



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

May 10, 2013

Mr. Charles Wakild  
N.C. Dept. of Environment and Natural Resources  
Division of Water Quality  
1650 Mail Service Center  
Raleigh NC, 27699-1650

Dear Sir:

**Subject:** **Additional Information in Response to the N.C. Division of Water Quality's Questions on the Modification Request of the Individual Section 404 and Section 401 Water Quality Certification** for the proposed improvements to NC 24 from SR 1853 (John Nunnery Rd.) in Cumberland to US 421-701/SR 1296 (Sunset Avenue) in Sampson County. Federal Aid Project No. STPNHF-F-8-2(17), TIP No. R-2303B, C, and D.

**References:** Section 401 Water Quality Certification issued September 24, 2012 (20120240) for R-2303  
Section 404 Individual Permit signed December 20, 2012 (SAW-1992- 03237) for R-2303  
NCDOT Modification Request dated January 29, 2013 *revised February 15, 2013*  
NCDWQ On Hold Letter dated March 5, 2013  
NCDOT Response dated April 12, 2013 to the NCDWQ On Hold Letter  
NCDWQ questions via email on April 26, 2013

On March 12, 2013, NCDOT received a letter (dated March 5, 2013) from N.C. Division of Water Quality (NCDWQ) placing the permit application for the above-referenced project on-hold, until suitable responses were provided addressing a lack of necessary information. NCDOT replied in a letter on April 12, 2013 providing responses to questions about permit drawings. The purpose of this letter is to provide responses to the remaining questions pertaining to utility drawings and hydraulic impacts. Original questions from your letter and subsequent email, as well as our responses (in italics), revised Utility Drawings, and revised Permit Drawing Summary Sheets are provided. Please replace utility drawings for both R-2303C and R-2303D, which were submitted with our modification request, with the attached versions.

**MAILING ADDRESS:**  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS UNIT  
1598 MAIL SERVICE CENTER  
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000  
FAX: 919-212-5785  
  
**WEBSITE:** *NCDOT.GOV*

**LOCATION:**  
CENTURY CENTER, BUILDING B  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610

### R-2303C

1. Permit drawings have the stream (LC8) at site 9 labeled as an intermittent stream but the stream table provided by ESI has it listed as perennial, which is correct?
  - *The LC8 is a perennial stream that at one time was listed as intermittent. The last review of the stream it scored a 38.5 with the DWQ rating making it perennial.*
2. Site 7 - temporary impacts shown on the permit drawings are not listed in the impact summary.
  - *Impact summary sheet is updated, see attached.*
3. Site 9 - temporary impacts shown on the outlet are not listed in the impact summary. No temporary impacts are shown or listed for the inlet. Aren't temporary impacts needed beyond the permanent impacts for dewatering , etc?
  - *Impact summary sheet is updated, see attached.*
  - *At inlet, bank stabilization impacts (permanent) were shown to extent of channel work, which ends just at the R/W line. Since at R/W no additional can be done outside of this location therefore no impacts shown for temporary impacts.*
4. Wetland Permit Impact Summary sheet has 0.38 acres of total impact listed in the "Excavation" column. The correct total is 0.36 acres based on DWQ's calculations. Error appears to be the total on sheet 79 of 80.
  - *Impact summary sheet is updated, see attached.*
5. Utility drawings do not appear to have been updated with the revised JD. Please correct.
  - *Corrected, see Revised Utility Drawings. Additionally, sites U10 and U12 have been added to R-2303C Utility Permit Drawings, which were not provided in our previous modification request.*
6. Utility permit drawing 5 of 10 notes 0.028 acres of HC at Site U9, however the Impact Summary Sheet (UPD 10 of 10) only lists 0.017 acres of HC at Site U9. Please correct.
  - *Corrected, see Revised Utility Drawing Sheet 7 of 18 and Utility Summary Sheet.*
7. Utility permit drawing 8 of 10, Site U-13 is a total take on roadway permit drawings. This impact does not need to be accounted for twice. Please correct.
  - *Corrected, see Revised Utility Drawing Sheet 10 of 18.*
8. Utility permit drawing 10 of 10 list permanent fill impacts in hundredths and the total in thousandths. Please correct.
  - *Corrected, see Revised Utility Summary Sheet 15 of 18.*

### R-2303D

1. Wetland Permit Impact Summary sheet has 6.67 acres of total impact listed in the "Permanent Fill" column. The correct total is 6.66 acres based on DWQ's calculations.
  - *Impacts in table accounted for and summed up to 1/1000<sup>th</sup> but shown to 1/100<sup>th</sup> due to rounding. Added note on summary table.*
2. Wetland Permit Impact Summary sheet has 1.54 acres of total impact listed in the "Mechanized Clearing" column. The correct total is 1.58 based on DWQ's calculations.
  - *Impacts in table accounted for and summed up to 1/1000<sup>th</sup> but shown to 1/100<sup>th</sup> due to rounding. Added note on summary table.*



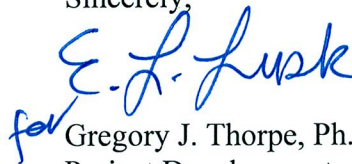
3. Utility drawing for Site 2 was not included in the application.
  - *Corrected, see Revised Utility Drawing Sheet 3 of 8.*

**General Comments**

1. Please provide EEP acceptance letters for Section C & D.
  - *The proposed mitigation for the permanent stream impacts has decreased for both sections. This is due to further review of the mitigation requirements by the USACE and NCDWQ mitigation totals meeting the USACE requirements were utilized as they are higher than those of NCDWQ, such as the case with bank stabilization. We are now only proposing compensatory mitigation for those sites that have stream impacts exceeding 150 linear feet. EEP Acceptance Letters will distributed once received.*
2. In regards to impacts being listed as <0.01. DWQ's authorizations uses an excel spreadsheet format and list the impacts per site. Impact's listed as <0.01 are counted as 0 when totaling impacts in excel. It appears that NCDOT sometimes count these <0.01 impacts in their totals and sometimes they don't. DWQ requests that if the impact is going count towards the total it is listed as 0.01 rather than <0.01? This should apply for each site and in the total column at the bottom of the Impact Summary.
  - *Though displayed as <0.01, actual impacts are summed to yield rounded totals. Accounting for these sites as 0.01 vs. <0.01 would inaccurately represent impacts and potentially inflated mitigation requirements. For clarification, a note has been added to the impact summary sheets, that states "Rounded totals are sum of actual impacts". Please note that values <0.01 ac have been presented and calculated in accordance with an agreement made several years ago with Brian Wrenn, NCDWQ.*

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Chris Manley at 919-707-6135 or [cdmanley@ncdot.gov](mailto:cdmanley@ncdot.gov).

Sincerely,

  
for

Gregory J. Thorpe, Ph.D., Manager  
Project Development and Environmental Analysis Unit

cc:

Mr. Mason Herndon, NCDWQ Fayetteville Office  
Mr. Brad Shaver, USACE Wilmington Field Office  
Mr. Stoney Mathis, NCDOT Division 3 Environmental Officer  
Mr. Travis Wilson, NC Wildlife Resources Commission  
Mr. Chris Militscher, US Environmental Protection Agency  
Mr. Gary Jordan, US Fish and Wildlife Service  
Ms. Sonia Carrillo, NCDWQ Central Office  
Mr. Dewayne L. Sykes P.E., NCDOT Utilities Unit  
Mr. John W. Twisdale, P.E., NCDOT Hydraulics Unit

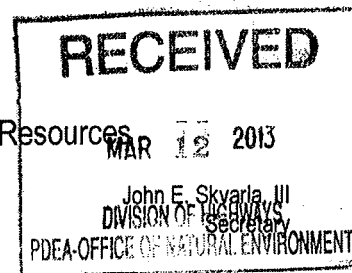


North Carolina Department of Environment and Natural Resources

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

Pat McCrory  
Governor

March 5, 2013



**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Dr. Greg Thorpe, PhD., Manager  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina, 27699-1598

Subject: Request for Modification to Individual Section 404 and Section 401 Water Quality Certification for the proposed improvements to NC 24 from SR 1853 (John Nunnery Rd.) in Cumberland County to US 421-701/SR 1296 (Sunset Avenue) in Sampson County. Federal Aid Project number STPNHF-F-8-2(17)-133(3), WBS No 34416, TIP No R-2303C and D, DWQ Project No 12-0240v.3

Dear Dr. Thorpe:

The Division of Water Quality has reviewed your submittal for a 401 Water Quality Certification for the aforementioned project. Review of your application revealed it lacking necessary information required for making an informed permit decision. The permit application was deficient in the following areas:

**R-2303C Application**

1. Permit Drawing 8 of 75, cross section 734+90.46 shows 6:1 slopes at this jurisdictional crossing. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
2. Please provide cross sections for Sta. 752+00 to 766+00 (Sites 3 and 4).
3. Permit drawing 16 of 75, cross section 774+00 shows 4:1 slopes at this jurisdictional crossing. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
4. Plan Sheet 8 (not permit drawing set), shows a PDE in wetlands that is not addressed in permit drawings or application. Please clarify.
5. Permit drawing 27/28 of 75, drainage feature below wetland at site 8 is labeled as a non jurisdictional stream. This feature is not identified on jurisdictional resources mapping and no impacts have been noted in application. Please clarify. If feature is a ditch, please label it accordingly.
6. Permit drawing 27/28 of 75, Site 9 shows wetlands impacts within -D7-, this was brought up at 4C and was never clarified. Please clarify. If wetlands do exist within existing -D7-, can -D7- be relocated outside of wetlands?
7. Permit drawing 34-35 of 75. Impact summary sheet list 315 lf of stream impacts at Site 11, however the permit drawing scale indicates approximately 190 lf of stream impact. Please clarify.
8. Permit drawing 37 of 75, cross section shows 4:1 slopes at this jurisdictional crossing. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.

Transportation and Permitting Unit  
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Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

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9. Permit drawing 38/39 of 75, please label equalizer pipes and add a note that they are to be placed at natural ground elevation.
10. Permit drawing 48 of 75, cross section 980+00 shows 4:1 slopes at this jurisdictional crossing. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
11. Permit drawing 51 of 75, shows 4:1 slopes on the outlet of this jurisdictional crossing. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
12. Permit drawing 62 of 74, appears that a single 24" pipe will be replaced with twin 36" pipes. The 401 will be conditioned as follows: "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." Provide a detail or cross section on how DOT will comply with this condition. This has been an issue on several projects that are under construction and has required field modifications.
13. Permit drawing 70 of 75, shows 5:1 slopes extending out into jurisdictional resources at Sta. 1092+00. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
14. Impact summary sheet PD 73-75 of 75. The purpose of adding permanent and temporary non-mitigable impacts columns is unclear. Please remove these columns for the spreadsheet and add these impacts the appropriate "SW Impact" columns which would be consistent with B & D sections.
15. Table 3 in the permit application states that there was an increase of 1.92 acres of wetland impacts within Section C over the preliminary estimates provided in the original application. Please provide a summary of where and why this increase in wetlands impacts has occurred.
16. Utility drawings do not appear to have been updated with the revised JD. Please correct.
17. Utility permit drawing 5 of 10 notes 0.028 acres of HC at Site U9, however the Impact Summary Sheet (UPD 10 of 10) only list 0.017 acres of HC at Site U9. Please correct.
18. Utility permit drawing 8 of 10, Site U-13 is a total take on roadway permit drawings. This impact does not need to be accounted for twice. Please correct.
19. Utility permit drawing 10 of 10 list permanent fill impacts in hundredths and the total in thousandths. Please correct.
20. Sheet 2-J, Details 28, 30 & 32, please show coir fiber matting in detail as shown in Detail K on Sheet 2E in the Section D permit drawings.
21. Please categorize stream impact sites as perennial or intermittent.

#### R-2303D Application

1. Site 1, Permit drawing 5/6 of 79, no stream impacts are listed for Site 1 in the impact summary sheet, Sheet 77 of 79. Please clarify.
2. Site 2, Permit drawing 77 of 79, provide linear feet of impact for bank stabilization in impact summary.
3. Site 4, Permit drawing 10/11 of 79, label equalizer pipes and note that pipes to be placed at natural ground elevation (not buried).
4. Site 7, Permit drawing 19 of 79, shows 4:1 slopes extending out into jurisdictional resources. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
5. Site 7, Permit drawing 20 of 79, shows 4.86:1 slopes extending out into jurisdictional resources at Sta. 1197+50. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.

Transportation and Permitting Unit  
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6. Site 12, Permit drawing 27/28 of 79, the permit drawing does not show rip rap bank stabilization which is depicted in Detail L for the outlet. The "TS" shown on the inlet is not listed in the impact summary sheet. No "TS" is shown on the outlet for dewatering measures, bypass and etc. Please clarify.
7. Site 13, Permit drawing 31/32 of 75. The impacts numbers listed in the impact summary sheet do not match the scaled impacts on the permit drawings. Please clarify.
8. Site 13, Permit drawing 34 of 79. Shows 4:1 slopes extending out into jurisdictional resources. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
9. Sites 14/15, Permit drawing 40 of 79. Shows >3:1 slopes extending out into jurisdictional resources. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
10. Site 16 and 19, Permit drawing 78 of 79, typically excavation in a marginal wetland area for the purpose restoring a natural wetland elevation is considered a temporary impact and should be noted accordingly in the impact summary sheet and in Table 4 of your application. Please confirm with Corps before making this change.
11. Site 18, Permit drawings 42-48, temporary impacts are proposed for a work causeway to aid in the construction of the bridge. Please provide description of this temporary fill and what measure the Department is taking to ensure that permanent impacts won't occur at this site. If the Department is proposing temporary fill in this area please provide a restoration and monitoring plan for this site.
12. Site 22, Permit drawing 79 of 79, pipe removal is not considered NSD, however if agreeable with both the Corps and DWQ, the removal of 56 lf of pipe could be noted at the bottom of the impact summary sheet and used to partially offset the new impacts at this site.
13. Site 22, Permit drawing 66 of 79, shows 4:1 slopes extending out into jurisdictional resources. Your application states in the "Minimization and Avoidance" section states that 3:1 slopes will be used in jurisdictional areas. Please correct.
14. Sites 21, Permit drawing 68/69 of 79, impacts are to a wetland; however the permit drawing as ponds labeled on the site. Please clarify.
15. Site 24, Permit drawing 75 of 79, depicts a rip pad in the stream; however the impact summary sheet indicates fill and bank stabilization impacts. Please clarify.
16. Site 14 & 15, Permit drawing 38 of 79, shows bank excavation at pipe outlets rather than rip rap bank stabilization as noted in Detail J. Please clarify.
17. Utility drawing for Site 2 was not included in the application.

#### General Comments on Application

Stream Impact Enumeration in Impact Summary – Based on conversations with the Hydraulics Unit and NES, all permanent stream impacts beyond the culverts in this application is being list as bank stabilization. For clarification purposes and to assist DOT in potentially reducing mitigation needs, DWQ offers the following comments:

- Bank stabilization impacts should only be listed when armoring banks with a hardened material like rip rap. DWQ consider hard armoring of the banks a permanent impact and if the length of the structure and rip rap banks is equal to or greater than 150 lf, mitigation will be required.
- If the proposed work is to only lay back vertical banks and stabilize with soft armoring like coir fiber matting and you are maintaining the typical width and depth of the stream channel, the Department considers this as a temporary impact which would not require stream mitigation.
- If the proposed work requires minor widening of the stream to accommodate the opening of the structure it should be considered a permanent impact directly associated with the structure and added to the permanent

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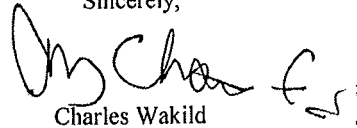
impacts of the structure. If the linear foot of the channel modification and structure is equal to or greater than 150 lf, mitigation will be required.

- If the proposed culvert is substantially wider than the receiving stream, DWQ requires floodplain benches and/or sills to maintain stream dimension. If this is accomplished with existing native earth material and no hard armoring is proposed, it is considered a temporary impact and should be accounted for accordingly. If hard armoring is required within the stream channel, it should be listed as a permanent impact associated with the structure.
- Temporary Channel Impacts should be shown on both ends of any permanent channel impacts to allow the contractor to install BMP's to work in the dry. Some sites did not have temporary impacts on both ends of the proposed work nor were they listed in the impact summary.

Therefore, pursuant to 15A NCAC 2H .0507(a) (5), we will have to place the permit application on hold until we are supplied the necessary information. You have 21 days to respond in writing with the requested information or notification to this office that the information is forthcoming. If, at the end of the 21 days, this office has not received this information in writing, we will assume you are withdrawing your application and it will be returned. Furthermore, until the information is received by the NC Division of Water Quality, we request (by copy of this letter) that the US Army Corps of Engineers place the permit application on hold.

If you have any questions or require additional information, please contact Mason Herndon at (910) 308-4021 or [mason.herndon@ncdenr.gov](mailto:mason.herndon@ncdenr.gov).

Sincerely,

  
Charles Wakild  
Director

cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office  
Stoney Mathis, Division 3 Environmental Officer  
Travis Wilson, NC Wildlife Resources Commission  
Chris Militscher, Environmental Protection Agency  
Gary Jordon, US Fish and Wildlife Service  
Sonia Carrillo, DWQ Central Regional Office  
File Copy

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Emailed from Mason Herndon on 4/26/2013

R-2303 Sections C & D revised application errors:

R-2303C

1. Permit drawings have the stream (LC8) at site 9 labeled as an intermittent stream but the stream table provided by ESI has it listed as perennial, which is correct?
2. Site 7 - temporary impacts shown on the permit drawings are not listed in the impact summary.
3. Site 9 - temporary impacts shown on the outlet are not listed in the impact summary. No temporary impacts are shown or listed for the inlet. Aren't temporary impacts needed beyond the permanent impacts for dewatering , etc?
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R-2303 D

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2. Wetland Permit Impact Summary sheet has 1.54 acres of total impact listed in the "Mechanized Clearing" column. The correct total is 1.58 based on DWQ's calculations.
3. Utility drawing for Site 2 was not included in the application.

General Comments:

1. Please provide EEP acceptance letters for Section C & D.
2. In regards to impacts being listed as <0.01. DWQ's authorizations uses an excel spreadsheet format and list the impacts per site. Impact's listed as <0.01 are counted as 0 when totaling impacts in excel. It appears that NCDOT sometimes count these <0.01 impacts in their totals and sometimes they don't. DWQ requests that if the impact is going count towards the total it is listed as 0.01 rather than <0.01? This should apply for each site and in the total column at the bottom of the Impact Summary.



# MITIGATION REQUEST FORM TRI-PARTY MOA (NCDOT)

Revised 3/24/2008



Fill in requested information, print out the form, sign and date, and either mail to EEP, 1652 Mail Service Center, Raleigh, NC 27699-1652, or fax to 919-715-2219. Attachments are acceptable for clarification purposes.

Electronic submissions are permissible; however, an acceptance letter cannot be sent until the original signed form has been received.

| NCDOT CONTACT INFORMATION |                          | REGULATORY CONTACT INFORMATION |                           |
|---------------------------|--------------------------|--------------------------------|---------------------------|
| Agency/Division           | NCDOT-Highways           | USACE Office                   | Regulatory Field Office   |
| Branch                    | PDEA-NEU                 | USACE Contact                  | Mr. Brad Shaver           |
| Mailing Address           | 1598 Mail Service Center | Mailing Address                | Post Office Box 1890      |
| City, State, Zip          | Raleigh, NC 27699-1598   | City, State, Zip               | Wilmington, NC 28402-1890 |
| Project Manager           | Chris Manley             | USACE Fax Number               | (910) 251-4025            |
| Telephone Number          | (919) 707-6000           | NCDWQ Contact                  |                           |
| E-Mail Address            | cdmanley@dot.state.nc.us | Mailing Address                |                           |
| Supervisor                | Chris Rivenbark          | City, State, Zip               |                           |
| Telephone Number          | (919) 707-6000           | NCDWQ Fax Number               |                           |

| PROJECT LOCATION INFORMATION AND IMPACTS  |                      |                                                             |  |
|-------------------------------------------|----------------------|-------------------------------------------------------------|--|
| TIP Number(s)                             |                      | R-2303 C                                                    |  |
| TIP Description                           |                      | NC 24 FROM SR 1404 (DOWDY RD) TO SR 1303 (MITCHELL LOOP RD) |  |
| Current Let Date                          |                      | 9/17/13                                                     |  |
| NCDOT Highway Division                    |                      | Division 3                                                  |  |
| County(ies)                               |                      | Sampson                                                     |  |
| EEP Ecoregion(s)                          |                      | Southern Inner Coastal Plain                                |  |
| River Basin(s)                            |                      | Cape Fear                                                   |  |
| Cataloging Unit(s) (8-digit)              |                      | 03030006                                                    |  |
| Total Stream (feet)                       | Warm                 | 1,026                                                       |  |
|                                           | Cool                 |                                                             |  |
|                                           | Cold                 |                                                             |  |
|                                           | TOTAL                | 1,026                                                       |  |
| Total Riparian Wetland Impact (acres)     |                      | 7.33                                                        |  |
| Total Non-Riparian Wetland Impact (acres) |                      | 3.69                                                        |  |
| Total Coastal Marsh Impact (acres)        |                      |                                                             |  |
| Total Buffer Impact                       | Zone 1 (square feet) |                                                             |  |
|                                           | Zone 2 (square feet) |                                                             |  |

| OTHER INFORMATION                 |  |
|-----------------------------------|--|
| USACE Action ID Number (if known) |  |
| NCDWQ Project Number (if known)   |  |
| NCDCM Project Number (if known)   |  |
| Comments:                         |  |

| IMPORTANT                                                            | Signature of Applicant or Agent: |
|----------------------------------------------------------------------|----------------------------------|
| Check below if this request is a:                                    |                                  |
| <input type="checkbox"/> New Mitigation Request                      |                                  |
| <input checked="" type="checkbox"/> Revision to a current acceptance |                                  |
|                                                                      | Date: _____                      |





# MITIGATION REQUEST FORM TRI-PARTY MOA (NCDOT)

Revised 3/24/2008



Fill in requested information, print out the form, sign and date, and either mail to EEP, 1652 Mail Service Center, Raleigh, NC 27699-1652, or fax to 919-715-2219. Attachments are acceptable for clarification purposes.

Electronic submissions are permissible; however, an acceptance letter cannot be sent until the original signed form has been received.

| NCDOT CONTACT INFORMATION |                          | REGULATORY CONTACT INFORMATION |                           |
|---------------------------|--------------------------|--------------------------------|---------------------------|
| Agency/Division           | NCDOT-Highways           | USACE Office                   | Regulatory Field Office   |
| Branch                    | PDEA-NEU                 | USACE Contact                  | Mr. Brad Shaver           |
| Mailing Address           | 1598 Mail Service Center | Mailing Address                | Post Office Box 1890      |
| City, State, Zip          | Raleigh, NC 27699-1598   | City, State, Zip               | Wilmington, NC 28402-1890 |
| Project Manager           | Chris Manley             | USACE Fax Number               | (910) 251-4025            |
| Telephone Number          | (919) 707-6000           | NCDWQ Contact                  |                           |
| E-Mail Address            | cdmanley@dot.state.nc.us | Mailing Address                |                           |
| Supervisor                | Chris Rivenbark          | City, State, Zip               |                           |
| Telephone Number          | (919) 707-6000           | NCDWQ Fax Number               |                           |

| PROJECT LOCATION INFORMATION AND IMPACTS  |                      |                                                             |  |
|-------------------------------------------|----------------------|-------------------------------------------------------------|--|
| TIP Number(s)                             |                      | R-2303 D                                                    |  |
| TIP Description                           |                      | NC 24 FROM SR 1303 (MITCHELL LOOP RD) TO US 421-701/SR 1296 |  |
| Current Let Date                          |                      | 9/17/13                                                     |  |
| NCDOT Highway Division                    |                      | Division 3                                                  |  |
| County(ies)                               |                      | Sampson                                                     |  |
| EEP Ecoregion(s)                          |                      | Southern Inner Coastal Plain                                |  |
| River Basin(s)                            |                      | Cape Fear                                                   |  |
| Cataloging Unit(s) (8-digit)              |                      | 03030006                                                    |  |
| Total Stream (feet)                       | Warm                 | 1,316                                                       |  |
|                                           | Cool                 |                                                             |  |
|                                           | Cold                 |                                                             |  |
|                                           | TOTAL                | 1,316                                                       |  |
| Total Riparian Wetland Impact (acres)     |                      | 3.1                                                         |  |
| Total Non-Riparian Wetland Impact (acres) |                      | 2.56                                                        |  |
| Total Coastal Marsh Impact (acres)        |                      |                                                             |  |
| Total Buffer Impact                       | Zone 1 (square feet) |                                                             |  |
|                                           | Zone 2 (square feet) |                                                             |  |

| OTHER INFORMATION                 |  |
|-----------------------------------|--|
| USACE Action ID Number (if known) |  |
| NCDWQ Project Number (if known)   |  |
| NCDCM Project Number (if known)   |  |
| Comments:                         |  |

| IMPORTANT                           |                                  | Signature of Applicant or Agent: |
|-------------------------------------|----------------------------------|----------------------------------|
| Check below if this request is a:   |                                  |                                  |
| <input type="checkbox"/>            | New Mitigation Request           |                                  |
| <input checked="" type="checkbox"/> | Revision to a current acceptance |                                  |
|                                     |                                  | Date: _____                      |

| WETLAND PERMIT IMPACT SUMMARY |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|-------------------------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|-----------------------------------------|-------------------------------------|----------------------------|--------------------------------------|--------------------------------------|
|                               |                   |                       | WETLAND IMPACTS                 |                             |                             |                                      |                                | SURFACE WATER IMPACTS     |                       |                                         |                                     |                            |                                      |                                      |
| Site No.                      | Station (From/To) | Structure Size / Type | 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) | Permanent Non Mitigable Impacts (ac) | Temporary Non Mitigable Impacts (ac) |
| 1                             | 734+14 to 739+72  | 42" RCP/WETLAND       | 0.87                            |                             | 0.20                        | 0.11                                 |                                | 0.01                      |                       | 74.00                                   |                                     |                            |                                      |                                      |
| 1                             | 734+14 to 739+73  | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 10.00                               |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 2                             | 741+85 to 744+50  | 36" RCP/WETLAND       | 0.26                            |                             |                             | 0.05                                 |                                |                           |                       |                                         |                                     |                            | 0.01                                 |                                      |
| 2                             | 741+85 to 744+50  | BANK STABILIZATION    |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            | <0.01                                | <0.01                                |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 3                             | 755+00 to 760+34  | POND                  |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            | 1.26                                 | 0.08                                 |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 4                             | 764+28 to 765+07  | 30" RCP               |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            | 0.04                                 |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 5                             | 769+44 to 777+78  | WETLAND/POND          | 0.95                            |                             | 0.16                        | 0.20                                 |                                | 0.45                      |                       |                                         |                                     |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 6                             | 804+86 to 807+86  | STREAM                | 0.10                            |                             |                             | 0.04                                 |                                | 0.01                      |                       | 213.00                                  |                                     |                            |                                      |                                      |
| 6                             | 804+86 to 807+86  | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 20.00                               |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 7                             | 860+27 to 865+12  | 10'x10' RCBC/FILL     | 2.34                            |                             |                             | 0.20                                 |                                | 0.07                      |                       | 260.00                                  |                                     |                            |                                      |                                      |
| 7                             | 860+27 to 865+12  | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 39.00                                   | 42.00                               |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 8                             | 881+97 to 882+31  | WETLAND               | <0.01                           |                             |                             | <0.01                                |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 9                             | 887+38 to 889+49  | WETLAND/STREAM        | 0.64                            |                             |                             | 0.05                                 |                                | 0.03                      |                       | 255.00                                  |                                     |                            |                                      |                                      |
| 9                             | 887+38 to 889+49  | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | 0.01                      | <0.01                 | 55.00                                   | 28.00                               |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| SHEET TOTALS                  |                   |                       | 5.17                            |                             | 0.36                        | 0.65                                 |                                | 0.59                      | 0.01                  | 916                                     | 100                                 |                            | 1.31                                 | 0.08                                 |

\*Rounded totals are sum of actual impacts

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SAMPSON COUNTY  
STPNHF-F-8-2(1 (R-2303C)

Revised 5/2/2013  
Permit Drawing  
Sheet 78 of 80



WETLAND PERMIT IMPACT SUMMARY

|              |                       |                       | WETLAND IMPACTS                 |                             |                             |                                      |                                | SURFACE WATER IMPACTS     |                       |                                         |                                     |                            |                                      |                                      |
|--------------|-----------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|-----------------------------------------|-------------------------------------|----------------------------|--------------------------------------|--------------------------------------|
| Site No.     | Station (From/To)     | Structure Size / Type | 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) | Permanent Non Mitigable Impacts (ac) | Temporary Non Mitigable Impacts (ac) |
| 10           | 905+77 to 907+41      | WETLAND/STREAM        | 0.25                            |                             |                             | 0.01                                 |                                | 0.04                      |                       | 262.00                                  |                                     |                            | 0.03                                 |                                      |
| 10           | 905+77 to 907+41      | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 80.00                                   | 20.00                               |                            | <0.01                                |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 11           | 912+92 to 913+67      | POND/STREAM           |                                 |                             |                             |                                      |                                | 0.26                      |                       | 315.00                                  |                                     |                            |                                      |                                      |
| 11           | 912+92 to 913+67      | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 14.00                                   | 20.00                               |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 12           | 937+08 to 957+49      | WETLAND (BRIDGE)      | 3.56                            |                             | 0.16*                       | 0.68                                 | 0.23                           |                           |                       |                                         |                                     |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 13           | 955+51 to 958+83 (RT) | WETLAND               | 0.32                            |                             |                             | 0.06                                 |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 14           | 977+98 to 981+52      | WETLAND               | 0.46                            |                             | 0.09                        | 0.11                                 |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 15           | 999+64 to 1005+57     | POND/STREAM           |                                 |                             |                             |                                      |                                | <0.01                     |                       | 38.00                                   |                                     |                            | 3.22                                 |                                      |
| 15           | 999+64 to 1005+57     | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 10.00                               |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 16           | 1005+48 to 1007+04    | WETLAND               | 0.05                            |                             |                             | 0.03                                 |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 17           | 1007+77 to 1010+99    | POND                  |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            | 0.34                                 |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 18           | 1035+56 to 1037+40    | WETLAND/STREAM        | 0.60                            |                             |                             | 0.06                                 |                                | 0.02                      |                       | 271.00                                  |                                     |                            |                                      |                                      |
| 18           | 1035+56 to 1037+40    | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 20.00                               |                            |                                      |                                      |
|              |                       |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 19           | 1064+16 to 1067+96    | 48" CMP               | 0.49                            |                             |                             | 0.09                                 |                                | <0.01                     |                       | 90.00                                   |                                     |                            |                                      |                                      |
| 19           | 1064+16 to 1067+96    | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 10.00                               |                            |                                      |                                      |
| SHEET TOTALS |                       |                       | 5.73                            |                             | 0.09                        | 1.05                                 | 0.23                           | 0.35                      | 0.01                  | 1100                                    | 80                                  |                            | 3.59                                 | 0.00                                 |

Site 12 contains 216 SF of impacts due to bents in stream  
\* Excavation of roadway fill around existing bridge is not required for mitigation and is not added into the total area  
  
\*Rounded totals are sum of actual impacts

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SAMPSON COUNTY  
STPNHF-F-8-2(1 (R-2303C)

Revised 5/2/2013  
Permit Drawing  
Sheet 79 of 80



## WETLAND PERMIT IMPACT SUMMARY

|                |                    |                       | WETLAND IMPACTS                 |                             |                             |                                      |                                | SURFACE WATER IMPACTS     |                       |                                         |                                     |                            |                                      |                                      |
|----------------|--------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|-----------------------------------------|-------------------------------------|----------------------------|--------------------------------------|--------------------------------------|
| Site No.       | Station (From/To)  | Structure Size / Type | 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) | Permanent Non Mitigable Impacts (ac) | Temporary Non Mitigable Impacts (ac) |
| 20             | 1075+74 to 1080+69 | WETLAND (BRIDGE)      | 0.82                            |                             |                             | 0.13                                 |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 21             | 1082+39 to 1083+15 | WETLAND               | 0.04                            |                             |                             | 0.02                                 |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 22             | 1086+79 to 1087+86 | 24" RCP               |                                 |                             |                             |                                      |                                | <0.01                     |                       | 26.00                                   |                                     |                            |                                      |                                      |
| 22             | 1086+79 to 1087+86 | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 20.00                               |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 23             | 1088+55 to 1089+59 | 18" RCP               |                                 |                             |                             |                                      |                                | 0.02                      |                       | 137.00                                  |                                     |                            |                                      |                                      |
| 23             | 1088+55 to 1089+59 | BANK STABILIZATION    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 10.00                               |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| 24             | 1091+76 to 1092+23 | WETLAND               | <0.01                           |                             |                             | 0.01                                 |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
|                |                    |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |                                      |                                      |
| SHEET TOTALS   |                    |                       | 0.87                            |                             |                             | 0.16                                 |                                | 0.03                      | <0.01                 | 183.00                                  | 30.00                               |                            |                                      |                                      |
| PROJECT TOTALS |                    |                       | 11.77                           |                             | 0.45                        | 1.87                                 | 0.23                           | 0.96                      | 0.02                  | 2199.00                                 | 210.00                              |                            | 4.90                                 | 0.08                                 |

\*Rounded totals are sum of actual impacts

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SAMPSON COUNTY  
STPNHF-F-8-2(1 (R-2303C)

Revised 5/2/2013  
Permit Drawing  
Sheet 80 of 80



| 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                             | 1106+95 to 1110+17-L-LT | Fill                  | 0.15                            |                             |                             | 0.10                                 |                                |                           |                       |                                         |                                     |                            |
| 2                             | 1106+68 to 1110+21-L-   | Fill / RCBC           | 0.63                            |                             |                             | 0.10                                 |                                | 0.02                      |                       | 183.00                                  |                                     |                            |
|                               |                         | Bank Stabilization    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 19.00                                   | 60.00                               |                            |
| 3                             | 1163+26 to 1167+43-L-RT | Fill                  | 0.51                            |                             |                             | 0.09                                 |                                |                           |                       |                                         |                                     |                            |
| 4                             | 1169+69 to 1176+07-L-RT | Fill                  | 1.25                            |                             |                             | 0.12                                 |                                |                           |                       |                                         |                                     |                            |
| 5                             | 1169+59 to 1172+52-L-LT | Fill                  | 0.06                            |                             | 0.02                        | 0.07                                 |                                |                           |                       |                                         |                                     |                            |
| 6                             | 1197+30 to 1197+97-L-LT | Fill                  | 0.06                            |                             | 0.01                        | 0.03                                 |                                | <0.01                     | 0.01                  | 35.00                                   | 11.00                               |                            |
| 7                             | 1199+32 to 1201+65-L-RT | Fill                  | 0.06                            |                             | 0.01                        | 0.04                                 |                                | <0.01                     | <0.01                 | 33.00                                   | 16.00                               |                            |
| 8                             | 1204+71 to 1205+18-L-RT | Fill                  | 0.01                            |                             |                             | 0.01                                 |                                |                           |                       |                                         |                                     |                            |
| ELIMINATED SITE 9 ON 4/2/2013 |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| 10                            | 1222+18 to 1225+09-L-LT | Fill                  | 0.32                            |                             |                             | 0.08                                 |                                |                           |                       |                                         |                                     |                            |
| 11                            | 1221+04 to 1225+66-L-RT | Fill                  | 0.30                            |                             |                             | 0.13                                 |                                |                           |                       |                                         |                                     |                            |
| TOTALS:                       |                         |                       | 3.36                            |                             | 0.04                        | 0.75                                 |                                | 0.03                      | 0.01                  | 270.00                                  | 87.00                               |                            |

SITE 4 - EQUALIZER PIPES PLACED AT NATURAL GROUND ELEVATION. NOT TO BE BURIED.

\*Rounded totals are sum of actual impacts

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SAMPSON COUNTY  
WBS - XXXXX.1.1 (R-2303D)

Revised 5/2/2013  
Permit Drawing  
Sheet 73 of 75



# 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) |
| 12       | 1224+08 to 1224+64-L-   | RCBC                  |                                 |                             | 0.02                        |                                      |                                | 0.04                      | 0.01                  | 306.00                                  |                                     |                            |
|          |                         | Bank Stablization     |                                 |                             |                             |                                      |                                | 0.01                      | 0.01                  | 42.00                                   | 60.00                               |                            |
| 13       | 1278+32 to 1281+53-L-   | 66" RCP               |                                 |                             |                             |                                      |                                | 0.03                      |                       | 286.00                                  |                                     |                            |
|          |                         | Bank Stablization     |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 21.00                                   | 10.00                               |                            |
| 14       | 1289+68 to 1291+91-L-   | Fill / 60" RCP        | 0.02                            |                             | <0.01                       | 0.03                                 |                                | 0.08                      |                       | 283.00                                  |                                     |                            |
|          |                         | Bank Stablization     |                                 |                             |                             |                                      |                                | 0.01                      | 0.01                  | 30.00                                   | 30.00                               |                            |
| 15       | 1292+13 to 1299+88-L-RT | Fill / 72" RCP        | 1.30                            |                             | 0.01                        | 0.17                                 |                                | 0.06                      |                       | 151.00                                  |                                     |                            |
|          |                         | Bank Stablization     |                                 |                             |                             | 0.02                                 |                                | 0.01                      | <0.01                 | 32.00                                   | 20.00                               |                            |
| 16       | 1295+68 to 1297+37-L-LT | Fill                  | 0.07                            |                             |                             | 0.04                                 |                                |                           |                       |                                         |                                     |                            |
| *        | 1292+00 to 1294+59-L-LT | Fill                  |                                 |                             | 0.25                        |                                      |                                | 0.35                      |                       |                                         |                                     |                            |
| 17       | 1303+81 to 1304+67-L-RT | Pond                  |                                 |                             |                             |                                      |                                | 0.02                      |                       |                                         |                                     |                            |
| 18       | 1301+67 to 1321+13-L-   | Bridge                | 1.16                            | 0.33                        | 0.01                        | 0.27                                 | 2.00                           |                           |                       |                                         |                                     |                            |
| TOTALS:  |                         |                       | 2.54                            | 0.33                        | 0.29                        | 0.51                                 | 2.00                           | 0.61                      | 0.04                  | 1151.00                                 | 120.00                              |                            |

SITE 16\* EXCAVATION IN WETLANDS IS PART OF A MITIGATION SITE AND IS CONSIDERED TEMPORARY IMPACT.

SITE 18 Bridge: Total Impacts due to Piers = 18sq.ft.

\*Rounded totals are sum of actual impacts

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SAMPSON COUNTY  
WBS - XXXXX.1.1 (R-2303D)

Revised 5/2/2013  
Permit Drawing  
Sheet 74 of 75



| 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) |
| 19                            | 1321+64 to 1329+01-L-   | Bridge                | 0.41                            |                             | 0.01                        | 0.20                                 | 0.20                           |                           |                       |                                         |                                     |                            |
| *                             | 1324+00 to 1325+65-L-LT | Fill                  |                                 |                             | 0.10                        |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| 20                            | 1391+00-L-LT            | RCP                   |                                 |                             |                             |                                      |                                | 0.02                      |                       | 129.00                                  |                                     |                            |
|                               |                         | Bank Stabilization    |                                 |                             |                             |                                      |                                | <0.01                     |                       | 10.00                                   |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| 21                            | SR1                     | Fill                  | 0.36                            |                             |                             | 0.08                                 |                                |                           |                       |                                         |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| 22                            | 1444+00-L-LT            | 72" RCP               |                                 |                             |                             |                                      |                                | 0.02                      |                       | 108.00                                  |                                     |                            |
|                               |                         | Bank Stabilization    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 46.00                                   | 5.00                                |                            |
| *                             | 12+22 to 12+69-Y53-LT   | 72" RCP               |                                 |                             |                             |                                      |                                | 0.01                      |                       | 55.00                                   |                                     | 56.00                      |
|                               |                         | Bank Stabilization    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 24.00                                   | 20.00                               |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| 23                            | 17+40-Y52-LT            | 36" RCP               |                                 |                             |                             |                                      |                                | <0.01                     |                       | 9.00                                    |                                     |                            |
|                               |                         | Bank Stabilization    |                                 |                             |                             |                                      |                                | <0.01                     | <0.01                 | 10.00                                   | 8.00                                |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| 24                            | 52+66-Y52-LT            | 42" STEEL             |                                 |                             |                             |                                      |                                | <0.01                     |                       | 17.00                                   |                                     |                            |
|                               |                         | Bank Stabilization    |                                 |                             |                             |                                      |                                | <0.01                     |                       | 9.00                                    |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                         |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| TOTALS:                       |                         |                       | 0.77                            |                             | 0.11                        | 0.28                                 | 0.20                           | 0.05                      | <0.01                 | 417.00                                  | 33.00                               | 56.00                      |

GRAND TOTAL

6.67

0.33

0.44

1.54

2.2

0.69

0.05

1838

240

56

SITE 19\* EXCAVATION IN WETLANDS IS PART OF A MITIGATION SITE AND IS CONSIDERED TEMPORARY IMPACT.

SITE 19 Bridge: Total Impact due to piers = 33sq.ft.

SITE 22\* -Y53- 56' OF PIPE TO BE REMOVED AND REPLACED WITH OPEN CHANNEL.

SITE 24 IS LOCATED +/- 500' OUTSIDE OF PROJECT LIMITS.

\*Rounded totals are sum of actual impacts

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SAMPSON COUNTY

WBS - XXXXX.1.1 (R-2303D)

SHEET 75 of 75

5/2/2013

Revised 5/2/2013

Permit Drawing

Sheet 75 of 75

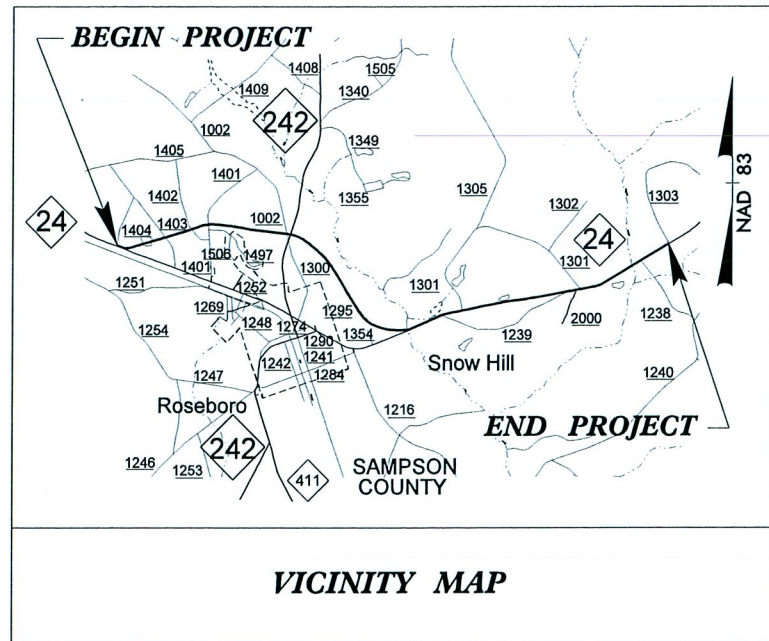


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Newsome AT RALEWNEWSOME

09/08/99

**TIP PROJECT: R-2303C**

**CONTRACT:**



**VICINITY MAP**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

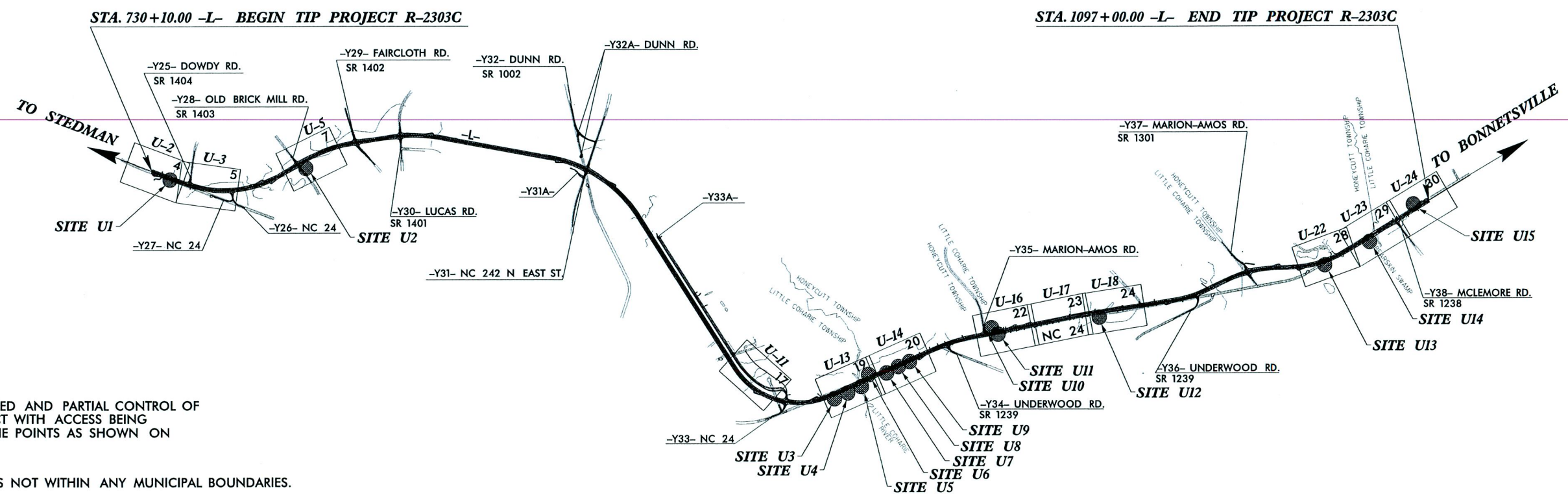
# UTILITY WETLAND IMPACT PLAN SAMPSON COUNTY

**LOCATION: NC 24 FROM SR 1404 (DOWDY ROAD) TO SR 1303  
(MITCHELL LOOP ROAD)**

**TYPE OF WORK: UTILITY RELOCATION WORK**

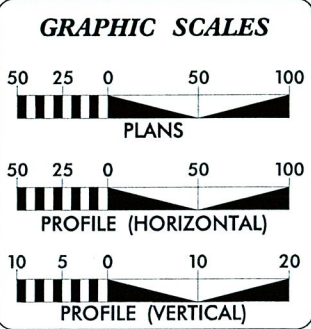
|            |           |
|------------|-----------|
| T.I.P. NO. | SHEET NO. |
| R-2303C    | U-1       |

Utility Permit Drawing  
Sheet 1 of 18



THIS IS A LIMITED AND PARTIAL CONTROL OF ACCESS PROJECT WITH ACCESS BEING LIMITED TO THE POINTS AS SHOWN ON THE PLANS.

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.



- UTILITY OWNERS ON PROJECT**
- (1) Progress Energy (Power Distribution /Transmission)
  - (2) South River EMC (Power Distribution /Transmission)
  - (3) Century Link (Telecommunications)
  - (4) Star Vision (Cable Television)
  - (5) PNG (Distribution Gas)



PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
UTILITIES ENGINEERING  
SECTION**

1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**Steve McKee, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**Brandy Creech** UTILITIES COORDINATION CONSULTANT



8/17/99  
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REVISIONS

STA 730+10.00 -L-  
BEGIN STATE PROJECT R-2303C

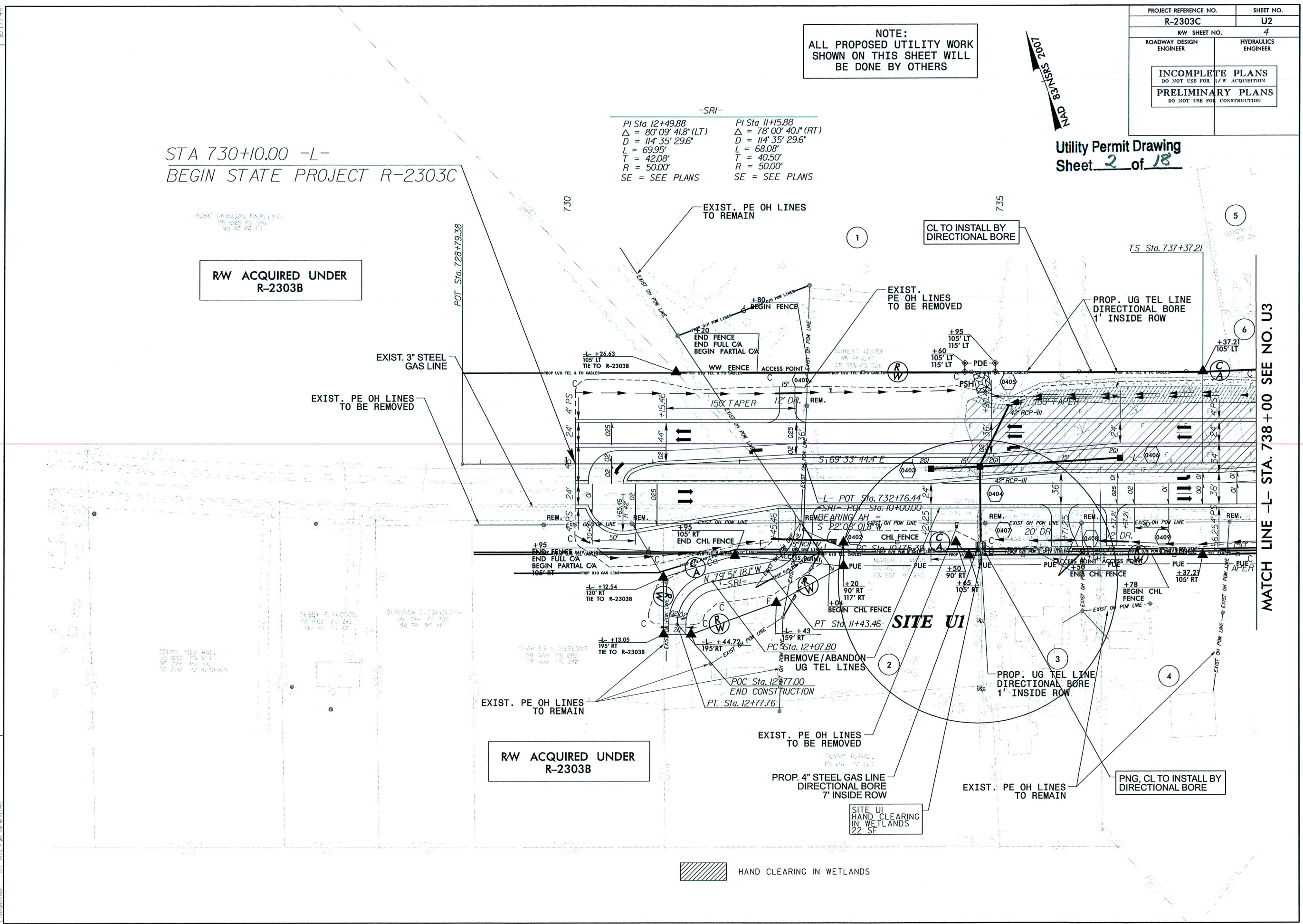
R/W ACQUIRED UNDER  
R-2303B

R/W ACQUIRED UNDER  
R-2303B

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

Utility Permit Drawing  
Sheet 2 of 18

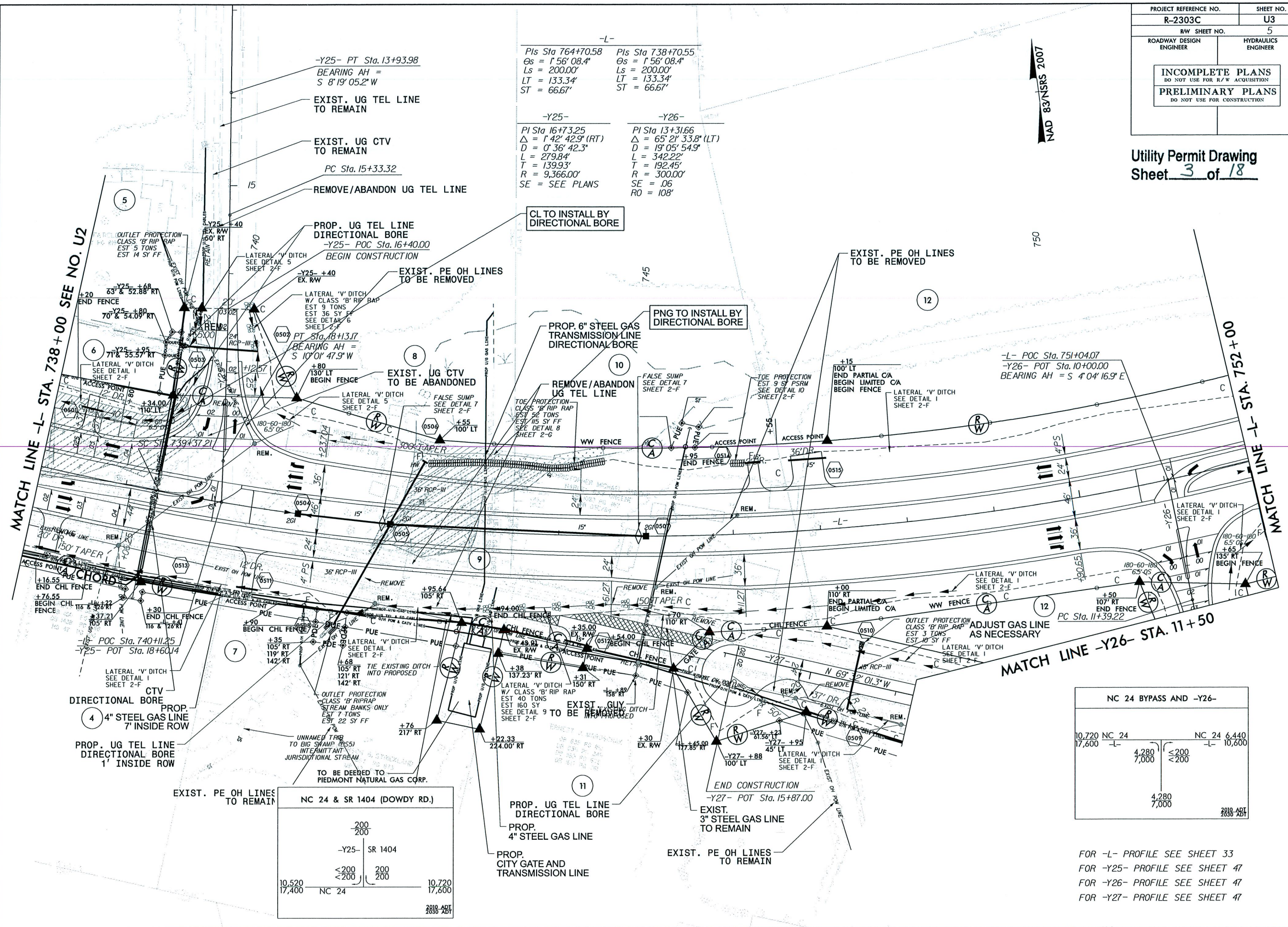
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| R-2303C                                            | U2                  |
| R/W SHEET NO.                                      | 4                   |
| ROADWAY DESIGN ENGINEER                            | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS<br>DO NOT USE FOR A/W ACQUISITION |                     |
| PRELIMINARY PLANS<br>DO NOT USE FOR CONSTRUCTION   |                     |



MATCH LINE -L- STA. 738+00 SEE NO. U3



FOR -L- PROFILE SEE SHEET 33  
FOR -Y25- PROFILE SEE SHEET 47  
FOR -Y26- PROFILE SEE SHEET 47  
FOR -Y27- PROFILE SEE SHEET 47





NAD 83/NSRS 2007

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



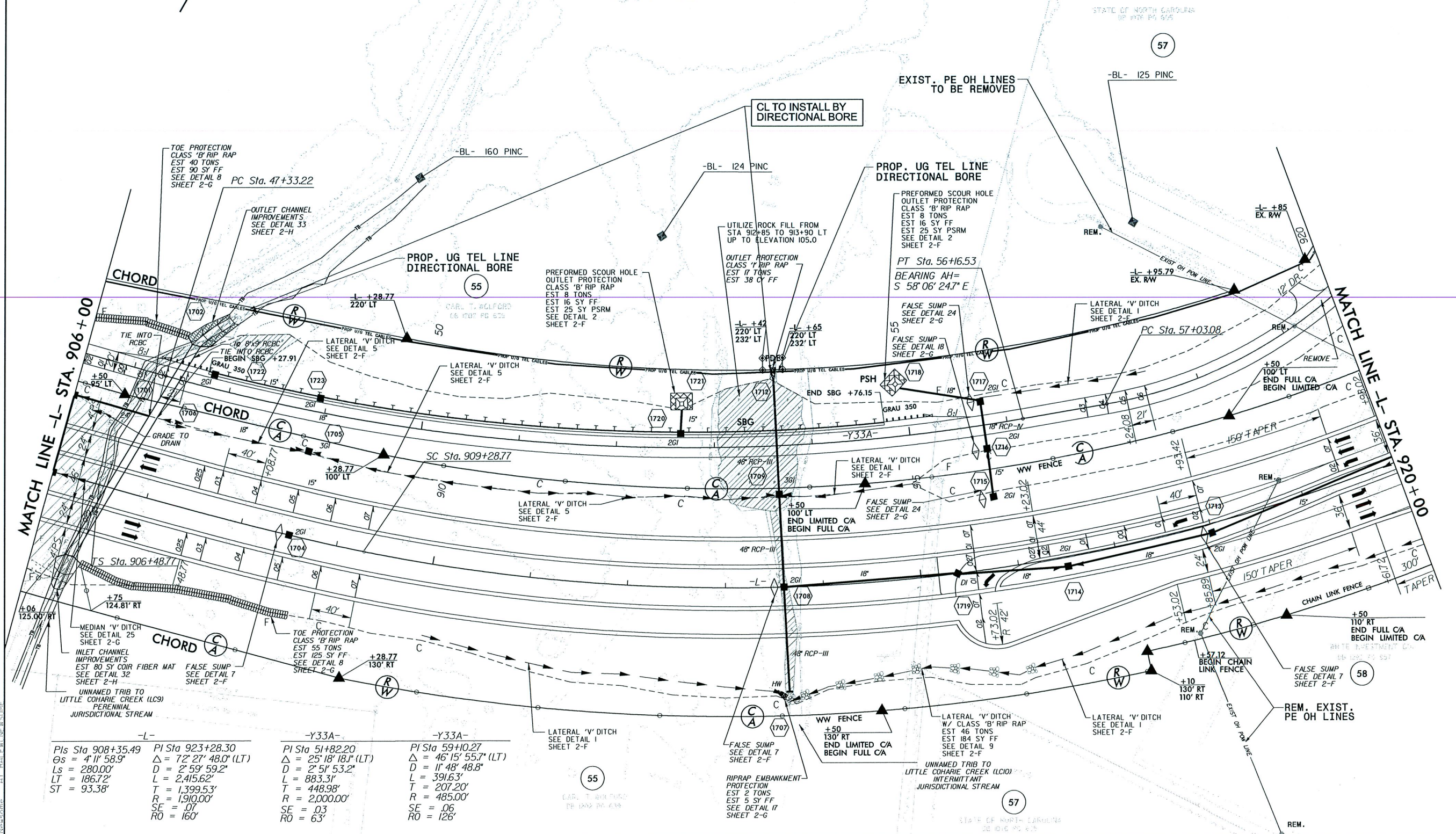
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|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|



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Newberry

|                                                    |                     |
|----------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                              | SHEET NO.           |
| R-2303C                                            | U11                 |
| R/W SHEET NO.                                      | 17                  |
| ROADWAY DESIGN ENGINEER                            | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS<br>DO NOT USE FOR R/W ACQUISITION |                     |
| PRELIMINARY PLANS<br>DO NOT USE FOR CONSTRUCTION   |                     |

Utility Permit Drawing  
Sheet 5 of 18



55  
CARL T. WOLFORD  
16 HST PG 576

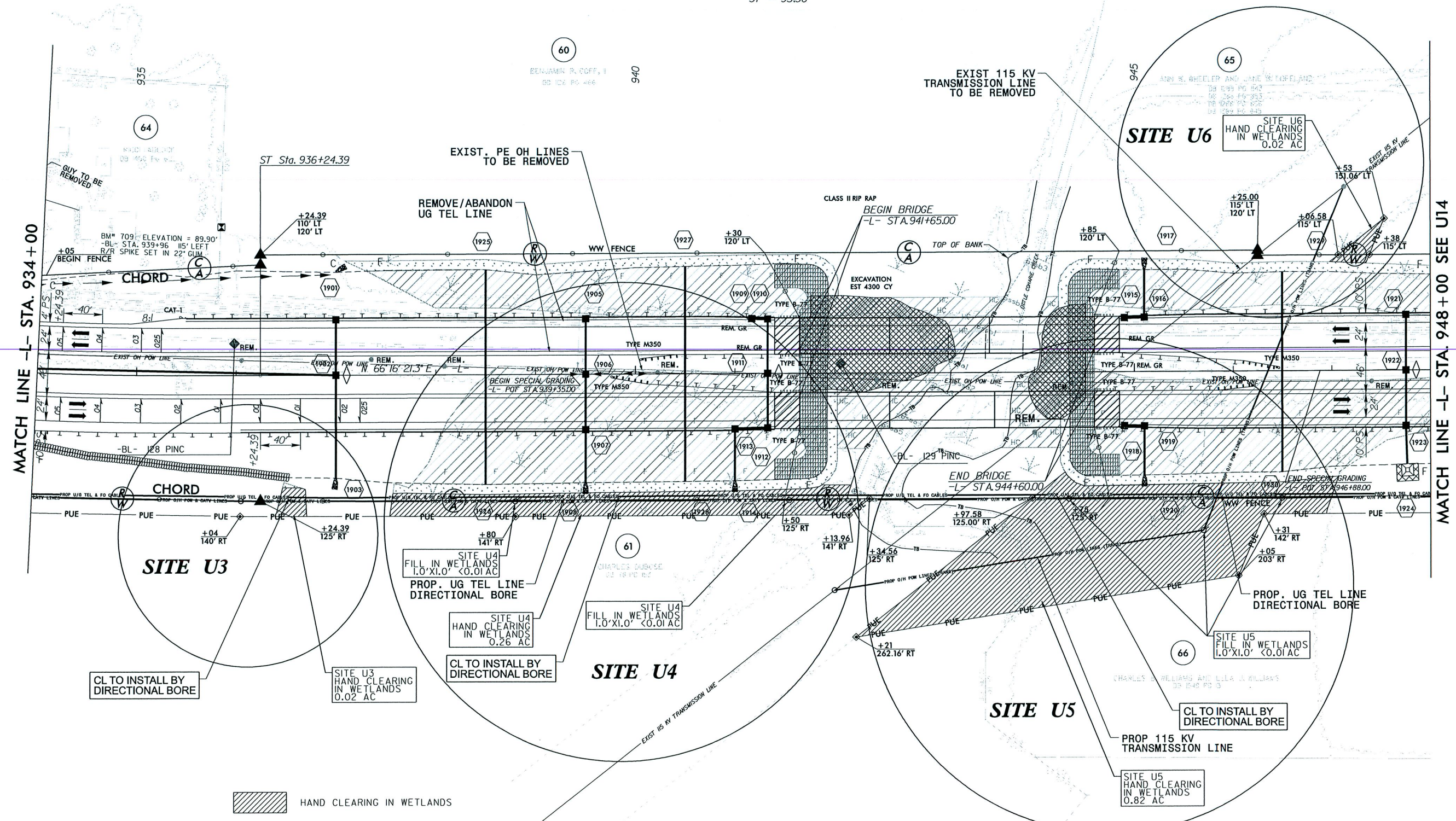
57  
STATE OF NORTH CAROLINA  
DP HST PG 576

58  
WHITE INVESTMENT CO.  
16 HST PG 581



NAD 83/NSRS 2007

|         |                                                                                                         |
|---------|---------------------------------------------------------------------------------------------------------|
| 8/17/99 | NP-Projects\NCOT\Utility On-Cell Contr-act\AR-2303C Sampson County\Environmental\2303c-rdy-psh-U013.dgn |
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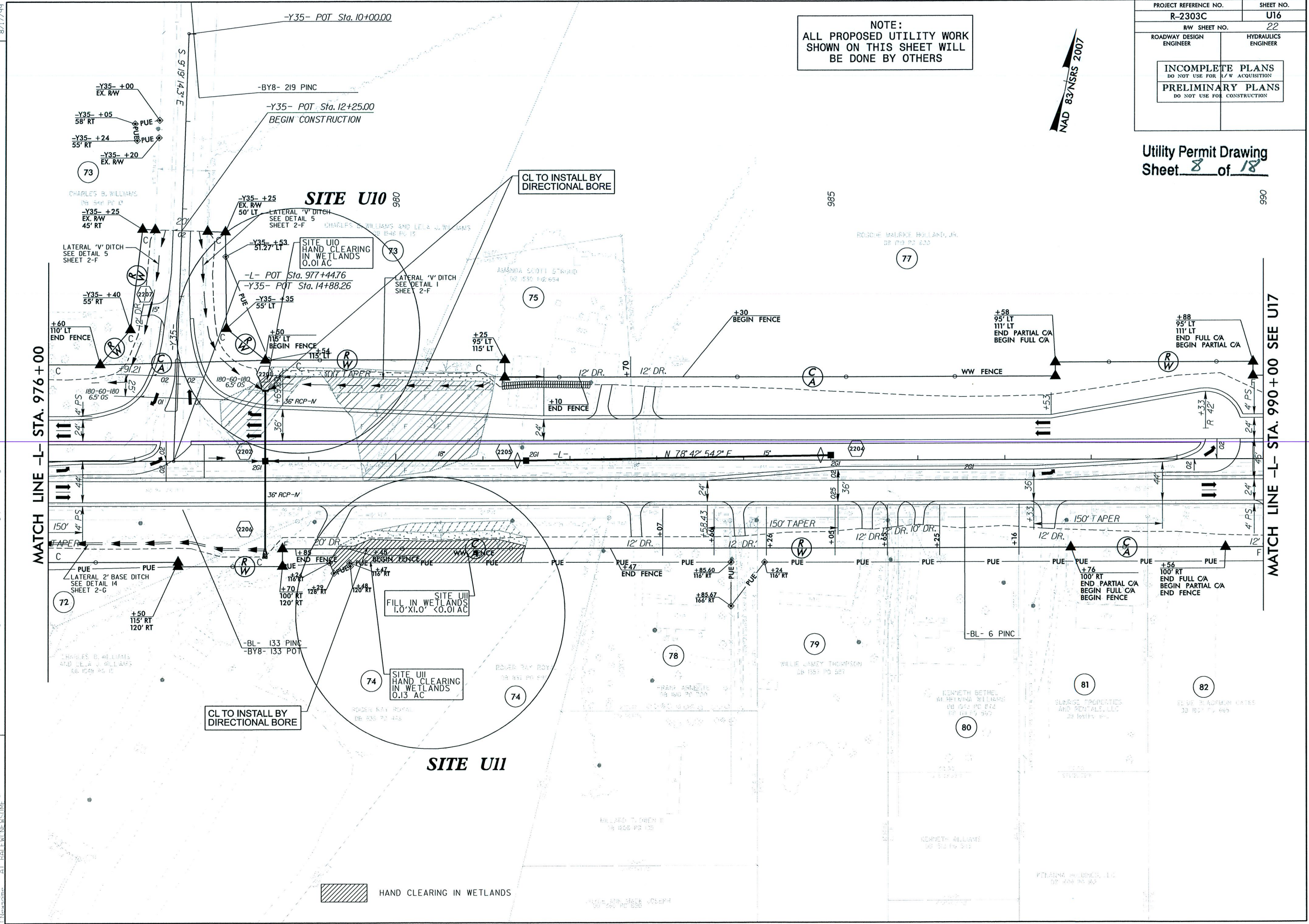




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Simpson County Environmental\2303C\_rdg.psh.U016.dgn  
PROJECT: 2303C  
SHEET: 22  
DATE: 8/17/99  
DRAWN BY: RDG  
CHECKED BY: RDG  
APPROVED BY: RDG

MATCH LINE -L- STA. 976+00

MATCH LINE -L- STA. 990+00 SEE U17



NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

NAD 83/NSRS 2007

|                                                    |                     |
|----------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                              | SHEET NO.           |
| R-2303C                                            | U16                 |
| R/W SHEET NO.                                      | 22                  |
| ROADWAY DESIGN ENGINEER                            | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS<br>DO NOT USE FOR R/W ACQUISITION |                     |
| PRELIMINARY PLANS<br>DO NOT USE FOR CONSTRUCTION   |                     |

Utility Permit Drawing  
Sheet 8 of 18

HAND CLEARING IN WETLANDS





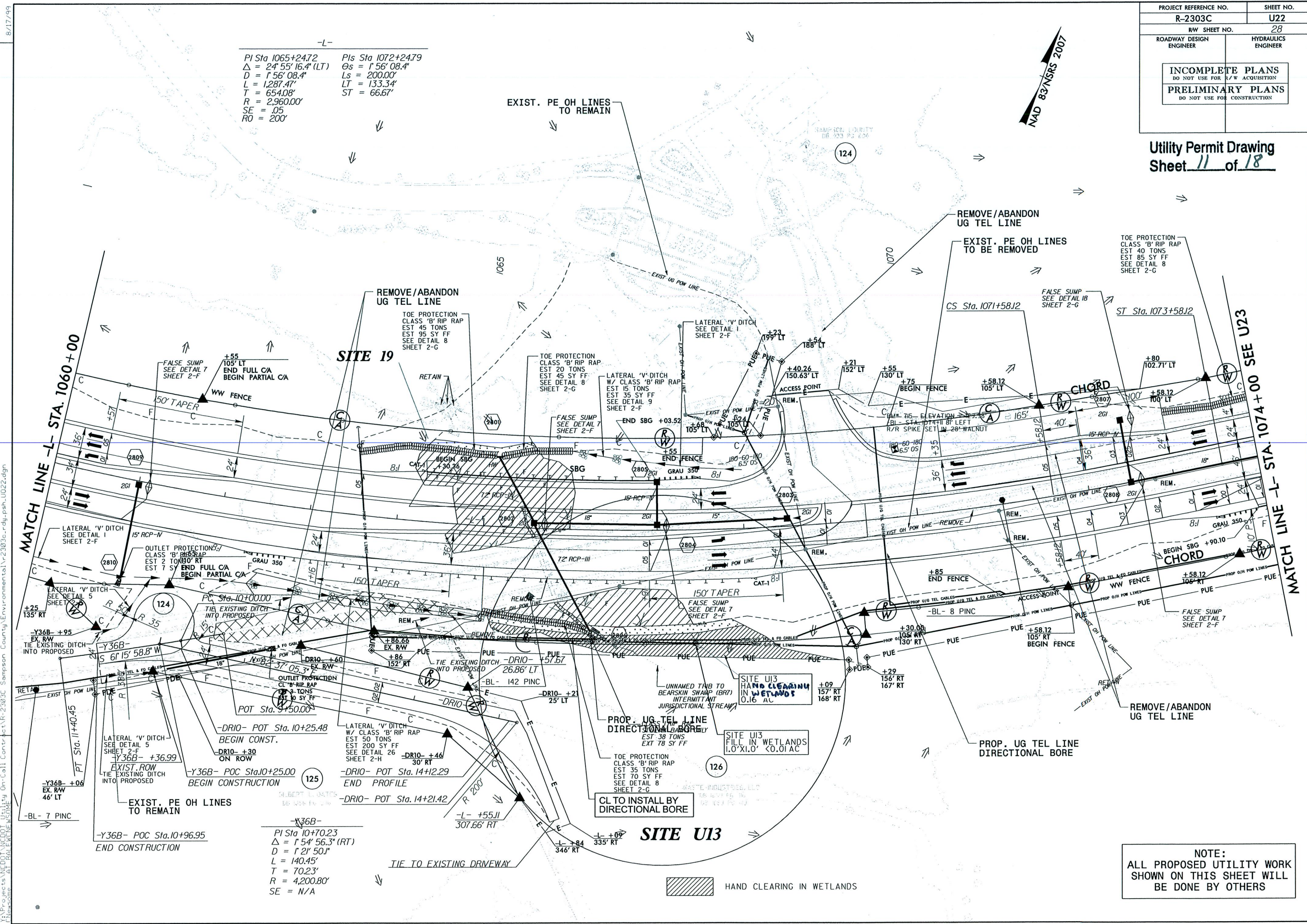






|                                                    |                     |
|----------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                              | SHEET NO.           |
| R-2303C                                            | U22                 |
| RAW SHEET NO.                                      | 28                  |
| ROADWAY DESIGN ENGINEER                            | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS<br>DO NOT USE FOR A/W ACQUISITION |                     |
| PRELIMINARY PLANS<br>DO NOT USE FOR CONSTRUCTION   |                     |

Utility Permit Drawing  
Sheet 11 of 18



8/17/99  
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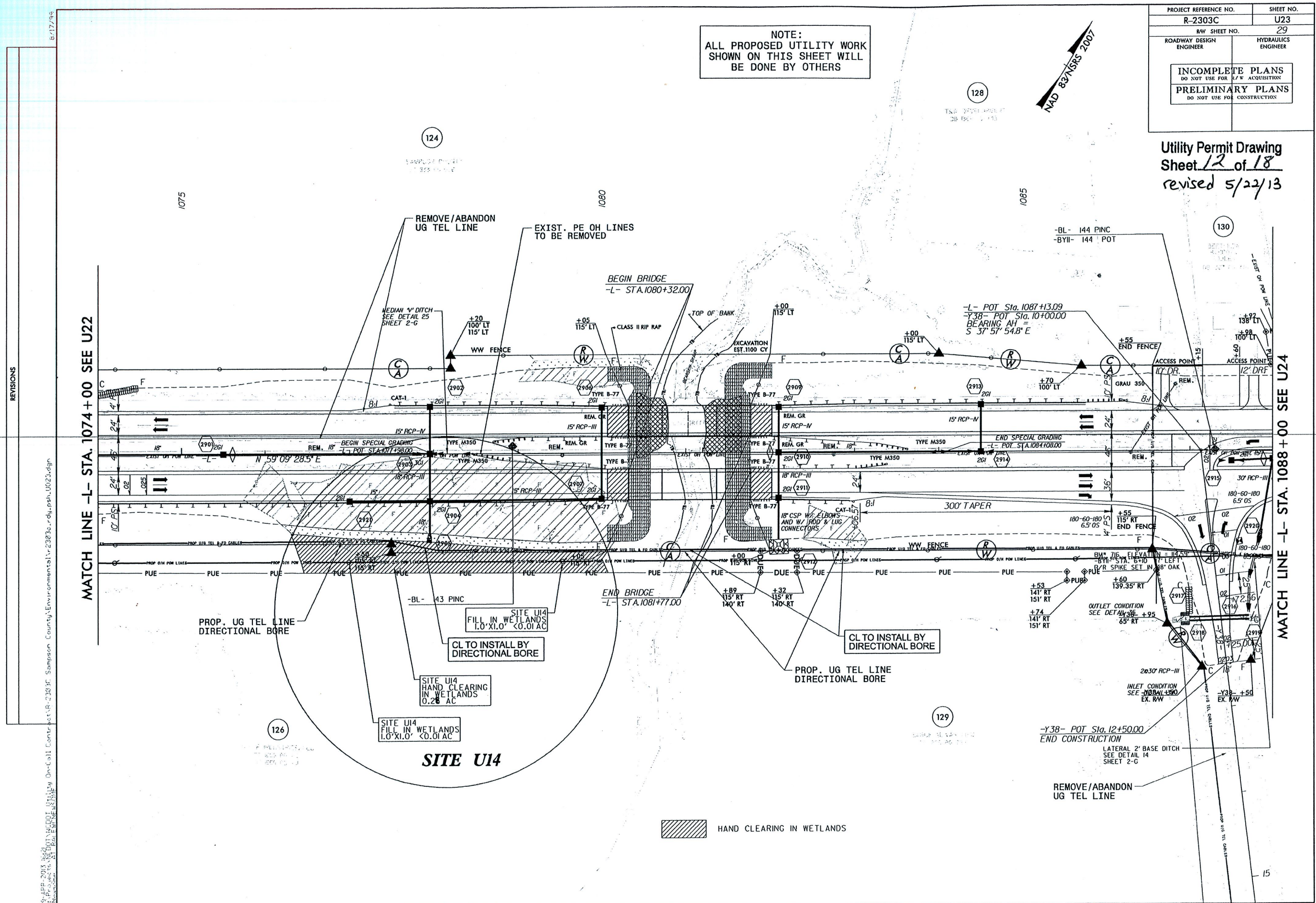
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| PROJECT REFERENCE NO.      | SHEET NO.              |
| R-2303C                    | U23                    |
| R/W SHEET NO.              | 29                     |
| ROADWAY DESIGN<br>ENGINEER | HYDRAULICS<br>ENGINEER |

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

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

Utility Permit Drawing  
Sheet 12 of 18  
revised 5/22/13

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS









Power, Communication, Natural Gas Utility Wetland Impacts

| PROP. NO. | PROPERTY OWNER NAME             | PROP. OWNER ADDRESS                                                                                                                                       |
|-----------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2         | Margie Aman                     | 2223 Autry Highway, Roseboro, NC 28382                                                                                                                    |
| 14        | Audrey Lee, Starling Kerr, etal | 980 Boren Brick Road, Roseboro, NC 28382                                                                                                                  |
| 61        | Charles Dubose                  | Roseboro Hwy, Roseboro, NC 28382                                                                                                                          |
| 65        | Ann Wheeler, Jane Copeland      | 9406 Roseboro Highway, Roseboro, NC 28382                                                                                                                 |
| 66        | Charles Williams, Lela Williams | 1793 Marion-Amos Road, Roseboro, NC 28382                                                                                                                 |
| 74        | Roger Royal                     | 1234 Underwood Road, Roseboro, NC 28382                                                                                                                   |
| 126       | Waste Industries, LLC           | 7654 Roseboro Hwy, Roseboro, NC 28382                                                                                                                     |
| 129       | Baron Van Liew                  | G11 0 61C SR 24 , Roseboro, NC 28382                                                                                                                      |
| 134       | James Monk                      | 6956 Roseboro Highway, Roseboro, NC 28382                                                                                                                 |
|           |                                 | <div> <p>N.C. DEPT. OF TRANSPORTATION<br/>DIVISION OF HIGHWAYS</p> <p>SAMPSON COUNTY<br/>PROJECT: R-2303C</p> <p>4/10/2013<br/>2/21/13 REVISED</p> </div> |

Utility Permit Drawing  
Sheet 14 of 18

Property Owners - Buffer

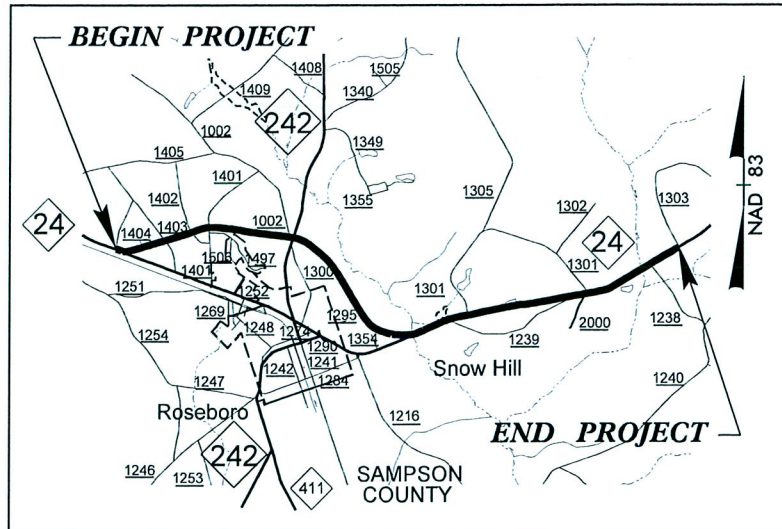


| WETLAND PERMIT IMPACT SUMMARY |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|-------------------------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|-----------------------------------------|-------------------------------------|----------------------------|
|                               |                   |                       | WETLAND IMPACTS                 |                             |                             |                                      |                                | SURFACE WATER IMPACTS     |                       |                                         |                                     |                            |
| Site No.                      | Station (From/To) | Structure Size / Type | 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) |
| U1                            | 734+78 -L-        | POWER, CTV            |                                 |                             |                             |                                      | <0.01                          |                           |                       |                                         |                                     |                            |
| U2                            | 16+33 -Y28-       | POWER                 | <0.01                           |                             |                             |                                      | 0.14                           |                           |                       |                                         |                                     |                            |
| U3                            | 936+39 -L-        | POWER, CTV            |                                 |                             |                             |                                      | 0.02                           |                           |                       |                                         |                                     |                            |
| U4                            | 937+54 -L-        | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.26                           |                           |                       |                                         |                                     |                            |
| U5                            | 942+21 -L-        | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.82                           |                           |                       |                                         |                                     |                            |
| U6                            | 947+07 -L-        | POWER                 |                                 |                             |                             |                                      | 0.02                           |                           |                       |                                         |                                     |                            |
| U7                            | 948+32 -L-        | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.16                           |                           |                       |                                         |                                     |                            |
| U8                            | 955+66 -L-        | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.12                           |                           |                       |                                         |                                     |                            |
| U9                            | 958+17 -L-        | POWER, CTV            |                                 |                             |                             |                                      | 0.04                           |                           |                       |                                         |                                     |                            |
| U10                           | 978+43 -L-        | POWER, CTV            |                                 |                             |                             |                                      | 0.01                           |                           |                       |                                         |                                     |                            |
| U11                           | 979+24 -L-        | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.13                           |                           |                       |                                         |                                     |                            |
| U12                           | 1005+40-L-        | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.19                           |                           |                       |                                         |                                     |                            |
| U13                           | 1075+13 -L-       | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.16                           |                           |                       |                                         |                                     |                            |
| U14                           | 1076+31 -L-       | POWER, CTV            | <0.01                           |                             |                             |                                      | 0.28                           |                           |                       |                                         |                                     |                            |
| U15                           | 1091+70 -L-       | POWER                 | <0.01                           |                             |                             |                                      | 0.04                           |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                               |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| TOTALS:                       |                   |                       | <0.01 (14sf)                    |                             | 0.0000                      |                                      | 2.38                           |                           | 0.0000                |                                         | 0                                   |                            |



TIP PROJECT: R-2303C

CONTRACT:



VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

UTILITIES CONSTRUCTION  
SAMPSON COUNTY

LOCATION: NC 24 FROM SR 1404 (DOWDY ROAD) TO SR 1303  
(MITCHELL LOOP ROAD)

TYPE OF WORK: WATER LINE AND SEWER LINE RELOCATION

T.I.P. NO.

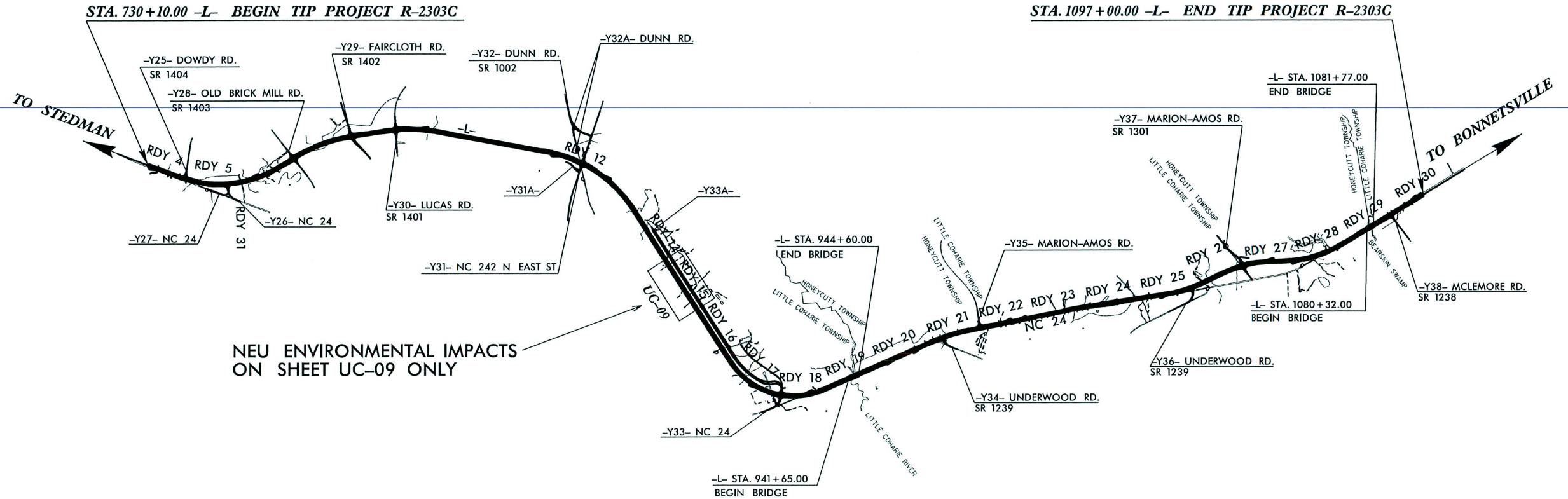
R-2303C

SHEET NO.

UC-1

NEU UTILITY  
RELOCATION PLANS

Utility Permit Drawing  
Sheet 16 of 18



GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.

UC-1  
UC-2  
UC-3 TO UC-3F  
UC-4 TO UC-24  
UC-25 TO UC-55

DESCRIPTION

TITLE SHEET  
SYMBOLGY SHEET  
NOTES SHEETS AND UTILITY  
DETAIL SHEETS  
UTILITIES CONSTRUCTION  
PLAN SHEETS  
UTILITIES CONSTRUCTION  
PROFILE PLAN SHEETS

UTILITY OWNERS ON PROJECT

- (1) SAMPSON COUNTY PUBLIC WORKS - WATER LINE
- (2) SAMPSON COUNTY PUBLIC WORKS - SEWER LINE
- (3) TOWN OF ROSEBORO - WATER LINE
- (4) TOWN OF ROSEBORO - SEWER LINE

SEAL

UTILITY DESIGN BY:

**MA Engineering**  
CONSULTANTS, INC.  
598 East Chatham Street, Suite 137 Cary, NC 27511  
Phone: 919.297.0220 Fax: 919.297.0221

NCDOT PROJECT ENGINEER:  
RON WILKINS, P.E.  
PREPARED FOR:  
NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
UTILITIES UNIT  
RALEIGH, NC



NEU UTILITY  
RELOCATION  
PLANS

MA Engineering  
CONSULTANTS, INC. 598 E. Charlton Street,  
Suite 137  
Cory, N.C. 27511

UTILITY OWNERS ON THIS PROJECT:  
1. TOWN OF ROSEBORO  
UTILITY: 12"/18" GRAVITY SEWER  
CONTACT: BUCK AMMONS  
PHONE: 910-525-4121

MATCH LINE -L- STA. 878+00 SEE SHEET NO. 08

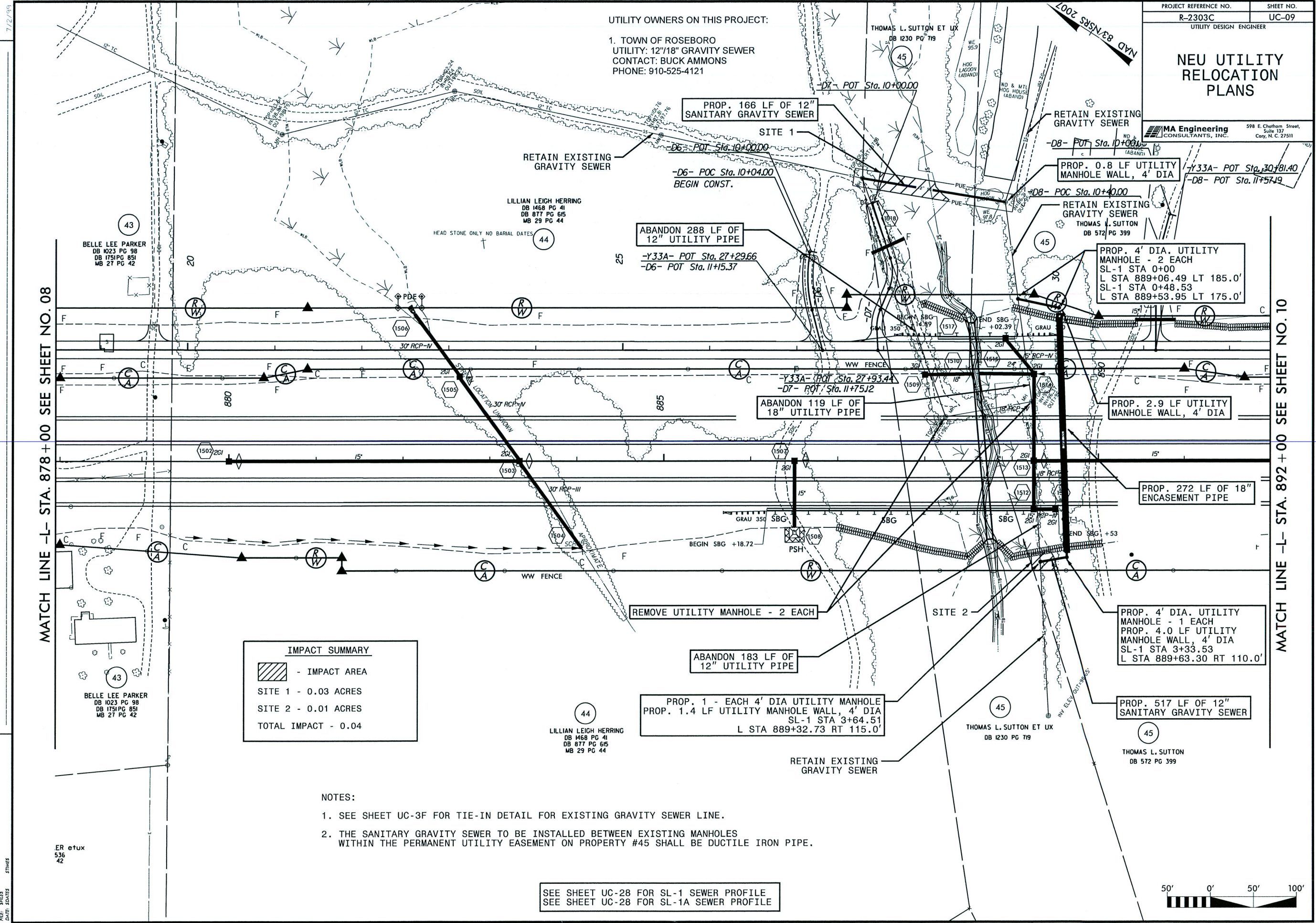
MATCH LINE -L- STA. 892+00 SEE SHEET NO. 10

| IMPACT SUMMARY                                                                      |               |
|-------------------------------------------------------------------------------------|---------------|
|  | - IMPACT AREA |
| SITE 1 - 0.03 ACRES                                                                 |               |
| SITE 2 - 0.01 ACRES                                                                 |               |
| TOTAL IMPACT - 0.04                                                                 |               |

NOTES:

- SEE SHEET UC-3F FOR TIE-IN DETAIL FOR EXISTING GRAVITY SEWER LINE.
- THE SANITARY GRAVITY SEWER TO BE INSTALLED BETWEEN EXISTING MANHOLES WITHIN THE PERMANENT UTILITY EASEMENT ON PROPERTY #45 SHALL BE DUCTILE IRON PIPE.

SEE SHEET UC-28 FOR SL-1 SEWER PROFILE  
SEE SHEET UC-28 FOR SL-1A SEWER PROFILE





| WETLAND AND SURFACE WATER IMPACTS |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|-----------------------------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|-----------------------------------------|-------------------------------------|----------------------------|
| 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                                 | 887+46 to 888+16  | 12" Gravity Sewer     |                                 |                             | 0.03                        |                                      |                                |                           |                       |                                         |                                     |                            |
| 2                                 | 889+23 to 889+53  | 12" Gravity Sewer     |                                 |                             | 0.01                        |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
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|                                   |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| TOTALS:                           |                   |                       |                                 |                             | 0.04                        |                                      |                                |                           |                       |                                         |                                     |                            |

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

Sampson County  
WBS - 34416.2.4 (R-2303C)

ATN Revised 3/31/05

SHEET 1 OF 1 4/17/2013

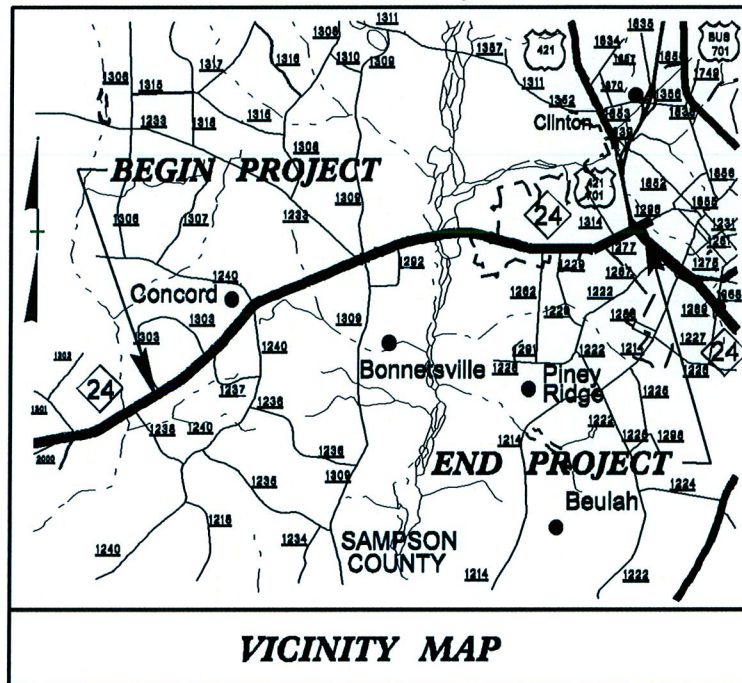


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\$\$\$\$\$USER\$NAME\$\$\$\$\$

CONTRACT:

TIP PROJECT: R-2303D

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



VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**UTILITY WETLAND IMPACT PLAN  
SAMPSON COUNTY**

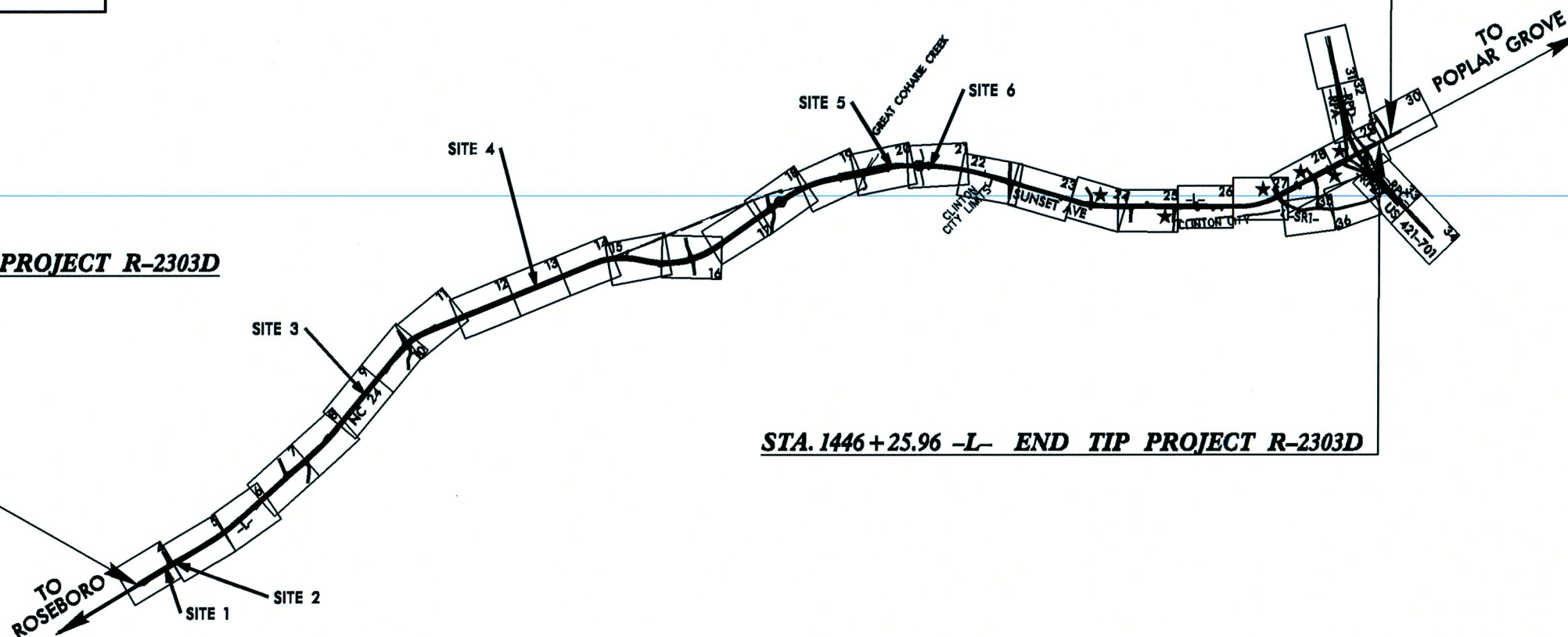
LOCATION: NC 24 FROM SR 1303 (MITCHELL LOOP ROAD)  
TO US 421-701/SR 1296 (SUNSET AVENUE)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, RESURFACING, CURB &  
GUTTER, SIGNALS, AND STRUCTURES

Utility Permit Drawing  
Sheet 1 of 8

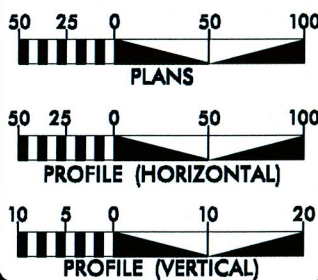
STA. 1449+56.13 -L- END CONSTRUCTION

STA. 1097+00.00 -L- BEGIN TIP PROJECT R-2303D



STA. 1446+25.96 -L- END TIP PROJECT R-2303D

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 40480  
ADT 2033 = 59680  
DHV = 11 %  
D = 55 %  
T = 8 % \*  
V (SHOULDER) = 60 MPH  
V (CURB & GUTTER) = 50 MPH  
\* (TTST 5% + DUAL 3%)  
FUNC. CLASS = ARTERIAL  
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2303D = 6.35 MILES  
LENGTH STRUCTURES TIP PROJECT R-2303D = 0.26 MILES  
TOTAL LENGTH TIP PROJECT R-2303D = 6.61 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
JUNE 30, 2011

LETTING DATE:  
JUNE 18, 2013

BRENDA MOORE, PE  
PROJECT ENGINEER

KATRINA N. WASHINGTON, PE  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE:

ROADWAY DESIGN  
ENGINEER

SIGNATURE:

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA



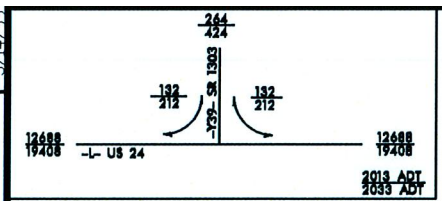
STATE HIGHWAY DESIGN ENGINEER

P.E.



Property lines relocated in parcels 3A, 3B & 8, parcel numbers and owner information revised for parcels 2, 3A, 3B, 8, 8A & 8C, access points added for parcels 2 & 4 and parcel 2 PUE changed to AUE. WAS 2/20/2012

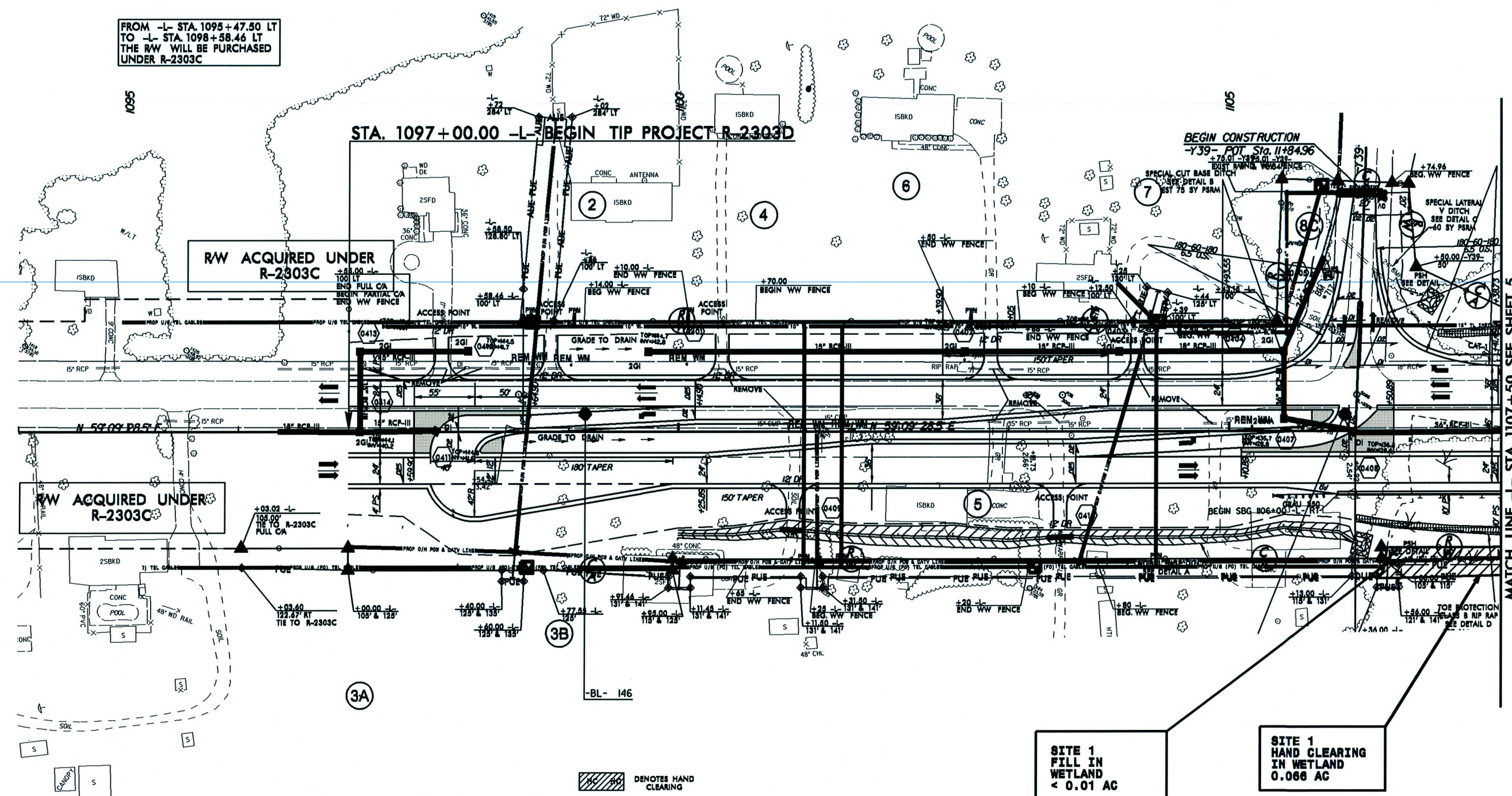
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|                             |                     |
|-----------------------------|---------------------|
| PROJECT REFERENCE NO.       | SHEET NO.           |
| R-2303D                     | 4                   |
| R/W SHEET NO.               |                     |
| ROADWAY DESIGN ENGINEER     | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS           |                     |
| DO NOT USE FOR CONSTRUCTION |                     |

UTILITY WETLAND IMPACT

Utility Permit Drawing  
Sheet 2 of 8



FROM -L- STA. 1095+47.50 LT  
TO -L- STA. 1098+58.46 LT  
THE RW WILL BE PURCHASED  
UNDER R-2303C

RW ACQUIRED UNDER  
R-2303C

RW ACQUIRED UNDER  
R-2303C

SITE 1  
FILL IN  
WETLAND  
< 0.01 AC

SITE 1  
HAND CLEARING  
IN WETLAND  
0.066 AC

MATCH LINE -L- STA 1107+50 SEE SHEET 5

DENOTES HAND  
CLEARING

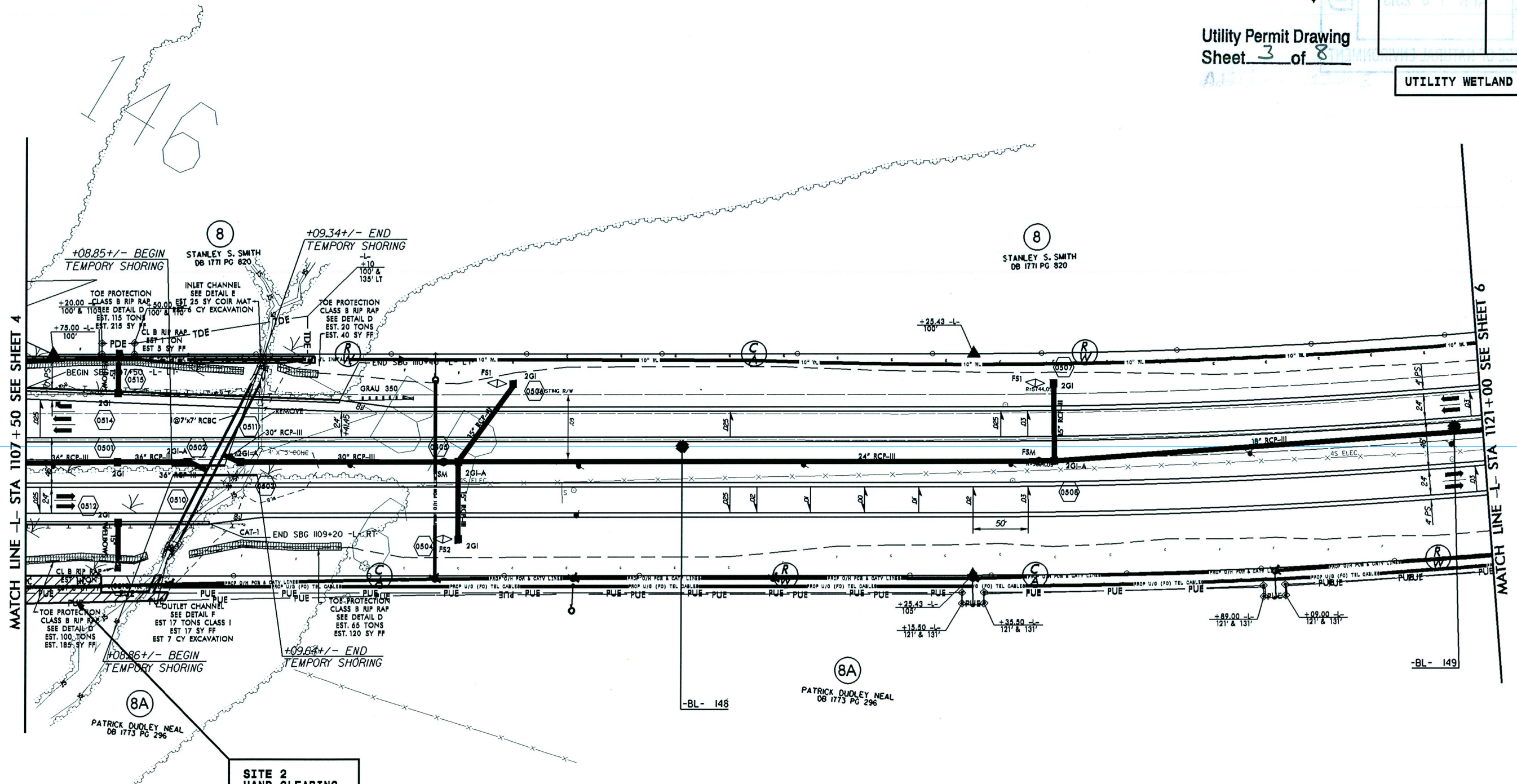


5/14/99

REVISIONS

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MATCH LINE -L- STA 1107+50 SEE SHEET 4



SITE 2  
HAND CLEARING  
IN WETLAND  
0.054 AC

SC HC  
DENOTES HAND  
CLEARING

UTILITY WETLAND IMPACT

|                         |                             |
|-------------------------|-----------------------------|
| PROJECT REFERENCE NO.   | SHEET NO.                   |
| R-2303D                 | 5                           |
| RW SHEET NO.            |                             |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER         |
| PRELIMINARY PLANS       | DO NOT USE FOR CONSTRUCTION |

Utility Permit Drawing  
Sheet 3 of 8

NAD 83 8395

MATCH LINE -L- STA 1121+00 SEE SHEET 6

-BL- 149

8A  
PATRICK DUDLEY NEAL  
08 1773 PG 296

-BL- 148

141-23034-UT\_PRL\_WET.pst\_05.dgn



|                                                  |                     |
|--------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                            | SHEET NO.           |
| R-2303D                                          | 9                   |
| R/W SHEET NO.                                    |                     |
| ROADWAY DESIGN ENGINEER                          | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS<br>DO NOT USE FOR CONSTRUCTION |                     |

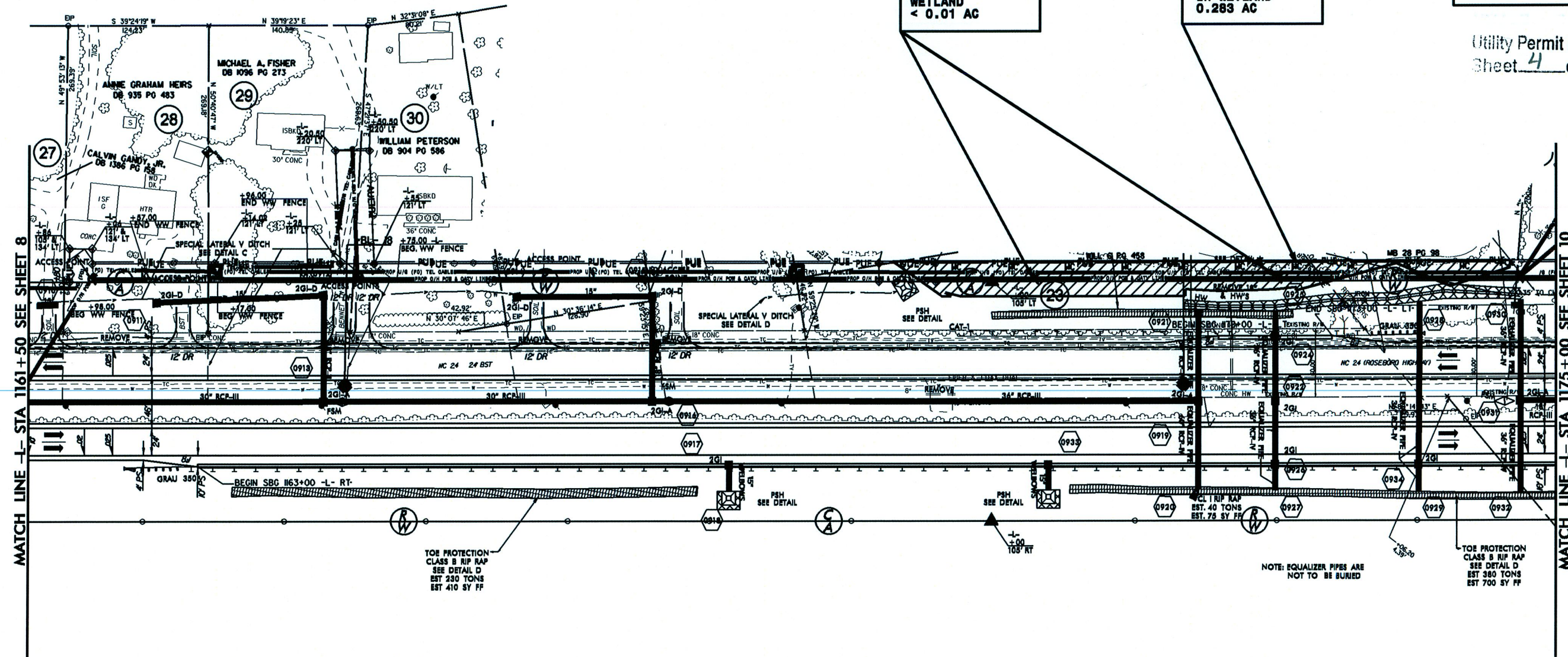
UTILITY WETLAND IMPACT

Utility Permit Drawing  
Sheet 4 of 8

NAD 83 95

SITE 3  
FILL IN  
WETLAND  
< 0.01 AC

SITE 3  
HAND CLEARING  
IN WETLAND  
0.283 AC



MATCH LINE -L- STA 1161+50 SEE SHEET 8

MATCH LINE -L- STA 1175+00 SEE SHEET 10

23

JEFF C. GRAHAM  
DB 1070 PG 757  
WLL 6 PG 458

HC HC  
DENOTES HAND  
CLEARING

REVISIONS

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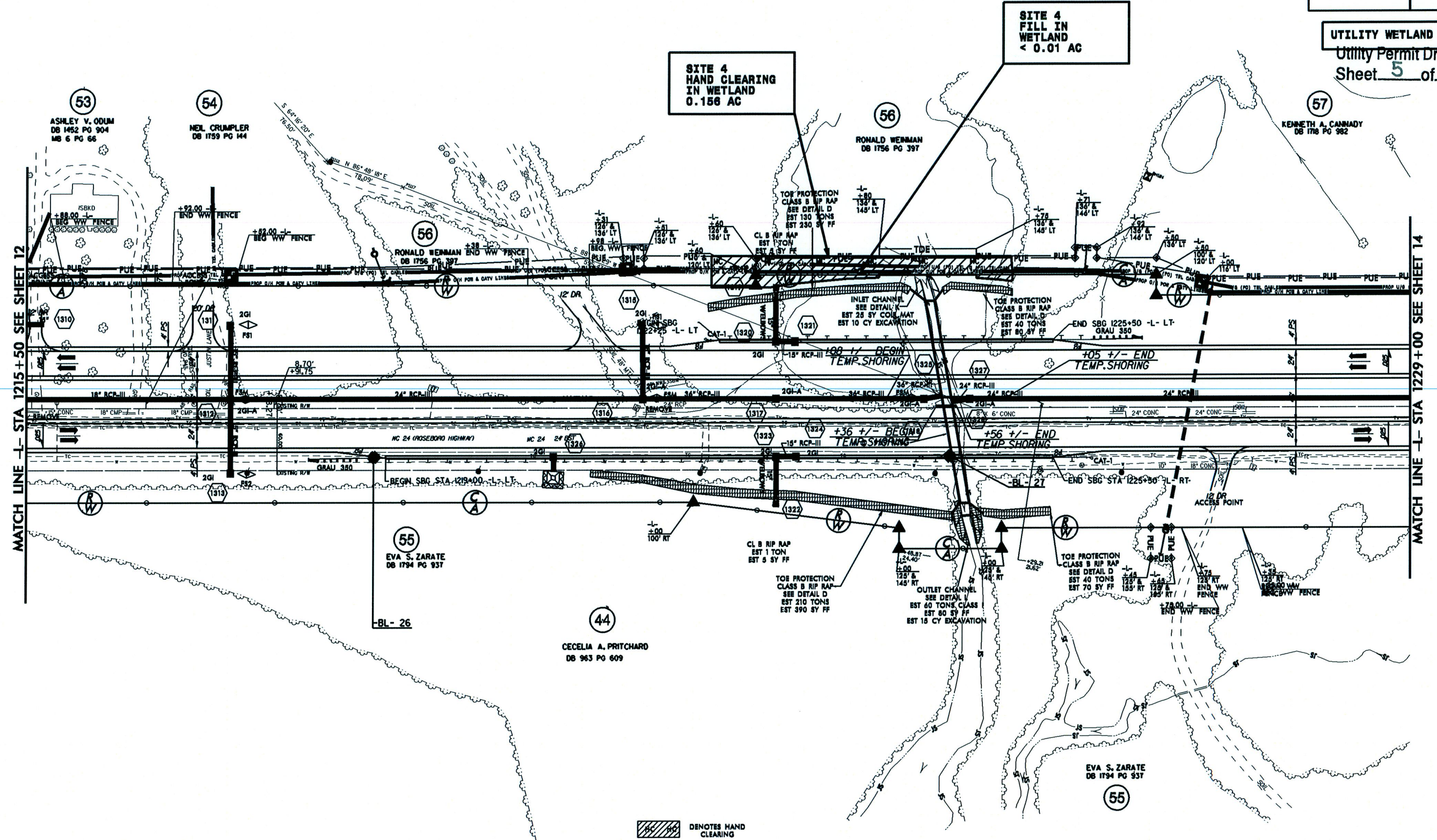


REVISIONS

5/14/95

|                             |                     |
|-----------------------------|---------------------|
| PROJECT REFERENCE NO.       | SHEET NO.           |
| R-2303D                     | 13                  |
| R/W SHEET NO.               |                     |
| ROADWAY DESIGN ENGINEER     | HYDRAULICS ENGINEER |
| PRELIMINARY PLANS           |                     |
| DO NOT USE FOR CONSTRUCTION |                     |

UTILITY WETLAND IMPACT  
Utility Permit Drawing  
Sheet 5 of 8



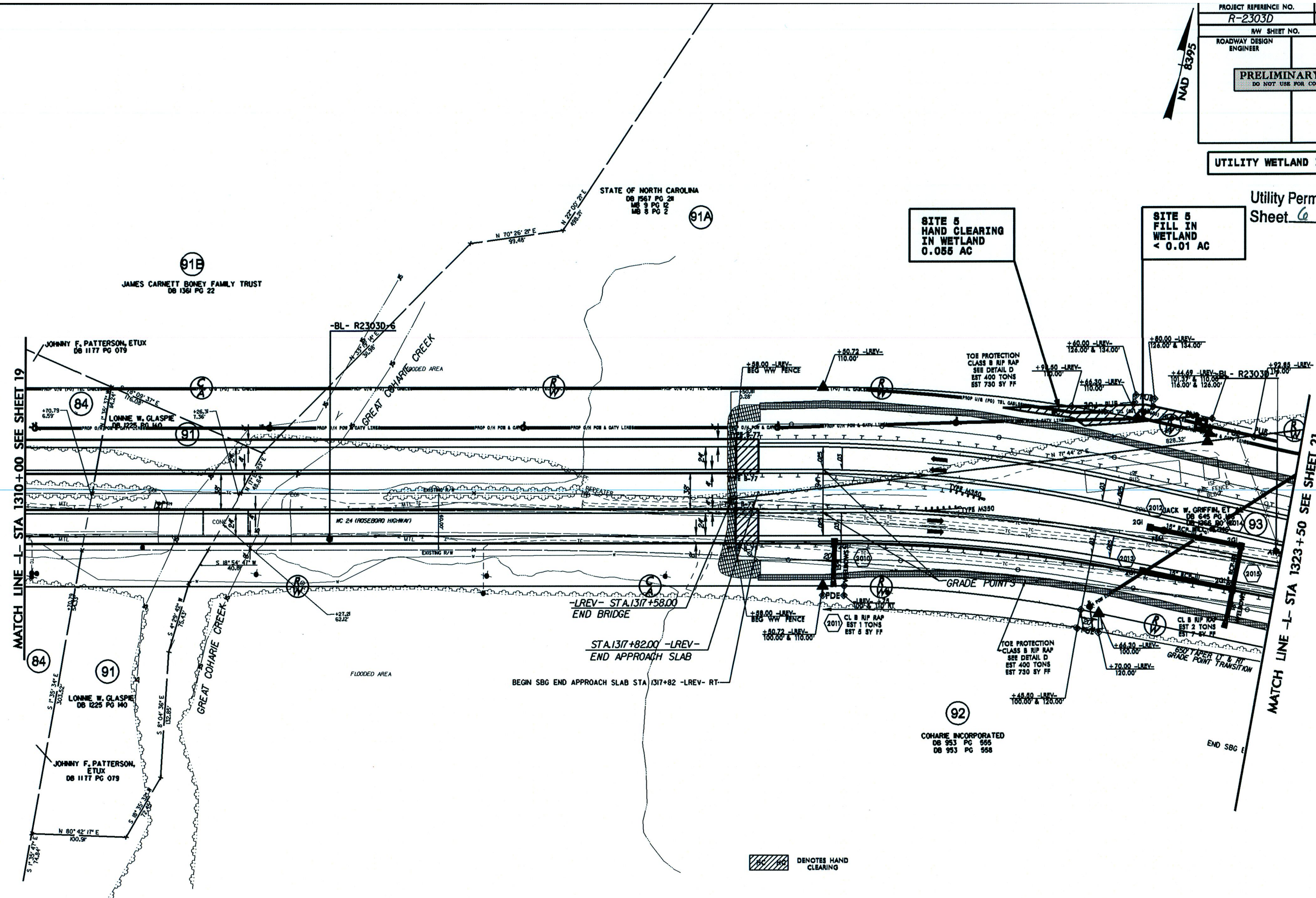
REVISIONS



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| PROJECT REFERENCE NO.                                   |                     | SHEET NO. |  |
| R-2303D                                                 |                     | 20        |  |
| RW SHEET NO.                                            |                     |           |  |
| ROADWAY DESIGN ENGINEER                                 | HYDRAULICS ENGINEER |           |  |
| <b>PRELIMINARY PLANS</b><br>DO NOT USE FOR CONSTRUCTION |                     |           |  |

**UTILITY WETLAND IMPACT**

Utility Permit Drawing  
Sheet 6 of 8

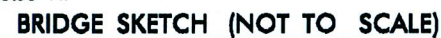


DENOTES HAND CLEARING

REVISIONS

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# 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        | 1106+36 -L-       | POWER                 | < 0.01                          |                             |                             |                                      | 0.07                           |                           |                       |                                         |                                     |                            |
| 2        | 1107+50 -L-       | POWER                 |                                 |                             |                             |                                      | 0.05                           |                           |                       |                                         |                                     |                            |
| 3        | 1169+12 -L-       | POWER                 | < 0.01                          |                             |                             |                                      | 0.28                           |                           |                       |                                         |                                     |                            |
| 4        | 1222+17 -L-       | POWER                 | < 0.01                          |                             |                             |                                      | 0.16                           |                           |                       |                                         |                                     |                            |
| 5        | 1319+83 -L-       | POWER                 | < 0.01                          |                             |                             |                                      | 0.06                           |                           |                       |                                         |                                     |                            |
| 6        | 1325+14 -L-       | POWER                 | < 0.01                          |                             |                             |                                      | 0.18                           |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
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|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
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|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
|          |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |                                         |                                     |                            |
| TOTALS:  |                   |                       | < 0.01                          |                             |                             | 0.00                                 | 0.80                           |                           |                       | 0.00                                    | 0.00                                |                            |

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

CUMBERLAND / SAMPSON COUNTY  
WBS - 34416.1.1 (R-2303D)