



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

August 29, 2013

Addendum No. 1

RE: Contract ID C203198

WBS # 34491.3.GVS4

F. A. # NHS-0017(131)

Brunswick, New Hanover Counties (R-2633BB)

US-17 (Wilmington Bypass) From SR-1430 (Cedar Hill Road) To
West Of US-421 North Of Wilmington

September 17, 2013 Letting

To Whom It May Concern:

Reference is made to the plans and proposal form furnished to you on this project.

The following revision has been made to the Roadway plans:

On Sheet No. 14 the reference to "Temporary Railroad Grade Crossing" has been removed. Please void Sheet No. 14 in your plans and staple the revised Sheet No. 14 thereto. If the Contractor wants to pursue a temporary grade crossing at this location he must make his own arrangements/agreement directly with the railroad company.

Sheet No. 15 was revised to add "rip rap" and "filter fabric" at the end of the MSE Wall. Please void Sheet No. 15 in your plans and staple the revised Sheet No. 15 thereto.

The following revisions have been made to the Structure plans:

- Sheet No. S-27 Revised to show the correct hatch fill for the temporary work bridge
- Sheet No. S-28 Revised note to require Class AA concrete for diaphragms for Bents 5 thru 8
- Sheet No. S-44 Revised to show an optional construction joint and to remove reference to jacking detail

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT UNIT
1591 MAIL SERVICE CENTER
RALEIGH NC 27699-1591

TELEPHONE: 919-707-6900
FAX: 919-250-4119
WEBSITE: www.ncdot.gov

LOCATION:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

- Sheet No. S-49 Revised to show an optional construction joint
- Sheet No. S-256 Revised to show the correct hatch fill for the temporary work bridge
- Sheet No. S-257 Revised note to require Class AA concrete for diaphragms for Bents 5 thru 8
- Sheet No. S-273 Revised to show an optional construction joint and to remove reference to jacking detail
- Sheet No. S-278 Revised to show an optional construction joint
- Sheet No. S-631 Revised the "Total Bill of Material" column for HP 12 X 53 piles to remove the word "Galvanized"

Please void the above listed sheets in your Structure plans and staple the revised sheets thereto.

The following revision has been made to the Structure Sub-surface plans:

Sheet Nos. 10 through 16 of 16 for the Bridge on US17 over Progress Energy Spur Line and SR 1394 were inadvertently omitted. Please staple Sheet Nos. 10 thru 16 of 16 in your plans after Sheet No. 9.

The following revisions have been made to the proposal form:

On Page Nos. 88 and 89 the project special provision entitled "Utilities By Others" has been revised. Please void Page Nos. 88 and 89 in your proposal and staple the revised Page Nos. 88 and 89 thereto.

Page No. R-1 has been revised to indicate that permits have been received. Please void Page No. R-1 in your proposal and staple the revised Page No. R-1 thereto.

New Page Nos. R-2 thru R-70 had been added to include the 404, 401 and CAMA permits required for the project and the draft U. S. Coast Guard permit conditions. Please staple New Page Nos. R-2 thru R-70 in your proposal after revised Page No. R-1.

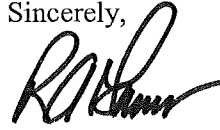
On the item sheets the following pay item quantity has been revised:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
231-8505000000-E-460	Vertical Concrete Barrier Rail	15,809.5 LF	28,809.47 LF

The Contractor's bid must be based on this revised pay item quantity. The contract will be prepared accordingly.

The Expedite File has been updated to reflect this revision. Please download the Expedite Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

Sincerely,



R. A. Garris, PE
Contract Officer

RAG/jag

Attachments

cc: Mr. Ron Hancock, PE
Ms. Karen Fussell, PE
Ms. D. M. Barbour, PE
Mr. J. V. Barbour, PE
Mr. R.E. Davenport, PE
Mr. G. R. Perfetti, PE
Ms. Lori Strickland
Project File (2)

Mr. Ray Arnold, PE
Ms. Natalie Roskam, PE
Ms. Penny Higgins
Ms. Jaci Kincaid
Mr. Ronnie Higgins
Mr. Larry Strickland
Ms. Marsha Sample

Revised 8-29-13

88

County: Brunswick/New Hanover
Project: R-2633BB

PROJECT SPECIAL PROVISIONS

Utility

UTILITIES BY OTHERS

General:

The following utility companies have facilities that will be in conflict with the construction of this project.

- A) Progress Energy – Power (Distribution)
- B) Progress Energy – Power (Transmission)
- C) AT&T – Telephone (Fiber Optic Cable)
- D) Piedmont Natural Gas – Gas

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted and are therefore listed in these special provisions for the benefit of the Contractor. All utility work listed herein will be done by the utility owner. All utilities are shown on the plans from the best available information.

The Contractor's attention is directed to Article 105-8 of the Standard Specifications.

Utilities Requiring Adjustment:

- A) Progress Energy – Power (Distribution)
 - 1) See Utilities by Others Plans.
 - 2) Contact person is Mr. Eddie Watkins 919-882-5051
 - 3) Relocation will be completed by 11/1/2013.
- B) Progress Energy – Power (Transmission)
 - 1) See Utilities by Others Plan
 - 2) Contact person is Mr. Jamie Loy 919-546-6034
 - 3) Relocation has been completed.
- C) AT & T – Telephone (Fiber Optic Cable)
 - 1) See Utilities by Others Plans.
 - 2) Mr. Shannon Coston 910-341-1623
 - 3) Relocation will be completed by 9/15/2013 with the exception of the cable adjustment at bridge wing wall Ramp B, Sheet 15 (approx. station SVRD7 23+00, 80' left). Contractor shall give AT&T three day notice and allow the two days to make the adjustment.

Revised 8-29-13

89

D) Piedmont Natural Gas – (Gas)

- 1) See Utilities by Others Plans.
- 2) Contact person is Mr. Dave Vena 704-731-4496
- 3) Relocation will be completed by 12/31/2013 with the exception of the gas main relocation on Parcel 59A (approximately 260' left of Line –L- at Sta. 317+60). Once the multi-story building is removed, Piedmont Natural Gas Company will require 90 days to relocate the gas main.

NOTE: All other utilities will remain in place and will be adjusted as necessary.

PROJECT SPECIAL PROVISION

(10-18-95)

Z-1

PERMITS

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

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

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

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

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

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

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

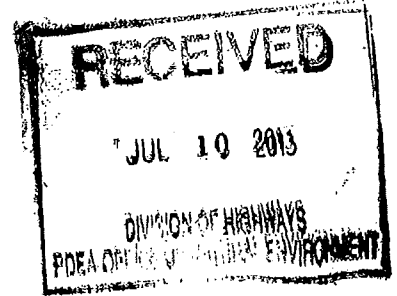
PLEASE NOTE - The following sheets, in the approved permit, were not made part of this contract:

- Sheets 2 through 42 of 73
- Sheets 62 through 67 of 73
- Sheets 2, 3, 4, 9, 10, 12 of 15



REPLY TO
ATTENTION OF:

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



July 9, 2013

Regulatory Division

Action ID No. SAW-1994-03552

Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
N.C. Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Thorpe:

Reference the Department of the Army (DA) permit issued on February 28, 2011, for the discharge of fill material into waters and wetlands adjacent to various Creeks, and their tributaries in order to construct Section A of TIP# R -2633 (Wilmington Bypass), Brunswick County, North Carolina. Reference is also made to your permit modification dated April 8, 2013 with revisions dated May 2, 6, 14, and 24, 2013. With the referenced revisions and updated information received for Section B, which totals 8.02 miles starting along Highway 74/76 in Leland, Brunswick County and terminating at US 421 north of Wilmington in New Hanover County, the existing permit is currently being modified to include the Section B.

I have determined that the proposed project modifications described above are not contrary to the public interest and consistent with the 404 (B)(1) and therefore, the DA permit is hereby modified. The following conditions specific to Section B have been added:

All original conditions in the February 28, 2011 permit remain valid and are enforceable with Section B authorization. The Special Conditions for the permit modification are the following:

1. This permit modification only authorizes work on Section B of TIP R-2633. The permittee has minimized impacts to waters and wetlands to the maximum extent practicable, any modifications to the plans, and a compensatory mitigation plan, have been approved by the US Army Corps of Engineers (COE). Approved permit plans for Section B are attached.
2. In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements

-2-

of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit modification authorization.

Section A impact breakdown is:

- Riparian 7.16 acres (2:1 ratio from offsite) = 14.32 acres
- Non Riparian 16.38 acres (2:1 ratio from offsite) = 32.76 acres
- Stream 504 linear feet (2:1 ratio from offsite) = 1008 linear feet

Section B impact breakdown is:

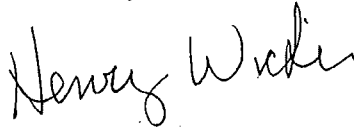
- Riparian 0.12 acre (2:1 ratio from offsite) = 0.24 acre
- Non Riparian 39.65 acres (2:1 ratio from offsite) = 79.30 acres
- Stream 5 linear feet (2:1 ratio from offsite) = 10 linear feet

Total: Riparian 14.56 acres, Non riparian 112.06, and stream 1,018 linear feet

The attached mitigation transfer form will cover the combined impacts of Section A and B.

This modification approval will be utilized for future compliance of the project. If you have questions, please contact Brad Shaver of the Wilmington Regulatory Field Office, at telephone (910) 251-4611.

Sincerely,



Steven A. Baker
Colonel, U. S. Army
District Commander

Enclosures

Copies Furnished (electronic w/o attachments):

Mr. Mason Herndon, NCDWQ
Mr. Stoney Mathis, NCDOT
Mr. Chris Rivenbark, NCDOT
Mr. Rachelle Beauregard, NCDOT
Mr. Chris Militscher, USEPA
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC
Ms. Beth Harmon, NCEEP
Mr. Todd Tugwell, USACE

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

Permittee: North Carolina Department of Transportation
 Project Name: R-2633 A and B Wilmington Bypass

Action ID: SAW-1994-03552
 County: Brunswick

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

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

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation*

8-digit HUC and Basin: 03030005, Cape Fear River Basin

Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
509				7.28	56.03	

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

Compensatory Mitigation Requirements:

8-digit HUC and Basin: 03030005, Cape Fear River Basin

Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
1,018				14.56	112.06	

Mitigation Site Debited: NCEEP

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

Section to be completed by the Mitigation Sponsor

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

Mitigation Sponsor Name: _____

Name of Sponsor's Authorized Representative: _____

 Signature of Sponsor's Authorized Representative

 Date of Signature

USACE Wilmington District
Compensatory Mitigation Responsibility Transfer Form, Page 2

Conditions for Transfer of Compensatory Mitigation Credit:

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

Comments/Additional Conditions:

This transfer form combines the impacts previously authorized in the section A authorization and combines them with the new section B authorization impact numbers and required mitigation.

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

USACE Project Manager: Brad Shaver
 USACE Field Office: Wilmington Regulatory Field Office
 US Army Corps of Engineers
 69 Darlington Avenue
 Wilmington, NC 28403

Email:



USACE Project Manager Signature

July 8, 2013

Date of Signature

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



North Carolina Department of Environment and Natural Resources

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

Stamp: JUN 13 2013
John E. Skvarla, III
Secretary

Pat McCrory
Governor

May 31, 2013

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: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000 with ADDITIONAL CONDITIONS for Proposed improvements to the Wilmington Bypass from US 17 in Brunswick County, north of the NC 87 intersection, to US 421 in New Hanover County. Federal Aid Project Nos. NHF-0017(96) and STM-0017(97), State Project Nos. 34491.1.3.GV2 and 34497.3.ST1, Brunswick and New Hanover Counties, TIP R-2633AA/AB and R-2633B.

NCDWQ Project No. 20100867 v. 4

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3842 issued to The North Carolina Department of Transportation (NCDOT) dated January 7, 2011 and reissuance dated January 13, 2011.

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

Sincerely,

Charles Wakild
Director

Attachments

- cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office (electronic copy only)
- Stoney Mathis, Division 3 Environmental Officer
- Chris Militscher, Environmental Protection Agency (electronic copy only)
- Gary Jordan, US Fish and Wildlife Service (electronic copy only)
- Travis Wilson, NC Wildlife Resources Commission (electronic copy only)
- Rachelle Beaugard, NCDOT, Natural Environment Section (electronic copy only)
- Jason Elliot, NCDOT, Natural Environment Section (electronic copy only)
- Steve Sollod, NC Coastal Management (electronic copy only)
- Jim Stanfill, Ecosystem Enhancement Program
- Sonia Carrillo, NCDWQ Central Office
- File Copy

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

One
North Carolina
Naturally

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

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (NCDWQ) Regulations in 15 NCAC 2H .0500. This certification modification authorizes the NCDOT to impact 103.65 acres of jurisdictional wetlands, 0.22 acres of isolated wetlands, 0.23 acres of waters and 978 linear feet of jurisdictional streams in Brunswick and New Hanover Counties. The project shall be constructed pursuant to the modification dated received April 3, 2013 and revisions received on May 8, 2013, May 14, 2013 and May 24, 2013. The modified authorized impacts are as described below:

Stream Impacts in the Cape Fear River Basin

Site	Station	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
SECTION AA & AB⁽¹⁾							
Total		16	115	683	30	844	627
SECTION B							
19	-Y7- 52+90	0	0	5	39	44	0
19	-Y7 DET- 16+45	0	0	0	90	90	0
Total		0	0	5	129	134	0
Project Total		16	115	688	159	978	627

⁽¹⁾Impacts authorized in the original 401 certification dated January 7, 2011, reissuance on January 11, 2011 and modifications dated May 9, 2011 and April 5, 2012.

Total Stream Impact for Project: 978 linear feet (134 linear feet for Section B)

Wetland Impacts in the Cape Fear River Basin

Site	Station	Wetland Type ⁽¹⁾	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)	Impacts Requiring Mitigation (ac)
SECTION AA & AB⁽²⁾									
Total			22.56	0.53	0.34	1.57	1.70	26.70	24.47
SECTION B									
* 3	-LREV- 339+73 to 358+92	NR	7.45	0	0.03	0	0.58	8.06	7.48
* 5	-LREV-372+74 to -L-85+08	NR	1.04	0	0	0	0.12	1.16	1.04
* 6	-L- 109+28 to 134+54	NR	9.72	0	0	0	1.13	10.85	9.72
* 6A	-L- 138+11 to 140+70	NR	0.68	0	0	0	0	0.68	0.68
* 6B	-L-141+20 to 144+29	NR	0.41	0	0	0	0.02	0.43	0.41
* 7	-L- 146+78 to 165+66	NR	10.55	0	0	0	0.98	11.53	10.55
* 9	-L- 186+97 to 191+88	NR	1.04	0	0	0	0.09	1.13	1.04
* 11	-L- 194+75 to 216+13	NR	8.72	0	0	0	0.93	9.65	8.72
* 14	-L- 264+32 to 266+94	R	0	0	0	0.03	0.30	0.33	0.03
* 15	-L- 319+46 to 387+92	R	0.05	0	0.93 ⁽³⁾	0	29.40	30.38	0.05
19	-Y7 DET- 16+45	R	0	0.06	0	0	0.03	0.09	0
20	-Y8- 47+74 to 49+95	R	<0.01	0	0	0.04	0.31	0.35	0.04
	EC measures in HC areas		0	0.75	0	0	0	0.75	0
SECTION B UTILITIES									
* 1	-Y8- 48+60	R	0	0	0	0	0.15	0.15	0
* 1	-Y8- 48+58	R	<0.01	0	0	0	0	<0.01	0
* 2	-L- 138+96 to 141+92	NR	0	0	0	0	0.83	0.83	0
* 2	-L- 140+36 to 140+74	NR	0	0	0.02 ⁽³⁾	0	0	0.02 ⁽³⁾	0
* 2	-L- 140+62 to 147+63	NR	0	0	0	0	0.48	0.48	0
* 2	-L- 147+50 to 147+89	NR	0	0	0.02 ⁽³⁾	0	0	0.02 ⁽³⁾	0
2	-L- 147+75 to 148+80	NR	0	0	0	0	0.05	0.05	0

Total*	39.67	0.81	1.00	0.07	35.40	76.95	39.77
Project Total	62.23	1.34	1.34	1.64	37.10	103.65	64.24

⁽¹⁾ Wetland Type: R = Riparian; NR=Non-Riparian. ⁽²⁾ Impacts authorized in the original 401 certification dated January 7, 2011, reissuance on January 11, 2011 and modifications dated May 9, 2011 and April 5, 2012. ⁽³⁾ Denotes temporary excavation and does not require mitigation. *totals may not match sum of individual impacts due to rounding.

Total Wetland Impact for Project: 103.65 (76.95 acres for Section B)

Isolated Wetland Impacts in the Cape Fear River Basin

Site	Station	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)	Impacts Requiring Mitigation (ac)
SECTION AA & AB⁽¹⁾								
Total		0	0	0	0	0	0	0
SECTION B								
16	-L-399+43 to 400+51	0.22	0	0	0	0	0.22	0.22
Total		0.22	0	0	0	0	0.22	0.22
Project Total		0.22	0	0	0	0	0.22	0.22

Total Isolated Wetland Impact for Project: 0.22 acres.

Open Water (Ponds/Tributary) Impacts in the Cape Fear River Basin

Site	Station	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
R-2303A⁽¹⁾				
*	Total	0	0	0
R-2303B				
11	-L- 194+75 to 216+13	0.07	<0.01	0.07
14	-L- 264+32 to 266+94	<0.01	0	<0.01
15	-L- 319+46 to 387+92	0.13	0.03	0.16
Total		0.20	0.03	0.23
Project Total		0.20	0.03	0.23

⁽¹⁾Impacts authorized in the original 401 certification dated January 7, 2011, reissuance on January 11, 2011 and modifications dated May 9, 2011 and April 5, 2012.

Total Open Water Impact for Project: 0.23 acres. (0.23 acres for Section B)

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

This approval is only valid for the purpose and design that you submitted in your modified application dated received April 3, 2013 and revisions received on May 8, 2013. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 7, 2011 (reissuance on January 11, 2011) and modifications dated May 9, 2011 and April 5, 2012 still apply except where superceded by this certification. Should your project change, you are required to notify NCDWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

Project Specific Conditions

1. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 7, 2011 (reissuance on January 11, 2011) and modifications dated May 9, 2011 and April 5, 2012 still apply except where superseded by this certification
2. The B-Section of this project must be constructed in accordance with the Stormwater Management Plan submitted in the application and dated April 3, 2013.
3. Compensatory mitigation for permanent impacts to 627 linear feet of streams is required for R-2633AA & AB and R-2633B based on the final impact numbers provided for the B-section. Mitigation will be provided through a combination of both onsite and offsite mitigation. Mitigation will be credited as detailed below:
 - a. The NCDOT will provide compensatory mitigation for 180 linear feet of streams to be performed onsite at Bishops Branch Mitigation Site at a required 1:1 ratio. Compensatory mitigation for the above impacts to jurisdictional streams will be through a combination of restoration and preservation. The NCDOT will restore 66 linear feet of stream via removal of the existing culvert at a 1:1 credit ratio (66 linear feet). Additionally, 570 linear feet of preservation will occur at a 5:1 ratio for 114 linear feet of credit. The onsite restoration shall be constructed in accordance with the design submitted in your application dated October 18, 2010.
 - b. All onsite mitigation requirements listed in Conditions 17 b, 17c and 17d in the original Water Quality Certification dated January 7, 2011 (reissuance on January 11, 2011) still apply.
 - c. We understand that you have chosen to perform compensatory mitigation for the remaining permanent impacts to 447 linear feet of jurisdictional streams through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated May 30, 2013 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.

Based on the above information, stream mitigation can be summarized as follows:

Mitigation Source	Mitigation Required (feet)	Debit Ratio	Debits Required (feet)
Sections AA & AB			
EEP	447	1:1	447
On Site Restoration	66	1:1	66
On Site Preservation	114	5:1	570
TOTAL:	627		1,083
Section B			
TOTAL:	0		0
Project Total			
TOTAL:	627		1,083

4. Mitigation for permanent impacts to 64.46 acres of wetland (404 and isolated) is required for R-2633AA & AB and R-2633B based on the final impact numbers provided for the B-section. Mitigation will be provided through a combination of both onsite and offsite mitigation. Mitigation will be credited as detailed below:
 - a. The NCDOT will provide compensatory mitigation impacts for 1.22 acres (0.63 acres restoration and 0.59 acres preservation) on site at the Bishop Branch Mitigation Site. The permittee shall comply with the on-site wetland mitigation plan submitted with the application dated October 18, 2010.
 - b. All onsite mitigation requirements listed in Conditions 18 b and 18c in the original Water Quality Certification dated January 7, 2011 (reissuance on January 11, 2011) still apply.
 - c. We understand that you have chosen to perform compensatory mitigation for the remaining 63.24 acres of impact (6.99 acres riparian and 56.25 acres non-riparian) wetlands through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the

mitigation for the project. EEP has indicated in a letter dated May 30, 2013 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010.

Based on the above information, wetland mitigation can be summarized as follows:

Mitigation Source	Wetland Type	Mitigation Credits Required	Debit Ratio	Credit or Debits (acres) Required
Sections AA & AB				
EEP	Riparian	6.87	2:1	13.74 (credits)
EEP	Non Riparian	16.38	2:1	32.76 (credits)
On Site Restoration	Riparian	0.63	1:1	0.63 (acres)
On Site Preservation	Riparian	0.59	5:1	2.95 (acres)
Section B				
EEP	Riparian	0.12	2:1	0.24
EEP	Non Riparian	39.87	2:1	79.74

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

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

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

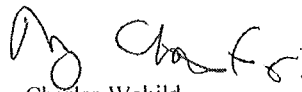
Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

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

Mr. Lacy Presnell, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

This the 31st day of May 2013

DIVISION OF WATER QUALITY



Charles Wakild
Director

Addendum No. 1

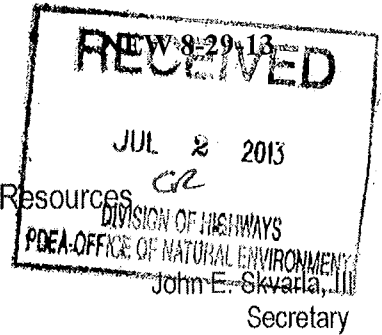
R-11



North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Pat McCrory
Governor

Braxton C. Davis
Director



June 28, 2013

Gregory J. Thorpe, Ph.D.
Environmental Manager Director
Project Development and Environmental Analysis Branch
NC Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Dr. Thorpe:

The enclosed permit constitutes authorization under the Coastal Area Management Act, and where applicable, the State Dredge and Fill Law, for you to proceed with your project proposal. The original (buff-colored form) is retained by you and it must be available on site when the project is inspected for compliance. Please sign both the original and the copy and return the copy to this office in the enclosed envelope. Signing the permit and proceeding means you have waived your right of appeal described below.

If you object to the permit or any of the conditions, you may request a hearing pursuant to NCGS 113A-121.1 or 113-229. Your petition for a hearing must be filed in accordance with NCGS Chapter 150B with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27611-6714, (919) 733-2698 within twenty (20) days of this decision on your permit. You should also be aware that if another qualified party submits a valid objection to the issuance of this permit within twenty (20) days, the matter must be resolved prior to work initiation. The Coastal Resources Commission makes the final decision on any appeal.

The project plan is subject to those conditions appearing on the permit form. Otherwise, all work must be carried out in accordance with your application. Modifications, time extensions, and future maintenance require additional approval. Please read your permit carefully prior to starting work and review all project plans, as approved. If you are having the work done by a contractor, it would be to your benefit to be sure that he fully understands all permit requirements.

From time to time, Department personnel will visit the project site. To facilitate this review, we request that you complete and mail the enclosed Notice Card just prior to work initiation. However, if questions arise concerning permit conditions, environmental safeguards, or problem areas, you may contact Department personnel at any time for assistance. By working in accordance with the permit, you will be helping to protect our vitally important coastal resources.

Sincerely,

Douglas V. Huggett
Major Permits and Consistency Manager

Enclosure

1638 Mail Service Center, Raleigh, NC 27699-1638
Internet: www.nccoastalmanagement.net

An Equal Opportunity \ Affirmative Action Employer

Permit Class
NEW

Permit Number
76-13

STATE OF NORTH CAROLINA
Department of Environment and Natural Resources
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1548

Authorizing development in Brunswick and New Hanover County at a new crossing of the Cape Fear River and Toomers Creek (US 17 Wilmington Bypass) as requested in the permittee's application dated 4/3/13, including the attached drawings as referenced in Condition No. 1 of this permit.

This permit, issued on 6/28/13, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

US 17 Bypass of Wilmington (TIP No. R-2633B)

- 1) Unless specifically altered herein, all work authorized by this permit shall be carried out in accordance with the following seventy seven (76) workplan drawings:

½ size drawings: Twenty six (26) drawings dated 11/30/12, five (5) drawings dated 12/3/12, two (2) drawings dated 2/8/13, three (3) drawings dated as received on 4/8/13, twenty four (24) drawings dated 5/2/13, three (3) drawings dated 5/6/13, two (2) drawings dated 5/14/13, and eleven (11) drawings dated 5/24/13.

(See attached sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

No Expiration Date, pursuant to GS 136-44.7B

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.

Douglas V. Haggitt
for

Braxton C. Davis, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

E. L. Luke for Gregory J. Thayer
Signature of Permittee

ADDITIONAL CONDITIONS

- 2) In accordance with project commitments made within the CAMA permit application, and in order to protect anadromous fish during spawning periods and through embryonic, larval or juvenile life stages, no in-water work shall be conducted in the Cape Fear River and Toomers Creek from February 1st through June 15th of any year without prior approval of the NC Division of Coastal Management (DCM), in consultation with the NC Wildlife Resources Commission (WRC) and the NC Division of Marine Fisheries (DMF). For the purposes of this moratorium, in-water is defined as extending 35 meters (115 feet) from the main channel where the vegetation line meets open water and into adjacent wetlands. The in-water work moratorium prohibits pile installation, both vibratory and impact, and activities associated with the construction of any temporary work bridge.
- 3) Unless specifically altered herein, the permittee shall implement NCDOT's Stream Crossing Guidelines for Anadromous Fish Passage.
- 4) The West Indian Manatee, *Trichechus manatus*, which is listed as a federally endangered species, has been reported in North Carolina waters. Therefore, in accordance with commitments made by the permittee and in order to protect the West Indian Manatee all work should be done during the period from November 1 to May 31. If work must be done during the period from June through October the enclosed guidelines prepared by the U.S. Fish and Wildlife Service (USFWS), entitled "Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters (rev. 06/03)" shall be followed.
- 5) The authorized project is located within a Primary Nursery Area (PNA). Therefore, in accordance with T15A:07H.0208 of the rules of the Coastal Resources Commission, no new dredging or excavation within PNA shall be permitted. Dredging in any manner, including "kicking" with boat propellers is not authorized. This prohibition shall be applied and enforced throughout the construction and any following maintenance activities.
- 6) The permanent and temporary work bridge piles shall be installed with vibratory hammer, pile driver, or drilling. Should jetting of any bridge piles become necessary, additional authorization shall be required by DCM in consultation with the appropriate resource agencies.
- 7) Turbidity curtains shall be used to isolate all in-water work areas from the adjacent waterbody, including but not limited to pile driving/drilling or removal activities and excavation and filling activities. The turbidity curtains shall encircle the immediate work area but, shall not impede navigation. The turbidity curtains shall be properly maintained and retained in the water until construction is complete and shall only be removed when turbidity within the curtains reaches ambient levels.
- 8) Drill slurry, uncured concrete, and water that has been in contact with uncured concrete, shall not be allowed to contact waters of the State or water that will enter waters of the State. Drilling fluids shall be disposed of in an upland disposal site. Water returning to the river shall be of sufficient quality so as not to pose as threat to aquatic organisms or otherwise violate State water quality standards.
- 9) Excavated material from the drill-shaft construction shall be removed from the encasements directly into containment vessels and sufficient efforts shall be utilized to minimize spillage of spoil material into waters of the State.

ADDITIONAL CONDITIONS

- 10) Excavated material from the drill-shaft construction shall be removed from the encasements directly into containment vessels and sufficient efforts shall be utilized to minimize spillage of spoil material into waters of the State.
- 11) The permittee and/or his contractor shall exercise all available precautions in day-to-day operations to prevent waste from entering the adjacent waters and wetlands.
- 12) Any debris resulting from the construction of the new bridges shall not enter wetlands or waters of the State, even temporarily.
- 13) Any waste materials and debris associated with bridge construction or other activities shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations are obtained from any relevant state, federal, or local authorities.
- 14) The permittee and/or his contractor shall provide for proper storage and handling of all oils, chemicals, etc., necessary to carry out the project.
- 15) Construction staging areas shall be located only in upland areas, and not in wetlands or waters of the State.
- 16) Placement of riprap shall be limited to the areas as depicted on the attached workplan drawings. The riprap material shall be free from loose dirt or any pollutant. The riprap material shall consist of clean rock or masonry materials, such as but not limited to, granite, marl, or broken concrete.
- 17) The temporary work bridges shall be removed in their entirety within 90 days after they are no longer needed. However, if this timeframe occurs while the moratorium referenced in Condition No. 2 of this permit is in effect, then the temporary work bridge shall be removed in its entirety within 90 days of the moratorium end date.
- 18) The permittee shall minimize the need to cross wetlands in transporting equipment to the maximum extent practicable.
- 19) Construction mats shall be utilized to support equipment within wetland areas to minimize temporary wetland impacts. These mats shall be removed immediately following project completion.
- 20) There shall be no clearing or grubbing of wetlands outside of the areas indicated on the attached workplan drawings without prior approval from DCM.
- 21) In accordance with project commitments made within the permit application, bridge deck drains shall not be located over the open waters of the Cape Fear River or Toomers Creek and shall not cause erosion of adjacent wetlands.
- 22) During bridge construction, the permittee shall make every attempt to allow the same navigation that is currently possible in the Cape Fear River. If this is not possible, then adequate notice shall be provided to the public that navigation will be limited during construction. The notice shall include an estimate of the amount of time that the limited navigation will occur.

ADDITIONAL CONDITIONS

- 23) During bridge construction, the permittee shall make every attempt to allow the same navigation that is currently possible in the Cape Fear River. If this is not possible, then adequate notice shall be provided to the public that navigation will be limited during construction. The notice shall include an estimate of the amount of time that the limited navigation will occur.
- 24) In accordance with project commitments made within the Record of Decision, dated October 2007, protective fencing shall be installed to ensure that no inadvertent impacts occur to populations of Pickering's Dawnflower, a listed Federal Species of Concern and state-listed endangered species, outside the limits of the construction easement.

Excavation and Fill

- 25) No excavation or filling shall take place at any time in any vegetated wetlands or surrounding waters outside of the alignment of the areas indicated on the attached workplan drawings, without permit modification.
- 26) Material excavated may be used in fill areas associated with the project or shall be removed from the site and taken to an approved high ground location.
- 27) All excavated materials shall be confined above normal high water level and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.
- 28) No excavated or fill material shall be placed at any time in any vegetated wetlands or surrounding waters outside of the alignment of the areas as indicated on the attached workplan drawings, without permit modification.
- 29) The temporary placement and double handling of any excavated or fill material within waters or vegetated wetlands is not authorized.
- 30) All fill material shall be clean and free of any pollutants except in trace quantities.

Barges

- 31) Barges shall be removed promptly when they are no longer needed.
- 32) Barges shall be utilized only in areas of sufficient depth such that the barges do not rest on the bottom during periods of low tide.
- 33) Caution shall be exercised with placement and removal of any barges to ensure that impacts to shallow water habitat are avoided and minimized to the maximum extent practicable.

ADDITIONAL CONDITIONS**Sedimentation and Erosion Control**

- 34) This project shall conform to all requirements of the NC Sedimentation Pollution Control Act and NC DOT's Memorandum of Agreement with the Division of Energy, Mineral and Land Resources.
- 35) Unless specifically altered herein, the permittee shall follow "Best Management Practices for the Protection of Surface Waters (3/97)" and shall also implement sedimentation and erosion control measures sufficient to protect aquatic resources. At a minimum, appropriate sedimentation and erosion control devices, measures or structures shall be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses, and property (e.g. silt fence, diversion swales or berms, etc.).

Compensatory Mitigation

- 36) Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent any temporary Coastal Wetland impact area from re-attaining pre-project Coastal Wetland functions, the permittee shall monitor temporary Coastal Wetland impacts for three years after project completion. The permittee shall schedule a meeting with DCM to verify the extent and location of temporary impacts upon project completion. The permittee shall then provide an annual update on any Coastal Wetland areas temporarily impacted by this project. This annual update shall consist of photographs and written report on the progress of these temporarily impacted areas in re-attaining Coastal Wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with DCM to determine if the Coastal Wetland areas temporarily impacted by this project have re-attained pre-project Coastal Wetland functions. If at the end of 3 years the Coastal Wetland areas temporarily impacted by this project have not re-attained pre-project Coastal Wetland functions, DCM shall determine whether compensatory Coastal Wetland mitigation shall be required.

NOTE: The Ecosystem Enhancement Program (EEP) agreed to provide mitigation for the entire project (R-2633AA&AB and R-2633B) impacts of 7.28 acres of riparian wetlands, 56.25 acres of non-riparian wetlands, and 509.0 linear feet of stream impacts, in accordance to the EEP Mitigation Acceptance Letter, dated 5/30/13.

Utilities Relocation

- 37) Any relocation of utility lines that has not been previously permitted by DCM or is not already depicted on the attached work plan drawings, or described within the attached permit application, shall require approval by DCM, either under the authority of this permit, or by the utility company obtaining separate authorization.

General

- 38) The permittee and/or contractor shall contact the DCM Transportation Field Representative at (252) 808-2808 extension No. 208 to schedule a pre-construction conference prior to project initiation.

N.C. Department of Transportation
TIP No. R-2633B

Permit # 76-13
Page 6 of 6

ADDITIONAL CONDITIONS

- 39) DWQ authorized the proposed project (DWQ Project No. 20100867 v.4) on 5/31/13 under Certification No. 3842 as a modification to the original Water Quality Certification, dated 1/7/11 and reissued on 1/13/11. Any violation of the Certification approved by the DWQ shall be considered a violation of this CAMA permit.

NOTE: DWQ provided confirmation that the subject project is excluded from State Coastal Stormwater permitting requirements by way of the Stormwater Permit Exclusion letter, dated ~~12/17/10~~ *5/13/13* (Project No. SW8 101115).

NOTE: If it is determined that additional permanent and/or temporary impacts are necessary that are not shown on the attached permit drawings or described in the authorized permit application, permit modification or additional authorization from DCM shall be required.

NOTE: This permit does not eliminate the need to obtain any additional state, federal, or local permits, approvals, or authorizations that may be required, including, but not limited to, the US Army Corps of Engineers and/or the US Coast Guard.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

GUIDELINES FOR AVOIDING IMPACTS TO THE WEST INDIAN MANATEE Precautionary Measures for Construction Activities in North Carolina Waters

The West Indian manatee (*Trichechus manatus*), also known as the Florida manatee, is a Federally-listed endangered aquatic mammal protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and the Marine Mammal Protection Act of 1972, as amended (16 U.S.C 1461 *et seq.*). The manatee is also listed as endangered under the North Carolina Endangered Species Act of 1987 (Article 25 of Chapter 113 of the General Statutes). The U.S. Fish and Wildlife Service (Service) is the lead Federal agency responsible for the protection and recovery of the West Indian manatee under the provisions of the Endangered Species Act.

Adult manatees average 10 feet long and weigh about 2,200 pounds, although some individuals have been recorded at lengths greater than 13 feet and weighing as much as 3,500 pounds. Manatees are commonly found in fresh, brackish, or marine water habitats, including shallow coastal bays, lagoons, estuaries, and inland rivers of varying salinity extremes. Manatees spend much of their time underwater or partly submerged, making them difficult to detect even in shallow water. While the manatee's principal stronghold in the United States is Florida, the species is considered a seasonal inhabitant of North Carolina with most occurrences reported from June through October.

To protect manatees in North Carolina, the Service's Raleigh Field Office has prepared precautionary measures for general construction activities in waters used by the species. Implementation of these measure will allow in-water projects which do not require blasting to proceed without adverse impacts to manatees. In addition, inclusion of these guidelines as conservation measures in a Biological Assessment or Biological Evaluation, or as part of the determination of impacts on the manatee in an environmental document prepared pursuant to the National Environmental Policy Act, will expedite the Service's review of the document for the fulfillment of requirements under Section 7 of the Endangered Species Act. These measures include:

1. The project manager and/or contractor will inform all personnel associated with the project that manatees may be present in the project area, and the need to avoid any harm to these endangered mammals. The project manager will ensure that all construction personnel know the general appearance of the species and their habit of moving about completely or partially submerged in shallow water. All construction personnel will be informed that they are responsible for observing water-related activities for the presence of manatees.
2. The project manager and/or the contractor will advise all construction personnel that

there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act and the Endangered Species Act.

3. If a manatee is seen within 100 yards of the active construction and/or dredging operation or vessel movement, all appropriate precautions will be implemented to ensure protection of the manatee. These precautions will include the immediate shutdown of moving equipment if a manatee comes within 50 feet of the operational area of the equipment. Activities will not resume until the manatee has departed the project area on its own volition (i.e., it may not be herded or harassed from the area).

4. Any collision with and/or injury to a manatee will be reported immediately. The report must be made to the U.S. Fish and Wildlife Service (ph. 919.856.4520 ext. 16), the National Marine Fisheries Service (ph. 252.728.8762), and the North Carolina Wildlife Resources Commission (ph. 252.448.1546).

5. A sign will be posted in all vessels associated with the project where it is clearly visible to the vessel operator. The sign should state:

CAUTION: The endangered manatee may occur in these waters during the warmer months, primarily from June through October. Idle speed is required if operating this vessel in shallow water during these months. All equipment must be shut down if a manatee comes within 50 feet of the vessel or operating equipment. A collision with and/or injury to the manatee must be reported immediately to the U.S. Fish and Wildlife Service (919-856-4520 ext. 16), the National Marine Fisheries Service (252.728.8762), and the North Carolina Wildlife Resources Commission (252.448.1546).

6. The contractor will maintain a log detailing sightings, collisions, and/or injuries to manatees during project activities. Upon completion of the action, the project manager will prepare a report which summarizes all information on manatees encountered and submit the report to the Service's Raleigh Field Office.

7. All vessels associated with the construction project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than a four foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

8. If siltation barriers must be placed in shallow water, these barriers will be: (a) made of material in which manatees cannot become entangled; (b) secured in a manner that they cannot break free and entangle manatees; and, (c) regularly monitored to ensure that manatees have not become entangled. Barriers will be placed in a manner to allow manatees entry to or exit from essential habitat.

Prepared by (rev. 06/2003):
U.S. Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726
919/856-4520

Figure 1. The whole body of the West Indian manatee may be visible in clear water; but in the dark and muddy waters of coastal North Carolina, one normally sees only a small part of the head when the manatee raises its nose to breathe.

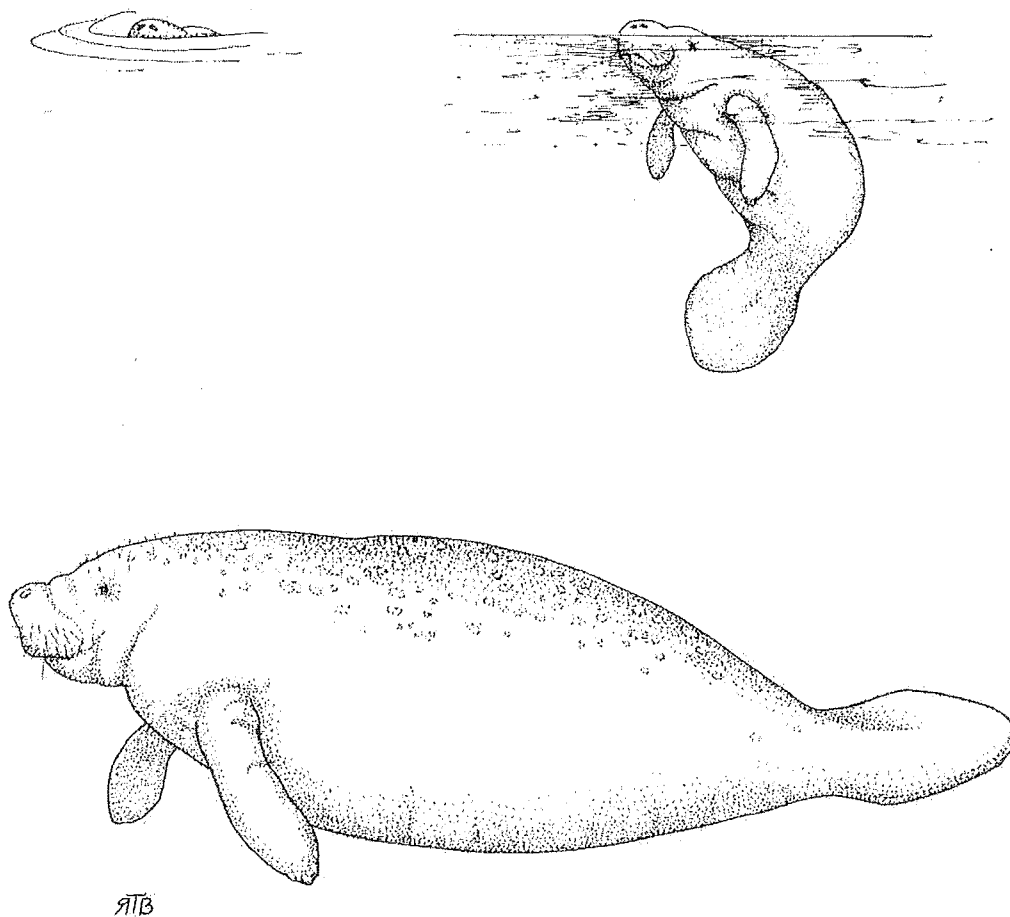
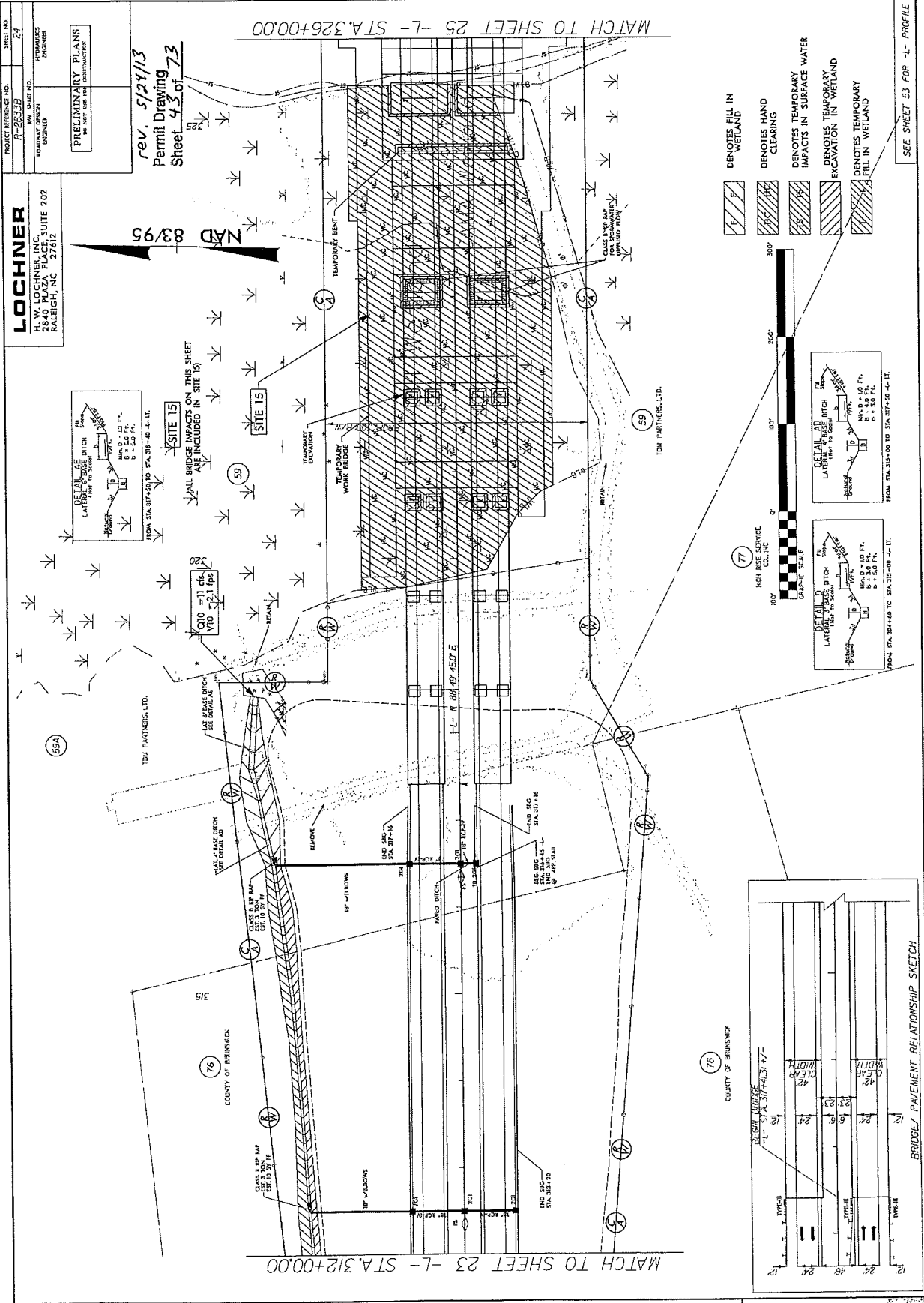


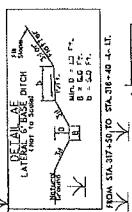
Illustration used with the permission of the North Carolina State Museum of Natural Sciences.
Source: Clark, M. K. 1987. Endangered, Threatened, and Rare Fauna of North Carolina: Part I. A re-evaluation of the mammals. Occasional Papers of the North Carolina Biological Survey 1987-3. North Carolina State Museum of Natural Sciences. Raleigh, NC. pp. 52.



PROJECT REFERENCE NO. R-22389
 SHEET NO. 24
 DATE 5/21/13
 ROADWAY DESIGNER HYDRAULIC ENGINEER
 SURVEYOR SHUNTER
 PROJECT MANAGER PLANS
 PROJECT NO. 13-000-000-0000

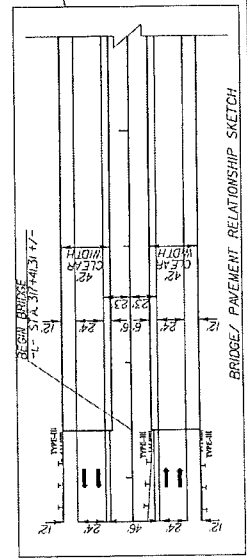
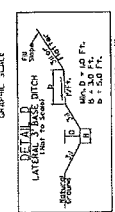
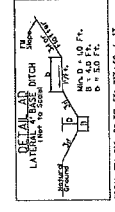
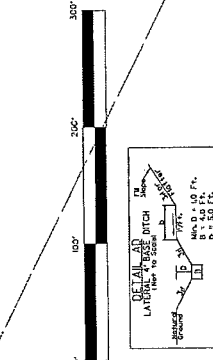
LOCHNER
 H. W. LOCHNER, INC.
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612

rev. 5/21/13
 Permit Drawing
 Sheet 43 of 73



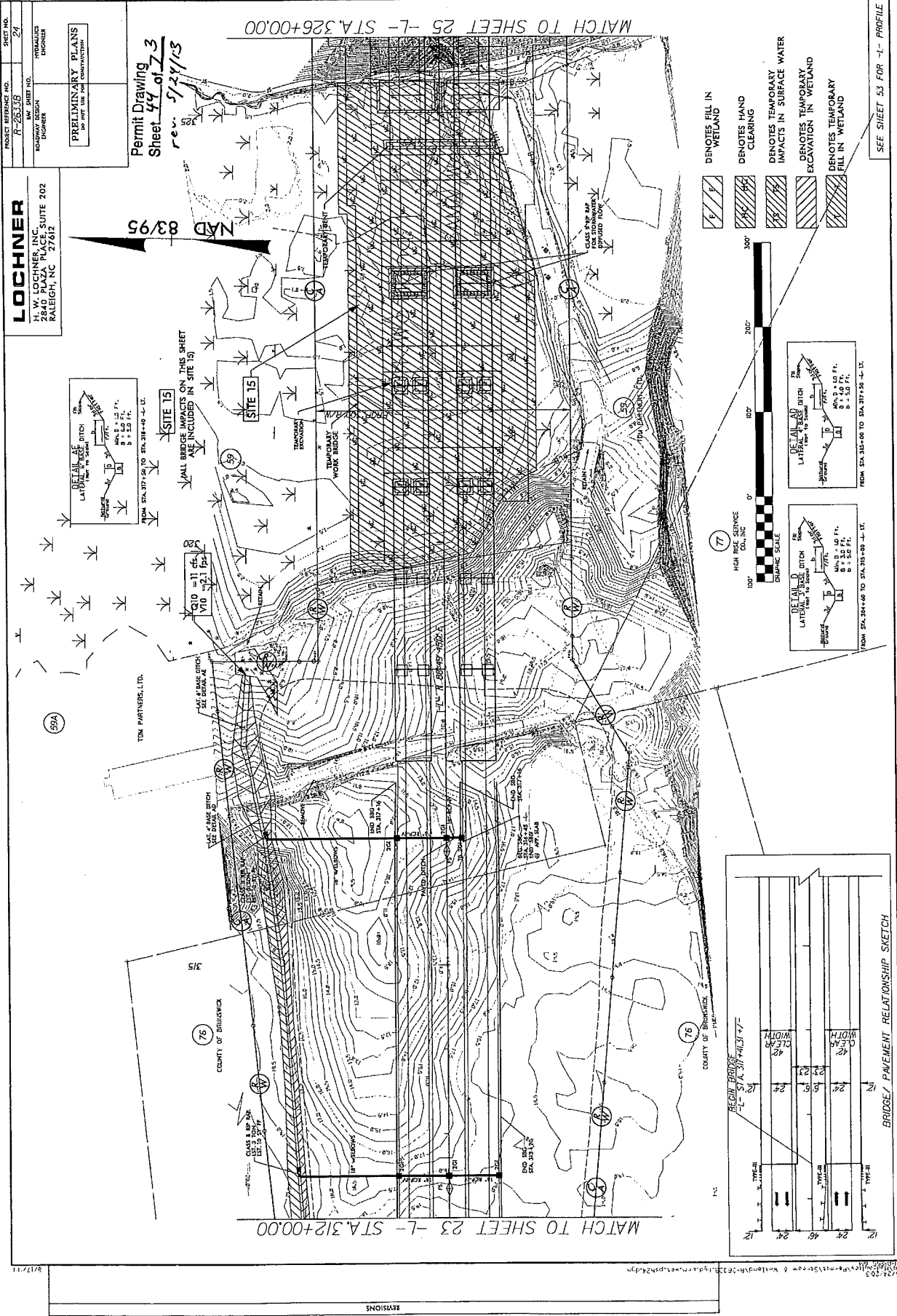
ALL BRIDGE IMPACTS ON THIS SHEET SHALL BE INCLUDED IN SHEET 15

- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY EXCAVATION IN WETLAND
- DENOTES TEMPORARY FILL IN WETLAND



BRIDGE PAVEMENT RELATIONSHIP SKETCH

REVISIONS

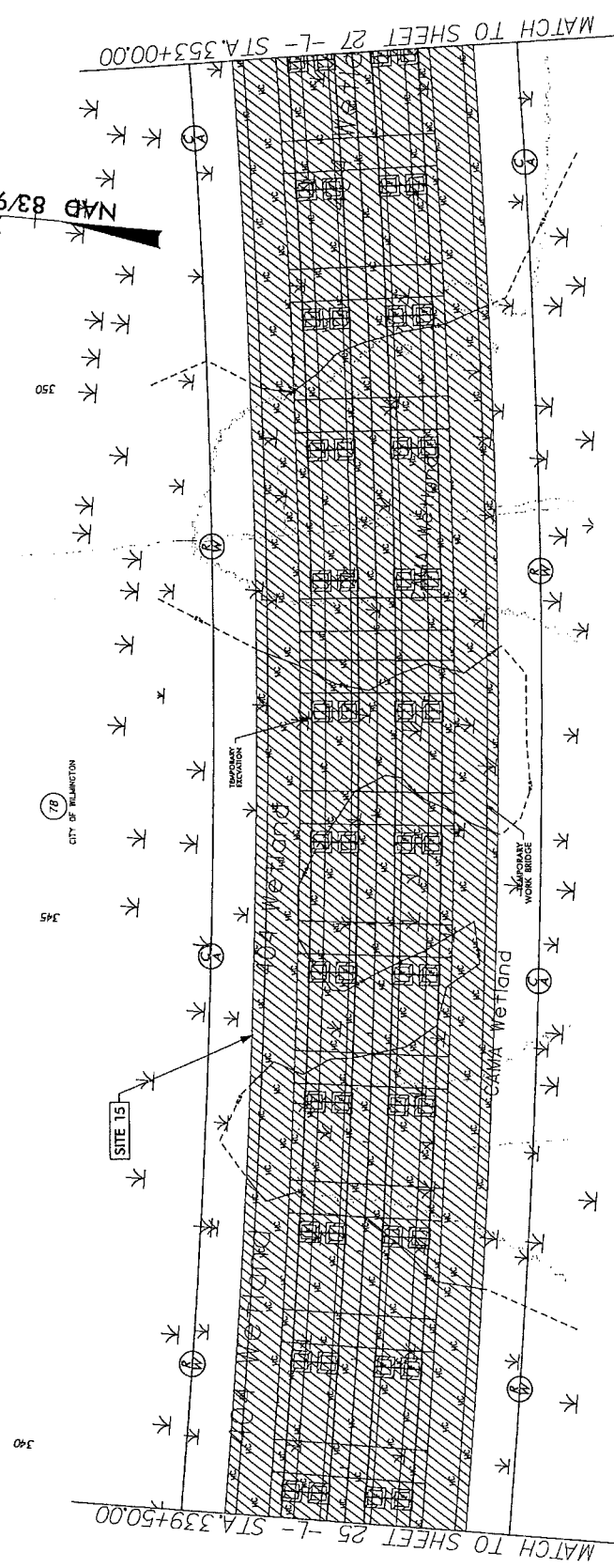
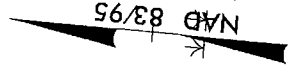





PROJECT REFERENCE NO. R-2633B
 SHEET NO. 26
 H.W. LOCHNER, INC.
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

Rev. 5/24/13
 Permit Drawing
 Sheet 47 of 73

LOCHNER
 H.W. LOCHNER, INC.
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612



-  DENOTES TEMPORARY EXCAVATION IN WETLAND
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING



SEE SHEET 54 FOR 'L' PROFILE

REVISIONS

LOCHNER

H. W. LOCHNER, INC. SUITE 202
1000 W. GARDNER STREET
RALEIGH, NC 27617

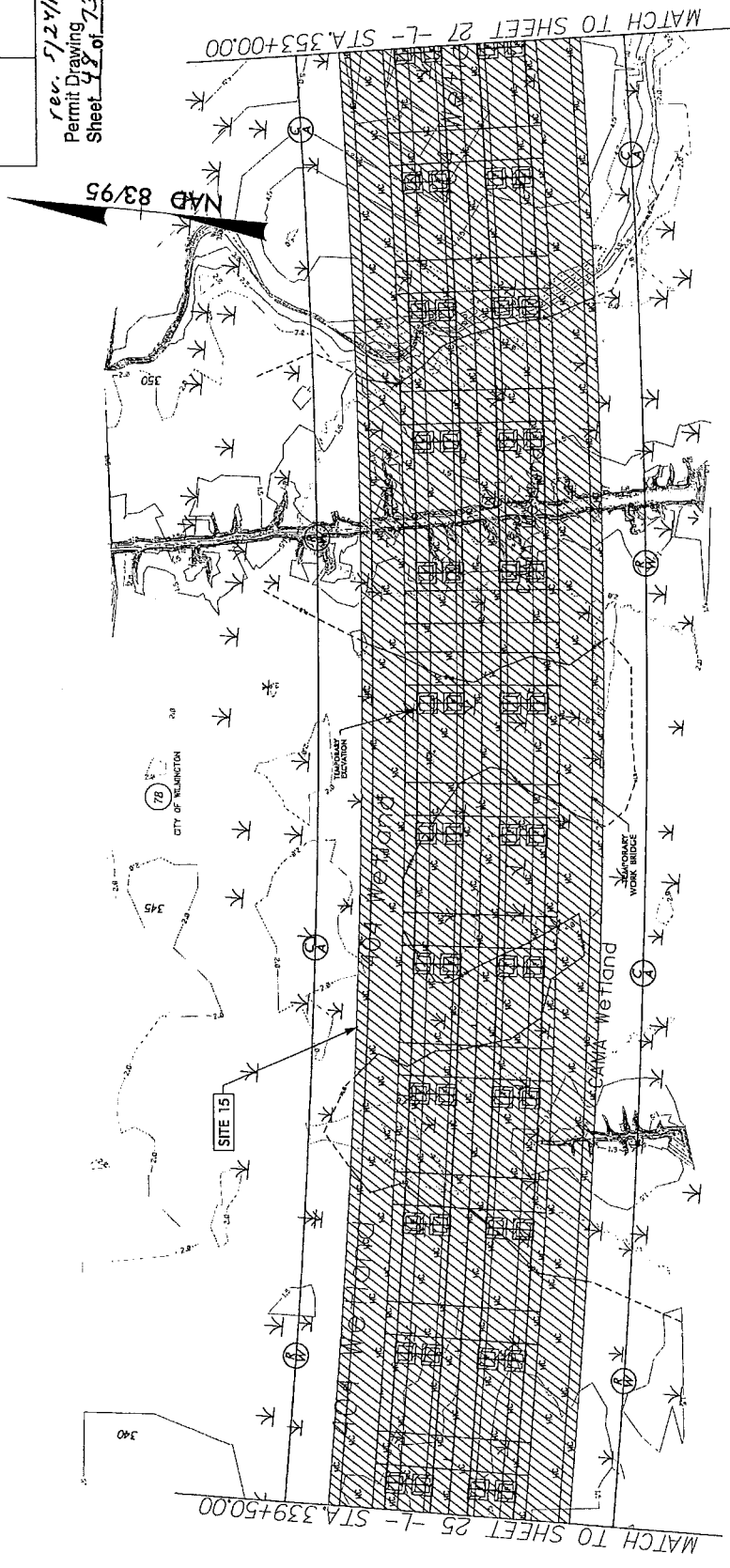
PROJECT REFERENCE NO.
R-26339




SHEET NO.
26

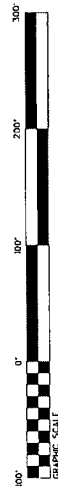
RAW SHEET NO.
HYDRAULIC ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Rev. 7/24/13
Permit Drawing
Sheet 42 of 73



-  DENOTES TEMPORARY EXCAVATION IN WETLAND
-  DENOTES FILL IN WETLAND
-  DENOTES HAND CLEARING



SEE SHEET 54 FOR "L" PROFILE

REVISED

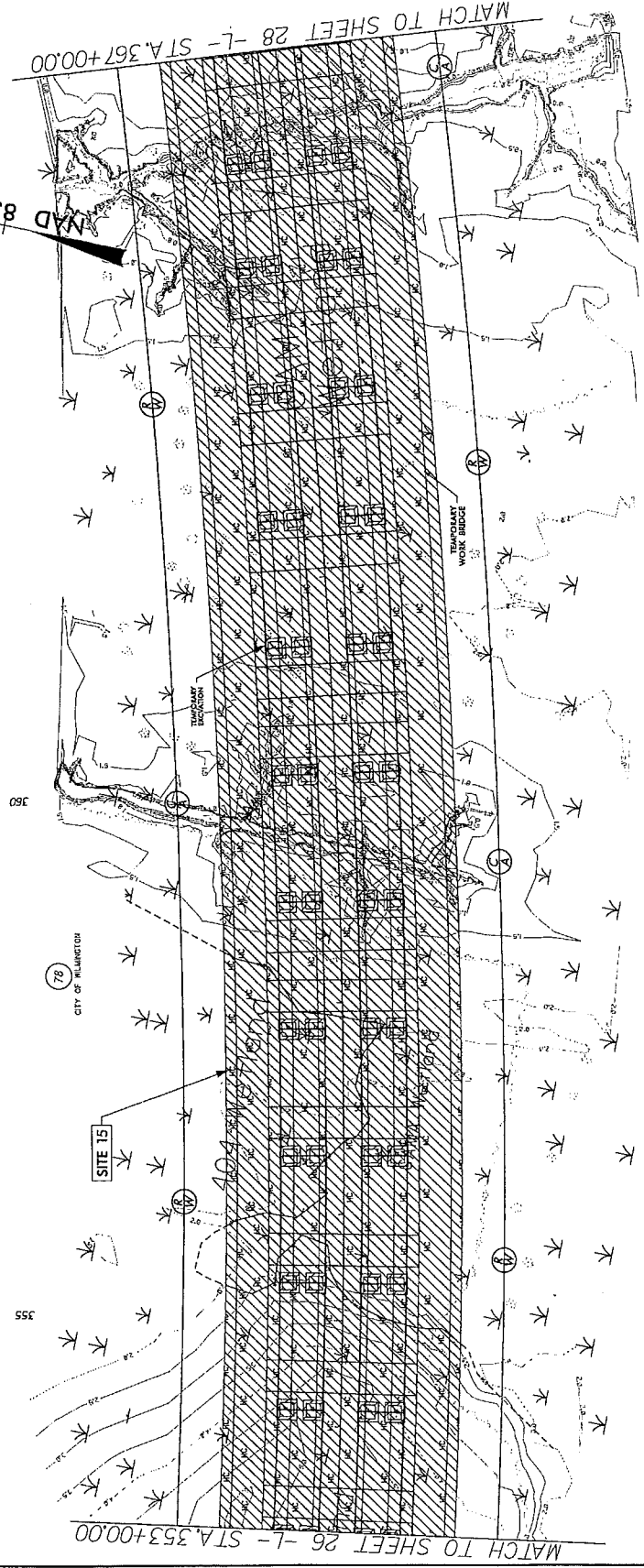
REVISIONS

PROJECT REFERENCE NO. R-2833B	SHEET NO. 27
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

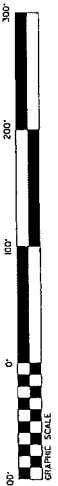
LOCHNER
 H. W. LOCHNER, INC.
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612

REV. 5/29/13
 Permit Drawing
 Sheet 49 of 73

MAD 83/95

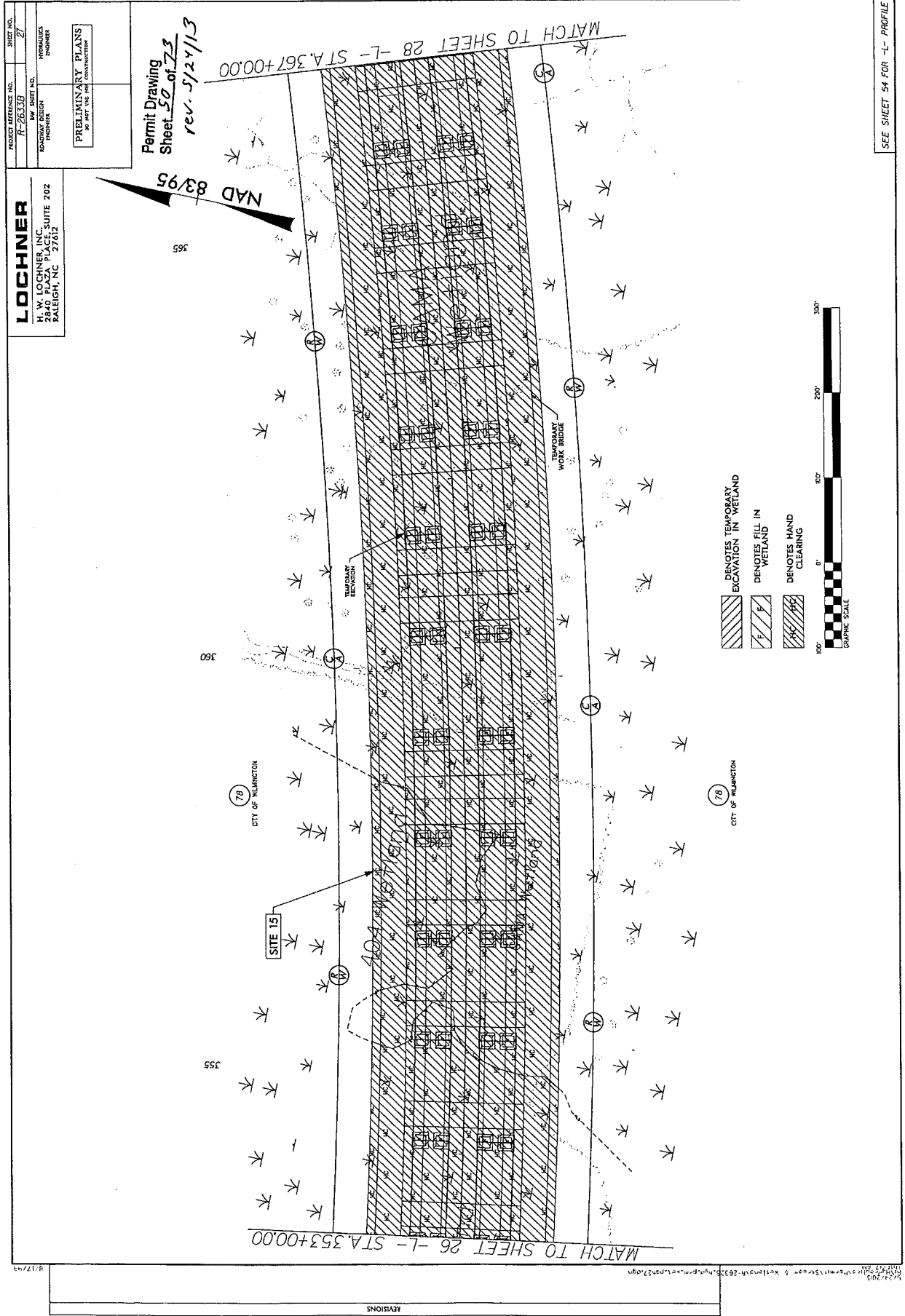


- DENOTES TEMPORARY EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING



SEE SHEET 54 FOR -C- PROFILE

REVISIONS



LOCHNER
 11 W. LOCHNER, INC.
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612

PROJECT REFERENCE NO. R-26339
 SHEET NO. 27
 EROSION CONTROL DESIGNER
 PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

Permit Drawing
 Sheet 50 of 23
 rev. 5/24/13

SEE SHEET 54 FOR "L" PROFILE

DENOTES TEMPORARY EXCAVATION IN WETLAND
 DENOTES FILL IN WETLAND
 DENOTES HAND CLEARING
 0' 100' 200' 300'
 GRAPHIC SCALE

REVISIONS

PROJECT REFERENCE NO. R-2537B
 SHEET NO. 29
 ROADWAY DESIGN ENGINEER
 HYDRAULIC ENGINEER
 PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

LOCHNER
 H. W. LOCHNER, INC. SUITE 202
 2840 PLAZA PLACE, RALEIGH, NC 27612

CAROLINA POWER AND LIGHT CO.
 79

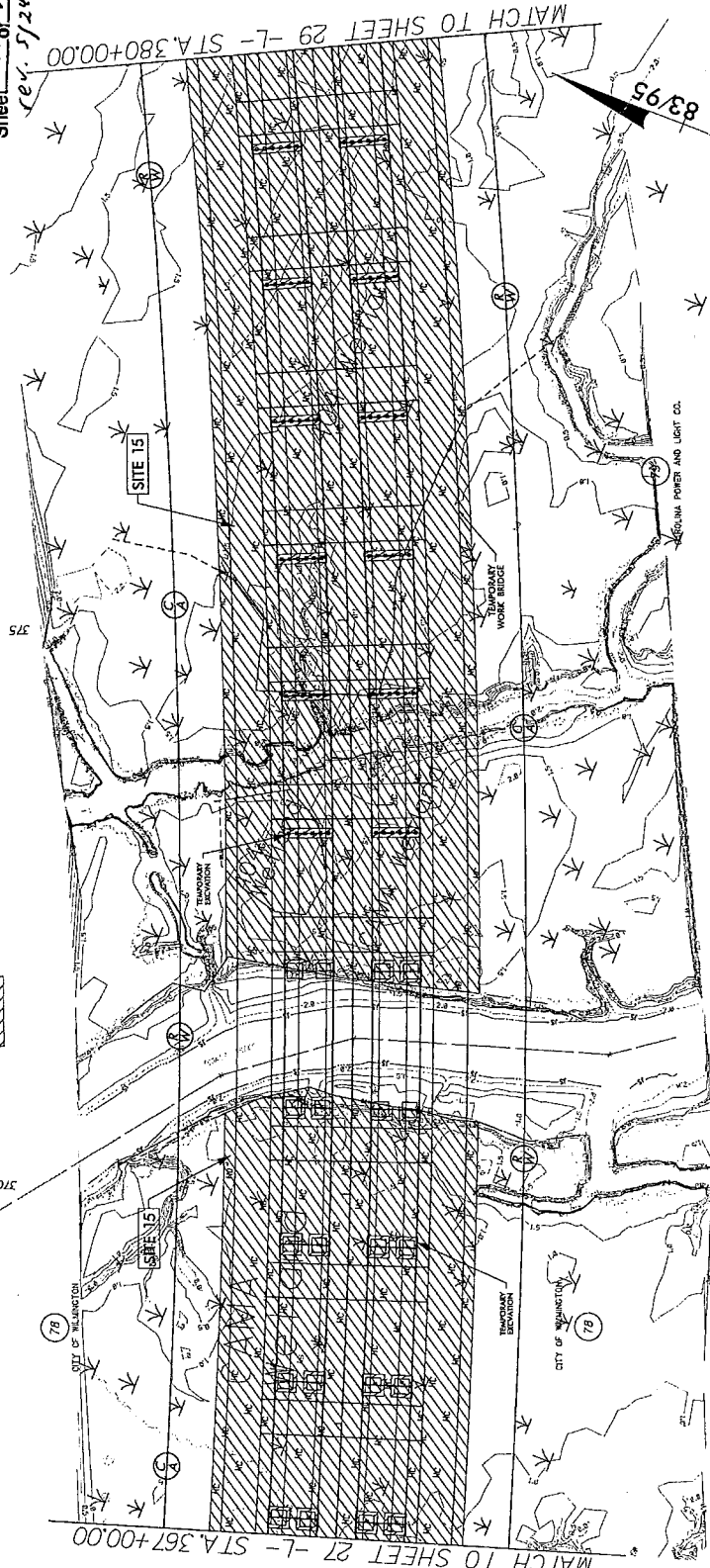


- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES TEMPORARY EXCAVATION IN WETLAND

Permit Drawing 73
 Sheet 52 of
 rev. 5/24/13

MATCH TO SHEET 29 - L - ST.A. 380+00.00

MATCH TO SHEET 27 - L - ST.A. 367+00.00

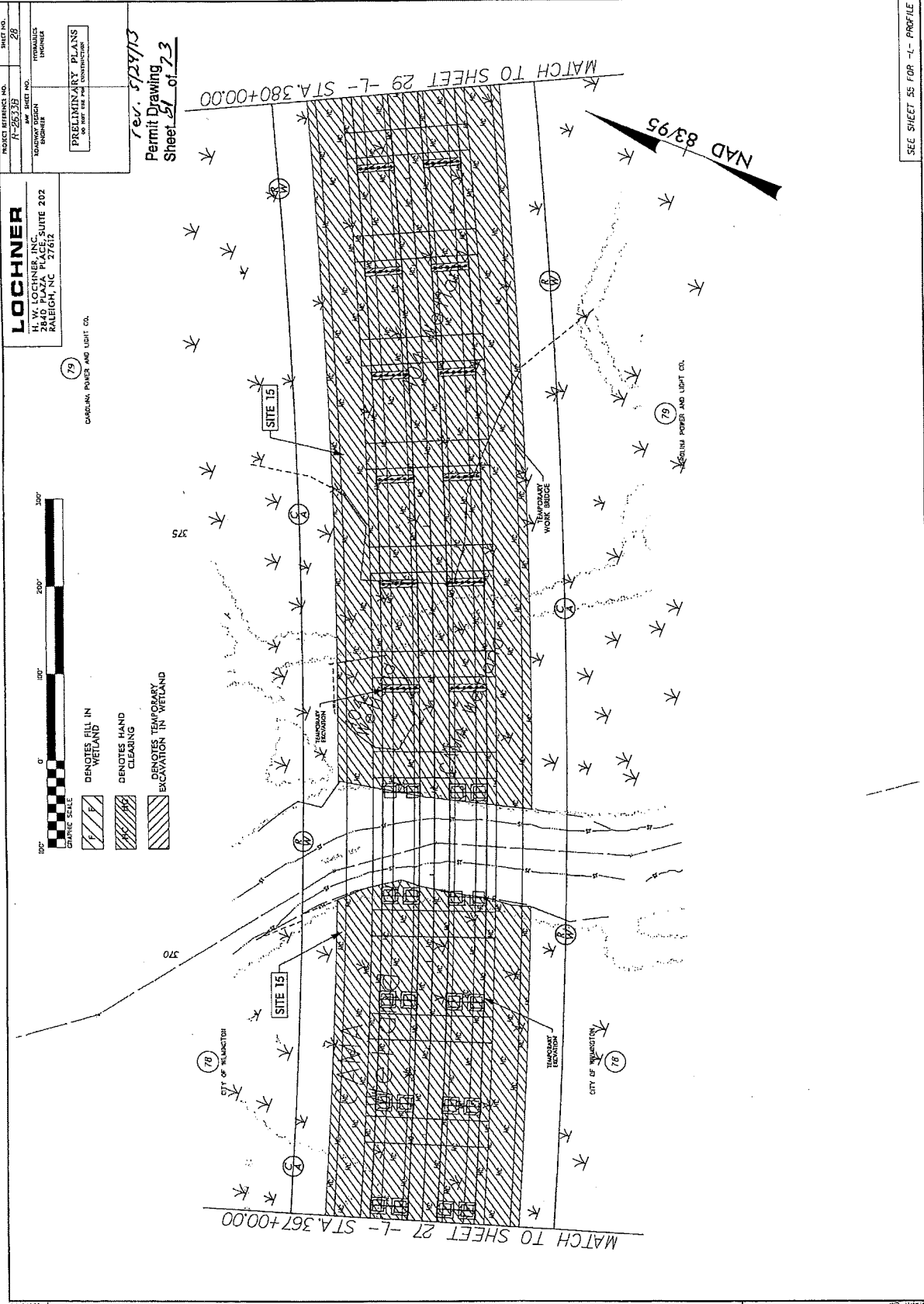


NAD 83/95

SEE SHEET 56 FOR -L- PROFILE

9/17/13

REVISIONS



PROJECT NUMBER AND SHEET NO.
 17-25515 28

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

rev. 5/23/13
 Permit Drawing
 Sheet 27 of 23

LOCHNER
 H. W. LOCHNER, INC., SUITE 202
 2840 LAKELAND PLACE
 RALEIGH, N.C. 27612

DRAWING POWER AND LIGHT CO.
 79

DRAWING POWER AND LIGHT CO.
 79

GRAPHIC SCALE
 0 100' 200' 300'

□ DENOTES FILL IN WETLAND
 □ DENOTES HAND CLEARING
 □ DENOTES TEMPORARY EXCAVATION IN WETLAND

MATCH TO SHEET 29 - L - STA. 380+00.00

MATCH TO SHEET 27 - L - STA. 367+00.00

NAD 83/95

SEE SHEET 25 FOR -L- PROFILE

EMVISIONS

PROJECT REFERENCE NO. R-26338
 SHEET NO. 29
 HYDRAULICS ENGINEER
 LOCHNER
 11 W. LOCHNER, INC., SUITE 202
 RALEIGH, NC 27612

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

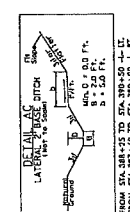
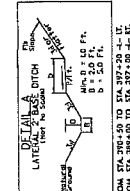
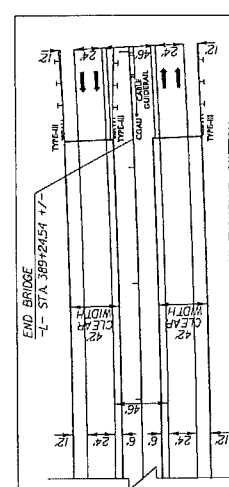
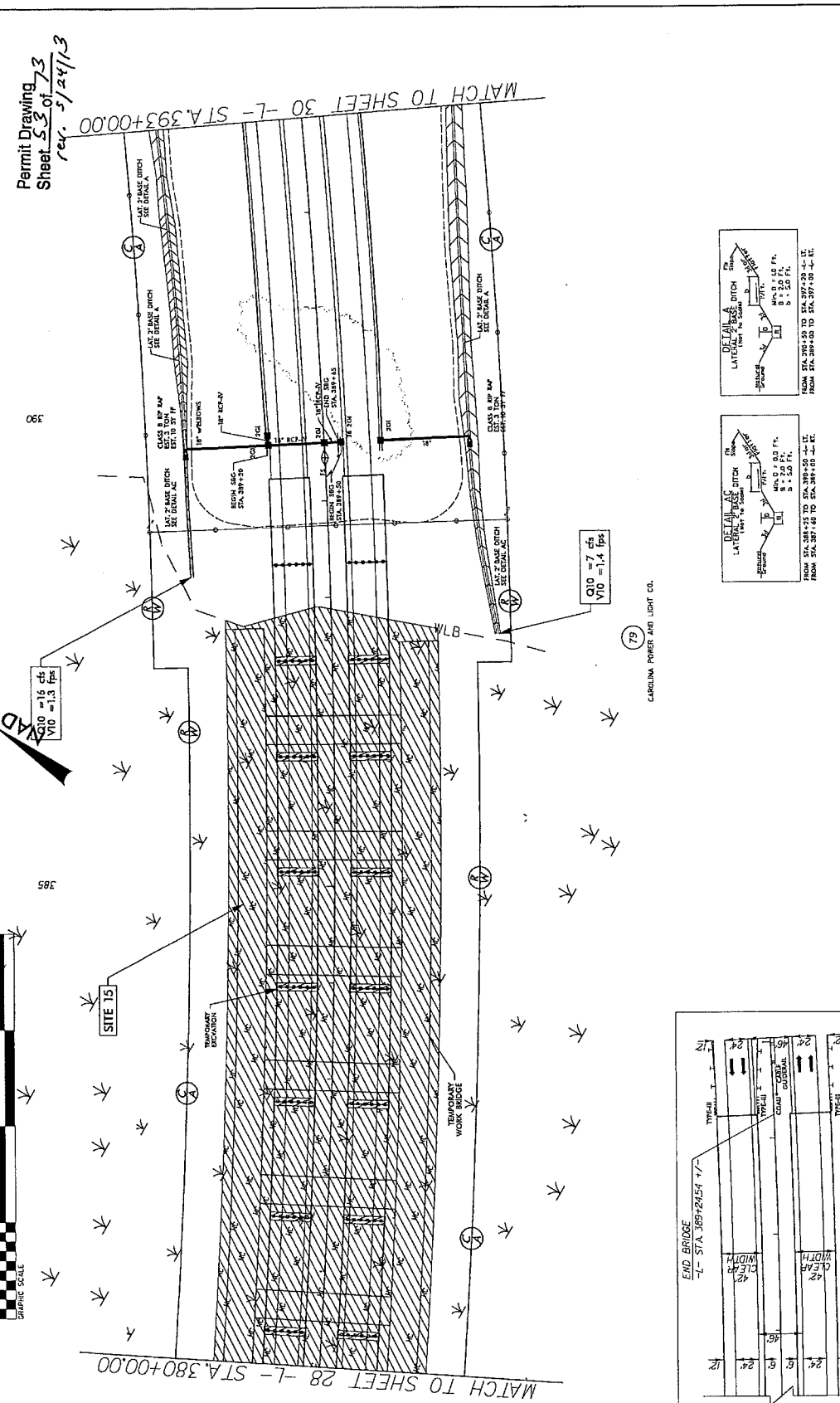
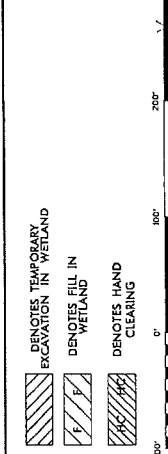
Permit Drawing
 Sheet 53 of 73
 rev. 5/24/13

LOCHNER
 11 W. LOCHNER, INC., SUITE 202
 RALEIGH, NC 27612

CAROLINA POWER AND LIGHT CO.
 (79)

AD 83/95
 Q10 = 15 cfs
 V10 = 1.3 fps

Q10 = 7 cfs
 V10 = 1.4 fps



SEE SHEET 55 FOR -1- PROFILE

9/17/09

REVISIONS

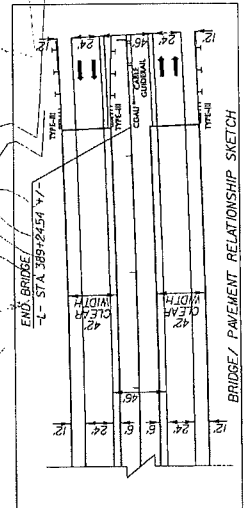
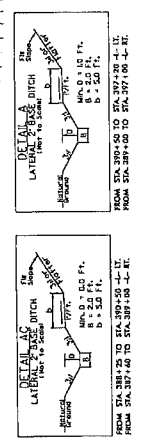
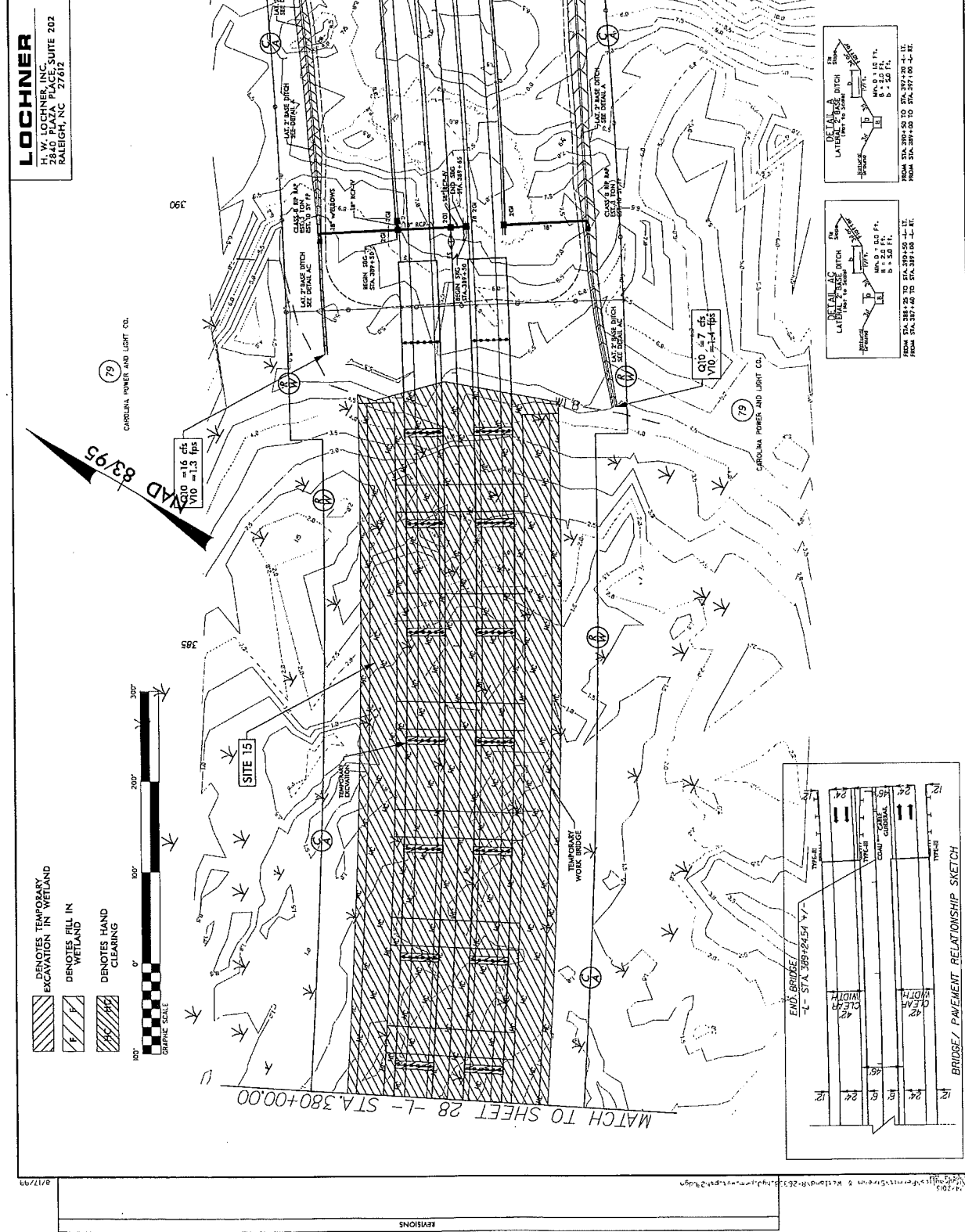
LOCHNER
 11 W. LOCHNER, INC. SUITE 202
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612

PROJECT REFERENCE NO. R-26338
 SHEET NO. 29

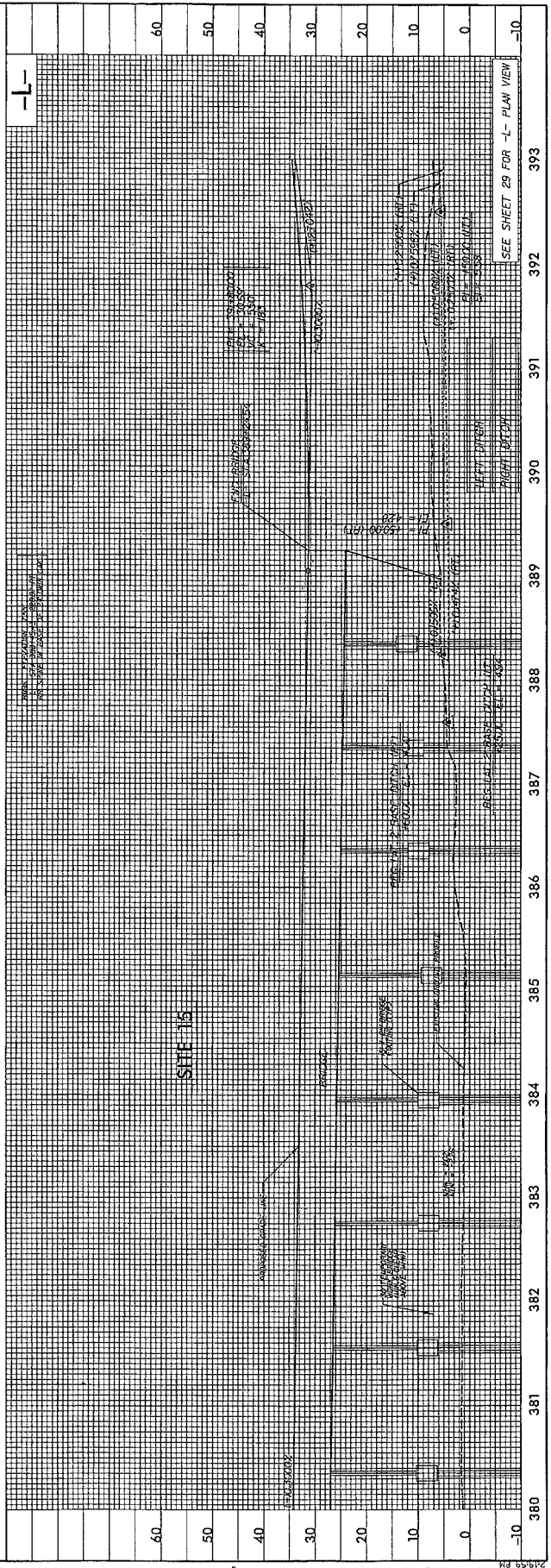
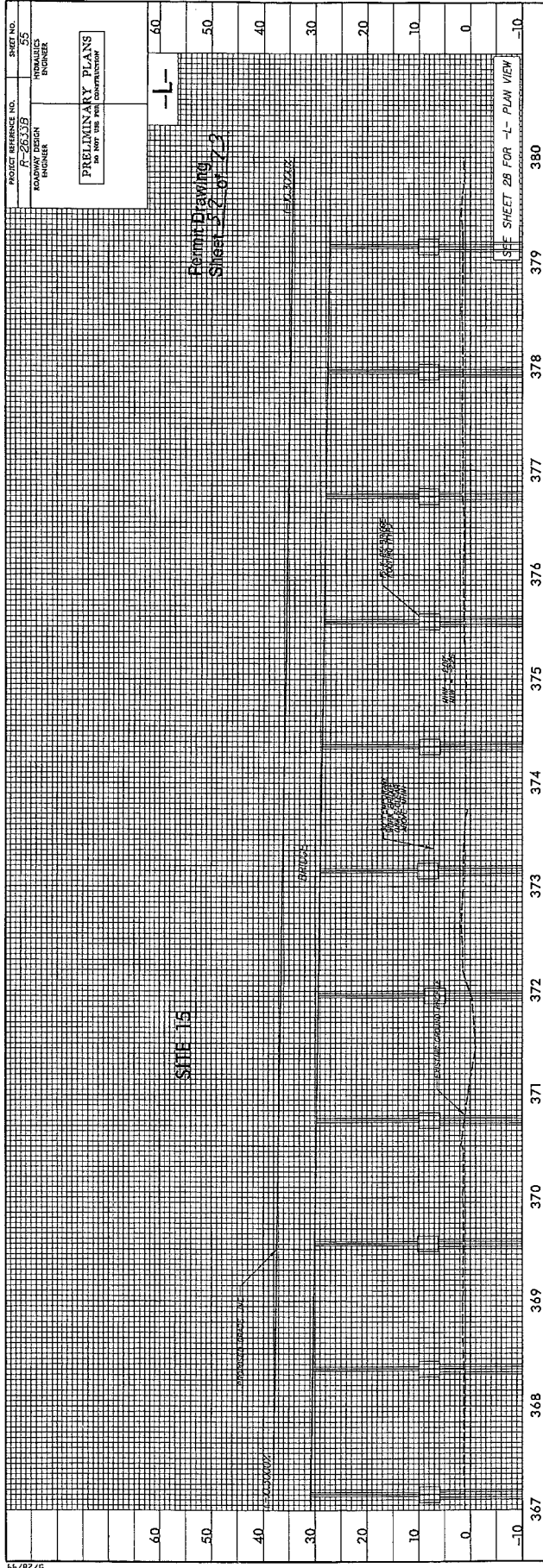
DESIGNATION: BRIDGE
 DRAWING NUMBER: 29

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

Permit Drawing
 Sheet 27 of 73
 rev. 5/24/13



SEE SHEET 55 FOR 'L' PROFILE



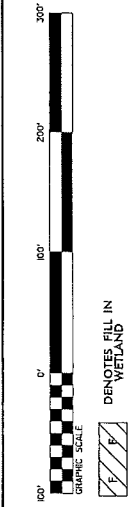
5/28/95

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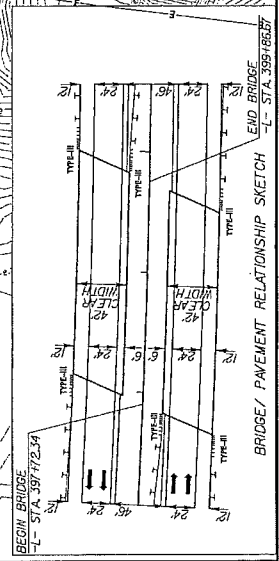
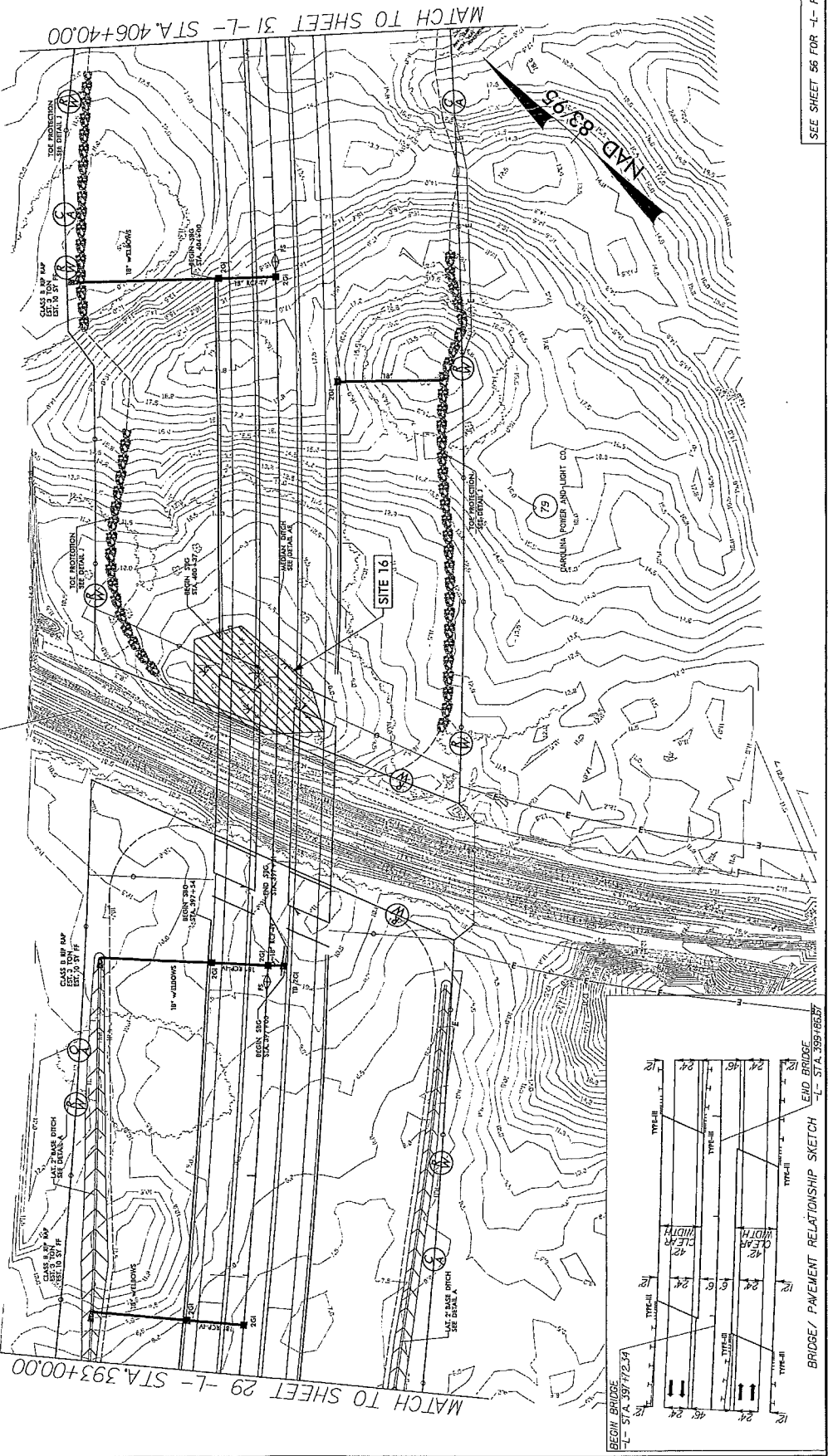
PROJECT REFERENCE NO. **A-2627B** SHEET NO. **30**
 ROADWAY DESIGN ENGINEER
 PRELIMINARY PLANS
 FOR THE NEW 8-29-13

LOCHNER
 H. W. LOCHNER, INC.
 2840 PLAZA PLACE, SUITE 202
 RALEIGH, NC 27612

Permit Drawing
 Sheet 29 of 73

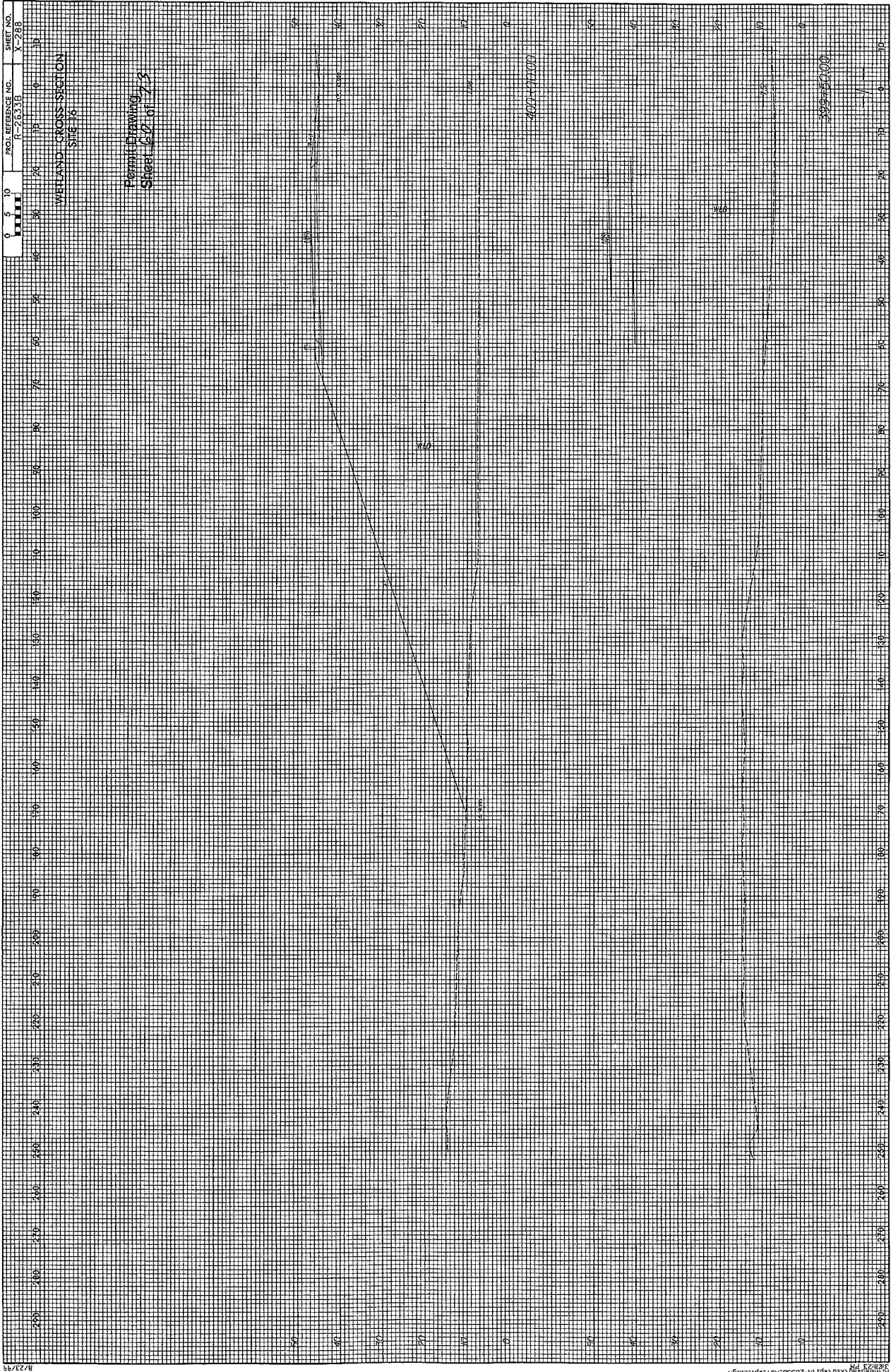


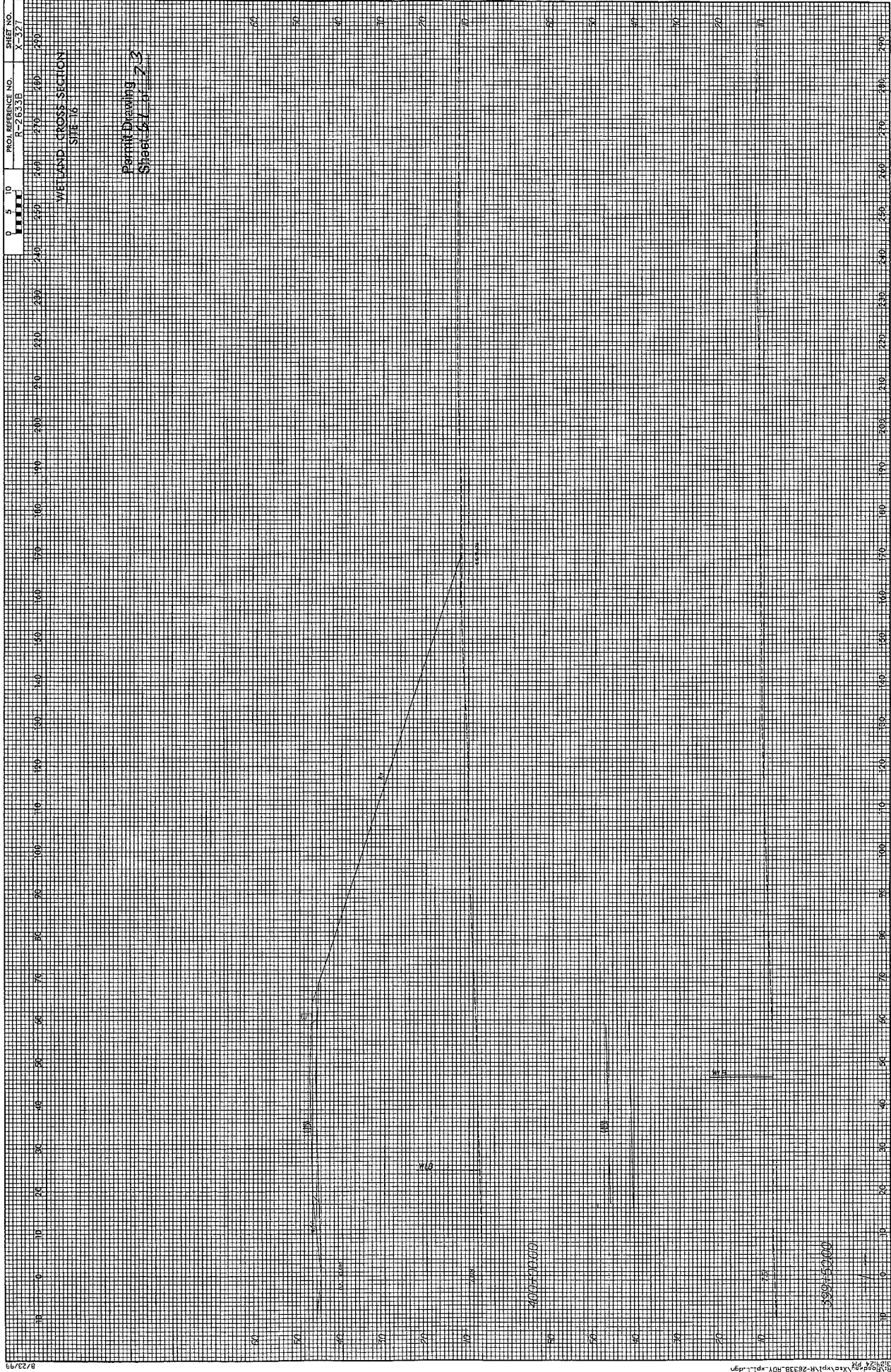
NOTE: TEMPORARY RAILROAD GRADE CROSSING.



SEE SHEET 36 FOR 4- PROFILE

REVISIONS
 RW: Revisions August 5, 2008. Revised RW label - Sta. 397+15 from 397+15 to 397+15. RT: 195 RT.
 8/27/09





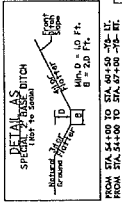
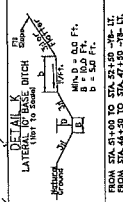
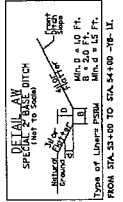
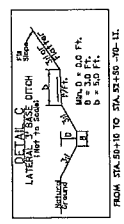
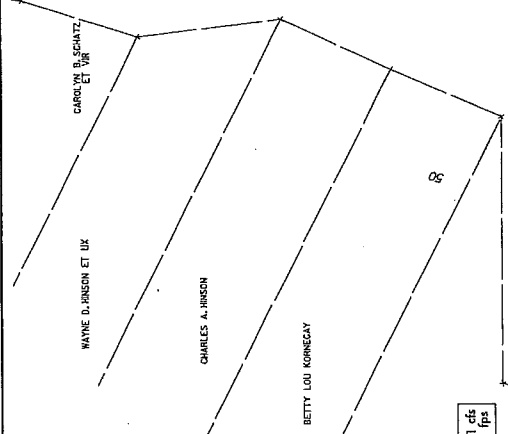
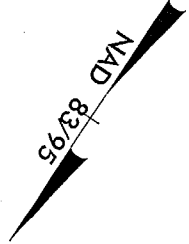
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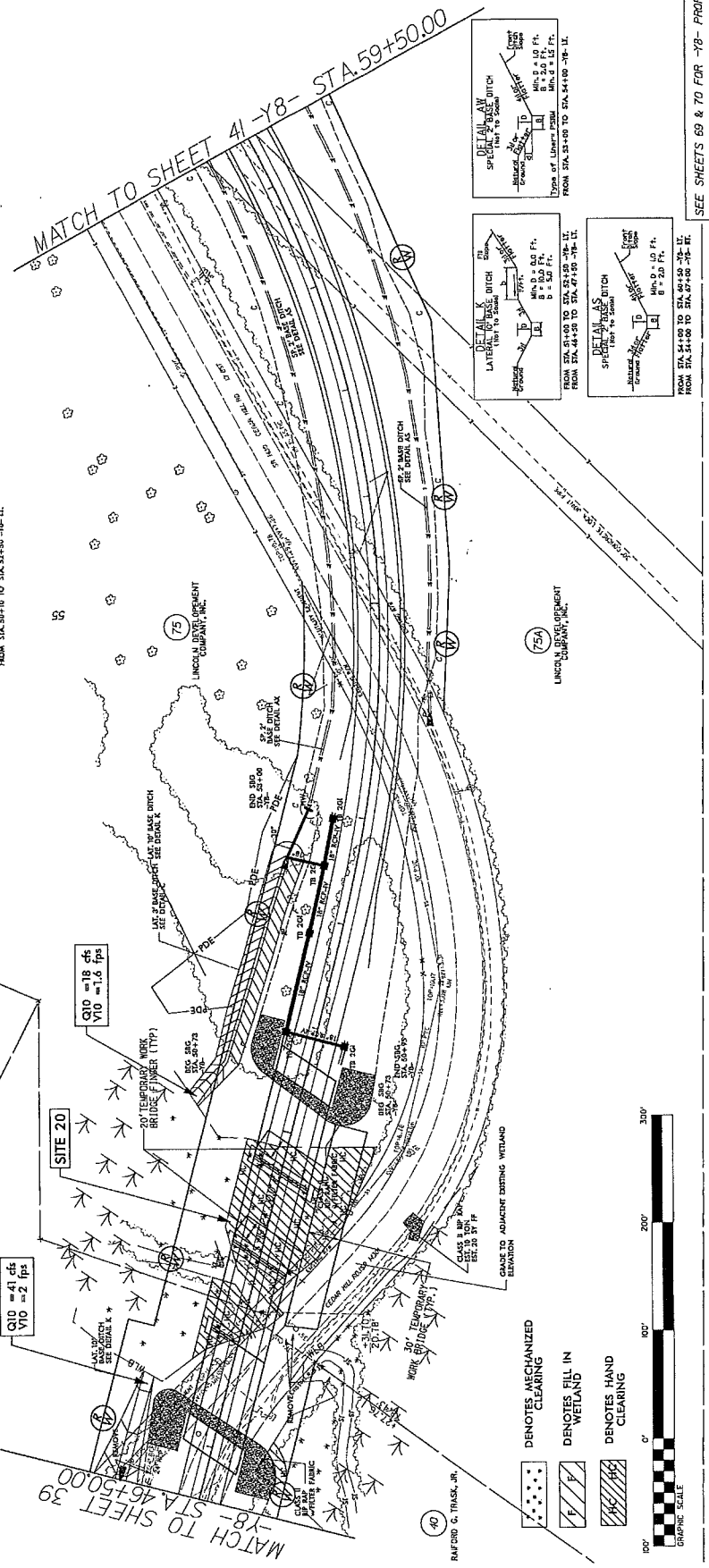
PROJECT REFERENCE NO. R-2533B
 SHEET NO. 40
 ROADWAY DESIGN ENGINEER
 PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

LOCHNER
 H. W. LOCHNER, INC. SUITE 202
 1000 W. WILSON ST.
 RALEIGH, NC 27612

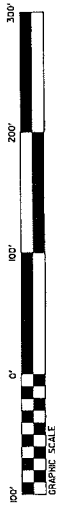
Permit Drawing
 Sheet 68 of 73



SEE SHEETS 68 & 70 FOR -78- PROFILE



- DENOTES MECHANIZED CLEARING
- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING



8/17/93

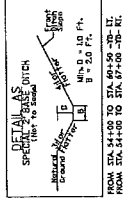
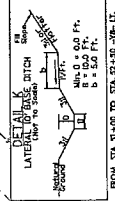
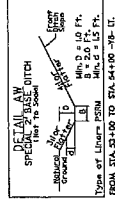
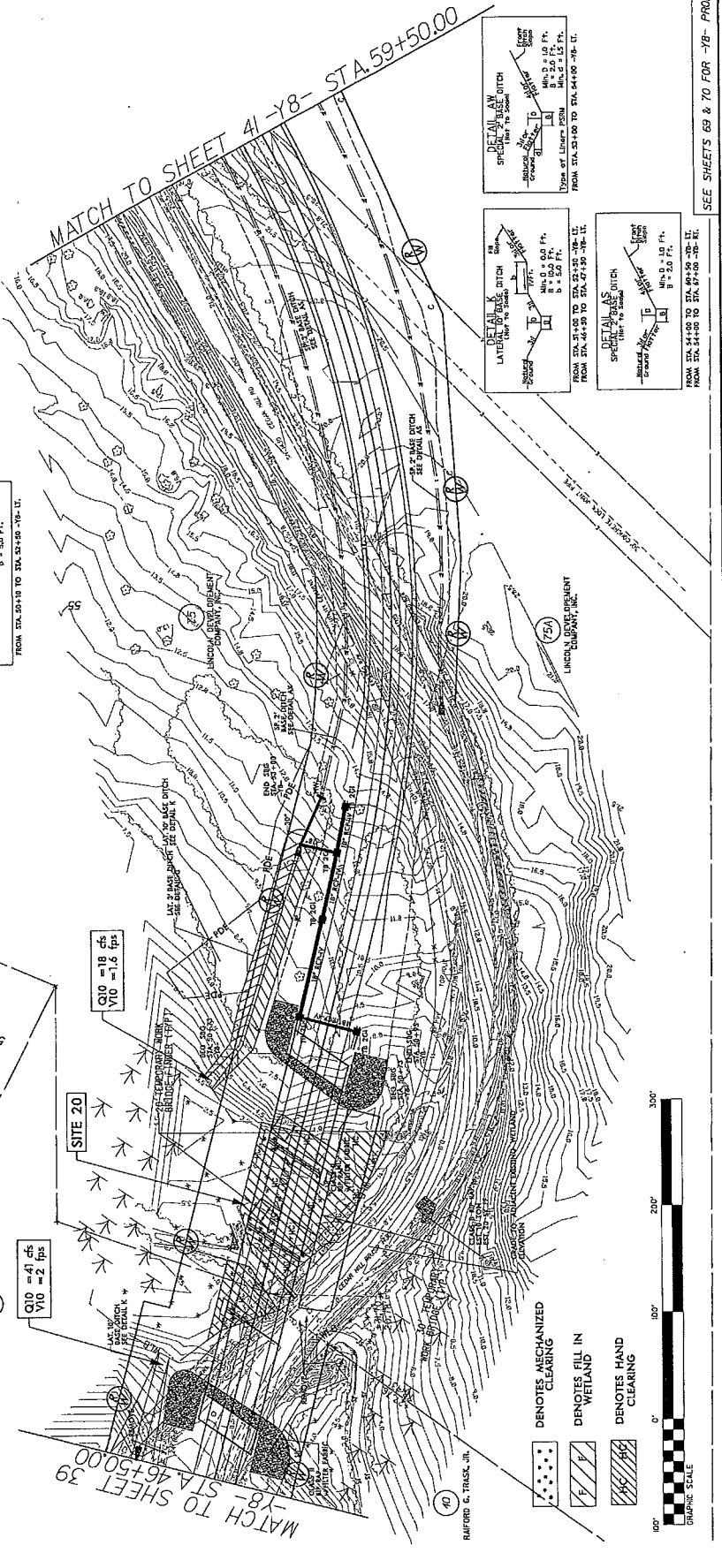
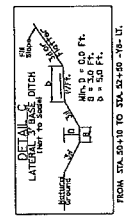
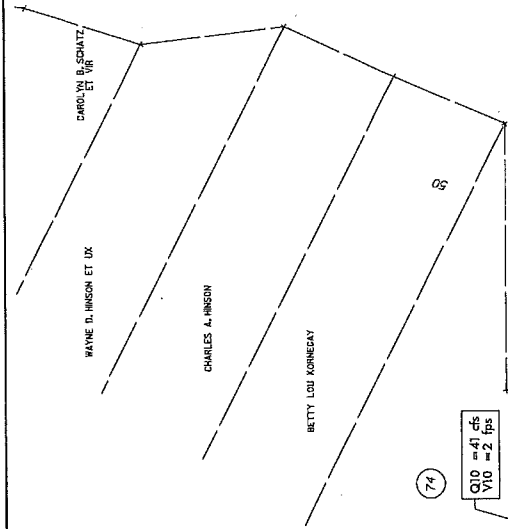
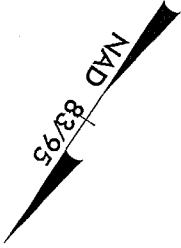
REVISIONS

8/17/93

PROJECT REFERENCE NO.	FW-2633B	SHEET NO.	40
ROADWAY DESIGN ENGINEER	H. W. LOCHNER, INC.	HYDRAULICS ENGINEER	H. W. LOCHNER, INC.
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

LOCHNER
 H. W. LOCHNER, INC.
 2341 W. LAMAR PLACE, SUITE 202
 RALEIGH, NC 27612

Permit Drawing,
 Sheet 67 of 73

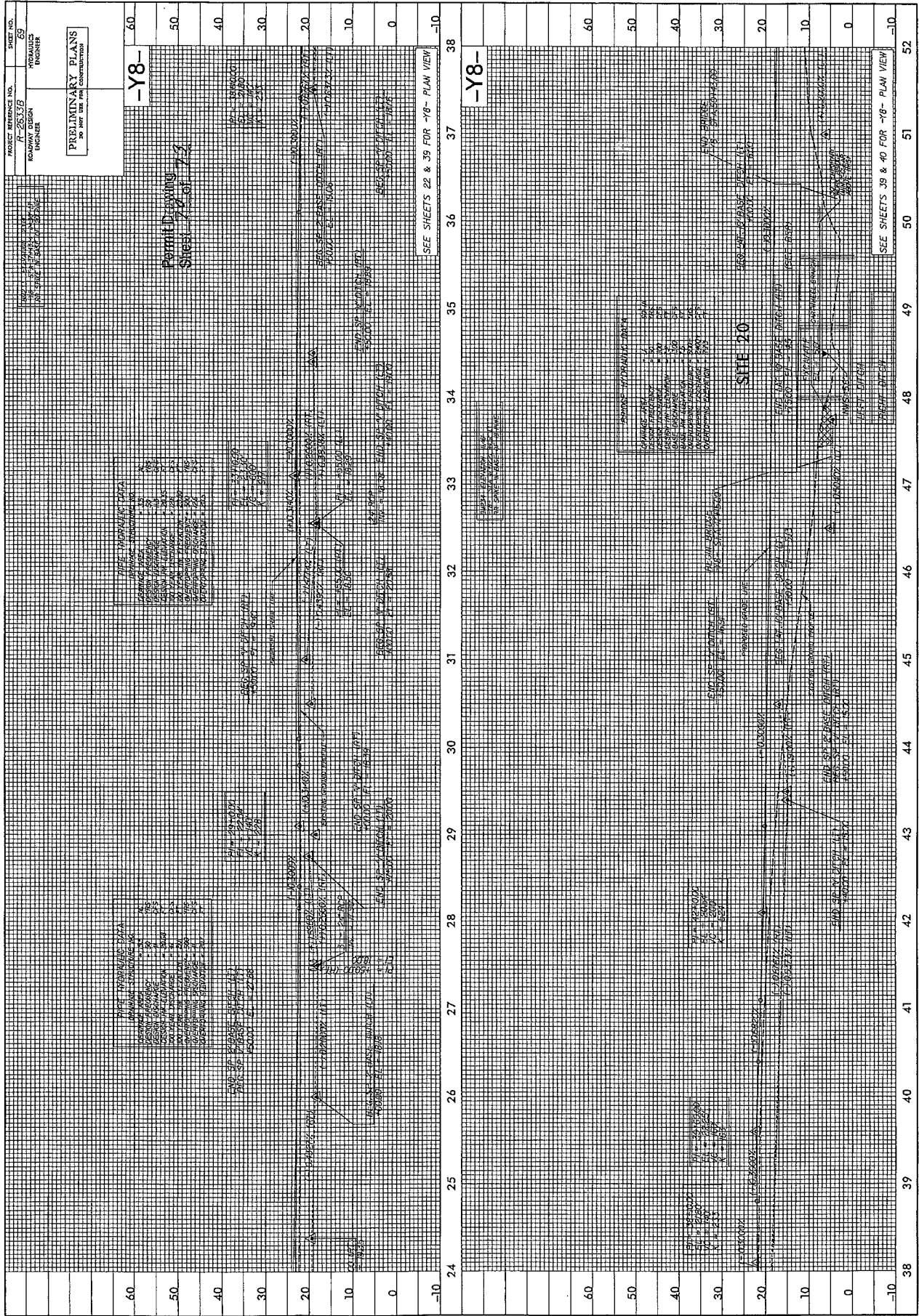


SEE SHEETS 69 & 70 FOR 78- PROFILE

B/17/799

REVISIONS

2/24/2013 10:42:23 AM C:\Users\jsteele\Documents\Projects\New 8-29-13\Drawings\Plan\p04.dwg



5/28/13

11/30/2012 11:04 AM Project: 2013-08-29-RV-P.L.SHEETS.dgn

PROPERTY OWNERS
NAMES AND ADDRESSES

REFERENCE NO.	NAMES	ADDRESSES
35	E.G.DALE ET UX	PO BOX 157 LELAND, NC 28451
36	ANNETTE ANDREWS TROY ET AL	2107 MT MISERY ROAD LELAND, NC 28461
39	LINCOLN DEVELOPMENT CO., INC.	PO BOX 2021 WILMINGTON, NC 28402
40	RAEFORD G. TRASK, JR.	1202 EASTWOOD ROAD WILMINGTON, NC 28403
59	TOM PARTNERS, LTD.	1508 MILITARY CUTOFF RD WILMINGTON, NC 28403
74	ESTATE OF ESSIE BLIZZARD	7524 ELKMONT CIRCLE WILMINGTON, NC 28411
75	LINCOLN LAND DEVELOPMENT CO., INC.	PO BOX 2021 WILMINGTON, NC 28402
78	CITY OF WILMINGTON	PO BOX 1810 WILMINGTON, NC 28408
79	CAROLINA POWER AND LIGHT CO.	410 SOUTH WILMINGTON ST RALEIGH, NC 27601

NCDOT

DIVISION OF HIGHWAYS
BRUNSWICK AND NEW HANOVER
COUNTIES
PROJECT: R-2633B

US 17 FROM 74/76
IN BRUNSWICK COUNTY TO
US 421 IN NEWHANOVER COUNTY

SHEET 71 OF 73 10/22/2012

PROPERTY OWNERS
NAMES AND ADDRESSES

REFERENCE NO.	NAMES	ADDRESSES
2	T.F.LIMITED HOLDINGS PARTNERSHIP	1202 EASTWOOD ROAD. WILMINGTON, NC 28403
3	JOHN M.HEWITT, ETUX	PO BOX 273 LELAND, NC 28451
4	V.A. CREECH, JR.	PO BOX 66 LELAND, NC 28451
10	MLH, LLC.	PO BOX 1967 WILMINGTON, NC 28402
11	WCM ENTERPRISES, LLC.	305 COLONIAL DRIVE WILMINGTON, NC 28403
13	CHADWICK-ONE, LLC.	PO BOX 452 LELAND, NC 28451
16	BARNEY L.PADGETT ET UX	PO BOX 7332 WILMINGTON, NC 28456
21	LOUISE VERZAAL JOYNER	5644 56th WAY WEST PALM BEACH, FL 33409

NCDOT
DIVISION OF HIGHWAYS
BRUNSWICK AND NEW HANOVER
COUNTIES
PROJECT: R-2633B

US 17 FROM 74//76
IN BRUNSWICK COUNTY TO
US 421 IN NEWHANOVER COUNTY

WETLAND PERMIT IMPACT SUMMARY																					
* Site No.	* Station (From/To)	* Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS				* Natural Stream Design (ft)										
			404 Permanent Fill In Wetlands (ac)	CAMA Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	404 Hand Clearing in Wetlands (ac)	CAMA Hand Clearing in Wetlands (ac)	Permanent SW Impacts (ac)		Temp. SW Impacts (ac)	Existing Channel Impacts (ft)	Existing Channel Impacts Temp. (ft)							
* 1***	-L-24+75-L4	Roadway-Fill																			
* 2***	-L-37+96-R4	Bridge																			
* 3***	-L-REV-339+73 to 358+52	Roadway Fill	7.45		0.03																
* 4	-RP D1-22+60	Deleted due to new JS delineation																			
* 5*	-L-REV-372+74 to -L-85+08	Roadway Fill	1.04																		
* 6*	-L-109+28 to 134+54	Roadway Fill	9.72																		
* 6A**	-L-136+11 to 140+70	Roadway Fill	0.68																		
* 6B**	-L-141+20 to 144+29	Roadway Fill	0.41																		
* 7*	-L-146+78 to 165+66	Roadway Fill	10.55																		
* 8	-L-156+60	Deleted due to new JS delineation																			
* 9*	-L-186+97 to 191+88	Roadway Fill	1.04																		
* 10	-RP D2-19+20 L1	Deleted due to new JS delineation																			
* 11*	-L-194+75 to 216+13	Roadway Fill; 3@42"	8.72																		
* 12	-L-230+39 to 242+11	Deleted due to new JS delineation																			
* 13	-L-256+36 to 265+87	Deleted due to new JS delineation																			
* 14*	-L-264+32 to 266+54	Bridge																			
* 15*	319+48 to 387+92	Temp. Work Bridge	0.05		***0.93																
* 16*	-L-399+43 to 400+51	Temp. Work Bridge																			
* 17***	-Y5-46+25-R1	Roadway Fill	0.22																		
* 18***	-Y5-46+25-R1	48" RCP																			
* 19*	-Y7-52+09	Culvert																			
* 19*	-Y7-DE1-16+45	Culvert																			
* 20*	-Y8-47+74 to 49+88	Bridge	<0.01																		
* 20*	-Y8-48+78 to 49+95	Temp. Work Bridge																			
TOTALS:			39.89		0.06	0.96	0.07	0.07	21.40	12.49	0.20	0.63	210	149	0.00						

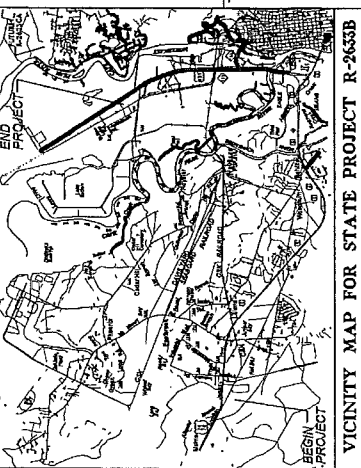
NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRUNSWICK AND NEW HANOVER COUNTIES
 WBS - 34491.1.2 (R-2633B)
 SHEET **73 of 73**
 rev. 5/24/13

Site 14 See Structures sheet for Bridge Impacts on Cartwheel Branch
 Site 15 Impacts for Permanent Dual Bridges CAMA=0.07 Ac, 404=0.07 Ac, Surface Water=0.1 Ac, Total=0.15 Ac.
 Site 15 Impacts for Temporary Work Bridge CAMA=0.16 Ac, 404=0.21 Ac, Surface Water=0.01 Ac, Total=0.38 Ac.
 * Revised due to new JS Delineation
 ** New Site due to new JS Delineation
 *** Sites 1, 2, 17, and 18 are now permitted with R-2633AA & AB and the impacts are included with that project.
 **** A portion of Site 3 is now permitted with R-2633AA & AB and the impacts are included with that project.
 ***** Temporary Excavation, CAMA=0.41Ac, 404 =0.52 Ac, Total=0.91 Ac.
 0.75 acres of Temp. Fill in 404 Wetlands in the Hand Clearing areas for Erosion Control Measures
 ATN/Revised 2/20/05

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**NEU PERMIT PLANS BRUNSWICK
-NEW HANOVER COUNTY**

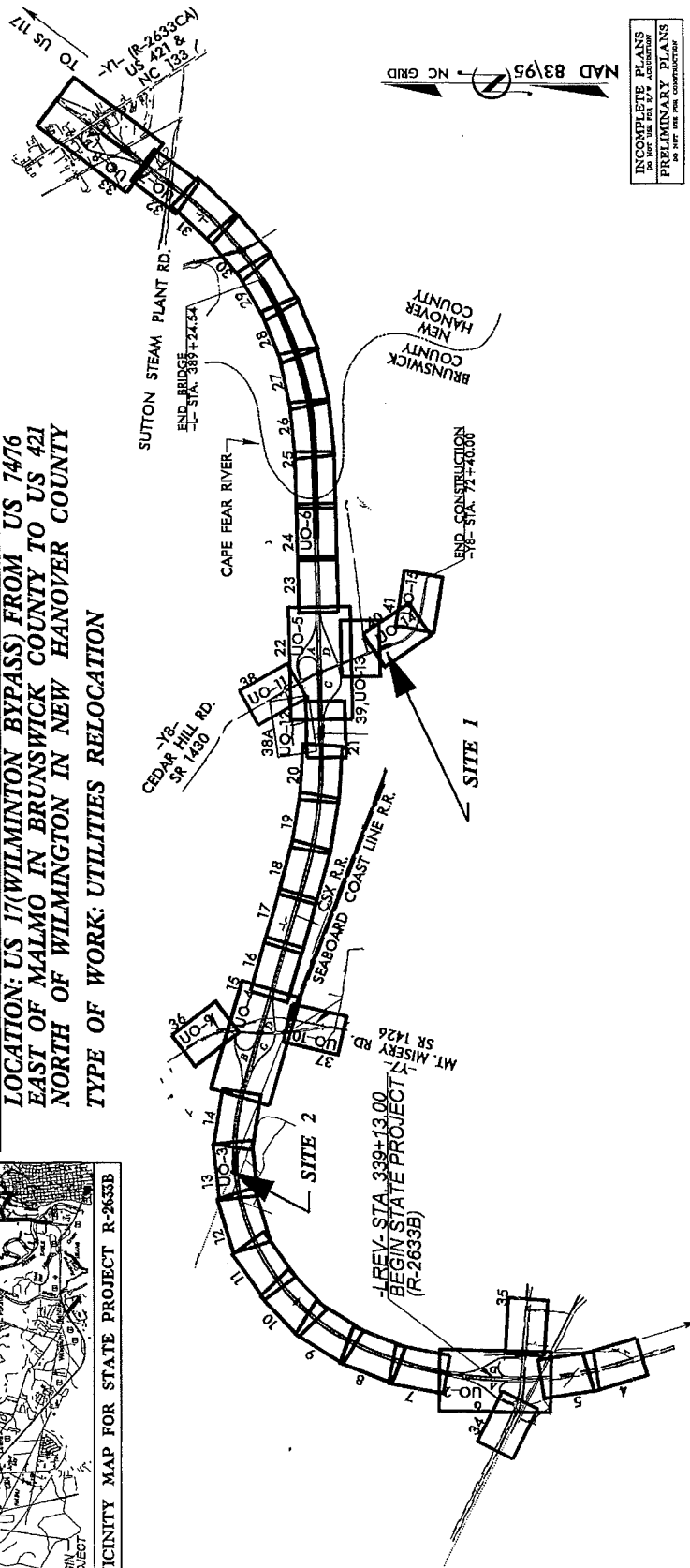
LOCATION: US 17(WILMINGTON BYPASS) FROM US 7476
EAST OF MALMO IN BRUNSWICK COUNTY TO US 421
NORTH OF WILMINGTON IN NEW HANOVER COUNTY
TYPE OF WORK: UTILITIES RELOCATION



TIP NO. R-2633B
SHEET NO. 1

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Utility Permit Drawing
Sheet 1 of 15
Revised 3/28/13



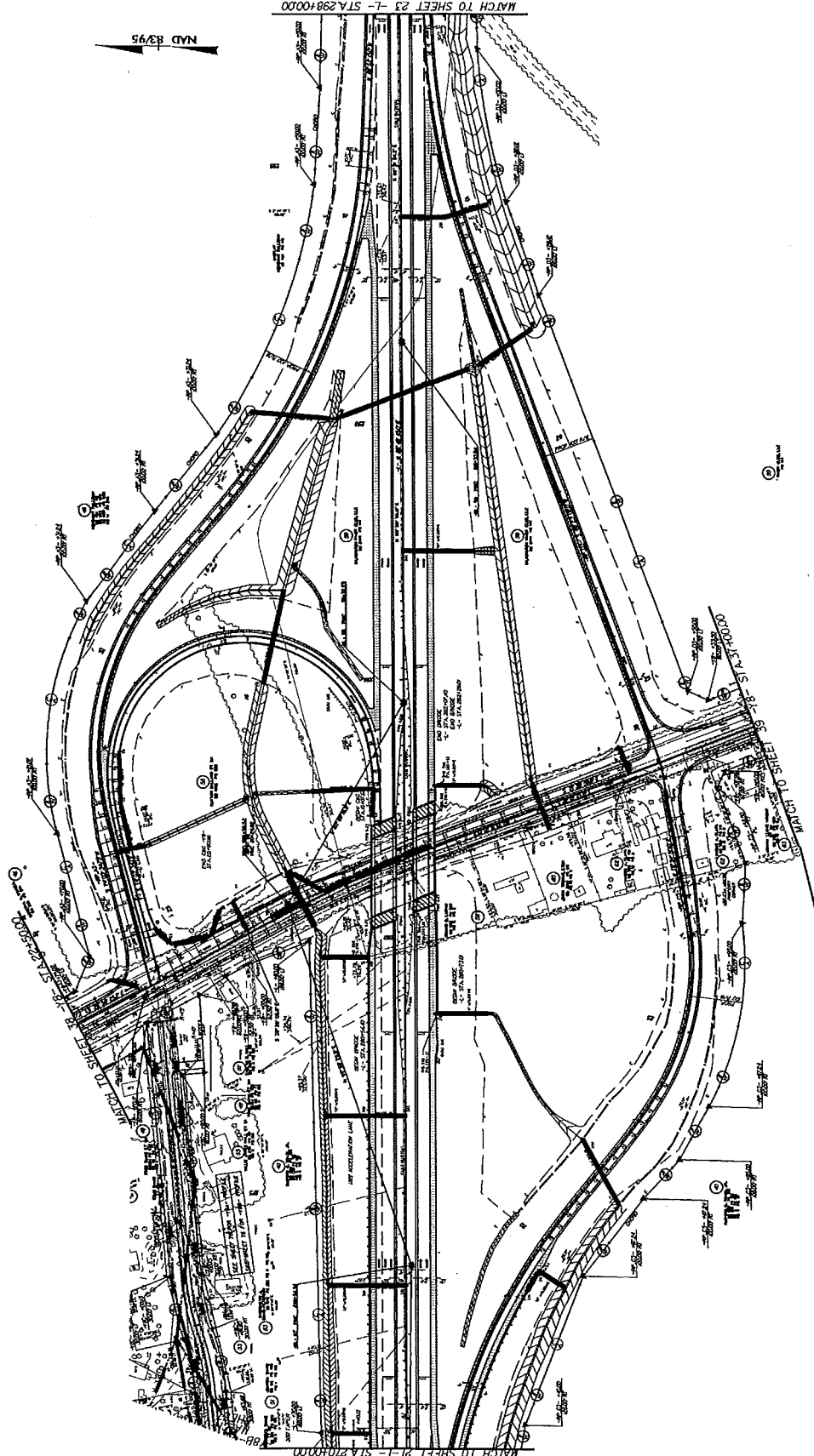
TIP PROJECT: R-2633B

PROJECT REFERENCE NO. R-26333B
SHEET NO. 107-5

UTILITIES BY OTHERS

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

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
Utility Permit Drawing
Sheet 5 of 15
Revised 3/12/13



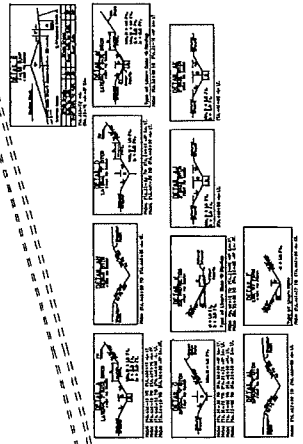
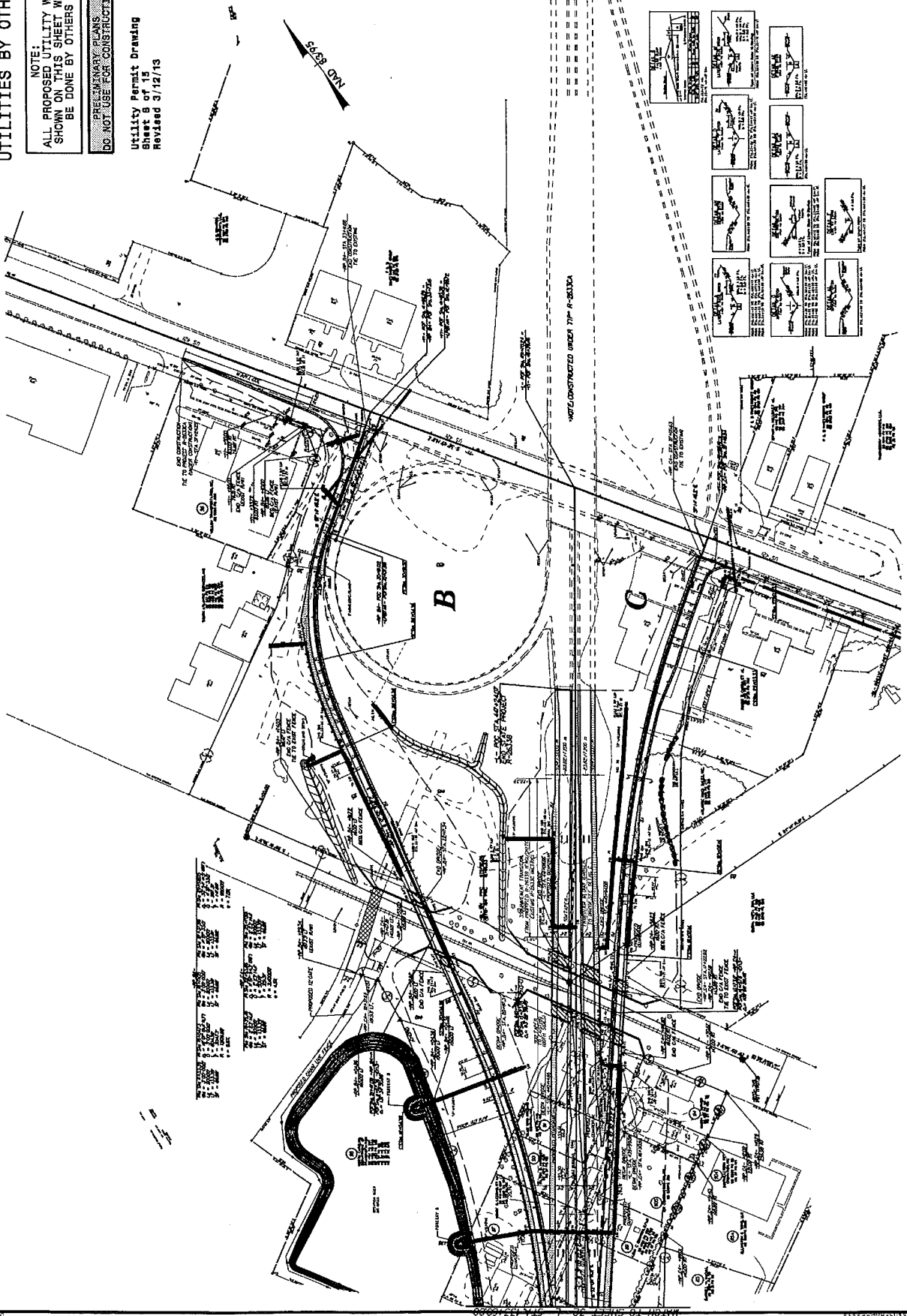
PROJECT REFERENCE NO. R-2633B
SHEET NO. 10-8

UTILITIES BY OTHERS

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

UTILITY PERMIT DRAWING
SHEET 8 OF 13
REVISED 3/12/13

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

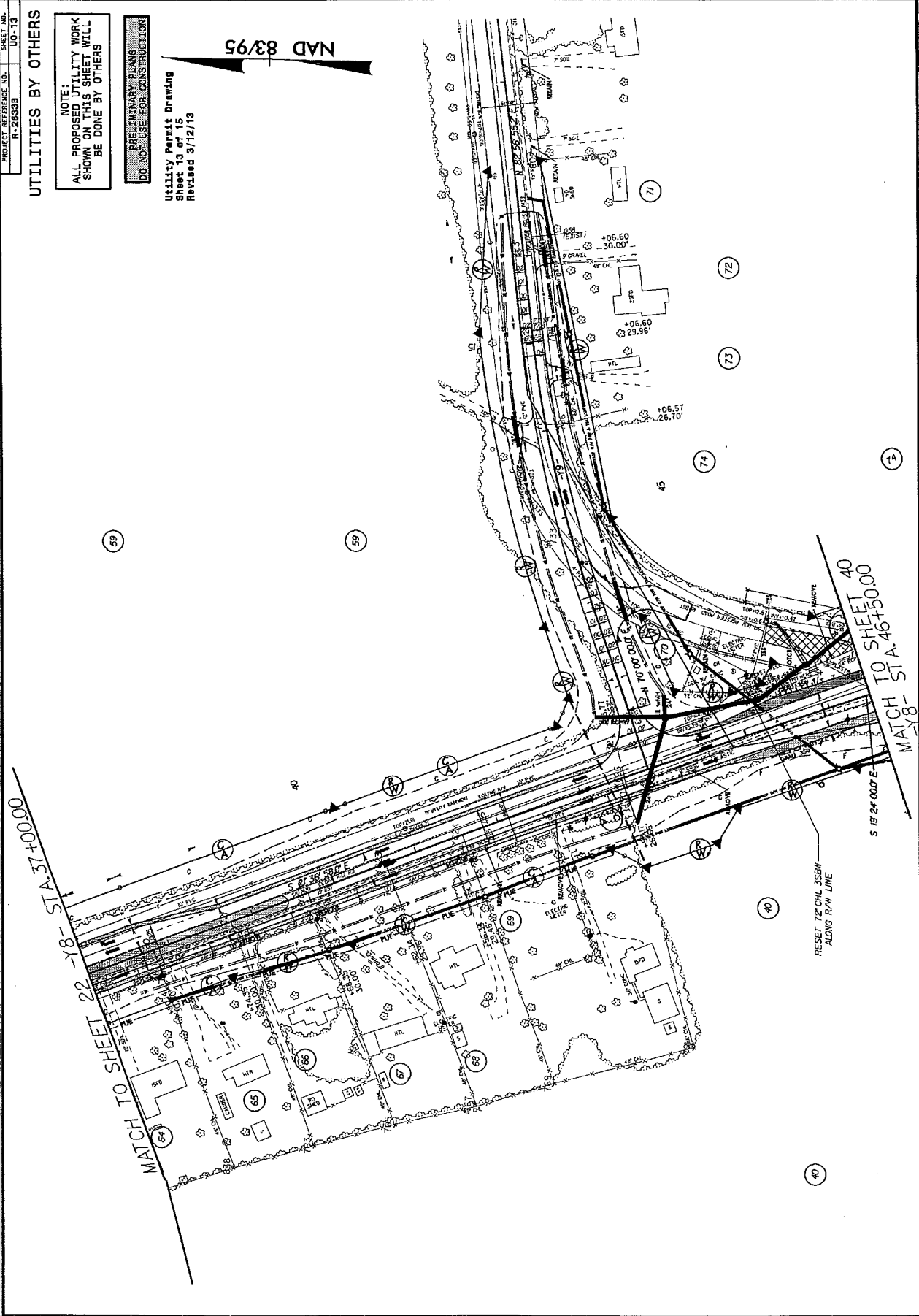
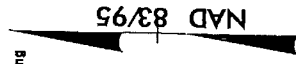


PROJECT REFERENCE NO. R-2633B
SHEET NO. UD-13

UTILITIES BY OTHERS

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

UTILITY PERMIT DRAWING
SINCE 3/12/13
REVISED 3/12/13



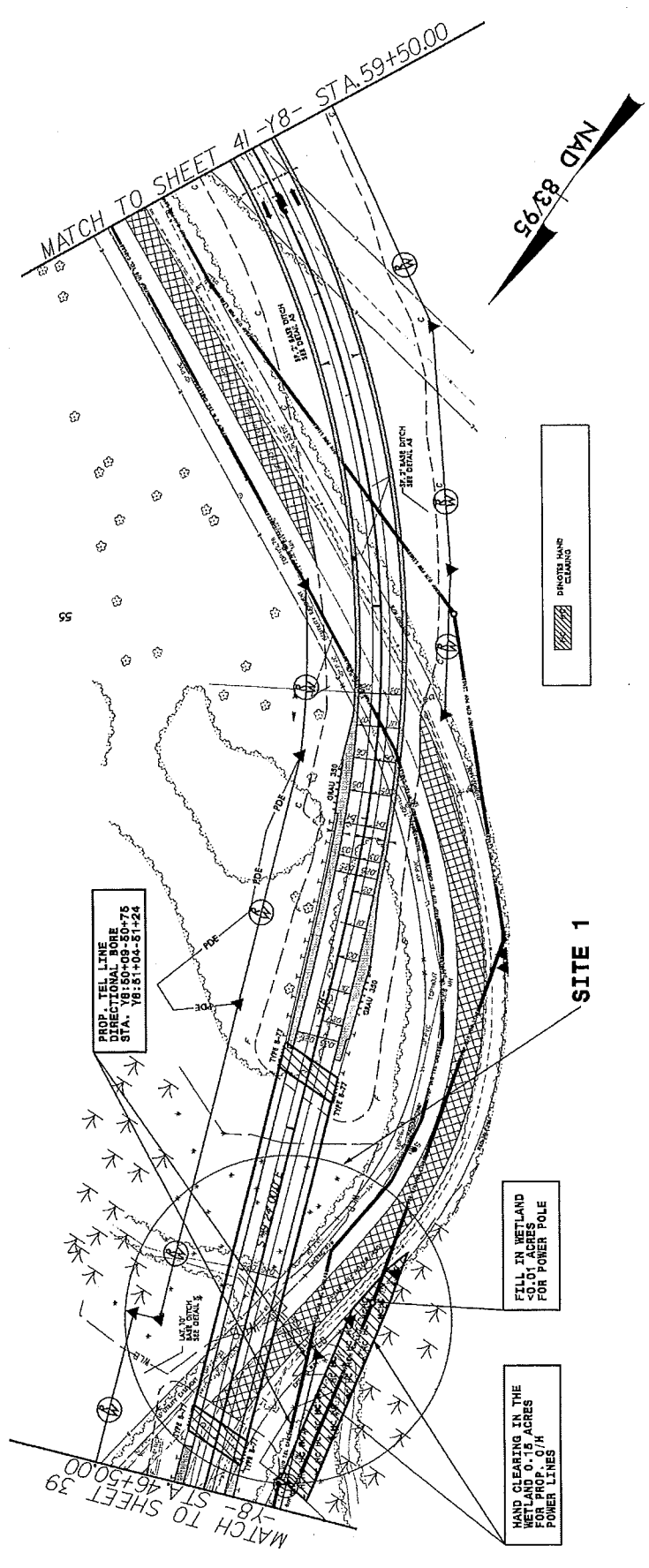
PROJECT REFERENCE NO. R-2833B SHEET NO. 2

UTILITIES BY OTHERS

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

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Utility Permit Drawing
Sheet 14 of 15
Revised 3/28/13



R/W REVISION 03/20/09 - ADDED PARCEL 15 LINCOLN DEVELOPMENT.
 R/W REVISION 02/11/10 - CHANGED LAYOUT ON PARCELS 24 AND 25 PERMITTED R/W COMMENTS ON EXISTING R/W CHANGED PARCEL 75A TO ROGERS FAMILY PROPERTIES, LLC 08 2722 PG 02B.
 5/14/09

R-57

NEW 8-29-13

Addendum No. 1



REPLY TO
ATTENTION OF:

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

August 23, 2013

Regulatory Division

Action ID No. SAW-1994-03552

Phil Harris
Manager, PDEA
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

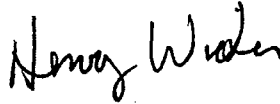
Dear Mr. Harris:

Reference the Department of the Army permit issued on January 13, 2011 and subsequent phased modification issued on July 9, 2013, to construct a fully controlled access freeway on new alignment from north of U 74/76 in Brunswick County to US 421 in New Hanover County approximately 7.6 miles. Reference is also made to your permit modification request dated July 31, 2013, revised plan view drawings, and revised impact summary sheet dated 8/15/2013. The modification request is to construct two open trench cut utility lines through Cartwheel Branch and its abutting wetlands.

We have determined that the proposed change is minor, and that a supplemental public notice is not necessary. Your permit is hereby modified to include the aforementioned changes as described in the July 31, 2013 modification request. It is understood that all other conditions of the original permit and previous modifications remain applicable, including the permit expiration date of December 31, 2016.

This modification approval and referenced plans (attached) will be utilized for future compliance of the project. If you have questions, please contact Brad Shaver of the Wilmington Regulatory Field Office, at telephone (910) 251-4611.

Sincerely,



Steven A. Baker
Colonel, U. S. Army
District Commander

Copies Furnished:

Mr. Mason Herndon
Division of Water Quality
North Carolina Department of
Environment and Natural Resources
225 Green Street, Suite 714
Fayetteville, North Carolina 28301-5094

Mr. Stephen Lane
Division of Coastal Management
North Carolina Department of
Environment and Natural Resources
400 Commerce Avenue
Morehead City, North Carolina 28557

Electronic Copy:

Mr. Stoney Mathis, NCDOT
Ms. Rachelle Beauregard, NCDOT

Memo to File:

Date: 8/19/2013

Action ID#: SAW-1994-03352

From: Brad Shaver

Subject: R-2633 (B) modification to cover utility impacts from of water and sewer installation

On July 9, 2013, the Corps issued a major modification to a standard permit issued to the Department first on January 13, 2011 for the construction of Section B of the Wilmington Bypass. As indicated the initial permit was issued for A and B understanding that the B phase would come online later and would only be authorized for construction once additional avoidance and minimization was considered which did occur on the aforementioned July date. Section B of the Wilmington Bypass originates at Hwy 74 in Brunswick County and progresses north and east until it reaches section C of the Bypass at US 421 in New Hanover County.

On July 31, 2013, the Corps received a modification request in order to install a water and sewer line contrary to the previously approved plans necessitated when the utility company took a closer look at the water and sewer locations in relation to the toe of fill. The new water and sewer lines must be separated by 10 feet to meet current DENR regulations and thus the total impact expected by this modification would be <0.01 acre of wetland for temporary impact in wetlands. Additionally there would be temporary excavation in the stream channel of less than 0.01 acre and 16 feet of temporary stream impact originating for dewatering activities.

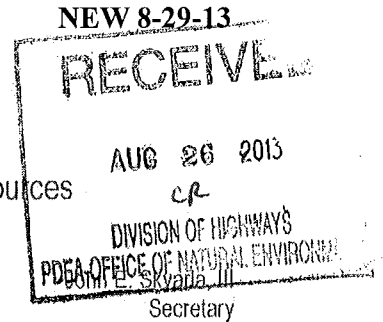
If conducted as planned there will be no permanent impact to waters of the U.S. The fact that dewatering activities are occurring should further minimize the potential for impacts to waters during construction. I see no reason why this permit should not be modified.



North Carolina Department of Environment and Natural Resources

Division of Water Resources
Water Quality Programs
Thomas A. Reeder
Director

Pat McCrory
Governor



August 19, 2013

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: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000 with ADDITIONAL CONDITIONS for Proposed improvements to the Wilmington Bypass from US 17 in Brunswick County, north of the NC 87 intersection, to US 421 in New Hanover County. Federal Aid Project Nos. NHF-0017(96) and STM-0017(97), State Project Nos. 34491.1.3.GV2 and 34497.3.ST1, Brunswick and New Hanover Counties, TIP R-2633AA/AB and R-2633B.

NCDWR Project No. 20100867 v. 5

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3842 issued to The North Carolina Department of Transportation (NCDOT) dated January 13, 2011 and modifications dated May 9, 2011 and April 5, 2012 and May 31, 2013.

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

Sincerely,

Thomas A. Reeder
Thomas A. Reeder

Attachments

- cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office (electronic copy only)
- Stoney Mathis, Division 3 Environmental Officer
- Chris Militscher, Environmental Protection Agency (electronic copy only)
- Gary Jordan, US Fish and Wildlife Service (electronic copy only)
- Travis Wilson, NC Wildlife Resources Commission (electronic copy only)
- Rachelle Beaugard, NCDOT, Natural Environment Section (electronic copy only)
- Jason Elliot, NCDOT, Natural Environment Section (electronic copy only)
- Steve Sollod, NC Coastal Management (electronic copy only)
- Sonia Carrillo, NCDWQ Central Office
- File Copy

Transportation and Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-807-6488
Internet: www.ncwaterquality.org



**Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act,
and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000) with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500 and ISOLATED WETLANDS PERMIT Pursuant to IWGP100000. This certification authorizes the NCDOT to impact an additional 0.01 acres of jurisdictional wetlands and 16 linear feet of jurisdictional streams in Brunswick County. The project shall be constructed pursuant to the modification dated received August 1, 2013 and revisions received on August 19, 2013. The authorized impacts are as described below:

Stream Impacts in the Cape Fear River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
Original approved utility impacts at Sta. -Y8- 46+77 to 48+10	0	0	0	0	0	0
New utility impacts with this approval at Sta. -Y8- 46+77 to 48+10	0	0	0	16	16	0
Total	0	0	0	16	16	0

Total New Stream Impact for (Site/Modification): 16 linear feet

Wetland Impacts in the Cape Fear River Basin (riparian)

Site	Fill (ac)	Fill (temporary) (ac)	Excavation (temporary) (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Total Wetland Impact (ac)
Original approved utility impacts at Sta. -Y8- 46+77 to 48+10	0	0	0	0	0	0
New utility impacts with this approval at Sta. -Y8- 46+77 to 48+10	0	0	<0.01	0	0	<0.01
Original approved utility impacts at Sta. -Y8- 46+72 to 47+58	0	0	0	0	0	0
New utility impacts with this approval at Sta. -Y8- 46+72 to 47+58	0	0	<0.01	0	0	<0.01
Total	0	0	0.01	0	0	0.01

Total Wetland Impact for (Site/Modification): 0.01 acres.

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

This approval is only valid for the purpose and design that you submitted in your modified application dated received August 1, 2013 and revision received on August 19, 2013. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 13, 2011 and modifications dated May 9, 2011 and April 5, 2012 and May 31, 2013 still apply except where superceded by this certification. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as

described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 13, 2011 and subsequent modifications dated May 9, 2011 and April 5, 2012 and May 31, 2013 still apply except where superseded by this certification.
2. Material temporarily excavated for utility installation shall be stockpiled in an upland area and placed back into the excavated area in a manner that restores the original grade and soil profile with the organic/root layer on top.

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

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

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

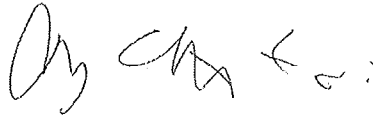
Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-431-3000, Facsimile: (919)-431-3100

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

Mr. Lacy Presnell, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center

This the 19th day of August 2013

DIVISION OF WATER RESOURCES



Thomas A. Reeder



North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Pat McCrory
Governor

Braxton C. Davis
Director

John E. Skvarla, III
Secretary

August 22, 2013

Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development and Environmental Analysis Branch
N.C. Dept. of Transportation
1548 Mail Service Center
Raleigh, N.C. 27699-1548

RE: Refinement of CAMA Major Development Permit No. 76-13 (TIP No. R-2633B).
Wilmington Bypass (B-Section), Brunswick County and New Hanover County.

Dear Dr. Thorpe:

This letter is in response to your request dated July 31, 2013, with additional information received from the North Carolina Department of Transportation on August 19, 2013, requesting authorization to revise the construction plans for the proposed water and sewer utility lines between Station 46+72 and Station 48+10 right of -Y8- on the Wilmington Bypass project.

Originally, the proposed water line was designed and permitted to cross under the fill and rip rap near the beginning of the proposed bridge over Cartwheel Branch. The revised design for the water line is to cross under the stream and adjacent wetland utilizing a 3' wide temporary trench, which would be immediately backfilled following completion of the utility line installation. The installation of the water line would be performed "in the dry" utilizing sand bags and a pump to divert the stream flow around the proposed work.

The sewer line was inadvertently omitted from the original permit plans. Current plans propose to construct the sewer line 10' from the proposed water line. The sewer line relocation would stop prior to crossing the stream and tie into the existing sewer force main. Additional total impacts from the water and sewer line relocation are 0.01 acre of temporary excavation in riparian wetlands, <0.01 acre of temporary excavation in surface waters, and 16 linear feet of stream impact.

This **Letter of Refinement** authorizes the revision to the water and sewer utility lines as described in your request dated July 31, 2013, with additional information received on August 19, 2013, including revised Utility Permit Drawing Sheets 14 of 15 and 15 of 15. This letter shall be attached to the original of amended CAMA Permit No. 76-13 and all documents must be readily available on site when a DCM representative inspects the NCDOT - Wilmington Bypass (T.I.P. R-2633B)


August 22, 2013

Page 2

project for compliance. All conditions and stipulations of the active permit remain in force unless altered herein.

Please contact Stephen Lane at (252) 808-2808 ext. 213 if you have any questions or concerns.

Sincerely,



Doug Huggett
Major Permits and Consistency Coordinator

cc: Rachelle Beauregard, NCDOT
Stephen Lane, NCDCM
Elizabeth Lusk, NCDOT
Chris Rivenbark, NCDOT
Steve Sollod, NCDCM
Brad Shaver, USACE
Mason Herndon, DWQ
Stonewall Mathis, NCDOT

U.S. COAST GUARD PERMIT (Draft Conditions):

The U.S. Coast Guard permit will not be received in time to distribute prior to bid opening. The Contractor's attention is directed to the following draft permit conditions which have been provided by the USCG. The Contractor shall comply with all draft conditions contained herewith and place his bid accordingly. The final USCG permit will be provided to the apparent lowest responsible bidder when received by the Department. The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *2012 Standard Specifications*.

DRAFT STIPULATIONS

- a. The Contractor shall submit his plan and schedule of operation for approval at least 45 days prior to commencement of work in the waterway. One copy of such information shall be submitted concurrently to your Resident Engineer, the United States Coast Guard Commander (dpb); Federal Building, 4th Floor, 431 Crawford Street; Portsmouth, VA 23704-5004, and the U. S. Coast Guard Sector North Carolina at 2301 East Fort Macon Road, Atlantic Beach, NC 28512-5633. The information shall include a sketch of the waterway; the bridge; the location of any restrictions that will be placed in the waterway such as barges, anchors, and anchor lines; the location and height above mean high water and detailed description of any scaffolding, or netting; detailed description indicating the placement, type and dimension of any cofferdams if used. The schedule should also include the hours of operation and whether or not the equipment will be removed at night. The contractor shall comply with all provisions of the Navigation Rules International - Inland, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. The Contractor shall submit to the Resident Engineer a copy of all correspondence between the Coast Guard and himself or herself. No deviation from the approved plan and schedule of operation may be made unless the modification has previously been submitted and approved by the Coast Guard.
- b. At no time during the work will the waterway be closed to navigation without prior approval from the Coast Guard. You are required to maintain close and regular contact with Coast Guard Sector North Carolina to keep them informed to activities in waterway at (252) 247-4570.
- c. Barges that are used in the waterways during the project must be marked. Attached outlines temporary marking and lighting requirements for barges and structures not part of the bridge that will be used during construction. If barge or float anchor lines are used, they must be marked by buoys, which should be lighted. If you should have any questions, regarding lights on the barges or work floats, please contact Mr. John Walters, Chief, Waterways Management Section, at (757) 398-6230. Floating equipment shall have a radiotelephone capable of operation from its main control station in accordance with Part 26 of Title 33, Code of Federal Regulations and shall be monitored during all periods the floating equipment is on station.
- d. During the progress of work, while the channel is in operation, should any material, machinery or equipment be lost, dumped, thrown overboard, sunk or misplaced which may be dangerous to or obstruct navigation, immediate notice shall be given to the Coast Guard and the object removed with the utmost dispatch. Until removal can be effected, the objects shall be properly

marked in order to protect navigation. Notice to the Coast Guard shall give a description and location of any such object and the action taken or being taken to protect navigation.

- e. Upon completion of the proposed project, an inspection of the waterway bottoms shall be performed to insure that all construction waste materials have been completely removed. Certification will be required in writing by a licensed engineer or licensed surveyor that the waterways have not been impaired and all construction related debris has been cleared from it. The certification shall include the actual method used to conduct the inspection. The Contractor shall remove any bridge related debris, resulting from the current or prior work or occurrences, discovered during this survey.
- f. Upon completion of the bridgework, a responsible official of the New Jersey North Carolina Department of Transportation shall verify as-built clearances and a statement attesting to the correctness of the clearances shall be forwarded to this office for record purpose. In lieu of verification by the above listed official, certification by a licensed surveyor or registered professional engineer registered in the State of North Carolina will be accepted.
- g. Except as shown on the plans, no dredging, excavation, filling, rip-rap, or other work affecting the bottoms, shall be done in conjunction with this work.
- h. If during the periods of construction, permanent lighting cannot be maintained operable, the fenders of each pier shall be marked with a battery or power operated white light of not less than 60 flashes per minute and visible for a range of 2,000 yards on 90% of the nights of the year. Generally, a lamp of 20-candle power will meet these requirements. If necessary to obtain coverage required, a light or lights on the upstream and downstream sides shall be installed. The piers shall be so marked until the construction has been completed and permanent navigational lighting has been reinstalled and determined to be operating satisfactorily. Written approval from the Coast Guard of temporary lighting during periods of construction is required. No existing bridge navigation lights shall be impaired or blocked during darkness or periods of reduced visibility.
- i. Compliance with the requirements stated herein does not relieve the contractor of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the State of North Carolina or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge. It is advised that the Coast Guard can levy monetary civil penalties for violations of bridge regulations and statutes.
- j. In accordance with Title 33 Code of Federal Regulations Part 118.25 – Application procedure, approval of lights and other signals required shall be obtained prior to construction. Application shall be by letter accompanied by duplicate sets of drawings showing (1) the plan and elevation of the structure showing lights and signals proposed, and (2) a small scale vicinity chart showing proposed bridge and all other bridges within 1,000 feet above or below the proposed bridges.

The office of the Bridge Administrator, Fifth Coast Guard District, shall be notified immediately upon completion of the project. If you should have any questions regarding this matter, please call me at (757) 398-6222.

DRAFT CONDITIONS

Issuance of a permit for the construction of the proposed bridge action is recommended. It is further recommended that the following conditions be included in the permit:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant.
2. The construction of falsework, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the District Commander prior to construction of the bridges. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structures shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the construction work has reached a point where such action should be taken, but in no case later than 90 days after the bridges have been opened to traffic.
3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulations as may be under the jurisdiction of the U.S. Department of Commerce, National Marine Fisheries Service, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridges.
4. Clearance gauges shall be installed and maintained in a good and legible condition on both US 17/Wilmington Bypass Bridges over Cape Fear River and over Toomers Creek by and at the expense of the owner of the bridges. The type of gauges and the locations in which they are to be installed will be submitted to the District Commander for approval.
5. When the proposed bridges are no longer used for transportation purposes, they shall be removed in its entirety or to an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridges.
6. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within three years and completed within five years after the date of this permit.

LIGHTING REQUIREMENTS FOR BARGES AND STRUCTURES NOT PART OF A BRIDGE OR APPROACH STRUCTURE

88.13 Lights on barges at bank or dock.

(a) The following barges shall display at night and, if practicable, in periods of restricted visibility the lights described in paragraph (b) of this section.

- (1) Every barge projecting into a buoyed or restricted channel.
- (2) Every barge so moored that it reduces the available navigable width of any channel to less than 80 meters.
- (3) Barges moored in groups of more than two barges wide or to a maximum width of over 25 meters.
- (4) Every barge not moored parallel to the bank or dock.

(b) Barges described in paragraph (a) shall carry two unobstructed white lights of an intensity to be visible for a least one mile on a clear dark night and arranged as follows:

- (1) On a single moored barge, lights shall be placed on the two corners farthest from the bank or dock.
- (2) On barges moored in group formation, a light shall be placed on each of the upstream and downstream ends of the group, on the corners farthest from the bank or dock.
- (3) Any barge in a group, projecting from the main body of the group toward the channel, shall be lighted as a single barge.

(c) Barges moored in any slip or slough, which is used primarily for mooring purposes, are exempt from the lighting requirements of this section.

***TITLE 33 CODE OF FEDERAL REGULATIONS, SECTION 118.95
LIGHTS ON STRUCTURES NOT PART OF A BRIDGE OR APPROACH STRUCTURE***

Lights on sheer booms, isolated piers, obstructions, and other structures not part of a bridge or approach structure must meet the requirements for aids to navigation in Subpart 66.01 of Part 66 of this chapter.

TITLE 33 CODE OF FEDERAL REGULATIONS, SECTION 66.01-10

(a) The characteristics of a private aid to navigation shall conform to the United States Aids to Navigation System described in Subpart B of Part 62 of this subchapter, except that only tungsten-incandescent light sources will be approved for electric lights.

Therefore in accordance with 33 CFR 66.01-10(a), the above lights shall be marked with slow flashing yellow lights visible for two miles on a clear dark night. Lights similar to the Tideland ML-120 Barge Light may be used. Only tungsten-incandescent light sources will be approved for electric lights.