



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

December 23, 2004

MEMORANDUM TO: Mr. S. P. Ivey, P.E.
Division 9 Engineer

FROM: Philip S. Harris, III, P.E., Manager *PHS*
Office of Natural Environment
Project Development and
Environmental Analysis Branch

SUBJECT: Rowan-Davidson Counties, I-85 North of SR 2120 (Exit 81) in
Rowan County to US 29-52-70/I-85 Business (Exit 87) in
Davidson County; Federal Project No. NHF-85-3 (164) 80; State
Project No. 8.1631403; TIP Number I-2304A

Attached is the Individual Permit and a modification to the Division of Water Quality 401 Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

cc: Mr. Art McMillan, P.E.
Mr. Jay Bennett, P.E.
Mr. David Chang, P.E.
Mr. Randy Garris, P.E.
Mr. Greg Perfetti, P.E.
Mr. Mark Staley
Mr. John F. Sullivan, III, FHWA
Mr. Omar Sultan
Ms. Diane Hampton, P.E., Division 9 DEO

PROJECT COMMITMENTS

I-85

**North of SR 2120 (Exit 81) in Rowan County to
US 29-52-70/I-85 Business (Exit 87) in Davidson County
Rowan-Davidson Counties
Federal Aid Project No. NHF-85-3(164)80
State Project No. 8.1631403
T.I.P. Project No. I-2304A**

Commitments Developed Through Project Development and Design

Project Development and Environmental Analysis Branch (PDEA)

Because the subject project lies within a Federal Energy Regulatory Commission (FERC)-licensed hydroplant project boundary (the Yadkin Project), approval for land transfer must be obtained by NCDOT in the form of a FERC license revision. Coordination with the proper FERC officials shall take place, and the process to obtain a FERC permit will be followed.

Geotechnical Unit

It is anticipated that the proposed widening of I-85 and interchange reconstruction along I-85 will encroach on one property identified as an underground storage tank (UST) site. The project has been designed to minimize impacts to this UST site to prevent the possibility of long-term, costly remediation. This impacted site will be further evaluated before the project's construction.

Structure Design Unit

The Structure Design Unit will coordinate with the Norfolk Southern Corporation, Duke Power, and the North Carolina Railroad concerning the highway improvements affecting the freight railroads. The Structure Design Unit will also coordinate with NCDOT Rail Division, Norfolk Southern Corporation, and North Carolina Railroad for the future high-speed passenger rail corridor between Charlotte and Raleigh.

PDEA

Due to its historical significance, Bridge # 46, which carries US 29-70 over the Yadkin River in the southbound direction, will remain in place but will be closed to vehicular traffic. The bridge will remain in place to serve pedestrian and bicycle traffic. Ownership, liability, and maintenance responsibilities are currently being discussed by the Rowan and Davidson County Commissioners, the Transportation Museum, and the State Historic Preservation Office (SHPO). It is anticipated that these issues will be resolved before the project construction.

The issues related to ownership, liability, and maintenance responsibilities have not been resolved by the above-mentioned parties. These issues continue to be discussed by the local officials.

Right of Way Branch

It is anticipated that thirteen Geodetic Survey markers will be impacted by this project. The North Carolina Geodetic Survey will be contacted prior to construction regarding the relocation of survey markers along the project.

PDEA / Structure Design Unit

Removal of Bridge #137, which spans the Yadkin River, results in potentially 1,254 cubic yards of temporary fill. NCDOT will implement Best Management Practices for Bridge Demolition and Removal.

Upon further analysis of the amount of temporary fill resulting from bridge demolition, it was determined that only the amount of fill from the substructure would result in temporary fill. The likely potential amount of fill resulting from bridge demolition will be approximately 430 cubic yards. NCDOT will implement Best Management Practices for Bridge Demolition and Removal.

PDEA

The project may have an impact on a low income community in the Williams Trailer Park area located along I-85 south of SR 2124 (Hackett Road). During the project development process, no concerns have been raised by the public or local government officials concerning environmental justice issues. NCDOT will aggressively seek participation of this low-income community in the public involvement process.

NCDOT held two meetings with the citizens of the Williams Trailer Park. The first meeting was held in the Spencer Town Hall on 6/19/2001, and the second meeting was held in the North Carolina Transportation Museum on 6/24/2002. During these meetings, the design was presented to the trailer park residents, and their input and concerns related to the project were obtained. In addition to these meetings, a more detailed analysis was performed to determine the impacts to this area, and the determination has been made that this project does not create impacts related to Environmental Justice for the Williams Trailer Park.

PDEA / Design Services Unit

Based on preliminary studies, five areas were identified as possible noise barrier locations. These noise barriers were determined to be unreasonable, due to the cost of the noise reduction benefits versus the cost of the abatement measures. However, the project will be re-evaluated for noise abatement measures once more detailed designs are complete.

The project was re-evaluated for noise abatement measures. Noise mitigation in the form of a wall was analyzed for several areas along the project. For the I-2304AA section, one location, known as Barrier Location 2, it was determined that a barrier in this location is considered reasonable and feasible by NCDOT guidelines. Hence, a noise wall is recommended in this area. Further coordination with the affected residents and/or businesses will take place concerning this proposed noise wall.

PDEA / Design Services Unit/Construction Unit

A roadside memorial exists within the project limits, however it is not anticipated to be impacted by this project. This memorial, dedicated in 1929 by the North Carolina Historic Commission, which currently owns the property, was investigated for its historical significance. It was determined that this Trading Ford Monument is not eligible for the National Register of Historic Places. Based on this site visit and other information compiled by NCDOT, no additional archaeological work was deemed necessary for this site. The Historic Preservation Office has requested that the bronze plaque be returned to them if the monument has to be removed during construction. Additionally, NCDOT will coordinate with local officials and SHPO to determine if there is a more suitable location for the marker.

Design Services Unit / Structure Design Unit

In accordance with the FERC requirements, a Construction Permit will be issued to NCDOT once all requested information is reviewed and approved by FERC. The construction permit will contain a condition, among many others, that with regard to existing bridges, that NCDOT will be required to remove all concrete down to the existing muck line so that it will not be a hazard or act as a "catch" for floating debris.

PDEA

The biological conclusion for the bald eagle was revised to "Not Likely to Adversely Affect." This conclusion was approved by the USFWS. Because eagles may potentially nest in this area prior to bridge construction, NCDOT will re-survey for bald eagles prior to the project's construction.

Commitments Developed Through Permitting

Section 401 Water Quality Certification Conditions

Division 9, Roadside Environmental Unit (REU)

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 within 30 days after the project has been released.

Division 9

Stormwater management shall be constructed in accordance with the hydraulic design plans submitted in the February 20, 2004 application.

Hydraulics Unit

The hazardous spill catch basins (I-2304AA Plan Sheet 9) shall be designed and located to afford ready access to maintenance and emergency response personnel and equipment.

- The volume of spill containment storage provided will be approximately 10,000 gallons plus the estimated runoff volume from rainfall intensity equating to a two-year return period event.
- A means will be provided such that the normal free flow of runoff at the basin outlet can be interrupted to cause containment of hazardous runoff. This can be accomplished by providing a mechanical control gate or by constructing a minimum control section in the outlet channel. The mechanical gate alternative will generally be utilized in areas where normal operational activities would allow close scrutiny and control, reducing the potential for problems with vandalism.
- Maintenance plans for constructed basins shall be developed in accordance with Best Management Practices (BMPs) and good engineering practices. Additional guidance for properly maintaining containment basins can be found at 40 CFR Part 112, §112.7, *et al.* (Spill Prevention Control and Countermeasures).
- Inspections of the hazardous spill catch basin and opening/shutting of the gate should be performed annually at a minimum, and within six (6) months after a spill incident to ensure integrity of the catch basin.
- Repairs should occur in a timely manner.
- NCDOT should provide annually, a site location map of all hazardous spill catch basins and similar devices to Federal (USEPA, USCG), DENR, State Emergency Response Coordinator, and all applicable county and urban center response groups.
- Signage indicating the presence of a hazardous spill catch basin shall be provided.

REU, Division 9

The removal of vegetation in riparian areas should be minimized. NCDOT is encouraged to use existing on-site vegetation and materials for stream bank stabilization and to minimize the use of rip rap. Rip rap shall not be placed in the stream bottom. Riparian vegetation, using native trees and shrubs, must be re-established within the construction limits of the project by the end of the growing season following completion of construction to re-establish the riparian zone and to provide long-term erosion control.

Division 9

Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch

diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. If any of the existing pipes are perched, they shall be removed and replaced, and re-installed correctly, unless demonstrated that this is topographically unfeasible.

PDEA

Summary of Compensatory Mitigation: Compensatory mitigation shall be the same as that approved by the US Army Corps of Engineers, as long as the mitigation required equals a ratio of 1:1 restoration or creation of lost wetland acres as described in 15A NCAC 2H.0506 (h)(6), and consists of the following:

I-2304 Section AA

- 0.02 acres of on-site riverine wetland restoration within I-2304 Section AA.
- 2644 linear feet of stream impacts will be mitigated through NCDENR Ecosystem Enhancement Program (EEP).
- 1.08 acres of impacts to non-riverine wetlands will be mitigated through EEP.

I-2304 Section AB

- 1.03 acres of on-site riverine wetland restoration within I-2304 Section AA.
- 1811 linear feet of stream will be mitigated through EEP.
- 0.16 acres of impacts to non-riverine wetlands will be mitigated through EEP.

In accordance with 15A NCAC 2R.0500, this contribution will satisfy NC Division of Water Quality's compensatory mitigation requirements under 15A NCAC 2H.0506(h). Until the EEP receives and clears NCDOT's payments, wetland or stream fill shall not occur. The payments to EEP shall be sent within two (2) months of issuance of the 404 permit.

Division 9, Design Services Unit, Hydraulics Unit

Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the permit drawings contained in the Application dated February 20, 2004 and May 11, 2004.

Division 9

The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions. All stream relocation and restoration activities shall comply with the final natural channel design plans approved by the NC Division of Water Quality.

Division 9, REU

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 NCDOT must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.

All temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its pre-construction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.

Section 404 Individual Permit Conditions

Compliance With Plans

Division 9, Design Services Unit

All work must be performed in strict compliance with the plans, which are a part of the Section 404 permit. Any modification to the permit plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

Construction Plans

NCDOT will ensure that the construction design plans for this project do not deviate from the permit plans. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Raleigh Regulatory Field Office prior to any active construction in waters or wetlands.

Sedimentation and Erosion Control Measures

Division 9, REU

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

Mitigation

PDEA

NCDOT shall mitigate for 2.29 acres of wetland impacts, and 4,455 linear feet of impact to streams with important aquatic function, for this project, as described below (1.05 acres of riverine bottomland hardwood wetland restoration at the Yadkin River Swamp Hardwoods Restoration Mitigation Site, and 2.48 acres of restoration equivalent non-riverine wetlands, and 8,910 linear feet of restoration equivalent warm water stream channel, through the North Carolina Ecosystem Enhancement Program (EEP), in the Yadkin River basin (Cataloging Unit 03040103).

YADKIN RIVER SWAMP HARDWOODS RESTORATION MITIGATION SITE

PDEA, Division 9, Roadside Environmental Unit

NCDOT shall implement the compensatory wetland mitigation plan entitled "Restoration Plan for Swamp Hardwoods Wetlands At Existing Bridge Causeway of the I-85 Yadkin River In Rowan County", dated July 12, 2004, to provide the restoration described in conditions below. NCDOT shall complete grading for the mitigation within one year of demolition of the existing I-85 Yadkin River bridge, and complete planting of the site within the first planting season (November 15 to March 15) after grading is completed. NCDOT shall contact the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager, a minimum of sixty days before completion of grading at the mitigation site, and inform the Project Manager of the expected completion date of the grading.

NCDOT shall mitigate for 1.05 acres of unavoidable impacts to riverine bottomland hardwood forest wetlands associated with this project with 1.05 acres of riverine bottomland hardwood forest wetland restoration, at the Yadkin River Swamp Hardwoods Restoration Mitigation Site (Yadkin Site).

NCDOT will do a boundary survey of the 1.05 acres of wetland restoration at the Yadkin Site, and submit a copy of the survey to the District Engineer within 90 days after construction of the site is completed.

NCDOT will monitor the site vegetation between June 1 and November 30, inclusively, of each year, and document plant mortality and stress. A minimum of one 0.05-acre sample plots will be established within the 1.05 acre restoration area, and will be placed randomly within a representative position. NCDOT will continue monitoring of the planting area annually until the specified performance criteria is met, as described below.

YADKIN SITE MITIGATION MONITORING

PDEA, Division 9, Roadside Environmental Unit

Performance criteria for tree planting areas will be met if sample plots demonstrate that for each of the first three complete years of monitoring, 320 target-species trees per acre

have survived, such that at the end of three years, 320 three-year old target-species trees per acre have survived on the site, and, in years four and five, 288 and 260 trees per acre, respectively, have survived on the site, such that at the end of year five, 260 five-year old target-species trees per acre have survived on the site.

If for any monitoring year, vegetation survival is not favorable, as determined by the Corps of Engineers, any remedial action required by the Corps of Engineers will be performed, the required restoration areas will be replanted, and the five-year monitoring period will begin again with year one.

GENERAL WETLANDS MITIGATION

PDEA, Division 9

NCDOT and subsequent property owners shall maintain the Yadkin Site in its natural condition, as altered by work in the mitigation plan, in perpetuity. Prohibited activities within the mitigation site specifically include, but are not limited to: the construction or placement of roads, walkways, buildings, signs, or structures of any kind (i.e., billboards, interior fences, etc.); filling, grading, excavation, leveling, or any other earth moving activity or activity that may alter the drainage patterns on the property; the cutting, mowing, destruction, removal, or other damage of any vegetation; disposal or storage of any debris, trash, garbage, or other waste material; except as may be authorized by the mitigation plans, or subsequent modifications that are approved by the Corps of Engineers. In addition, NCDOT shall take no action, whether on or off the mitigation property, which will adversely impact the wetlands on the mitigation property, except as specifically authorized by this permit, or subsequent modifications that are approved by the Corps of Engineers.

NCDOT shall make every effort to convey the Yadkin Site property to a nonprofit conservation organization or a natural resource agency, which is willing to hold the areas in perpetuity for conservation purposes, and which is acceptable to the Corps of Engineers. The annual monitoring reports, as required, will include the status of the conveyance efforts.

NCDOT shall not sell or otherwise convey any interest in the property used to satisfy mitigation requirements for this permit, to any third party, without 10 days prior notification to Wilmington District Corps of Engineers in writing, which writing shall reference this permit Action ID number.

Any sale, lease, or other conveyance of the mitigation site property shall include restrictions on the use of the property as described in conditions above, which conditions shall be enforced by the North Carolina Department of Transportation. Such restrictions shall include language providing for third party enforcement rights in favor of the Corps of Engineers. Such restrictions must be approved prior to conveyance by the Corps of Engineers.

GENERAL MITIGATION

PDEA

NCDOT shall contact the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager, to provide that individual with the opportunity to attend the yearly mitigation monitoring efforts.

NC-EEP STREAM AND WETLAND MITIGATION:

PDEA

Compensatory mitigation for the unavoidable impacts to 1.24 acres of non-riverine wetlands, and 4,455 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated April 30, 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 2.48 acres of restoration equivalent non-riverine wetlands, and 8,910 linear feet of restoration equivalent warm water stream channel in the Yadkin River basin (Cataloging Unit 03040103) by one year of the date of this permit. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. 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.

Navigation

Division 9, Hydraulics Unit, Structure Design Unit

The authorized fill and structures, and associated activities, in the Yadkin River must not interfere with the public's right to free navigation on the river. No attempt will be made by NCDOT to prevent the full and free use by the public of the river at or adjacent to the authorized work for reason other than safety. NCDOT shall not modify the design of the temporary work bridges to provide an unobstructed main channel less than fifty feet wide, with no vertical structural obstructions from the work bridges extending into the opening.

Construction Plans

Division 9, Hydraulics Unit, Design Services Unit

Prior to commencing construction within jurisdictional waters of the United States, NCDOT shall forward the latest version of project construction drawings to the USACE, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings are acceptable.

Historic Property

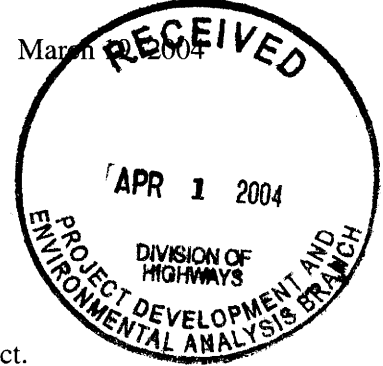
Division 9, PDEA

NCDOT shall leave Bridge No. 46, which currently carries US 29-70 over the Yadkin River in the southbound direction, in place, due to its historical significance. NCDOT shall close the bridge to vehicular traffic, but it will serve pedestrian and bicycle traffic. NCDOT shall work out ownership and maintenance responsibilities with the Rowan and Davidson County Commissioners, the Transportation Museum, and the North Carolina State Historic Preservation Office



Haney
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
Coleen H. Sullins, Deputy Director
Division of Water Quality

AB



Mr. Gregory J. Thorpe, Ph.D., Environmental Director
NCDOT Planning and Environmental Branch
1548 Mail Service Center
Raleigh, NC, 27699-1548

Dear Dr. Thorpe:

Re: Water Quality Certification Pursuant to §401 of the Federal Clean Water Act.
Improvements to I-85 from north of SR 2120 in Rowan County to north of I-85 Business in Davidson County.
F.A. Project No. NHF-85-3(164)80; State Project No. 8.1631403
✓ TIP No. I-2304AA and I-2304AB
DWQ Project No. 040275

Attached hereto is a copy of Certification No. 3455 issued to The North Carolina Department of Transportation dated March 19, 2004.

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

Sincerely,

Alan W. Klimek, P.E.

Attachments

cc: Wilmington District Corps of Engineers
Eric Alsmeyer, USACE Raleigh Field Office
NCDWQ Winston-Salem Regional Office
Christopher Militscher, US Environmental Protection Agency – Region IV
William Gilmore, NC Ecological Enhancement Program
Central Files
File Copy



: Gregory J. Thorpe, Ph.D.
: §401 Water Quality Certification No. 3455
: I-2304 AA and I-2304 BA

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

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, .0500. This Certification authorizes the NCDOT to incur the following permanent impacts:

I-2304 Section AA

- 0.02 acres of riverine wetlands through excavation and mechanized clearing;
- 1.08 acres of non-riverine wetlands through fill and mechanized clearing;
- 2644 linear feet of jurisdictional stream loss.

I-2304 Section AB

- 1.03 acres of riverine wetlands through fill, excavation, and mechanized clearing.
- 0.16 acres of non-riverine wetlands through fill and mechanized clearing.
- 1811 linear feet of jurisdictional stream loss;
- 0.003 acres of ponds (filling or draining).

The I-2304AA and I-2304AB projects shall be constructed pursuant to the application dated February 20, 2004 to improve I-85 from north of SR 2120 in Rowan County to north of I-85 Business in Davidson County.

The Application provides adequate assurance that the discharge of fill material into the waters of the state 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. All work authorized by this Certification must be done in strict compliance with the plans attached to the Application. If this project changes, incurring additional impacts to streams, wetlands or buffers, you are required to notify the DWQ *in writing*, and you may be required to submit a new application. 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, Non-discharge and Water Supply watershed regulations.

This Certification shall expire three (3) years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding US Army Corps of Engineers Permit, whichever is later.

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 protect surface waters 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*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. Any reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Application. All construction activities shall be performed so that no violations of state water quality standards, statutes, or rules occur.
3. 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 within 30 days after the project has been released.
4. Stormwater management shall be constructed in accordance with the hydraulic design plans submitted in the February 20, 2004 application.
5. The hazardous spill catch basins (I-2304AA Plan Sheet 9) shall be designed and located to afford ready access to maintenance and emergency response personnel and equipment.
 - The volume of spill containment storage provided will be approximately 10,000 gallons plus the estimated runoff volume from rainfall intensity equating to a two-year return period event.
 - A means will be provided such that the normal free flow of runoff at the basin outlet can be interrupted to cause containment of hazardous runoff. This can be accomplished by providing a mechanical control gate or by constructing a minimum control section in the outlet channel. The mechanical gate alternative will generally be utilized in areas where normal operational activities would allow close scrutiny and control, reducing the potential for problems with vandalism.
 - Maintenance plans for constructed basins shall be developed in accordance with Best Management Practices (BMPs) and good engineering practices. Additional guidance for properly maintaining containment basins can be found at 40 CFR Part 112, §112.7, *et al.* (Spill Prevention Control and Countermeasures).
 - Inspections of the hazardous spill catch basin and opening/shutting of the gate should be performed annually at a minimum, and within six (6) months after a spill incident to ensure integrity of the catch basin.
 - Repairs should occur in a timely manner.

- NCDOT should provide annually, a site location map of all hazardous spill catch basins and similar devices to Federal (USEPA, USCG), DENR, State Emergency Response Coordinator, and all applicable county and urban center response groups.
 - Signage indicating the presence of a hazardous spill catch basin shall be provided.
6. The outside wetland or water boundary as well as along the construction corridor within these boundaries approved under this authorization shall be clearly marked by orange fabric fencing for the areas that have been approved to infringe within the wetland or water prior to any land disturbing activities.
 7. NCDOT and its contractors and/or agents shall not excavate, fill, or perform mechanized land clearing at any time in the construction or maintenance of this project within waters and/or wetlands, except as authorized by this Certification, or any modification to this Certification. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this Certification without appropriate modification. If this occurs, compensatory mitigation will be required since it is a direct impact from road construction activities.
 8. Excavation of stream crossings should be conducted in the dry unless demonstrated by the applicant or its authorized agent to be unfeasible. Sandbags, cofferdams, flexible pipe, or other diversion structures should be used to minimize excavation in flowing water.
 9. Live or fresh concrete shall not come into contact with waters of the state until the concrete has hardened.
 10. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.
 11. The removal of vegetation in riparian areas should be minimized. NCDOT is encouraged to use existing on-site vegetation and materials for stream bank stabilization and to minimize the use of rip rap. Riprap shall not be placed in the stream bottom. Riparian vegetation, using native trees and shrubs, must be re-established within the construction limits of the project by the end of the growing season following completion of construction to reestablish the riparian zone and to provide long-term erosion control.
 12. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. If any of the existing pipes are perched, they shall be removed and replaced, and re-installed correctly, unless demonstrated that this is topographically unfeasible.
 13. Heavy equipment should be operated from the bank rather than in the stream channel unless demonstrated by the applicant or its authorized agent to be unfeasible. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids or other toxic substances.
 14. *Summary of Compensatory Mitigation:* Compensatory mitigation shall be the same as that approved by the US Army Corps of Engineers, as long as the mitigation required equals a ratio of 1:1 restoration or creation of lost wetland acres as described in 15A NCAC 2H.0506 (h)(6), and consists of the following:

I-2304 Section AA

- 0.02 acres of on-site riverine wetland restoration within I-2304 Section AA
- 2644 linear feet of stream impacts will be mitigated through NCDENR Ecosystem Enhancement Program (EEP).
- 1.08 acres of impacts to non-riverine wetlands will be mitigated through EEP.

I-2304 Section AB

- 1.03 acres of on-site riverine wetland restoration within I-2304 Section AA.
- 1811 linear feet of stream will be mitigated through EEP.
- 0.16 acres of impacts to non-riverine wetlands will be mitigated through EEP.

In accordance with 15A NCAC 2R.0500, this contribution will satisfy NC Division of Water Quality's compensatory mitigation requirements under 15A NCAC 2H.0506(h). Until the EEP receives and clears your payments, wetland or stream fill shall not occur. The payments to EEP shall be sent within two (2) months of issuance of the 404 permit.

15. Rock check dams at culvert outlets should be removed at project completion to avoid blocking movement of aquatic life.
16. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the Application dated February 20, 2004.
17. 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.
18. NCDOT and its authorized agents shall conduct its activities in a manner consistent with State water quality standards and any other appropriate requirements of State law and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the Certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

NCDOT shall require its contractors (and/or agents) to comply with all of the terms of this Certification, and shall provide each of its contractors (and/or agents) a copy of this Certification.

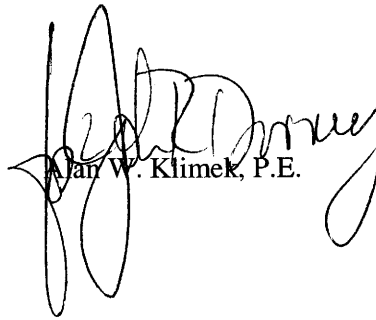
Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal Permit. This Certification shall expire upon the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

Gregory J. Thorpe, Ph.D.
§401 Water Quality Certification No. 3455
I-2304 AA and I-2304 BA

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

This the 19th day of March 2004

DIVISION OF WATER QUALITY



Alan W. Klimek, P.E.

WQC No. 3455

**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. 040275, is authorized to impact the surface waters of the State of North Carolina as indicated below for the purpose of improving I-85 from north of SR 2120 in Rowan County to north of I-85 Business in Davidson 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

I-2304 Section AA

- 0.02 acres of riverine wetlands through excavation and mechanized clearing;
- 1.08 acres of non-riverine wetlands through fill and mechanized clearing;
- 2644 linear feet of jurisdictional stream loss.

I-2304 Section AB

- 1.03 acres of riverine wetlands through fill, excavation, and mechanized clearing.
- 0.16 acres of non-riverine wetlands through fill and mechanized clearing.
- 1811 linear feet of jurisdictional stream loss;
- 0.003 acres of ponds (filling or draining).

On-site mitigation to be performed by NCDOT:

- 0.02 acres of on-site riverine wetland restoration within I-2304 Section AA.
- 1.03 acres of on-site riverine wetland restoration within I-2304 Section AA.

COMPENSATORY MITIGATION REQUIREMENTS:

LOCATION: I-85

COUNTY: Davidson and Rowan Counties

BASIN/SUBBASIN: Yadkin-Pee Dee, Hydrologic Unit 03040103

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 03040103:

- 4455 linear feet of stream impacts.
- 1.24 acres of impacts to non-riverine wetlands.

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



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, 1650 Mail Service Center, Raleigh, NC, 27699-1650. 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: _____

If this project was designed by a Certified Professional

I, _____, as a duly registered Professional _____ (i.e., Engineer, Landscape Architect, Surveyor, etc.) 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 _____



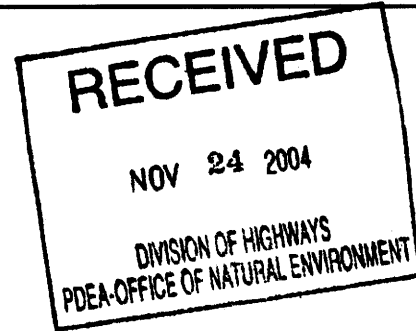


Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

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

Harvey

November 22, 2004



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

Re: Modification of 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act, Individual Permit Improvements to I-85 from north of SR2120 in Rowan County to north of NC 150 in Davidson County, TIP No. I-2304AA and AB
WQC No. 3455

Dear Dr. Thorpe:

Attached hereto is a copy of the Modification of Certification No. 3455 issued to The North Carolina Department of Transportation dated March 19, 2004. If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Alan W. Klimek, P.E.
Director

Attachments

cc: Wilmington District US Army Corps of Engineers
Mr. Eric Alsmeyer, Corps of Engineers Raleigh Field Office
Mr. Christopher Militscher, US Environmental Protection Agency – Region IV
Mr. William Gilmore, P.E. Transition Manager, NC DENR Ecosystem Enhancement Program
Sue Homewood, NC DWQ Winston-Salem Regional Office
Central Files
File Copy

APPROVAL OF 401 Water Quality Certification and 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 (DWQ) Regulations in 15 NCAC 2H, Section .0500, and 15 NCAC 2B .0233. This certification authorizes the NCDOT for the following impacts:

Wetland Impacts in the Yadkin-Pee Dee River Basin

Section	Riverine (acres)	Non- Riverine (acres)	Total (acres)	On-Site Wetland Restoration (acres)	Mitigation Required (acres)
Section AA (authorized under original WQC)					
Excavation and Mechanized Clearing	0.02	0	0.02	0.02	0
Fill and Mechanized Clearing	0	1.08	1.08	0	1.08
Subtotal	0.02	1.08	1.10	0.02	1.08
Additional Impacts for this modification					
Fill	0.1	0	0.1	0.1	0
Total Section AA Impacts	0.12	1.08	1.20	0.12	1.08
Section AB (authorized under original WQC)					
Fill, Excavation and Mechanized Clearing	1.03	0	1.03	1.03	0
Fill and Mechanized Clearing	0	0.16	0.16	0	0.16
Subtotal	1.03	0.16	1.19	1.03	0.16
Additional Impacts for this modification					
Fill	0	0	0	0	0
Total Section AB Impacts	1.03	0.16	1.19	1.03	0.16

Surface Water Impacts for the Yadkin-Pee Dee River Basins

Section	Ponds (acres)	Stream Impacts (linear feet)	Stream Impacts (acres)	Stream Impacts Requiring Mitigation (linear feet)	On-Site Natural Channel Design (linear feet)	Mitigation Required
Section AA (authorized under original WQC)	0	2,644	0	2,644	0	2,644
Additional Impacts for this modification	0	0	0.15	0	0	0
Total for Section AA	0	11,104	0.15	11,104	0	2,644
Section AB (authorized under original WQC)	0.003	1,811	0	1,811	0	1,811
Additional Impacts for this modification	0	0	0	0	0	0
Total for Section AB	0.003	1,811	0	1,811	0	1,811

The project shall be constructed pursuant to the application filed on the October 11, 2004. The application provides adequate assurance that the discharge of fill material into the waters of the Yadkin-Pee Dee 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, 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:

Project Specific Conditions of Certification:

1. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands and streams through an in-lieu payment to the North Carolina Ecosystem Enhancement Program (NCEEP), and that the NCEEP has agreed to implement the mitigation for the project. NCEEP has indicated in a letter dated August 26, 2004 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project as detailed in the table below.

Type of Impact	Amount of Impact
Non-Riverine Wetlands	1.24 ac
Streams	4,455 lf

General Conditions of Certification:

2. The dimension, pattern and profile of the stream above and below the crossing should not be modified by widening the stream channel or reducing the depth of the stream. Disturbed floodplains and streams should be restored to natural geomorphic conditions. All stream relocation and restoration activities shall comply with the final natural channel design plans approved by the NC Division of Water Quality.
3. Construction will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard.
 - a. The erosion and sediment control measures for the project must equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Sediment and Erosion Control Planning and Design Manual. These 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 equal or exceed the proper design, installation, operation and maintenance outlined in the most recent version of the North Carolina Surface Mining Manual. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
4. 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.
5. 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.

6. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened.
7. 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.
8. Excavation of the stream crossings should be conducted in the dry. Sandbags, cofferdams, flexible pipe, or other diversion structures should be used to minimize excavation in flowing water.
9. 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.
10. 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.
11. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed to allow low flow passage of water and aquatic life unless it can be shown to DWQ that providing passage would be impractical. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and 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.
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 temporary fills in wetlands and surface waters shall be removed upon completion of the project. In addition, the post-construction removal of any temporary bridge structures or fill will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species will be required.
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.

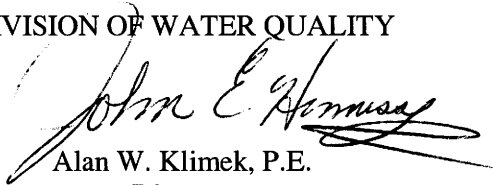
16. Heavy equipment should be operated from the bank rather than in the stream channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the stream. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
17. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
18. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the application dated May 11, 2004.
19. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by orange fabric fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
20. NCDOT, and its authorized agents, shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State law and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.
21. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification (and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
22. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch in diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. These measurements must be based on natural thalweg depths.
23. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated March 19, 2004 and all other corresponding modifications still apply except where superseded by this certification.

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 22nd day of November 2004

DIVISION OF WATER QUALITY

A handwritten signature in black ink, appearing to read "Alan W. Klimek", with a large, stylized flourish extending to the right.

Alan W. Klimek, P.E.
Director

WQC No. 3455

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. _____

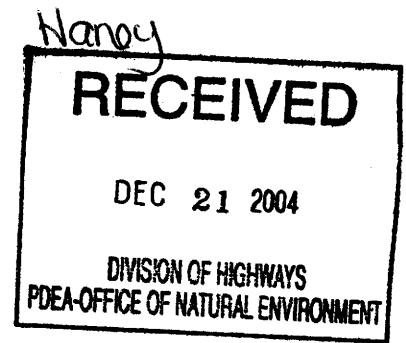
Date _____



REPLY TO
ATTENTION OF:

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

December 16, 2004



Regulatory Division

Subject: Action ID. 199821203; TIP No. I-2304A

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

Dear Mr. Thorpe:

In accordance with the written request of February 20, 2004, and the ensuing administrative record, enclosed is a permit to authorize the discharge of fill material into waters of the United States, for construction of Section A of the Interstate 85 (I-85) Improvements (T.I.P. No. I-2304A), from north of SR 2120 (Exit 81), northeast of Spencer, in Rowan County, to north of I-85 Business (Exit 87), southwest of Lexington, in Davidson County, North Carolina, crossing the Yadkin River, Potts Creek, and unnamed tributaries.

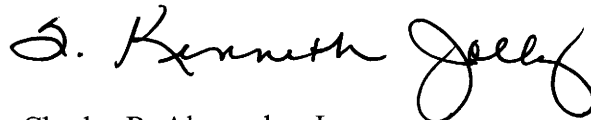
If any change in the authorized work is required because of unforeseen or altered conditions or for any other reason, the plans revised to show the change must be sent promptly to this office. Such action is necessary, as revised plans must be reviewed and the permit modified.

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

- a. You must complete construction before December 31, 2009.
- b. You must notify this office in advance as to when you intend to commence and complete work.
- c. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

Should you have questions, contact Mr. Eric Alsmeyer of my Raleigh Field Office regulatory staff at telephone (919) 876-8441, extension 23.

Sincerely,



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

Enclosures

Copy Furnished with enclosures:

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

Copies Furnished with special conditions and plans:

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

Mr. Ron Sechler
National Marine Fisheries
Service, NOAA
Pivers Island
Beaufort, North Carolina 28516

Mr. David Rackley
National Marine Fisheries
Service, NOAA
219 Fort Johnson Road
Charleston, South Carolina 29412-9110

•
* Mr. Ronald Mikulak, Chief
Wetlands Section - Region IV
Water Management Division
U.S. Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

Mr. Doug Huggett
NC Division of Coastal Management
Division of Coastal Management
151-B, NC Hwy 24
Morehead City, NC 2855

Mr. William D. Gilmore, P.E.
EEP Transition Manager
Ecosystem Enhancement Center
1652 Mail Service Center
Raleigh, NC 27699-1652

DEPARTMENT OF THE ARMY PERMIT

RECEIVED

DEC 14 2004

REGULATORY
WLM, FLD, CFC.

NC Department of Transportation

Permittee _____

199821203

Permit No. _____

USAED, Wilmington

Issuing Office _____

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

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

Project Description:

Place fill material impacting a total of 2.29 acres of wetlands and 4,455 linear feet of stream, for construction of Section A of the Interstate 85 (I-85) Improvements (T.I.P. No. I-2304A), crossing the Yadkin River, Potts Creek, and unnamed tributaries.

Project Location:

From north of SR 2120 (Exit 81), northeast of Spencer, in Rowan County, to north of I-85 Business (Exit 87), southwest of Lexington, in Davidson County, North Carolina.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2009. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See enclosed sheet.

Further Information:
1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.





1998 21 203
COPY
RECEIVED

North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Alan W. Klimek, P.E., Director
Division of Water Quality
Coleen H. Sullins, Deputy Director
Division of Water Quality

APR 9 1 2004

March 19, 2004

RALEIGH REGULATORY FIELD OFFICE

Mr. Gregory J. Thorpe, Ph.D., Environmental Director
NCDOT Planning and Environmental Branch
1548 Mail Service Center
Raleigh, NC, 27699-1548

Dear Dr. Thorpe:

Re: Water Quality Certification Pursuant to §401 of the Federal Clean Water Act.
Improvements to I-85 from north of SR 2120 in Rowan County to north of I-85 Business in Davidson County.
F.A. Project No. NHF-85-3(164)80; State Project No. 8.1631403
TIP No. I-2304AA and I-2304AB
DWQ Project No. 040275

Attached hereto is a copy of Certification No. 3455 issued to The North Carolina Department of Transportation dated March 19, 2004.

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

Sincerely,

Alan W. Klimek, P.E.

Attachments

cc: Wilmington District Corps of Engineers
Eric Alsmeyer, USACE Raleigh Field Office
NCDWQ Winston-Salem Regional Office
Christopher Militscher, US Environmental Protection Agency – Region IV
William Gilmore, NC Ecological Enhancement Program
Central Files
File Copy



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

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, .0500. This Certification authorizes the NCDOT to incur the following permanent impacts:

I-2304 Section AA

- 0.02 acres of riverine wetlands through excavation and mechanized clearing;
- 1.08 acres of non-riverine wetlands through fill and mechanized clearing;
- 2644 linear feet of jurisdictional stream loss.

I-2304 Section AB

- 1.03 acres of riverine wetlands through fill, excavation, and mechanized clearing.
- 0.16 acres of non-riverine wetlands through fill and mechanized clearing.
- 1811 linear feet of jurisdictional stream loss;
- 0.003 acres of ponds (filling or draining).

The I-2304AA and I-2304AB projects shall be constructed pursuant to the application dated February 20, 2004 to improve I-85 from north of SR 2120 in Rowan County to north of I-85 Business in Davidson County.

The Application provides adequate assurance that the discharge of fill material into the waters of the state 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. All work authorized by this Certification must be done in strict compliance with the plans attached to the Application. If this project changes, incurring additional impacts to streams, wetlands or buffers, you are required to notify the DWQ *in writing*, and you may be required to submit a new application. 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, Non-discharge and Water Supply watershed regulations.

This Certification shall expire three (3) years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding US Army Corps of Engineers Permit, whichever is later.

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 protect surface waters 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*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. Any reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the Application. All construction activities shall be performed so that no violations of state water quality standards, statutes, or rules occur.
3. 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 within 30 days after the project has been released.
4. Stormwater management shall be constructed in accordance with the hydraulic design plans submitted in the February 20, 2004 application.
5. The hazardous spill catch basins (I-2304AA Plan Sheet 9) shall be designed and located to afford ready access to maintenance and emergency response personnel and equipment.
 - The volume of spill containment storage provided will be approximately 10,000 gallons plus the estimated runoff volume from rainfall intensity equating to a two-year return period event.
 - A means will be provided such that the normal free flow of runoff at the basin outlet can be interrupted to cause containment of hazardous runoff. This can be accomplished by providing a mechanical control gate or by constructing a minimum control section in the outlet channel. The mechanical gate alternative will generally be utilized in areas where normal operational activities would allow close scrutiny and control, reducing the potential for problems with vandalism.
 - Maintenance plans for constructed basins shall be developed in accordance with Best Management Practices (BMPs) and good engineering practices. Additional guidance for properly maintaining containment basins can be found at 40 CFR Part 112, §112.7, *et al.* (Spill Prevention Control and Countermeasures).
 - Inspections of the hazardous spill catch basin and opening/shutting of the gate should be performed annually at a minimum, and within six (6) months after a spill incident to ensure integrity of the catch basin.
 - Repairs should occur in a timely manner.

- NCDOT should provide annually, a site location map of all hazardous spill catch basins and similar devices to Federal (USEPA, USCG), DENR, State Emergency Response Coordinator, and all applicable county and urban center response groups.
 - Signage indicating the presence of a hazardous spill catch basin shall be provided.
6. The outside wetland or water boundary as well as along the construction corridor within these boundaries approved under this authorization shall be clearly marked by orange fabric fencing for the areas that have been approved to infringe within the wetland or water prior to any land disturbing activities.
 7. NCDOT and its contractors and/or agents shall not excavate, fill, or perform mechanized land clearing at any time in the construction or maintenance of this project within waters and/or wetlands, except as authorized by this Certification, or any modification to this Certification. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this Certification without appropriate modification. If this occurs, compensatory mitigation will be required since it is a direct impact from road construction activities.
 8. Excavation of stream crossings should be conducted in the dry unless demonstrated by the applicant or its authorized agent to be unfeasible. Sandbags, cofferdams, flexible pipe, or other diversion structures should be used to minimize excavation in flowing water.
 9. Live or fresh concrete shall not come into contact with waters of the state until the concrete has hardened.
 10. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.
 11. The removal of vegetation in riparian areas should be minimized. NCDOT is encouraged to use existing on-site vegetation and materials for stream bank stabilization and to minimize the use of rip rap. Riprap shall not be placed in the stream bottom. Riparian vegetation, using native trees and shrubs, must be re-established within the construction limits of the project by the end of the growing season following completion of construction to reestablish the riparian zone and to provide long-term erosion control.
 12. Culverts that are less than 48-inch in diameter should be buried to a depth equal to or greater than 20% of their size to allow for aquatic life passage. Culverts that are 48-inch diameter or larger should be buried at least 12 inches below the stream bottom to allow natural stream bottom material to become established in the culvert following installation and to provide aquatic life passage during periods of low flow. If any of the existing pipes are perched, they shall be removed and replaced, and re-installed correctly, unless demonstrated that this is topographically unfeasible.
 13. Heavy equipment should be operated from the bank rather than in the stream channel unless demonstrated by the applicant or its authorized agent to be unfeasible. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids or other toxic substances.
 14. *Summary of Compensatory Mitigation:* Compensatory mitigation shall be the same as that approved by the US Army Corps of Engineers, as long as the mitigation required equals a ratio of 1:1 restoration or creation of lost wetland acres as described in 15A NCAC 2H.0506 (h)(6), and consists of the following:

I-2304 Section AA

- 0.02 acres of on-site riverine wetland restoration within I-2304 Section AA
- 2644 linear feet of stream impacts will be mitigated through NCDENR Ecosystem Enhancement Program (EEP).
- 1.08 acres of impacts to non-riverine wetlands will be mitigated through EEP.

I-2304 Section AB

- 1.03 acres of on-site riverine wetland restoration within I-2304 Section AA.
- 1811 linear feet of stream will be mitigated through EEP.
- 0.16 acres of impacts to non-riverine wetlands will be mitigated through EEP.

In accordance with 15A NCAC 2R.0500, this contribution will satisfy NC Division of Water Quality's compensatory mitigation requirements under 15A NCAC 2H.0506(h). Until the EEP receives and clears your payments, wetland or stream fill shall not occur. The payments to EEP shall be sent within two (2) months of issuance of the 404 permit.

15. Rock check dams at culvert outlets should be removed at project completion to avoid blocking movement of aquatic life.
16. Two copies of the final construction drawings shall be furnished to NCDWQ prior to the pre-construction meeting. Written verification shall be provided that the final construction drawings comply with the attached permit drawings contained in the Application dated February 20, 2004.
17. 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.
18. NCDOT and its authorized agents shall conduct its activities in a manner consistent with State water quality standards and any other appropriate requirements of State law and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this Certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15A NCAC 2H.0507(d). Before modifying the Certification, DWQ shall notify NCDOT and the US Army Corps of Engineers, provide public notice in accordance with 15A NCAC 2H.0503 and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the United States Army Corps of Engineers for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

NCDOT shall require its contractors (and/or agents) to comply with all of the terms of this Certification, and shall provide each of its contractors (and/or agents) a copy of this Certification.

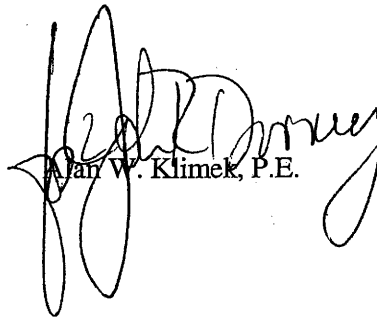
Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal Permit. This Certification shall expire upon the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

Gregory J. Thorpe, Ph.D.
§401 Water Quality Certification No. 3455
I-2304 AA and I-2304 BA

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

This the 19th day of March 2004

DIVISION OF WATER QUALITY



Alan W. Klimek, P.E.

WQC No. 3455

**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. 040275, is authorized to impact the surface waters of the State of North Carolina as indicated below for the purpose of improving I-85 from north of SR 2120 in Rowan County to north of I-85 Business in Davidson 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

I-2304 Section AA

- 0.02 acres of riverine wetlands through excavation and mechanized clearing;
- 1.08 acres of non-riverine wetlands through fill and mechanized clearing;
- 2644 linear feet of jurisdictional stream loss.

I-2304 Section AB

- 1.03 acres of riverine wetlands through fill, excavation, and mechanized clearing.
- 0.16 acres of non-riverine wetlands through fill and mechanized clearing.
- 1811 linear feet of jurisdictional stream loss;
- 0.003 acres of ponds (filling or draining).

On-site mitigation to be performed by NCDOT:

- 0.02 acres of on-site riverine wetland restoration within I-2304 Section AA.
- 1.03 acres of on-site riverine wetland restoration within I-2304 Section AA.

COMPENSATORY MITIGATION REQUIREMENTS:

LOCATION: I-85

COUNTY: Davidson and Rowan Counties

BASIN/SUBBASIN: Yadkin-Pee Dee, Hydrologic Unit 03040103

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 03040103:

- 4455 linear feet of stream impacts.
- 1.24 acres of impacts to non-riverine wetlands.

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

SPECIAL CONDITIONS (Action ID. 199821203; NCDOT/TIP I-2304A)

COMPLIANCE WITH PLANS

a) All work must be performed in strict compliance with the attached plans, which are a part of this permit. Any modification to the permit plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

ACTIVITIES NOT AUTHORIZED

b) Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, nor shall any activities take place that cause the degradation of waters or wetlands. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

This permit does not authorize temporary placement or double handling of excavated or fill material within jurisdictional waters, including wetlands, outside the permitted area. Additionally, no construction materials or equipment will be placed or stored within jurisdictional waters, including wetlands.

CONSTRUCTION PLANS

c) The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of Engineers, Raleigh Regulatory Field Office prior to any active construction in waters or wetlands.

d) Prior to commencing construction within jurisdictional waters of the United States for any portion of the proposed project, the permittee shall forward the latest version of project construction drawings to the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.

POLLUTION SPILLS

e) All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other

toxic materials. No equipment staging or storage of construction material will occur in wetlands. Hydro-seeding equipment will not be discharged or washed out into any surface waters or wetlands. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

CLEAN FILL MATERIAL

f) Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.

CONTRACTOR COMPLIANCE

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

SEDIMENTATION AND EROSION CONTROL MEASURES

h) The permittee shall use appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" to assure compliance with the appropriate turbidity water quality standard. . Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standards. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

Adequate sedimentation and erosion control measures must be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures must be inspected and maintained regularly, especially following rainfall events. All fill material must be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

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

During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of nonerodable materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

REPORTING OF VIOLATIONS

i) The permittee will report any violation of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act in writing to the Wilmington District, U. S Army Corps of Engineers, within 24 hours of the permittee's discovery of the violation.

COMPLIANCE WITH SPECIAL CONDITIONS

j) Failure to institute and carry out the details of the following special conditions, below, will result in a directive to cease all ongoing and permitted work within waters and/or wetlands associated with the permitted project, or such other remedies and/or fines as the District Engineer or his authorized representatives may seek.

WET CONCRETE

k) The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.

CULVERTS

l) All authorized culverts will be installed to allow the passage of low stream flows and the continued movement of fish and other aquatic life as well as to prevent headcutting of the streambed. For all box culverts and for pipes greater than 48 inches in diameter, the bottom of the pipe will be buried at least one foot below the bed of the stream unless burial would be impractical and the Corps of Engineers has waived this requirement. For culverts 48 inches in diameter or smaller, the bottom of the pipe must be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in disequilibrium of wetlands or streambeds or banks, adjacent to, upstream or downstream of the structures. In order to allow for the continued movement of bed load and aquatic organisms, existing stream channel widths and depths will be maintained at the inlet and outlet ends of culverts. Riprap armoring of streams at culvert inlets and outlets shall be minimized above the ordinary high water elevation in favor of bioengineering techniques such as bank sloping, erosion control matting and revegetation with deep-rooted, woody plants.

PRECONSTRUCTION MEETING

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

BORROW AND WASTE

n) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands. All jurisdictional wetland lines on borrow and waste sites shall be verified by the Corps of Engineers and shown on the approved reclamation plans. The permittee shall ensure that all such areas comply with Condition b) of this permit, and shall require and maintain documentation of the location and characteristics of all borrow and disposal sites associated with this project. This information will include data regarding soils, vegetation and hydrology sufficient to clearly demonstrate compliance with the Condition b). All information will be available to the USACE upon request. NCDOT shall require its contractors to complete and execute reclamation plans for each waste and borrow site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the Corps of Engineers within 30 days of the completion of the reclamation work.

MITIGATION

o. The permittee shall mitigate for 2.29 acres of wetland impacts, and 4,455 linear feet of impact to streams with important aquatic function, for this project, as described below (1.05 acres of riverine bottomland hardwood wetland restoration at the Yadkin River Swamp Hardwoods Restoration Mitigation Site, and 2.48 acres of restoration equivalent

non-riverine wetlands, and 8,910 linear feet of restoration equivalent warm water stream channel, through the North Carolina Ecosystem Enhancement Program (EEP), in the Yadkin River basin (Cataloging Unit 03040103).

YADKIN RIVER SWAMP HARDWOODS RESTORATION MITIGATION SITE

p. The permittee shall implement the compensatory wetland mitigation plan entitled "Restoration Plan for Swamp Hardwoods Wetlands At Existing Bridge Causeway of the I-85 Yadkin River In Rowan County", dated July 12, 2004, to provide the restoration described in condition n. below. NCDOT shall complete grading for the mitigation within one year of demolition of the existing I-85 Yadkin River bridge, and complete planting of the site within the first planting season (November 15 to March 15) after grading is completed. NCDOT shall contact the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager, a minimum of sixty days before completion of grading at the mitigation site, and inform the Project Manager of the expected completion date of the grading.

q. The permittee shall mitigate for 1.05 acres of unavoidable impacts to riverine bottomland hardwood forest wetlands associated with this project with 1.05 acres of riverine bottomland hardwood forest wetland restoration, at the Yadkin River Swamp Hardwoods Restoration Mitigation Site (Yadkin Site).

r. NCDOT will do a boundary survey of the 1.05 acres of wetland restoration at the Yadkin Site, and submit a copy of the survey to the District Engineer within 90 days after construction of the site is completed.

s. The permittee will monitor the site vegetation between June 1 and November 30, inclusively, of each year, and document plant mortality and stress. A minimum of one 0.05-acre sample plots will be established within the 1.05 acre restoration area, and will be placed randomly within a representative position. The permittee will continue monitoring of the planting area annually until the specified performance criteria is met, as described below.

YADKIN SITE MITIGATION MONITORING

t. Performance criteria for tree planting areas will be met if sample plots demonstrate that for each of the first three complete years of monitoring, 320 target-species trees per acre have survived, such that at the end of three years, 320 three-year old target-species trees per acre have survived on the site, and, in years four and five, 288 and 260 trees per acre, respectively, have survived on the site, such that at the end of year five, 260 five-year old target-species trees per acre have survived on the site.

u. If for any monitoring year, vegetation survival is not favorable, as determined by the Corps of Engineers, any remedial action required by the Corps of Engineers will be performed, the required restoration areas will be replanted, and the five-year monitoring period will begin again with year one.

GENERAL WETLANDS MITIGATION

v. The permittee and subsequent property owners shall maintain the Yadkin Site in its natural condition, as altered by work in the mitigation plan, in perpetuity. Prohibited activities within the mitigation site specifically include, but are not limited to: the construction or placement of roads, walkways, buildings, signs, or structures of any kind (i.e., billboards, interior fences, etc.); filling, grading, excavation, leveling, or any other earth moving activity or activity that may alter the drainage patterns on the property; the cutting, mowing, destruction, removal, or other damage of any vegetation; disposal or storage of any debris, trash, garbage, or other waste material; except as may be authorized by the mitigation plans, or subsequent modifications that are approved by the Corps of Engineers. In addition, the permittee shall take no action, whether on or off the mitigation property, which will adversely impact the wetlands on the mitigation property, except as specifically authorized by this permit, or subsequent modifications that are approved by the Corps of Engineers.

w. The permittee shall make every effort to convey the Yadkin Site property to a nonprofit conservation organization or a natural resource agency, which is willing to hold the areas in perpetuity for conservation purposes, and which is acceptable to the Corps of Engineers. The annual monitoring reports, as required, will include the status of the conveyance efforts.

x. The permittee shall not sell or otherwise convey any interest in the property used to satisfy mitigation requirements for this permit, to any third party, without 10 days prior notification to Wilmington District Corps of Engineers in writing, which writing shall reference this permit Action ID number.

y. Any sale, lease, or other conveyance of the mitigation site property shall include restrictions on the use of the property as described in condition x. above, which conditions shall be enforced by the North Carolina Department of Transportation. Such restrictions shall include language providing for third party enforcement rights in favor of the Corps of Engineers. Such restrictions must be approved prior to conveyance by the Corps of Engineers.

GENERAL MITIGATION

z. The permittee shall contact the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager, to provide that individual with the opportunity to attend the yearly mitigation monitoring efforts.

NC-EEP STREAM AND WETLAND MITIGATION:

aa. Compensatory mitigation for the unavoidable impacts to 1.24 acres of non-riverine wetlands, and 4,455 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated April 30, 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 2.48 acres of restoration equivalent non-riverine wetlands, and 8,910 linear feet of restoration equivalent warm water stream channel in the Yadkin River basin (Cataloging Unit 03040103) by one year of the date of this permit. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration. 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.

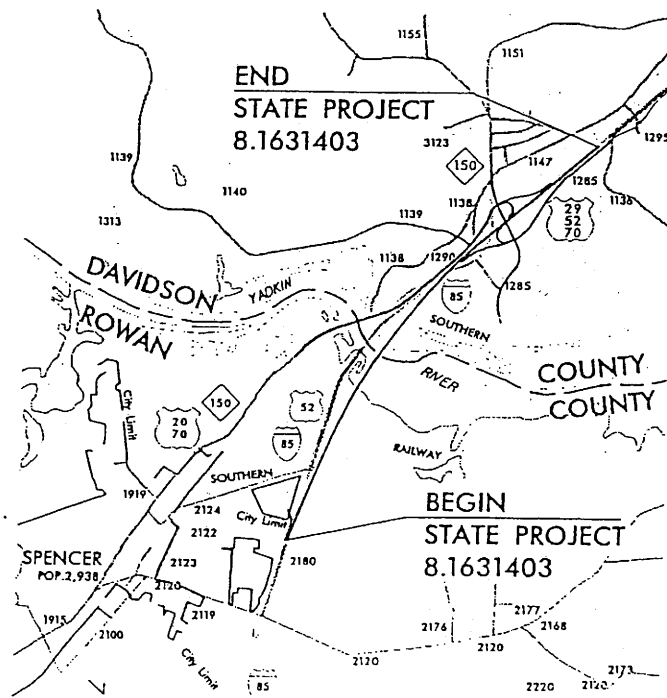
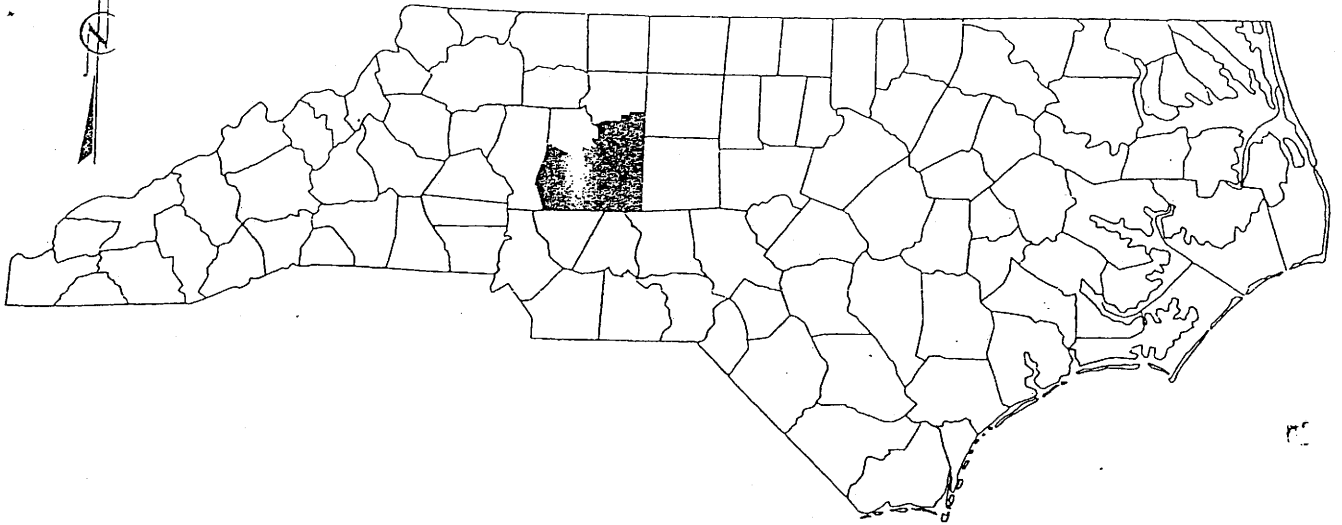
Navigation

bb. The authorized fill and structures, and associated activities, in the Yadkin River must not interfere with the public's right to free navigation on the river. No attempt will be made by the permittee to prevent the full and free use by the public of the river at or adjacent to the authorized work for reason other than safety. NCDOT shall not modify the design of the temporary work bridges to provide an unobstructed main channel less than fifty feet wide, with no vertical structural obstructions from the work bridges extending into the opening.

Historic Property

cc. NCDOT shall leave Bridge No. 46, which currently carries US 29-70 over the Yadkin River in the southbound direction, in place, due to its historical significance. NCDOT shall close the bridge to vehicular traffic, but it will serve pedestrian and bicycle traffic. NCDOT shall work out ownership and maintenance responsibilities with the Rowan and Davidson County Commissioners, the Transportation Museum, and the North Carolina State Historic Preservation Office.

NORTH CAROLINA



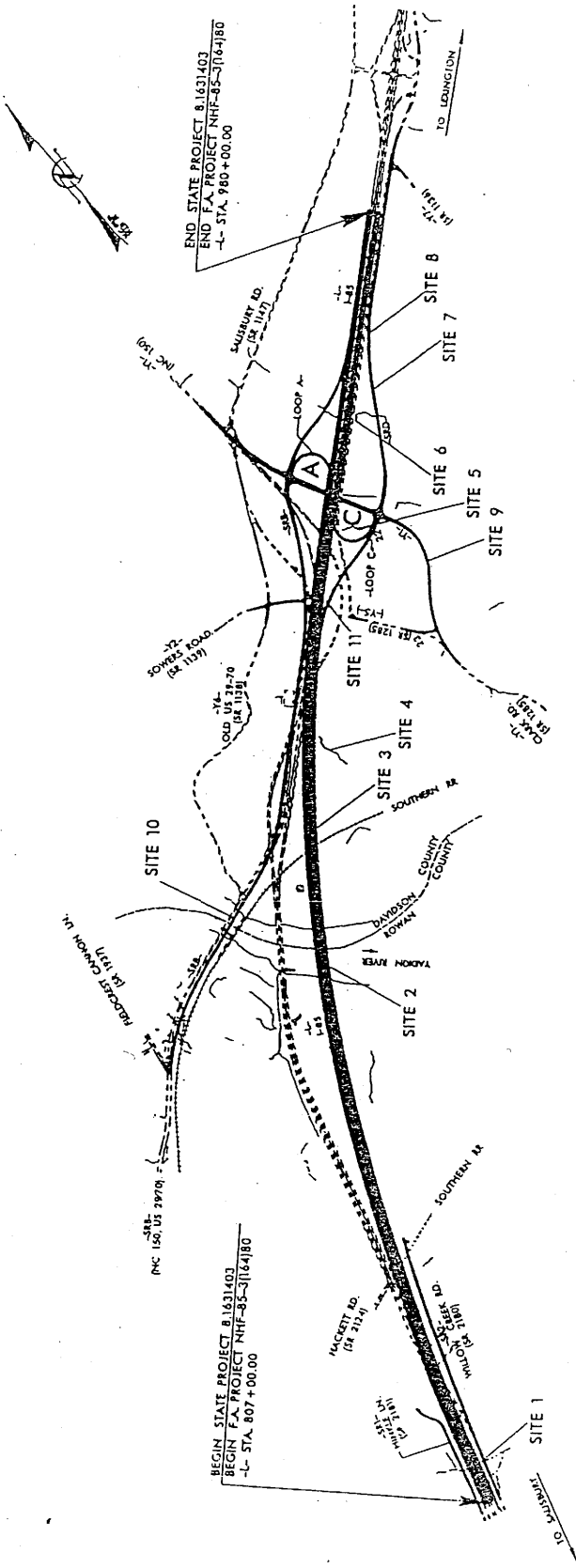
VICINITY MAPS

NCDOT

DIVISION OF HIGHWAYS
DAVIDSON/ROWAN

PROJECT: 8.1631403 (I-2304AA)

I-85 FROM NORTH OF SR 2120 IN
ROWAN COUNTY TO NORTH OF
NC 150 IN DAVIDSON COUNTY



NCDOT

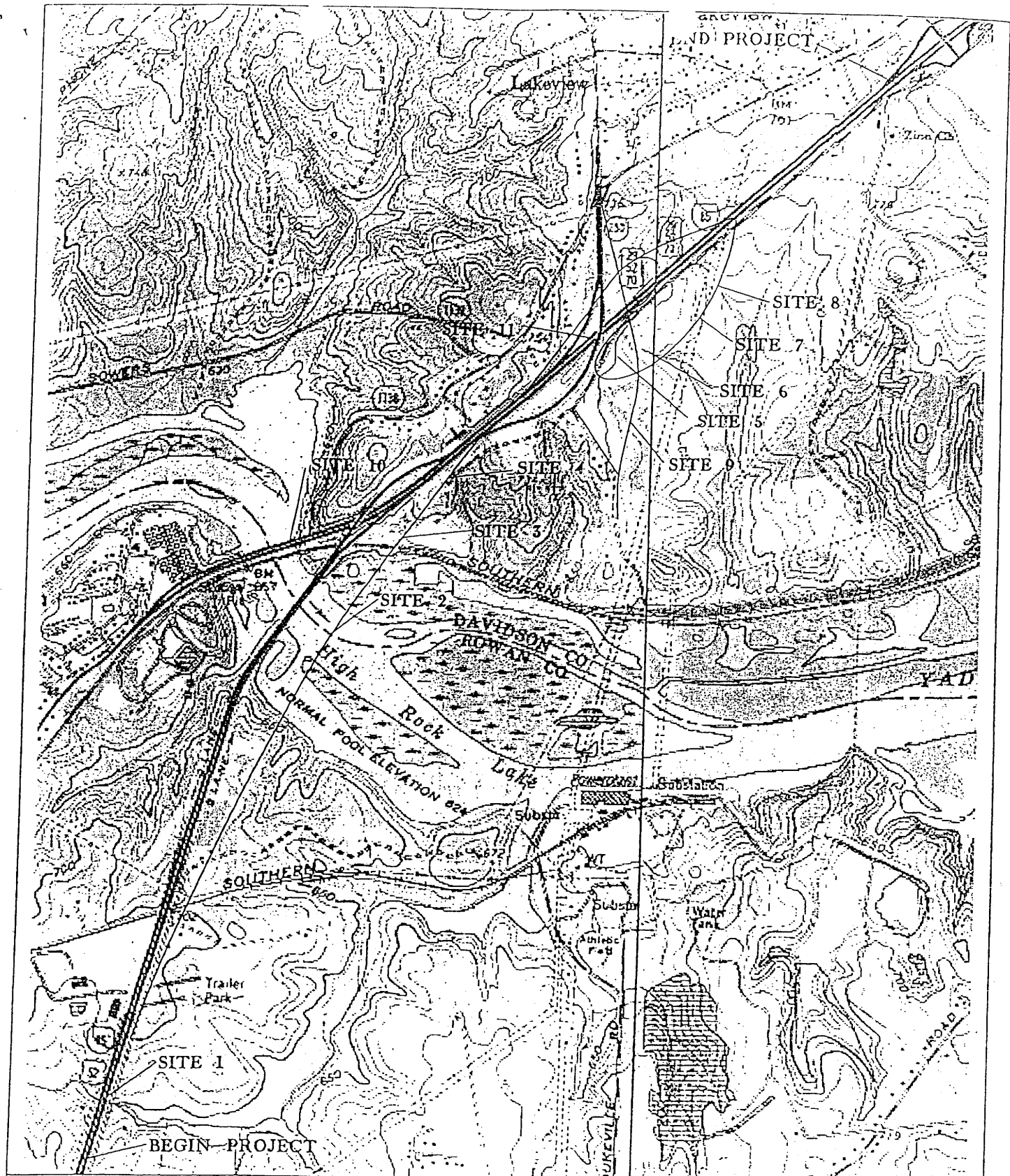
DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN

PROJECT: 8.1631403 (I-2304AA)

I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

SHEET 2 OF 21 5/8/03

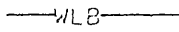
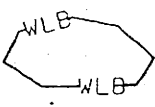
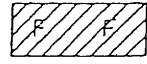

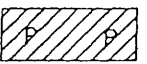


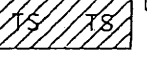


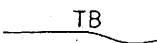
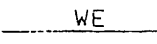
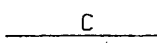
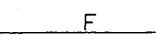

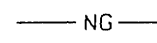
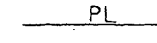
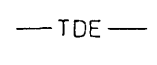
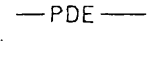
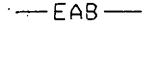
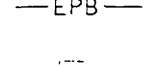
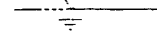
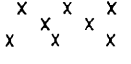

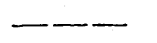
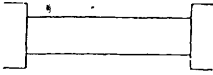
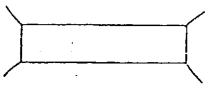


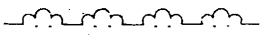
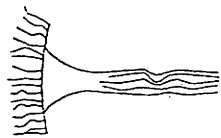
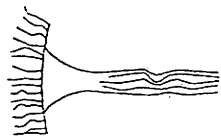



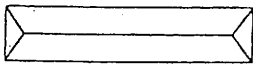
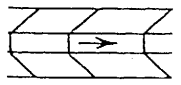
SITE MAP



TOPO MAP
SCALE 1" = 2000'

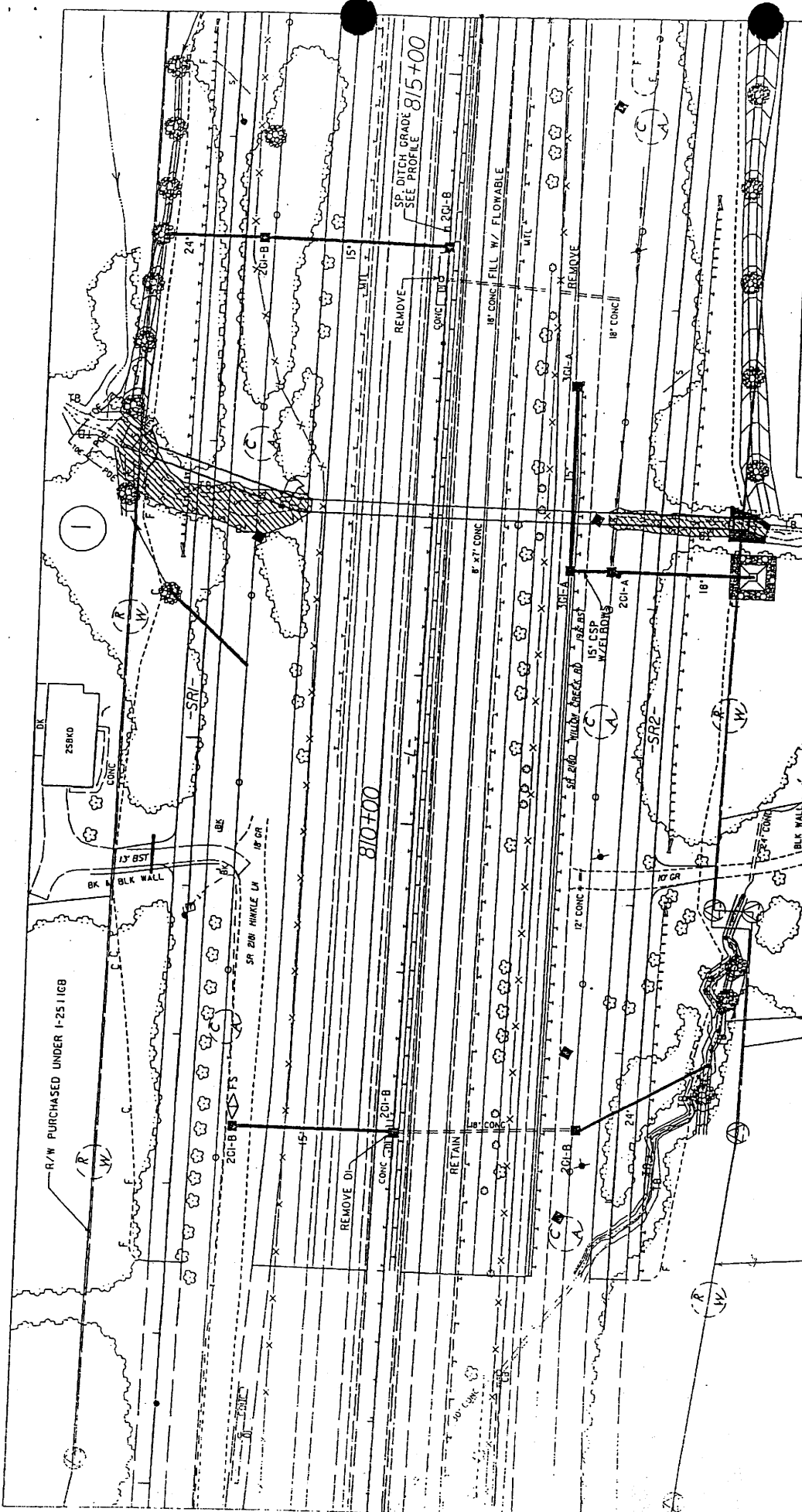
NCDOT
DIVISION OF HIGHWAYS
DAVIDSON/ROWAN COUNTY
PROJECT: 8.1631403 (I-2304AA)
I-85 FROM NORTH OF SR 2120 IN
ROWAN COUNTY TO NORTH OF
NC 150 IN DAVIDSON COUNTY
SHEET 3 OF 21 5/7/02

WETLAND LEGEND

-  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
-  TOP OF BANK
-  EDGE OF WATER
-  PROP. LIMIT OF CUT
-  PROP. LIMIT OF FILL
-  PROP. RIGHT OF WAY
-  NATURAL GROUND
-  PROPERTY LINE
-  TEMP. DRAINAGE EASEMENT
-  PERMANENT DRAINAGE EASEMENT
-  EXIST. ENDANGERED ANIMAL BOUNDARY
-  EXIST. ENDANGERED PLANT BOUNDARY
-  WATER SURFACE
-  LIVE STAKES
-  BOULDER
-  CORE FIBER ROLLS
-  PROPOSED BRIDGE
-  PROPOSED BOX CULVERT
-  PROPOSED PIPE CULVERT
12"-48"
PIPES
54" PIPES
& ABOVE
- (DASHED LINES DENOTE
EXISTING STRUCTURES)
-  SINGLE TREE
-  WOODS LINE
-  DRAINAGE INLET
-  ROOTWAD
-  RIP RAP
-  ADJACENT PROPERTY OWNER
OR PARCEL NUMBER
IF AVAILABLE
-  PREFORMED SCOUR HOLE
-  LEVEL SPREADER (LS)
-  DITCH /
GRASS SWALE

NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN COUNTY
 PROJECT: 8.1631403 (I-2304AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

SHEET **4** OF **21** 5/7/03



NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 81651403 (I-2304.A.A)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

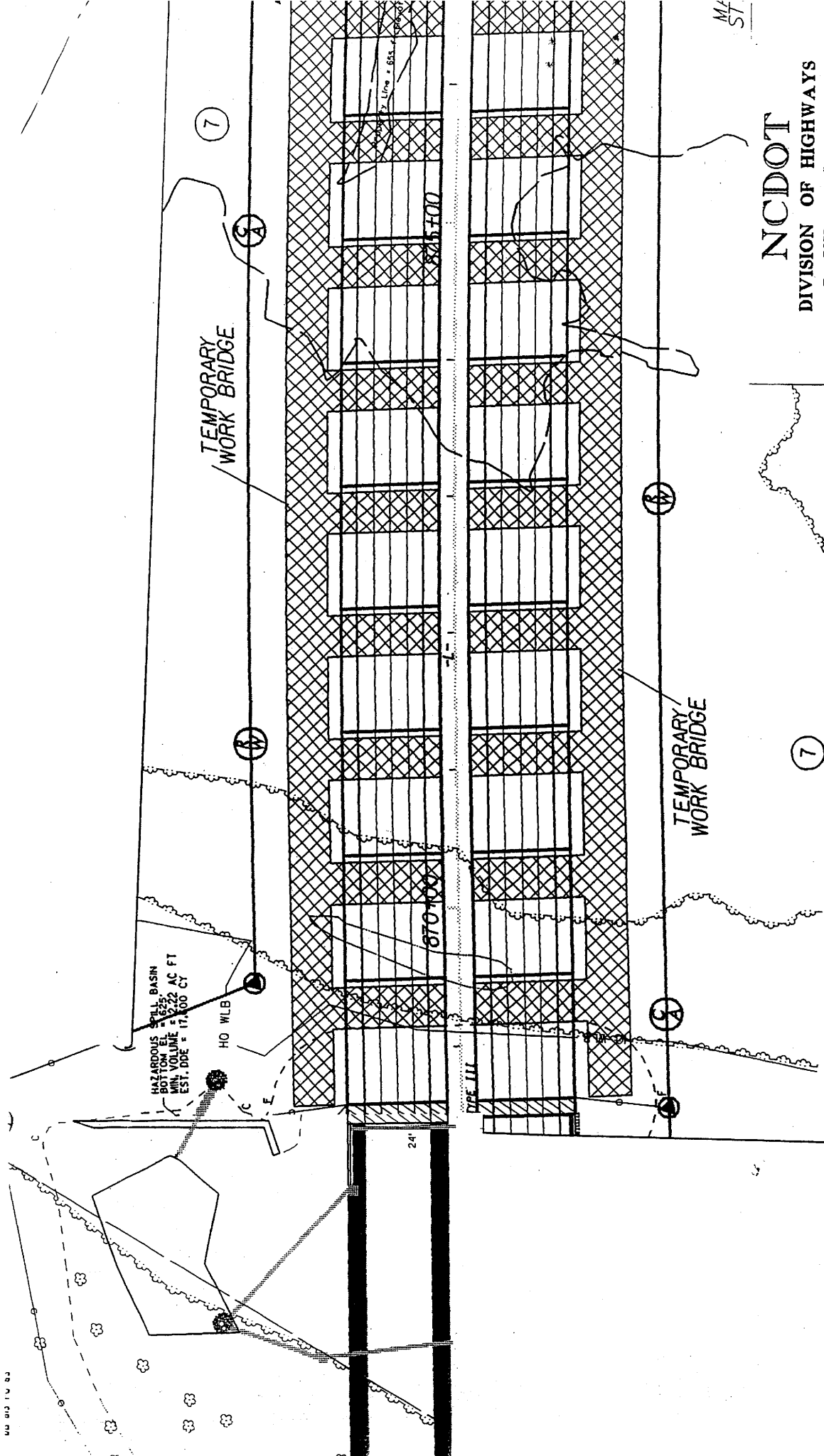
PLAN VIEW
 STREAM
 IMPACTS
 SITE I

TO BE PERMITTED
 UNDER I-25 I/CB

SCALE 1" = 100'

SHEET 5 OF 21

6/25/03



HAZARDOUS SPILL BASIN
 BOTTOM EL. = 1625
 MIN. VOLUME = 122 AC FT
 EST. DDE = 11,000 CT

HO WLB

TEMPORARY WORK BRIDGE

TEMPORARY WORK BRIDGE

MT ST

NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1651403 (I-2304AA)

I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

Rev: 10/04

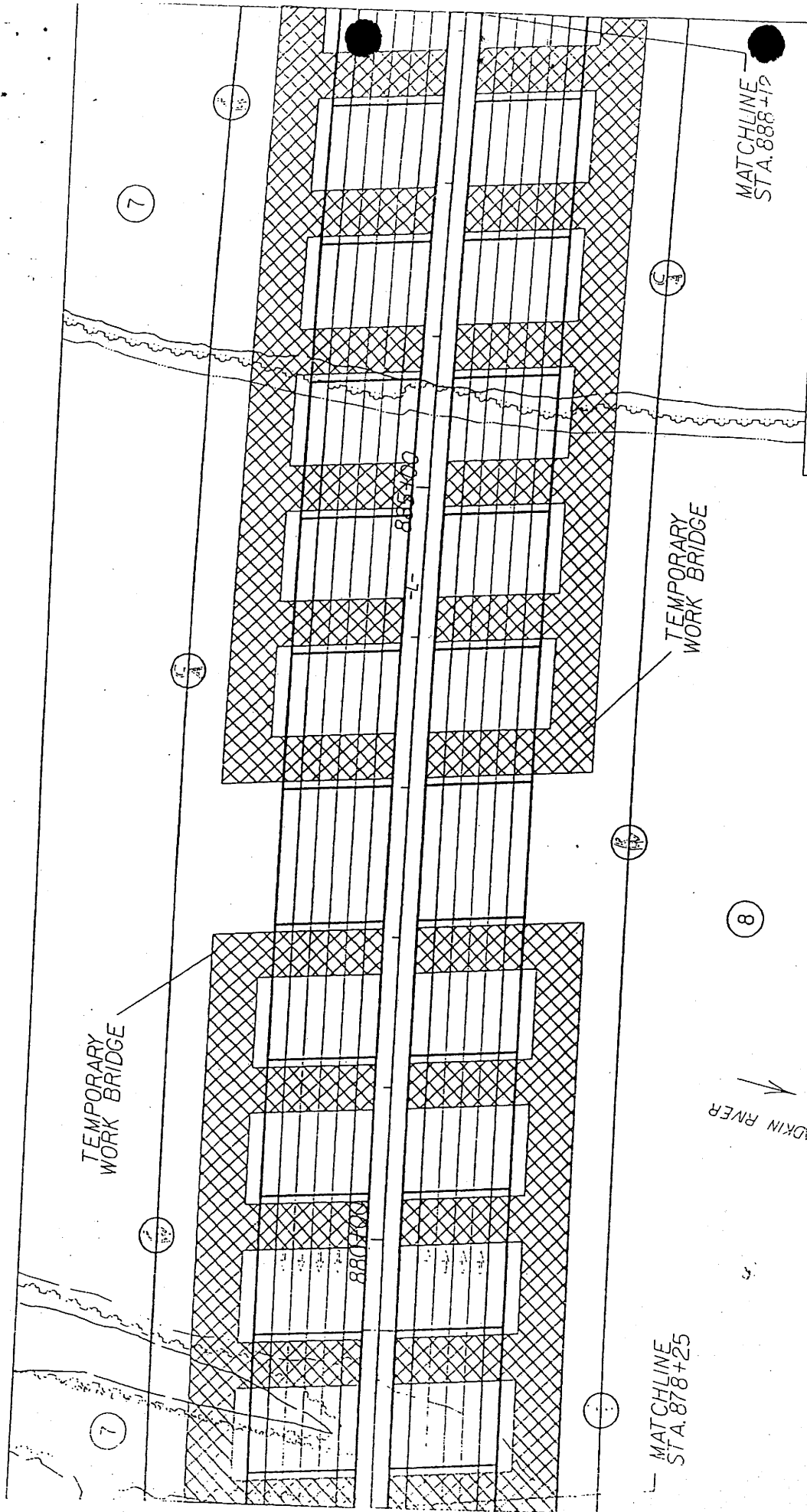
SHEET 6 OF 21

3/2/04

PLAN VIEW
 STREAM
 IMPACTS
 SITE 2

SCALE 1" = 100'



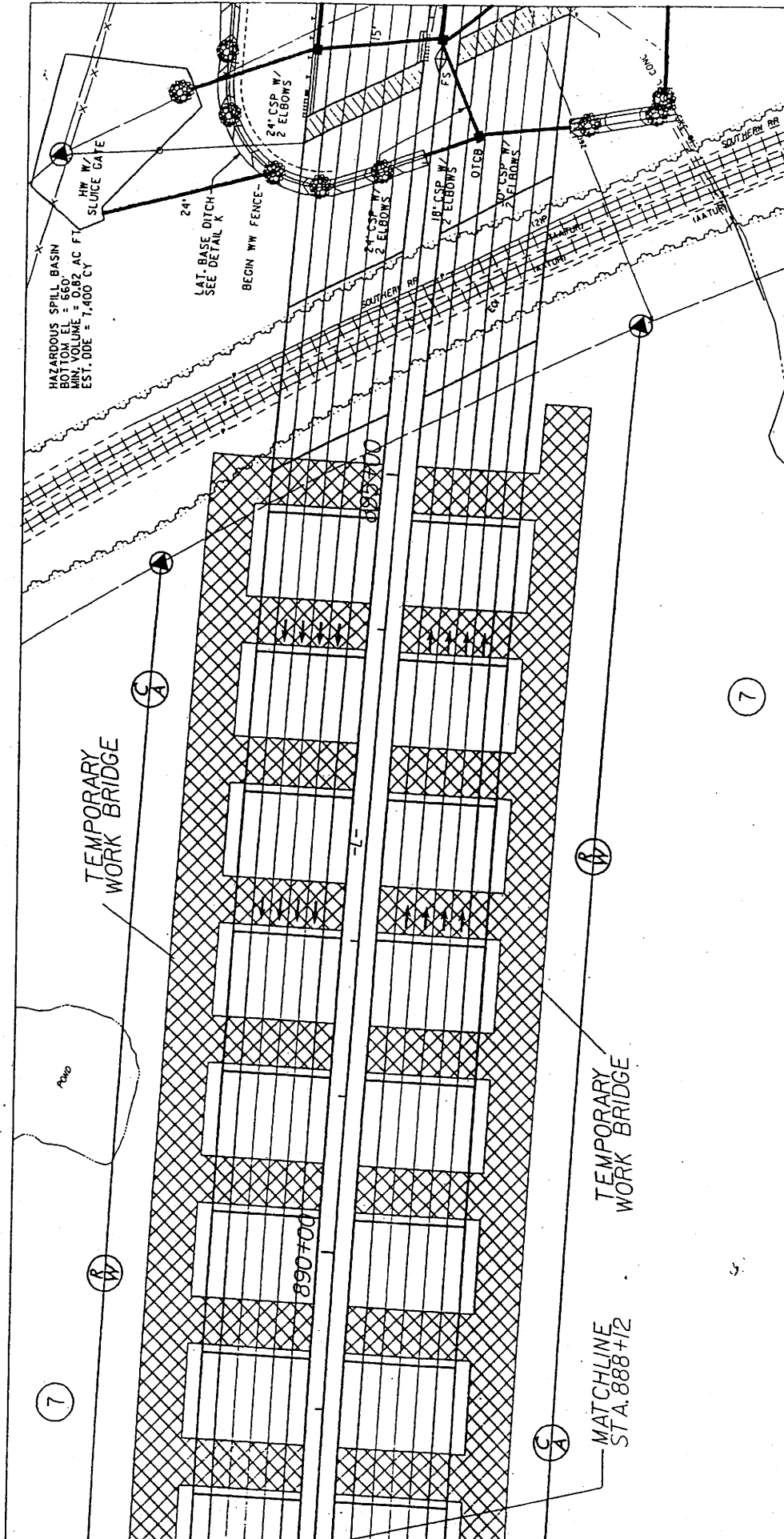


NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1631403 (I-2304.AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

PLAN VIEW
 STREAM
 IMPACTS
 SITE 2

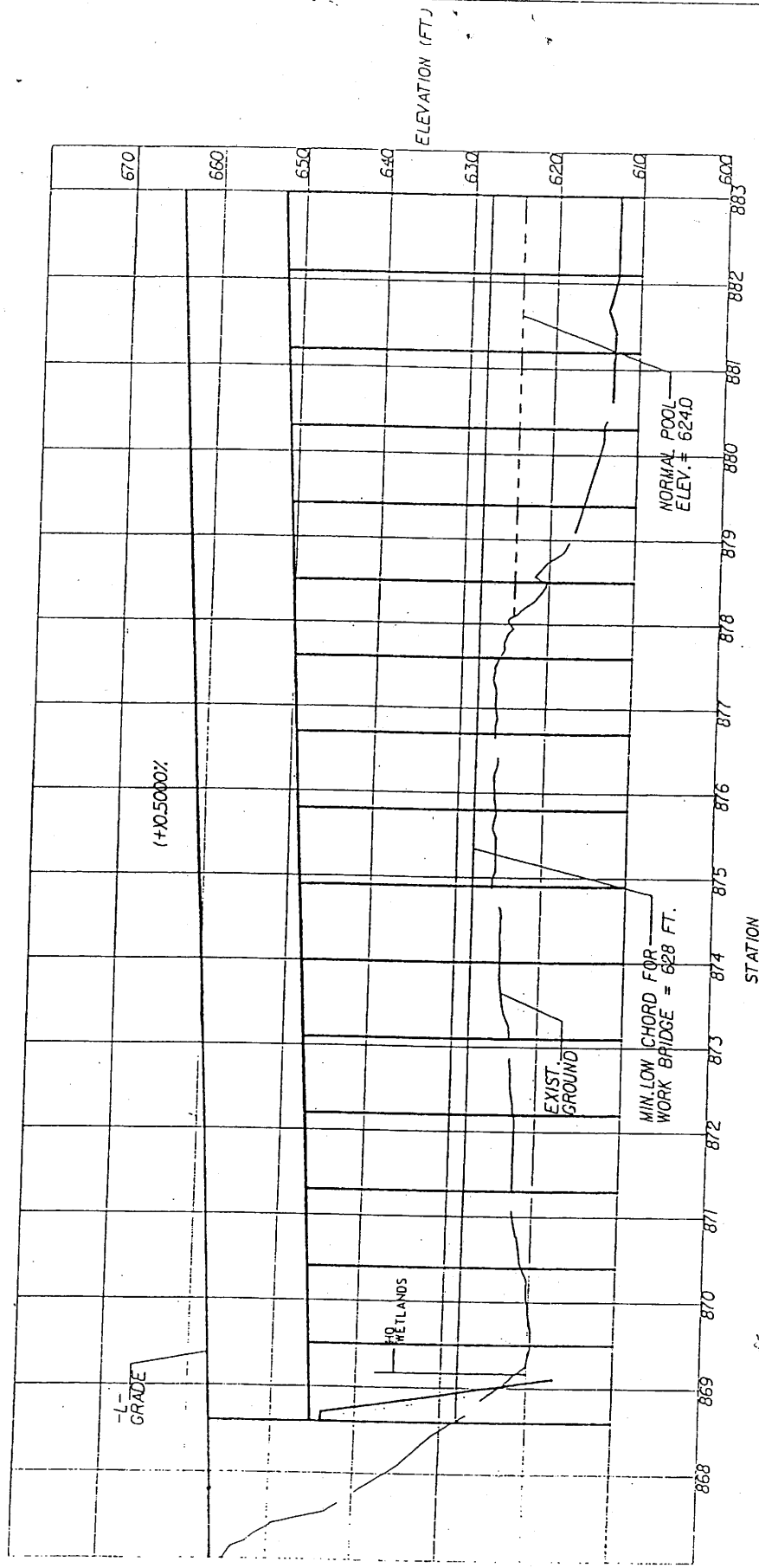
SCALE 1" = 100'

YADKIN RIVER



NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1631403 (I-2304AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 Rev: 10/04
 SHEET 8 OF 21 3/2/04

PLAN VIEW
 STREAM
 IMPACTS
 SITE 2
 SCALE 1" = 100'
 NAD '83

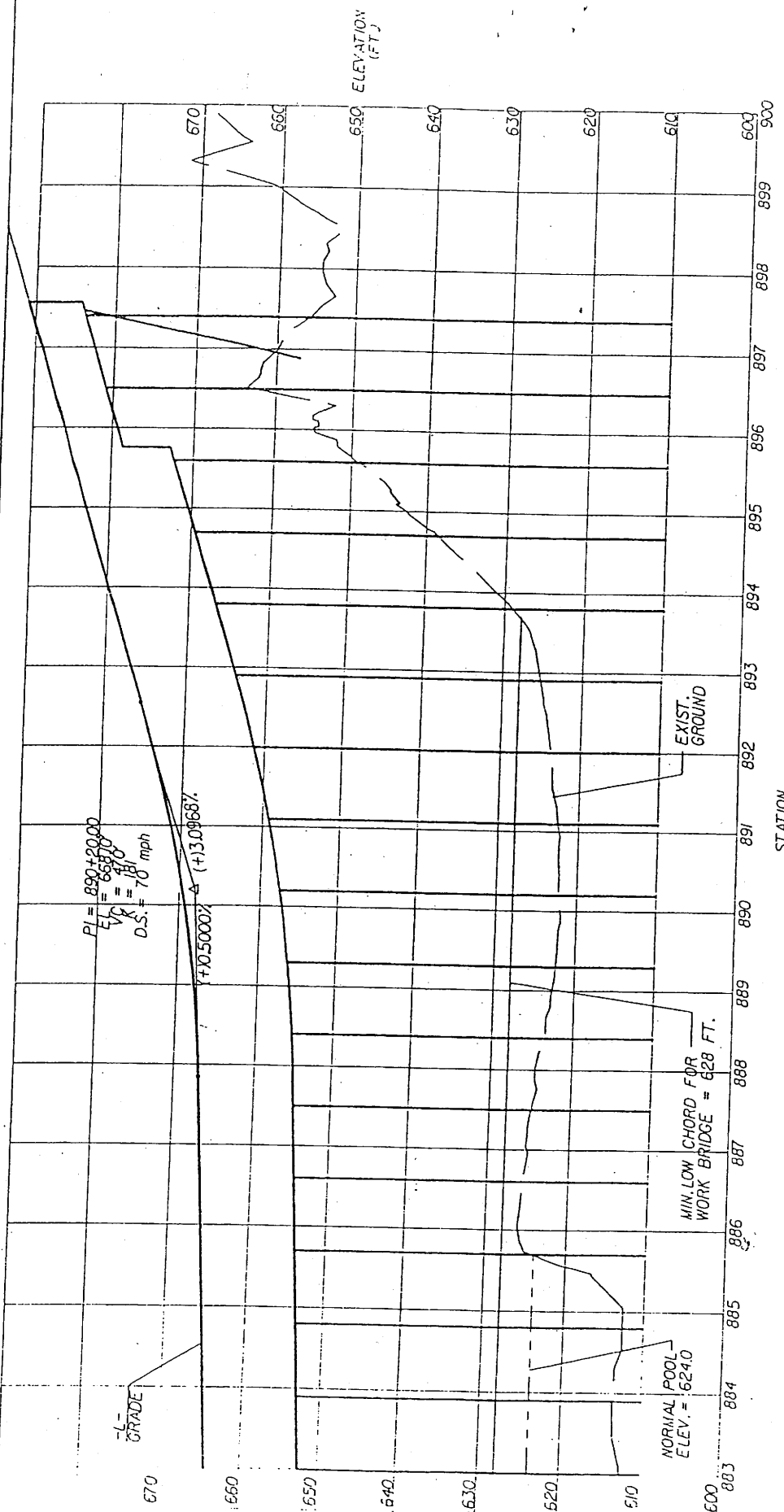


NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1631403 (I-2304.A.A.)

I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

SHEET **9** OF **21** 5/7/03

PROFILE VIEW
SITE 2
 SCALE 1" = 200' HORIZONTAL
 1" = 20' VERTICAL

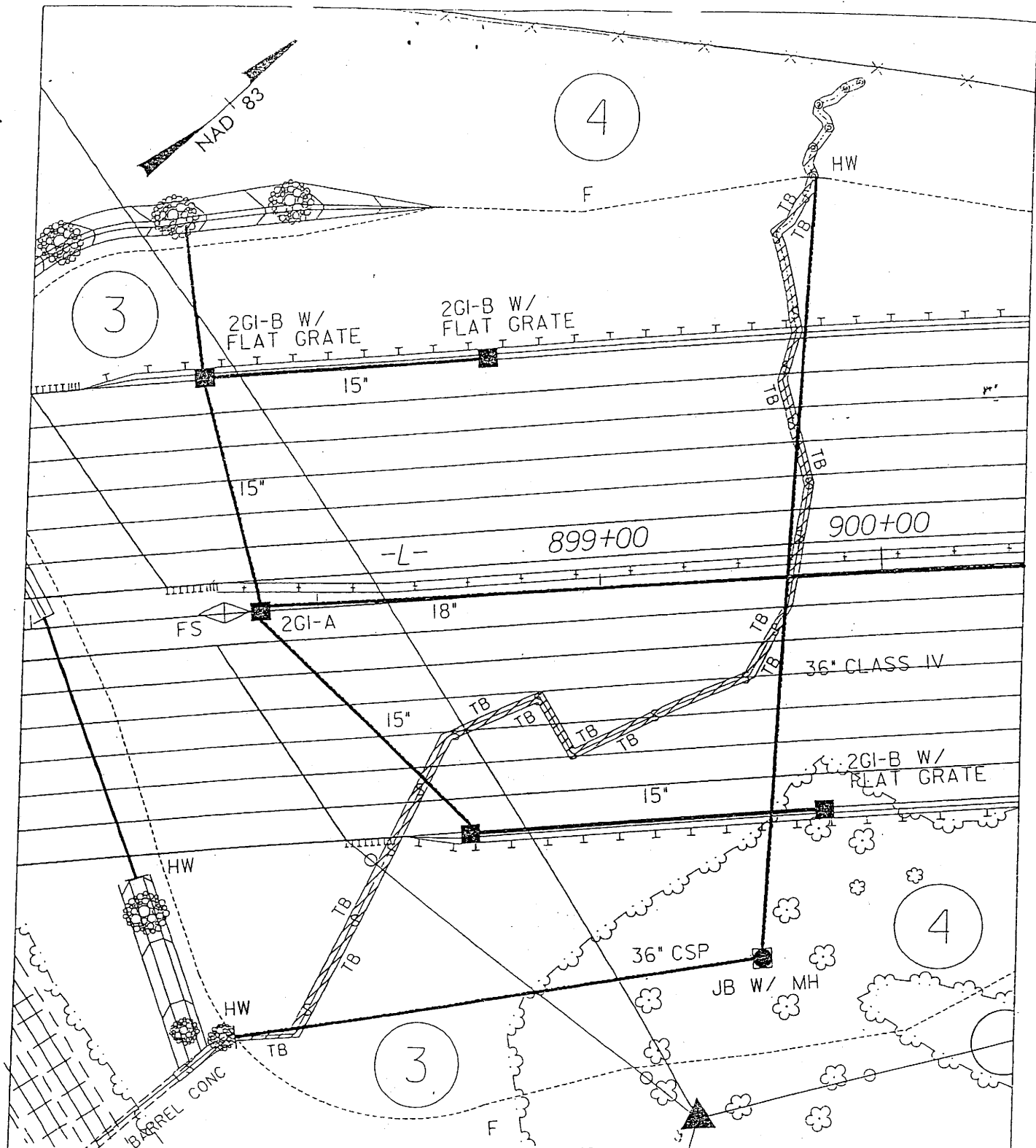


PROFILE VIEW
SITE 2

SCALE 1" = 200' HORIZONTAL
1" = 20' VERTICAL

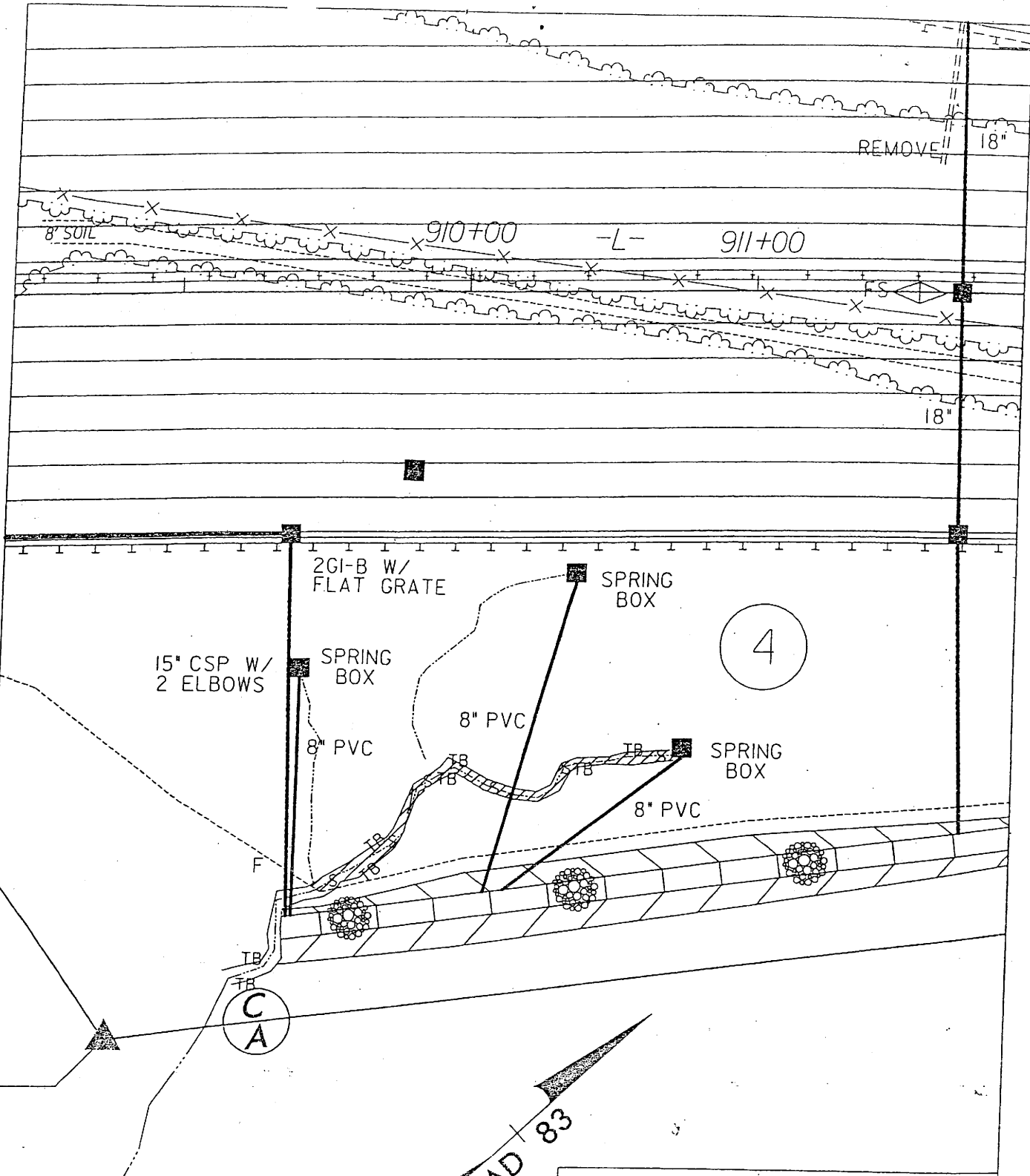
NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1631-403 (I-2304.A.A)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

SHEET 10 OF 21
 5/7/03

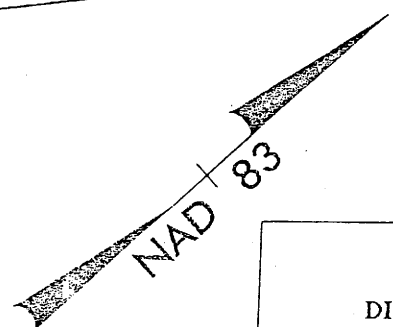


PLAN VIEW
 STREAM
 IMPACTS
 SITE 5
 SCALE 1" = 50'

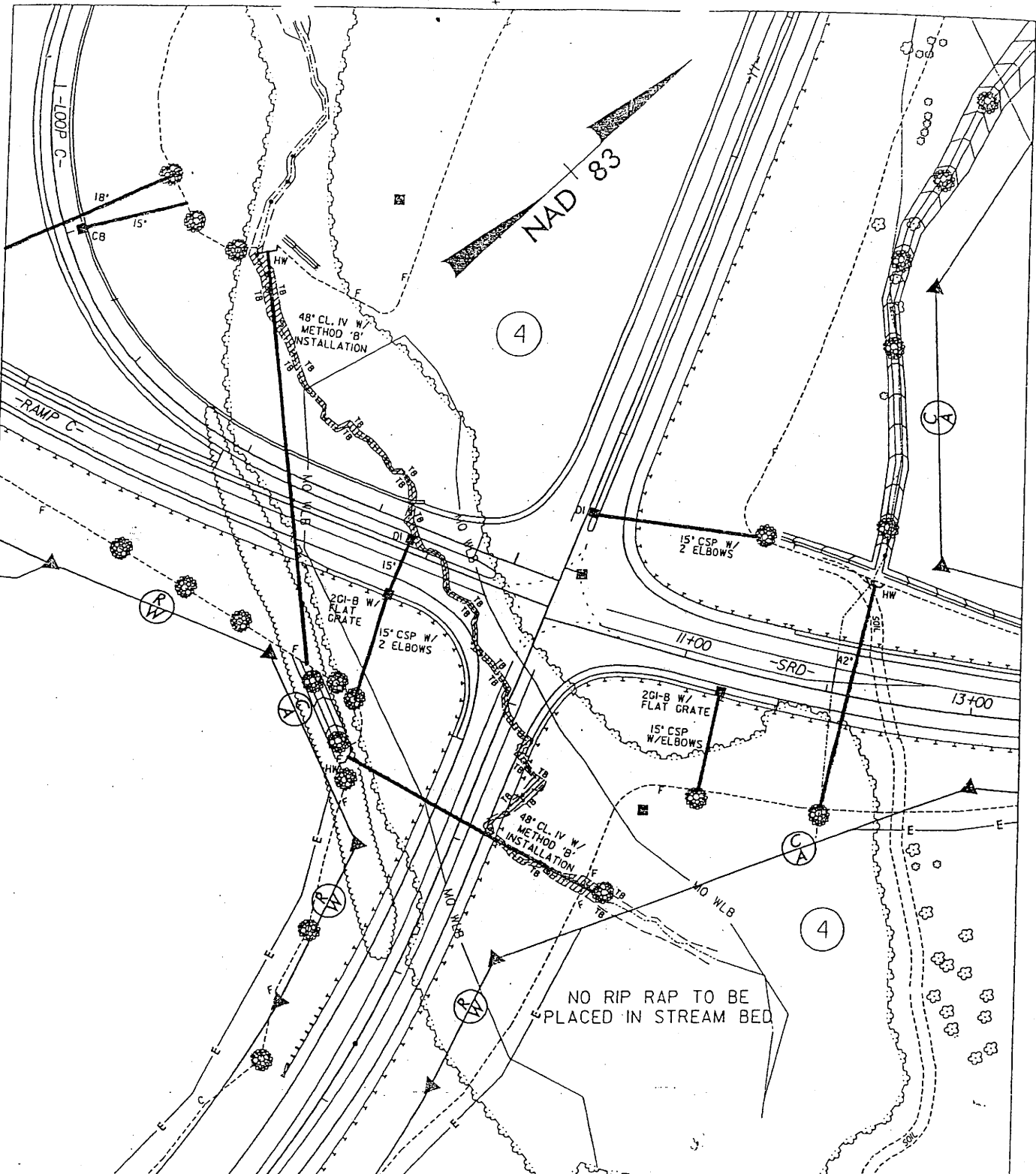
NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1631405 (I-2504AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 SHEET 11 OF 21
 6/25/03



PLAN VIEW
 SITE 4
 STREAM
 IMPACTS
 SCALE 1" = 50'

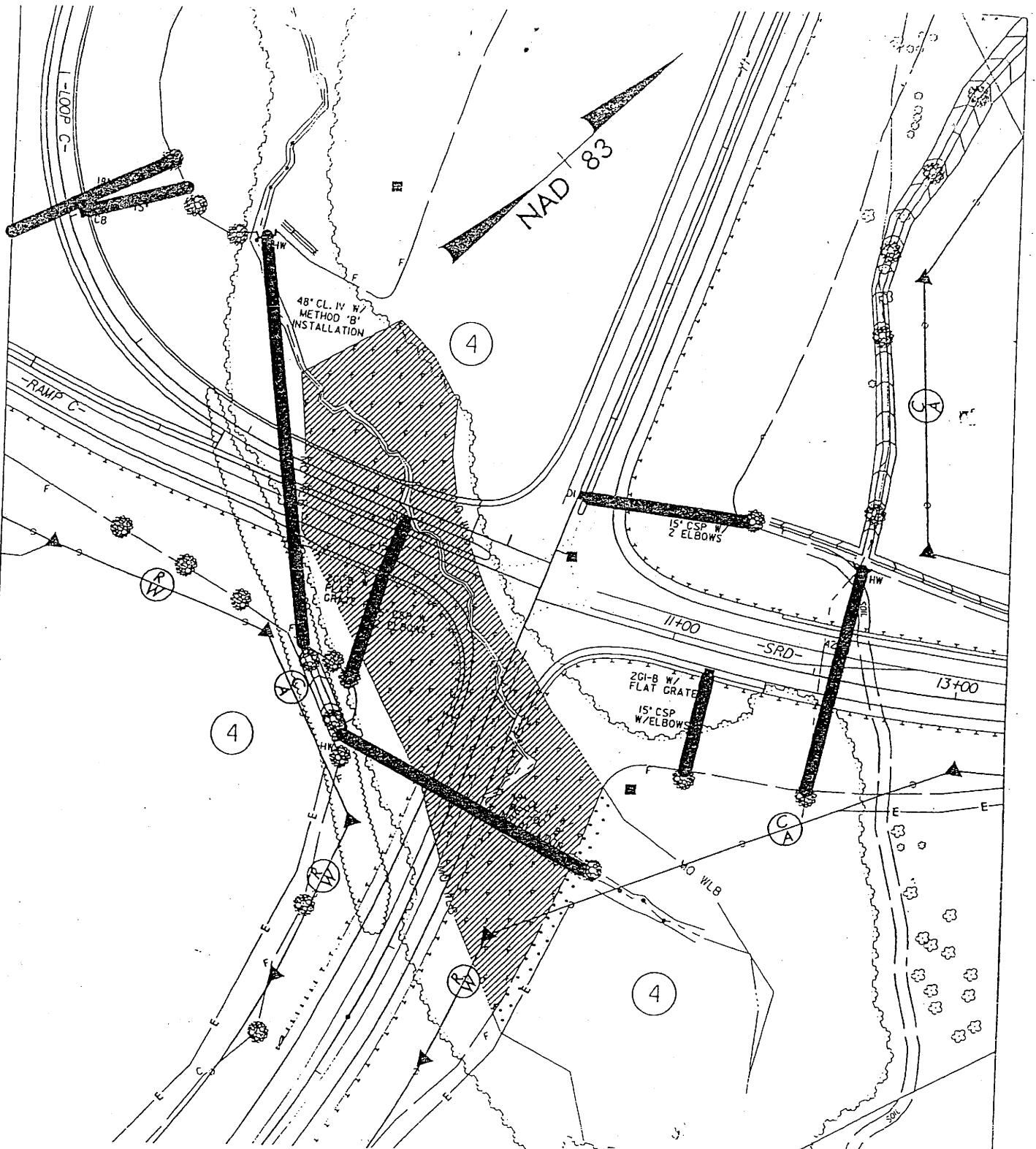


NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN COUNTY
 PROJECT: 8.1651403 (I-2304AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 SHEET 12 OF 21
 10/3/05



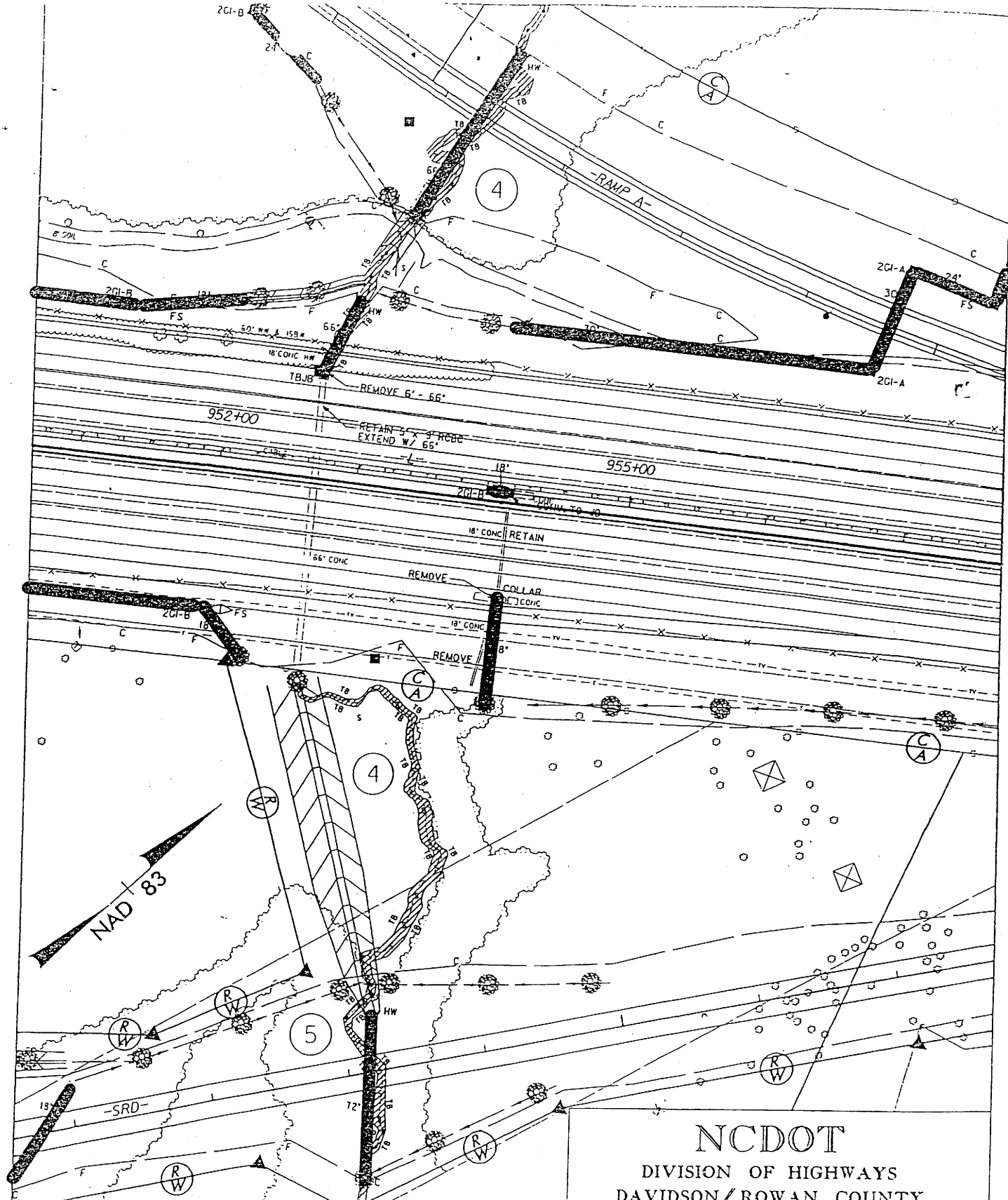
PLAN VIEW
 STREAM
 IMPACTS
 SITE 5
 SCALE 1"=100'

NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN COUNTY
 PROJECT: 8.1631403 (I-2504AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 SHEET B OF 21
 10/5/05



PLAN VIEW
 WETLAND
 IMPACTS
 SITE 5
 SCALE 1" = 100'

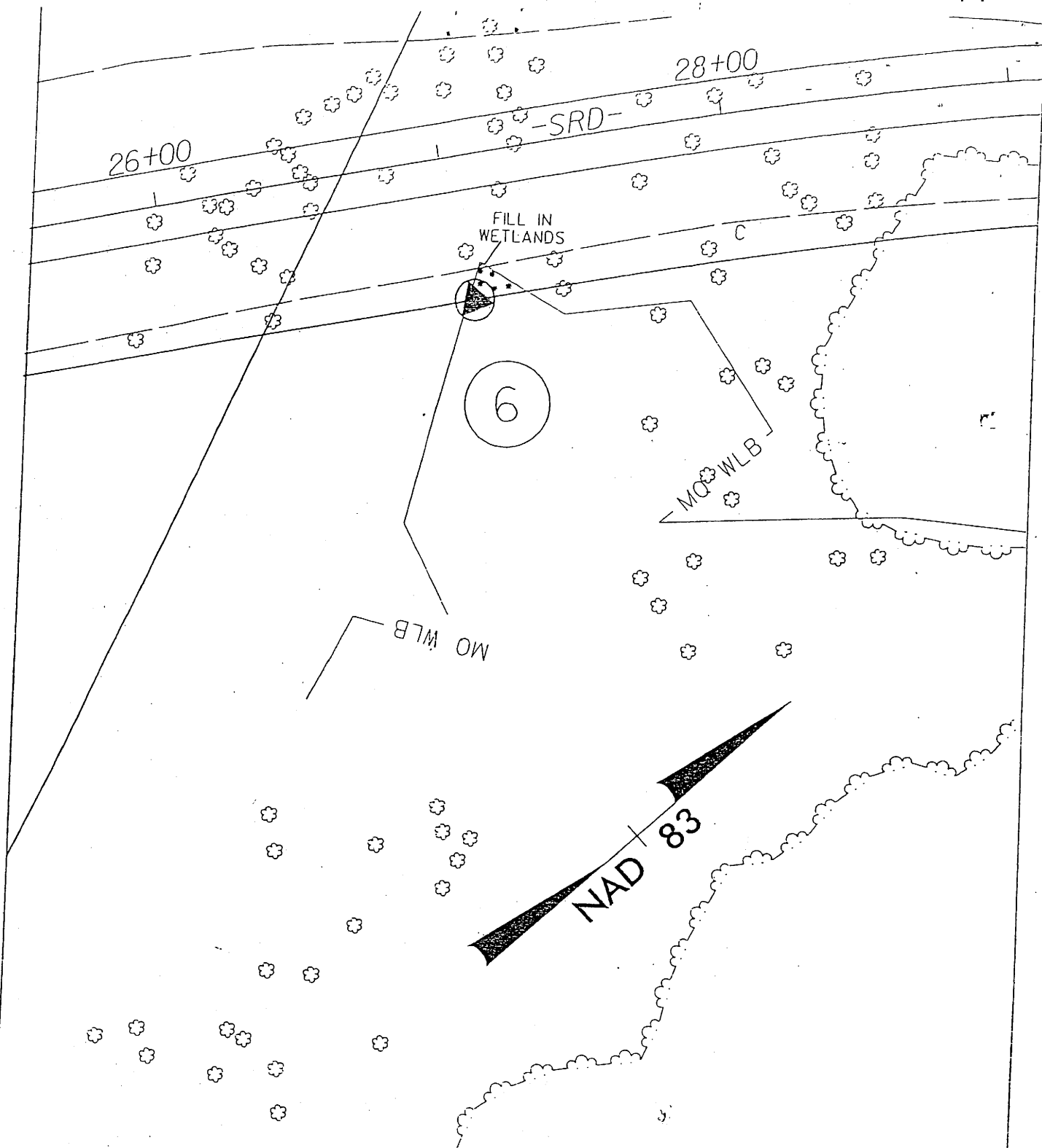
NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN COUNTY
 PROJECT: 8.1631403 (I-2304AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY



PLAN VIEW
 STREAM
 IMPACTS
 SITE 6

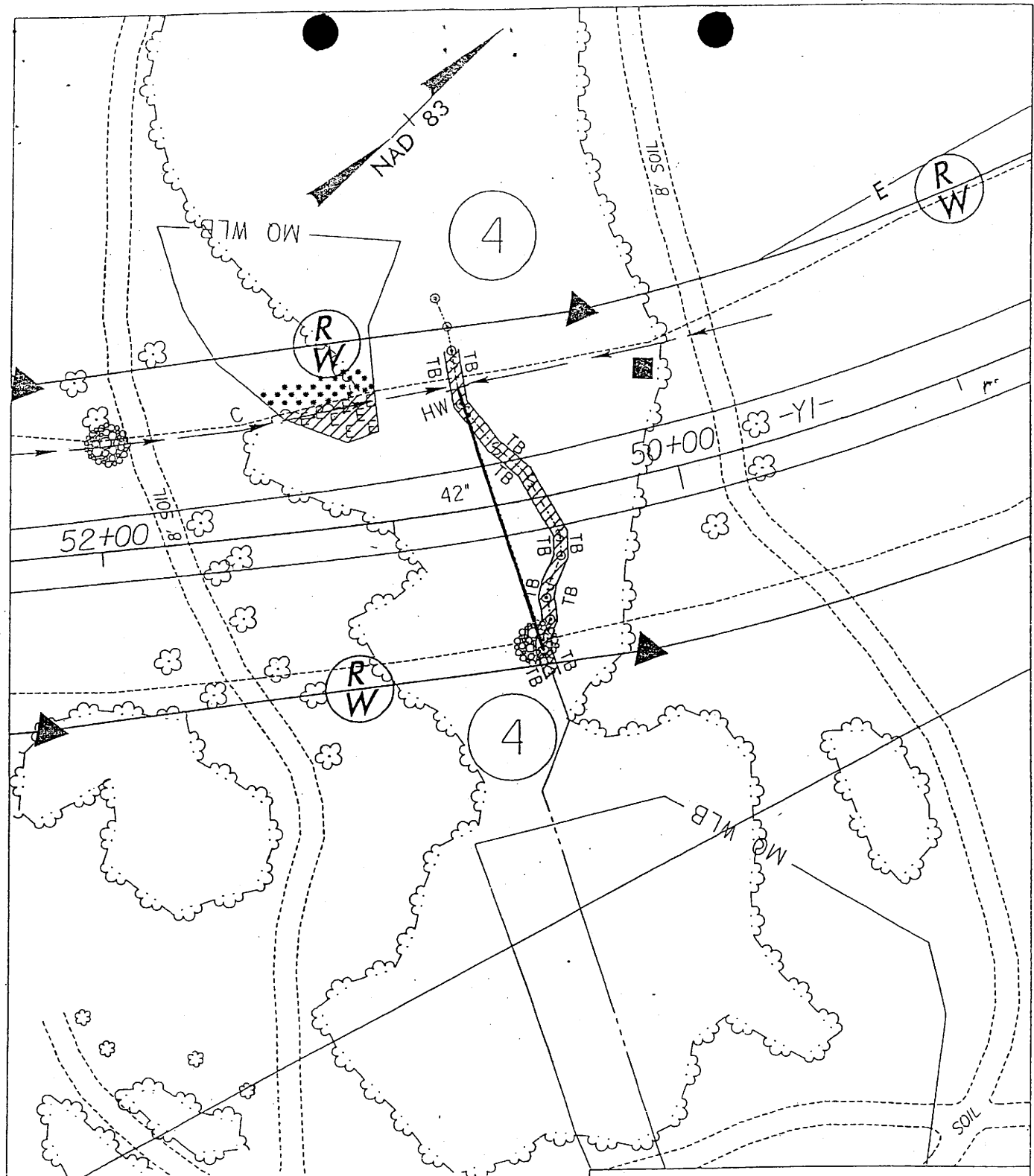
SCALE
 1" = 100'

NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN COUNTY
 PROJECT: 8.1631403 (I-2304AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 SHEET 15 OF 21
 5/7/05



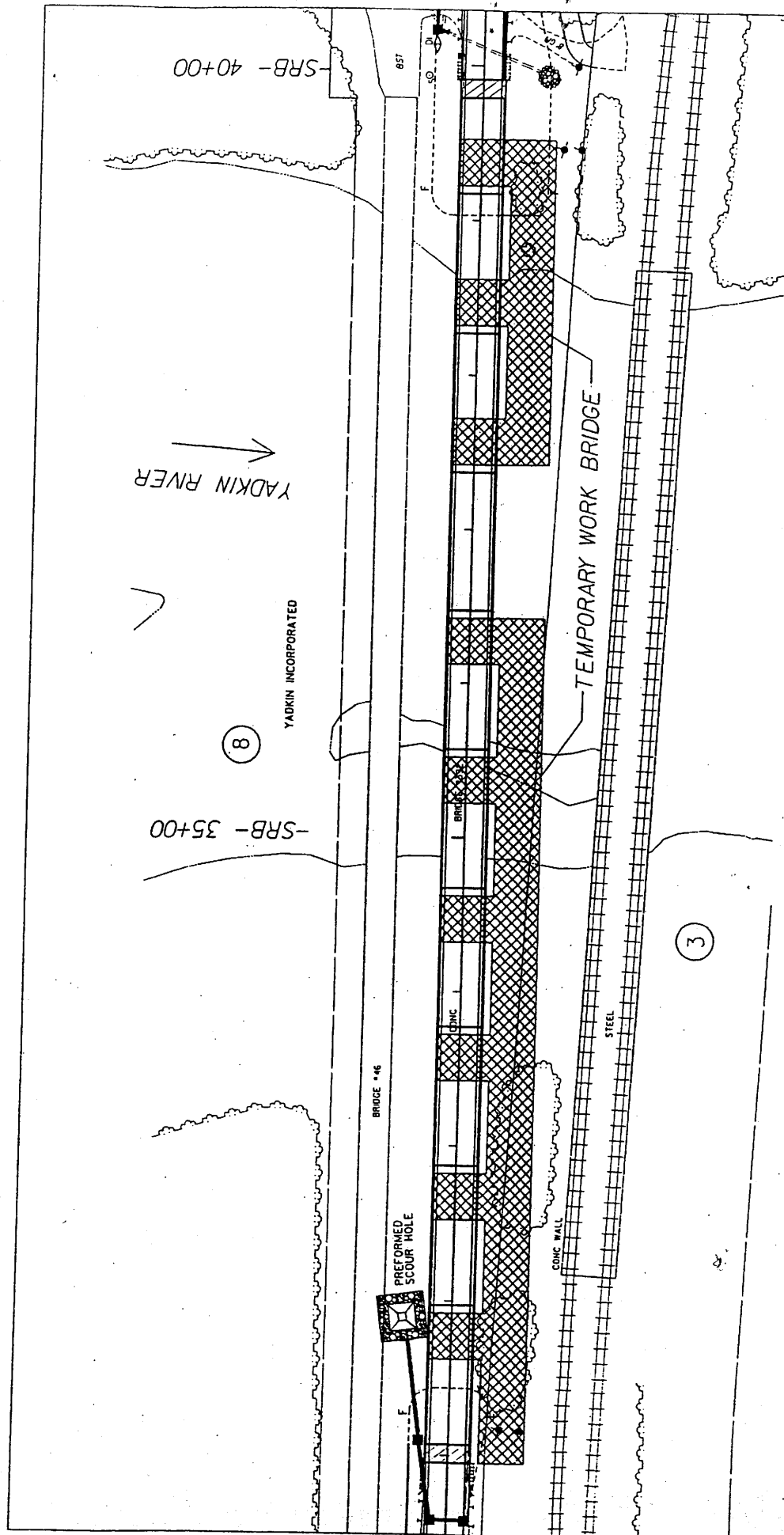
PLAN VIEW
 WETLAND
 IMPACTS
 SITE 7
 SCALE 1" = 50'

NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN COUNTY
 PROJECT: 8.1631405 (I-2504AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY



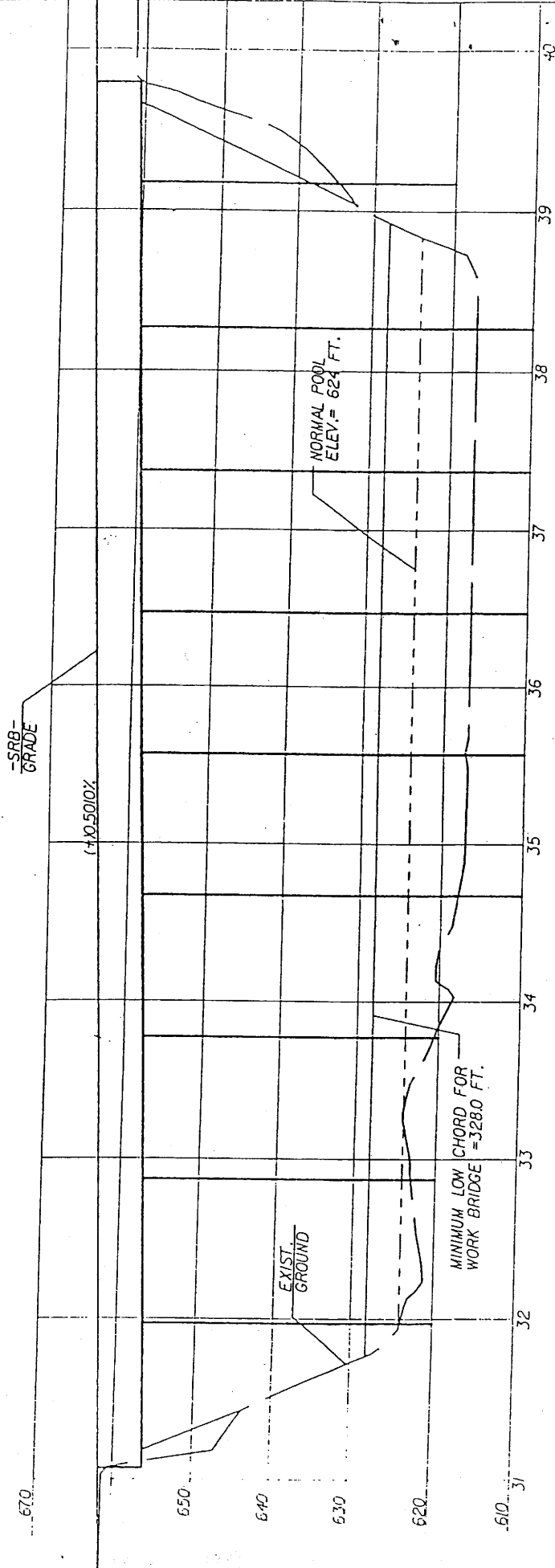
PLAN VIEW
 STREAM & WETLAND
 IMPACTS
 SITE 9
 SCALE 1" = 50'

NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1651405 (I-2504AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 SHEET 17 OF 21
 6/25/05



NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 8.1631403 (I-2304.AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY
 Rev: 10/04
 SHEET 18 OF 21
 3/2/04

PLAN VIEW
 STREAM
 IMPACTS
 SITE 10
 SCALE 1" = 100'
 NAD 83



NCDOT
 DIVISION OF HIGHWAYS
 DAVIDSON/ROWAN
 PROJECT: 81631403 (I-2304.A.A)

I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY

SHEET 19 OF 21

5/7/05

PROFILE VIEW
 SITE 10

SCALE 1" = 100' HORIZONTAL
 1" = 20' VERTICAL

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	HINKLE, PAUL P.	455 HINKLE LANE SALISBURY, NC 28144-8555
2	HINKLE, JR., HOLLIS L.	655 HACKETT ST. SALISBURY, NC 28144-7769
3	SOUTHERN RAIL CO.	8 NORTH JEFFERSON ST. ROANOKE, VA 24042
4	GRUBB, ROBERT L.	P.O. BOX 388 HIGH POINT, NC 27260
5	DUKE POWER COMPANY	P.O. BOX 1090 CHARLOTTE, NC 28201-1090
6	FALCON DEVELOPMENT GROUP INC.	1329 SOUTH MAIN ST. SALISBURY, NC 28144
7	ALUMINUM COMPANY OF AMERICA	P.O. BOX 688 BADIN, NC 28009
8	YADKIN INCORPORATED	P.O. BOX 688 BADIN, NC 28009

NCDOT

DIVISION OF HIGHWAYS
DAVIDSON/ROWAN COUNTY
PROJECT: 8.1631403 (I-2304AA)

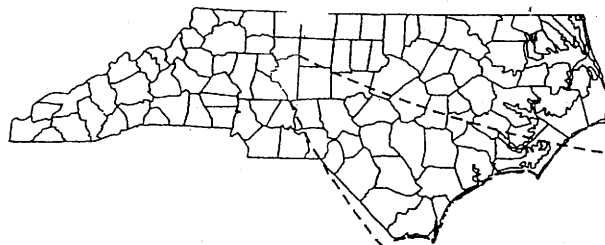
I-85 FROM NORTH OF SR 2120 IN
ROWAN COUNTY TO NORTH OF
NC 150 IN DAVIDSON COUNTY

WETLANDS IMPACT PERMIT SUMMARY

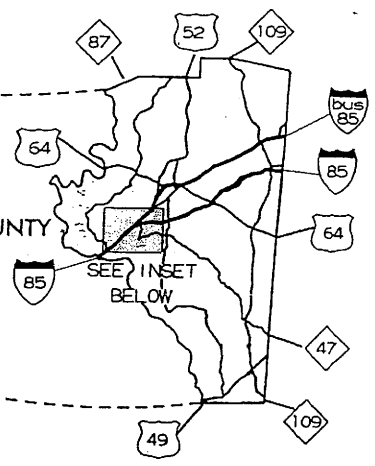
Site No.	Station (From/To)	Structure Size / Type	Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Temp. Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)
1	812+00 -L-	8' X 7' RCBC					0.1129			262	
2	868+60 TO 897+27 -L-	BRIDGE									
3	900+00 -L-	36" RCP					0.0378			485	
4	910+00 -L-	8" PVC					0.0138			190	
5	9+00 -LOOP C-	48" RCP					0.0705			619	
6	9+00 -LOOP C-		1.0385			0.0404					
7	952+60 -L-	72"					0.1343			863	
8	27+00 -SRD-		0.000086			0.0027					
9	963+00 -L-						0.0075			97	
10	50+50 -Y1-	42" RCP			0.0077	0.0088	0.0146			128	
11	31+07 TO 39+79 -SRB- 1+00 -RAMP C-	BRIDGE									
TOTALS:			1.04	0.00	0.01	0.05	0.39	0.00	0.00	2644	0.00

NCDOT

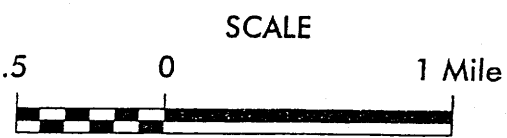
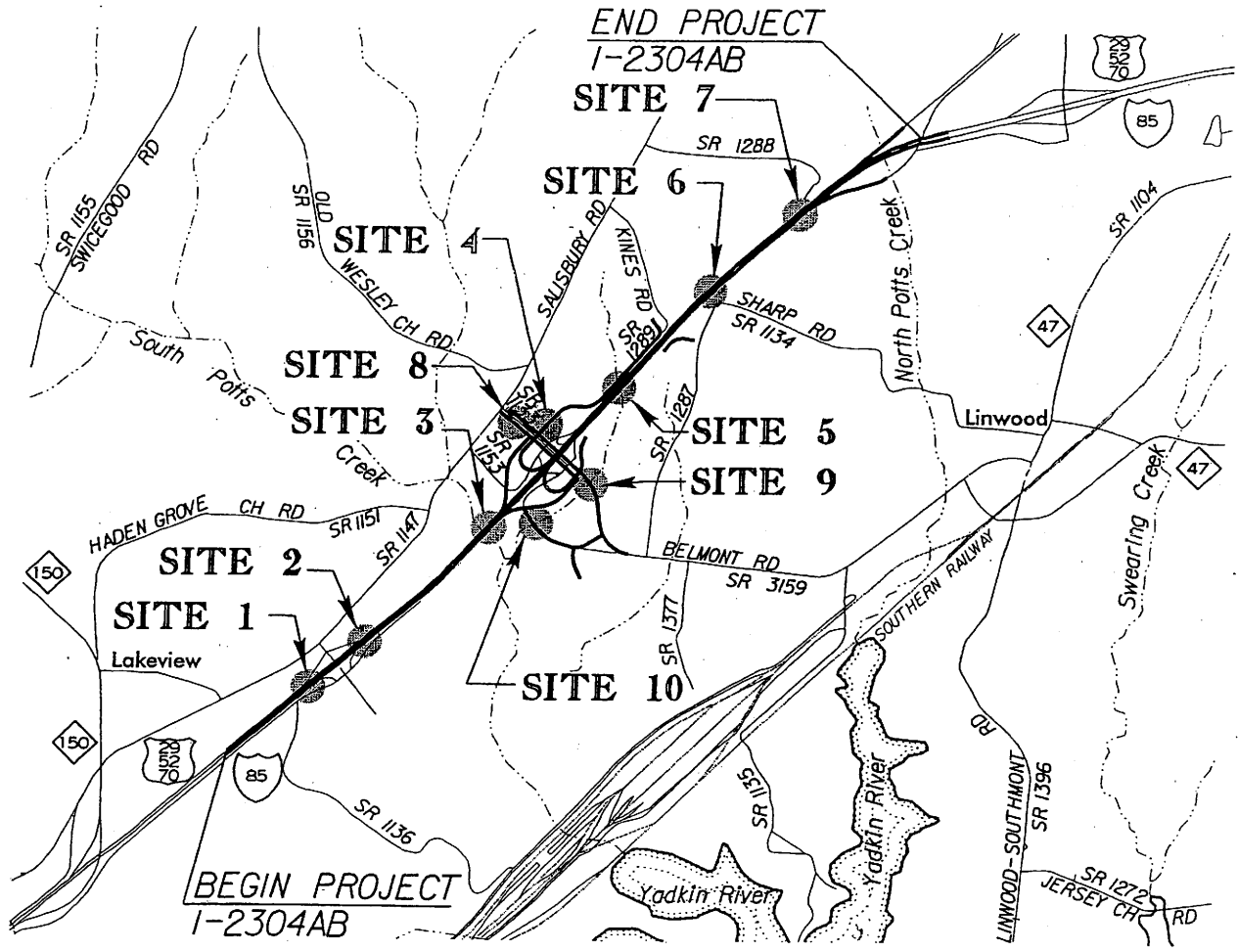
DIVISION OF HIGHWAYS
 DAVIDSON / ROWAN COUNTY
 PROJECT 8.1631403 (I-2304AA)
 I-85 FROM NORTH OF SR 2120 IN
 ROWAN COUNTY TO NORTH OF
 NC 150 IN DAVIDSON COUNTY



DAVIDSON COUNTY



SEE INSET BELOW



N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

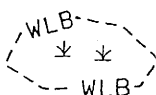
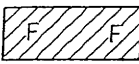
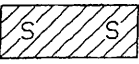

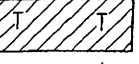
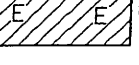
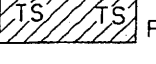
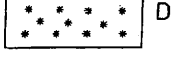
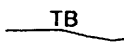
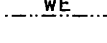


DAVIDSON COUNTY

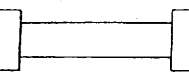
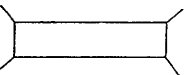

PROJECT: 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS

SHEET 1 OF 2


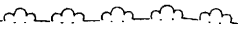

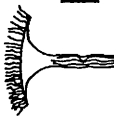


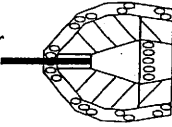
02/24/03

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
- BZ — RIPARIAN BUFFER ZONE
- ← ← FLOW DIRECTION
-  TOP OF BANK
-  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
- X X X LIVE STAKES
-  BOULDER
- — COIR FIBER ROLLS

-  PROPOSED BRIDGE
-  PROPOSED BOX CULVERT
-  PROPOSED PIPE CULVERT

(DASHED LINES DENOTE EXISTING STRUCTURES)

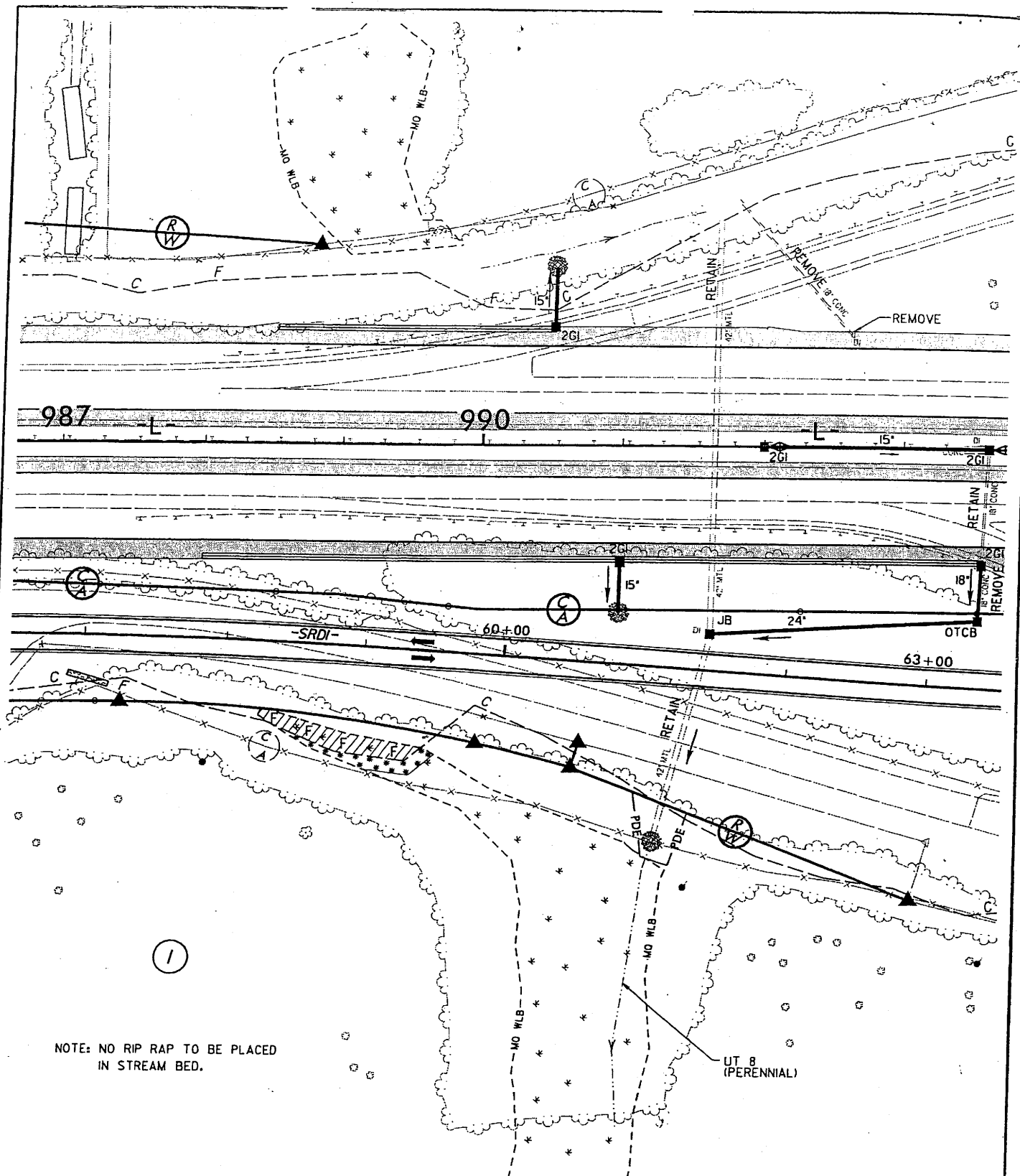
-  SINGLE TREE
-  WOODS LINE
-  DRAINAGE INLET
-  ROOTWAD
-  RIP RAP
-  ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE
-  RIP RAP ENERGY DISSIPATOR BASIN

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORHT
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

SHEET 2 OF 21 2/24/03



NOTE: NO RIP RAP TO BE PLACED IN STREAM BED.

PLAN VIEW SITE 1



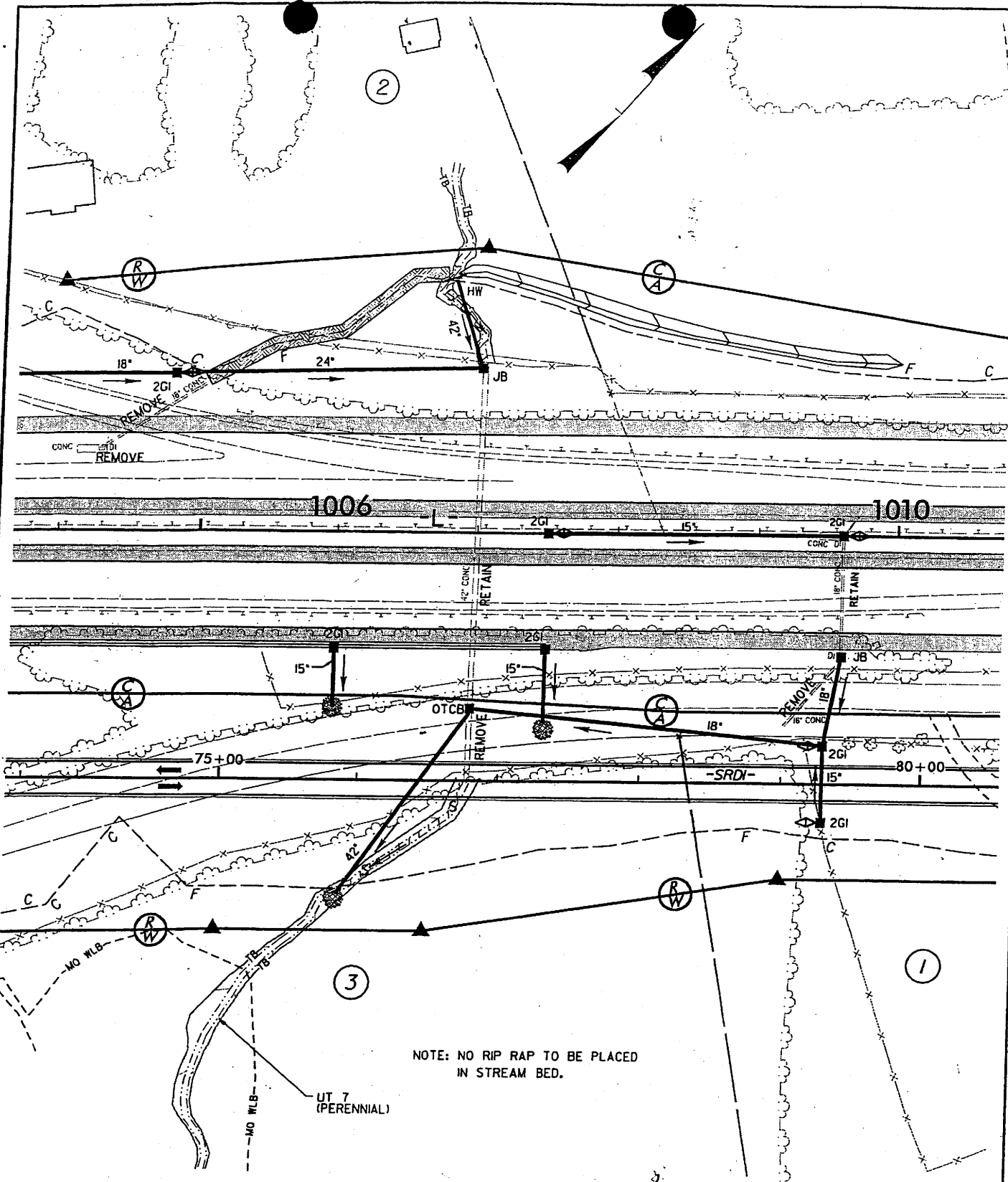
- DENOTES MECHANIZED CLEARING
- DENOTES FILL IN WETLANDS

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 DAVIDSON COUNTY

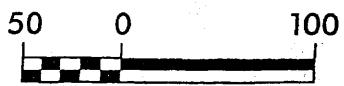
 PROJECT: 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS
 SHEET **3** OF **21**

2/24/03

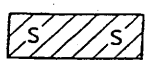


NOTE: NO RIP RAP TO BE PLACED IN STREAM BED.

PLAN VIEW SITE 2



DENOTES FILL IN SURFACE WATERS



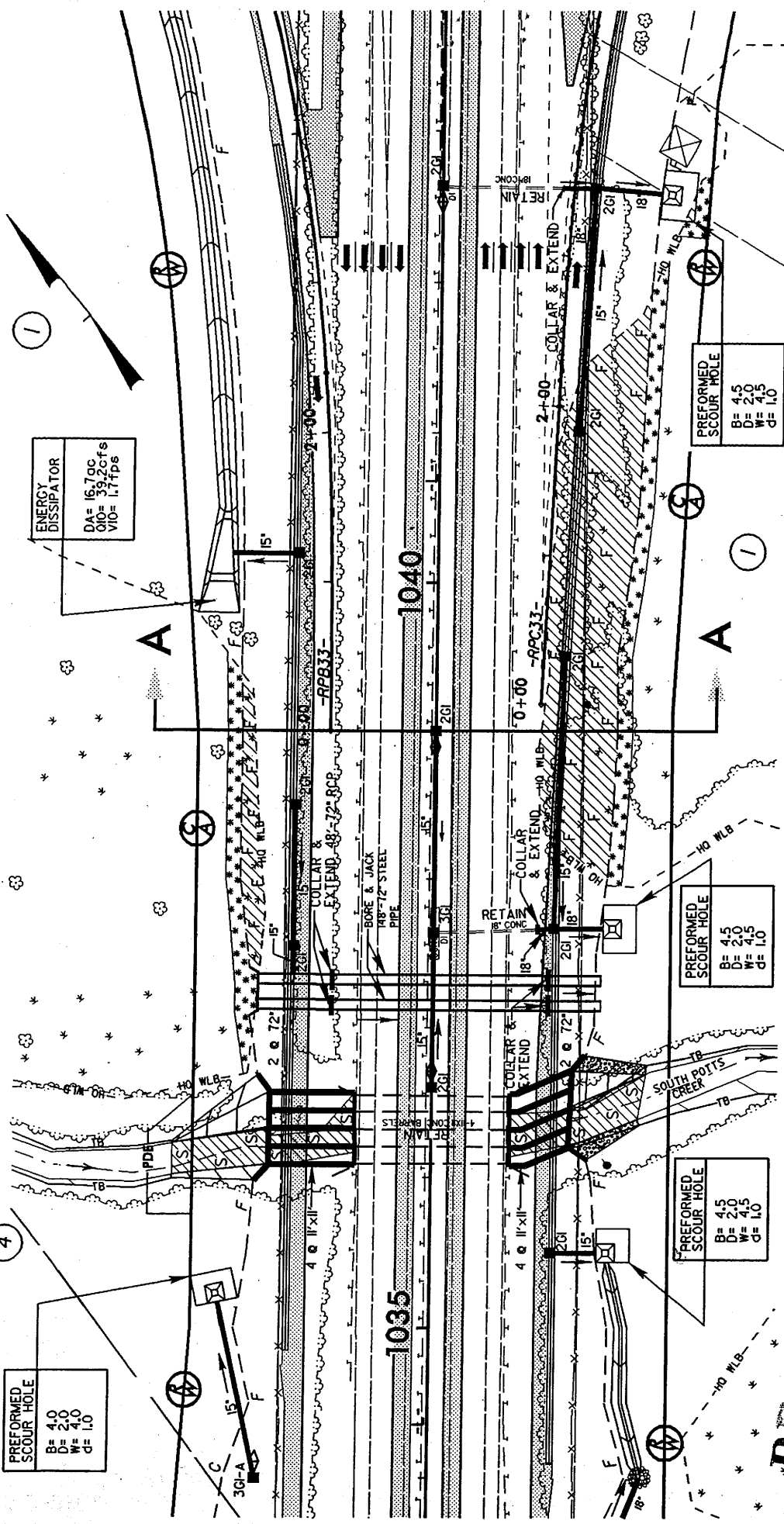
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

SHEET 4 OF 21

2/24/03



ENERGY DISSIPATOR
 DA= 16.7cc
 O/D= 39.2cfs
 V/D= 1.7f/s

PREFORMED SCOUR HOLE
 B= 4.0
 D= 2.0
 W= 4.0
 C= 1.0

PREFORMED SCOUR HOLE
 B= 4.5
 D= 2.0
 W= 4.5
 C= 1.0

PREFORMED SCOUR HOLE
 B= 4.5
 D= 2.0
 W= 4.5
 C= 1.0

PREFORMED SCOUR HOLE
 B= 4.5
 D= 2.0
 W= 4.5
 C= 1.0

PLAN VIEW
 SITE 3

- ***** DENOTES MECHANIZED CLEARING
- ////// DENOTES EXCAVATION IN WETLAND
- ////// DENOTES FILL IN WETLANDS
- ////// DENOTES FILL IN SURFACE WATERS

NOTE: HAND CLEAR IN WETLANDS TO INSTALL CONTROLLED ACCESS FENCING.

RECEIVED 1
 4 2004

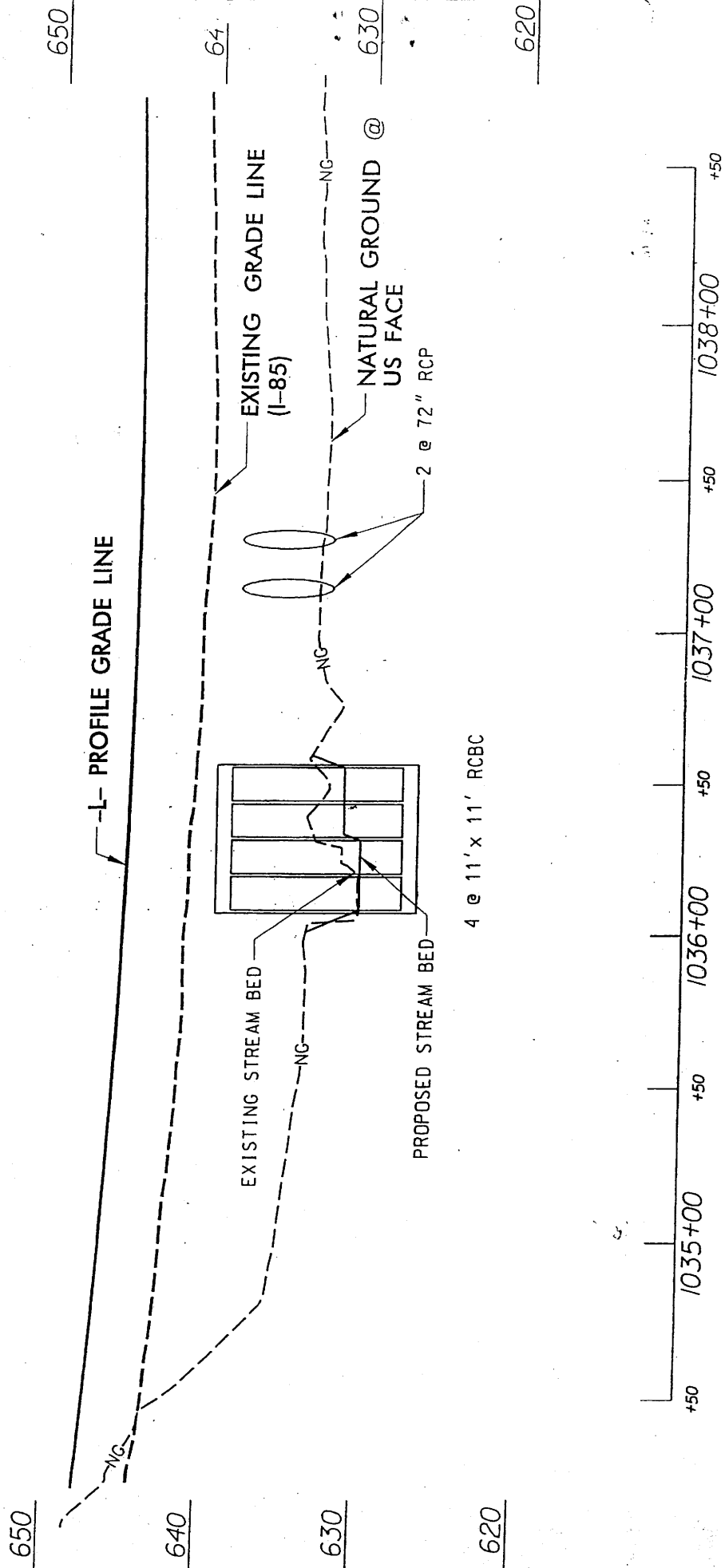
RALEIGH REGULATORY FIELD OFFICE



N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

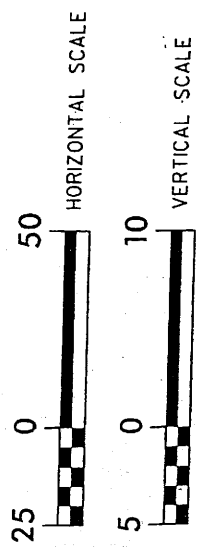
DAVIDSON COUNTY
 PROJECT: 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS

SHEET 5 OF 21
 2/11/03
 REVISED 3/18/04

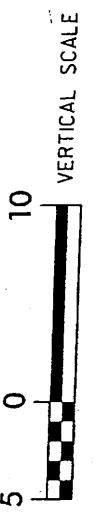
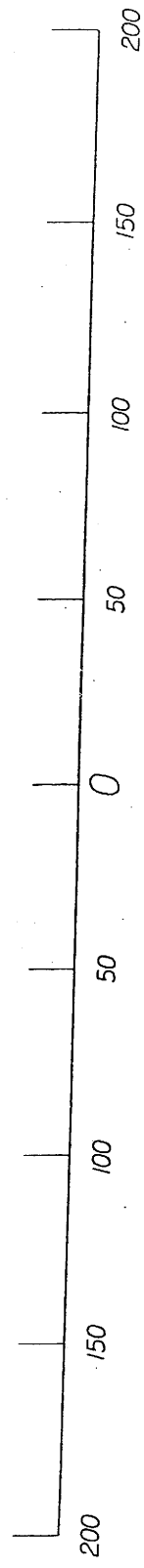
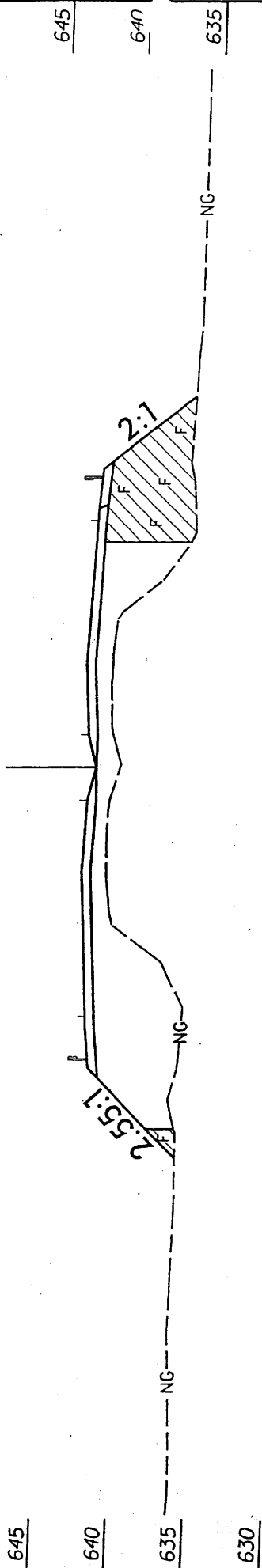


N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DAVIDSON COUNTY
 PROJECT: 8.1631403 (I-2504AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS
 SHEET OF 2/24/03

PROFILE SITE 3

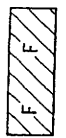


☒ 1039+00 -L-

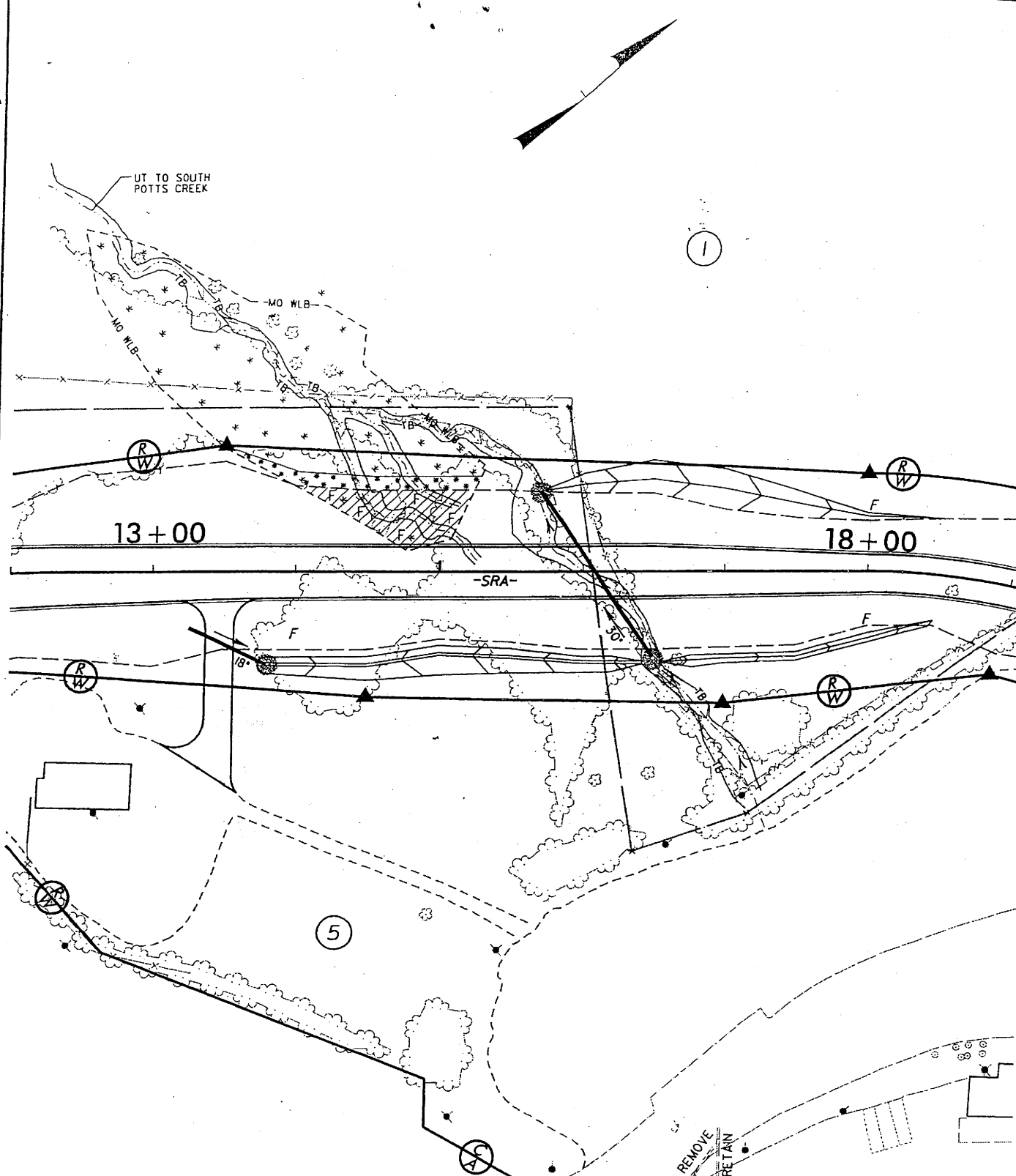


SITE 3
SECTION A-A

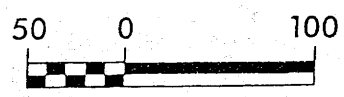
DENOTES FILL IN
WETLANDS

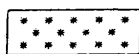


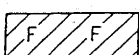
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
DAVIDSON COUNTY
PROJECT: 81631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS
SHEET 7 OF 21 2/24/03



PLAN VIEW
SITE 4



DENOTES MECHANIZED CLEARING 

DENOTES FILL IN WETLANDS 

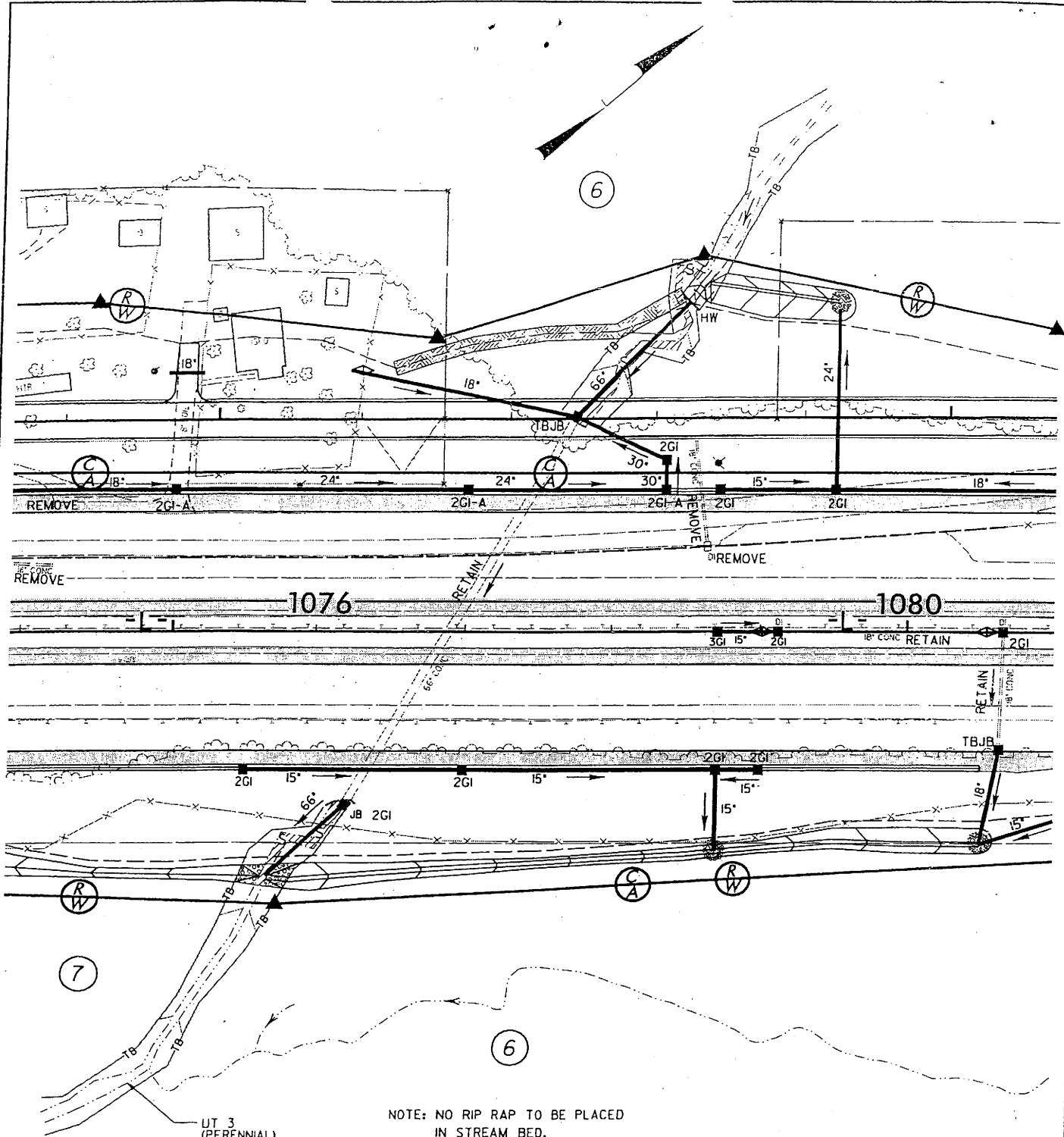
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

SHEET 8 OF 21

2/24/03



PLAN VIEW
SITE 5

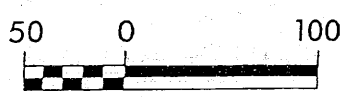
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

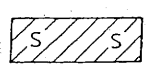
PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

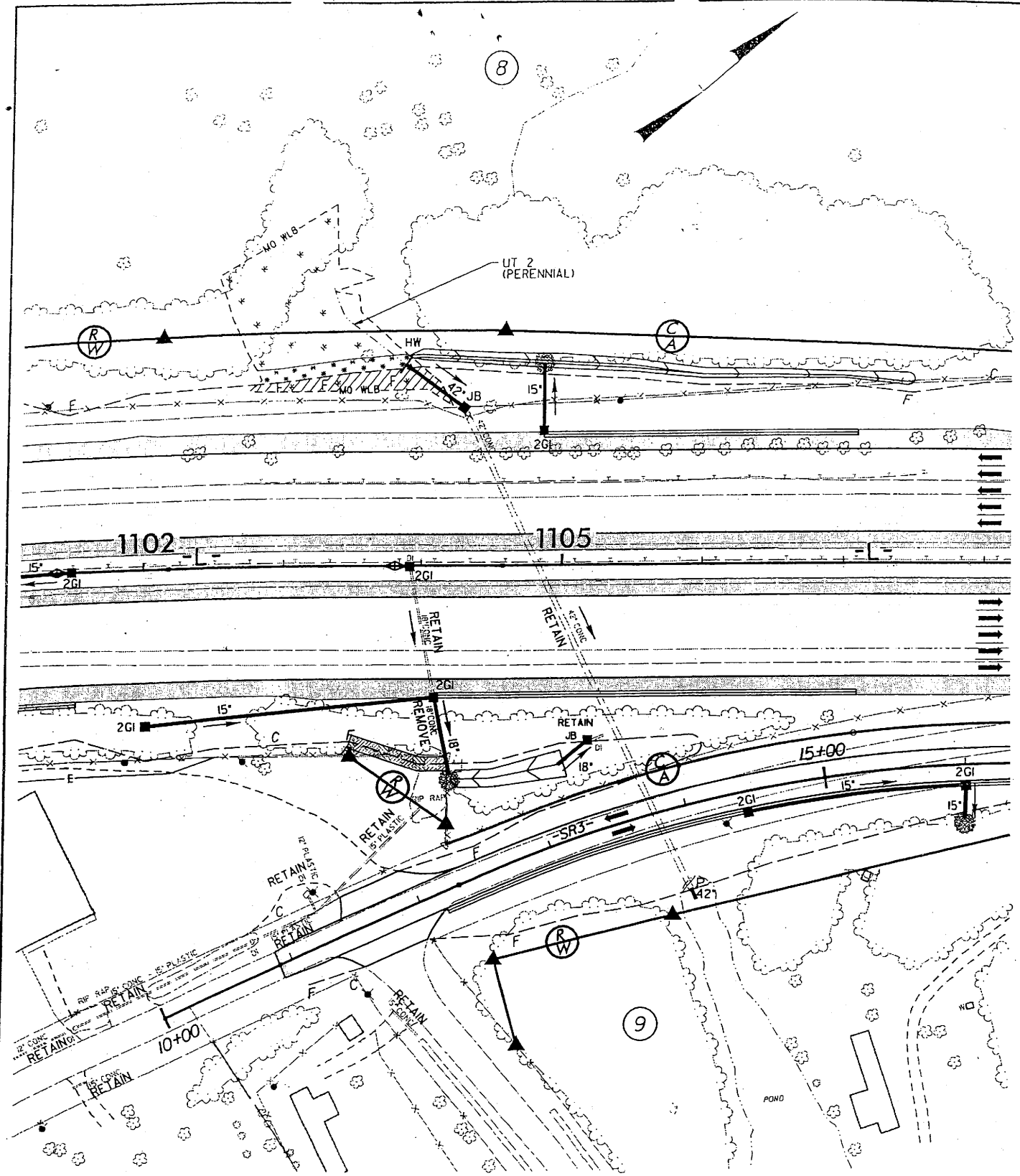
SHEET 9 OF 21

2/24/03



DENOTES FILL IN
SURFACE WATERS





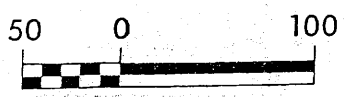
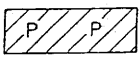
PLAN VIEW SITE 6

NOTE: HAND CLEAR IN WETLANDS TO INSTALL CONTROLLED ACCESS FENCING.

DENOTES MECHANIZED CLEARING

DENOTES FILL IN WETLANDS

DENOTES FILL IN SURFACE WATERS (POND)



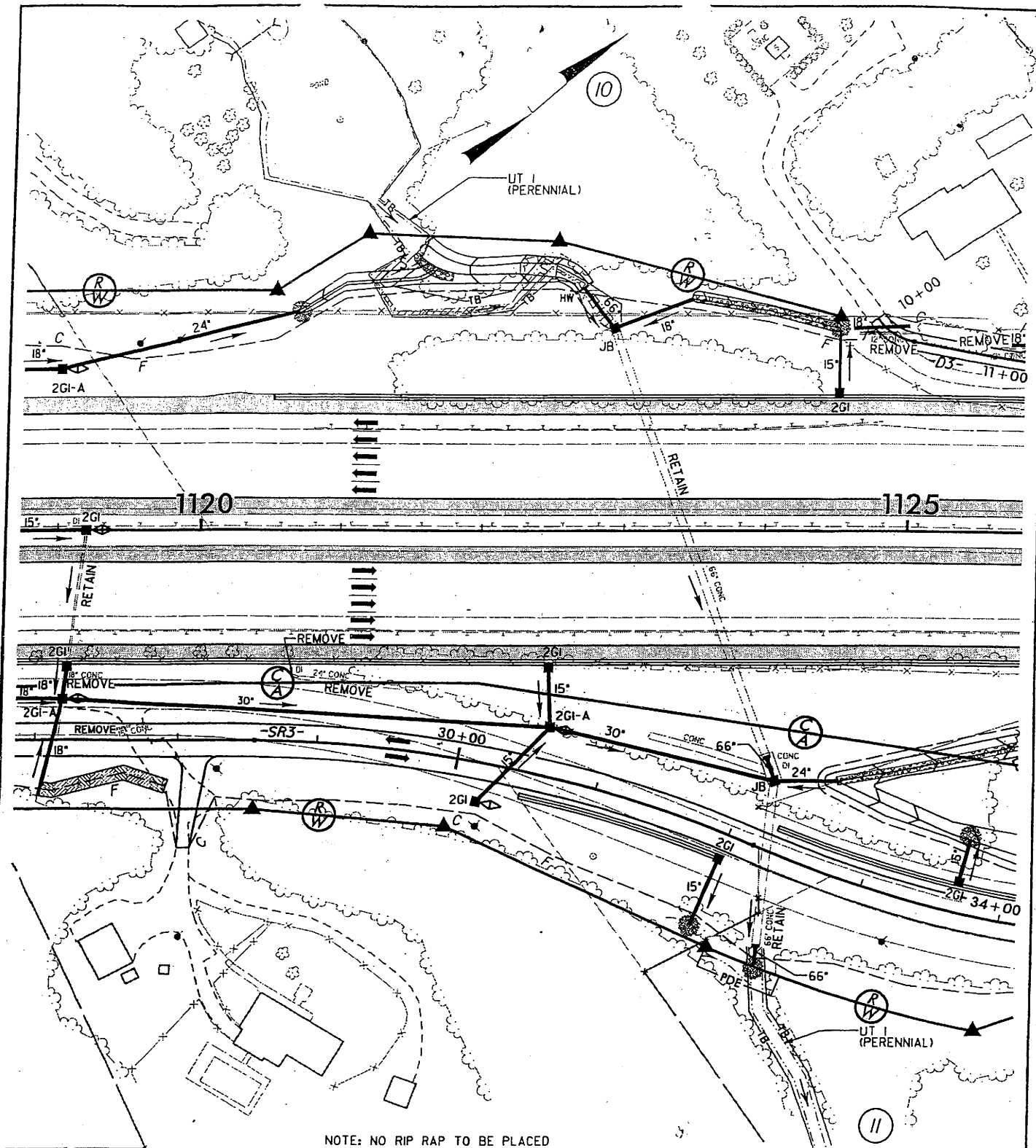
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

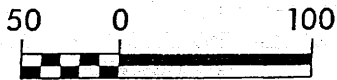
SHEET 10 OF 21

2/24/03

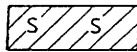


NOTE: NO RIP RAP TO BE PLACED IN STREAM BED.

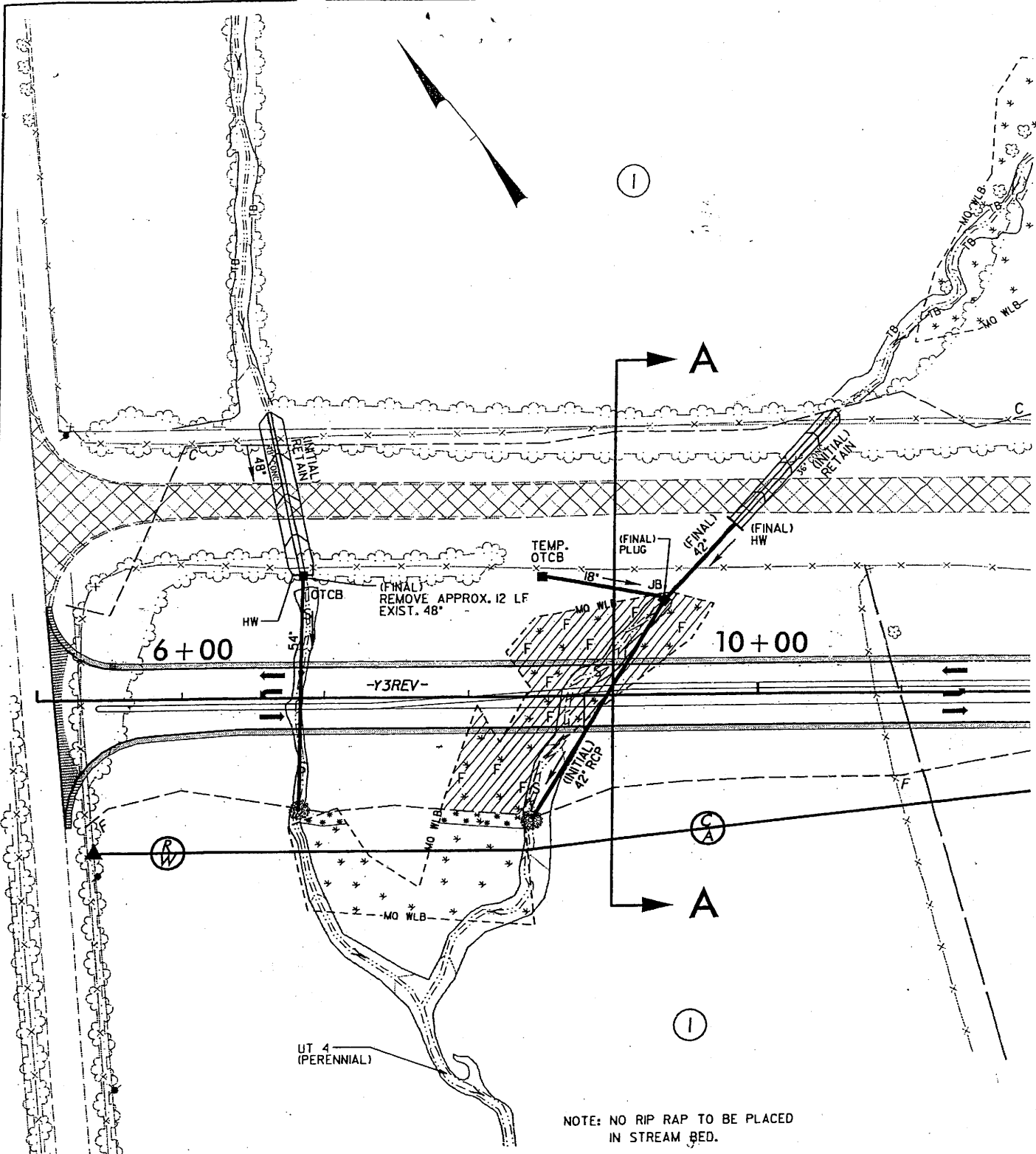
PLAN VIEW SITE 7



DENOTES FILL IN SURFACE WATERS

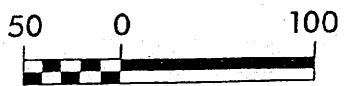



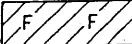

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DAVIDSON COUNTY
 PROJECT: 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF I-85 BUSINESS
 SHEET 11 OF 21 2/24/03



NOTE: NO RIP RAP TO BE PLACED IN STREAM BED.

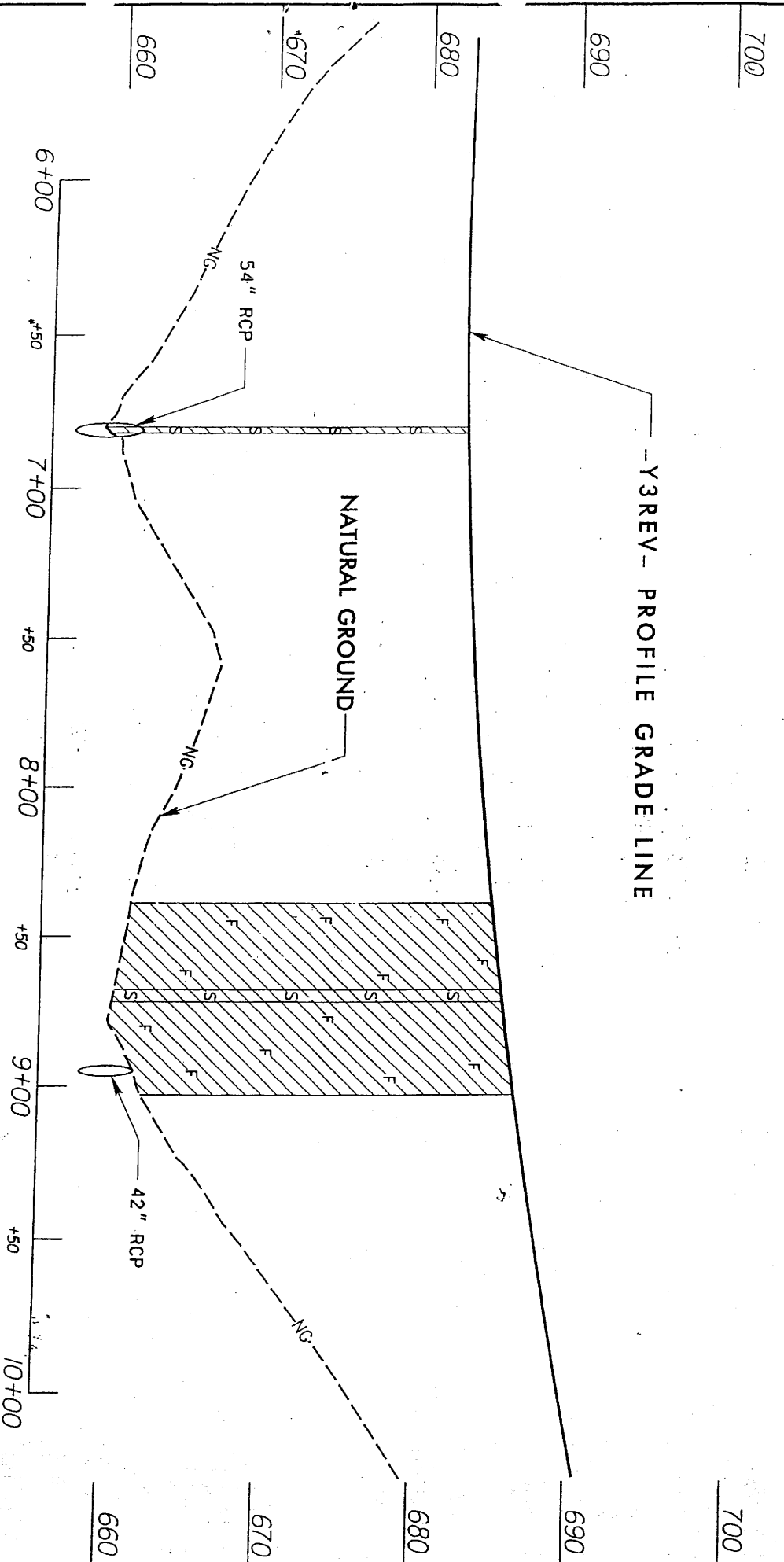
PLAN VIEW SITE 8



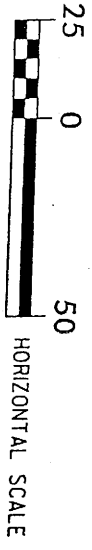
- DENOTES MECHANIZED CLEARING 
- DENOTES FILL IN WETLANDS 
- DENOTES FILL IN SURFACE WATERS 

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 DAVIDSON COUNTY
 PROJECT: 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS
 SHEET 12 OF 21 2/24/03

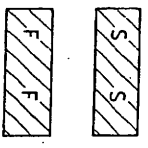


**PROFILE
SITE 8**



DENOTES FILL IN
SURFACE WATERS

DENOTES FILL IN
WETLANDS



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

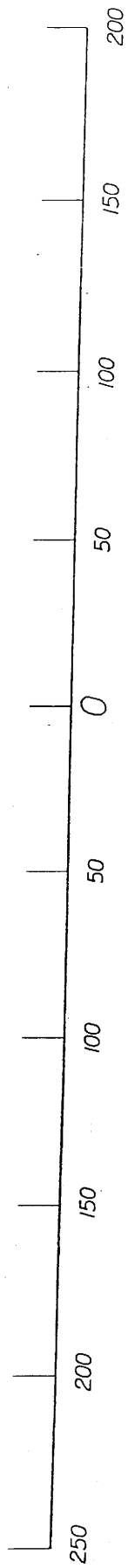
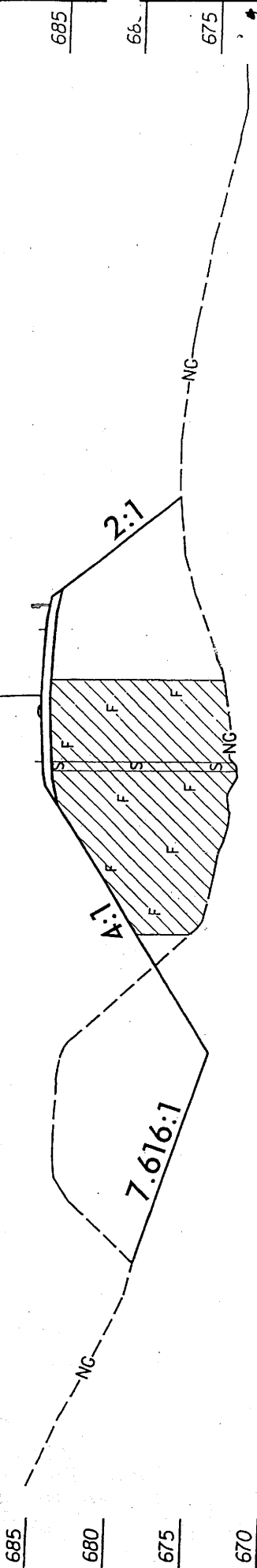
DAVIDSON COUNTY

PROJECT: 8.1631403 (I-230/4AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

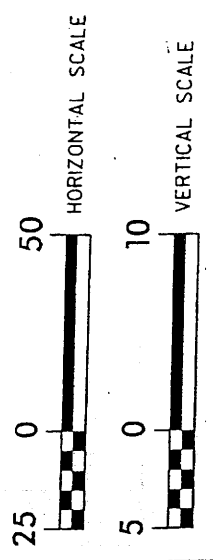
SHEET **13** OF **21**

2/24/03

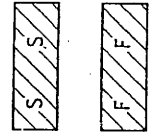
9 + 00 -Y3REV-



SITE 8
SECTION A-A



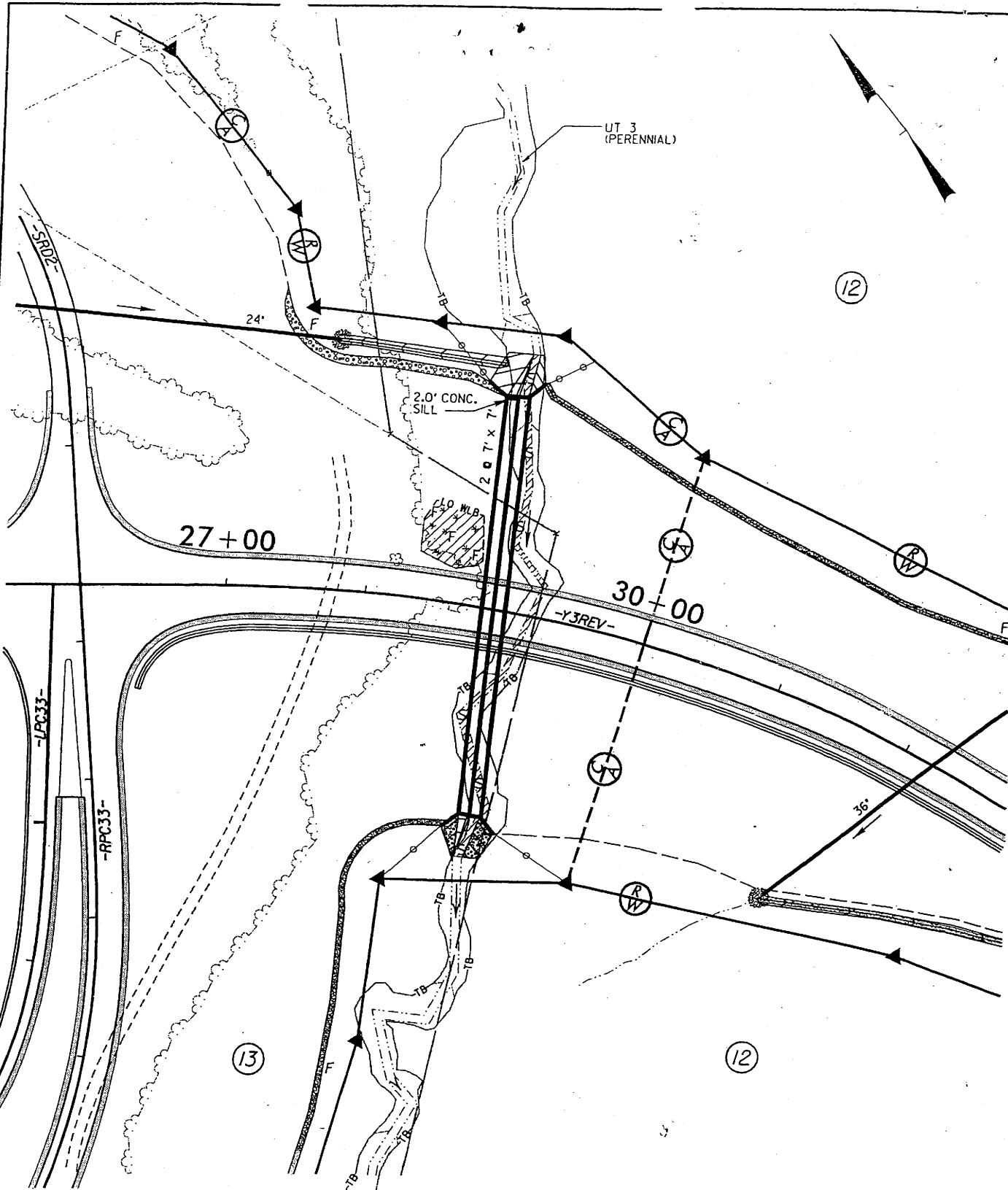
DENOTES FILL IN
 SURFACE WATERS
 DENOTES FILL IN
 WETLANDS



N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DAVIDSON COUNTY
 PROJECT: 81631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS
 SHEET 14 OF 21 2/24/03

685
680
675
670

685
680
675
670



PLAN VIEW
SITE 9



DENOTES FILL IN
WETLANDS



DENOTES FILL IN
SURFACE WATERS



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

SHEET 15 OF 21

2 / 24 / 03

-Y3REV- PROFILE GRADE LINE

(-)2.9360%

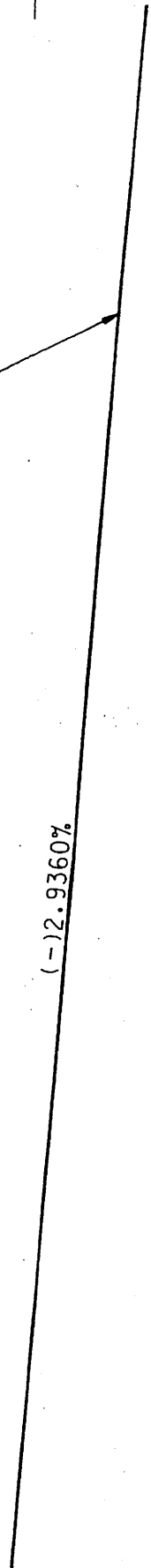
720

700

680

660

640



NATURAL GROUND LINE @ US FACE

NC

NC

2 @ 7' x 7' RCBC



2'-0" CONC. SILL

PROPOSED STREAM BED

EXISTING STREAM BED

27+00

28+00

29+00

30+00

31+00

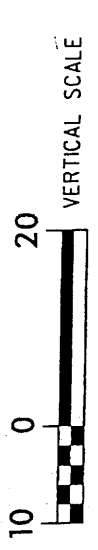
+50

+50

+50

+50

+50



PROFILE SITE 9

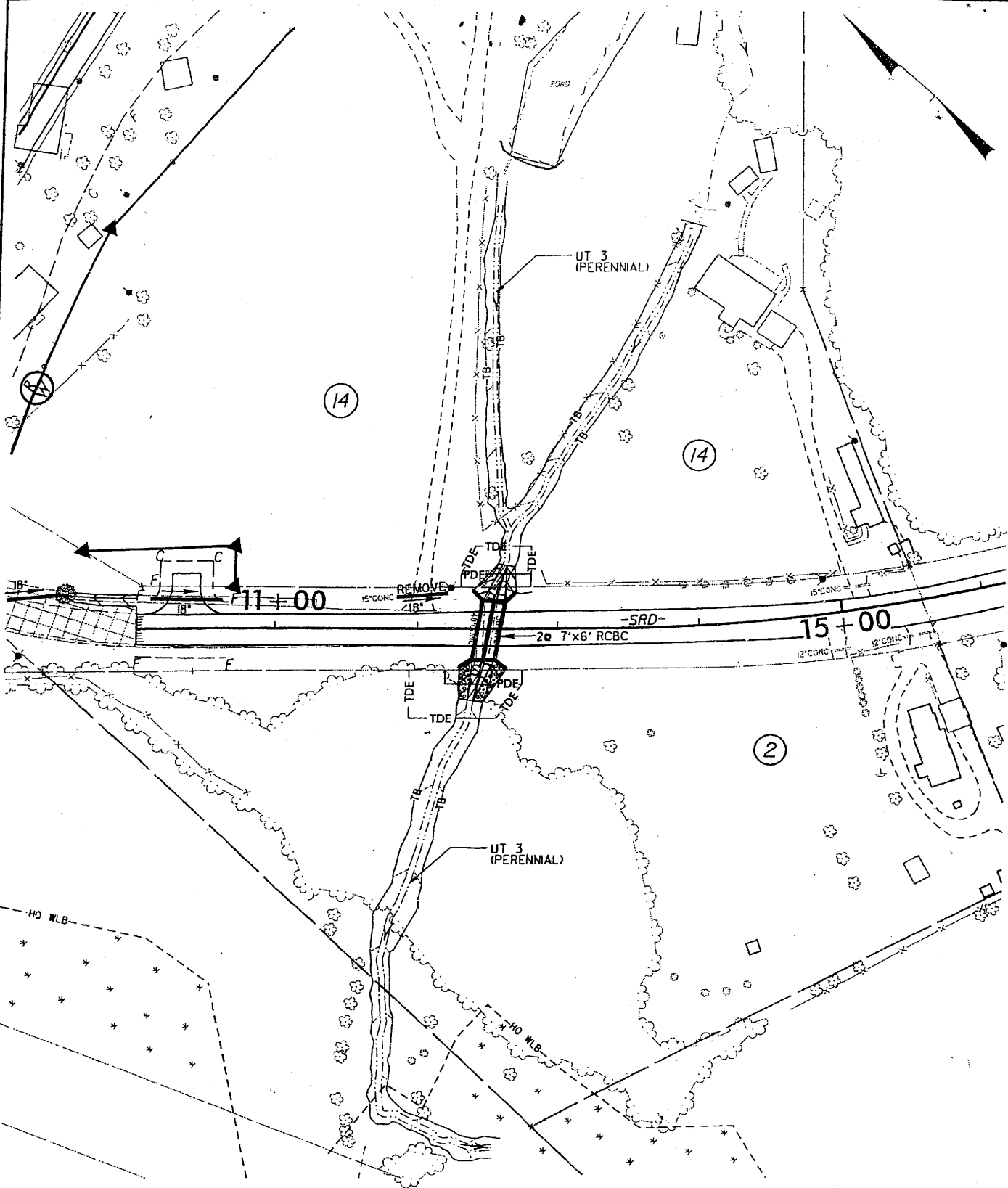
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1651403 (I-2304AB)

I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

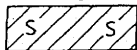
SHEET 16 OF 21 2/24/03



PLAN VIEW
SITE 10



DENOTES FILL IN
SURFACE WATERS



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

SHEET 17 OF 21

2 / 24 / 03

660

650

640

630

620

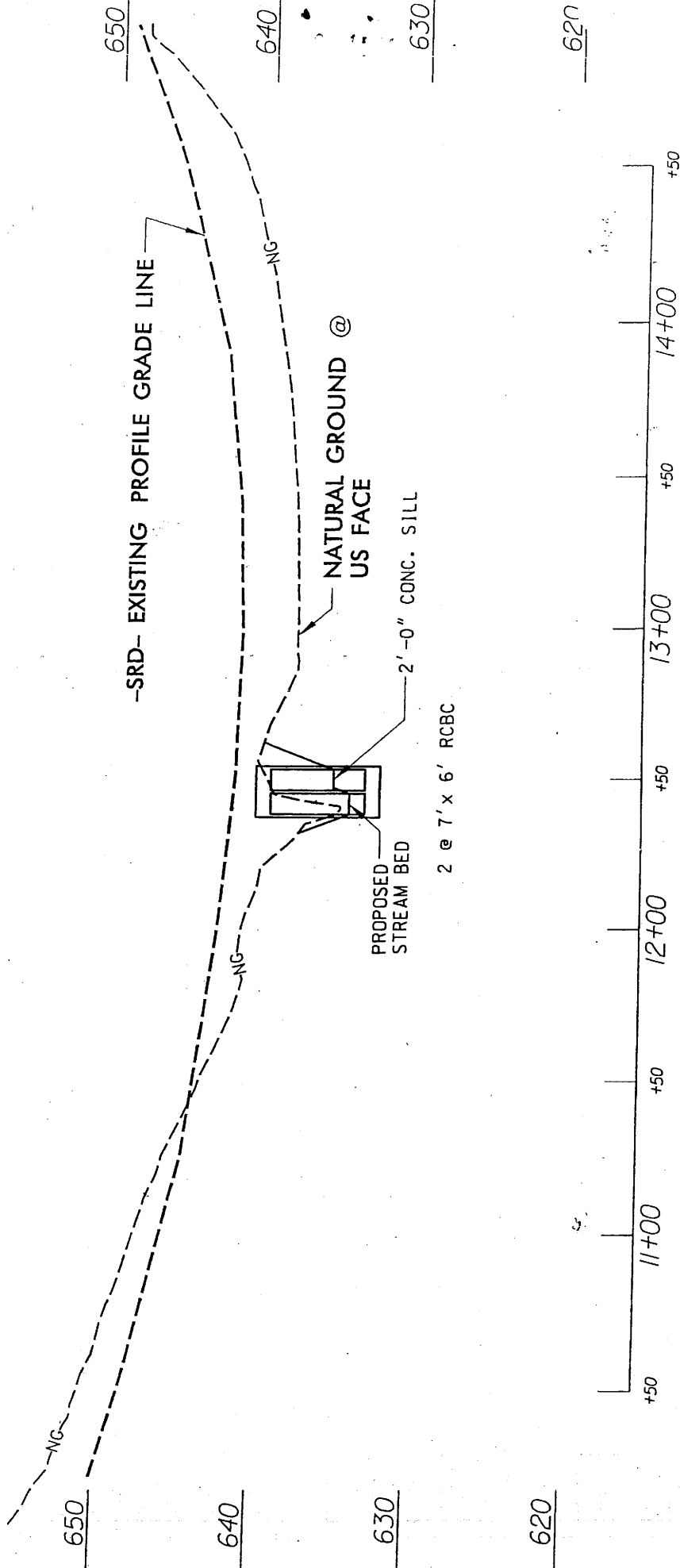
660

650

640

630

620



PROFILE SITE 10



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

DAVIDSON COUNTY

PROJECT: 8.1631403 (I-2304AB)
I-85 WIDENING FROM JUST NORTH
OF NC 150 TO JUST NORTH
OF I-85 BUSINESS

SHEET 18 OF 24

2/24/03

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From / To)	Structure / Type	Size	WETLAND IMPACTS			SURFACE WATER IMPACTS							
				Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Temp. Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)		
1	-L- 988+45R / -L- 989+70R			0.033			0.019							
2	-L- 1006+08R / -L- 1007+00L	1 @ 42" RCP						0.021					219	
3	-L- 1036+00 / -L- 1042+70R	4 @ 11" x 11" RCBC w/ 2 @ 72"		0.463		0.016	0.171	0.062					216	
4	-SRA- 13+50L / -SRA- 16+70R	1 @ 30" RCP		0.071			0.036							
5	-L- 1076+70R / -L- 1078+70R	1 @ 66" RCP												
6	-L- 1102+75L / -L- 1106+10R	1 @ 42" RCP		0.037			0.026	0.034					270	
7	-L- 1121+15L / -L- 1124+05R	1 @ 66" RCP							0.003					
8	-Y3REV- 6+50R / -Y3REV- 6+92L -Y3REV- 7+80R / -Y3REV- 9+70R	1 @ 54" RCP 1 @ 42" RCP		0.263			0.005 0.003	0.009 0.014					179 201	
9	-Y3REV- 28+65L / -Y3REV- 29+35R	2 @ 7' x 7' RCBC w/ 2' CONC. SILL		0.039				0.042					395	
10	-SRD- 12+26R / -SRD- 12+78L	2 @ 7' x 6' RCBC w/ 2' CONC. SILL						0.006					59	
TOTALS:				0.906	0.000	0.016	0.266	0.218	0.003	0.000	1811	0		

N.C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 DAVIDSON COUNTY

 PROJECT 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH OF
 I-85 BUSINESS

Property Owner List

Site NO.	Parcel NO.	Name DB and Pg	Address
1	①	Robert L. Grubb Trustee of June C. Little DB 698 Pg 336	P.O. BOX 388 High Point, NC 27260
2	①	Robert L. Grubb Trustee of June C. Little DB 698 Pg 336	P.O. BOX 388 High Point, NC 27260
	②	Franklin Haywood Graves And Wife, Margaret L Graves DB 635 Pg 17 DB 915 Pg 965 DB 401 Pg 338	8291 Old Salisbury Road Linwood, NC 27299-9708
	③	Everhart Used Cars, Inc. DB 635 Pg 161	1517 Greensboro Road Lexington NC 27292-1919
3	①	Robert L. Grubb Trustee of June C. Little DB 699 Pg 336	P.O. BOX 388 High Point, NC 27260
	④	Earl L Blanton And Wife, Kathy L Blanton DB 705 Pg 514	7847 Old Salisbury Road Linwood, NC 27299
4	①	Robert L. Grubb Trustee of June C. Little DB 699 Pg 336	P.O. BOX 388 High Point, NC 27260
	⑤	Walser Enterprises DB 112 Pg 110	Snider-Kines Road Linwood, NC 27299
5	⑥	C. C. Fitzgerald Heirs DB 57 Pg 205	194 Redwine Road Linwood, NC 27299
	⑦	Randall G Lomax And Wife, Tammy P Lomax DB 875 Pg 936	310 Lake Shore Drive Lexington, NC 27292-8117

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DAVIDSON COUNTY
 PROJECT: 8.1631403 (I-2304AB)
 I-85 WIDENING FROM JUST NORTH
 OF NC 150 TO JUST NORTH
 OF I-85 BUSINESS
 SHEET 20 OF 21 2/24/03

Property Owner List

Site NO.	Parcel NO.	Name DB and Pg	Address
6	8	Mobile Development Corp. DB 1051 Pg 1588	23 West Second Street Lexington, NC 27292
	9	Robert A. Gusman DB 634 Pg 656 DB 613 Pg 959	P.O. Box 992 Lexington, NC 27293-0992
7	10	George W Gobble And Wife, Betty E Gobble DB 596 Pg 757	984 Wayane Gobble Road Linwood, NC 27299-9706
	11	Margaret N. Clark DB 832 Pg 814	1089 Clyde Fitzgerald Road Linwood, NC 27299
8	1	Robert L. Grubb Trustee of June C. Little DB 699 Pg 336	P.O. BOX 388 High Point, NC 27260
9	12	Beallmont Farms Inc. DB 931 Pg 628	P.O. Box 835 Linwood, NC 27299
	13	Henderson Hargrave Heirs DB 102 Pg 288	561 Belmont Road Linwood, NC 27299-9201
10	2	Walter McDowell, SR DB 550 Pg 769	796 Belmont Road Linwood, NC 27299-9201
	14	Henderson Hargrave Heirs DB 102 Pg 288	561 Belmont Road Linwood, NC 27299-9201

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