



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

November 2, 2004

Mr. Jim Trogden, PE
Division Engineer
509 Ward Blvd.
PO Box 3165
Wilson, NC 27895

Dear Mr. Trogden,

Subject: Wake Forest Bypass, Wake County, Federal Project No. STP-98(1), State Project No. 81402501, TIP No. R-2809B

Please find enclosed a copy of the USACE Individual Permit Modification, and NCDWQ 401 and Buffer Certification. All commitments from the original permit still apply and no new conditions have been added.

Sincerely,

A handwritten signature in black ink, appearing to read "Brett Feulner", written over a large, light-colored oval scribble.

Brett Feulner
Environmental Biologist
Project Development & Environmental Analysis Branch

cc: Ms. Wendi O. Johnson, Division Construction Engineer
Mr. Eddie Bunn, Resident Engineer.
Mr. Jamie Shern, Division Environmental Officer

REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

October 27, 2004

Regulatory Division

Action ID. 199601836

Dr. Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
N.C. Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Dear Dr. Thorpe:

Reference the Department of the Army permit issued on April 4, 2002 (AID 199601836; TIP R-2809; NC 98 Wake Forest Bypass), for the discharges of fill material in waters of the United States, including wetlands, to facilitate construction of Sections A, B and C of the NC 98 Wake Forest Bypass, generally southeast of Wake Forest, in Wake County, North Carolina. Reference also the modification of that permit on October 30, 2003, for the final design of Section B, and your August 11, 2004 letter requesting additional modification of the permit, to authorize additional stream impacts in Section B totaling 419 linear feet (61 linear feet temporary, and 358 linear feet permanent, including 351 linear feet of stream relocation) due to additional required access for construction, a more accurate calculation of impact at one site, and an inaccurate survey of a stream.

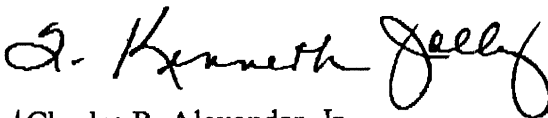
We have reviewed your proposal and have determined that the additional stream impacts are minor, and an additional public notice is not necessary. Therefore, the permit is hereby modified to include the work as shown on the enclosed plan, subject to the following additional special condition:

Compensatory mitigation for the additional unavoidable impacts to 7 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated August 26, 2004, from William D. Gilmore, EEP Transition Manager. Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide a minimum of 14 linear feet of restoration of warm water stream channel in the Neuse River basin (Hydrologic Cataloging Unit 03020201) by July 22, 2005. The NCDOT shall, within 30 days of the issue date of this permit, certify that sufficient funds have been provided to EEP to complete the required mitigation, pursuant to Paragraph V. of the MOA.

It is understood that all conditions of the original permit remain applicable, including that the additional 351 linear feet of stream relocation is subject to Special Conditions c. and d. for ONSITE STREAM RELOCATION, and that the expiration date is unchanged.

If you have questions, please contact Eric Alsmeyer of the Raleigh Regulatory Field Office, at telephone (919) 876-8441, extension 23.

Sincerely,


for Charles R. Alexander, Jr.
Colonel, U.S. Army
District Engineer

Enclosure

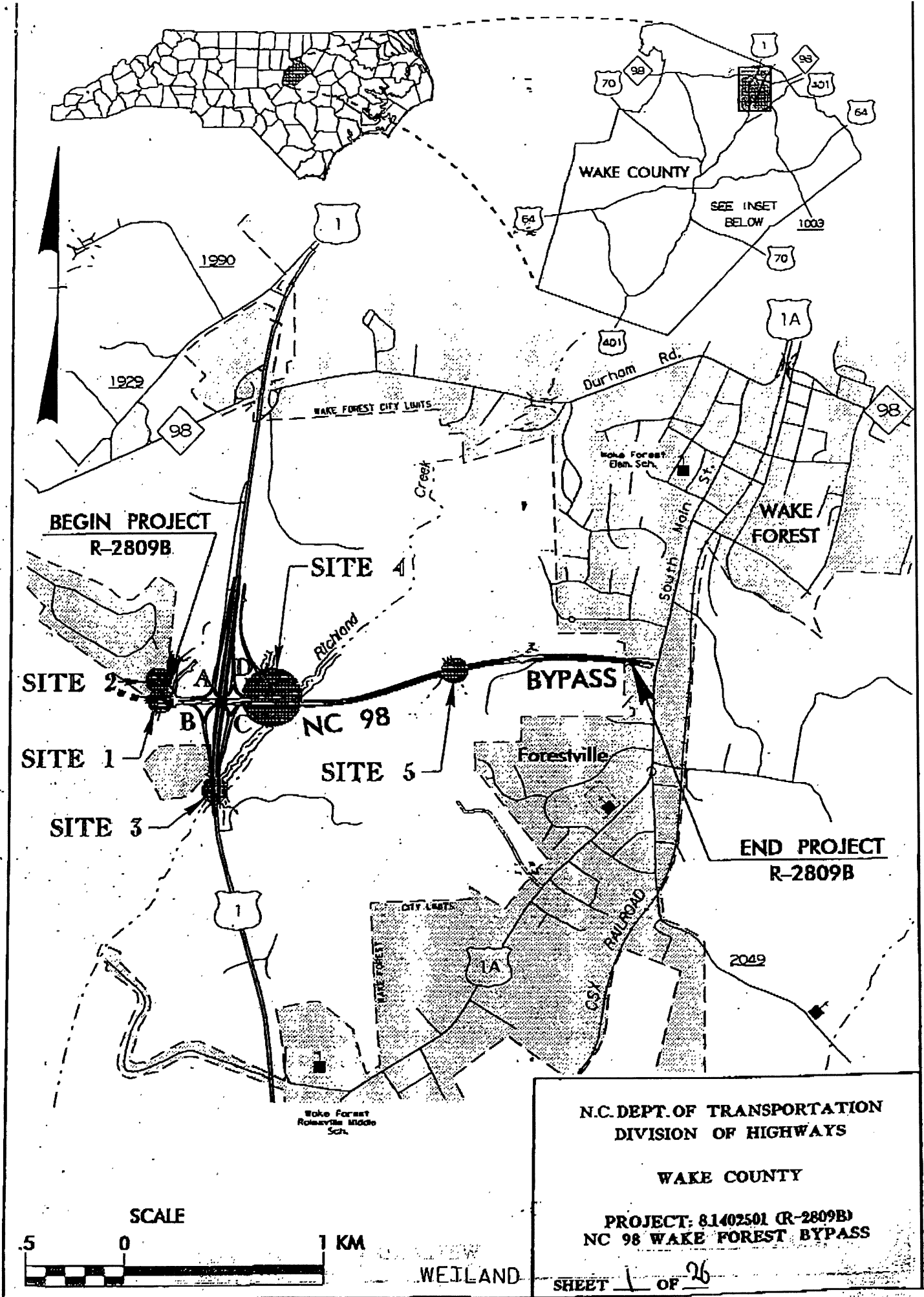
Copies Furnished with enclosure:

Mr. John Dorney
Division of Water Quality-Wetlands Section
North Carolina Department of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North, Carolina 27699-1650

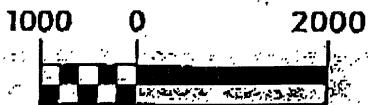
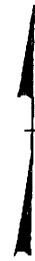
Mr. William D. Gilmore, P.E.
Transition Manager
Division of Ecosystem Enhancement
North Carolina Department of Environment and Natural Resources
1652 Mail Service Center
Raleigh, NC 27699-1652

By Fax:

Mr. Christopher Murray
Division Environmental Supervisor
NCDOT, Division 5
2612 Duke Street
Durham, North Carolina 27704



N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE COUNTY
 PROJECT: 81402501 (R-2809B)
 NC 98 WAKE FOREST BYPASS
 SHEET 1 OF 26
 WEILAND



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY

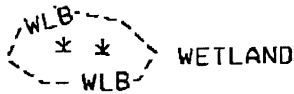
PROJECT: 8.1402501 (R-2809B)
NC 98 WAKE FOREST BYPASS

WETLAND

SHEET 2 OF 26

LEGEND

--- WLB --- WETLAND BOUNDARY



WETLAND



DENOTES FILL IN WETLAND



DENOTES FILL IN SURFACE WATER



DENOTES FILL IN SURFACE WATER (POND)



DENOTES TEMPORARY FILL IN WETLAND



DENOTES EXCAVATION IN WETLAND



DENOTES TEMPORARY FILL IN SURFACE WATER



DENOTES MECHANIZED CLEARING

← ← FLOW DIRECTION

TB TOP OF BANK

WE EDGE OF WATER

C PROP. LIMIT OF CUT

F PROP. LIMIT OF FILL

▲ PROP. RIGHT OF WAY

NG NATURAL GROUND

PL PROPERTY LINE

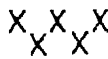
TDE TEMP. DRAINAGE EASEMENT

PDE PERMANENT DRAINAGE EASEMENT

EAB EXIST. ENDANGERED ANIMAL BOUNDARY

EPB EXIST. ENDANGERED PLANT BOUNDARY

▽ WATER SURFACE



LIVE STAKES



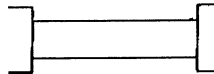
BOULDER



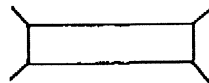
COIR FIBER ROLLS



ADJACENT PROPERTY OWNER OR PARCEL NUMBER



PROPOSED BRIDGE



PROPOSED BOX CULVERT



PROPOSED PIPE CULVERT

(DASHED LINES DENOTE EXISTING STRUCTURES)



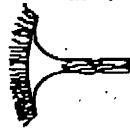
SINGLE TREE



WOODS LINE



DRAINAGE INLET



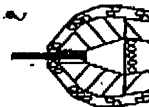
ROOTWAD



VANE



RIP RAP



RIP RAP ENERGY DISSIPATOR BASIN

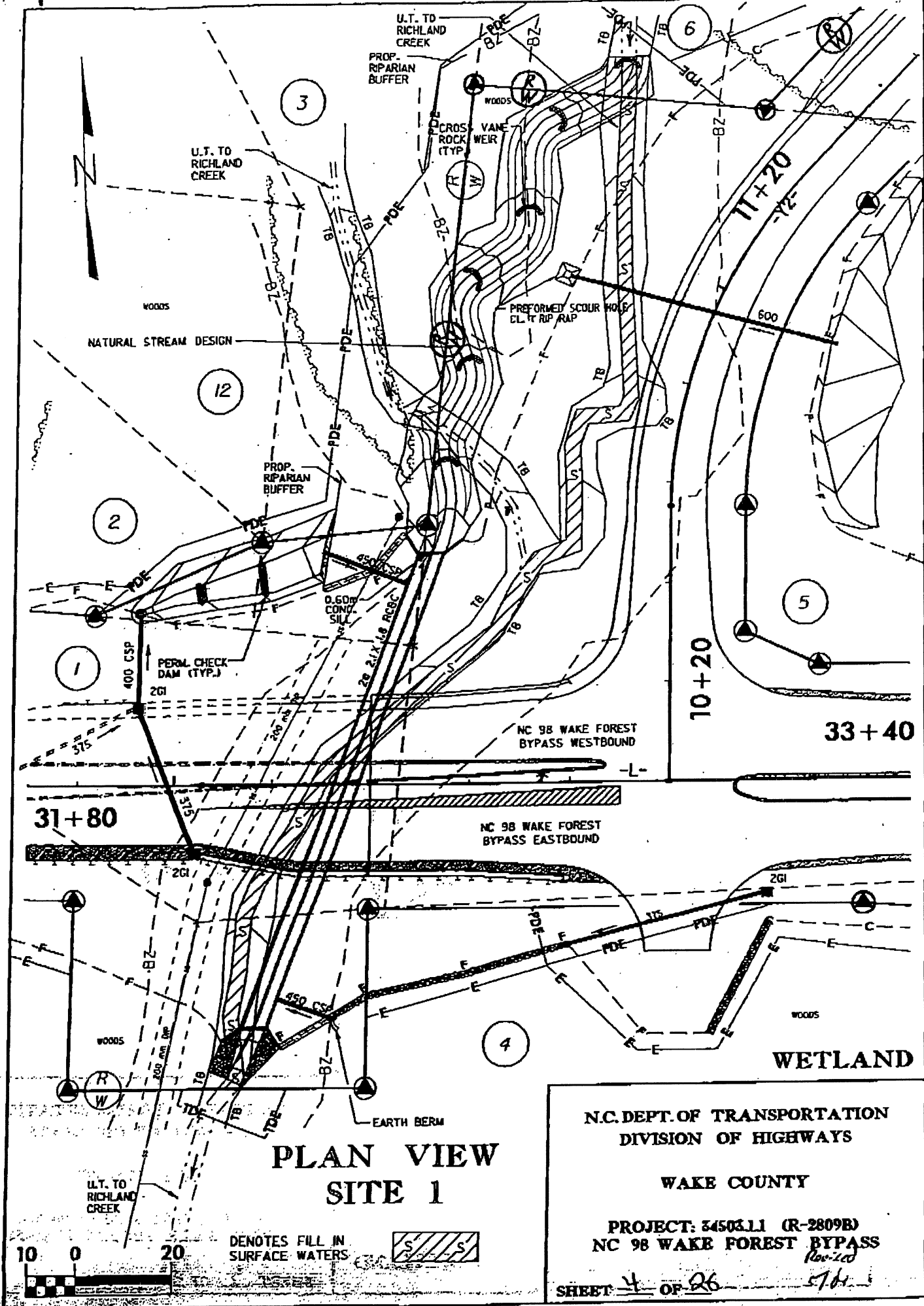
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 8.1402501 (R-2809B)
NC-98 WAKE FOREST BYPASS

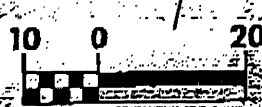
WETLAND

SHEET 3 OF 26



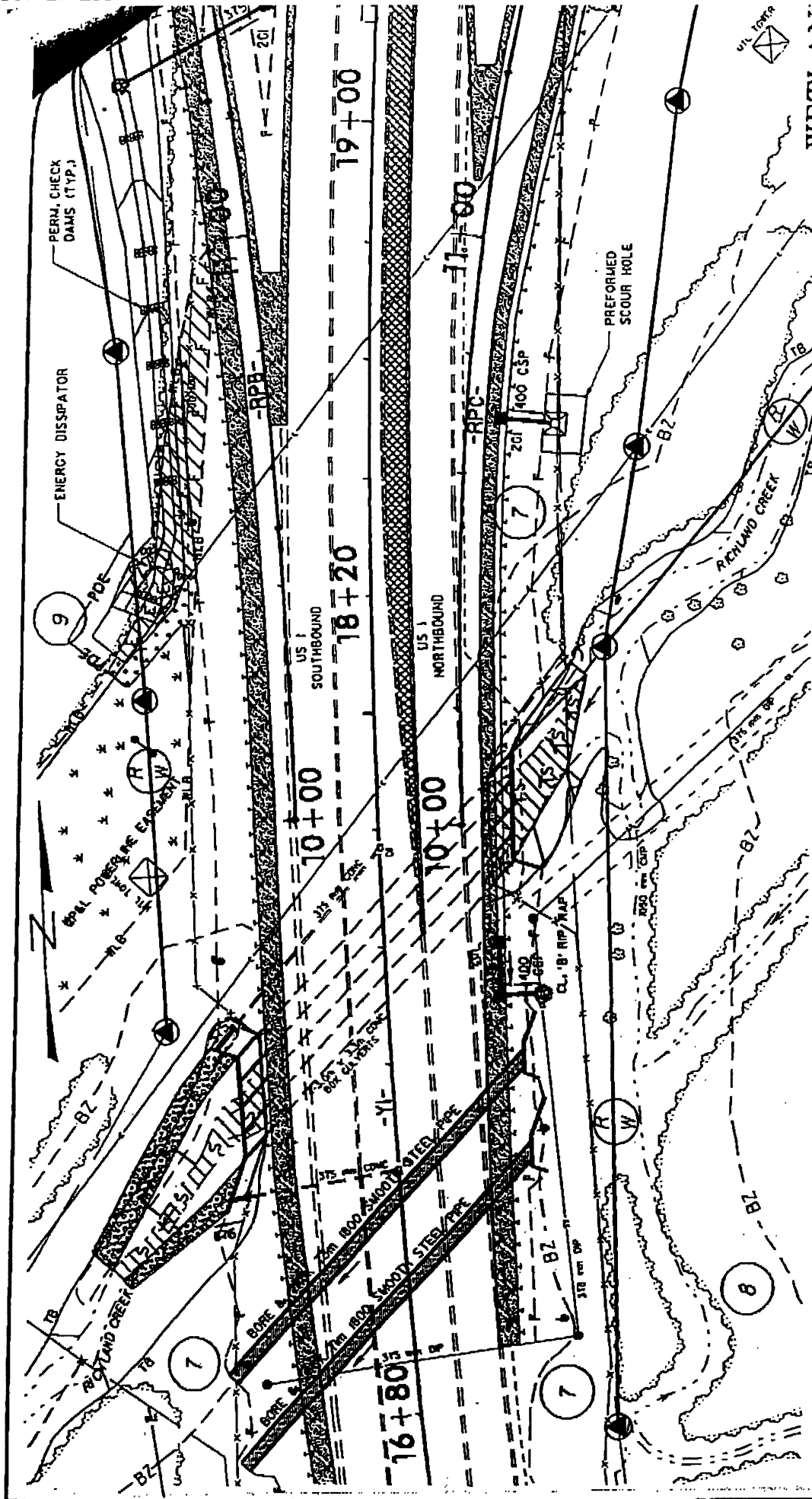
**PLAN VIEW
SITE 1**

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE COUNTY
 PROJECT: 34503.L1 (R-2809B)
 NC 98 WAKE FOREST BYPASS
 (Rev. 1-03)
 SHEET 4 OF 26 5/1/04



DENOTES FILL IN SURFACE WATERS









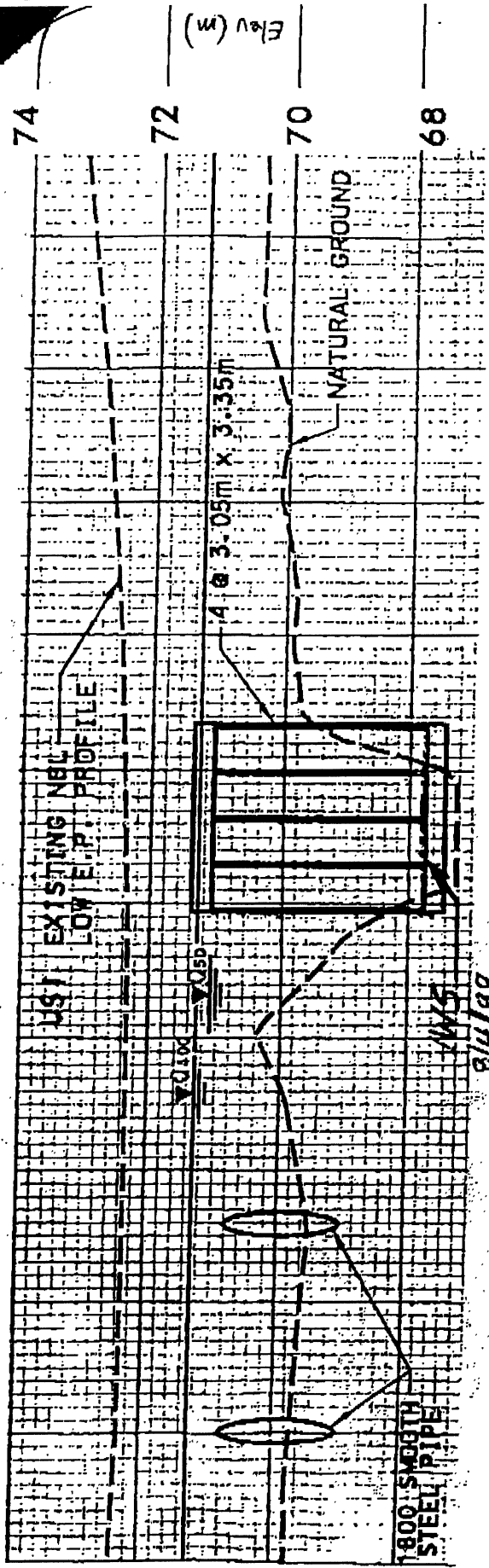
N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE COUNTY

PROJECT: 34503.1.1 (R-2809B)
 NC 98 WAKE FOREST BYPASS

SHEET 15 OF 26 Rev. Aug 2004

-  DENOTES MECHANIZED CLEARING
-  DENOTES EXCAVATION IN WETLAND
-  DENOTES FILL IN WETLAND
-  DENOTES FILL IN SURFACE WATERS

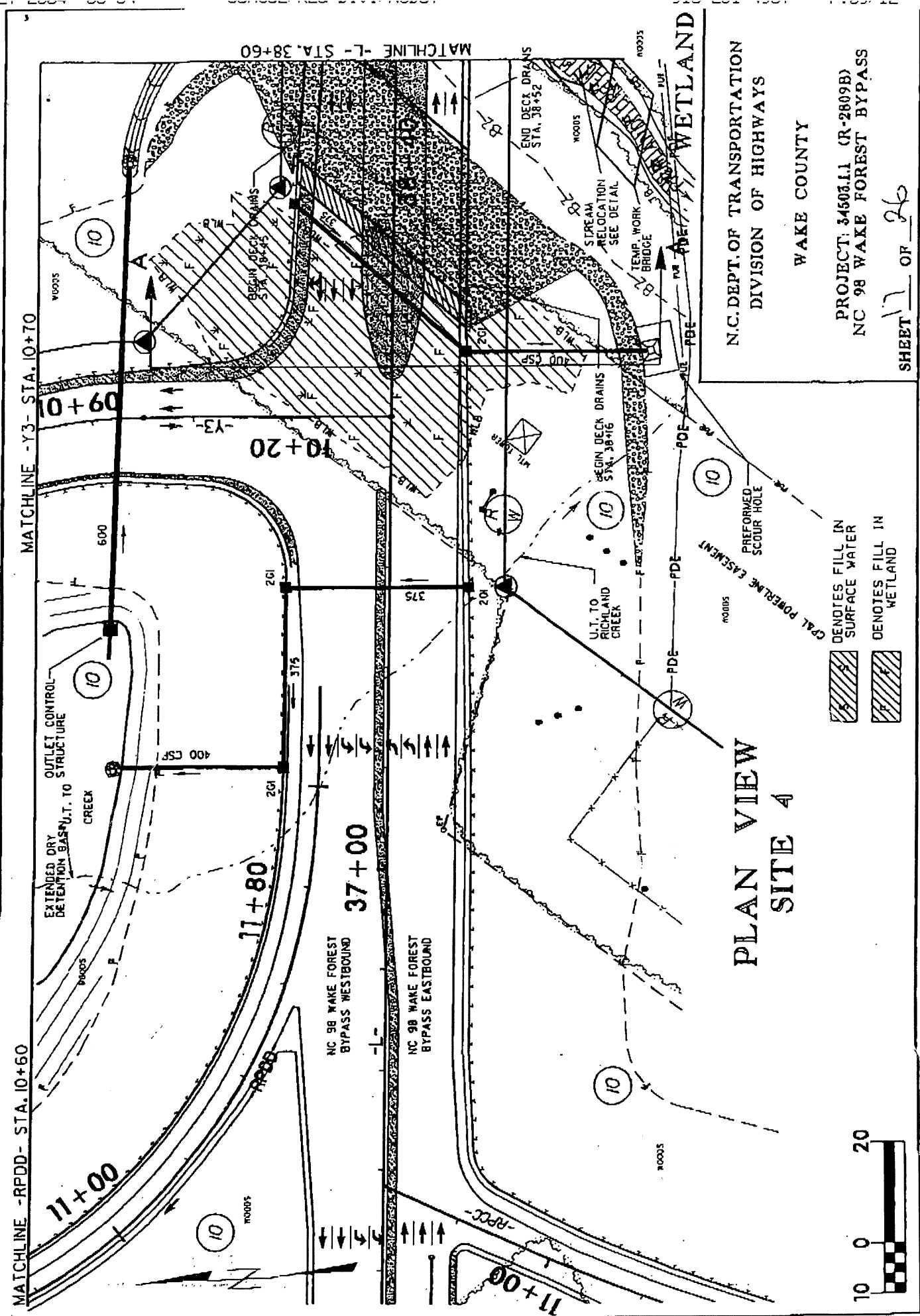
PLAN VIEW
 SITE 3



NCDDOT
 DIVISION OF HIGHWAYS
 PROJECT: 8.1402601 (R-2809B)
 NC 98 WAKE FOREST BYPASS

PROFILE
SITE 3

SHEET 6 OF 26 Rev. Aug 2001





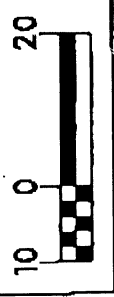
N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE COUNTY

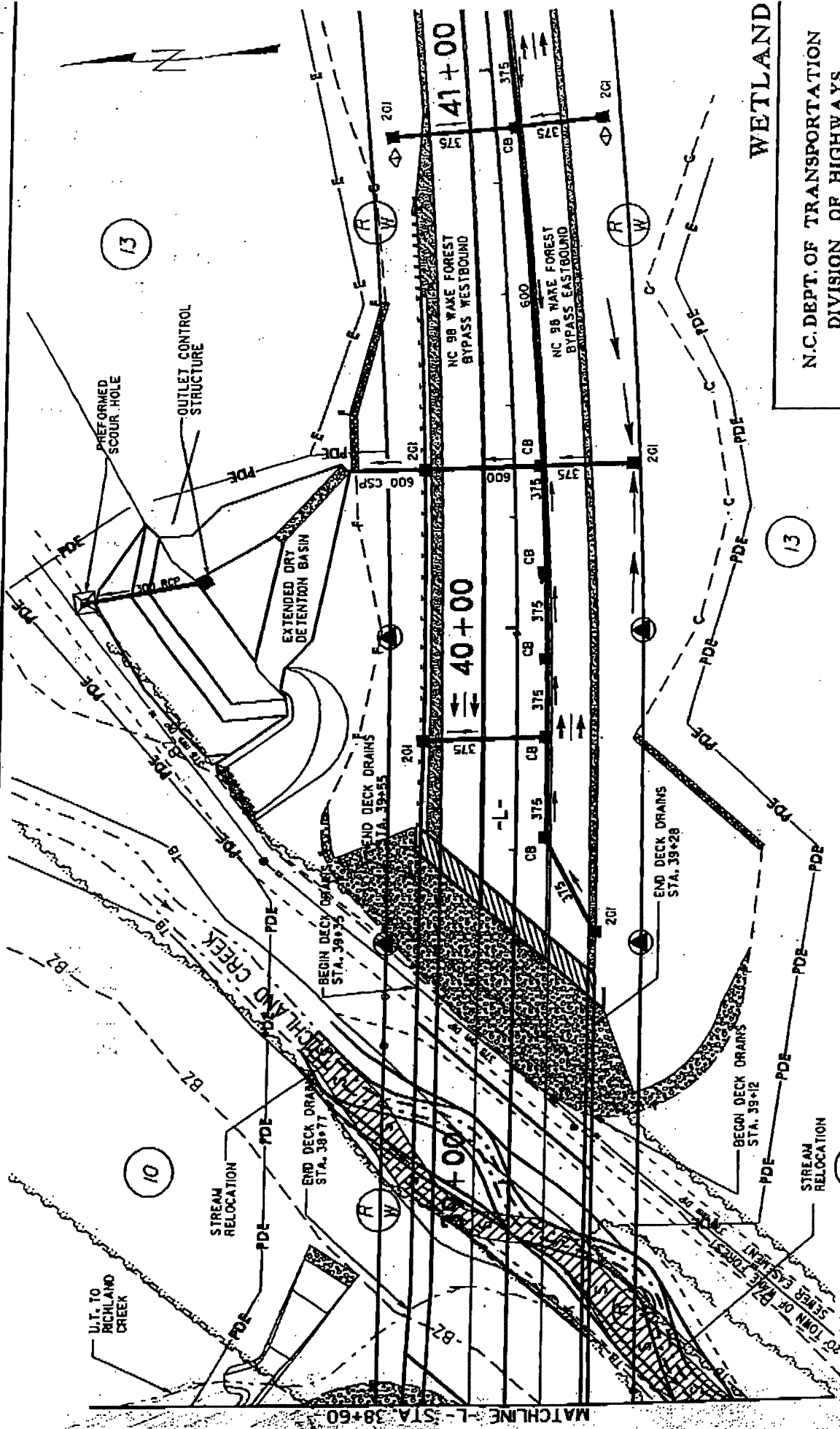
PROJECT: 34503.11 (R-2809B)
 NC 98 WAKE FOREST BYPASS

SHEET 17 OF 26

PLAN VIEW
 SITE 4

 DENOTES FILL IN SURFACE WATER
 DENOTES FILL IN WETLAND





N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT 8.1402601 (R-2809B)
NC 98 WAKE FOREST BYPASS

SHEET 19 OF 26

Hatched pattern symbol: DENOTES FILL IN SURFACE WATER

PLAN VIEW
SITE 4



WETLAND

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 81402501 (R-2809B)
NC 98 WAKE FOREST BYPASS

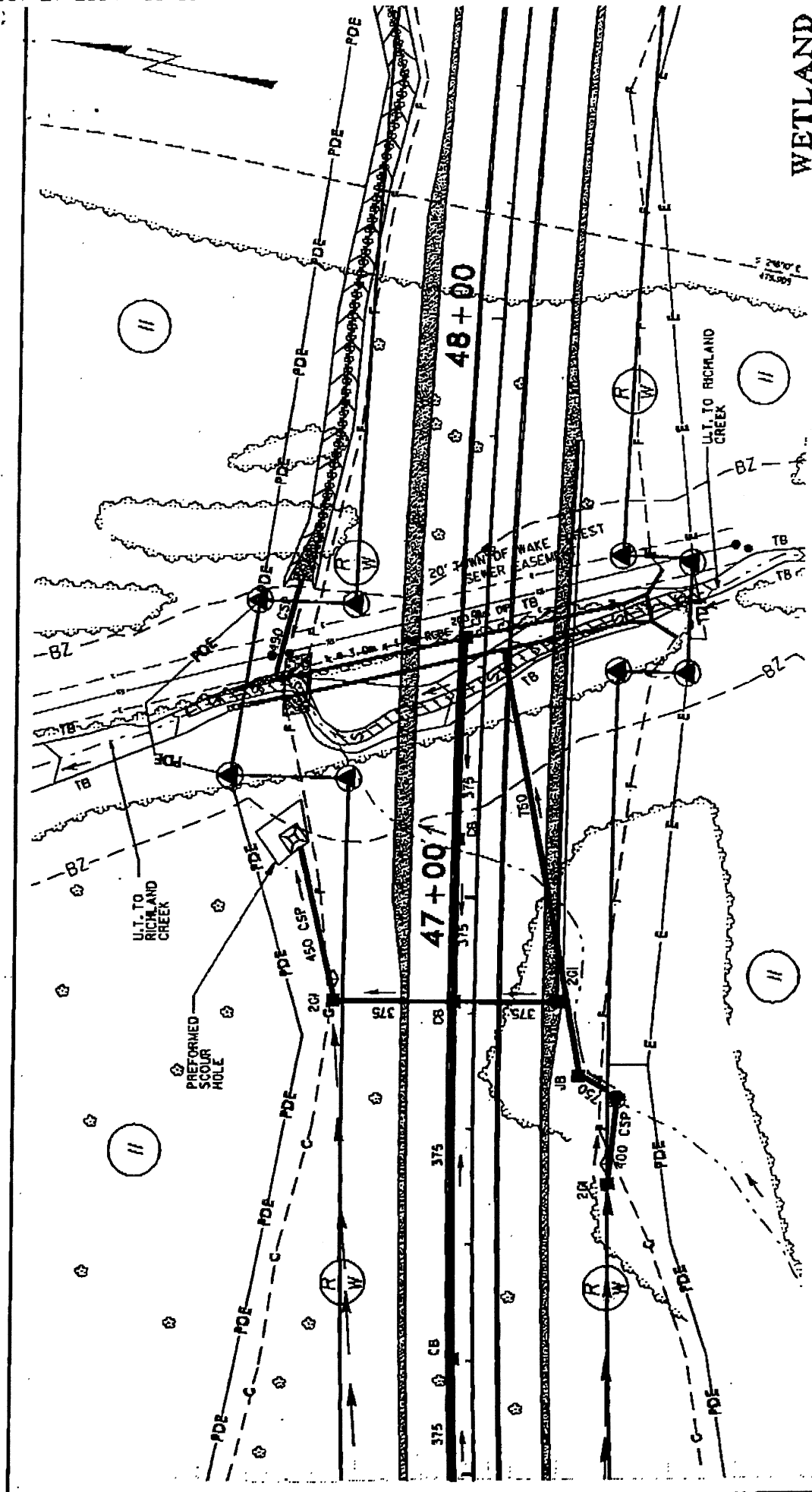
Revised

SHEET 21 OF 26

PLAN VIEW SITE 5



DENOTES FILL IN
SURFACE WATERS



WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From / To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS					
			Fill In Wetlands (ac)	Temp. Fill In Wetlands (ec)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ec)	Fill In SW (Pond) (ac)	Temp. Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)	
1	-L-31+98 / -Y2-11+38	2 @ 2.1m x 1.8m RC8C					0.19				797.20	383.80
2	-Y2-10+42L / -Y2-10+89L						0.01				132.20	
3	-Y1-16+88L / RPB-11+01L	4 @ 3.2m x 3.2m RC8C	0.86		0.06	0.02	0.05				222.40	
4	-L-37+74L / 39+34L	4 @ 88' PSG Bridge	0.88				0.16			0.03	351.00	361.00
5	-L-47+08L / 47+70R	1 @ 3.0m X 1.8m RC8C					0.04			0.01	240.80	
TOTALS:			0.72	0.00	0.06	0.02	0.43	0.00	0.04	1743.80	736.80	

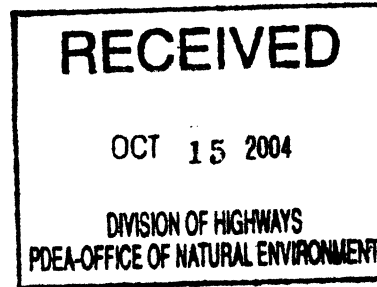
N.C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 WAKE COUNTY
 PROJECT 8.1402501 (R-2809B)
 NC 98 WAKE FOREST BYPASS
 SHEET 26 OF 26
 Rev. Aug 2004

Notes:
 RMA Category II uses Impacts = 62 feet
 RMA 61 Impervious stream impacts = 61 feet
 Form Revised 3/22/01



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

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



October 13, 2004
Wake County
DWQ No. 010550
TIP No. R-2809B

Dr. Gregory J. Thorpe, PhD., Manager
Planning and Environmental Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Dear Dr. Thorpe:

Re: Modification to 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act,
Proposed to Individual Permit in Wake County (TIP R-2809B).
WQC Project No. 10550

Attached hereto is a copy of modification to Certification No. 3443 issued to The North Carolina Department of Transportation dated February 4, 2002, modified October 22, 2003, modified January 5, 2004.

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

Sincerely,

Alan W. Klimek, P.E.
Director

Attachments

Modification to WQC No. 010550

cc: Wilmington District US Army Corps of Engineers
Mr. Eric Alsmeyer, US Army Corps of Engineers Raleigh Field Office
NCDWQ Raleigh Regional Office
Mr. Jim Trogdon, PE, Division 4 Engineer, PO Box 3165, Wilson, NC 27895
Mr. Jamie Shern, Division 4 Environmental Officer, PO Box 3165, Wilson, NC 27895
Central Files
File Copy

**APPROVAL OF 401 Water Quality Certification and ADDITIONAL CONDITIONS
and Neuse River Buffer Rules**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500, and 15 NCAC 2B .0233. The attached modification authorizes the following:

Surface Water Impacts for the Neuse River Basins

Site	Original Stream Impacts (linear feet)	Revised Stream Impacts (Linear Feet)	Increase in Stream Impact (Linear Feet)	Stream Impacts Requiring Mitigation (linear feet)	On-Site Natural Channel Design (linear feet)	Mitigation Required (for entire project)
Section B, Site 1	790	797	7	797	0	797
Section B, Site 4	0	351	351	351	351	0
Total	790	1,148	358	1,148	351	797

Neuse River Riparian Buffer Impacts & Mitigation

Site	Zone 1 (Square feet)	Zone 2 (Square feet)	Increase (Square feet)
Site 1	44,185	27,942	3,380
Site 2	9,397	4,639	6,552
Site 3 (Y1 16+88L/RPB 11+01 L)	15,629	3,820	4,468
Site 3 (Y1 16+98R/17+70R)	5,694	4,456	4,780
Site 4 (Y3 10+77R/11+05R)	452	2,024	-21,371
Site 4 (L 38+24.5/39+44.5)	26,629	19,837	28,792
Site 4 (L 40+00)	0	1,324	1,324
Site 5 (L47+09L/47+70R)	19,439	10,828	2,980
Total Impacts	121,425	74,870	30,905
Mitigable Impacts	120,973	71,522	44,779
Buffer Replacement	34,512	25,105	
Total Buffer Replacement	59,617		45,616
Total Mitigation Cost	0		

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

This approval is only valid for the purpose and design that you submitted in your application modification, as described in the Public Notice. Should your project change, you are required to notify the DWQ 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 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 three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Corps of Engineers Permit, whichever is sooner.

Condition(s) of Certification:

1. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate water quality standards.
 - a.) The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - b.) For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
2. All sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored after the Division of Land Resources has released the project;
3. If an environmental document is required, this Certification is not valid until a FONSI or ROD is issued by the State Clearinghouse. All water quality-related conditions of the FONSI or ROD shall become conditions of this Certification:
4. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit. Should waste or borrow sites be located in wetlands or stream, compensatory mitigation will be required since it is a direct impact from road construction activities.
5. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened;
6. All channel relocations will be constructed in a dry work area, and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating coir

fiber and seedling establishment is allowable. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.

7. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.
8. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ.
9. Compensatory mitigation for impacts to streams shall be done for 358 linear feet of streams in the Neuse River Basin at a replacement ratio of 1:1. Compensatory mitigation for impacts to jurisdictional streams shall be provided by onsite stream relocations of 351 linear feet of streams as described (i.e. a stable stream pattern, dimension, and profile) in the August 16, 2004 permit modification request. All stream relocations shall have 50-foot wooded buffers planted on both sides of the stream unless otherwise approved by the NC Division of Water Quality. As-Builts for the completed streams shall be submitted to the North Carolina Division of Water Quality 401 Wetlands Unit within 30 days of the completion of the construction of the relocations. If the parameters of this condition are not met, then the NCDOT shall supply additional stream mitigation for the 351 linear feet of impacts. In addition to the 351 linear feet of on-site mitigation, compensatory mitigation for an additional 7 linear feet of streams is required in the Neuse River Basin (Cataloguing Unit 03020201). We understand that you have chosen to perform compensatory mitigation for impacts to streams through use of the NC Ecosystem Enhancement Program (NCEEP), and that the EEP has agreed to implement the mitigation for the project. A letter of acceptance submitted to the NCDWQ is required from EEP prior to incurring any impacts on the project.
10. All stormwater runoff shall be directed to sheetflow through stream buffers at nonerosive velocities, unless approved otherwise by this certification.
11. For areas in the project that are located in the Neuse River Basin, no changes to the horizontal or vertical placement of the stormwater outfall locations, the horizontal or vertical placement of the culverts, the horizontal or vertical placement of bridges, the horizontal or vertical placement of grassed swales, or the horizontal or vertical placement of open ditches is permitted without written approval from the NC Division of Water Quality 401 Wetlands Unit. In addition, no changes to the flow spreader locations or designs, preformed scour hole locations or designs are permitted without written approval from the NC Division of Water Quality 401 Wetlands Unit. Any request for changes to the referenced items above will require submittal of a modification request, with seven copies, and corresponding fees will need to be submitted to the North Carolina Division of Water Quality.
12. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
13. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1.
14. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

15. Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.
16. Heavy equipment must be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the stream.
17. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
18. The presence of equipment in the channels must be minimized. Under no circumstances must rock, sand or other materials be dredged from the wetted stream channel under authorization of this permit, except in the immediate vicinity of the culverts.
19. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.

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 this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, P.O. Box 27447, Raleigh, N.C. 27611-7447. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 13th day of October 2004

DIVISION OF WATER QUALITY

Alan W. Klimek, P.E.
Director

WQC No. 3443



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources
Alan W. Klimek, P.E. Director
Division of Water Quality

DWQ Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

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

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

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

Signature _____ Registration No. _____

Date _____

**NORTH CAROLINA – DIVISION OF WATER QUALITY
401 WATER QUALITY CERTIFICATION
SUMMARY OF PERMITTED IMPACTS AND MITIGATION REQUIREMENTS**

In accordance with 15A NCAC 2H.0500, NCDOT, DWQ Project No. 010550 is authorized to impact the surface waters of the State of North Carolina as indicated below for the purpose of construction of the Wake Forest Bypass in Wake County. All activities associated with these authorized impacts must be conducted in accordance with the conditions listed in the attached Certification transmittal letter. **THIS CERTIFICATION IS NOT VALID WITHOUT THE ATTACHMENTS.**

Summary of Impacts

- 358 linear feet of jurisdictional stream loss.
- 44,779 square feet of protected riparian buffer impact

On-site mitigation to be performed by NCDOT:

- 351 linear feet of on-site stream relocation using natural channel design.
- 45,616 square feet of protected riparian buffer replacement

COMPENSATORY MITIGATION REQUIREMENTS:

LOCATION: Wake Forest Bypass

COUNTY: Wake County

BASIN/SUBBASIN: Neuse, Hydrologic Unit 3020201

As required by 15A NCAC 2B .0250 and 15A NCAC 2H .0506(h), and the conditions of this Certification, you are required to compensate for the above impacts through the restoration, creation, enhancement or preservation of wetlands, buffers, and surface waters as outlined below *prior* to conducting any activities that impact or degrade waters of the state. Mitigation to be performed by NC Ecological Enhancement Program in Hydrologic Unit 03020201:

- 7 linear feet of stream.

One of the options you have available to satisfy the compensatory mitigation requirements is through payment of a fee to the Ecosystem Enhancement Program per 15A NCAC 2R .0503. If you choose this option, please sign this form and mail it to the address listed below. An invoice for the appropriate amount of payment will be sent to you upon receipt of this form. **PLEASE NOTE, THE ABOVE IMPACTS ARE NOT AUTHORIZED UNTIL YOU RECEIVE NOTIFICATION THAT YOUR PAYMENT HAS BEEN PROCESSED BY THE ECOSYSTEM ENHANCEMENT PROGRAM.**

Signature

Date

ECOSYSTEM ENHANCEMENT PROGRAM
1652 Mail Service Center
RALEIGH, NC, 27699-1652