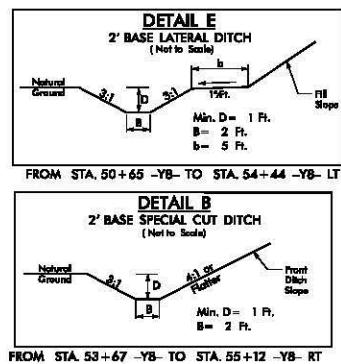
REVISIONS



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REVISIONS

MATCHLINE -Y8- STA. 53+00, SEE SHEET 54



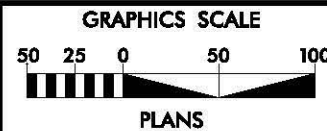
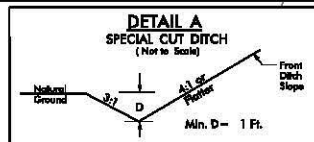
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DENOTES IMPACTS IN
SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER



PROJECT REFERENCE NO. R-2250		SHEET NO. 55	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
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<div style="border: 1px solid black; padding: 10px; text-align: center;">PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</div>			
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PERMIT DRAWINGS
SHEET 24 OF 30

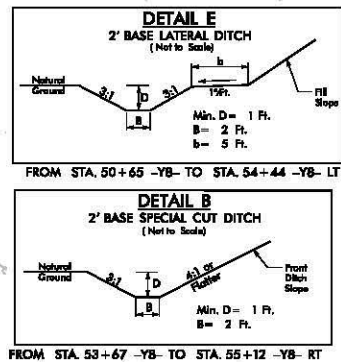
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REVISIONS

MATCHLINE -Y8- STA. 53 + 00, SEE SHEET 54

MATCHLINE -Y8- STA. 62 + 50, SEE SHEET 52C



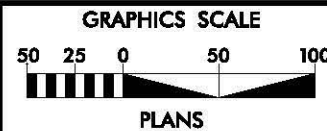
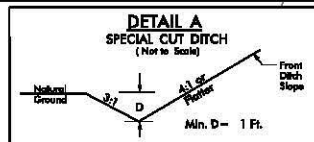
LEGEND:





DENOTES IMPACTS IN
SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER

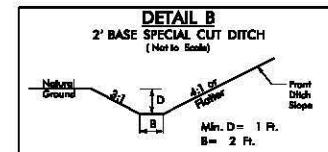


PROJECT REFERENCE NO. R-2250		SHEET NO. 55	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
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<div style="border: 1px solid black; padding: 10px; text-align: center;">PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</div>			
<div style="display: flex; align-items: center;"><div style="flex: 1;"></div><div style="flex: 2; padding-left: 10px;">HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116</div></div>			
<div style="display: flex; align-items: center;"><div style="flex: 1;"></div><div style="flex: 2; padding-left: 10px;">BARNHILL CONTRACTING COMPANY</div></div>			

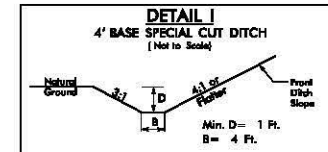
PERMIT DRAWINGS
SHEET 25 OF 30

SEE SHEET NO. 130 FOR -Y8- PROFILE

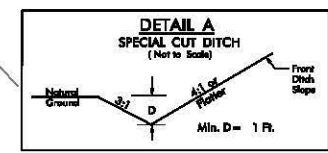
REVISIONS



FROM STA. 3+80 -Y18- TO STA. 6+50 -Y18- LT
FROM STA. 3+80 -Y18- TO STA. 6+36 -Y18- RT
FROM STA. 8+00 -Y18- TO STA. 17+00 -Y18- LT



FROM STA. 6+50 -Y18- TO STA. 8+00 -Y18- LT
FROM STA. 6+40 -Y18- TO STA. 8+22 -Y18- RT



FROM STA. 3+50 -Y18- TO STA. 3+80 -Y18- LT
FROM STA. 17+30 -Y18- TO STA. 20+00 -Y18- RT
FROM STA. 17+38 -Y18- TO STA. 20+00 -Y18- LT

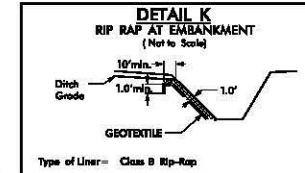
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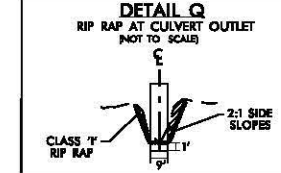
DENOTES IMPACTS IN
SURFACE WATER



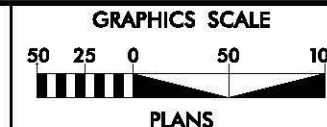
DENOTES TEMPORARY
IMPACTS IN SURFACE WATER



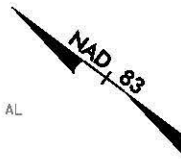
STA. 6+54 -Y78PC- RT



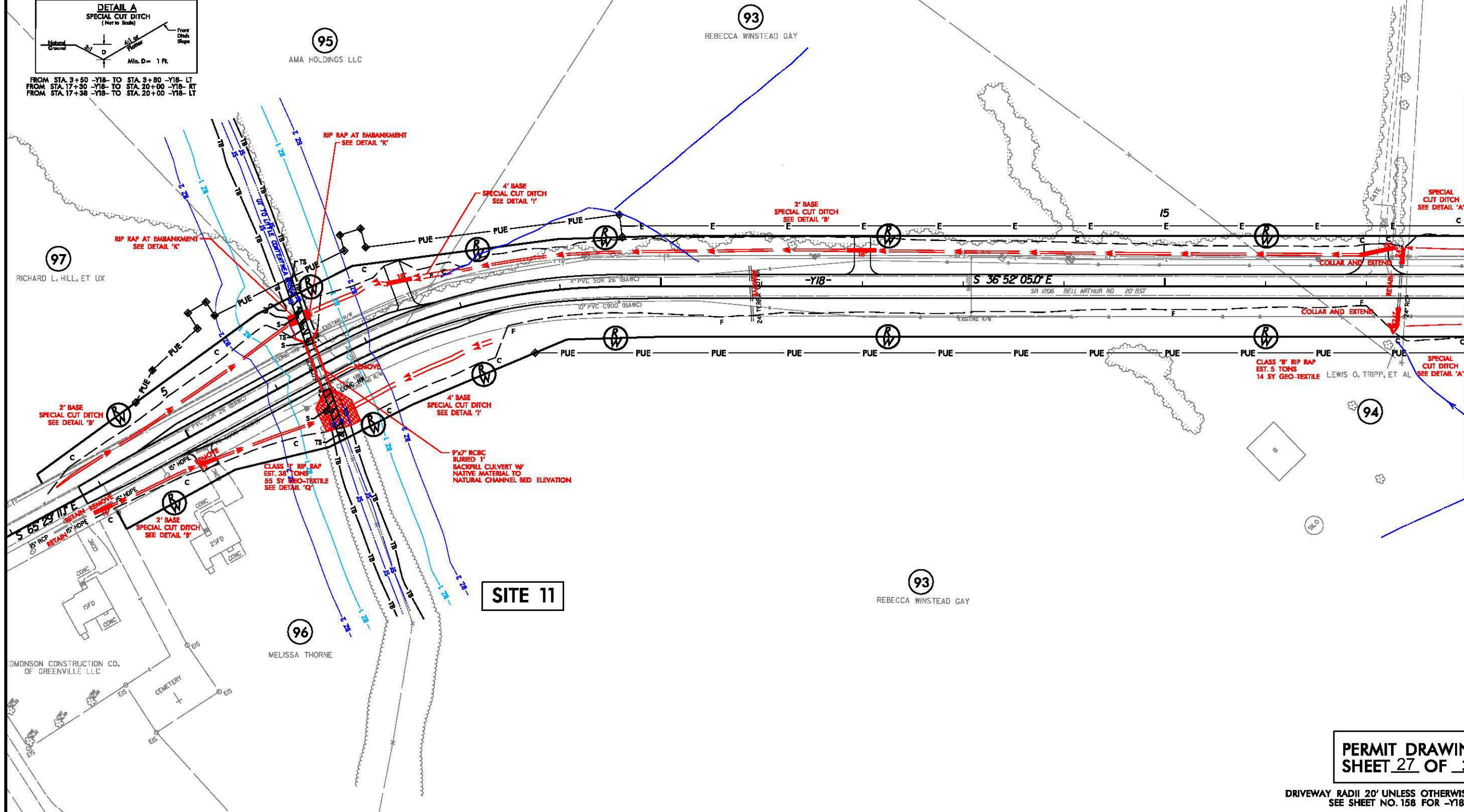
STA. 6+43 -Y18- RT



94
LEWIS O. TRIPP, ET AL



PROJECT REFERENCE NO.	SHEET NO.
R-2250	67
RDW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
BARNHILL CONTRACTING COMPANY	

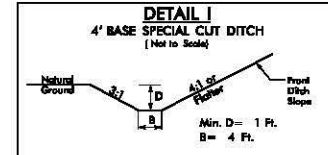
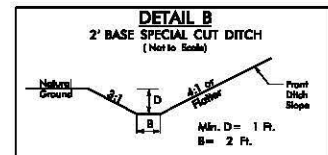


MATCHLINE -Y18- STA. 18+00, SEE SHEET 59

PERMIT DRAWINGS
SHEET 27 OF 30

DRIVEWAY RADII 20' UNLESS OTHERWISE NOTED
SEE SHEET NO. 158 FOR -Y18- PROFILE

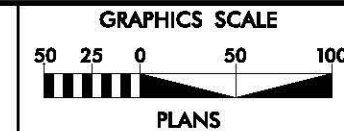
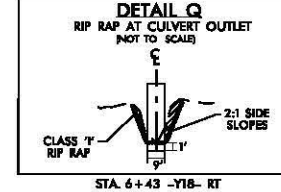
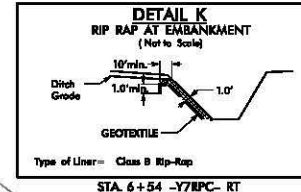
REVISIONS



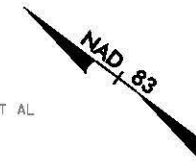
LEGEND:

DENOTES IMPACTS IN SURFACE WATER

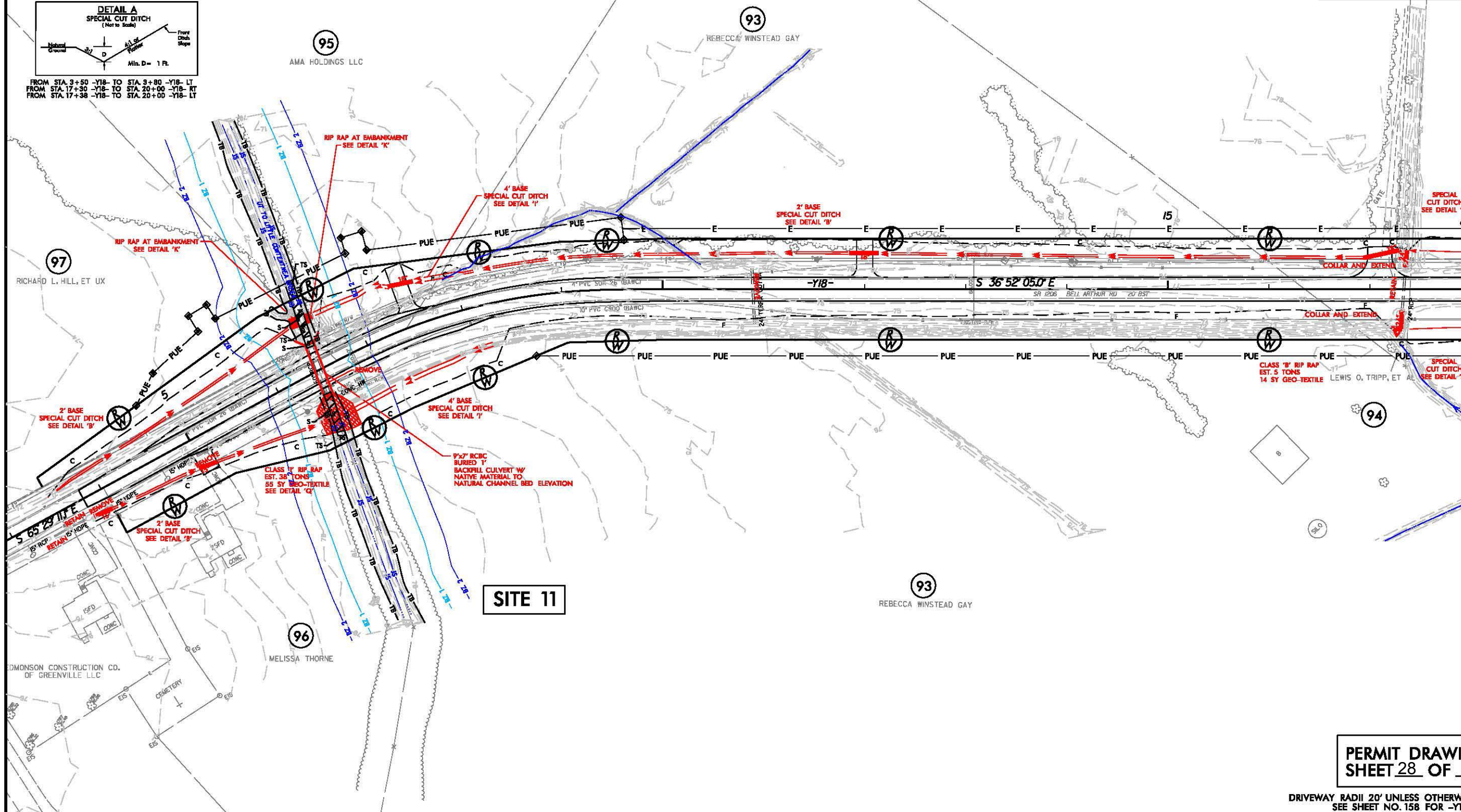
DENOTES TEMPORARY IMPACTS IN SURFACE WATER



94
LEWIS O. TRIPP, ET AL



PROJECT REFERENCE NO.	SHEET NO.
R-2250	67
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
BARNHILL CONTRACTING COMPANY	



MATCHLINE -Y18- STA. 18+00, SEE SHEET 59

SITE 11

PERMIT DRAWINGS
SHEET 28 OF 30

DRIVEWAY RADII 20' UNLESS OTHERWISE NOTED
SEE SHEET NO. 158 FOR -Y18- PROFILE

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)
1	23+91 - 39+93 -FLYBY7-	ROADWAY FILL						0.14	< 0.01	1,532	92	
2	26+00 - 28+50 -Y7RPC-	UTILITY RELOCATION							0.01		50	
3	99+52 - 101+50 -L-	72" RCP-III						0.03	0.01	246	117	
5	67+77 - 69+66 -Y9-	54" RCP-III						0.03	< 0.01			
6	247+99 - 252+06 -L-	54" RCP-IV						0.08	0.02			
7	436+30 - 437+83 -L-	10' x 7' RCBC						0.05	0.06	233	244	
8	638+38 - 639+86 -L-	ROADWAY FILL	0.33									
9	39+16 - 41+02 -FLYBY7-	60" PIPE EXTENSION						0.02	< 0.01	132	38	
10	54+55 - 55+79 -Y8-	96" CSP EXTENSION						< 0.01	< 0.01			
11	5+78 - 7+11 -Y18-	9' x 7' RCBC						0.01	0.01	61	59	
	MOYE PROPERTY*	TEMPORARY CROSSING									19	
TOTALS*:			0.33					0.37	0.14	2,204	619	0

*Rounded totals are sum of actual impacts

NOTES:

SITE 1 PROPOSED STREAM RELOCATION: 1,914 FT.

SITE 4 HAS BEEN ELIMINATED

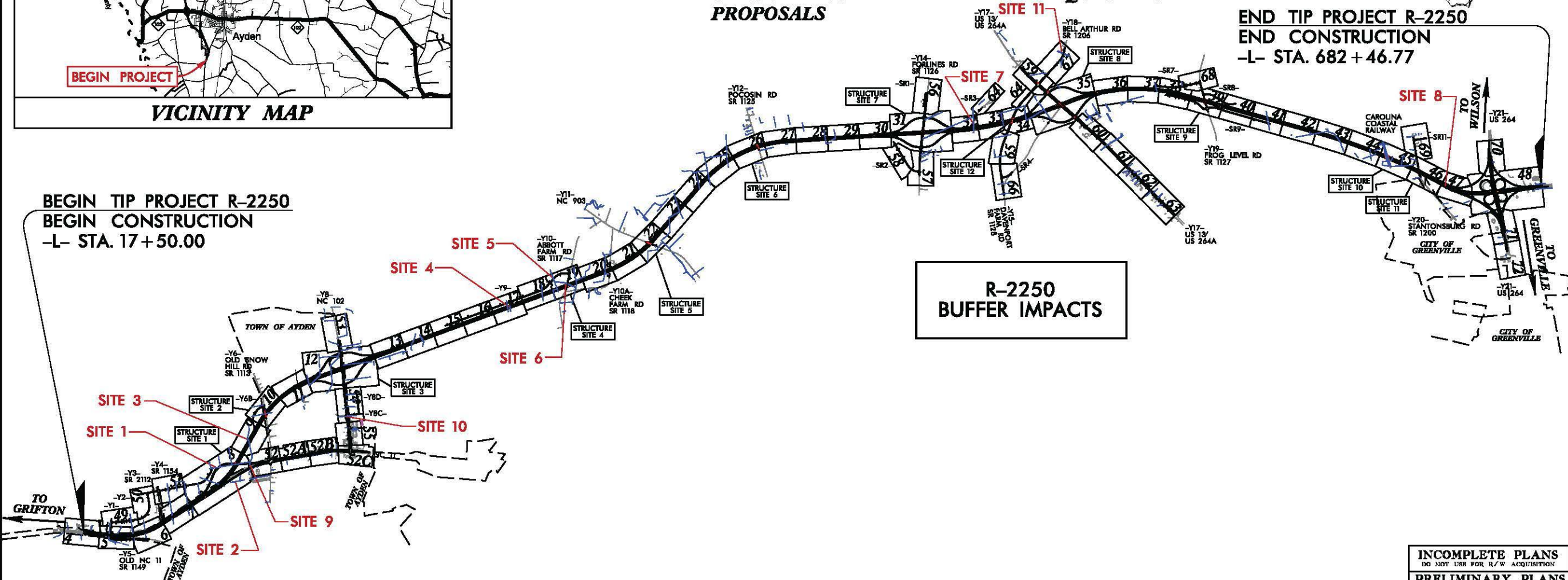
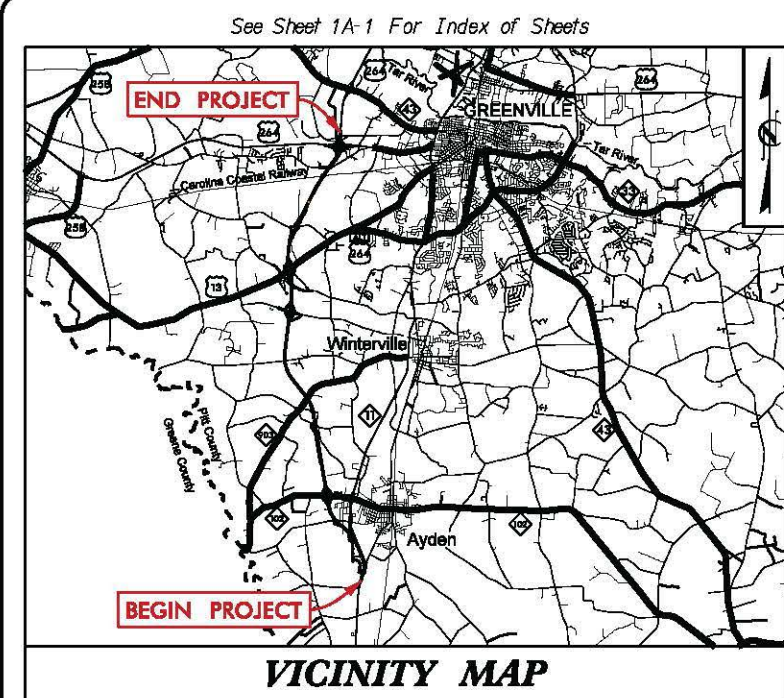
*BORROW SITE LOCATION

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
REVISED 3/9/2016
PITT COUNTY
R-2250
34411.1.2

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09/28/99

CONTRACT: C 203609
TIP PROJECT: R-2250

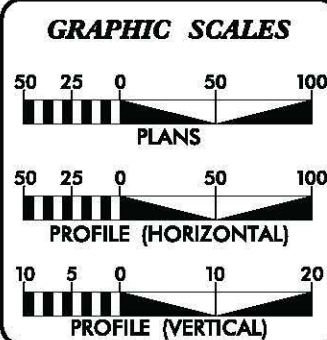


**BEGIN TIP PROJECT R-2250
BEGIN CONSTRUCTION
-L- STA. 17 + 50.00**

**A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES
OF THE TOWN OF AYDEN AND THE CITY OF GREENVILLE.**

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

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



DESIGN DATA

ADT 2014 = 19,700	VPD
ADT 2040 = 34,000	VPD
DHV = 10 %	
D = 60 %	
* T = 8 %	
V = 70 MPH	
*(TTST 3% + DUALS 5%)	
FUNC. CLASS. = FREEWAY	
STATEWIDE TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2250 = 12.333 MILES
LENGTH STRUCTURE TIP PROJECT R-2250 = 0.261 MILES
TOTAL LENGTH TIP PROJECT R-2250 = 12.594 MILES

Prepared for the Office of:

DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	PAUL A. MEEHAN, PE PROJECT ENGINEER
LETTING DATE:	DOMINIC M. WAINWRIGHT, PE PROJECT DESIGN ENGINEER

APRIL 21, 2015

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

STATE HIGHWAY DESIGN ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PITT COUNTY

**LOCATION: US 264 (GREENVILLE SOUTHWEST BYPASS) FROM SOUTH
OF SR 1149 (OLD NC 11) TO THE US 264 INTERCHANGE**

**TYPE OF WORK: DESIGN-BUILD AS SPECIFIED IN THE SCOPE
OF WORK CONTAINED IN THE REQUEST FOR
PROPOSALS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2250	1	13
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34411.1.2		P.E.	
34411.3.R7		CONSTRUCTION	



**BUFFER DRAWINGS
SHEET 1 OF 13**

**INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION**

**PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION**



HDR HDR Engineering, Inc. of the Carolinas
565 Fayetteville St., Suite 900, Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116



BUFFER DRAWINGS
SHEET ____ OF ____

GRAPHIC SCALE

50 25 0 25 50

PLANS

[illegible]

**ENLARGEMENTS
FOLLOW**

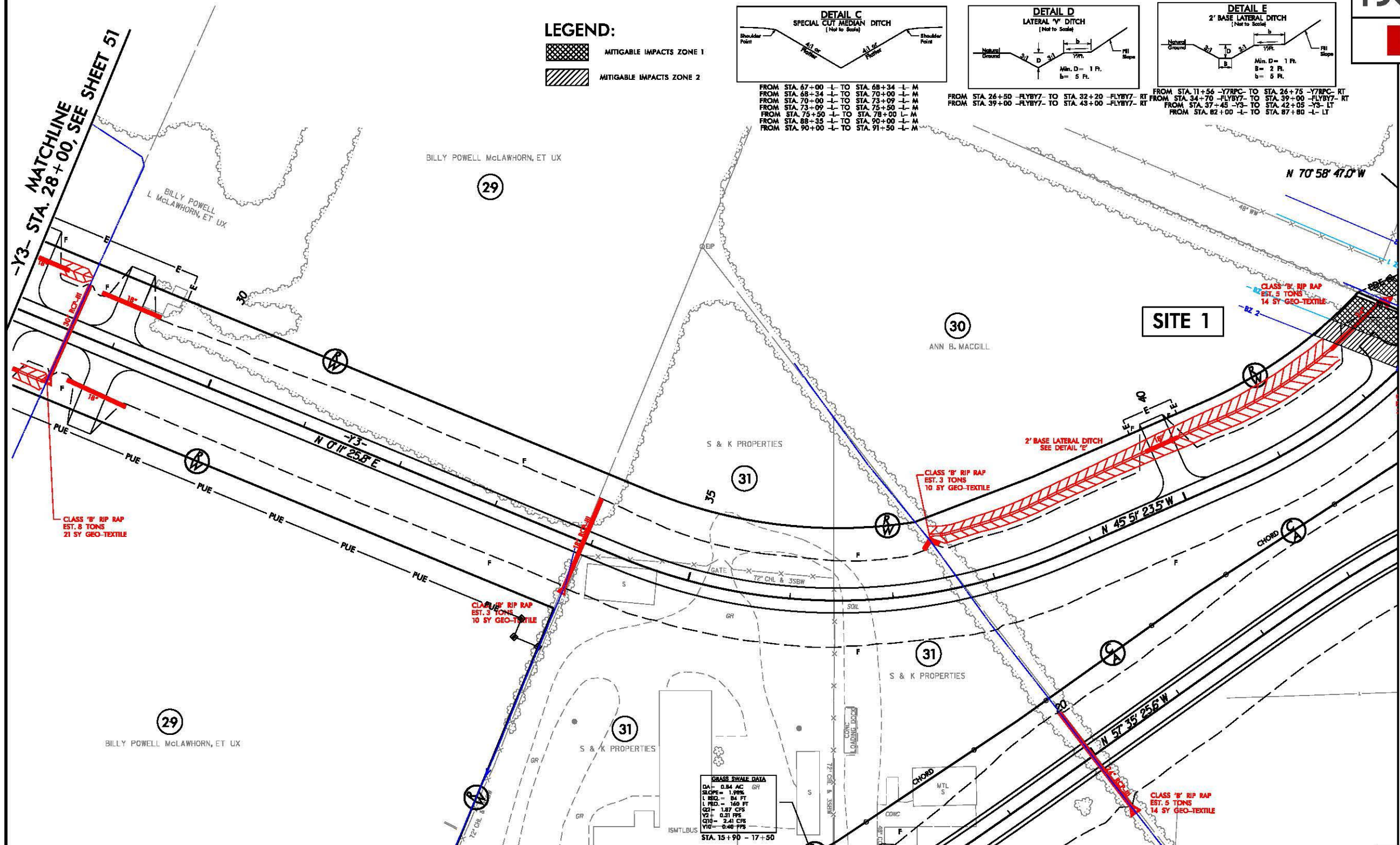
FX
10000 Highway 6, Suite 400, Dallas, TX 75240
NCS&S, License Number: F-716

INCOMPLETE PLANS DO NOT USE FOR PERMITS	DO NOT USE FOR CONTRACTS
---	-----------------------------

PROJECT REFERENCE NO.	SHEET NO.
R-2250	8
HW SHEET NO.	

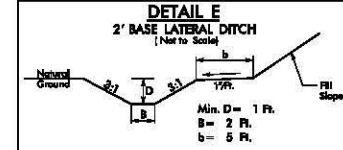
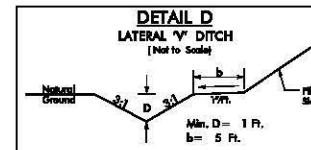
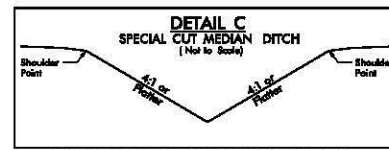
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REVISIONS



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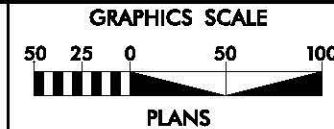
- MITIGABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2



GRADE SWALE DATA

DAI=	0.54 AC	GR
SLOPE=	1.00%	
L REQ=	84 FT	
L PRO=	149 FT	
Q21=	1.87 CFS	
V2=	0.21 FPS	
Q10=	2.41 CFS	
V10=	0.46 FPS	

STA. 15+00 - 17+50



PROJECT REFERENCE NO.	SHEET NO.
R-2250	8B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

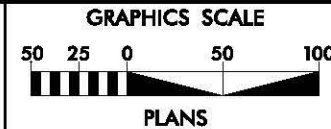
BARNHILL CONTRACTING COMPANY

MATCHLINE, SEE SHEET 8C

BUFFER DRAWINGS
SHEET 4 OF 13

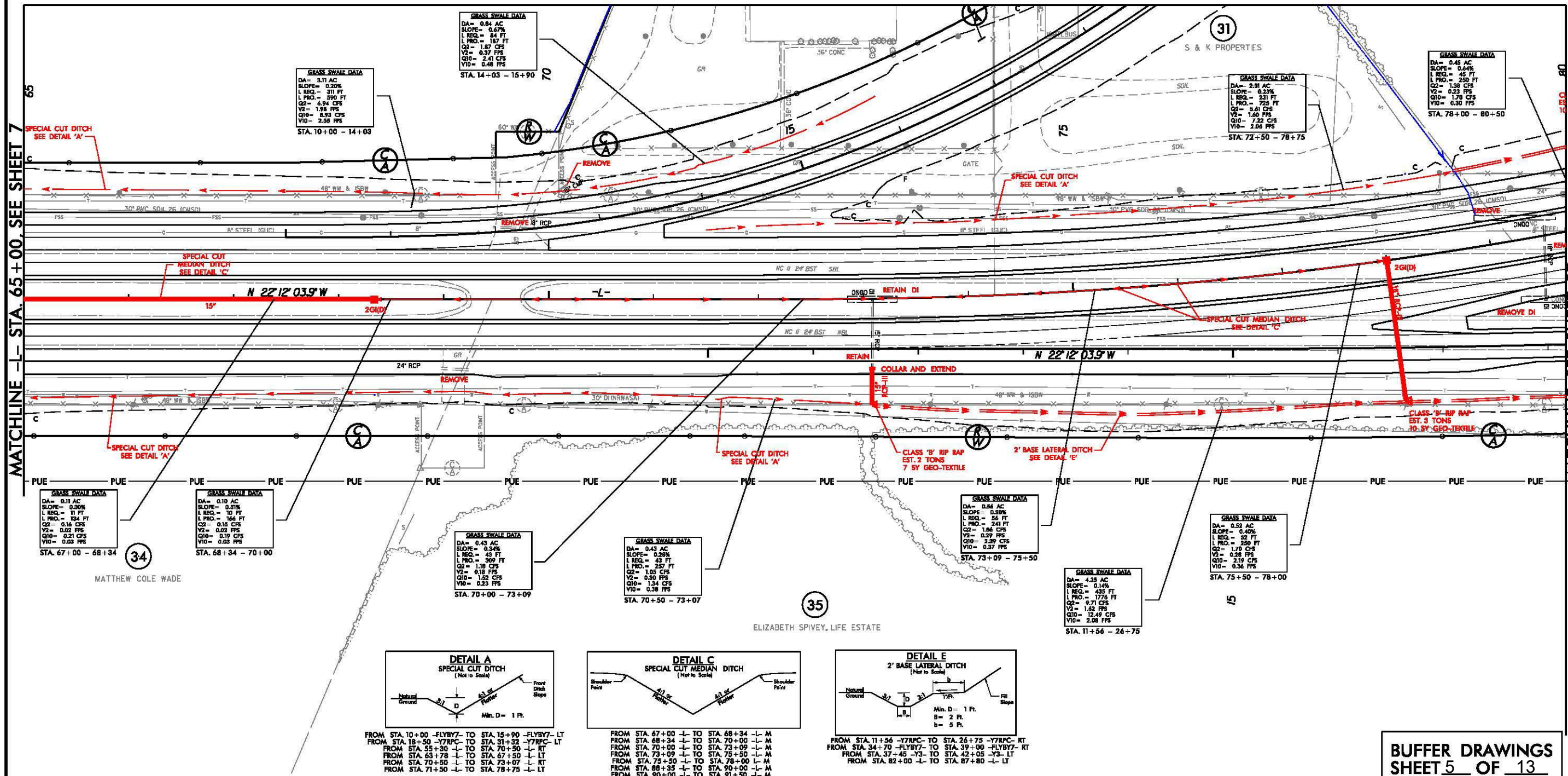
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DATE: 1/13/2016

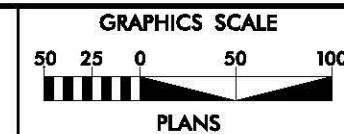
REVISIONS





PROJECT REFERENCE NO.	SHEET NO.
R-2250	8C
RDW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR E/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
BARNHILL CONTRACTING COMPANY	

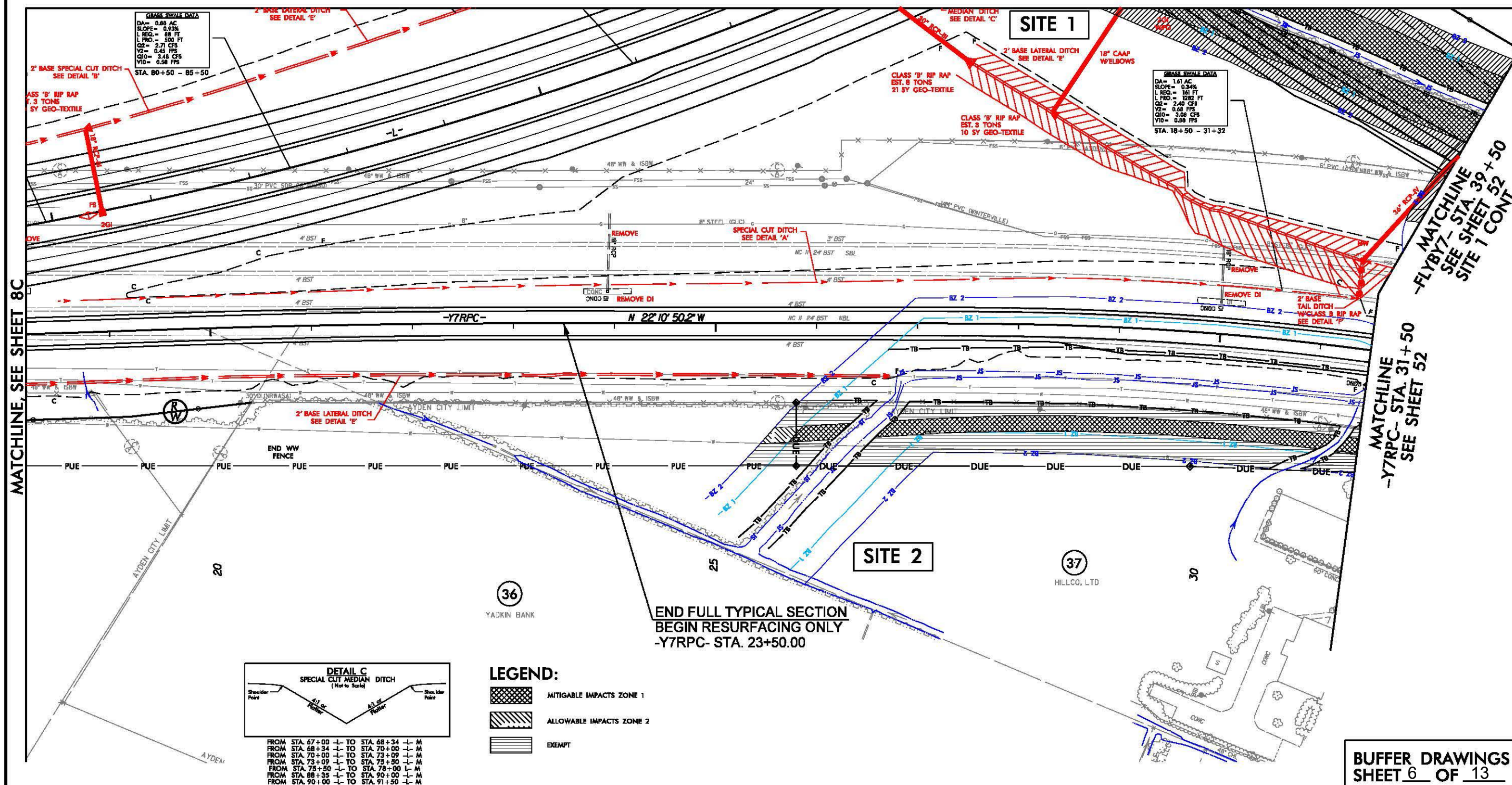
MATCHLINE, SEE SHEET 8B





PROJECT REFERENCE NO.		SHEET NO.					
R-2250		8D					
R/W SHEET NO.							
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER					
<table border="1"><tr><td colspan="2">INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION</td></tr><tr><td colspan="2">PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION</td></tr></table>				INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION							
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION							
 <div>HDR Engineering, Inc. of the Carolina 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-011</div>							
		BARNHILL CONTRACTING COMPANY					

MATCHLINE, SEE SHEET 8A



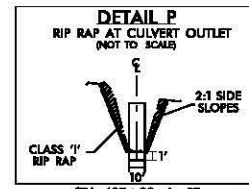
BUFFER DRAWINGS
SHEET 6 OF 13

PLOT DRIVER: NCDOT_color_eng_100.plt
PENTABLE: NCDOT_permit.s_NCON.tbl
USER: KBELL
DATE: 1/28/2016
TIME: 1:28:29 PM
FILE: North.Carolina.Dept.of.Transportation\R-2250A.B.C.Greenville.Southwest.Bypass.DB\06.00_Project_Design\R-2250.NCDOT_File_Structure\Hydraulics\PERMITS\Environmental\Drawings\R2250.HYD.PRM.BUF_PSH.dgn

REVISIONS

LEGEND:

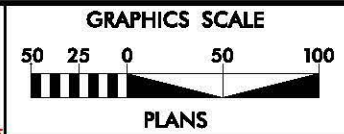
- MITIGABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 2
- ALLOWABLE IMPACTS ZONE 2



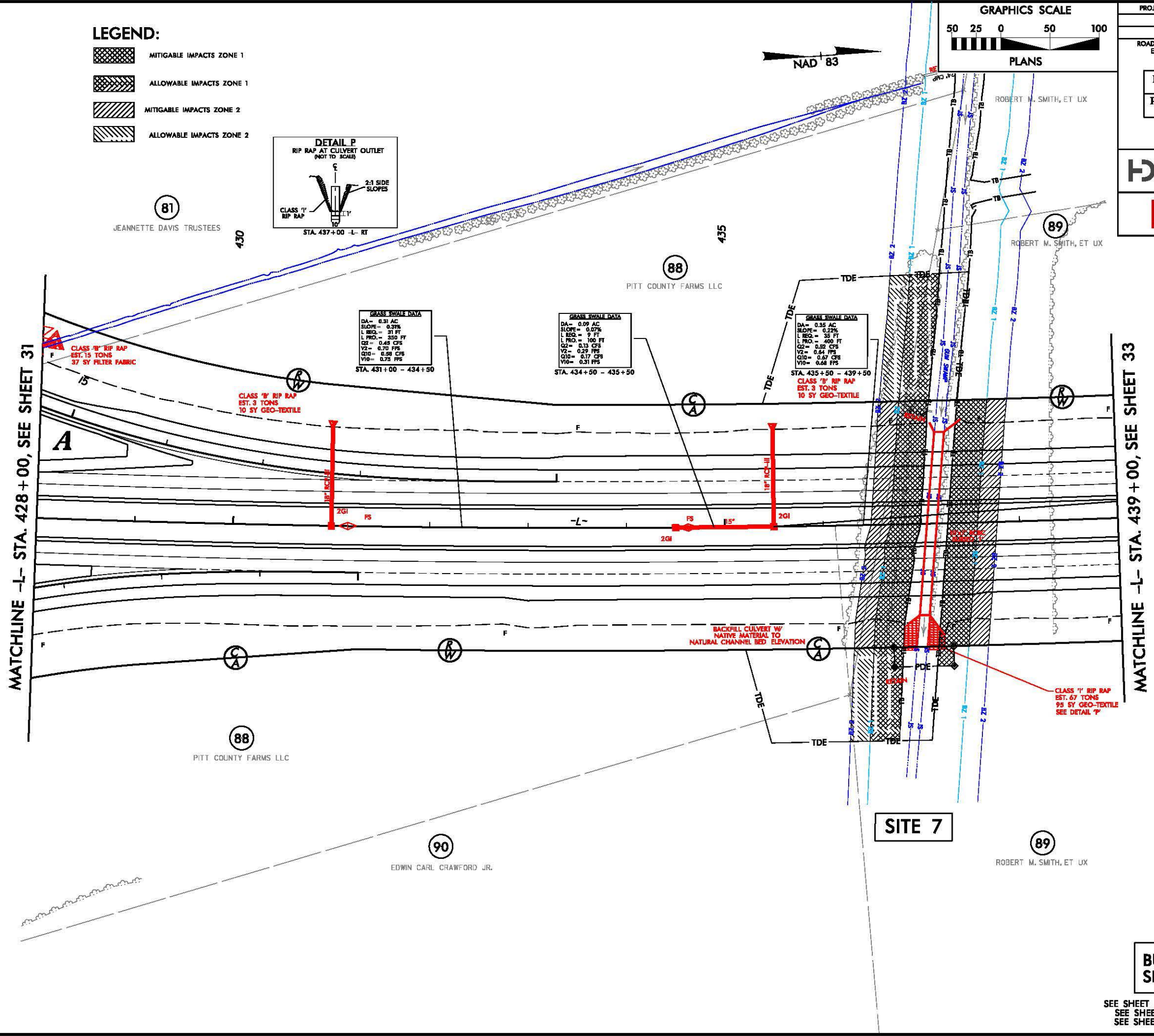
GRASS SWALE DATA
DA = 0.31 AC
SLOPE = 0.31%
L REQ. = 31 FT
L PRO. = 320 FT
Q2 = 0.48 CFS
V2 = 0.70 FPS
Q10 = 0.58 CFS
V10 = 0.73 FPS
STA. 431+00 - 434+50

GRASS SWALE DATA
DA = 0.09 AC
SLOPE = 0.07%
L REQ. = 9 FT
L PRO. = 100 FT
Q2 = 0.13 CFS
V2 = 0.29 FPS
Q10 = 0.17 CFS
V10 = 0.31 FPS
STA. 434+50 - 435+50

GRASS SWALE DATA
DA = 0.35 AC
SLOPE = 0.22%
L REQ. = 35 FT
L PRO. = 400 FT
Q2 = 0.52 CFS
V2 = 0.54 FPS
Q10 = 0.67 CFS
V10 = 0.68 FPS
STA. 435+50 - 439+50



PROJECT REFERENCE NO. R-2250		SHEET NO. 32
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION		
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION		
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116		
BARNHILL CONTRACTING COMPANY		

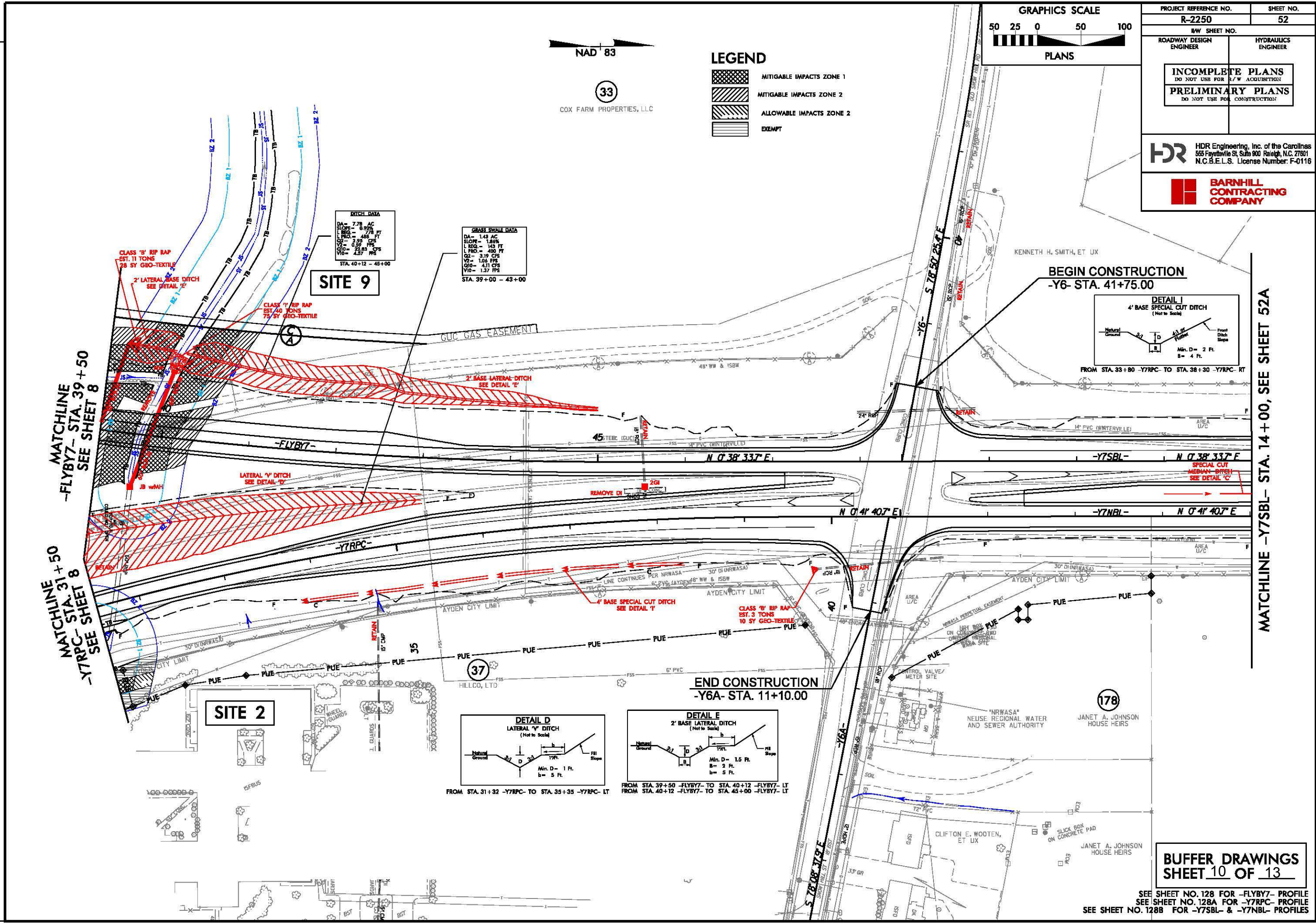


BUFFER DRAWINGS
SHEET 9 OF 13

SEE SHEET NOS. 102 & 103 FOR -L- PROFILE
SEE SHEET NO. 144 FOR -Y14RPA- PROFILE
SEE SHEET NO. 147 FOR -Y14RPD- PROFILE

PLOT DRIVER: NCDOT_color_eng_100.plt
USER: KBELL
DATE: 1/28/2016
TIME: 1:57:52 PM
FILE: NorthCarolinaDept.ofTransportation\R2250A.B.C.Greenville\Southwest Bypass\Bypass\06.00.Project_Design\Hydraulics\PERMITS\Environmental\Drawings\R2250.HYD.PRM.BUF_PSH.dgn

REVISIONS



PROJECT REFERENCE NO. R-2250		SHEET NO. 52	
RDW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			
HDR HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116			
BARNHILL CONTRACTING COMPANY			

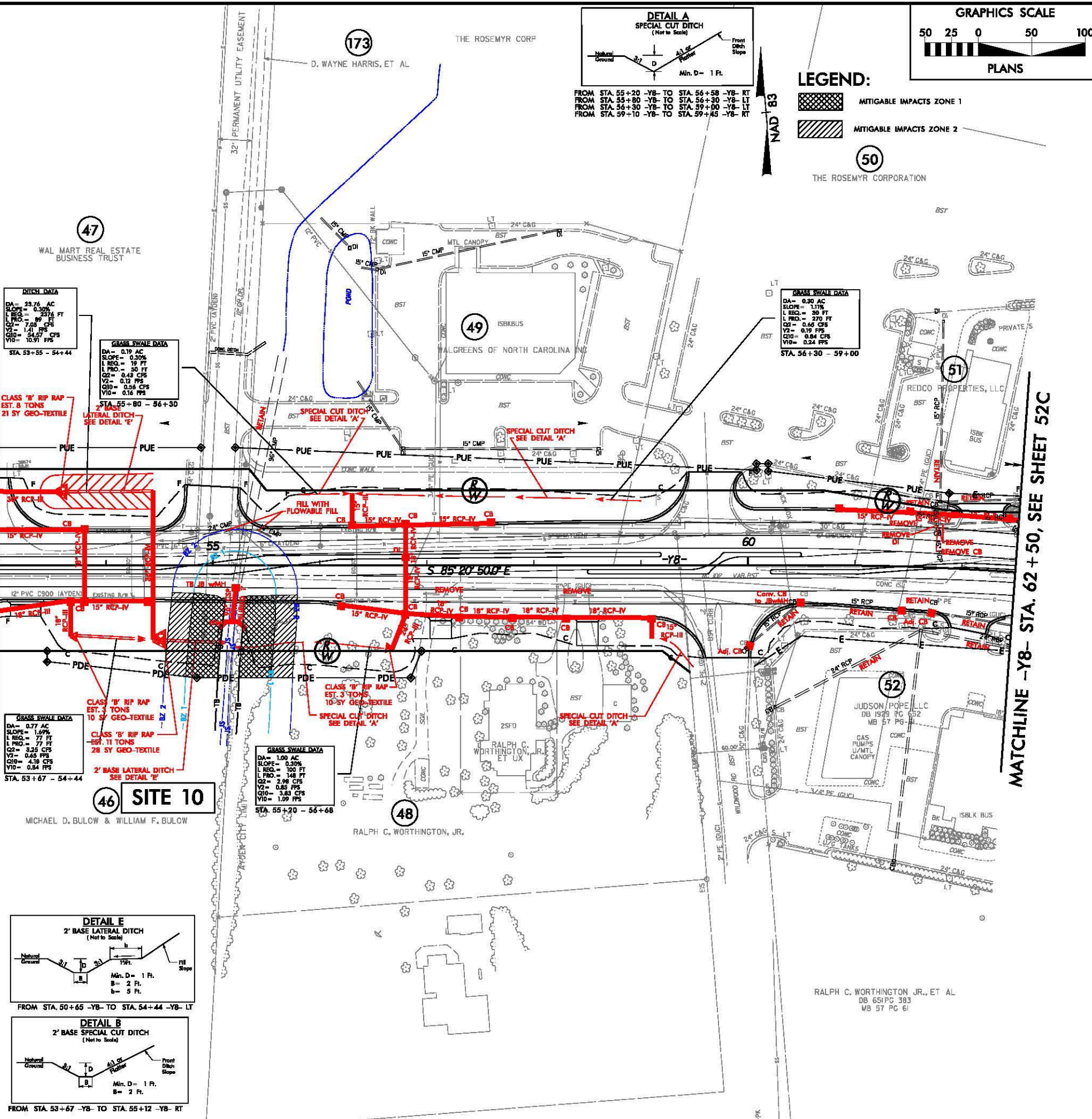
BUFFER DRAWINGS
SHEET 10 OF 13

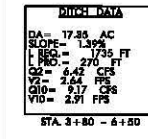
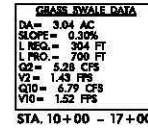
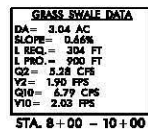
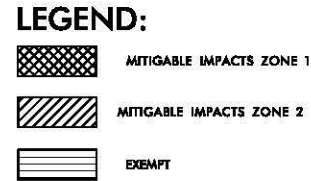
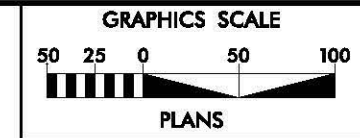
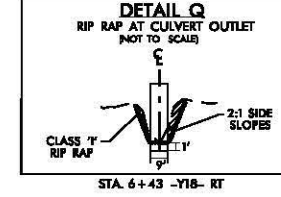
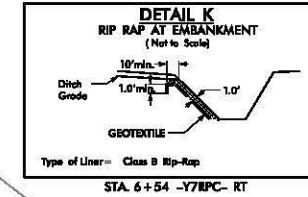
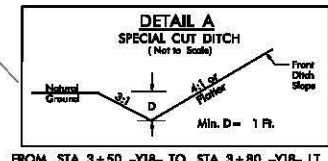
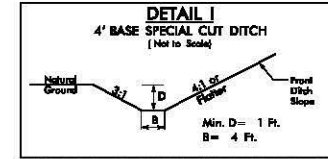
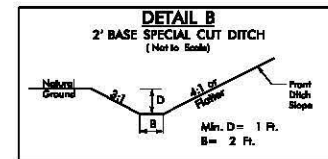
SEE SHEET NO. 128 FOR -FLYBY7- PROFILE
SEE SHEET NO. 128A FOR -Y7RPC- PROFILE
SEE SHEET NO. 128B FOR -Y7SBL- & -Y7NBL- PROFILES

REVISIONS

MATCHLINE -Y8- STA. 53+00, SEE SHEET 54

MATCHLINE -Y8- STA. 62+50, SEE SHEET 52C





BUFFER DRAWINGS
SHEET 12 OF 13

DRIVEWAY RADII 20' UNLESS OTHERWISE NOTED
SEE SHEET NO. 158 FOR -Y18- PROFILE

SITE 11

PLOT DRIVER: NCDOT_pdf_color_eng.100.plt
PENTABLE: NCDOT_permit's.NOCON.tbl
USER: kbell
DATE: 1/12/2016
TIME: 4:16:20 PM
FILE: North_Carolina_Dept.of_Transportation\R-2250A-B-C-greenline_Southwest_Bypass_DSN06.00_Project_Design\R-2250_NCDOT_File_Structure\Hydraulics\PERMITS_Environment\Drawings\R2250_HYD_PEM_BUF_PSH.dgn

EDMONSON CONSTRUCTION CO.
OF GREENVILLE LLC

MELISSA THORNE

93
REBECCA WINSTEAD GAY

BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	TYPE			ALLOWABLE			MITIGABLE			ZONE 1 (ft²)	ZONE 2 (ft²)
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)	ZONE 1 (ft²)	ZONE 2 (ft²)	TOTAL (ft²)		
1	ROADWAY FILL	23+91 - 39+93 -FLYBY7-	X						89,889	60,675	150,564		
2	UTILITY RELOCATION	26+00 - 28+50 -Y7RPC-			X		806	806	7,825		7,825		
3	72" RCP-III	99+52 - 101+50 -L-	X						17,579	12,145	29,724		
5	54" RCP-III	67+77 - 69+66-Y9-	X						8,453	5,414	13,867		
7	10' x 7' RCBC	436+30 - 437+83 -L-	X			6,557	4,476	11,033	15,578	10,057	25,635		
9	60' PIPE EXTENSION	39+16 - 41+02 -FLYBY7-	X						12,010	5,172	17,182		
10	96" CSP EXTENSION	54+55 - 55+79 -Y8-	X						4,619	3,095	7,714		
11	9' x 7' RCBC	5+78 - 7+11 -Y18-	X						3,261	4,934	8,195		
	TEMPORARY CROSSING	MOYE PROPERTY*	X			1,440	760						
TOTAL:						7,997	6,042	11,839	159,214	101,492	260,706		

NOTES:
 SITE 1 PROPOSED STREAM RELOCATION:
 BUFFER ZONE 1: 1.29 AC
 BUFFER ZONE 2: 0.87 AC
 *BORROW SITE LOCATION

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PITT COUNTY
 PROJECT: 34411.1.2 (R-2250)
 REVISED 3/9/2016
 SHEET 13 OF 13