October 18, 1995r

PROJECT SPECIAL PROVISIONS
PERMITS

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

PERMIT	AUTHORITY GRANTING THE PERMIT
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Environmental Management, DENR, State of North Carolina

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

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

The Contractor's attention is also directed to Articles 107-10 and 107-14 of the Standard Specifications and the following:

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

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

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

REPLY TO
ATTENTION OF:

May 27, 2003

Regulatory Division

Action ID. 199303531; TIP No. R-2539

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

Dear Dr. Thorpe:

In accordance with the written request of August 9, 2002, and the ensuing administrative record, enclosed is a permit to discharge dredged or fill materials impacting a total of 15.84 acres of waters of the United States, including 15.69 acres of Section 404 wetlands and 619 linear feet of stream, to widen 14.2 miles of NC 55 from 0.7 miles east of US 17 in Bridgeton to NC 304 in Bayboro, Craven and Pamlico Counties, North Carolina (TIP R-2539, Federal Aid Project STP-55(1), State Project No. 8.1170901).

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, 2006.

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, feel free to contact Mr. Mike Bell at the Washington Regulatory Field Office, telephone (252)975-1616, extension 26.

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. Garland Pardue, 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
Division of Coastal Management
North Carolina Department of
Environment and Natural Resources
1638 Mail Service Center
Raleigh, North Carolina 27699-1638

Mr. Ronald E. Ferrell, Program Manager
Wetlands Restoration Program
Division of Water Quality
1619 Mail Service Center
Raleigh, North, Carolina 27699-1619

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DEPARTMENT OF THE ARMY PERMIT

Permittee NC Department of Transportation

Permit No. 199303531

Issuing Office CESAW-RG-W

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

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

Project Description:

To discharge dredged or fill materials impacting a total of 15.84 acres of waters of the United States, including 15.69 acres of Section 404 wetlands and 619 linear feet of stream, to widen 14.2 miles of NC 55 from 0.7 miles east of US 17 in Bridgeton to NC 304 in Bayboro.

Project Location:

From NC 55 from 0.7 miles east of US 17 in Bridgeton to NC 304 in Bayboro, Craven and Pamlico Counties, North Carolina.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2006 **. 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.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

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

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

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

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

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

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

12 May 03

(PERMITTEE) *(DATE)*

NC DEPARTMENT OF TRANSPORTATION

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

S. Kenneth Jolly 5/27/03

(DISTRICT ENGINEER) *(DATE)*

for CHARLES R. ALEXANDER, JR. COLONEL

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

(TRANSFEREE) *(DATE)*

☆U.S. GOVERNMENT PRINTING OFFICE: 1986 — 717-425

SPECIAL CONDITIONS

ACTION ID: 199303531;TIP NO. R-2539

a. 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.

b. All work authorized by this permit must be performed in strict compliance with the attached plans, which are part of the permit.

c. The permittee and its contractors and/or agents shall not excavate, fill, or perform landclearing at any time in the construction or maintenance of this project within waters and/or wetlands, except as authorized by this permit or any modification to this permit. There shall be no excavation from or waste disposal into jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and fill activities connected with this project.

d. To ensure that all borrow and waste activities occur on high ground, 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 ensure that all such areas comply with Special Condition (c.) 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 Special Condition (c.) above. All information will be available to the Corps of Engineers on request. NCDOT will require its contractors to complete 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.

e. 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.

f. The permittee shall schedule an onsite preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions within the Department of the Army Permit. The permittee shall notify the Corps of Engineers NCDOT Project Manager a minimum of thirty (30) days in advance of the scheduled meeting in order to provide that individual with ample opportunity to schedule and participate in the required meeting.

g. Prior to commencing construction within jurisdictional waters of the United States, the permittee shall forward the latest version of the project construction drawings to the Corps of Engineers, Washington Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings are preferred.

h. The permittee will maintain the authorized work in good condition and in conformance with the terms and conditions of this permit. The permittee is not relieved of this requirement if he abandons the permitted activity without having it transferred to a third party.

i. The temporary placement or double handling of excavated or fill materials within waters or wetlands are not authorized.

j. All fill material will be clean and free of any pollutants except in trace quantities. Metal products, organic materials, or unsightly debris will not be used.

k. All fill material will be immediately stabilized and maintained to prevent erosion and sedimentation into adjacent waters and/or wetlands. Fescue will not be planted within wetlands or any mitigation area.

l. 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.

m. This Department of the Army permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

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

o. In-stream activities will be minimized during the spring migration period of anadromous fish (February 1 through June 15).

p. In order to avoid impacts to high quality wetlands, temporary construction bridges will be used over Upper Broad Creek and Deep Run Creek and associated wetlands. In addition, top down construction methods will be used to construct the bridge over Goose Creek and associated wetlands.

q. Absolutely no fill shall be deposited into, or removed from, wetlands adjacent to Upper Broad or Deep Run Creeks during installation or removal of pilings to support the temporary construction bridges. This prohibition includes matting or dredging.

CULTURAL AND ARCHEOLOGICAL RESOURCES

r. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he will immediately notify the Wilmington District Engineer which will initiate the required State/Federal coordination.

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STREAM MITIGATION

s. The permittee will mitigate for stream impacts by purchasing and implementing natural channel design off-site on 969 linear feet at the Brock Mitigation Site located in Jones County. In addition, the permittee will provide 134.5 feet of on-site mitigation within the right of way via a relocation of an unnamed tributary to West Fork Goose Creek (see Section B drawing sheet 25 of 48). Channel banks will be planted with one or more of the following species: sycamore, willow oak, green ash, water oak or swamp chestnut oak. As-Builts for the completed stream and wetland restoration will be submitted to the Corps of Engineers, NCDOT Regulatory Project Manager within 30 days of the completion of the construction. The NCDOT has purchased an Option for the Brock Mitigation Site and will finalize the Mitigation Plan by May 1, 2004, and have the restoration work completed by May 1, 2005.

t. The permittee will visually monitor the vegetative plantings on the on-site mitigation stream banks, utilized to satisfy Special Condition (s.) above, to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation for a minimum of one year after planting, and appropriate remedial actions (e.g., replanting, streambank grading, etc.).

u. NCDOT will maintain the stream channels utilized to satisfy Special Condition (s.) in a natural state in perpetuity as mitigation areas. Prohibited activities within these mitigation areas specifically includes, 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 that may alter the drainage pattern on the property; the cutting, mowing, destruction, removal, damage or other alternation of any vegetation; disposal or storage of any debris, waste or garbage; except as may be authorized by the mitigation plan or subsequent modifications which 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 restored streams.

v. Special Condition (u.), above, runs with the land. The permittee shall not sell, lease, or otherwise convey any interest in the properties used to satisfy mitigation requirements for this permit, to any third party, without the express written consent of the Corps of Engineers.

w. The permittee will identify and survey the acreage at the mitigation sites utilized to satisfy Special Condition (u.) above and provide a copy of the survey to the US Army Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager, within 45 days of the date of this permit.

x. Riprap placed for bank stabilization will be limited to the stream bank below the high water mark, and vegetation should be used for stabilization above the high water elevation.

y. The dimension, pattern and profile of the on-site stream mitigation above and below the base flow barrel(s) will not be modified by widening the stream channel or reducing the depth of either mitigated stream .

z. Storm water will be routed to buffer areas and not discharged directly into streams.

aa. Construction equipment will be operated from the bank rather than in the stream channel in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the streams.

bb. Discharging hydro seeding mixtures and washing out hydro seeders and other equipment in or adjacent to surface waters is strictly prohibited.

WETLAND MITIGATION

cc. Existing bridges over Upper Broad, Goose and Deep Run Creeks will be removed and associated causeway fill will be excavated to restore and enhance three on-site wetlands. The material will be removed to the elevation of the adjacent wetlands. This wetland restoration effort will be accomplished pursuant to the "Restoration Plan for Swamp Hardwood Wetlands, at existing Bridge Causeways of NC 55, Upper Broad Creek, Deep Run, Goose Creek in Craven and Pamlico Counties", dated December 11, 2002, and implemented concurrently with all phases of construction activities authorized by this permit, to the extent necessary to restore, monitor and maintain 2.66 acres of riverine bottomland hardwood wetlands to the satisfaction of the Corps of Engineers. Any deviation from the mitigation site construction schedule must be approved by the Wilmington District, U.S. Army Corps of Engineers, Regulatory Division.

dd. NCDOT will maintain the mitigation sites (including 11.99 acres of riverine wetland enhancement) in the condition established by the mitigation plan in perpetuity (fee title). Prohibited activities within the mitigation areas 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 that may alter the drainage pattern on the property; the cutting, mowing, destruction, removal, damage or other alternation of any vegetation; disposal or storage of any debris, waste or garbage; except as may be authorized by the mitigation plans or subsequent modifications which are approved by the Corps of Engineers. In addition, the permittee shall take no action, whether on or off the mitigation properties, which will adversely impact the restored wetlands.

ee. Special Condition (dd.), above, runs with the land. The permittee shall not sell, lease, or otherwise convey any interest in the properties used to satisfy mitigation requirements for this permit, to any third party, without the express written consent of the Corps of Engineers.

ff. The permittee shall contact the Corps of Engineers, Washington Regulatory Field Office, NCDOT Regulatory Project Manager and provide him with the opportunity to attend the annual mitigation monitoring efforts.

gg. The permittee will submit the annual mitigation monitoring reports by December 31 of each monitoring year.

hh. The Permittee shall debit 28.60 non-riverine restoration acres from the Croatan Wetland Mitigation Bank. No work within waters or wetlands authorized by this permit shall begin until proof has been received by the COE that the credits have been debited from the Bank in accordance with the Mitigation Banking Instrument signed April 2003, attached hereto and incorporated herein by reference. The NCDOT shall perform all activities required of the Bank Sponsor in the "Agreement To Establish The Croatan Mitigation Bank In Craven County, North Carolina," including the "Final Mitigation Plan," dated April 2002.

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

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Rec'd @ PLB
4-8-03

March 17, 2003

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

Dear Dr. Thorpe:

Re: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act,
Proposed widening of NC 55 from US 17 in Bridgeton to NC 304 in Bayboro in Craven and Palico Counties.
WQC Project No. 021232 R-2539

Attached hereto is a copy of Certification No. 3415 issued to The North Carolina Department of Transportation dated March 17, 2003. This certification authorizes the NCDOT to impact 15.69 acres of jurisdictional wetlands, 619linear feet of streams, 0.15 acres of other surface waters, and 2.06 acres of Neuse River Riparian Buffers. The project shall be constructed pursuant to the application dated August 9, 2002, and the subsequent addendum dated February 3, 2003. Any proposed site plans submitted in the August 9, 2002 application that have a subsequent revised site plan submitted in the February 4, 2003 addendum are not authorized by this certification. Instead, for all impacts where a proposed site design as provided in the original August 9, 2002 application was revised and submitted in the February 4, 2003 addendum, the drawings with the latest date of revision are authorized. The purpose of the authorized impacts is the widening of NC 55 from US 17 in Bridgeton to NC 304 in Bayboro in Craven and Pamlico Counties.

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

Sincerely,

Alan W. Klimek, P.E.
Director

Attachments

cc: Wilmington District Corps of Engineers
Corps of Engineers Washington Field Office
DWQ Washington Regional Office
Cathy Brittingham, Division of Coastal Management
Ron Ferrell, Wetlands Restoration Program
Central Files
File Copy

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

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

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500, and 15 NCAC 2B .0233. This certification authorizes the NCDOT to impact 15.69 acres of jurisdictional wetlands, 619linear feet of streams, 0.15 acres of other surface waters, and 2.06 acres of Neuse River Riparian Buffers as described below.

Section	Impacts to Wetlands (Acres)			Impacts to Streams (Feet)	Impacts to other Surface Waters (Acres)	Impacts to Buffers (Acres)	
	Fill in Wetlands	Excavation & Drainage	Mechanized Clearing			Zone 1	Zone 2
R-2539A	2.48	3.43	1.16	114.8	0.05	0.39	0.18
R-2539B	1.88	0.24	1.52	295.2	0.03	0.59	0.32
R-2539C	1.52	1.96	1.50	209.0	0.07	0.37	0.21
Total	**5.88**	**5.63**	**4.18**	**619**	**0.15**	**1.35**	**0.71**

The project shall be constructed pursuant to the application dated August 9, 2002, and the subsequent addendum dated February 3, 2003. Any proposed site plans submitted in the August 9, 2002 application that have a subsequent revised site plan submitted in the February 4, 2003 addendum are not authorized by this certification. Instead, for all impacts where a proposed site design as provided in the original August 9, 2002 application was revised and submitted in the February 4, 2003 addendum, the drawings with the latest date of revision are authorized. The purpose of the authorized impacts is the widening of NC 55 from US 17 in Bridgeton to NC 304 in Bayboro in Craven and Pamlico Counties.

The application provides adequate assurance that the discharge of fill material into the waters of the Neuse River 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 any additional wetland impacts or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Corps of Engineers Permit, whichever is sooner.

Condition(s) of Certification:

1. 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" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall 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 (50 NTUs in all fresh water streams and rivers not designated as trout waters; 25 NTUs in all lakes and reservoirs, and all saltwater classes; and 10 NTUs in trout waters);

2. All sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored after the Division of Land Resources has released the project;

3. If an environmental document is required, this Certification is not valid until a FONSI or ROD is issued by the State Clearinghouse. All water quality-related conditions of the FONSI or ROD shall become conditions of this Certification;

4. No live or fresh concrete shall come into contact with waters of the state until the concrete has hardened;

5. 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.

6. All channel relocations will be constructed in a dry work area, and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. A transitional phase incorporating coir fiber and seedling establishment is allowable. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.

7. Compensatory mitigation for impacts to wetlands shall be done for 15.69 acres of impacts (1.39 acres of riverine and 14.30 acres of non-riverine). Applying a replacement ration of 2:1, total mitigation for 1.39 acres of riverine wetlands and 14.30 acres of non-riverine wetlands are 2.78 and 28.60 acres, respectively. The mitigation shall be provided as described below:

Mitigation Site	Acres of WL Debited from Site	Type of Mitigation	Replacement Ratio	Acres of Mitigation Credited
On-Site Riverine Mitigation	1.39	Riverine Restoration	1:1	1.39
On-Site Riverine Enhancement	5.56	Enhancement	4:1	1.39
Croatan Mitigation Site	28.60	Restoration	1:1	28.60

8. 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.

9. Compensatory mitigation for impacts to streams shall be done for 619 linear feet of stream impact at a replacement ratio of 1:1. The required mitigation will be provided by using off-site stream mitigation by debiting 619 linear feet of stream credits from the Brock Mitigation Site located in Jones County.

10. 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 stream beds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ.

11. All stormwater runoff shall be directed to sheetflow through stream buffers at nonerosive velocities, unless approved otherwise by this certification.

12. Prior to planting any of the vegetation for the wetland restoration sites located at R-2539A from Station 40+35 to 42+55, R-2539B from Station 75+55 to Station 76+55, and R-2539B from Station 148+40 to Station 150+60, a planting shall be submitted to, and approved by, the NC Division of Water Quality.

13. For the aforementioned wetland mitigation sites located at R-2539A from Station 40+35 to 42+55, R-2539B from Station 75+55 to Station 76+55, and R-2539B from Station 148+40 to Station 150+60, NCDOT shall plant 680 stems/acre of the approved planting list. Vegetation success shall be measured by survivability over a 5-year monitoring period. Survivability will be based on 320 stems/acre after 3 years and 260 stems after 5 years. A survey of vegetation during the growing season shall be conducted annually over the 5-year monitoring period, and submitted to the NC Division of Water Quality. If the surviving vegetation densities are below the required thresholds after the 5-year monitoring period, the site may still be declared successful, at the discretion, and with written approval from, the NC Division of Water Quality.

14. For the wetland mitigation sites located at R-2539A from Station 40+35 to 42+55, R-2539B from Station 75+55 to Station 76+55, and R-2539B from Station 148+40 to Station 150+60, hydrologic success of the sites will be attained by restoration of a hydrologic regime that results in inundation or saturation of the soils within 12 inches of the ground surface for at least 12.5 percent of the growing season, and inundation or saturation of the soils within 12 inches of the ground surface within 20 percent of hydrologic monitoring gauges located in the adjacent wetland reference. The hydrologic monitoring shall persist for a total of 5 years. In addition, after the 5-year monitoring period, if the monitoring requirements are not met, the site may still be declared successful, at the discretion, and with written approval from, the NC Division of Water Quality.

15. 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.

16. The post-construction removal of any temporary bridge structures will need to return the project site to its preconstruction contours and elevations. The revegetation of the impacted areas with appropriate native species may also be necessary.

17. No changes to the horizontal or vertical placement of the stormwater outfall locations, the horizontal or vertical placement of the culverts, the horizontal or vertical placement of bridges, the horizontal or vertical placement of grassed swales, or the horizontal or vertical placement of open ditches is permitted without written approval from the NC Division of Water Quality 401 Wetlands Unit. In addition, no changes to the flow spreader locations or designs, preformed scour hole locations or designs are permitted without written approval from the NC Division of Water Quality 401 Wetlands Unit. Any request for changes to the referenced items above will require submittal of a modification request, with seven copies, and corresponding fees will need to be submitted to the North Carolina Division of Water Quality.

18. When final design plans are completed for R-2539 Section B, and R-2539 Section C, a modification to the 401 Water Quality Certification and the Neuse River Riparian Buffer Certification shall be submitted with seven copies and fees to the NC Division of Water Quality. Final designs shall reflect all appropriate avoidance, minimization, and mitigation for impacts to wetlands, streams, and other surface waters, and buffers. No construction activities that impact any wetlands, streams, surface waters, or buffers located in R-2539 Section B or R-2539 Section shall begin until after NCDOT applies for, and receives a written modification 401 Water Quality Neuse River Riparian Buffer Certification from the NC Division of Water Quality.

Violations of any condition herein set forth shall 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.

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

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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 18th day of March 2003

DIVISION OF WATER QUALITY

Alan W. Klimek, P.E.
Director

WQC No. 3415

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

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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 _____

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Restoration Plan for Swamp Hardwood Wetlands

at existing Bridge Causeways of NC 55
Upper Broad Creek, Deep Run, and Goose Creek
in Craven and Pamlico Counties

R-2539

December 11, 2002

Revised January 24, 2003

The NCDOT will perform on-site mitigation for riverine bottomland hardwood swamp at the NC 55 overpasses of Upper Broad Creek, Deep Run, and Goose Creek in Craven and Pamlico counties. The NCDOT will remove approximately 1.78 acres of existing bridge causeway fill in Section A and approximately 0.88 acres in Section B in order to lengthen the bridges and restore the underlying wetlands.

The existing causeways will be removed and graded down approximately three feet below the grade of the surrounding wetlands. The excavated areas will be back filled with undercut material (muck) removed during the construction of R-2539. The portions of the site with adequate aerial clearance will be revegetated with swamp hardwood trees. Since all species are not available every year from local nurseries, the seedling mixture will mimic the surrounding wetland to the maximum extent possible. The final species mix will be subject to agency review prior to planting. The species to be planted will include an equal representation of green ash (*Fraxinus pennsylvanica*), bald cypress (*Taxodium distichum*), yellow poplar (*Liriodendron tulipifera*), swamp black gum (*Nyssa biflora*), and water tupelo (*Nyssa aquatica*). Twelve- to eighteen-inch bareroot seedlings will be planted at a density of 680 trees per acre. We also expect natural seeding from the adjacent swamp hardwoods. The remaining portion, with restricted overhead clearance, will be seeded with grasses immediately following construction, in order to stabilize the site and allowed to revegetate naturally from the local herbaceous seed source. Total on-site riverine wetland mitigation anticipated for this project will be 2.66 acres.

After planting has been completed, an initial evaluation will be performed to verify satisfactory planting technique and to determine initial species composition and density. Vegetation sampling plots will be established and permanently located within the three swamp hardwood mitigation areas.

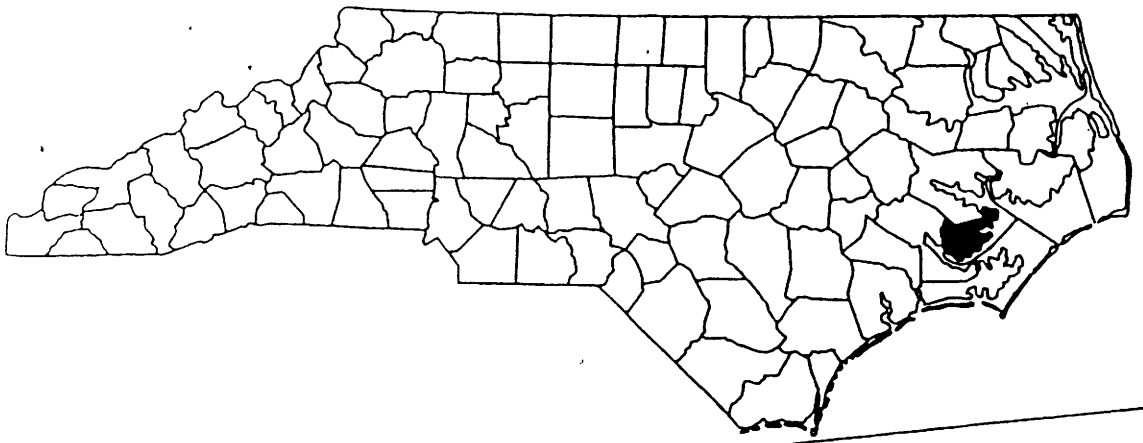
Success criteria have been established to verify that the mitigation areas support vegetation necessary for a jurisdictional determination and that the restored area exhibits wetland hydrology. Based on the success criteria listed below, an annual report summarizing mitigation will be submitted to the regulatory agencies for their review and acceptance. Five years after project completion, NCDOT will schedule an agency field meeting to determine whether the areas have attained jurisdictional wetland status.

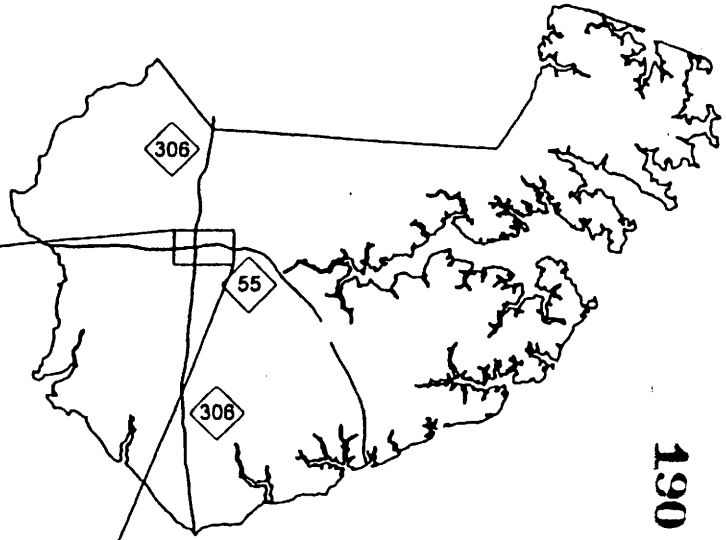
Vegetation Monitoring

For swamp hardwood areas planted in tree species, an annual update will consist of photographs provided during the agency monitoring report meeting and brief report on the progress of these areas attaining wetland jurisdictional status. The vegetative characteristics of the restoration area will then be compared to the immediately adjacent existing wetland complex (Reference Site).

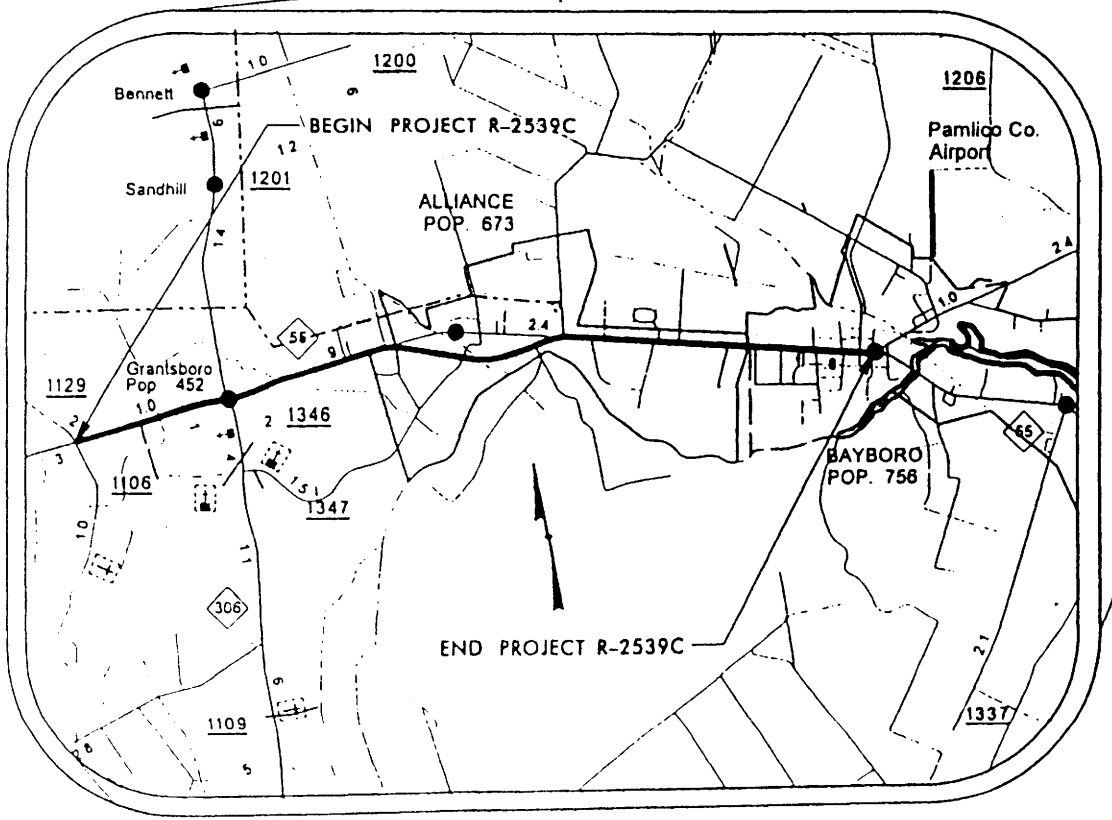
Hydrologic Monitoring

When the existing causeways were constructed, the swamp hardwood wetland systems impacted had at least some amount of standing water throughout most of the growing season. Therefore, it is reasonable to expect that the removal of the causeways and minor site preparation will restore the area to wetland status. The restored hydrology of the site will be assessed concurrently with the vegetation monitoring. The site will be evaluated to determine if the restored area exhibits signs of wetland hydrology. The site will be evaluated using the same criteria outlined in the 1987 Wetland Delineation Manual, published by the United States Army Corps of Engineers, for field identification of a jurisdictional wetland. The hydrologic characteristics of the restoration area will then be compared to the immediately adjacent existing wetland complex (Reference Site).





PAMLICO COUNTY



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.) TO NC 304
(VANDEMERE RD.)
MARCH 2001
SHEET 1 OF 20

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12. Description of proposed work (Attach PLANS-8 1/2" X 11" drawings only): Roadway construction. Includes grading, drainage, paving and pipe culverts.

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13. Purpose of proposed work: Widening of existing two lane facility to provide adequate traffic capacity and improve safety.

14. State reasons why the applicant believes that this activity must be carried out in wetlands. Also note measures taken to minimize wetland impacts. Improvements to existing NC 55 will provide a facility that will more efficiently and safely accommodate both existing and projected traffic volumes. Limited work in wetlands.

15. You are required to contact the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) regarding the presence or any Federally listed or proposed for listing endangered or threatened species or critical habitat in the permit area that may be affected by the proposed project. Have you done so? YES [x] NO [ ]

RESPONSES FROM THE USFWS AND/OR NMFS SHOULD BE FORWARDED TO CORPS.

16. You are required to contact the State Historic Preservation Officer (SHPO) regarding the presence of historic properties in the permit area which may be affected by the proposed project. Have you done so? YES [x] NO [ ]

RESPONSES FROM THE SHPO SHOULD BE FORWARDED TO CORPS.

17. Additional information required by DEM:

A. Wetland delineation map showing all wetlands, streams, and lakes on the property.

B. If available, representative photograph of wetlands to be impacted by project.

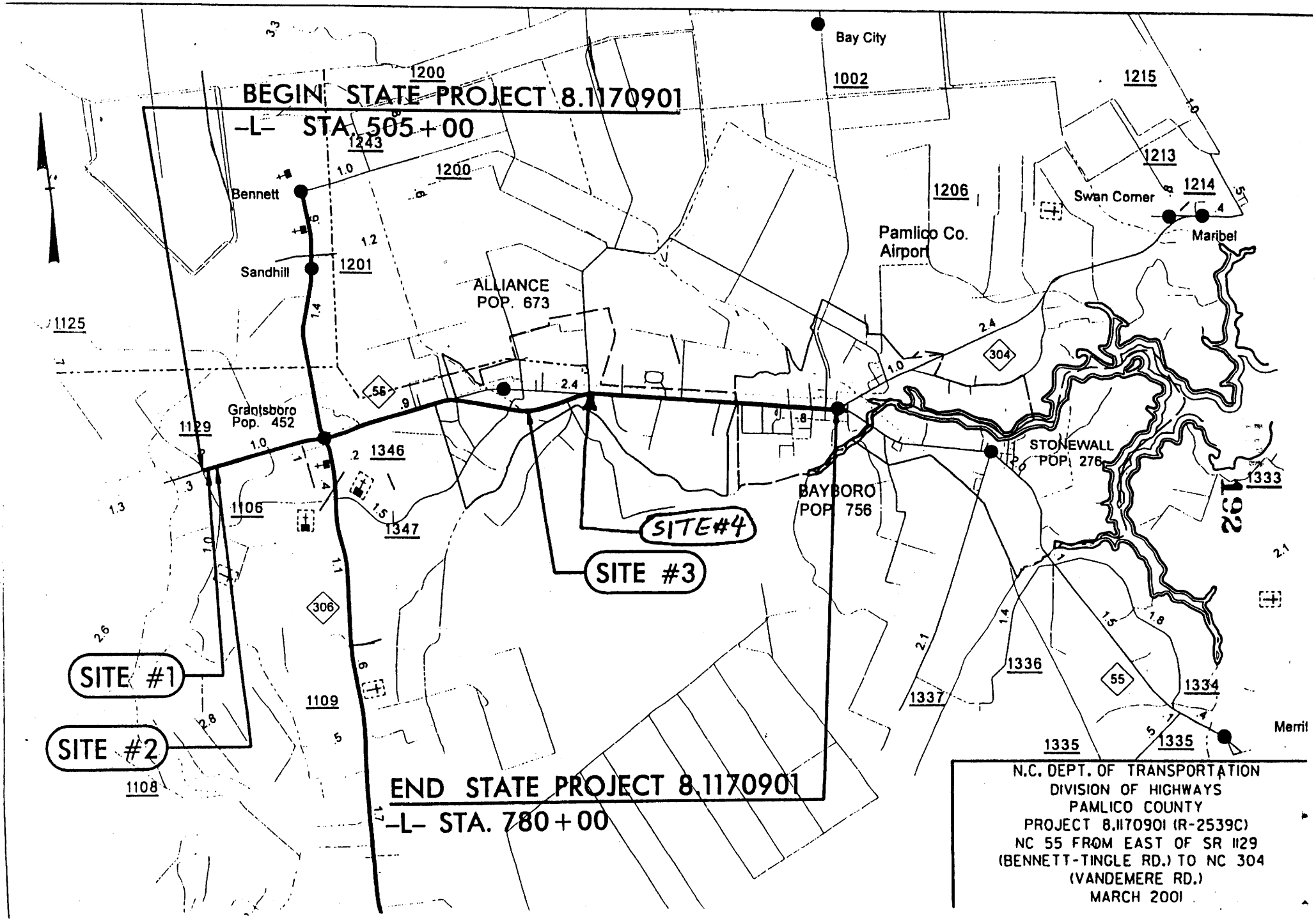
C. If delineation was performed by a consultant, include all data sheets relevant to the placement of the delineation line.

D. If a stormwater management plan is required for this project, attach copy.

E. What is land use of surrounding property? Residential, Agricultural

F. If applicable, what is proposed method of sewage disposal? N/A

Owner's Signature Date



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.) TO NC 304
(VANDEMERE RD.)
MARCH 2001

PROPERTY OWNERS

PARCEL NO.	NAMES 193	ADDRESSES
1	ARTHUR KELLY JR	
2	RUBY CRECHEL	
3	WEYERHAEUSER, INC	
4	MARY S BRINSON	
5	GLORIA S BARRINGTON	
6	SARAH A HARRIS	
7	WILLIAM MANUEL III	
8	DAVID W HARRIS	
9	CHARLES H AUTRY	
10	COURTENAY R SMARIDGE	
11	PAMLICO COUNTY	
12	JESSIE F HILL	
13	MARY L MORGAN	
14	LELA C McCLANAHAM	
15	LONNIE B GRIFFIN	

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM SR 1129
(BENNETT-TINGLE ROAD) TO NC 304
(VANDEMERE ROAD)
MARCH 2001
SHEET 3 OF 20

LEGEND

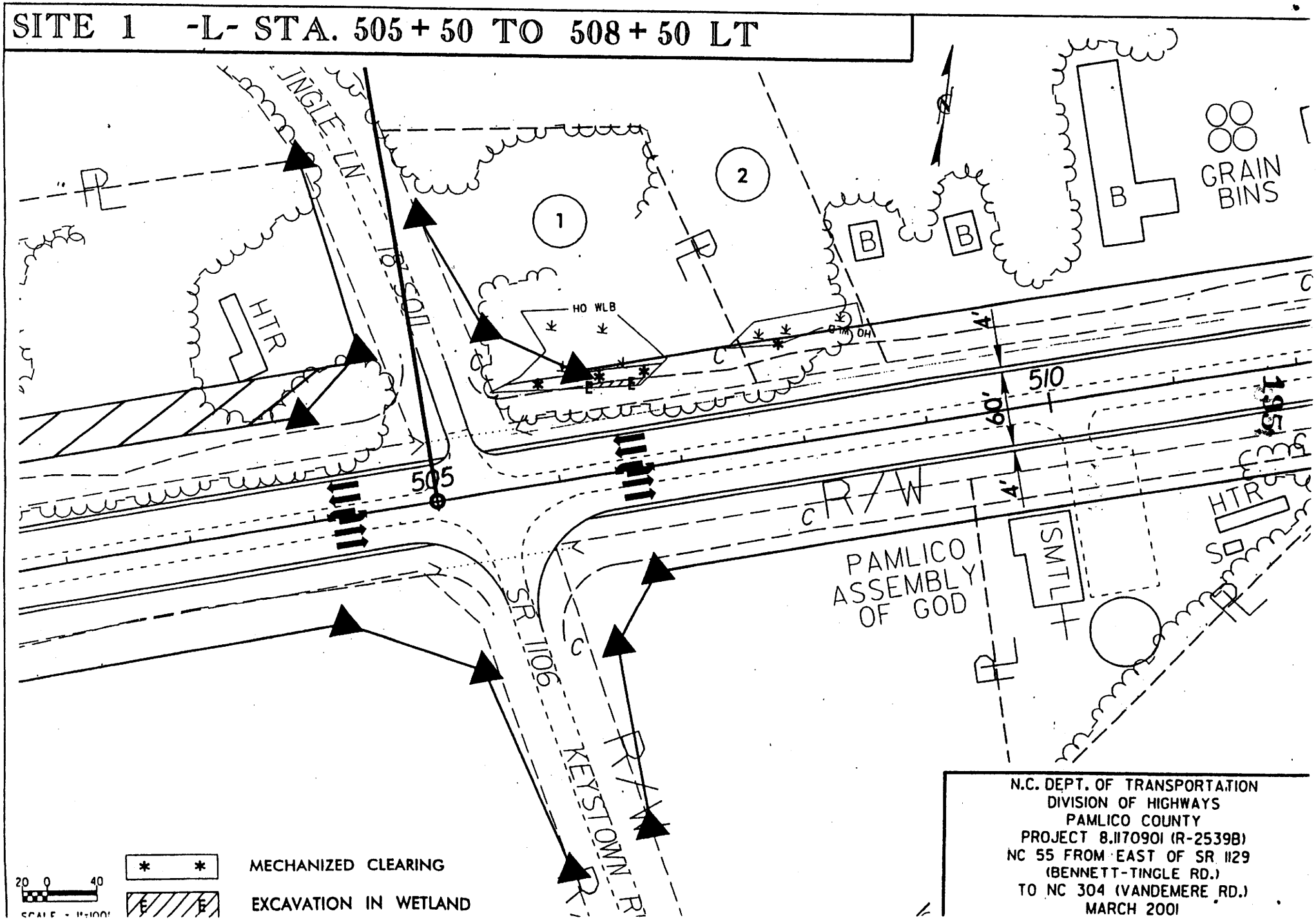
	LINE WT
WLB —— WETLAND BOUNDARY	4-6
WETLAND	4-6
F F DENOTES FILL IN WETLAND	2
S S DENOTES FILL IN SURFACE WATER	2
P P DENOTES FILL IN SURFACE WATER (POND)	2
T T DENOTES TEMPORARY FILL IN WETLAND	2
E E DENOTES EXCAVATION IN WETLAND	2
TS TS DENOTES TEMPORARY FILL IN SURFACE WATER	2
DENOTES MECHANIZED CLEARING	2
FLOW DIRECTION	2
TB TOP OF BANK	2-4
WE EDGE OF WATER	2
C PROP. LIMIT OF CUT	2
F PROP. LIMIT OF FILL	2
PROP. RIGHT OF WAY	2
NG NATURAL GROUND	2
PL PROPERTY LINE	2
TDE TEMP. DRAINAGE EASEMENT	2
PDE PERMANENT DRAINAGE EASEMENT	2
EAB EXIST. ENDANGERED ANIMAL BOUNDARY	2
EPB EXIST. ENDANGERED PLANT BOUNDARY	2
WATER SURFACE	2
LIVE STAKES	2
BOULDER	6
CORE FIBER ROLLS	

	LINE WT
PROPOSED BRIDGE	6
PROPOSED BOX CULVERT	6
PROPOSED PIPE CULVERT (DASHED LINES DENOTE EXISTNG STRUCTURES) 12"-48" PIPES	15
54" PIPES & ABOVE	6
SINGLE TREE	2
WOODS LINE	2
DRAINAGE INLET	
ROOTWAD	2
RIP RAP	2
5 ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE	2
BZ 1 BUFFER ZONE 1 BOUNDARY	2
BZ 2 BUFFER ZONE 2 BOUNDARY	2

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM SR 1129 (BENNETT-TINGLE ROAD)
TO NC 304 (VANDEMERE ROAD)

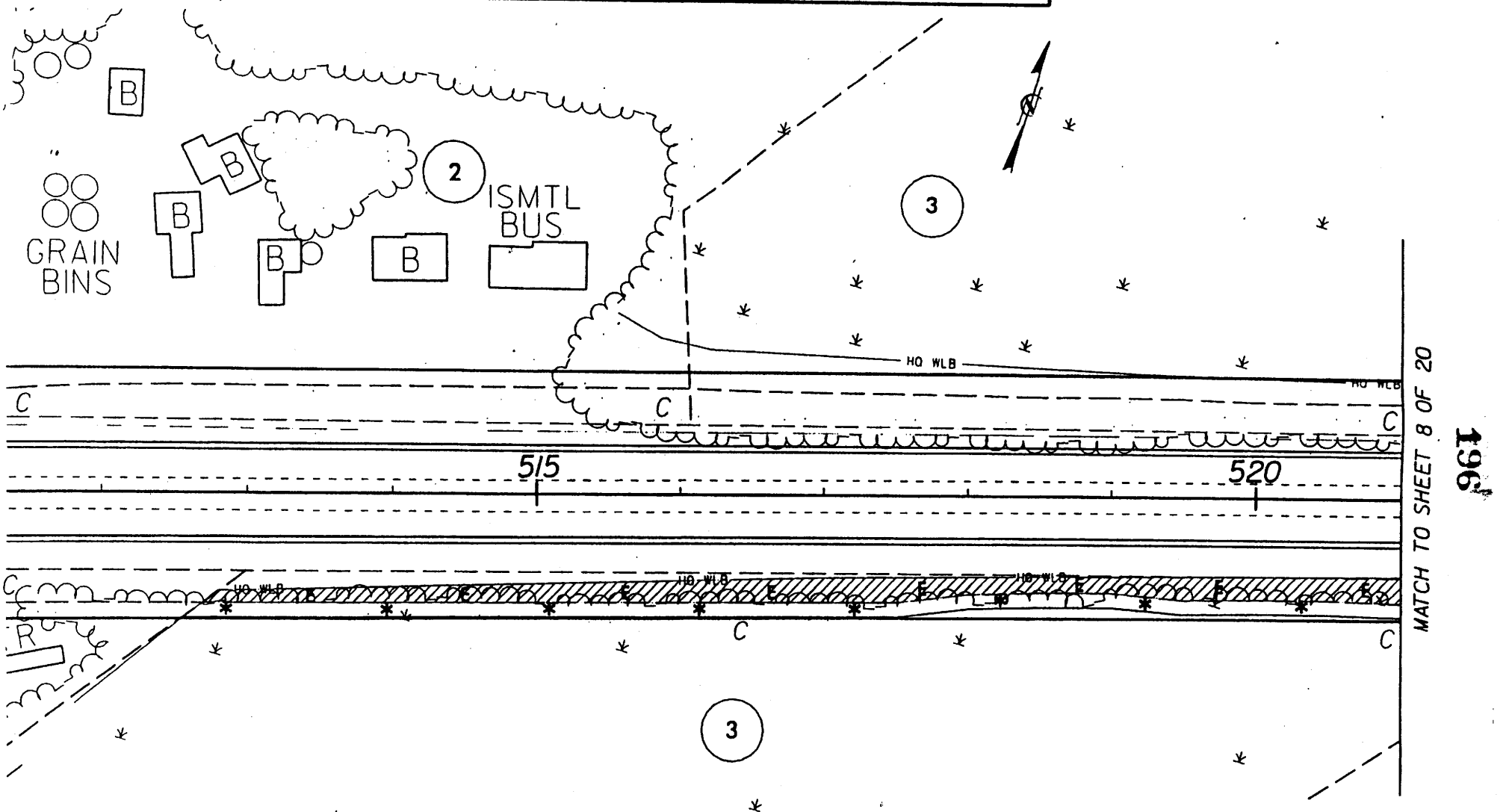
SHEET 5 OF 20

SITE 1 -L- STA. 505 + 50 TO 508 + 50 LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001

SITE 2 -L- STA. 513+00 TO 548+05 RT & LT



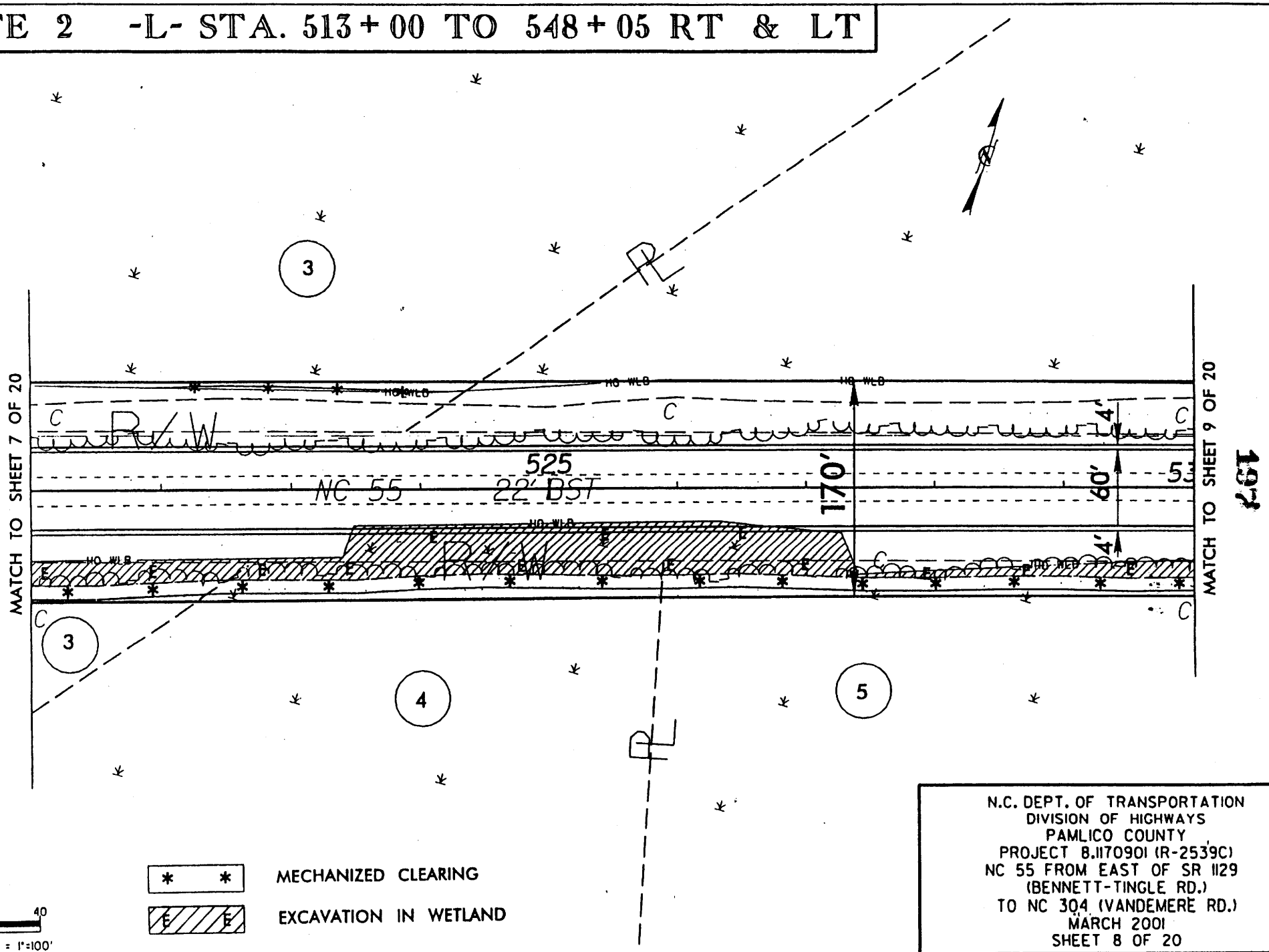
20 0 40
SCALE = 1"=100'

* * MECHANIZED CLEARING

E E EXCAVATION IN WETLAND

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 7 OF 20

SITE 2 -L- STA. 513+00 TO 548+05 RT & LT



* * MECHANIZED CLEARING

E E EXCAVATION IN WETLAND

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SCALE = 1"=100'

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 8 OF 20

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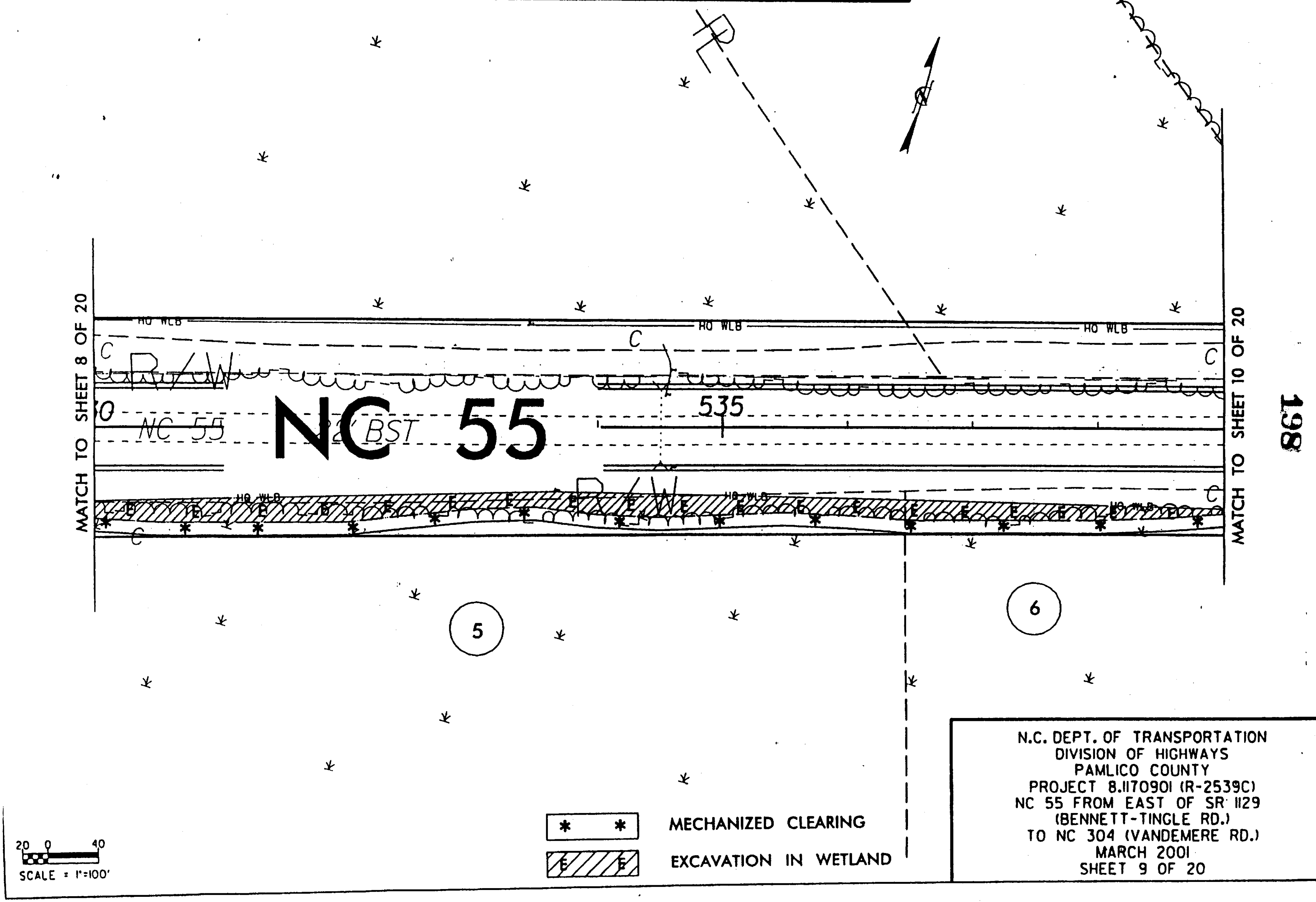
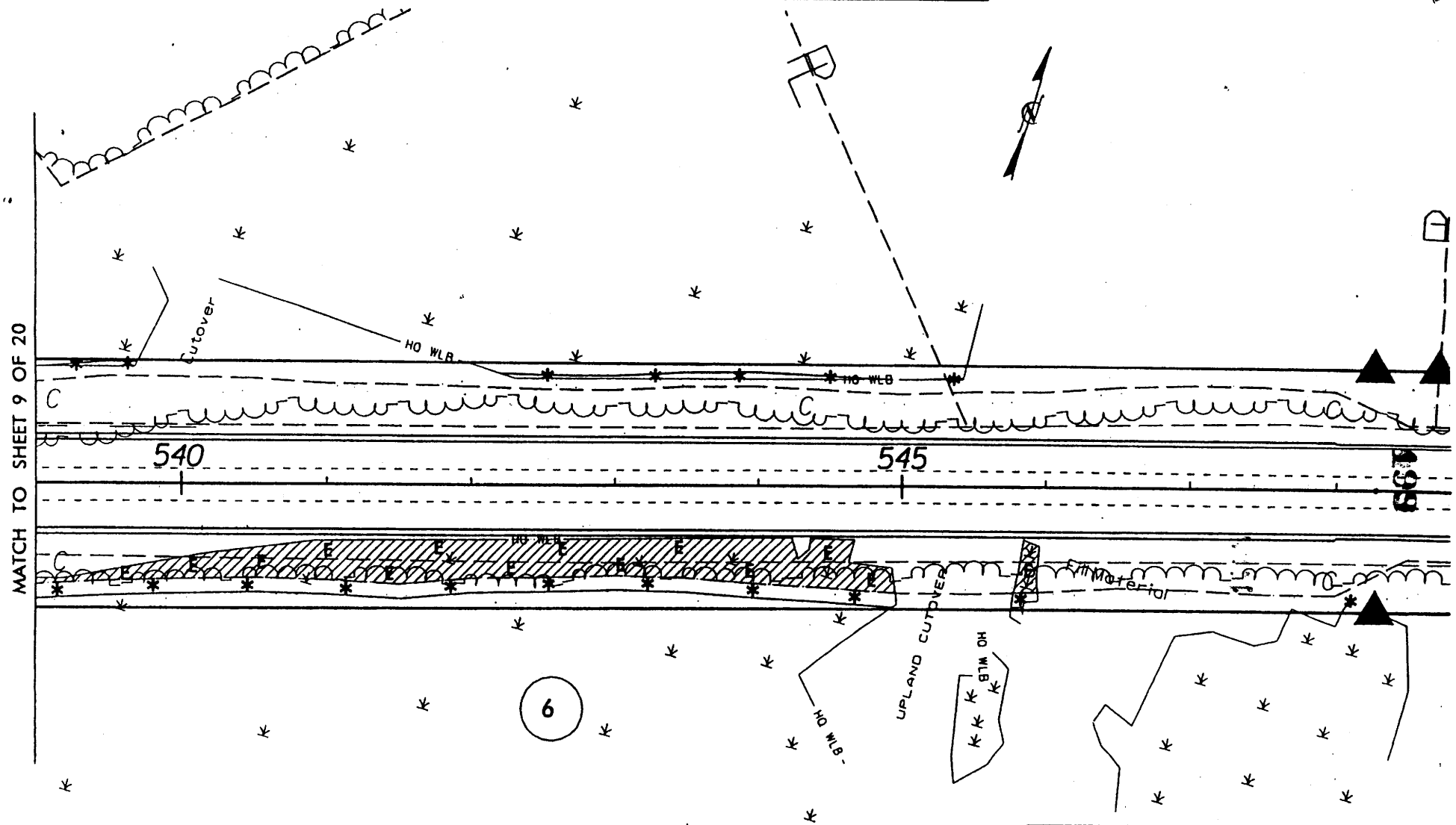


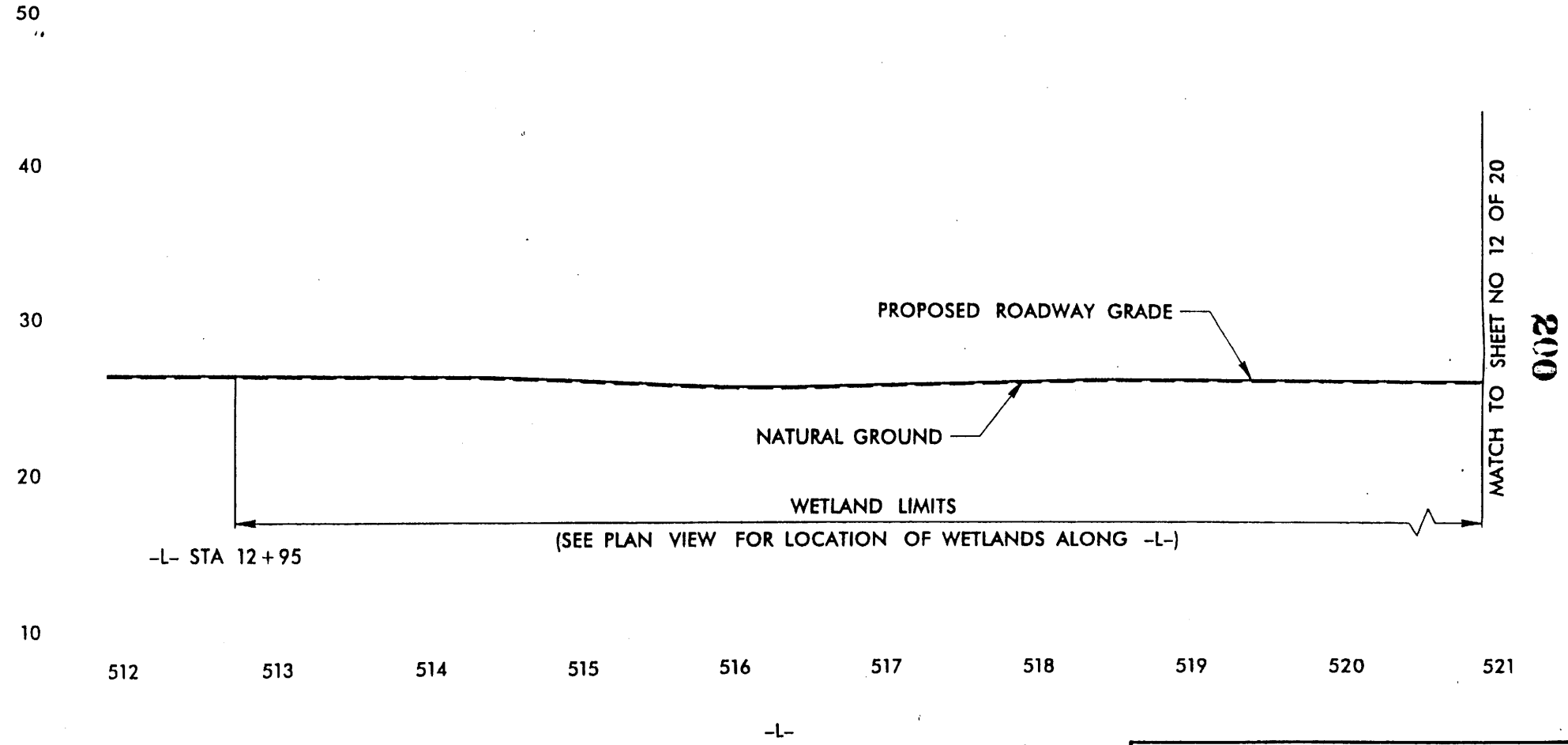
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 9 OF 20

SITE 2 -L- STA. 513+00 TO 548+05 RT & LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 10 OF 20

PROFILE VIEW
SITE 2



002

2 0 4
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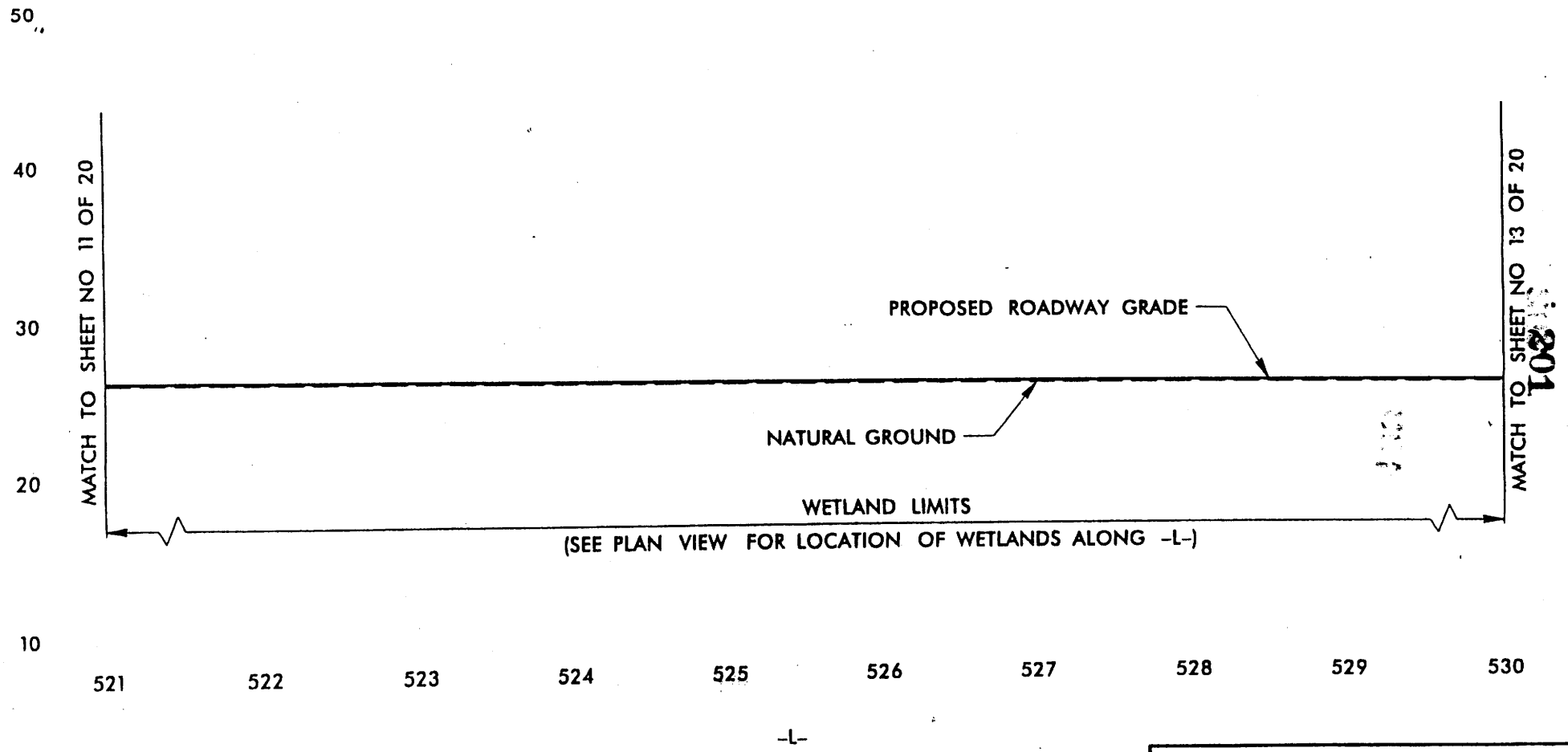
20 0 40
HORIZ. SCALE = 1"=100'

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 11 OF 20

PROFILE VIEW
SITE 2



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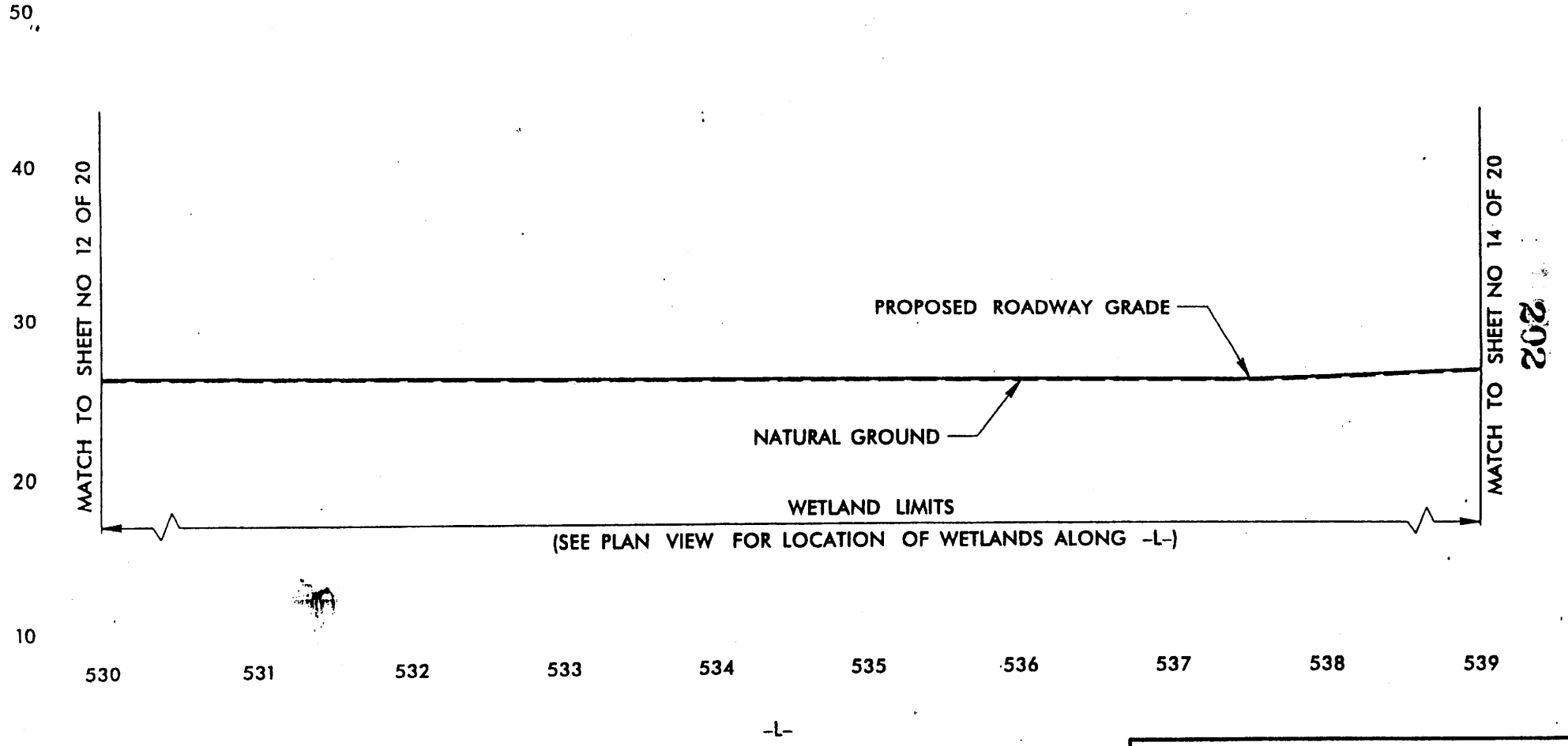
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 12 OF 20

PROFILE VIEW
SITE 2



202

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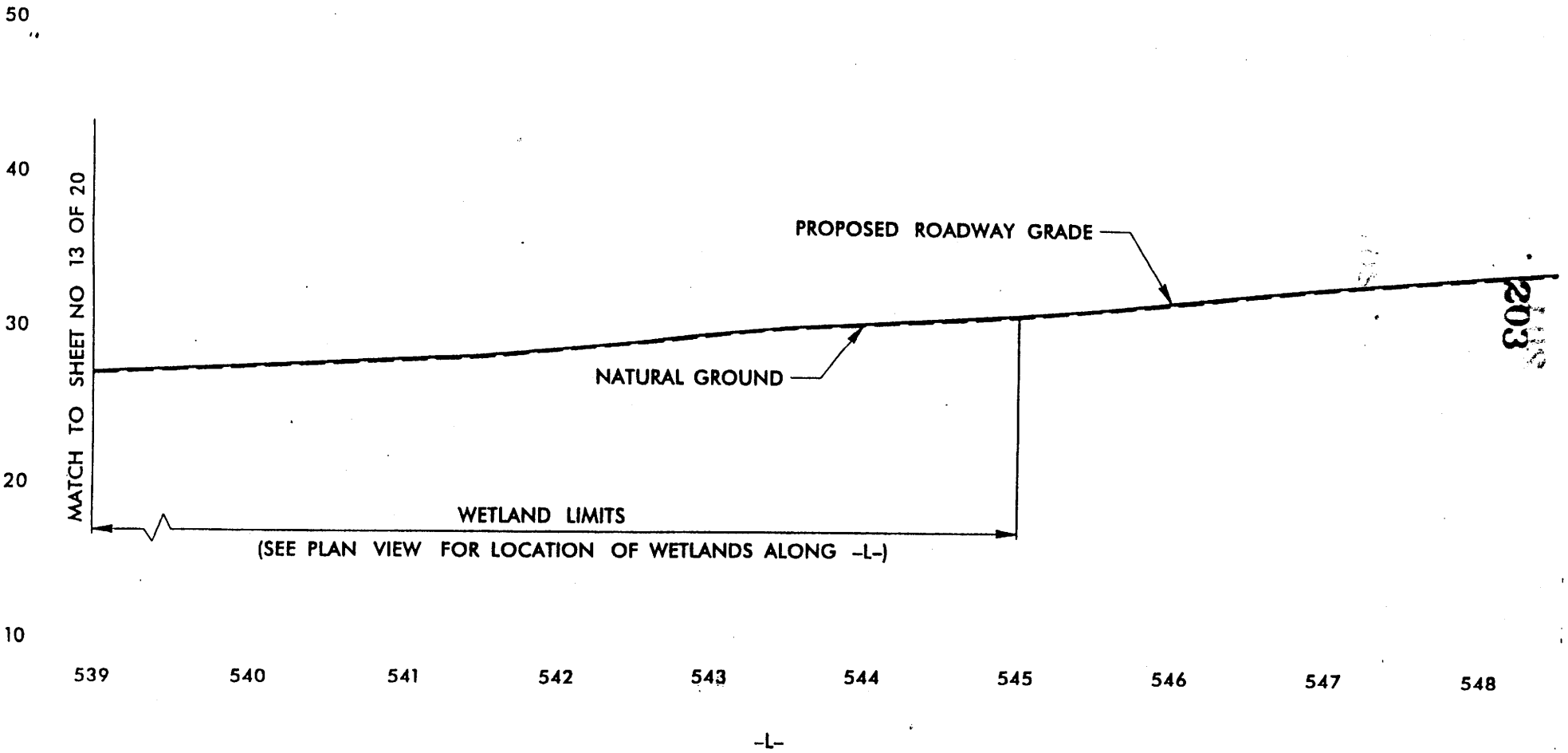
HORIZ. SCALE = 1"=100'

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD.
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 13 OF 20

PROFILE VIEW
SITE 2



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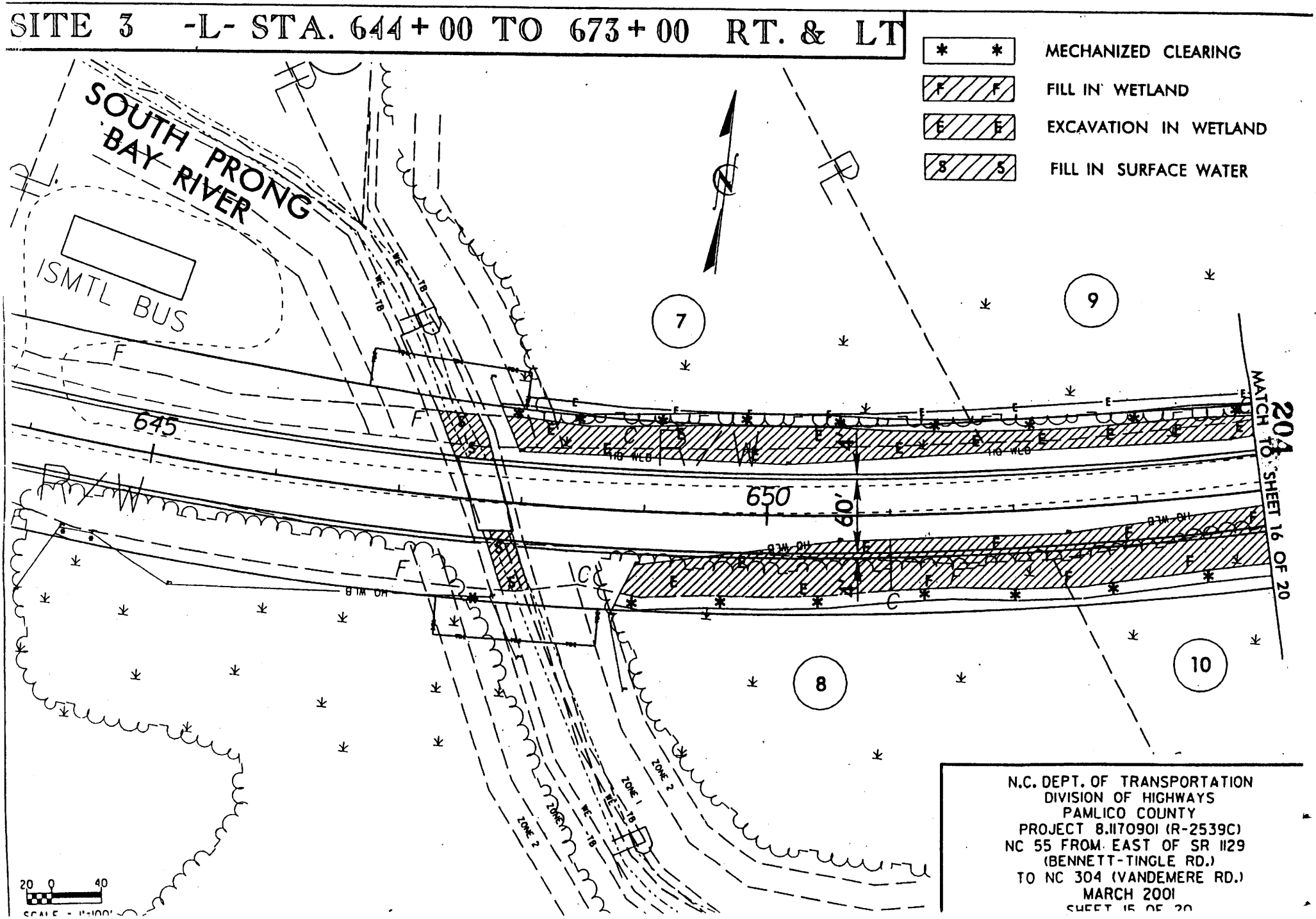
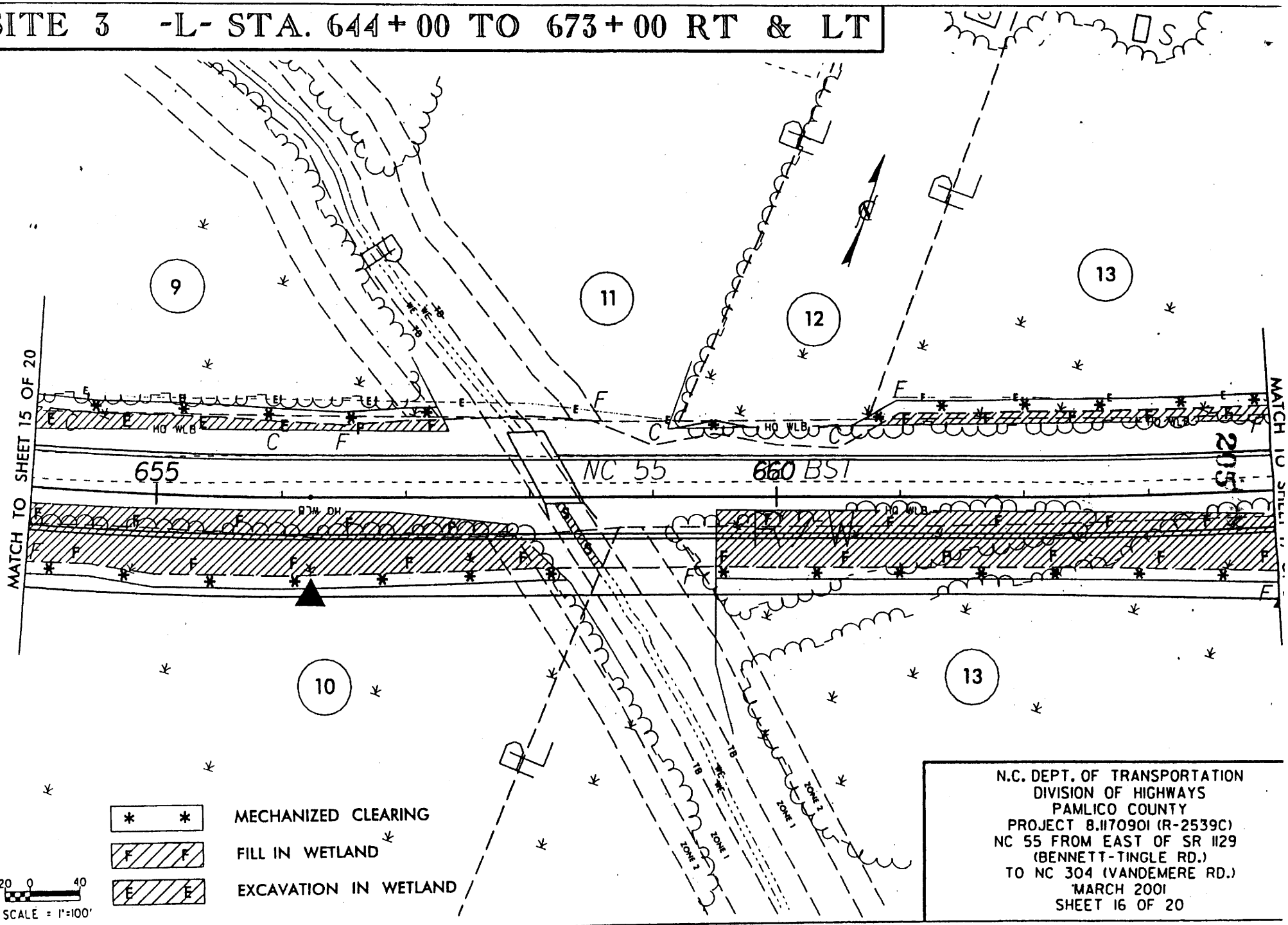
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD.
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 14 OF 20

SITE 3 -L- STA. 644+00 TO 673+00 RT. & LT



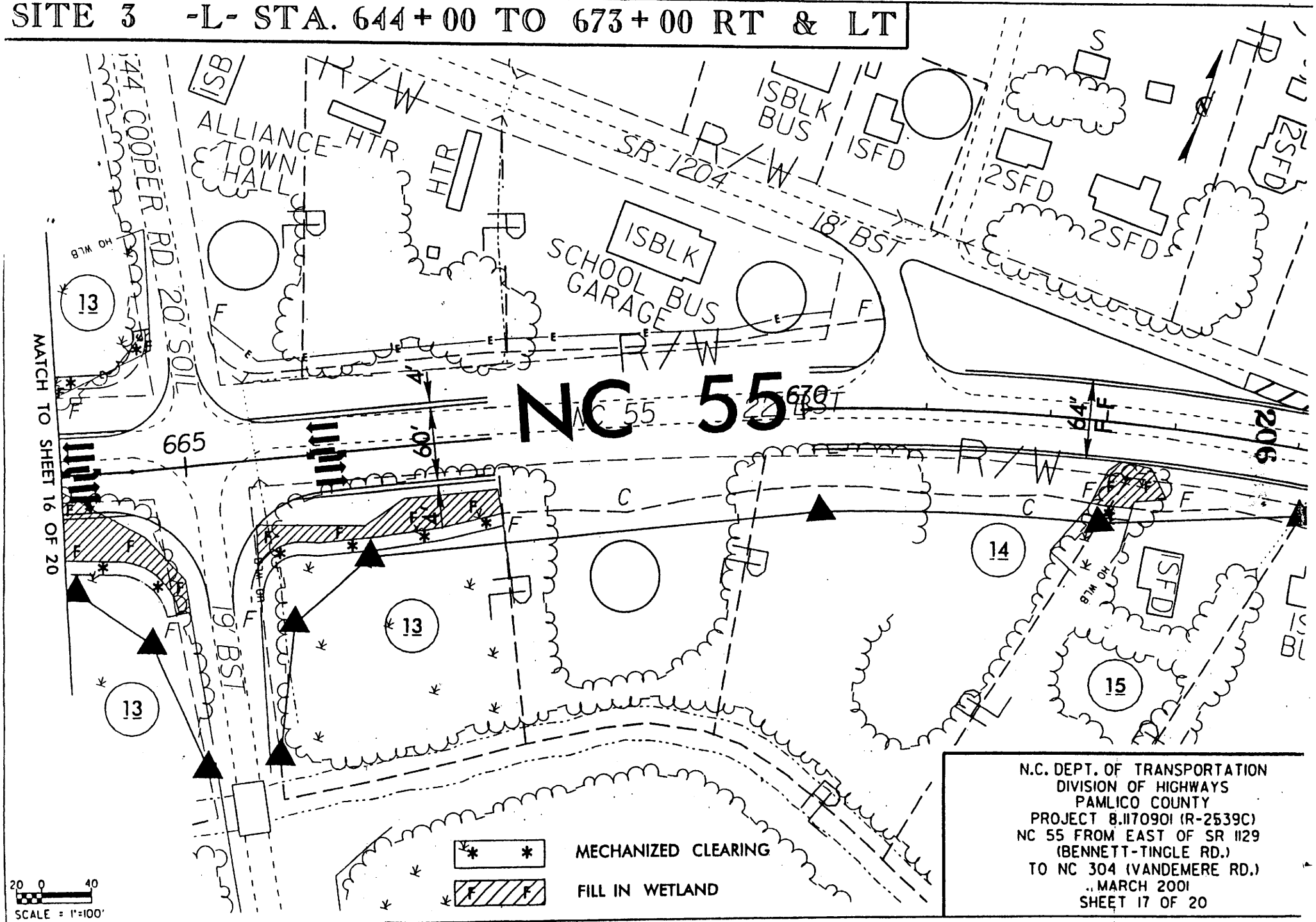
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 15 OF 20

SITE 3 -L- STA. 644+00 TO 673+00 RT & LT



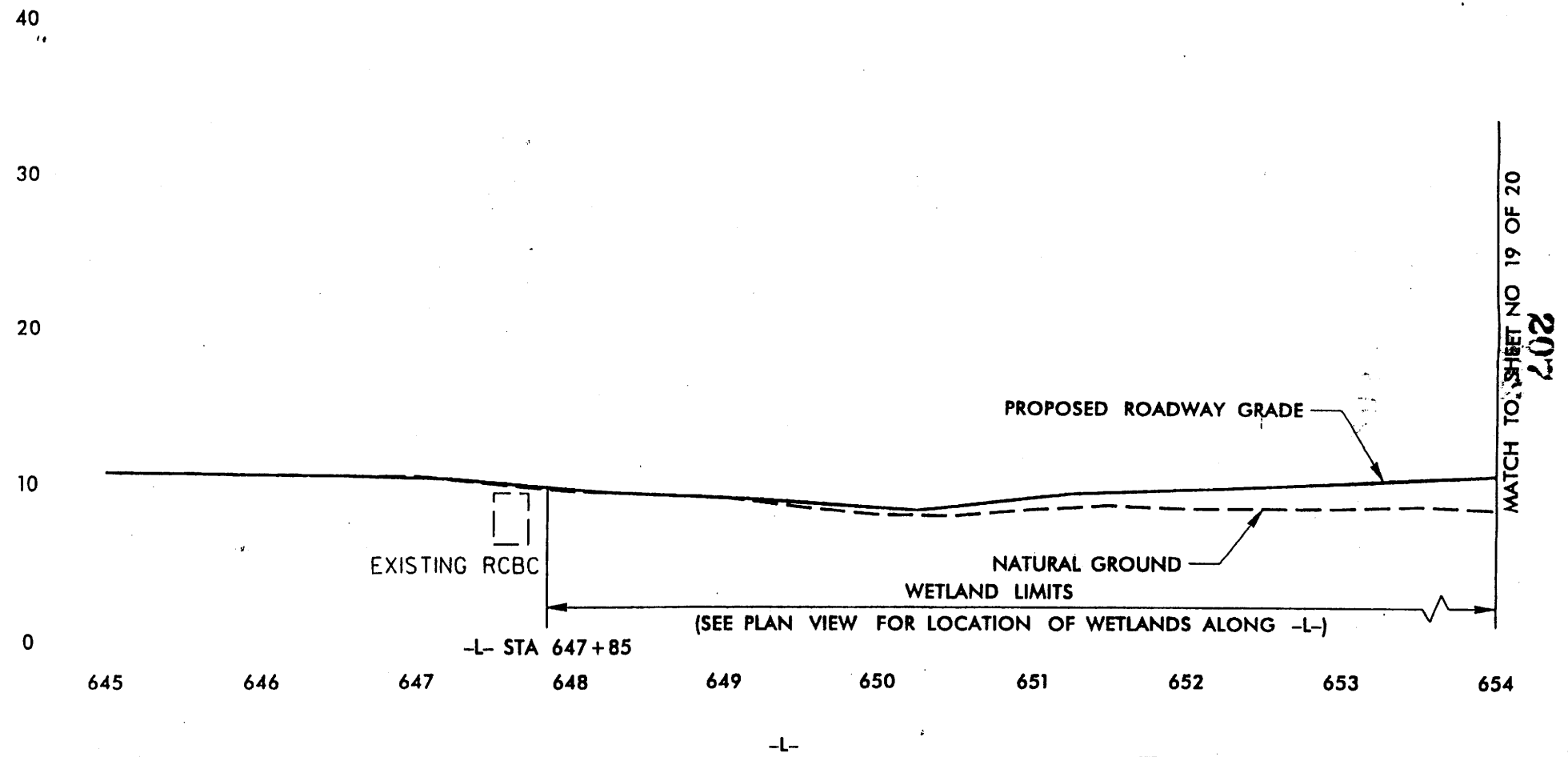
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 16 OF 20

SITE 3 -L- STA. 644+00 TO 673+00 RT & LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
.. MARCH 2001
SHEET 17 OF 20

PROFILE VIEW
SITE 3



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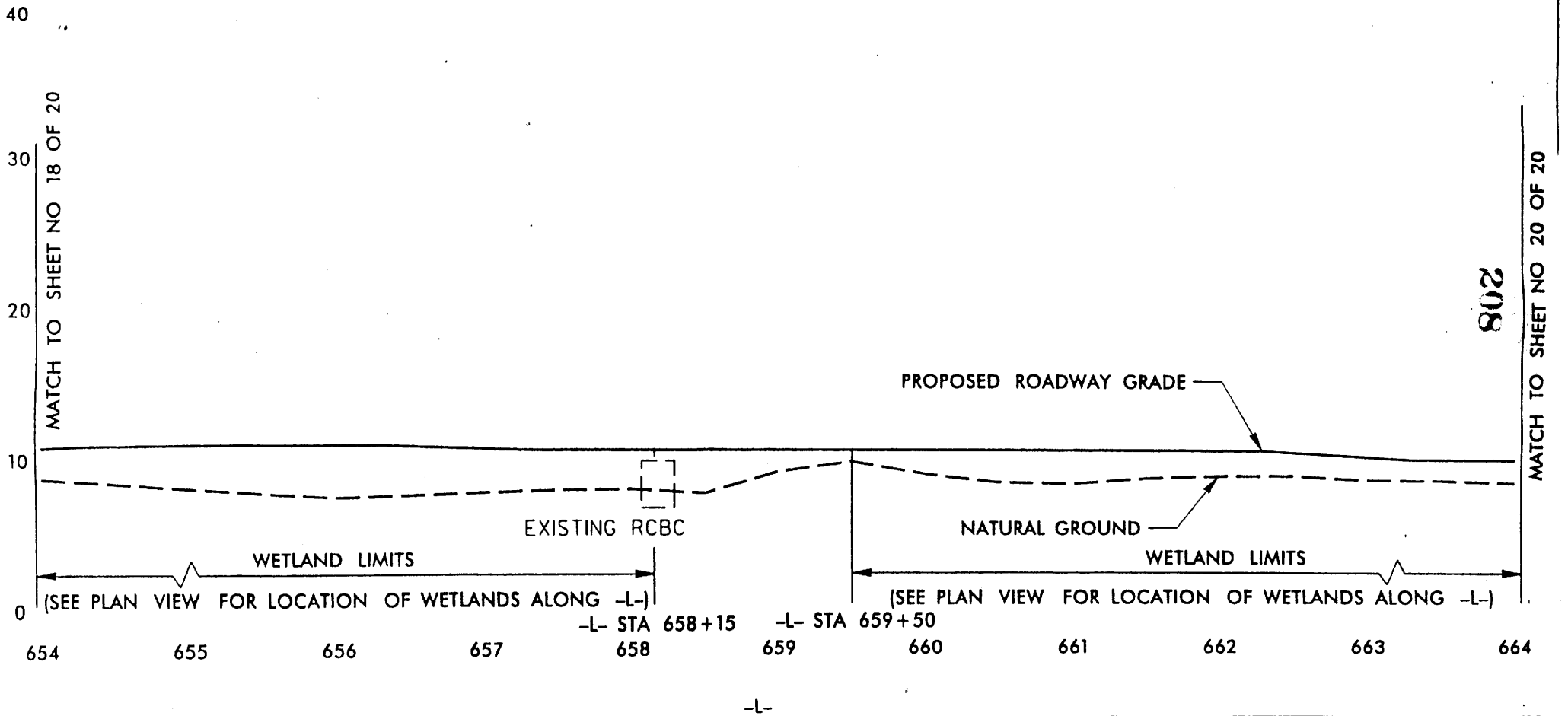
HORIZ. SCALE = 1"=100'

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 18 OF XX

PROFILE VIEW
SITE 3



2 0 4
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HORIZ. SCALE = 1"=100'

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD.)
TO NC 304 (VANDEMERE RD.)
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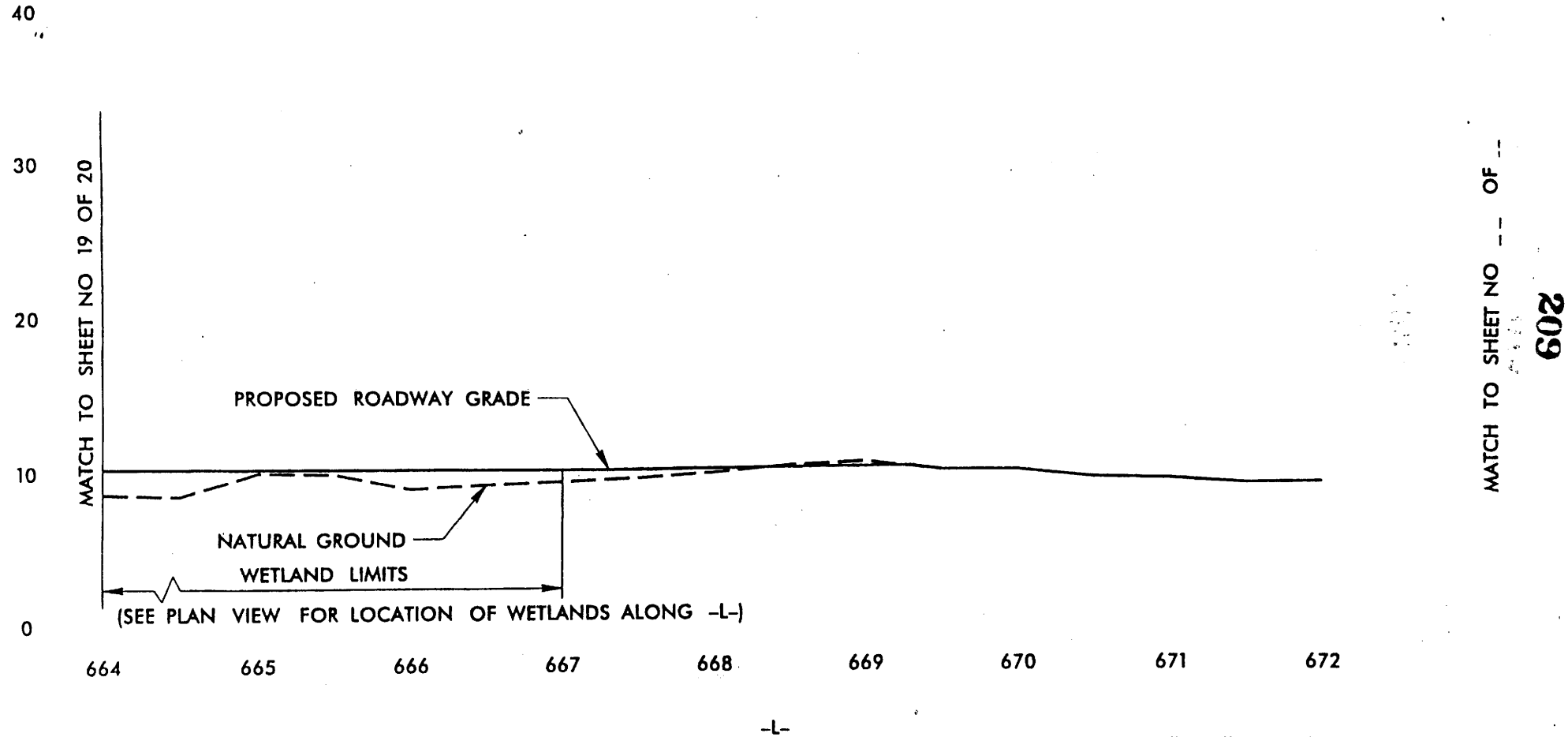
PROFILE VIEW
SITE 3

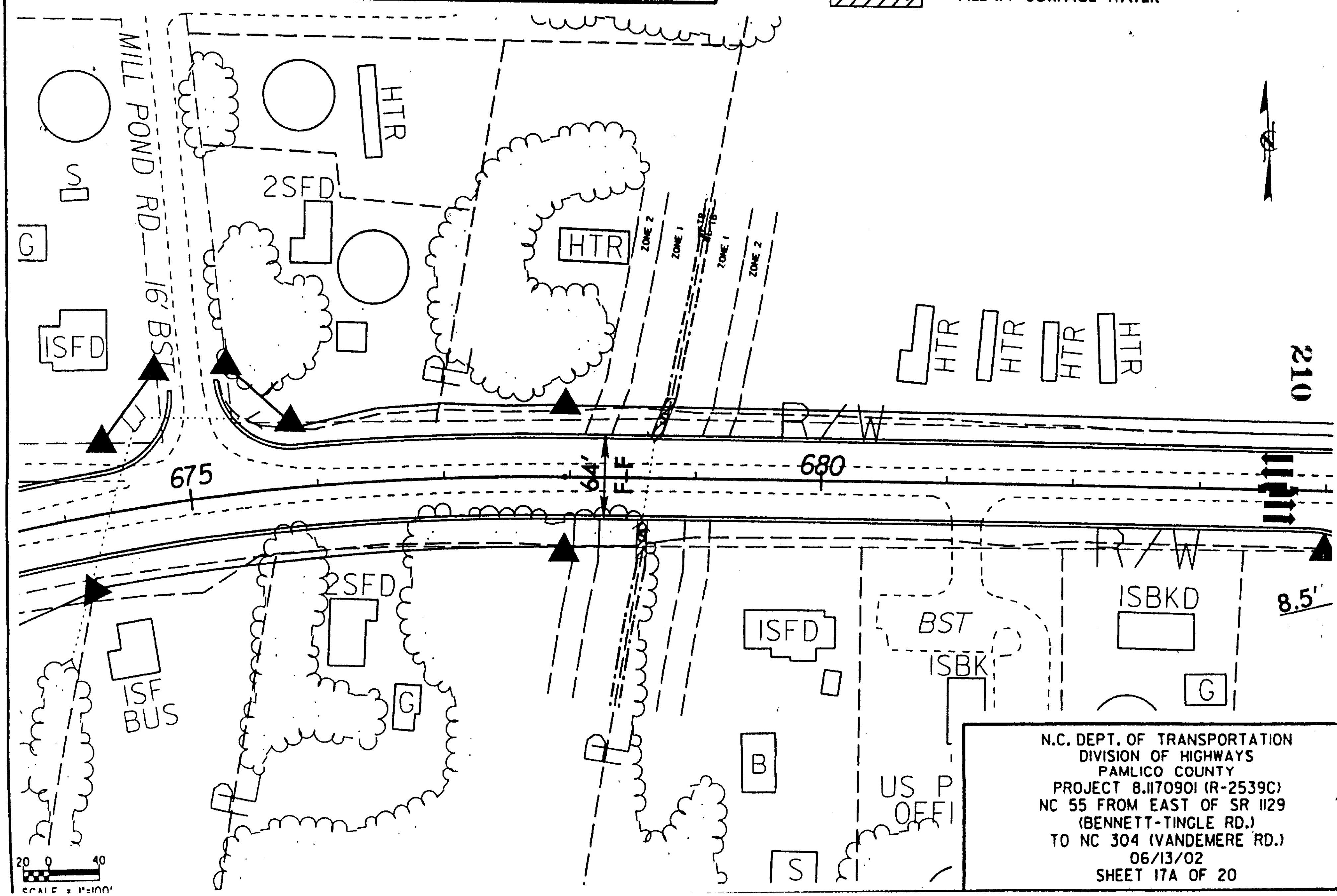


2 0 4
VERT. SCALE = 1"=10'

20 0 40
HORIZ. SCALE = 1"=100'

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B&C)
NC 55 FROM EAST OF SR 1127 (BAYLEAF RD.
TO NC 304 (VANDEMERE RD.)
MARCH 2001
SHEET 20 OF 20

SITE 4 -L- STA. 678 + 60 RT & LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
06/13/02
SHEET 17A OF 20

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS				
			Fill In Wetlands (ac)	Temp. Fill In Wetlands (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	505+50 TO 508+50				0.005	0.026					
2	513+00 TO 548+05				1.396	0.774					
3	644+00 TO 673+00		1.521		0.560	0.699	0.062			144	
4	678+60						0.011			65	
TOTALS:			1.521	0.000	1.961	1.499	0.073	0.000	0.000	209	0

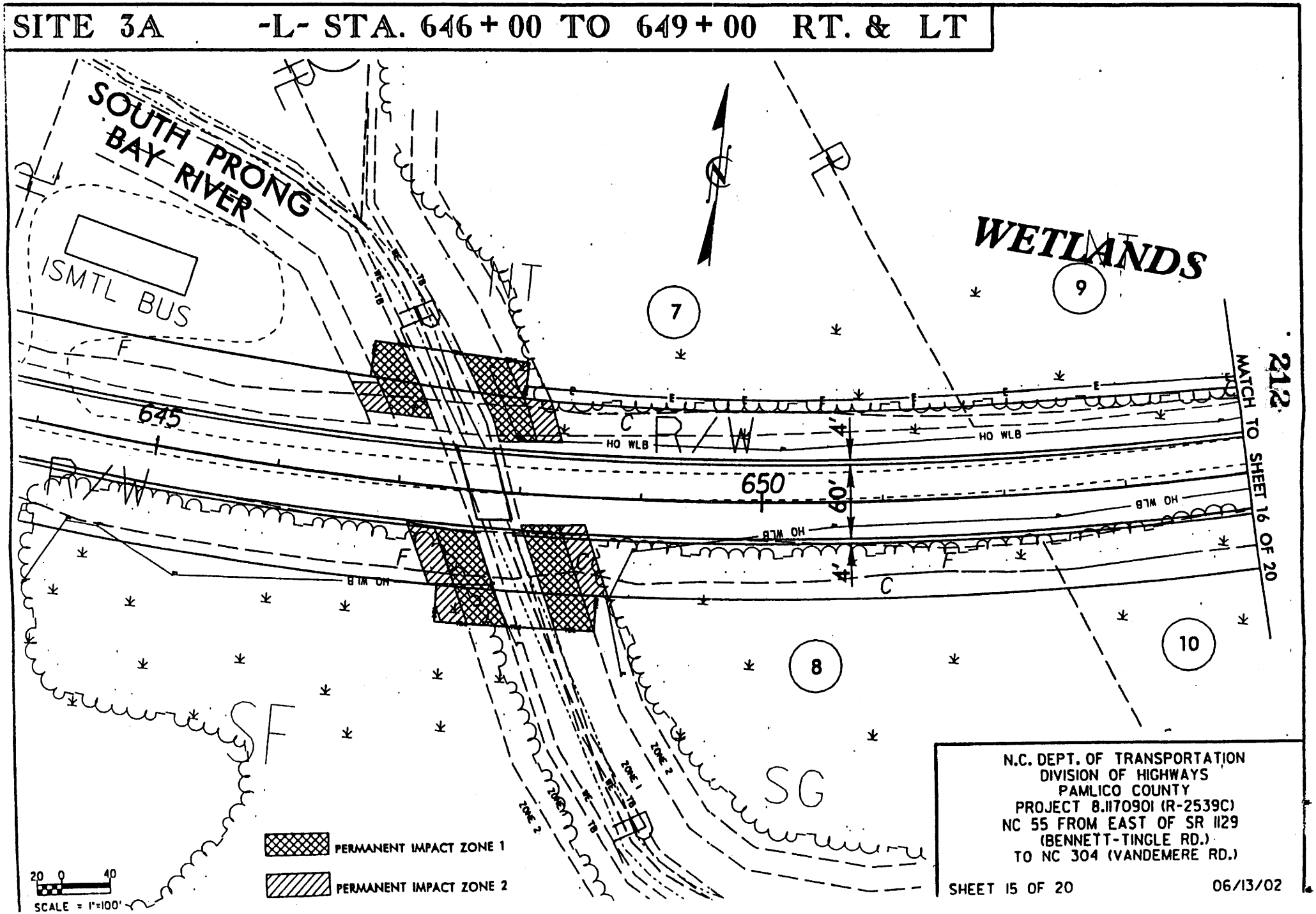
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

PAMILCO COUNTY

PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129 (BENNETE-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
SHEET OF 06/13/02

Form Revised 3/22/01

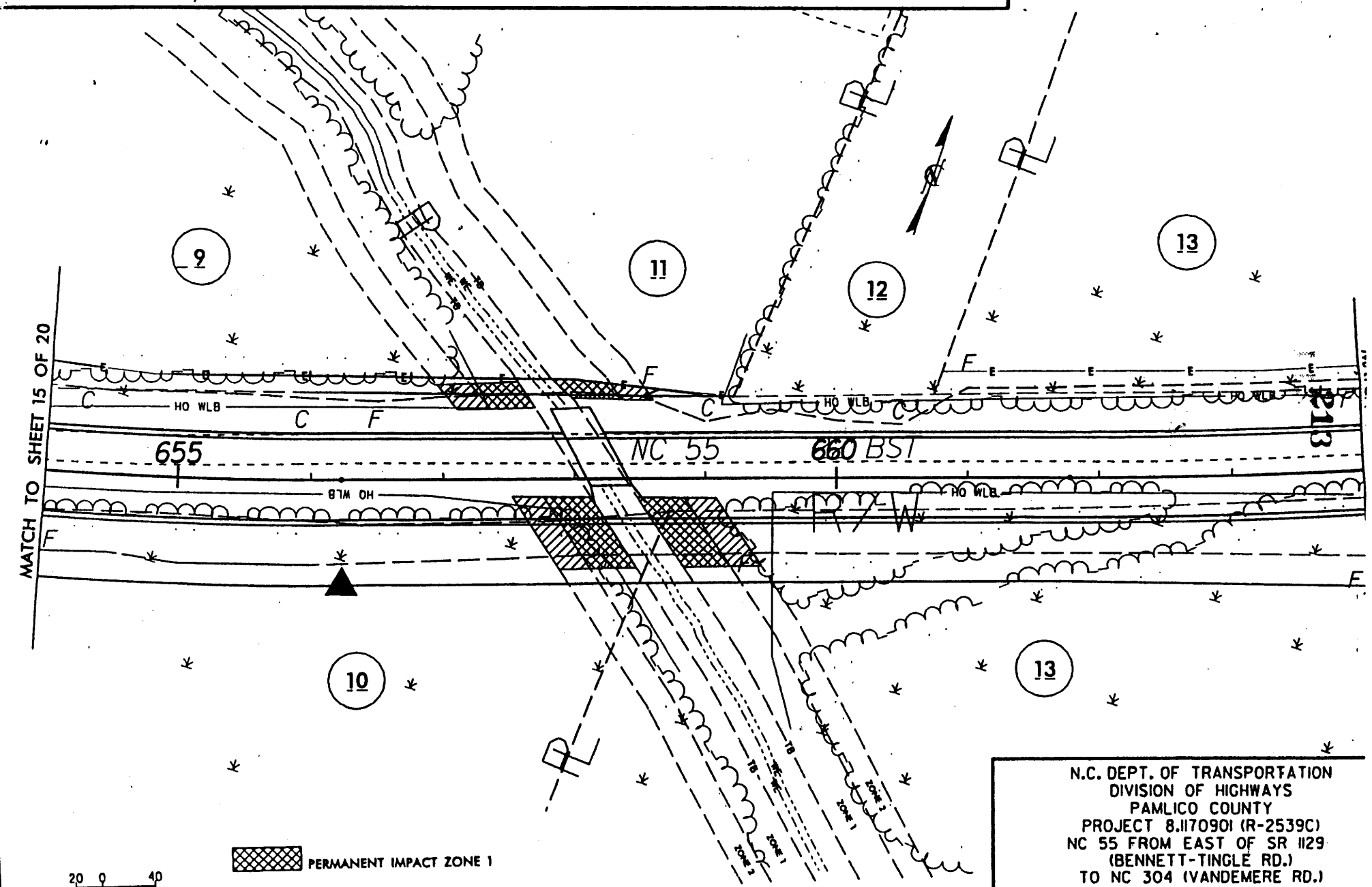
SITE 3A -L- STA. 646+00 TO 649+00 RT. & LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)

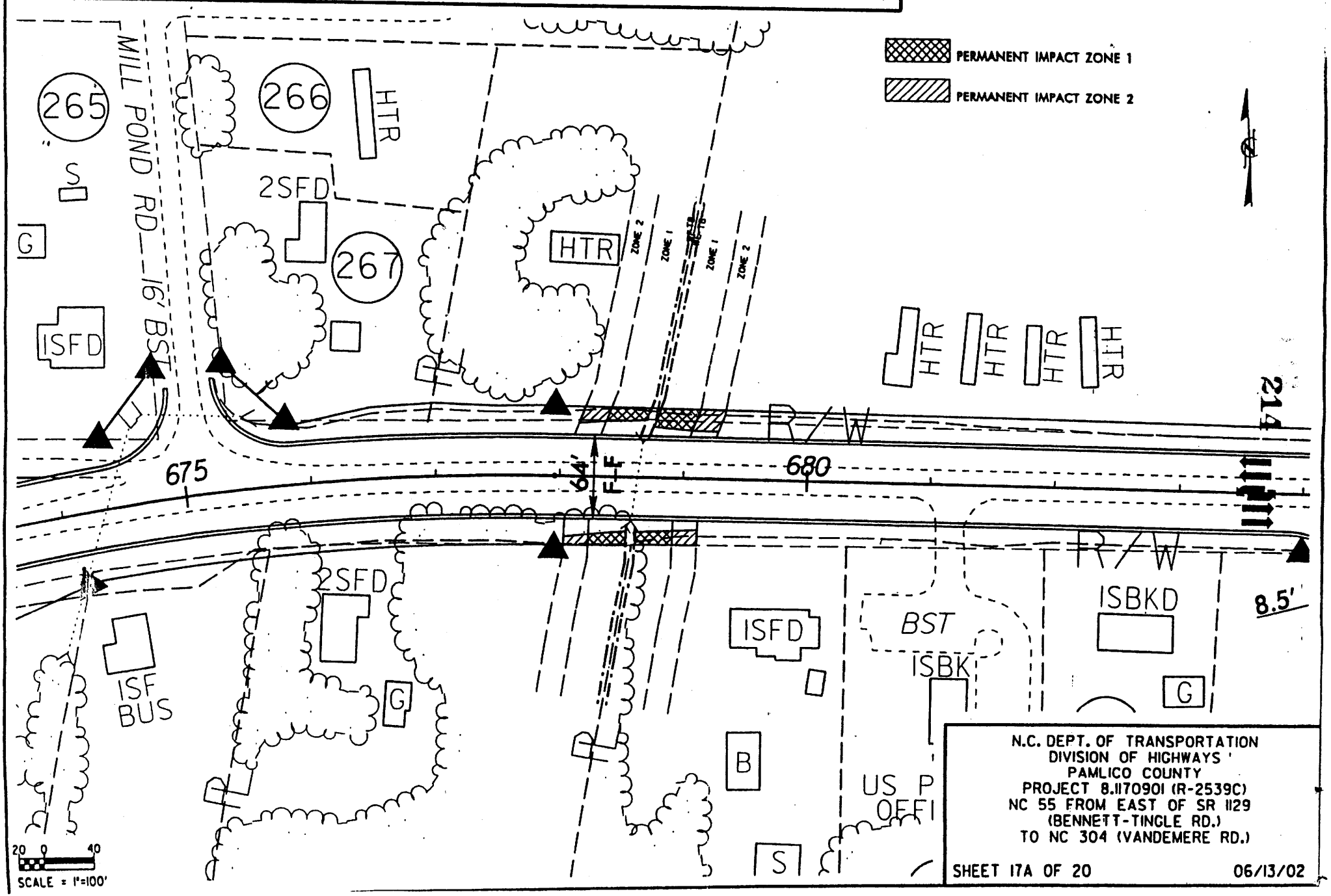
SHEET 15 OF 20 06/13/02

SITE 3B -L- STA. 657+00 TO 660+00 RT & LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
06/18/02
SHEET 16 OF 20

SITE 4 -L- STA. 677+00 TO 680+00 RT & LT



N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
(BENNETT-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)

SHEET 17A OF 20 06/13/02

BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT								BUFFER REPLACEMENT	
			TYPE		ALLOWABLE			MITIGABLE				
			ROAD CROSSING	PARALLEL IMPACT	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)
3a		-L- Sta. 646+00 TO 649+00	X		9321.8	4443.1	13765.0					
3b		-L- Sta 657+00 TO 660+00	X		4964.0	3346.7	8310.7					
4		-L- Sta 677+00 TO 680+00	X		2003.8	1350.4	3310.8					
TOTAL:					16289.6	9140.2	25386.3	0.0	0.0	0.0	0.0	0.0

215

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

PAMILCO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129 (BENNETE-TINGLE RD.)
TO NC 304 (VANDEMERE RD.)
6/18/2002
SHEET OF

AGREEMENT TO ESTABLISH THE CROATAN WETLAND MITIGATION BANK IN CRAVEN COUNTY, NORTH CAROLINA

This Mitigation Banking Instrument (MBI) is made and entered into on the 21 day of MARCH, 2002, by the North Carolina Department of Transportation, hereinafter Sponsor, and the U. S. Army Corps of Engineers (Corps), and each of the following agencies, upon its execution of this MBI, the Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), the North Carolina Wildlife Resources Commission (NCWRC), the North Carolina Division of Coastal Management (NCDCM), and the North Carolina Division of Water Quality (NCDWQ). The Corps, together with the State and Federal agencies that execute this MBI, are hereinafter collectively referred to as the Mitigation Bank Review Team (MBRT).

WHEREAS the purpose of this agreement is to establish a mitigation bank (Croatan Wetland Mitigation Bank) that provides compensatory mitigation for unavoidable wetland impacts separately authorized by Section 404 Clean Water Act permits in appropriate circumstances; and

WHEREAS the Sponsor is the record owner of that certain parcel of land containing approximately 4,034.6 acres located in Craven County, North Carolina, described in the Croatan Wetland Mitigation Bank Mitigation Plan, and as shown on the attached survey (Property).

WHEREAS the agencies comprising the Mitigation Bank Review Team agree that the Bank site is a suitable mitigation bank site, and that implementation of the Mitigation Plan is likely to result in net gains in wetland functions at the Bank site, and have therefore approved the Mitigation Plan;

THEREFORE, it is mutually agreed among the parties to this agreement that the following provisions are adopted and will be implemented upon signature of this MBI.

General Provisions

1. The goal of the Bank is to restore, enhance and preserve riverine and nonriverine wetland systems and their functions and values to compensate in appropriate circumstances for unavoidable wetland impacts authorized by Section 404 of the Clean Water Act permits in circumstances deemed appropriate by the Corps after consultation, through the permit review process, with members of the MBRT.

2. Use of credits from the Bank to offset wetland impacts authorized by Clean Water Act permits must be in compliance with the Clean Water Act and implementing regulations, including but not limited to the 404(b)(1) Guidelines, the National Environmental Policy Act, and all other applicable Federal and State legislation, rules and regulations. This agreement has been drafted following the guidelines set forth in the proposed " Federal Guidance for the Establishment, Use and the Operation of Mitigation Banks," 60 Fed. Reg. 58605, November 28, 1995 (Guidance).

3. The MBRT shall be chaired by the representative of the U.S. Army Corps of Engineers, Wilmington District. The MBRT shall review monitoring and accounting reports as described below. In addition, the MBRT will review proposals for remedial actions proposed by the Sponsor, or any of the agencies represented on the MBRT. The MBRT's role and responsibilities are more fully set forth in Sections II. C. 3 and 6 of the Guidance. The MBRT will work to reach consensus on its actions.

4. The Corps, after consultation with the appropriate Federal and State review agencies through the permit review process, shall make final decisions concerning the amount and type of compensatory mitigation to be required for unavoidable, permitted wetland impacts, and whether or not the use of credits from the Bank is appropriate to offset those impacts. In the case of permit applications and compensatory mitigation required solely under the Section 401 Water Quality Certification rules of North Carolina, the N.C. Division of Water Quality (NCDWQ) will determine the amount of credits that can be withdrawn from the Bank.

5. The parties to this agreement understand that, where practicable, on-site, in-kind compensatory mitigation is preferred, unless use of the Bank is determined by the Corps to be environmentally preferable.

Mitigation Plan

6. The Bank site consists of predominantly nonriverine flats and depressions on the boundary of the Neuse and White Oak River Basins. Other than approximately 179 acres associated with East Prong Brice Creek and tributary, these inter-stream divide wetlands are not directly associated with tributary floodplains. Similar wetlands are distributed throughout the Lower Coastal Plain of North Carolina comprising an eco-region with similar parent material, climate, soils, faunal, and vegetation patterns. A more detailed description of the baseline conditions on the site is contained in the Mitigation Plan, Section 3.0.

7. The Sponsor will perform work described in Section 5.0 of the Mitigation Plan, including planting, hydrologic and soil modifications. The purpose of the work, and the objective of the Bank, is to restore 1435.2 acres of nonriverine wetlands and 49.6 acres of riverine wetlands, to enhance 1983.8 acres of existing nonriverine wetlands and 91.6 acres of existing riverine wetlands, and to preserve 361 acres of nonriverine wetlands and 37.8 acres of riverine wetlands.

8. The Sponsors shall monitor the Bank Site as described in Section 7.0 of the Mitigation Plan, for a minimum of 5 years or until success criteria are met, whichever is longer. Hydrologic success criteria will include inundation or saturation within 30 cm (12 inches) of the surface for at least 12.5% of the growing season for mineral soils and 25% of the growing season for organic soils and riverine restoration/enhancement areas, and the hydroperiod for restoration areas shall be within 50% of reference saturation or inundation depth, duration and frequency for the first three monitoring years and shall be within 20% for years four and five. If the 50% and 20% goals are not attained, a site visit will be conducted by the MBRT to determine the viability of the site.

9. The Sponsor is responsible for assuring the success of the restoration, enhancement and preservation activities at the Bank Site, and for the overall operation and management of the Bank.

10. The Sponsor shall provide to each member of the MBRT the reports described in Section 7.4 of the Mitigation Plan.

11. The Corps shall review said reports, and may, at any time, after consultation with the Sponsor and the MBRT, direct the Sponsor to take remedial action at the Bank site. Remedial action required by the Corps shall be designed to achieve the success criteria referenced above. All remedial actions required under this paragraph shall include a work schedule and monitoring criteria that will take into account physical and climactic conditions.

12. The Sponsor shall implement any remedial measures required pursuant to paragraph 11, above.

13. In the event the Sponsor determines that remedial action may be necessary to achieve the required success criteria, it shall provide notice of such proposed remedial action to all members of the MBRT. No remedial actions shall be taken without the concurrence of the Corps, in consultation with the MBRT.

14. The members of the MBRT will be allowed reasonable access to the Property for the purposes of inspection of the Property and compliance monitoring of the Mitigation Plan.

Use of Mitigation Credits

15. The Geographical Service Area (GSA) is the designated area wherein a bank can reasonably be expected to provide appropriate compensation for impacts to wetland or other aquatic resources. The GSA for this Bank comprises Hydrologic Cataloging Unit 03020204 (corresponding to DWQ sub-basins 03-04-10 and 03-04-11). The Service Area includes the lower portion of the Neuse River Drainage Basin, including the Trent River watershed. Counties included within this Service Area include most of the southern and central portions of Craven County and northern Jones County, as well as portions of northern Carteret County, southern and western Pamlico County, northern Onslow County, and southern Lenoir County. Use of a Bank Site to compensate for impacts beyond the geographic service area may be considered by the Corps or the permitting agency on a case-by-case basis.

16. The Mitigation Plan is intended to result in the following forms, amounts and types, in acres (wetlands), of compensatory mitigation:

Table 1. Wetland Mitigation Components for the CWMB.

CWMB Component		Phase I (acres)	Phase II (acres)	Total (acres)
Nonriverine Wetlands	Restoration	311.6	1123.6	1435.2

	Enhancement	1026.9	956.9	1983.8
	Preservation	108.0	253.0	361.0
Riverine Wetlands	Restoration	0	49.6	49.6
	Enhancement	0	91.6	91.6
	Preservation	0	37.8	37.8
Non-credit Areas	Non-restorable	18.9	27.1	46.0
	Nonhydric Soil	3.9	25.7	29.6
Total		1469.3	2565.3	4034.6

17. Successful implementation of the Mitigation Plan will result in the establishment of the following number of mitigation credits categorized by form and type:

Table 2. Wetland Credits Generated at the CWMB.

	Nonriverine Wetland Credits			Riverine Wetland Credits			Total Phase Credits
	R	E	P	R	E	P	
Phase I	311.6	513.4	21.6	0	0	0	846.6
Phase II	1123.6	478.4	50.6	49.6	45.8	7.6	1755.6
Bank Total	1435.2	991.8	72.2	49.6	45.8	7.6	2602.2

18. It is anticipated by the parties to this agreement that use of mitigation credits shall be "in-kind;" that is, that nonriverine credits will be used to offset nonriverine impacts and riverine credits will be used to offset riverine impacts.

19. It is anticipated by the parties that in most cases in which the Corps, after consultation with the MBRT, has determined that mitigation credits from the Bank may be used to offset wetland impacts authorized by Section 404 permits, for every one acre of impacts, two credits will be debited from the Bank. One of those credits must be a restoration credit; the remaining credit will be made up of any combination of restoration, enhancement, creation or preservation credits, as selected by the Sponsor and approved by the Corps during its permit process. Deviations from this compensation ratio may be authorized by the Corps on a case-by-case basis where justified by considerations of functions of the wetlands impacted, the severity of the wetland impacts, whether the compensatory mitigation is in-kind, and the physical proximity of the wetland impacts to the Bank site, except that in all cases, a minimum of a one-to-one ratio of impact acres to restoration mitigation credits (acres) must be met.

20. Notwithstanding the above, all decisions concerning the appropriateness of using credits from the Bank to offset impacts to waters and wetlands, as well as all decisions concerning the amount and type of such credits to be used to offset wetland and water impacts authorized by Department of the Army permits, shall be made by the Corps of Engineers, pursuant to Section

404 of the Clean Water Act and implementing regulations and guidance, after notice of any proposed use of the Bank to the members of the MBRT, and consultation with the members of the MBRT concerning such use. Notice to and consultation with the members of the MBRT shall be through the permit review process.

21. Fifteen percent (15%) of the Bank's total restoration and enhancement credits shall be available for sale immediately upon completion of all of the following:

a. Execution of this MBI by the Sponsor, the Corps, and other agencies eligible for membership in the MBRT who choose to execute this agreement;

b. Approval of the final mitigation plan;

c. Recordation of the preservation mechanism described in paragraph 24 of this MBI, as well as a title opinion covering the property acceptable to the Corps;

Additionally, the Sponsor must complete the initial physical and biological improvements to the bank site pursuant to the mitigation plan no later than the first full growing season following initial debiting of the Bank.

22. Subject to the Sponsor's continued satisfactory completion of all required success criteria and monitoring, additional restoration mitigation credits will be available for sale by the Sponsor on the following schedule for each phase:

Table 3. Credit Release Schedule.

Date (Anticipated)	Milestone Reached	Phased Release			
		Phase I		Phase II	
		Release	Cumulative	Release	Cumulative
February 2002	Execution of MBI, Approval of the Final Mitigation Plan, Recordation of the Preservation Mechanism	15%	15%	15%	15%
January 2003	First Year Monitoring Report (Phase I)	10%	25%	0%	15%
January 2004	Second Year Monitoring Report (Phase I); First Year Monitoring Report (Phase II)	10%	35%	10%	25%
January 2005	Third Year Monitoring Report (Phase I); Second Year Monitoring Report (Phase II)	10%	45%	10%	35%
January 2006	Fourth Year Monitoring Report (Phase I); Third Year Monitoring Report (Phase II)	15%	60%	10%	45%
January 2007	Fifth Year Monitoring Report (Phase I); Fourth Year Monitoring Report (Phase II)	15%	75%	15%	60%
January 2008	Fifth Year Monitoring Report (Phase II)	0%	75%	15%	75%
January 2008	Final Credit Release (Upon Final Approval of MBRT)	25%	100%	25%	100%

The above schedule applies only to the extent the Sponsor completes all construction as specified in the mitigation plan and documents acceptable survival and growth of planted vegetation, attainment of acceptable wetland/stream hydrology as described under the success criteria in the monitoring section of the mitigation plan. The final 25% of the Bank's restoration and preservation credits will be available for sale only upon a determination by the MBRT, after at least five years of monitoring, that the bank site meets the overall objectives and success criteria set forth in the mitigation plan.

23. The Sponsor shall develop accounting procedures acceptable to the MBRT for maintaining accurate records of debits made from the Bank. Such procedures shall include the generation of a report by the Sponsor showing credits used at the time they are debited from the Bank, which the Sponsor shall provide within 30 days of the debit to each member of the MBRT. In addition, the Sponsor shall prepare an annual report, on each anniversary of the date of execution of this agreement, showing all credits used, and the balance of credits remaining, to each member of the MBRT, until such time as all of the credits have been utilized, or this agreement is otherwise terminated. All reports shall identify credits debited and remaining by type of credit, and shall include for each reported debit the Corps Action ID number for the permit for which the credits were utilized.

Property Disposition

24. The Sponsor shall convey the property to the U. S. Forest Service, in form acceptable to the MBRT, sufficient to protect the Bank site in perpetuity. The Sponsor and the USFS shall enter into a Memorandum of Understanding (MOU), which shall be perpetual, and require that the USFS preserve all natural areas, and prohibit all use of the property inconsistent with its use as mitigation property, including any activity that would materially alter the biological integrity or functional and educational value of wetlands within the Bank site, consistent with the mitigation plan. The purpose of the MOU will be to assure that future use of the Bank site will result in the restoration, protection, maintenance and enhancement of wetland functions described in the mitigation plan. The Sponsor shall deliver a title opinion acceptable to the Corps covering the mitigation property. The property shall be free and clear of any encumbrances that would conflict with its use as mitigation, including, but not limited to, any liens that have priority over the recorded preservation mechanism.

Financial Assurances

25. The Bank Sponsor is a Department of the State of North Carolina. The Sponsor intends to use the credits generated by this bank only as compensation for unavoidable wetland and stream impacts authorized by Department of the Army and North Carolina DWQ certifications issued to the Sponsor. For these reasons, the Sponsor will not be required to provide financial assurances, with the understanding that all Department of the Army permits issued to the

Sponsor requiring use of this bank will also require the Sponsor, as permittee, to ensure that the mitigation bank is successful to the extent required to compensate for wetland and/or stream impacts authorized by each permit.

Long-term Management

26. Bank Sponsor, NCDOT, presently owns the Site in fee and, as a condition of this MBI, will convey title to the Site to the U.S. Forest Service. Prior to conveying the Site to the Forest Service, however, the COE, NCDOT, and the Forest Service will execute a Memorandum of Understanding concerning the disposition and long-term management of the Site. Terms of the Memorandum of Understanding include the requirement that NCDOT implement the recommendations of the Mitigation Plan. To this effect, the deed of conveyence to the Forest Service from NCDOT shall have a restriction allowing NCDOT access to the Site at all times for the purpose of implementing, monitoring and maintaining the Site in a condition consistent with the Mitigation Plan. NCDOT is responsible for the mitigation success of the Site, including any remedial activities, and monitoring to ensure success criteria are met throughout the monitoring period. The Memorandum of Understanding also includes the requirement that the Forest Service allow for the long-term maintenance and preservation of the Site in its restored state in perpetuity.

Miscellaneous

27. Any agency participant may terminate its participation in the MBRT with notice in writing to all other parties to this agreement. Termination shall be effective seven (7) days from placing said notices in the United States mail. Member withdrawal shall not affect any prior sale of credits and all remaining parties shall continue to implement and enforce the terms of this MBI. Except for termination as described above, this agreement may be modified only with the written agreement of all remaining parties to this agreement at the time of the modification.

28. Any delay or failure of Bank Sponsor shall not constitute a default hereunder if and to the extent that such delay or failure is primarily caused by any act, event or conditions beyond the Sponsor's reasonable control and significantly adversely affects its ability to perform its obligations hereunder including: (i) acts of God, lightning, earthquake, fire, landslide, drought, hurricane, storm, flood, or interference by third parties; (ii) condemnation or other taking by any governmental body; (iii) change in applicable law, regulation, rule, ordinance or permit condition, or the interpretation or enforcement thereof; (iv) any order, judgment, action or determination of any federal, state or local court, administrative agency or government body; or (v) the suspension or interruption of any permit, license, consent, authorization or approval. If the performance of the Bank Sponsor is affected by any such event, Bank Sponsor shall give written notice thereof to the MBRT as soon as is reasonably practicable. If such event occurs before the final availability of all credits for sale, the Sponsor shall take remedial action to restore the property to its condition prior to such event, in a manner sufficient to provide

adequate mitigation to cover credits that were sold prior to such delay or failure to compensate for impacts to waters, including wetlands, authorized by Department of the Army permits. Such remedial action shall be taken by the Sponsor only to the extent necessary and appropriate, as determined by the MBRT.

29. No third party shall be deemed a beneficiary hereof and no one except the signatories hereof, their successors and assigns, shall be entitled to seek enforcement hereof.

30. This MBI constitutes the entire agreement between the parties concerning the subject matter hereof and supersedes all prior agreements or undertakings.

31. In the event any one or more of the provisions contained in this MBI are held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions hereof, and this MBI shall be construed as if such invalid, illegal or unenforceable provision had not been contained herein.

32. This MBI shall be governed by and construed in accordance with the laws of North Carolina and the United States as appropriate.

33. This MBI may be executed by the parties in any combination, in one or more counterparts, all of which together shall constitute but one and the same instrument.

34. The terms and conditions of this MBI shall be binding upon, and inure to the benefit of the parties hereto and their respective successors.

35. All notices and required reports shall be sent by regular mail to each of the parties at their respective addresses, provided below:

Sponsor: North Carolina Department of Transportation
Mr. William D. Gilmore, P.E.
Branch Manager, Project Development and Environmental Analysis
1548 Mail Service Center
Raleigh, NC 27699-1548

Corps:
Mr. Michael F. Bell, P.W.S.
U.S. Army Corps of Engineers
Washington Regulatory Field Office
Post Office Box 1000
Washington, North Carolina 27889-1000

EPA:
Ms. Kathy Matthews
Wetlands Regulatory Section
USEPA/EAB
980 College Station Road
Athens, Georgia 306053

FWS:
Mr. Howard Hall
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

NMFS:
Mr. Ron Sechler
National Marine Fisheries, NOAA
Habitat Conservation Division
101 Pivers Island Road
Beaufort, North Carolina 28516

NCWRC:
Mr. William Wescott
NC Wildlife Resources Commission
146 Chesterfield Drive
Washington, North Carolina 27889

NCDCM:
Ms. Kelly Williams, P.W.S.
Wetland Restoration Specialist
1638 Mail Service Center
Raleigh, North Carolina 27699-1638

NCDWQ:
Mr. Mac Haupt
Division of Water Quality
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled "Agreement To Establish The Croatan Mitigation Bank In Craven County, North Carolina":

Sponsor:

By: _____ Date: 9/5/2002

U.S. Army Corps of Engineers:

By: _____ Date: 3/22/03

Col, USA

IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled "Agreement To Establish The Croatan Mitigation Bank In Craven County, North Carolina":

U.S. Environmental Protection Agency:

By: _____ Date: _____

U.S. Fish and Wildlife Service:

By: _____ Date: _____

National Marine Fisheries Service:

By: _____ Date: _____

N.C. Division of Water Quality:

By: _____ Date: _____

N.C. Wildlife Resources Commission:

By: _____ Date: _____

N.C. Division of Coastal Management:

By: _____ Date: _____

List of Appendices

Appendix A: **{Name of Bank}** Final Mitigation Plan;

Appendix B: Property Survey and Legal Description;

Appendix C: Map – Geographic Service Area;

Appendix D: Construction Costs;

Appendix E: Maintenance and Monitoring Costs;

Appendix F: Form of Financial Assurance;

Appendix G: Form of Preservation Mechanism;

North Carolina Department of Environment and Natural Resources
Division of Coastal Management
Michael F. Easley, Governor **Donna D. Moffitt, Director** William G. Ross Jr., Secretary

April 23, 2003

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

Dear Sir or Madam:

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

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

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

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

Sincerely,

Douglas V. Huggett

Douglas V. Huggett
Major Permits and Consistency Manager

Enclosure

1638 Mail Service Center, Raleigh, North Carolina 27699-1638
Phone: 919-733-2293 \ FAX: 919-733-1495 \ Internet: http://dcm2.enr.state.nc.us

Permit Class
NEW

229

Permit Number
55-03

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

Permit

for

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

___ Excavation and/or filling pursuant to NCGS 113-229

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

Authorizing development in Craven and Pamlico County at Upper Broad Creek and Goose Creek, NC 55 Widening from Bridgeton to Bayboro , as requested in the permittee's application dated 8/13/02 and 2/4/03, including the attached workplan drawings (33): 24 dated 2/13/02; 2 dated 5/20/02; 3 dated as received on 8/16/02; and 4 dated 11/6/02.

This permit, issued on **4/22/03** , is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

Roadway Widening

NOTE: The North Carolina Department of Transportation (NCDOT) project authorized by this Coastal Area Management Act (CAMA) permit, Transportation Improvement Program Number (T.I.P. No.) R-2539, is divided into three segments: R-2539A; R-2539B; and R-2539C. The R-2539A segment impacts the Public Trust Area and Public Trust Shoreline CAMA Areas of Environmental Concern (AEC's) where it crosses Upper Broad Creek. The R-2539B segment impacts the Public Trust Area and Public Trust Shoreline CAMA AEC's where it crosses Goose Creek. The R-2539C segment does not impact any CAMA AEC's.

(See attached sheets for Additional Conditions)

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

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

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

All work must cease when the permit expires on

December 31, 2006

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

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

Donna D. Moffitt, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

Signature of Permittee

ADDITIONAL CONDITIONS

1) This permit only authorizes construction of the R-2539A segment of this project, from US 17 in Craven County to East of SR 1127 in Pamlico County. Prior to initiating any construction on the remaining segments of this project (R-2539B and R-2539C), the permittee must submit a request for, and receive, a modification(s) of this CAMA permit.

NOTE: R-2539A will permanently impact approximately 7.07 acres of wetlands, 0.05 acres of surface waters, 0.17 acres of Neuse Buffer and 114.8 linear feet of jurisdictional streams.

NOTE: It is anticipated that the CAMA permit modification for R-2539B (from East of SR 1127 to SR 1129) will be processed as a major modification because of the proposed impacts to CAMA AEC's at the crossing of Goose Creek. The processing procedures for a major modification are the same as the procedures for a new major permit.

NOTE: When they are complete, final workplan drawings for R-2539C (from SR 1129 to NC 304 in Bayboro) shall be submitted to DCM to determine the appropriate permit processing requirements.

NOTE: The permittee is strongly encouraged to keep this CAMA permit active by requesting the necessary permit renewal(s) in accordance with the rules of the Coastal Resources Commission until construction of all project segments (R-2539A, R-2539B and R-2539C) is complete.

2) No excavation shall occur within wetlands or waters of the United States, except as depicted on the attached workplan drawings.

3) The temporary placement or double handling of fill materials within waters or vegetated wetlands is not authorized.

4) No excavated or fill material will be placed at any time in any vegetated wetlands or surrounding waters outside of the alignment of the fill area indicated on the attached workplan drawing(s).

5) All excavated materials will be confined above normal high water and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.

6) All fill material must be clean and free of any pollutants, except in trace quantities.

7) No riprap will be placed in stream beds.

8) Placement of riprap shall be limited to the areas as depicted on the attached workplan drawings. The riprap material must be free from loose dirt or any pollutant. It must be of a size sufficient to prevent its movement from the site by wave or current action. The riprap material must consist of clean rock or masonry materials such as but not limited to granite or broken concrete.

9) Live concrete shall not be allowed to contact the water in or entering into Waters of the State.

10) If the permittee determines that additional permanent and/or temporary impacts will occur that are not shown on the attached permit drawings, additional authorization from DCM will be required.

ADDITIONAL CONDITIONS

11) Fill slopes in wetlands will be 3:1 or steeper.

Environmental Commitments

12) In accordance with the Project Commitments contained within the Environmental Assessment (EA) dated 10/8/07 and the Finding of No Significant Impact (FONSI) dated 9/14/00, the permittee shall conform with the NCDOT official policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997). These guidelines require that instream activities be avoided from February 15 to June 15.

13) Any mitigative measures or environmental commitments specifically made by the applicant in the CAMA permit application, the Environmental Assessment (EA) dated 10/8/07, the Finding of No Significant Impact (FONSI) dated 9/14/00, and/or during the NEPA/404 Merger Process, shall be implemented, regardless of whether or not such commitments are addressed by individual conditions of this permit.

Bridge Replacement, Upper Broad Creek

14) Debris resulting from demolition of the existing bridge, including deck components, shall not enter wetlands or waters of the United States, even temporarily.

15) All excavated materials and debris associated with the removal of the existing bridge and existing causeway fill material will be disposed of on an approved upland site.

16) Bridges shall be constructed with driven piles or drilled shaft construction, specifically piles shall not be jetted. Should jetting of any bridge piles become necessary, a modification to this permit will be required.

17) The temporary work bridge will be constructed utilizing top-down construction methods, and will be removed immediately after construction of the permanent bridge is completed.

Mitigation

NOTE: Compensatory mitigation for wetland and stream impacts resulting from this project includes: 2.66 acres of on-site riverine wetland restoration through the removal of existing bridge causeway and railway berm; 11.99 acres of riverine wetland enhancement associated with bridge lengthening; 28.60 acres of off-site restoration at the Croatan Mitigation Site; 134.5 linear feet of on-site stream relocation on R-2539B, Site 13; and 969 linear feet of off-site stream restoration at the Brock Mitigation Site in Jones County.

18) On-site mitigation will be carried out as described in the document titled "Restoration Plan for Swamp Hardwood Wetlands at existing Bridge Causeways of NC 55, Upper Broad Creek, Deep Run, and Goose Creek in Craven and Pamlico Counties" dated December 11, 2002 and revised on January 24, 2003.

19) The permittee will ensure the removal of all unsuitable existing causeway fill material to prevent potential contamination of the adjacent water bodies. The permittee will fill any void left by the removal of this unsuitable existing causeway fill material with suitable organic substrate.

ADDITIONAL CONDITIONS

NOTE: Prior to removing the causeway fill material at Upper Broad Creek, Deep Run and Goose Creek, the permittee is strongly encouraged to develop a more detailed monitoring plan and success criteria for the areas of wetland enhancement associated with the on-site wetland mitigation in consultation with the DCM Wetland Specialist. This information would be very useful to the discussions of the "Ecological Enhancement for Causeway Removal" interagency workgroup.

20) The annual monitoring report for the Croatan Mitigation Site shall include a debit ledger that reflects that credits for 28.60 acres of wetland restoration have been debited for R-2539A/B/C. The debit ledger shall also show the remaining credits available at the Croatan Mitigation site.

21) All mitigation sites will be protected in perpetuity in their restored, enhanced, or preserved states as appropriate according to the approved final mitigation plans and owned by the permittee or its approved designee. Failure to adequately protect mitigation sites may result in further mitigation requirements.

22) Due to the possibility that compaction, mechanized clearing, hand clearing for utility relocations, and/or other site alterations might prevent the temporary wetland impact area from re-attaining wetland jurisdictional status, the permittee shall provide an annual update on the wetland areas temporarily impacted by this project. This annual update will consist of photographs provided during the agency monitoring report meeting and a brief report on the progress of these temporarily impacted areas in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with DCM, the NC Division of Water Quality and the NC Wildlife Resources Commission to determine if the wetland areas temporarily impacted by this project have re-attained jurisdictional wetland status. If at the end of 3 years the wetland areas temporarily impacted by this project have not re-attained jurisdictional wetland status, DCM, in association with the above listed agencies, shall determine whether additional mitigation efforts will be required.

Sedimentation and Erosion Control

23) The permittee shall follow Best Management Practices for the protection of Surface Waters and sedimentation and erosion control measures sufficient to protect aquatic resources.

24) This project must conform to all requirements of the NC Sedimentation Pollution Control Act and NC DOT's Memorandum of Agreement with the Division of Land Resources.

25) In order to protect water quality, runoff from construction must not visibly increase the amount of suspended sediments in adjacent waters.

26) Appropriate sedimentation and erosion control devices, measures or structures must be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses and property (e.g. silt fence, diversion swales or berms, sand fence, etc.).

27) All disturbed areas shall be properly graded and provided a ground cover sufficient to restrain erosion within thirty days of project completion.

ADDITIONAL CONDITIONS

Stormwater Management

28) The N.C. Division of Water Quality (DWQ) approved the R-2539A segment of this project under stormwater management rules of the Environmental Management Commission (EMC) under Stormwater Permit No. SW7020418 on 6/27/02. The DWQ approved the R-2539B segment of this project under stormwater management rules of the EMC under Stormwater Permit No. SW7020722 on 10/7/02. Any violation of the permits approved by the DWQ will be considered a violation of this CAMA permit. If required, a Stormwater Management Permit must be obtained for the R-2539C segment of this project, and a copy provided to DCM, prior to initiating any construction of the R-2539C segment.

General

29) Any relocation of utility lines that is not already depicted on the attached workplan drawings, or described within the attached permit application, will require additional authorization, either by way of a modification of this permit or by the utility company obtaining separate authorization.

30) The N.C. Division of Water Quality has authorized the proposed project under Water Quality Certification No. 3415 (DWQ Project No. 021232), which was issued on 3/17/03. Any violation of the Certification approved by DWQ will be considered a violation of this CAMA permit.

NOTE: The U.S. Army Corps of Engineers has assigned the proposed project COE Action ID. No. 199303531.

NOTE: This permit does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.

NOTE: The permittee is encouraged to contact the Public Health Pest Management Section at (919) 733-6407 to discuss mosquito control measures.

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

August 13, 2002

Division of Coastal Management
North Carolina Department of Environment
And Natural Resources
151-B Hwy. 24
Hestron Plaza II
Morehead City, NC 28557

ATTN.: Mr. Bill Arrington
Transportation Projects

Dear Sir:

Subject: **Application for Division of Coastal Management Major Development permit** for the NC 55 Widening From US 17 in Bridgeton to NC 304 in Bayboro, Craven and Pamlico Counties, NCDOT Division No. 2, Federal Aid Project STP-55(1), State Project No. 8.1170901, T.I.P. No. R-2539.

The North Carolina Department of Transportation (NCDOT), Division of Highways, in consultation with the Federal Highway Administration (FHWA) proposes to widen NC 55 in Craven and Pamlico Counties, from 0.7 miles east of US 17 in Bridgeton to NC 304 in Bayboro. The proposed project is approximately 14.2 miles in length, and will provide a five lane, 60-foot roadway, with 4-foot paved shoulders throughout the majority of the project.

Purpose and Need: The purpose of this project is to increase traffic capacity and safety by widening NC 55 from the existing two-lane facility to a five-lane roadway. NC 55 is designated as a Major Thoroughfare on the New Bern Thoroughfare Plan, which was adopted by the NCDOT on August 14, 1992. It also appears on the Pamlico County Thoroughfare Plan as a Major Collector, adopted by the NCDOT on June 3, 1994.

Summary of Impacts: Total impacts to CAMA jurisdictional Areas of Environmental Concern (AECs) will be approximately 118.1 linear feet at a UT to West Fork Goose Creek in Section B. Section 404 Waters of the U.S. jurisdictional impacts of R-2539 are estimated at 15.69 acres of permanent wetland impacts (1.39 acres of riverine, 14.3 of non-riverine), 0.15 acres of fill in surface waters, 619.2 linear feet of stream channels, and 1.65 acres of Neuse River riparian buffer. Table 1 summarizes the Section 404 Waters of the U.S. jurisdictional impacts associated with the R-2539 project by Sections A, B, and C. The final design drawings for Section A are complete and the impact totals are accurate. The design for Section B is approximately 80% complete and

Section C is still preliminary at this time. The project crosses two CAMA jurisdictional waters, Upper Broad Creek in section A and Goose Creek in Section B, per the EA and June 25, 2002 email from Bill Arrington, DCM. No CAMA coastal wetlands are located within the project limits. NEPA 404 Wetland impacts have been reduced by 15 percent (2.23 acres) by eliminating a ditch through wetlands and by bridge lengthening at every bridge location in the project. (Please note that future references to "jurisdictional areas" refer to Section 404 Waters of the U.S., unless otherwise specified.)

- Impacts to jurisdictional areas of Section R-2539A consist of 7.07 acres of wetland, 0.05 acres of surface water, 0.17 acres of buffer, and 114.8 linear feet of stream channel. Wetland impacts include 0.54 acres of riverine and 6.53 acres of non-riverine. Drainage from ditches associated with the project is calculated to account for 2.14 acres of the wetland impacts.

- Impacts associated with preliminary design of section R-2539B consist of 3.64 acres of wetland, 0.03 acres of surface water, 0.90 acres of Neuse Buffer, and 295.2 linear feet of stream channel. Permanent impacts to riverine and non-riverine wetlands total 0.85 acres and 2.79 acres, respectively. There are no drainage impacts in Section B

- Impacts associated with the preliminary design of section R-2539C are estimated to be 4.98 acres of wetland, 0.07 acres of surface water, 0.58 acres of Neuse Buffer, and 209.0 linear feet of stream channel. There are no drainage or riverine wetland impacts in R-2539C.

Table 1: Summary of jurisdictional Impacts (Federal Clean Water Act)

Section	Permanent Wetland (ac)* Riverine/non-riverine	Drainage Impacts (ac)** Riverine/non-riverine	Existing Channel Impacts (ft)	Surface Water (ac)	Total Wetland Impacts (ac)
R-2539A	0.42 / 4.51	0.12 / 2.02	114.8	0.05	7.07
R-2539B	0.85 / 2.79	N/A	295.2	0.03	3.64
R-2539C	0.0/4.98	N/A	209.0	0.07	4.98
TOTAL	**1.27 / 12.28**	**0.12 / 2.02**	**619.0**	**0.15**	**15.69**

* includes fill, excavation, and mechanized clearing
** includes impact derived from Boussinesq equation

Summary of Mitigation: Throughout the NEPA and design process this project has been designed to avoid and minimize impacts to all jurisdictional areas. Specific strategies are detailed elsewhere in this document. Highlights include widening NC 55 along the existing roadway, using 3:1 slopes within wetland limits, extending bridge spans at Upper Broad Creek, Deep Run Creek, and Goose Creek, and wetland restoration associated with the removal of existing bridge causeways and an abandoned railway track. Permanent impacts to riverine and non-riverine wetlands total 1.27 acres and 12.28 acres respectively. Table 2 presents a summary of mitigation associated with the R-2539 project. Compensatory mitigation for unavoidable impacts associated with R-2539 will consist of:

- 4.23 acres of on-site riverine wetland restoration through the removal of existing bridge causeway and railway berm;
- 11.99 acres of riverine wetland enhancement associated with bridge lengthening;
- 28.60 acres of off-site restoration at the Croatan Mitigation Banking Site;
- 134.5 linear feet of on-site stream relocation on Section B, Site 13; and
- 969 linear feet of off-site stream restoration at the Brock Mitigation Site, Jones County.

Table 2: Summary of Mitigation

Section	Wetlands (ac)			Channel Restoration (ft)		Neuse Buffer (ac.)
	On-Site Riverine Restoration 1:1	On-site Riverine Enhancement 4:1	Off site Non-Riverine Restoration 2:1	On-Site 1:1	Off-Site 2:1	None Required
R-2539A	1.78	4.94	Croatan	0	Brock	0
R-2539B	2.45	7.05	Croatan	134.5	Brock	0
R-2539C	N/A	N/A	Croatan	0	Brock	0
TOTAL	**4.23***	**11.99**	**28.60**	**134.5**	**969****	**0**

* = Total riverine wetland impacts equal 1.39 acre
** = From the Brock Restoration preliminary restored stream length. Draft Mitigation Report awaiting submittal.

Summary of Neuse Buffer Impacts and Mitigation: The total Neuse River riparian buffer impacts associated with R-2539 consist of 1.08 acres in Zone 1 and 0.57 acres in Zone 2 (Table 3). However, since no single buffer impact site within R-2539 exceeds 0.33 acre or 150 linear feet in size, no compensatory mitigation is required.

PROJECT SCHEDULE

Construction of this project will be divided into three sections as detailed in Table 3. Permit drawings for all three sections are included. The attached permit drawings are complete in detailing all impacts occurring within section R-2539A. However, permit drawings for sections R-2539B and R-2539C detail the current best preliminary alignment and maximum potential impacts. Design for these latter sections are at 80 percent and less than 30 percent, respectively The impacts associated with sections R-2539B and R-2539C are expected to decrease once final design is completed. Final permit drawings for R-2539B and R-2539C will be provided under separate cover. NCDOT understands that no construction will occur on Sections B and C until final design and resulting impacts have been approved by all regulatory agencies

Table 3. Project Sections and Scheduling

Section	Project Limits	Scheduled Let Date
R-2539A	0.47 miles west of SR 1600 in Craven County to east of SR 1127 in Pamlico County	November 2002
R-2539B	East of SR 1127 to SR 1129 in Pamlico County	October 2003
R-2539C	SR 1129 to NC 304 in Bayboro, Pamlico County	June 2005

* NOTE: Because the permit drawings submitted for the R-2539B and R-2539C sections are preliminary, DCM did not circulate them in this CAMA permit application package for review by state agencies. Copies are available upon request.
CB

RESOURCE STATUS

Wetland and Stream Delineations:

Wetland delineations were conducted using the criteria specified in the 1987 Corps of Engineers Wetland Delineation Manual. Mr. Mike Bell of the USACE Wilmington Regulatory Field Office verified the delineations in the field on September 1, 2000.

Stream classification and delineations were field verified by Mr. Mike Bell and Mr. John Hennessy (NC Division of Water Quality) on April 26, 2001.

The attached permit application package consists of drawings depicting jurisdictional impacts. As previously mentioned, the construction of R-2539A will involve of 4.91 acres of permanent wetland impacts, 0.05 acres of fill within surface waters, 2.14 acres of drainage impacts, 0.17 acres of Neuse Buffer impacts and 114.8 linear feet of impacts to jurisdictional streams. Impacts associated with of Section B consist of 3.64 acres of permanent wetland impacts, 0.03 acres of fill in surface waters, 0.90 acres of Neuse Buffer impacts, and 295.2 linear feet of stream channel impacts. Impacts associated with Section C are preliminary and the maximum potential impacts are presented. However, it should be noted that the proposed mitigation is based on the maximum potential jurisdictional impacts.

R-2539A: Characterization of Jurisdictional Sites:

Wetlands

This section will have 4.91 acres of permanent wetland impacts and 0.05 acres of surface water impacts (Table 4). In addition, 2.14 acres of impacts associated with a roadside drainage ditch have been computed using the Boussinesq equation. Drainage extents are depicted at Sites 1, 2, 3, 8, and 12 (permit drawing sheets 4, 5, 6, 11, 14, and 16 of 28). Wetlands within section R-2539A can be characterized as palustrine, forested, seasonally flooded (PF01C, Cowardin, *et. al.*). These systems occur either in association with a stream (riverine) or as depressional areas within uplands.

Wetlands associated with streams can be characterized as Coastal Plain bottomland hardwood wetlands (Schafale and Weakley, 1990) (riverine wetlands). Hydrology for this system is provided by overbank flooding of the associated stream. Dominant canopy vegetation includes bald cypress (*Taxodium distichum*), blackgum (*Nyssa sylvatica*), green ash (*Fraxinus pennsylvanica*), tulip tree (*Liriodendron tulipifera*), and sweetgum (*Liquidambar styraciflua*). Understory and herbaceous species include saplings of canopy species, black willow (*Salix nigra*), redbay (*Persea borbonia*), chain fern (*Woodwardia areolata*), royal fern (*Osmunda regalis*), lizzards-tail (*Saururus cernuus*), and rush (*Juncus* sp.). Riverine wetlands within section R-2539A occur in association with Upper Broad Creek (Sites 10, 11, 12; permit drawing sheets 13, 14, 15, 16 of 28).

Hydrology for depressional wetlands (non-riverine) is provided by rainfall, surface water run-off and groundwater discharge. These systems are found on the broad flat interstream areas. Dominant canopy vegetation includes loblolly pine (*Pinus taeda*), water oak, (*Quercus nigra*), and red maple (*Acer rubrum*). Understory and herbaceous species include saplings of canopy species, giant cane (*Arundinaria gigantea*), chain fern, royal fern, and rush.

Table 4. Jurisdictional Impacts within R-2539A

Site	Station	Fill in Wetland (ac)	Excavation in Wetlands (ac)	Mechanized Clearing (Method III) (ac)*	Surface Water Impacts (ac)	Drainage Impacts (ac)
1	10+20/16+00	0.57	0.02	0.30	0.02	0.14
2	12+20/14+00		0.64	0.12		1.16
3	14+30/16+00		0.50	0.12		
4	18+40/20+60	0.69		0.17		
5	23+70/27+50	0.45		0.22		
6	26+50/27+60		0.02	0.02	0.02	
7	27+60/29+30	0.25		0.07		
8	31+50/32+00		0.10	0.03		0.10
9	37+40/38+35	0.20		0.05		
10**	38+70/41+30	0.25		0.02		
11**	41+20/42+90	0.07		0.02		eliminated
12	43+60/43+70		0.01	0.02		0.12
TOTAL		**2.48**	**1.29**	**1.16**	**0.05*** **	**2.14**

*= Clearing and grubbing of vegetation to 10 feet beyond the construction limits.
** = Impacts associated with Upper Broad Creek
*** = Metric Conversions have been rounded to the nearest hundredth

Streams

Within section R-2539A two streams are traversed; Unnamed Tributary to Duck Creek (UDC) and Upper Broad Creek. Jurisdictional stream information is presented in Table 5. UDC is approximately 7 feet in width and maintains a moderate flow for the majority of the year. Upper Broad Creek is approximately 50 feet in width and maintains a moderate flow year round. Both channels can be characterized as having adequate aquatic habitat and associated faunal assemblages. A total of 114.8 linear feet of stream channel (UDC) will be impacted. NCDOT, by lengthening the bridge over Upper Broad Creek, has eliminated stream impacts at Upper Broad Creek. Additionally, this will allow restoration of a high quality riverine wetland.

Table 5. Jurisdictional Stream Information on R-2539A

Site	Station Number (From/ To)	Stream Name	DWQ Index No.	DWQ Rating	Status	Impact (ft)	Required Mitigation 2:1 (ft)
1	10+20/ 16+00	UDC	27-103	SC;Sw, NSW	P	52.5	105.0
2	12+20/ 14+00	UDC	27-103	SC;Sw, NSW	P	62.3	124.6
11	40+35/ 42+90	Upper Broad Creek*	27-106-(1)	C (SC); Sw, NSW	P	0	0
TOTAL						**114.8**	**229.6**

* CAMA jurisdictional AEC

Neuse Buffer

The project lies within the Neuse River Basin and is subject to the Neuse Buffer rules protecting riparian buffers adjacent to any surface water that is delineated on either the USGS Quadrangle map or the NRCS soil survey map. Section R-2539A has a total of 0.12 acres and 0.05 acres of impacts to Zones 1 and 2 respectively (Table 6).

Table 6. Neuse Buffer Impacts on R-2539A

Site No.	Station (From – To)	Zone 1		Zone2	
		Allowable Impacts (ac)	Mitigable Impacts (ac)	Allowable Impacts (ac)	Mitigable Impacts (ac)
1	10+200–16+00	0.02	0.0	<0.01	0.0
2	12+20-14+00	0.10	0.0	0.05	0.0
TOTAL		**0.12**	**0.0**	**0.05**	**0.0**

R-2539B and R-2539C: Characterization of Jurisdictional Sites:

Wetlands

Impacts to jurisdictional areas within Sections B and C have been computed, but are preliminary at this time. These values are the result of minimization and avoidance measures and represent the maximum possible impacts foreseen at this time. Table 7 shows the site by site impacts for R-2539B and the maximum estimated impacts for R-2539C.

Wetland delineations were completed for the entire project, as stated previously. Wetlands occurring within Sections B and C are characterized in a similar manner as those in Section A. These systems exhibit the same position within the landscape, hydrologic sources and vegetative species. Riverine wetlands are present in Section B and are associated with Sasser's Branch (Site 2, Sheet 8 of 48), Deep Run Creek (Site 4, Sheet 10 of 48), and Goose Creek (Site 16, Sheets 28 and 29 of 48). There are no riverine wetlands within Section C.

At the present time, due to the sequencing of the project, Section C permit drawings detailing the exact nature and location of jurisdictional impacts are preliminary (less than 30 percent design). NCDOT will continue to explore every avenue to reduce these projected impacts. Proposed changes will be coordinated with the relevant natural resource agencies.

Table 7. Jurisdictional Impacts on R-2539B and R-2539C

Site	Station From/To	Fill in Wetland (ac)*	Excavation in Wetlands (ac)	Mechanized Clearing (Method III)* (ac)	Surface Water Impacts (ac)
R-2539B					
1	56 +30 / 56 +55		0.08	0.02	
2	59 +70 / 61 +00	0.13	0.03	0.05	<0.01
3	62 +25 / 63 +60	0.14		0.02	
4	74 +85 / 82 +00	0.34		0.15	
5	81 +85 / 82 +00	0.03		0.01	<0.01
6	102 +35 / 103 +65	0.12		0.09	
7	108 +50 / 114 +00	0.71		0.44	<0.01
8	117 +20 / 118 +60	0.02		0.09	
9	119 +20 / 120 +20	0.05		0.06	
10	121 +70 / 122 +20	0.11		0.03	
11	123 +75 / 125 +60	0.05		0.04	
12	130 +60 / 131 +95	Impacts avoided		Impacts avoided	
13	134 +75 / 137 +30	0.07	0.12	0.33	0.01
14	139 +10 / 139 +20	0.04	<0.01	0.01	
15	145 +35 / 146 +75			0.09	
16**	148 +10 / 151 +40	0.07		0.08	
TOTAL R-2539B		**1.88**	**0.24**	**1.52**	**0.03*** **
R-2539C					
1	505 +50 / 508 +50	0.01<		0.03	
2	513 +00 / 548 +05		1.40	0.77	
3	644+00 / 673+00	1.52	0.56	0.70	0.06
4	678+60				0.01
TOTAL R-2539C		**1.52**	**1.96**	**1.50**	**0.07**

*= Clearing and grubbing of vegetation to 10 feet beyond the construction limits.
**= Impacts associated with Goose Creek
*** = Metric Conversions have been rounded to the nearest hundredth

Streams

Jurisdictional stream information for sections R-2539B and R-2539C is presented in Table 8. There are six stream channels that potentially will be impacted by construction activity on sections B and C. Sassers Branch is approximately 10 feet in width and maintains a moderate flow year round. UT to Deep Run is approximately 3 feet in width and maintains flow through the majority of the year. UT to Black Creek is approximately 16 feet in width and maintains flow for the majority of the year. The UT to West Fork Goose Creek is approximately 20 feet in width and maintains flow year round. UT1 to South Prong Bay River is approximately 15 feet in width and maintains flow year round. UT2 to South Prong Bay River is 3 to 5 feet wide and is a perennial stream. A total of 504 linear feet of stream channels will potentially be impacted and require mitigation in these latter two Sections. The bridges over Deep Run Creek and Goose Creek have been lengthened from 70 feet and 100 feet to 328 feet and 732 feet respectively, providing greater opportunities for wetland restoration.

Table 8. Jurisdictional Stream Information, Sections R-2539B and R-2539C

Site	Station Number (From/To)	Structure	Stream Name	DWQ Index No.	DWQ Rating	Status	Impact (ft)	Onsite Stream Relocation (ft)	Required Mitigation 2:1 (ft)
R-2539B									
2	59+70/ 61+00	1650 RCP	Sassers Branch	27-106-5	SC Sw NSW	P	72.2	0	144.4
5	81+85/ 82+00	1050 RCP	UT to Deep Run	27-106-6	SC Sw NSW	I	52.5	0	105.0
7	108+50/ 114+00	1.8x1.2 RCBC	UT to Black Creek	27-107-7	SC Sw NSW	I	52.5	0	72.2*
13	134+75/ 137+30	900 RCP	UT to West Fork Goose Creek**	27-107-(1)	SC Sw NSW	P	118.1	134.5	0
TOTAL R-2539B							**295.3**	**134.5**	**321.6**
R-2539C									
3	644+00/ 673+00	Not yet finalized	UT1 to South Prong Bay River	27-150-3	SC Sw NSW	P	144.1	0	288.20
4	678+60	Not yet finalized	UT2 to South Prong Bay River	27-150-3	SC Sw NSW	P	65.0	0	130.0
TOTAL R-2539C							**209.1**	**0**	**418.20**

*NCDOT proposes that the relocated stream channel at Site 13 will provide onsite mitigation for Site 13 impacts as well as 16.4 feet of Site 7 impacts, requiring the balance of 36.1 feet of impact from Site 7 to be mitigated for offsite at a ratio of 2:1.

**CAMA jurisdictional AEC

Neuse Buffer

Sections R-2539B and R-2539C lie within the Neuse River Basin and are subject to the Neuse Buffer rules protecting riparian buffers adjacent to any surface water that is delineated on either the USGS Quadrangle map or the NRCS soil survey map. Sections R-2539B and R-2539C have a total of 0.96 acres and 0.18 acres of impacts to Zones 1 and 0.52 acres and 0.13 acres to Zone 2 respectively (Table 9).

Table 9 Neuse Buffer Impacts on R-2539B and R-2539C

Site No.	Station (From / To)	Zone 1 (ac)	Zone2 (ac)
2	59 +70 / 61 +00	0.11	0.06
4	74+85 / 77+40	0.00	<0.01
5	81 +85 / 82 +00	0.09	0.06
7	108 +50 / 114 +00	0.18	0.10
13	134 +75 / 137 +30	0.21	0.09
TOTAL R-2539B		**0.59**	**0.31**
3a	646+00 / 649+00	0.21	0.10
3b	657+00 / 660+00	0.11	0.08
4	677+00 / 680+00	0.05	0.03
TOTAL R-2539C		**0.37**	**0.21**

MITIGATION OPTIONS

The Corps of Engineers had adopted, through the Council on Environmental Quality (CEQ), a wetland mitigation policy that embraces the concept of "no net loss of wetlands" and sequencing. The purpose of this policy is to restore and maintain the chemical, biological, and physical integrity of the Waters of the United States. Mitigation of wetland and surface water impacts has been defined by the CEQ to include: avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time and compensating for impacts (40 CFR 1508.20). Executive Order 11990 (Protection of Wetlands) and Department of Transportation Order 5660.1A (Preservation of the Nations Wetlands), emphasize protection of the functions and values provided by wetlands. These directives require that new construction in wetlands be avoided as much as possible and that all practicable measures are taken to minimize or mitigate impacts to wetlands.

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize wetland impacts, and to provide full compensatory mitigation of all remaining wetland impacts. Avoidance measures were taken during the planning and EA/FONSI phases; minimization measures were incorporated as part of the project design.

AVOIDANCE: All wetland areas not affected by the project will be protected from unnecessary encroachment. In direct consultation with the U.S. Army Corps of Engineers (COE) and the State Historic Preservation Office, decisions were made to shift the alignment of widening the existing roadway to minimize wetland impacts where possible.

No staging of construction equipment or storage of construction supplies will be allowed in wetlands or near surface waters.

This permit application presents the maximum potential impacts currently associated with the preliminary designs of Sections B and C. Avoidance and minimization measures are being considered and evaluated for these sections, therefore, actual impacts should be less than those reported in this document. Design for the latter sections will be coordinated with relevant natural resource agencies.

NCDOT has redesigned the bridge over Upper Broad Creek in Section R-2539A, and the bridges over Deep Run Creek and East Fork Goose Creek in R-2539B. Lengthening of these bridges has avoided impacts to high quality riverine wetlands and provided on-site restoration and enhancement to these same systems.

MINIMIZATION: Minimization includes the examination of appropriate and practicable steps to reduce the adverse impacts. NCDOT has redesigned the bridge over Upper Broad Creek in Section R-2539A, and the bridges over Deep Run Creek and Goose Creek in R-2539B. Lengthening of these bridges has minimized impacts to high quality riverine wetlands and provided on-site restoration and enhancement to these same systems. Additional minimization techniques were implemented as follows:

1. Ditching: It is the policy of the NCDOT to eliminate ditching in wetlands as much as possible, thus preserving the hydrology of adjacent wetlands. However, widening the existing pavement with its present super elevation requires ditches through wetlands to provide positive drainage. Drainage is necessary to prevent road flooding, as well as to prevent deterioration due to saturation by providing subgrade drainage. Unfortunately, vertical difference between road elevation and natural ground elevation is not great enough to allow sheet flow into the wetlands. Studies were conducted to investigate raising the grade. Traffic cannot be maintained during construction if the grade is raised. Because NC 55 is designated as a major thoroughfare in Craven and Pamlico counties and is the only major facility providing east-west route through these counties, an offsite detour is not feasible due to the high volume of cars and commercial vehicles. Therefore, ditches are required at the following locations: Station 10+40 to Station 10+60 right, Station 12+17 to Station 14+00 left, Station 14+25 to Station15+97 left, Station 31+72 to Station 31+96 left, and Station 43+63 to Sta.43+72 right. As discussed in the February 20, 2002 pre-application meeting, the wetland impacts resulting from drainage effects of ditches through wetlands have been calculated using the Boussinesq equation and included in this application.

2. Wetland Ditch at Site 12, Section A (permit drawing sheet 15 of 28): Previous design called for extending a ditch through the wetland on north side of project east of Upper Broad Creek (Station 42+63 to 42+80). Because the natural ground elevation is significantly lower in the wetland than the adjacent upland, from whence the ditch originates, use of natural drainage will be adequate to end the ditch before it enters the wetland. As a result, drainage impacts to high quality riverine wetlands were reduced by 0.63 acres.

3. Slopes: It is NCDOT's policy to use 2:1 slopes in wetlands, where it is feasible. Oftentimes, as is the case with this project, the soils will not support steeper than 3:1 slopes, or the steeper slopes would require guardrails, which would require a wider footprint to back the guardrail away from traffic. Therefore, 3:1 slopes are being used where fill slopes intersect with wetlands in this project.

   The NCDOT submits further clarification to DCM's concern, that Section A permit drawings do show 4:1 and 6:1 slopes. However, they stop short of the wetland limits. In the case of the

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revised 2a.

CB 4:1 slopes at station 25+00 (Sheet 25 of 28), the wetland ends outside of that slope. There is a vertical line indicating the wetland boundary at station 11+60 (Sheet 21 of 29), the 6:1 slopes are not in wetlands. There are wetlands on the right side, where the slopes are 3:1.

4 X. Section B, Site 12 – The previously proposed 0.1 acres of wetland fill and 0.1 acres of mechanized clearing were avoided by the addition of an expressway gutter. This pulled the slope stake in far enough to avoid the wetland and eliminate the need for mechanized clearing. (Remaining site numbers did not change to avoid confusion.)

5 X. Bridge lengthening: Direct consultation with COE and NCDWQ resulted in lengthening the bridges at the following three locations. At each of these locations, existing causeways will be removed and restored to riverine wetlands. **NCDOT's additional cost to lengthen these three bridges totals nearly six million dollars ($5,712,700).**

a. Section A, Sites 11 and 12, Sheet 14 and 15 of 28 - The Upper Broad Creek bridge has been redesigned from an 275-foot bridge to a 722-foot bridge, **avoiding 0.15 acres of high quality riverine wetland impact**. Construction of the new pre-stressed concrete girder bridge will be conducted using a temporary work bridge to allow phased construction. The temporary bridge will be constructed using top-down construction.

b X. Section B, Site 4, Sheet 10 of 48 - The Deep Run Creek bridge has been redesigned from a 148-foot bridge to a 328-foot bridge, **avoiding 0.64 acres of high quality riverine wetland impact**. This new bridge will also be a pre-stressed concrete girder bridge, requiring a temporary work bridge. The temporary bridge will be constructed using top-down construction.

c. Section B, Site 16, Sheets 28 and 29 of 48 - The Goose Creek bridge has been redesigned from a 148-foot bridge to a 722-foot bridge, **avoiding 0.81 acres of high quality riverine wetland impact**. The new Goose Creek bridge will be a cored slab bridge, constructed top-down, which avoids any additional impacts from a work bridge.

6 X. Historic properties at Upper Broad Creek Wetland: NCDOT, US Army Corps Engineers and SHPO representatives met in the field on February 25, 1999 and agreed to make the necessary alignment shifts to minimize impacts to the bottomland hardwood system and the historic Fred Whitehurst property.

7 X. High Quality Waters BMP: NCDOT has committed (FONSI) that "construction related impacts associated with the proposed action will be minimized through the use of High Quality Waters erosion and sediment control measures. All practical measures have been taken to minimize environmental harm."

8 X. Best Management Practices: NCDOT has committed that Sediment and Erosion Control Guidelines for BMPs for Protection of Surface Waters will be adhered to during construction to minimize potential negative environmental impacts. (see FONSI)

9 X. Sediment and Erosion Control Measures: NCDOT will stipulate that sediment and erosion control measures not be placed in wetlands unless it is absolutely necessary to place silt fences on wetland boundaries to contain erosion caused by the sheet flow of water. This commitment will be incorporated into the construction contract awarded for the proposed project (see FONSI).

Revised 11a

10 7. Drainage:

a. Bridge Deck Drains – Deck drains on bridges will be directed away from open water and released into Zone 2 of the riparian buffer

b. Road Drainage - With the exception of Special Buffer Design (see Neuse Buffer Addendum) around the UDC to Duck Creek (permit drawing sheet 4 of 28), road drainage will flow through grassed buffers before entering the streams.

11 8. Clearing: Clearing Method III (clearing and grubbing of vegetation to 10 feet beyond the construction limits) will be used.

12 9. Revegetation: Within 15 days of construction completion, vegetation will bereestablished on exposed areas with judicious use of pesticide and herbicide.

13 10. In-stream Moratorium: Although NC Marine Fisheries has indicated that shortnosed sturgeon are not likely to be found in Upper Broad Creek, the NCDOT has committed to minimizing in-stream activities during the spring migration period of anadromous fish (February 1 through June 15) per the request of the NC Wildlife Resource Commission and US Fish and Wildlife Service.

14 11. Temporary Work Bridges: Temporary work bridges or top down construction will be used during bridge construction to minimize impacts to jurisdictional waters and wetlands. Traffic will be maintained on the existing two-lane road during new bridge construction. Following completion of the new bridges, traffic will be routed to the new bridge while the existing bridge is replaced.

a. The new bridges over Upper Broad Creek (Section A, Sites 10 and 11 – permit drawing sheets 14 and 15 of 28) and Deep Run Creek (Section B, Site 4 - permit drawing sheet 10 of 48) will be a constructed of pre-stressed concrete girders. In order to lower the girders in place temporary work bridges will be necessary. The work bridges will be cored slab bridges constructed top-down, minimizing impacts to the stream and surrounding wetlands.

b. The new cored slab bridge over Goose Creek (Section B, Site 16 – permit drawing sheet 28 of 40) will be constructed via the top-down method, eliminating the need for a temporary work bridge.

COMPENSATION: The primary emphasis of the mitigation is to reestablish a condition similar to that which would have existed if the project were not built. As previously stated, mitigation is limited to reasonable expenditures and practicable considerations related to highway operation. Mitigation is generally accomplished through a combination of methods designed to replace wetland functions and values lost as a result of construction of the project. These methods consist of creation of new wetlands from uplands, borrow pits, and other non-wetland areas; restoration of wetlands; and enhancement of existing wetlands; and relocation and restoration of streams. At the February 20, 2002 pre-application meeting the following approximate ratios were agreed to: 1:1 for onsite wetland restoration, 2:1 for offsite wetland restoration, 4:1 for onsite wetland enhancement, and 2:1 for offsite stream restoration. The NCDOT also puts forth a 1:1 ratio for onsite stream relocation. This was not discussed at the pre-application meeting since design had not reached the current 80 percent completion for Section B, where the stream relocation occurs.

. **Compensatory Wetland Mitigation**:

Riverine (1.39 acres of impacts): The NCDOT will provide 4.23 acres of on-site riverine wetland restoration and 11.99 acres of on-site riverine wetland enhancement. This will more than fulfill the 1:1 wetland restoration requirement of 1.39 acres. Onsite wetland restoration consists of lifting existing bridge causeways at Upper Broad, Deep Run, and Goose Creeks, as well as removal of portions of an abandoned railroad bed. At the bridge locations, longer bridges will enable removal of existing causeways, which will in turn enhance the high quality riverine wetlands upstream and downstream. Elevations will be restored to pre-disturbance contours, mimicking adjacent wetlands (see attached Restoration Plan for Swamp Hardwood Wetlands).

Non-riverine (14.3 acres of impacts): NCDOT will use 28.60 acres from the Croatan Mitigation Site in Craven County to mitigate for the 14.3 acres of non-riverine wetland impacts at a 2:1 ratio. The NCDOT owns the property and there is an approved final mitigation plan. The site has been constructed and final plantings will occur this winter. Additional copies of the final mitigation plan are available upon request.

Compensatory Stream Mitigation (619 feet impacts): NCDOT will provide 134.5 feet of on-site stream mitigation via relocation of a UT to West Fork Goose Creek. The remaining 484.5 linear feet of stream impacts will be mitigated for at a 2:1 ratio with off-site stream restoration. Stream mitigation will be provided at the Brock Mitigation Site, Jones County, North Carolina. The 969 linear feet of stream mitigation will be debited from the 2,512 linear feet of stream restoration to be done at the Brock site. The stream restoration will be done using natural channel design.

Natural Channel Design: Stream relocation will occur at a UT to West Fork Goose CreekSite 13 in Section B (permit drawing sheet 25 of 48). Rosgen's Natural Channel Design will be utilized to construct an E6 type stream channel. Channel construction will occur in the dry. Channel banks will be planted with trees and shrubs similar to the adjacent non-impacted UT to West Fork Goose Creek. Water will be turned into the new channel following bank stabilization. Design is detailed on permit drawing sheets 42 through 47 of 48.

Brock Stream Mitigation Site: The mitigation plan consists of a Priority 2 restoration of a ditched tributary of Chinquapin Branch. Using natural channel design, the current channel will be restored to a C5 type channel. A total of 2512 linear feet of restored channel will be provided on the Brock Mitigation Site. After debiting the 969 feet of mitigation required for R-2539, 1,596 linear feet of stream restoration will be left for future project needs. The mitigation plan is currently in review and will be provided under separate cover. The NCDOT has purchased an Option for this site and commits to finalizing the Mitigation Plan within 12 months following permit issuance. Therefore, in accordance with 1999 MOU between the NCDOT and DENR, the Brock Mitigation site provides an acceptable mitigation strategy ~~(see attached MOU)~~.

CB

R-2539A

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Restoration Plan for Swamp Hardwood Wetlands

at existing Bridge Causeways of NC 55
Upper Broad Creek, Deep Run, and Goose Creek
in Craven and Pamlico Counties

R-2539

RECEIVED
FEB 10 2003
DIV. OF COASTAL MANAGEMENT
RALEIGH

December 11, 2002
Revised January 24, 2003

The NCDOT will perform on-site mitigation for riverine bottomland hardwood swamp at the NC 55 overpasses of Upper Broad Creek, Deep Run, and Goose Creek in Craven and Pamlico counties. The NCDOT will remove approximately 1.78 acres of existing bridge causeway fill in Section A and approximately 0.88 acres in Section B in order to lengthen the bridges and restore the underlying wetlands.

The existing causeways will be removed and graded down approximately three feet below the grade of the surrounding wetlands. The excavated areas will be back filled with undercut material (muck) removed during the construction of R-2539. The portions of the site with adequate aerial clearance will be revegetated with swamp hardwood trees. Since all species are not available every year from local nurseries, the seedling mixture will mimic the surrounding wetland to the maximum extent possible. The final species mix will be subject to agency review prior to planting. The species to be planted will include an equal representation of green ash (*Fraxinus pennsylvanica*), bald cypress (*Taxodium distichum*), yellow poplar (*Liriodendron tulipifera*), swamp black gum (*Nyssa biflora*), and water tupelo (*Nyssa aquatica*). Twelve- to eighteen-inch bareroot seedlings will be planted at a density of 680 trees per acre. We also expect natural seeding from the adjacent swamp hardwoods. The remaining portion, with restricted overhead clearance, will be seeded with grasses immediately following construction, in order to stabilize the site and allowed to revegetate naturally from the local herbaceous seed source. Total on-site riverine wetland mitigation anticipated for this project will be 2.66 acres.

After planting has been completed, an initial evaluation will be performed to verify satisfactory planting technique and to determine initial species composition and density. Vegetation sampling plots will be established and permanently located within the three swamp hardwood mitigation areas.

Success criteria have been established to verify that the mitigation areas support vegetation necessary for a jurisdictional determination and that the restored area exhibits wetland hydrology. Based on the success criteria listed below, an annual report summarizing mitigation will be submitted to the regulatory agencies for their review and acceptance. Five years after project completion, NCDOT will schedule an agency field meeting to determine whether the areas have attained jurisdictional wetland status.

Vegetation Monitoring

For swamp hardwood areas planted in tree species, an annual update will consist of photographs provided during the agency monitoring report meeting and brief report on the progress of these areas attaining wetland jurisdictional status. The vegetative characteristics of the restoration area will then be compared to the immediately adjacent existing wetland complex (Reference Site).

Hydrologic Monitoring

When the existing causeways were constructed, the swamp hardwood wetland systems impacted had at least some amount of standing water throughout most of the growing season. Therefore, it is reasonable to expect that the removal of the causeways and minor site preparation will restore the area to wetland status. The restored hydrology of the site will be assessed concurrently with the vegetation monitoring. The site will be evaluated to determine if the restored area exhibits signs of wetland hydrology. The site will be evaluated using the same criteria outlined in the 1987 Wetland Delineation Manual, published by the United States Army Corps of Engineers, for field identification of a jurisdictional wetland. The hydrologic characteristics of the restoration area will then be compared to the immediately adjacent existing wetland complex (Reference Site).

R-2539A

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REGULATORY APPROVALS

Application is hereby made for a Division of Coastal Management CAMA Major Development permit for R-2539 as required for the above described activities. Per instruction from DCM Representatives Cathy Brittingham and Bill Arrington (June 26, 2002 email), the NCDOT submits this application for the entire project; however, we are requesting a permit for development of Section A only because it is the only Section with final design. NCDOT will submit additional chapters for the subsequent Sections as they are finalized. No development will begin on any Section prior to issuance of that Section's permit. We also suggest that this permit be conditioned to allow for submittal of Utilities Relocations plans when they are finalized. The Bridges and Culverts Form (DCM-MP-5) for Section A is provided for authorization of that section at this time. NCDOT will submit the additional permit chapters for Sections B and C as the design drawings are finalized. At check for $475.00 has been submitted to the NC Division of Water Quality for processing the water quality certification application.

If you have any questions or need additional information please call Ms. Elizabeth L. Lusk at (919) 733-7844 extension 335.

Sincerely,

V. Charles Bruton

V. Charles Bruton, Ph.D., Manager
Office of the Natural Environment

Attachments:
- MP-1
- MP-5
- Permit drawings
- ½-size Plans

cc: w/o attachment
- Mr. David Franklin, Corps of Engineers, Wilmington Field Office
- Mr. Garland Pardue, Ph.D., USFWS, Raleigh
- Mr. N. L. Graf, P.E., FHWA
- Mr. John Dorney, NCDENR, Division of Water Quality
- Mr. David Cox, NCWRC, Raleigh
- Mr. Burt Tasaico P.E. Program Development Branch
- Ms. Deborah Barbour, P.E., Highway Design Branch
- Mr. Jay Bennett, P.E., NCDOT Roadway Design Unit
- Mr. Dave Henderson, P.E., Hydraulics Unit
- Mr. Greg Perfetti, P.E., NCDOT Structure Design, Raleigh
- Mr. C.E. (Neil) Lassiter, Jr., P.E. Division 2 Engineer, Greenville
- Mr. Jay B. Johnson, Division 2 Environmental Officer
- Mr. Charles R. Cox, P.E., NCDOT Project Development and Environmental Analysis, Raleigh

File: R-2539 CAMA permit

Vegetation Monitoring

For swamp hardwood areas planted in tree species, an annual update will consist of photographs provided during the agency monitoring report meeting and brief report on the progress of these areas attaining wetland jurisdictional status. The vegetative characteristics of the restoration area will then be compared to the immediately adjacent existing wetland complex (Reference Site).

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Form DCM-MP-1

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APPLICATION

(To be completed by all applicants)

revised 4a

1. APPLICANT R-2539

a. **Landowner:**

Name N.C. Department of Transportation

Address 1548 Mail Service Center

City Raleigh **State** NC

Zip 27699-1548 **Day Phone** 919-733-3141

Fax (919) 733-9794

b. **Authorized Agent:**

Name: _____

Address: _____

City: _____ **State:** _____

Zip: _____ **Day Phone:** _____

Fax: _____

c. **Project name (if any):** T.I.P. R-2539, State Project No. 8.1170901, NC 55 Widening

NOTE: Permit will be issued in name of landowner(s), and/or project name.

2. LOCATION OF PROPOSED PROJECT

a. **County:** Craven and Pamlico

b. **City, town, community or landmark:** From US 17 in Bridgeton to NC 304 in Bayboro

c. **Street address or secondary road number:** NC 55

d. **Is proposed work within city limits or planning jurisdiction?** Part Yes _____ No

e. **Name of body of water nearest project (e.g. river, creek, sound, bay):** Duck Creek, Upper Broad Creek, Sassers Branch, Deep Run Creek, Black Creek, Goose Creek, South Prong Bay River

3. DESCRIPTION AND PLANNED USE OF PROPOSED PROJECT

a. **List all development activities you propose (e.g. building a home, motel, marina, bulkhead, pier, and excavation and/or filling activities.** Roadway widening, bridge construction and lengthening. Removal of road causeways and abandoned railway causeways.

b. **Is the proposed activity maintenance of an existing project, new work, or both?** Both

c. **Will the project be for public, private or commercial use?** Public

d. **Give a brief description of purpose, use, methods of construction and daily operations of proposed project. If more space is needed, please attach additional pages.** Widening of NC 55 from two to five lanes, from US 17 in Bridgeton to NC 304 in Bayboro

Form DCM-MP-1

4. LAND AND WATER CHARACTERISTICS

a. **Size of entire tract:** pprox. 40 ac pervious surface

b. **Size of individual lot(s):** N/A

c. **Approximate elevation of tract above MHW or NWL:** :+/- 5 feet

d. **Soil type(s) and texture(s) of tract:**
See attached Table MP1-1 and Table MP1-2

e. **Vegetation on tract** See attached Table MP1-3.

f. **Man-made features now on tract** Bridge, roadway

g. **What is the CAMA Land Use Plan land classification of the site?** *(Consult the local land use plan.)*
Craven County = C, Pamlico County = P

____ Conservation	C Transitional
P Developed	P Community
P Rural	____ Other

h. **How is the tract zoned by local government?**

i. **Is the proposed project consistent with the applicable zoning?** X **Yes** ____ **No**

(Attach zoning compliance certificate, if applicable)

j. **Has a professional archaeological assessment been done for the tract?** X **Yes** ____ **No**
If yes, by whom? SHPO

k. **Is the project located in a National Registered Historic District or does it involve a National Register listed or eligible property?**
X **Yes** ____ **No**

l. **Are there wetlands on the site?** X **Yes** **No**
Coastal (marsh) ____ **Other** Section 404
If yes, has a delineation been conducted? Yes, Michael F. Bell, USCOE and John Hennessy, DWQ September 1, 2001; Bill Arrington, DCM June 25, 2002
(Attach documentation, if available)

m. **Describe existing wastewater treatment facilities.**

revised 4a

None

n. **Describe location and type of discharges to waters of the state. (For example, surface runoff, sanitary wastewater, industrial/commercial effluent, "wash down" and residential discharges.)** Surface runoff

o. **Describe existing drinking water supply source.**
Water line

5. ADDITIONAL INFORMATION

In addition to the completed application form, the following items must be submitted:

- **A copy of the deed** (with state application only) or other instrument under which the applicant claims title to the affected properties. If the applicant is not claiming to be the owner of said property, then forward a copy of the deed or other instrument under which the owner claims title, plus written permission from the owner to carry out the project.

- **An accurate, dated work plat** (including plan view and cross-sectional drawings) drawn to scale in black ink on an 8 1/2" by 11" white paper. (Refer to Coastal Resources Commission Rule 7J.0203 for a detailed description.)

  Please note that original drawings are preferred and only high quality copies will be accepted. Blue-line prints or other larger plats are acceptable only if an adequate number of quality copies are provided by applicant. (Contact the U.S. Army Corps of Engineers regarding that agency's use of larger drawings.) A site or location map is a part of plat requirements and it must be sufficiently detailed to guide agency personnel unfamiliar with the area to the site. Include highway or secondary road (SR) numbers, landmarks, and the like.

- **A Stormwater Certification**, if one is necessary.

- A list of the **names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail.** Such landowners must be advised

- A list of the **names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail.** Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management. Upon signing this form, the applicant further certifies that such notice has been provided.

See Attached permit drawings

Name _____
Address _____
Phone _____

Name _____
Address _____
Phone _____

Name _____
Address _____
Phone _____

- **A list of previous state or federal permits** issued for work on the project tract. Include permit numbers, permittee, and issuing dates.

_____

- **A check for $400** made payable to the Department of Environment, Health, and Natural Resources (DEHNR) to cover the costs of processing the application.

- **A signed AEC hazard notice** for projects in oceanfront and inlet areas.

- **A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A - 1 to 10)** If the project involves the expenditure of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act.

6. CERTIFICATION AND PERMISSION TO ENTER ON LAND

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to conditions and restrictions contained in the permit.

I certify that to the best of my knowledge, the proposed activity complies with the State of North Carolina's approved Coastal Management Program and will be conducted in a manner consistent with such program.

I certify that I am authorized to grant, and do in fact, grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

This is the 13th day of August, 19 2002

Print Name Victor Charles Bruton

Signature Victor Charles Bruton

Landowner or Authorized Agent

Please indicate attachments pertaining to your proposed project.

___ DCM MP-2 Excavation and Fill Information
____ DCM MP-3 Upland Development
____ DCM MP-4 Structures Information
_X_ DCM MP-5 Bridges and Culverts
____ DCM MP-6 Marina Development

NOTE: Please sign and date each attachment in the space provided at the bottom of each form.

Table MP1-1. Project Area Soils

Map Unit Symbol	Soil Map Units	Hydric Classification
AaA	Altavista fine sandy loam	Non-hydric
Ag	Augusta fine sandy loam	B
Ap	Arapahoe fine sandy loam	A
Ba	Ballahack fine sandy loam	Non-hydric
ByB	Baymeade sand	Non-hydric
CnB	Conetoe loamy sand	Non-hydric
CrB	Craven loam	Non-hydric
Cs	Charleston fine sandy loam	Non-hydric
DA	Dare muck	A
De	Deloss fine sandy loam	Non-hydric
Fo	Fork loamy sand	Non-hydric
GoA	Goldsboro fine sandy loam	Non-hydric
La	Leaf silt loam	A
Le	Lenior silt loam	B
Ln	Leon sand	A
Ly	Lynchburg fine sandy loam	B
MA	Masontown loam	A
MM	Masontown mucky fine sandy loam and Muckalee sandy loam	A
Mu	Murville mucky fine sandy loam	Non-hydric
NoA	Norfolk loamy fine sand	Non-hydric
NoB	Norfolk loamy fine sand	Non-hydric
Ra	Raines fine sandy loam	A
Ro	Roanoke fine sandy loam	A
Ru	Rutledge mucky loamy fine sand	A
Se	Seabrook loamy fine sand	B
Sk	Stockade loamy fine sand	Non-hydric
Th	Tomahawk loamy sand	Non-hydric
Yo	Yonges loamy fine sand	A

Note: "A" denotes hydric soils or soils having hydric soils as a major component.
"B" denotes soils with inclusions of hydric soils or which have wet spots.

Table MP1-2. Soils at Stream Crossings

Station Number	Map Unit Symbol	Soil Map Units	Hydric Classification
10 + 20 – 16 + 00	DA	Dare muck	A
	Ln	Leon sand	A
	Mu	Murville mucky fine sandy loam	Non-hydric
38 + 70 – 43 + 70	AaA	Altavista fine sandy loam	Non-hydric
	Ap	Arapahoe fine sandy loam	A
	Cs	Charleston fine sandy loam	Non-hydric
	De	Deloss fine sandy loam	Non-hydric
	MA	Masontown loam	A
	MM	Masontown mucky fine sandy loam and Muckalee sandy loam	A
	Yo	Yonges loamy fine sand	A
59 + 70 – 61 + 00	Cs	Charleston fine sandy loam	Non-hydric
	MA	Masontown loam	A
	GoA	Goldsboro fine sandy loam	Non-hydric
	NoB	Norfolk loamy fine sand	Non-hydric
74 + 85 – 77 + 40	CrB	Craven loam	Non-hydric
	GoA	Goldsboro fine sandy loam	Non-hydric
	NoB	Norfolk loamy fine sand	Non-hydric
81 + 85 – 82 + 00	GoA	Goldsboro fine sandy loam	Non-hydric
	Le	Lenior silt loam	B
108 + 50 – 114 + 00	La	Leaf silt loam	A
134 + 75 – 137 + 30	CrB	Craven loam	Non-hydric
	GoA	Goldsboro fine sandy loam	Non-hydric
	Le	Lenior silt loam	B
	Ly	Lynchburg fine sandy loam	B
	MA	Masontown loam	A
644 + 00 – 673	Ba	Ballahack fine sandy loam	Non-hydric
	Fo	Fork loamy sand	Non-hydric
	Yo	Yonges loamy fine sand	A

Table MP1-3. Vegetation at Stream Crossings

Station Number	**Vegetative Community (per Schafale/Weakley)**	**Dominant Plants (Common Names)**
10 + 20 – 16 +00	Coastal Plain Small Stream Swamp	Red Maple, Sweetgum, Tulip tree
38 + 70 – 43 + 70	Cypress-Gum Swamp	Blackgum, Red Maple, Sweetgum
59 + 70 – 61 + 00	Cypress-Gum Swamp	Blackgum, Red Maple, Sweetgum
74 + 85 – 77 + 40	Coastal Plain Bottomland Hardwoods	Water Oak, Sweetgum, Tulip tree
81 + 85 – 82 + 00	Cypress-Gum Swamp	Blackgum, Red Maple, Sweetgum
108 + 50 – 114 + 00	Cypress-Gum Swamp	Blackgum, Red Maple, Sweetgum
134 + 75 – 137 + 30	Coastal Plain Bottomland Hardwoods/ Cypress-Gum Swamp	Water Oak, Sweetgum, Tulip tree / Blackgum, Red Maple, Sweetgum

Form DCM-MP-5 258

BRIDGES AND CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM-MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project.

1. BRIDGES R-2539 A , Station 40+00-43

a. **Public** X **Private** _____

b. **Type of bridge (construction material)**
Prestressed concrete girders

c. **Water body to be crossed by bridge**
Upper Broad Creek

d. **Water depth at the proposed crossing at MLW or NWL** +/- 2 ft

e. **Will proposed bridge replace an existing bridge?**
X **Yes** _____ **No**
If yes,
(1) **Length of existing bridge** 214 ft
(2) **Width of existing bridge** 29 ft
(3) **Navigation clearance underneath existing bridge** 8 ft
(4) **Will all, or a part of, the existing bridge be removed? (Explain)** Yes, all of the existing bridge will be removed as the new bridge is built.

f. **Will proposed bridge replace an existing culvert(s)?**
_____ **Yes** X **No**
If yes,
(1) **Length of existing culvert** _____
(2) **Width of existing culvert** _____
(3) **Height of the top of the existing culvert above the MHW or NWL** _____
(4) **Will all, or a part of, the existing culvert be removed? (Explain)** _____

g. **Length of proposed bridge** ~~720 ft~~ changed in revised Cover letter to 722' 8/28/02 1210 PM

h. **Width of proposed bridge** 65 ft

i. **Height of proposed bridge above wetlands**
10 ft

j. **Will the proposed bridge affect existing water flow?**
_____ **Yes** X **No**
If yes, explain _____

k. **Navigation clearance underneath proposed bridge**
8 ft

l. **Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening?** _____ **Yes** X **No**
If yes, explain : New bridge will be longer

m. **Will the proposed bridge cross wetlands containing no navigable waters?** X **Yes** ___ **No**
If yes, explain : Wetlands will be restored under the new bridge

n. **Have you contacted the U.S. Coast Guard concerning their approval?**
___ **Yes** X **No**
If yes, please provide record of their action.
_____

2. CULVERTS

a. **Water body in which culvert is to be placed**

b. **Number of culverts proposed** _____

c. **Type of culvert (construction material, style)**

d. Will proposed culvert replace an existing bridge?
____ Yes __X__ No
If yes,
(1) Length of existing bridge _____
(2) Width of existing bridge _____
(3) Navigation clearance underneath existing bridge _____
(4) Will all, or a part of, the existing bridge be removed? (Explain) _____

e. Will proposed culvert replace an existing culvert?
_____
____ Yes ____ No
If yes,
(1) Length of existing culvert _____
(2) Width of existing culvert _____
(3) Height of the top of the existing culvert above the MHW or NWL _____
(4) Will all, or a part of, the existing culvert be removed? (Explain) _____

f. Length of proposed culvert _____

g. Width of proposed culvert _____

h. Height of the top of the proposed culvert above the MHW or NWL _____

i. Will the proposed culvert affect existing water flow?
____ Yes ____ No
If yes, explain _____

j. Will the proposed culvert affect existing navigation potential? ____ Yes ____ No
If yes, explain _____
_____

3. EXCAVATION AND FILL

a. Will the placement of the proposed bridge or culvert require any excavation below the MHW or NWL?
__X__ Yes ____ No

See Attached Permit Drawings

If yes,
(1) Length of area to be excavated _____
(2) Width of area to be excavated _____
(3) Depth of area to be excavated _____
(4) Amount of material to be excavated in cubic yards _____

b. Will the placement of the proposed bridge or culvert require any excavation within:
__Coastal Wetlands__SAVs Section 404 Other Wetlands

If yes,

See Attached Permit Drawings

(1) Length of area to be excavated _____
(2) Width of area to be excavated _____
(3) Amount of material to be excavated in cubic yards _____

c. Will the placement of the proposed bridge or culvert require any highground excavation?
__X__Yes ____ No
If yes,

See Attached Permit Drawings

____(1) Length of area to be excavated _____
(2) Width of area to be excavated _____
(3) Amount of material to be excavated in cubic yards 977 cu yds

d. If the placement of the bridge or culvert involves any excavation, please complete the following:
(1) Location of the spoil disposal area
Approved upland disposal site.
(2) Dimensions of spoil disposal area
Unknown at this t ime
(3) Do you claim title to the disposal area?
____ Yes __X__ No
If no, attach a letter granting permission from the owner.
(4) Will the disposal area be available for future maintenance? ____ Yes __X__ No
(5) Does the disposal area include any coastal wetlands (marsh), SAVs, or other wetlands?
____ Yes __X__ No
If yes, give dimensions if different from (2) above. _____
(6) Does the disposal area include any area below the MHW or NWL? _ Yes __X__ No
If yes, give dimension if different from No. 2 above. _____

e. Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d. above) to be placed below MHW or NWL? ____Yes __X__ No
If yes,
(1) Length of area to be filled _____
(2) Width of area to be filled _____
(3) Purpose of fill_____

f. Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d. above) to be placed within:
__ Coastal Wetlands __ SAVs Section 404 Other Wetlands.
See Attached Permit Drawings
If yes,

(1) Length of area to be filled _____
(2) Width of area to be filled _____
(3) Purpose of fill Provide wider road base

g. Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d. above) to be placed on highground? __X__ Yes ____ No
If yes,
See Attached Permit Drawings

(1) Length of area to be filled _____
(2) Width of area to be filled _____
(3) Purpose of fill Provide wider road base

4. GENERAL

a. Will the proposed project involve any mitigation?
__X__ Yes ____ No
If yes, explain in detail
See cover letter

b. Will the proposed project require the relocation of any existing utility lines? __X__ Yes ____ No
If yes, explain in detail Telephone lines and power lines.

c. Will the proposed project require the construction of any temporary detour structures?
____Yes __X__ No
If yes, explain in detail: Existing bridge will be used as the detour bridge

d. Will the proposed project require any work channels? ____ Yes __X__ No
If yes, complete Form DCM-MP-2

e. How will excavated or fill material be kept on site and erosion controlled? Silt fence, diversion ditches and NCDOT Type "B" basins.

f. What type of construction equipment will be used (for example, dragline, backhoe or hydraulic dredge)? Backhoe, bulldozer, crane.

g. Will wetlands be crossed in transporting equipment to project site? _____Yes __X__ No
If yes, explain steps that will be taken to lessen environmental impacts.

h. Will the placement of the proposed bridge or culvert require any shoreline stabilization?
____Yes __X__ No
If yes, explain in detail

Applicant or Project Name:
NCDOT NC 55 Widening R-2539A

Signature Vinton Charles Gupta

Date August 13, 2002

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Revised 1-28-05

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

REPLY TO
ATTENTION OF:

January 18, 2005

Regulatory Division

Action ID No. 199303531

Dr. Gregory J. Thorpe, Ph.D.
Environmental Management Director, PEDA
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Thorpe:

Reference the Department of the Army (DA) permit issued to you on May 9, 2003, and a modification to this permit issued on September 29, 2003, associated with the widening of approximately 14.2 miles of NC 55 from 0.7 miles east of US 17 in Bridgeton to NC 304 in Bayboro, Craven and Pamlico Counties, North Carolina (TIP R-2539, Federal Aid Project STP-55(1), State Project No. 8.1170901). Also reference your subsequent written request dated October 14, 2004, for a permit modification to:

1. Submit the attached final permit drawings and relevant information for R-2539 Section C. The final design revisions resulted in five sites differing from those submitted with the original permit application. These changes resulted in 4.90 additional non-riverine wetland impacts and 145.6 additional feet of stream impacts.

2. Mitigate for the additional wetland and stream impacts by utilizing the Ecosystem Enhancement Program to mitigate for 0.52 acres of non-riverine wetlands and 145.6 feet of stream located in Cataloging Unit 03020105 of the Tar-Pamlico River Basin and 4.38 acres of non-riverine wetlands located in Cataloging Unit 03020204 of the Neuse River Basin.

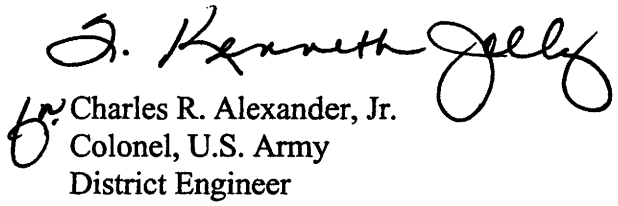
This modification request was coordinated with the North Carolina Division of Water Quality, and other appropriate State and Federal agencies. The coordination revealed no objections to this modification request. Therefore, the permit is hereby modified in accordance with the specific work activities described above and in the enclosed plans. It is understood that all conditions of the original permit remain applicable and that the expiration date is unchanged. In addition, the permittee will comply with the following special permit condition:

a. Compensatory mitigation for the unavoidable impacts within the Tar-Pamlico River Basin to 0.52 acres of non-riverine wetlands and 145.6 linear feet of stream associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP). The EEP will provide 5.2 acres of preservation of non-riverine wetlands and 1,456 linear feet of stream preservation in the Southern Outer Coastal Plain Eco-Region at the Wallace Deer Club Tracts 1-5 in Pender County that has been acquired and protected by the EEP. Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide a minimum of 0.52 acres of restoration of non-riverine wetlands and 145.6 feet of stream restoration in the Tar-Pamlico River Basin (Hydrologic Cataloging Unit 03020105) by July 22, 2005, and half of the proposed preservation mitigation would be available at that time for mitigation for other project impacts. 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.

b. Compensatory mitigation for the remaining unavoidable impacts within the Neuse River Basin to 4.38 acres of non-riverine wetlands associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP). Pursuant to the EEP Memorandum of Agreement (MOA) between the State of North Carolina and the US Army Corps of Engineers signed on July 22, 2003, the EEP will provide a minimum of 8.76 acres of existing restoration equivalents of non-riverine wetlands, Neuse River Basin (Hydrologic Cataloging Unit 03020204). At least half of the 8.76 acre requirement must be in the form of 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.

Any questions regarding this correspondence may be directed to Mr. William Biddlecome, NCDOT Coordinator/Regulatory Project Manager at the Washington Regulatory Field Office, telephone (252) 975-1616, extension 31.

Sincerely,



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

Enclosure

Copies Furnished (without enclosure):

Ms. Cathey Brittingham
Division of Coastal Management
1638 Mail Service Center
Raleigh, North Carolina 27699-16387

Mr. John Hennessy
NCDENR-DWQ
Wetlands Section
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

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

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

Mr. Ronald Mikulak, Chief
Wetlands Regulatory Section - Region IV
Environmental Protection Agency
Atlanta Federal Center
100 Alabama Street, SW
Atlanta, Georgia 30365

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

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December 10, 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

Dear Dr. Thorpe:

Re: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act, Widening of NC 55 from US 17 in Bridgeton to NC 304 in Bayboro, Craven and Pamilico Counties. WQC Project No. 021232, TIP No. R-2539C.

Attached hereto is a copy of a modification to Certification No. 3415 issued to The North Carolina Department of Transportation dated March 17, 2003. This certification authorizes the NCDOT for the following impacts:

Wetland, Surface Water and Protected Riparian Buffer Impacts

Section	Fill in Wetlands (acres)	Excavation & Drainage (acres)	Mechanized Clearing (acres)	Streams (Linear Feet)	Other surface waters (acres)	Buffer Zone 1 (acres)	Buffer Zone 2 (acres)
R-2539C (Original 401 WQC)	1.52	1.96	1.50	209	0.07	0.37	0.21
R-2539C (Additional Impacts with this Modification)	+0.95	+4.32	-0.37	+146	0	+0.33	+0.23
Total	**2.47**	**6.28**	**1.13**	**355**	**0.07**	**0.70**	**0.44**
Net Total for Wetland Impacts		**9.88**					
Net Total for Buffer Impacts						**1.14**	

This certification modifies only segment C of the widening of NC 55 from Bridgeton to Bayboro and shall be constructed pursuant to the application dated received on October 19, 2004 and all subsequent submittals and revisions. All the authorized activities and conditions of the certification associated with the original Water Quality Certification dated March 17, 2003 and all subsequent modifications still apply except where superceded by this certification.

Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604
Phone: 919-733-1786 / FAX 919-733-6893 / Internet: http://h2o.enr.state.nc.us/ncwetlands

If we can be of further assistance, do not hesitate to contact Nicole Thomson at 919-715-3415.

Sincerely,

John E. Hennessy

Alan W. Klimek, P.E.
Director

Attachments

cc: Wilmington District US Army Corps of Engineers
Mr. Mike Bell, Corps of Engineers Washington Field Office
Mr. Mike Thomas, NC DWQ Washington Regional Office
Mr. Christopher Militscher, US Environmental Protection Agency – Region IV
Mr. William Gilmore, P.E. Transition Manager, NC DENR Ecosystem Enhancement Program
Mr. C.E. Lassiter, Jr., P.E. Division 2 Engineer, PO Box 1587, Greenville, NC 27835
Mr. Jay Johnson, Division 2 Environmental Officer, PO Box 1587, Greenville, NC 27835
Central Files
File Copy

Modification of APPROVAL OF 401 Water Quality Certification and ADDITIONAL CONDITIONS and Tar-Pamlico River Buffer Authorization

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 .0259. This certification authorizes the NCDOT for the following impacts:

Wetland, Surface Water and Protected Riparian Buffer Impacts

Section	Fill in Wetlands (acres)	Excavation & Drainage (acres)	Mechanized Clearing (acres)	Streams (Linear Feet)	Other surface waters (acres)	Buffer Zone 1 (acres)	Buffer Zone 2 (acres)
R-2539C (Original 401 WQC)	1.52	1.96	1.50	209	0.07	0.37	0.21
R-2539C (Additional Impacts with this Modification)	+0.95	+4.32	-0.37	+146	0	+0.33	+0.23
Total	**2.47**	**6.28**	**1.13**	**355**	**0.07**	**0.70**	**0.44**
Net Total for Wetland Impacts	**9.88**						
Net Total for Buffer Impacts						**1.14**	

Impacts to Tar-Pamlico Riparian Buffers

Section	Zone 1 (Sq. Ft.)	Zone 2 (Sq. Ft.)
Site 3 (STA 196+00 –L)	10,793	6,495
Site 3 (STA 199+77 –L)	10,440	6,373
Site 3A (STA 12+10 –Y7)	750	1,064
Site 5 (STA 206+00)	8,442	5,039
Total	**30,425**	**18,971**
Impacts Requiring Mitigation	**21,233**	**12,868**
Onsite Buffer Replacement	1,186	0
Total Remaining Impacts Requiring Mitigation	**20,047**	**12,868**

This certification modifies only segment C of the widening of NC 55 from Bridgeton to Bayboro and shall be constructed pursuant to the application dated received on October 19, 2004 and all subsequent submittals and revisions. All the authorized activities and conditions of the certification associated with the original Water Quality Certification dated March 17, 2003 and all subsequent modifications still apply except where superceded by this certification.

The application provides adequate assurance that the discharge of fill material into the waters of the Tar-Pamlico and Neuse River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity

will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your 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 any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Corps of Engineers Permit, whichever is sooner.

Condition(s) of Certification:

1. 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.

2. All sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored after the Division of Land Resources has released the project.

3. Pursuant to NCAC15A 2B.0233(6) and NCAC15A 2B.0259(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse or Tar-Pamlico Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.

4. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1.

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. 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.

9. 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.

10. The Ecosystem Enhancement Program (EEP) previously provided wetland mitigation for Sections A and B and a portion of the mitigation required for Section C at the initial 404 and 401 permit issuance. The additional amounts of impact requiring mitigation are as follows:

Wetlands Impacted	Impacts (Ac)	Replacement Ratio	Mitigation Site	Acres of Mitigation Credited
Non-Riverine Wetland Impacts Tar-Pamlico River Basin	0.63	10:1	Wallace Club Deer Tract 1 and 2, Pender County	6.30
Non-Riverine Wetland Impacts Neuse River Basin)	4.4	2:1	Cataloging Unit 03020204 of the Neuse River Basin	8.8

11. We understand that you have chosen to perform compensatory mitigation for impacts to 145.6 linear feet o streams through the North Carolina Ecosystem Enhancement Program (NCEEP), and that the EEP has agreed to implement the mitigation for the project

12. Compensatory mitigation for the additional impacts to 0.76 acres (20,047 square feet in Zone 1 and 12,868 square feet in Zone 2) of Tar-Pamlico Riparian Buffers shall be provided for as described below.

Zone of Impact	Impacts (Square Feet)	Replacement Ratio	Total Square Feet of Mitigation Required
Zone 1	20,047	3:1	60,141
Zone 2	12,868	1.5:1	19,302
Total	32,915		79,443

We understand that you have chosen to perform compensatory mitigation for impacts to protected buffers through an in lieu payment to the North Carolina Ecosystem Enhancement Program (NCEEP), and that the EEP has agreed to implement the mitigation for the project. Mitigation for unavoidable impacts to Tar-Pamlico Riparian Buffers shall be provided through an in-lieu payment to the North Carolina Ecosystem Enhancement Program (NCEEP) at a rate of $0.96 per square foot. Therefore, a total payment of $76,265.28 shall be submitted to the NCEEP to offset the impacts. No construction activities in Tar-Pamlico River Riparian buffers shall begin until payment for buffer mitigation is made and the Ecosystem Enhancement Program receives and clears your check (made payable to DENR – Ecosystem Enhancement Program).

13. All stormwater runoff shall be directed to sheetflow through stream buffers at nonerosive velocities, unless approved otherwise by this certification.

14. 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.

15. 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.

16. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

17. 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.

18. Any riprap used must not interfere with thalweg performance and aquatic life passage during low flow conditions.

19. 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.

20. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.

21. All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated with native woody species upon completion of the project construction. A post-construction as-built with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the Department of Transportation.

22. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.

23. 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.

24. 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.

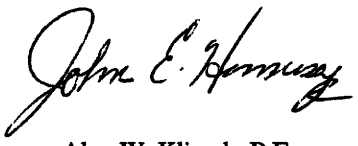
25. A copy of this Water Quality Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification (and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.

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 10th day of December 2004

DIVISION OF WATER QUALITY



Alan W. Klimek, P.E.
Director

WQC No. 3415

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

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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 _____

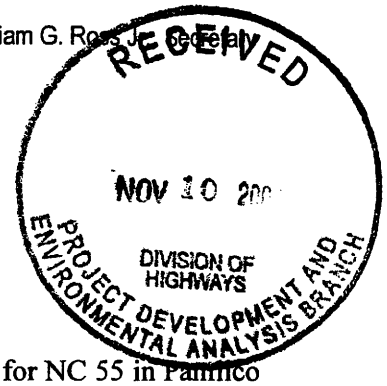
Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604
Phone: 919-733-1786 / FAX 919-733-6893 / Internet: http://h2o.enr.state.nc.us/ncwetlands

Collista Tyndall

NCDENR 272

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

Michael F. Easley, Governor | **Charles S. Jones, Director** | William G. Ross Jr., Secretary



November 8, 2004

Gregory J Thorpe, PhD, Environmental Management Director
Project Development & Environmental Analysis Branch
N.C. Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

RE: Request for a Modification to authorize the C Section of the widening project for NC 55 in Pamlico County, TIP No. R-2539. NCDOT Letter dated 10/14/04 with accompanying drawings and revised drawing 13 of 24 dated 11/1/04 requesting a Modification of the existing CAMA Permit No. 55-03.

Dear Dr. Thorpe:

This letter is in response to the N.C. Department of Transportation's (NCDOT's) request dated October 14, 2004 requesting a Modification for CAMA Major Permit No. 55-03. The NCDOT letter requests authorization for construction of the C Section of the widening project for NC 55 in Pamlico County, TIP No. R-2539.

Please be advised that through this **Letter of Refinement**, DCM conveys its determination that this request as described in the October 14, 2004 NCDOT correspondence to Bill Arrington, is consistent with existing State rules and regulations and is in keeping with the original purpose and intent of the CAMA permit, with the following conditions.

1. This letter does not eliminate the need to obtain any additional state, federal or local permits, approvals or authorizations that may be required.

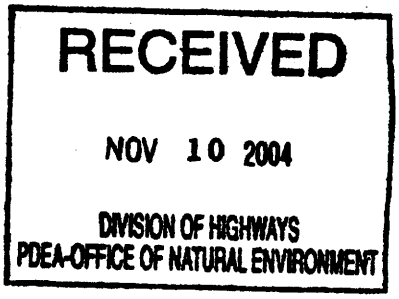
2. This Letter of Refinement must be attached to the original of CAMA Permit No. 55-03, which was issued on April 22, 2003 and both documents must be readily available on site when a DCM representative inspects the project for compliance.

3. All conditions and stipulations of the active permit remain in force unless altered herein.

Please contact Bill Arrington at (252) 528-0019 if you have any questions or concerns.

Sincerely,

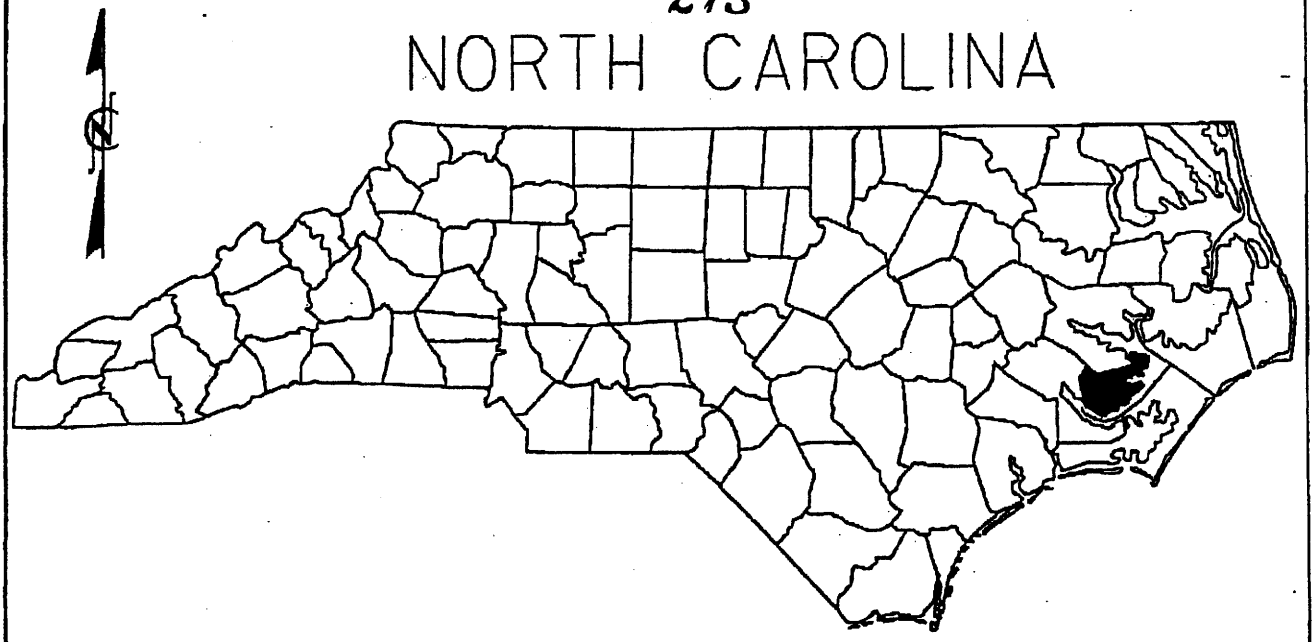
Tere Barrett, MHC District Manager
NC Division of Coastal Management.

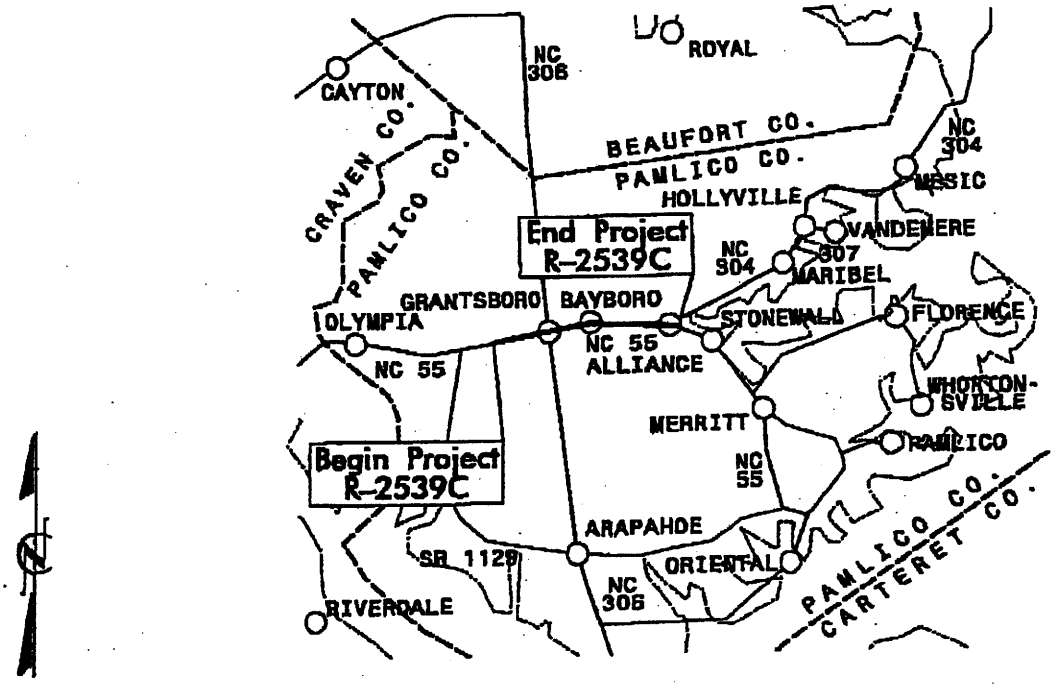


Cc: Ted Tyndall, DCM
Doug Huggett, DCM
Steve Sollod, DCM
Bill Arrington, DCM
Mike Bell, USACE
Nicole Thomson, DWQ

1638 Mail Service Center, Raleigh, North Carolina 27699-1638
Phone: 919-733-2293 \ FAX: 919-733-1495 \ Internet: www.nccoastalmanagement.net

273





VICINITY MAPS

NCDOT

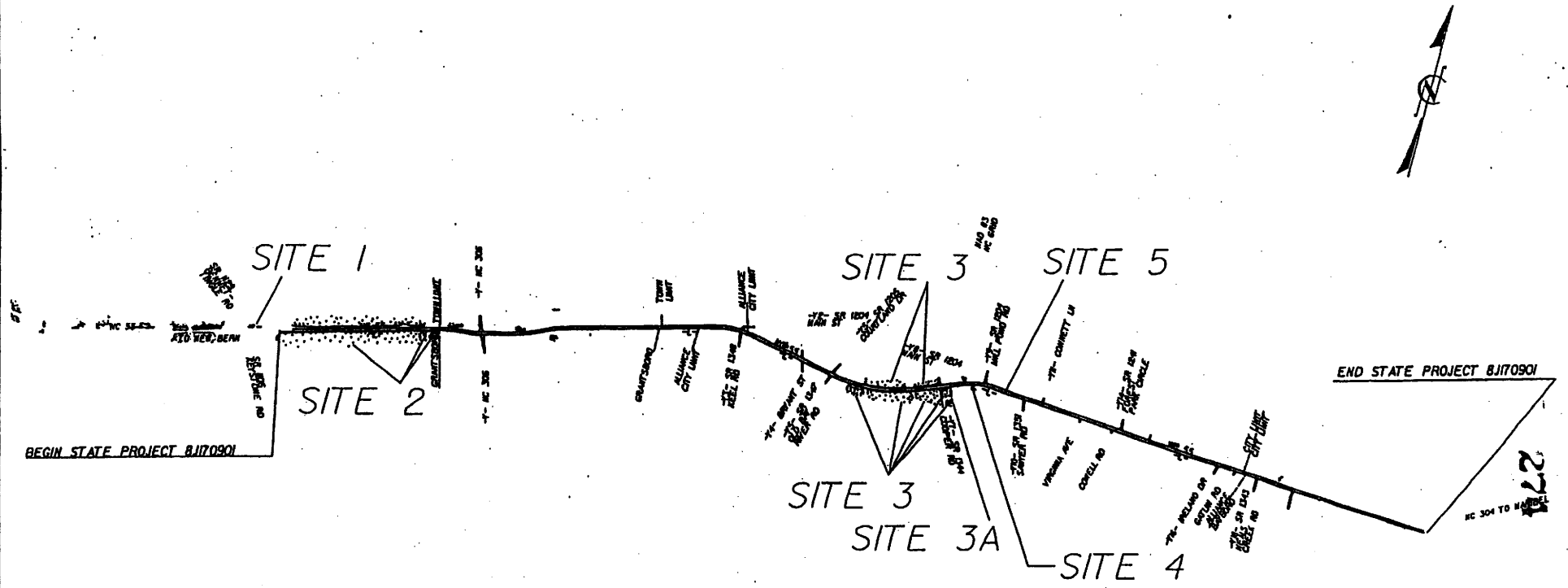
DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

SHEET 1 OF 24 7/9/03



SITE MAP

NCDOT

DIVISION OF HIGHWAYS

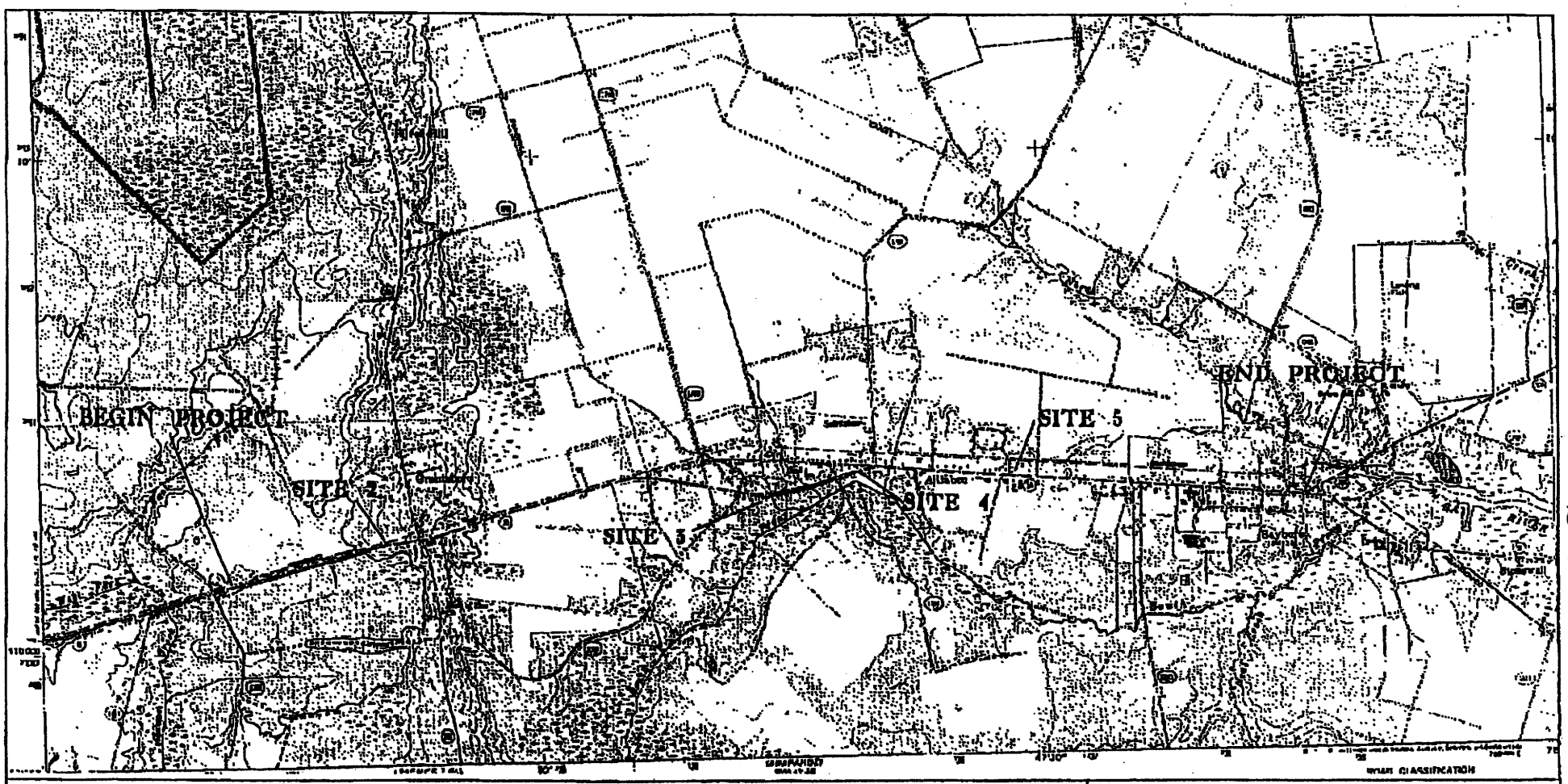
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 2 OF 24 8/23/04



TOPO MAP

SCALE 1" = 4000'

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 3 OF 24 7/9/03

WETLAND276 LEGEND

WLB — WETLAND BOUNDARY

WETLAND

DENOTES FILL IN WETLAND

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN SURFACE WATER (POND)

DENOTES TEMPORARY FILL IN WETLAND

DENOTES EXCAVATION IN WETLAND

DENOTES TEMPORARY FILL IN SURFACE WATER

DENOTES MECHANIZED CLEARING

FLOW DIRECTION

TB — TOP OF BANK

WE — EDGE OF WATER

C — PROP. LIMIT OF CUT

F — PROP. LIMIT OF FILL

PROP. RIGHT OF WAY

NG — NATURAL GROUND

PL — PROPERTY LINE

TDE — TEMP. DRAINAGE EASEMENT

PDE — PERMANENT DRAINAGE EASEMENT

EAB — EXIST. ENDANGERED ANIMAL BOUNDARY

EPB — EXIST. ENDANGERED PLANT BOUNDARY

WATER SURFACE

LIVE STAKES

BOULDER

CORE FIBER ROLLS

PROPOSED BRIDGE

PROPOSED BOX CULVERT

PROPOSED PIPE CULVERT
12"-48" PIPES
54" PIPES & ABOVE

(DASHED LINES DENOTE EXISTNG STRUCTURES)

SINGLE TREE

WOODS LINE

DRAINAGE INLET

ROOTWAD

RIP RAP

5 — ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE

PREFORMED SCOUR HOLE

LEVEL SPREADER (LS)

DITCH / GRASS SWALE

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

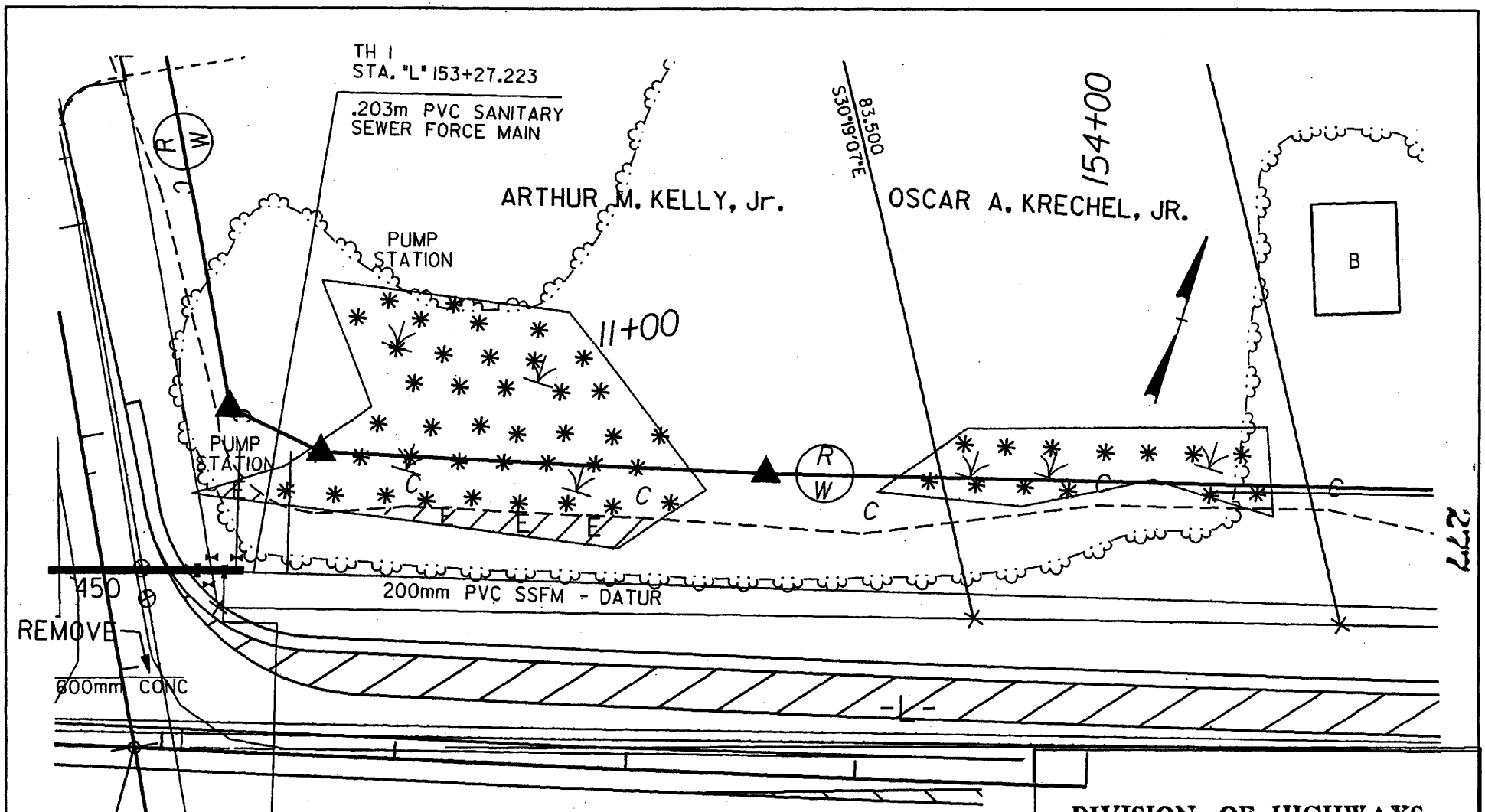
PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 4 OF 24

7/9/03

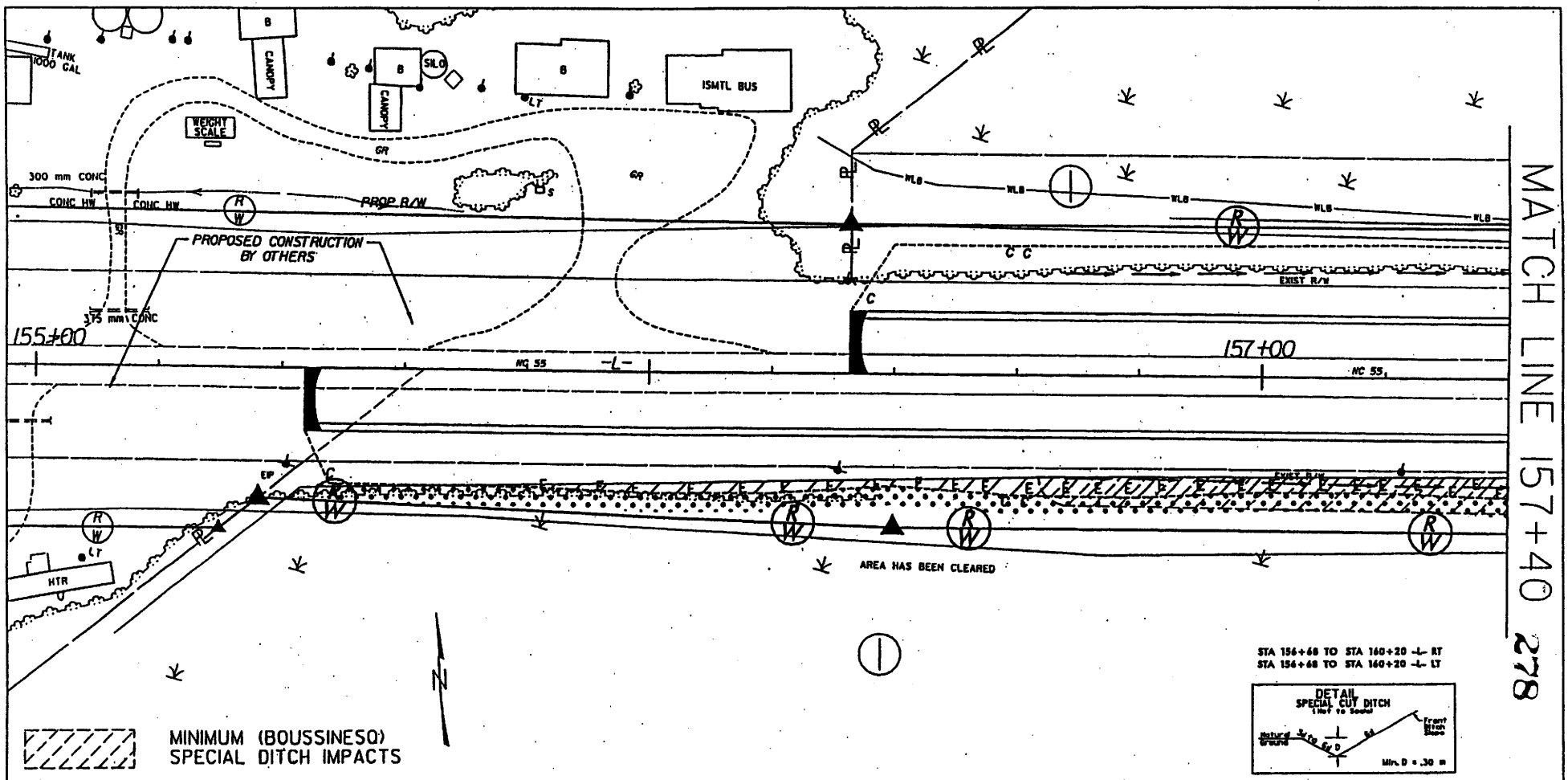


POC Sta 153+18.284 -L- =
POT Sta 11+26.788 -Y10-

PLAN VIEW
WETLAND
IMPACTS
SITE 1
SCALE = 1:500

DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 5 OF 24 8/13/04



PLAN VIEW
WETLAND
IMPACTS
SITE 2
SCALE = 1:1000

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

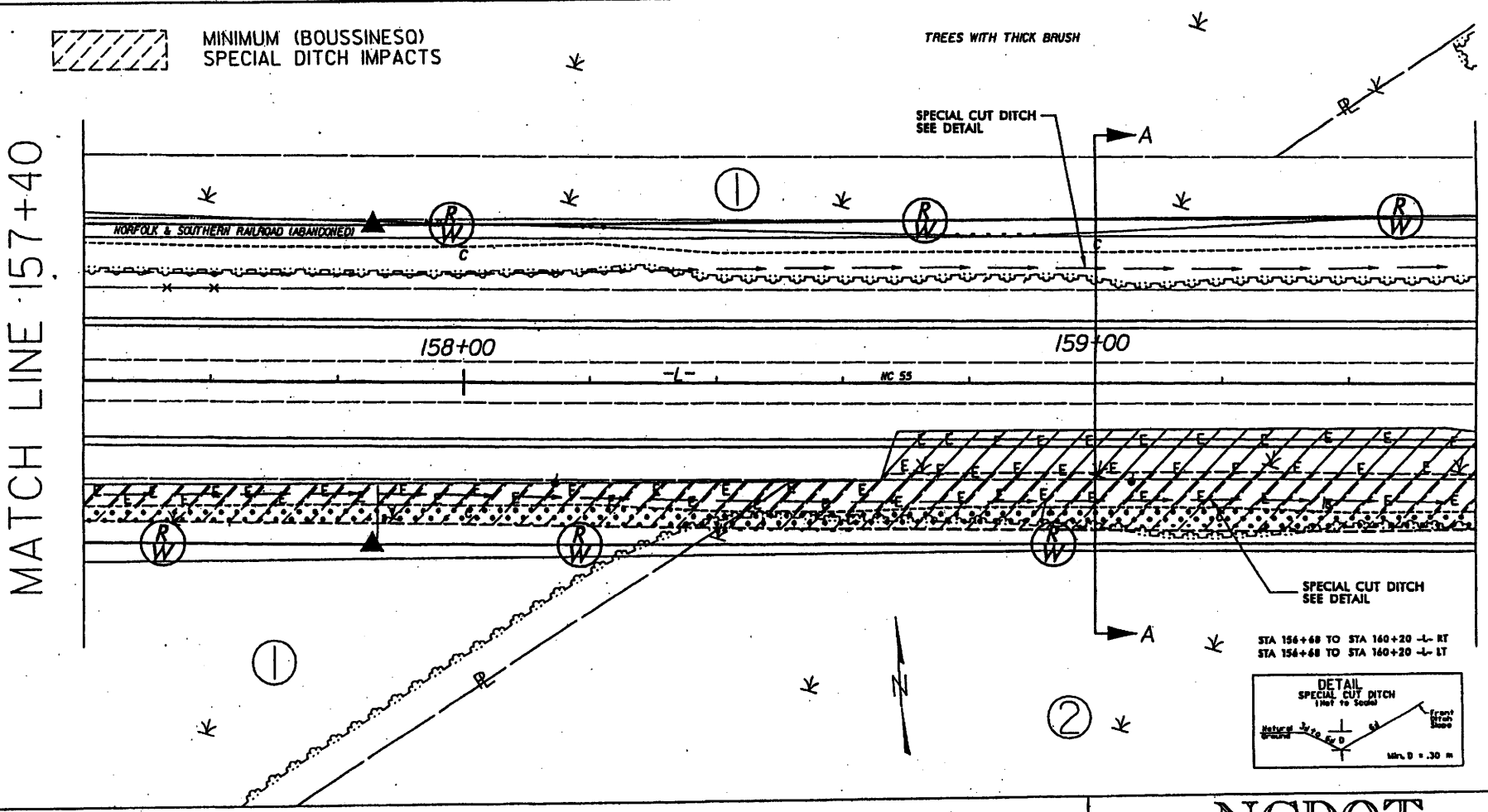
NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 6 OF 24

Rev 10/11/04
12/18/03

278



PLAN VIEW
WETLAND
IMPACTS
SITE 2
SCALE = 1:1000

NCDOT
DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

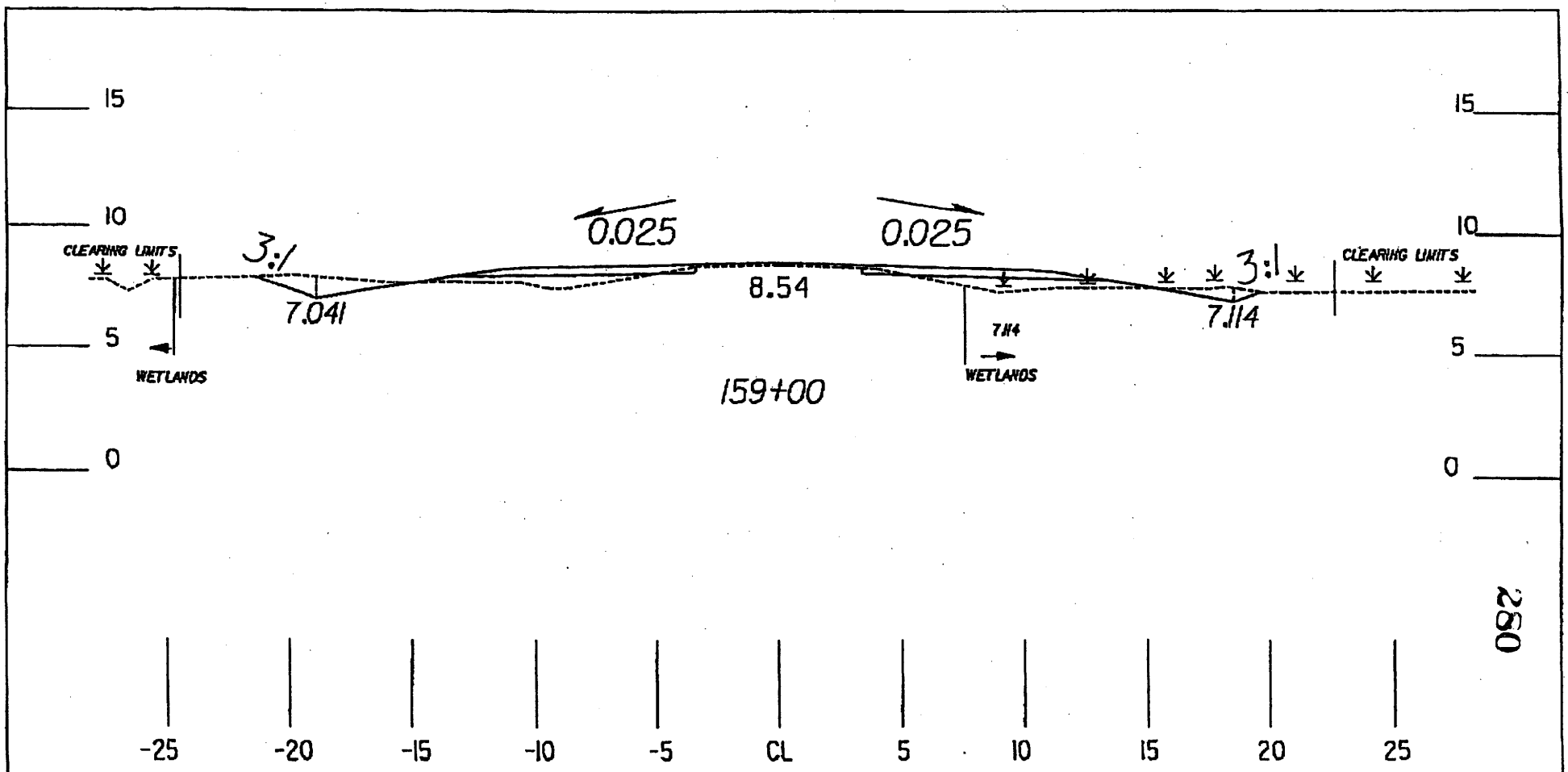
NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 7 OF 24

Rev 10/11/04
12/18/03

279



CROSS SECTION A-A

STA 159+00

SITE 2

SCALE = HORIZ. 1:250 VERT. 1:250

NCDOT

DIVISION OF HIGHWAYS

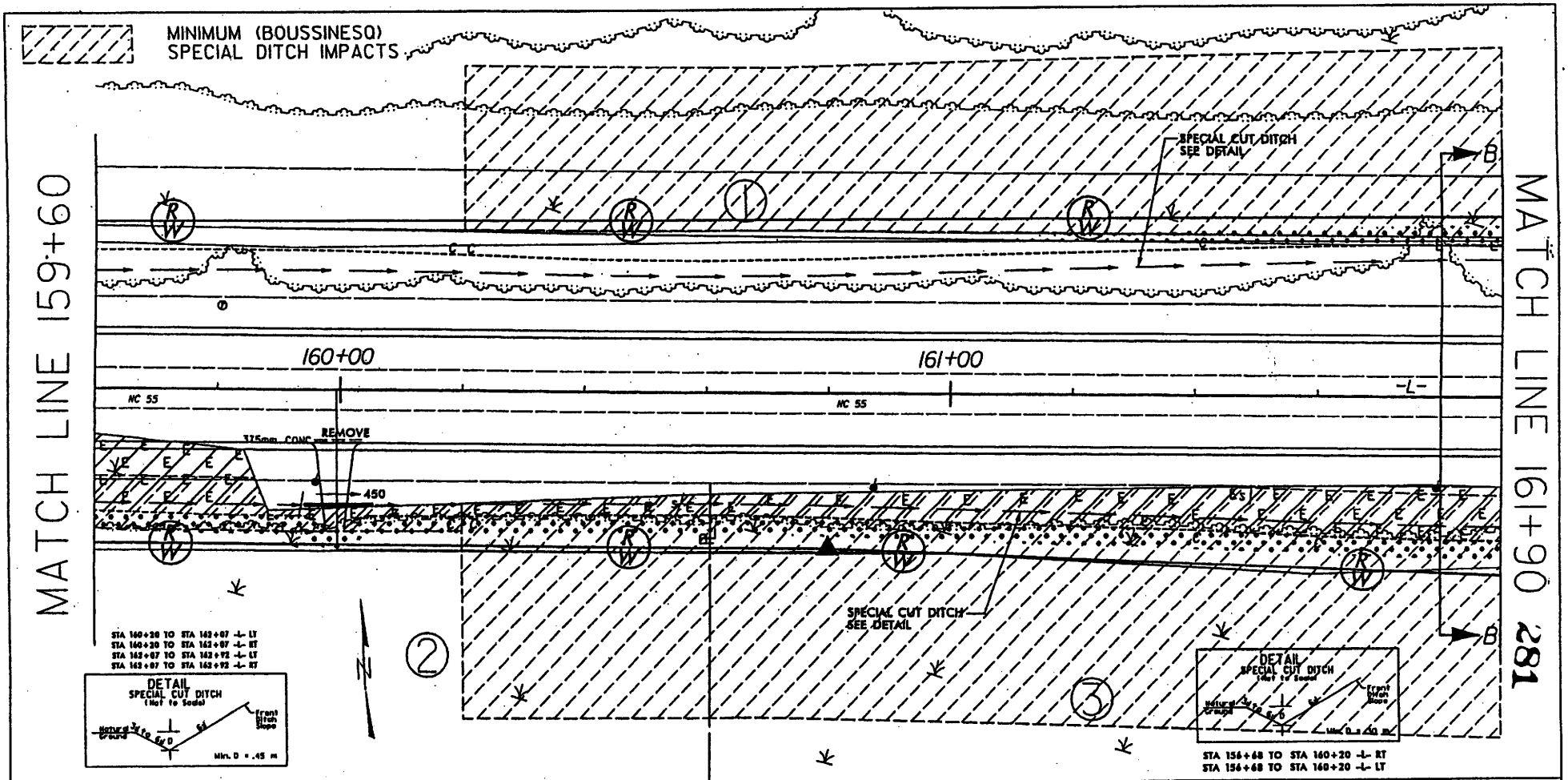
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 8 OF 24 1/19/04



281

PLAN VIEW
WETLAND
IMPACTS
SITE 2
SCALE = 1:1000

NCDOT

DIVISION OF HIGHWAYS

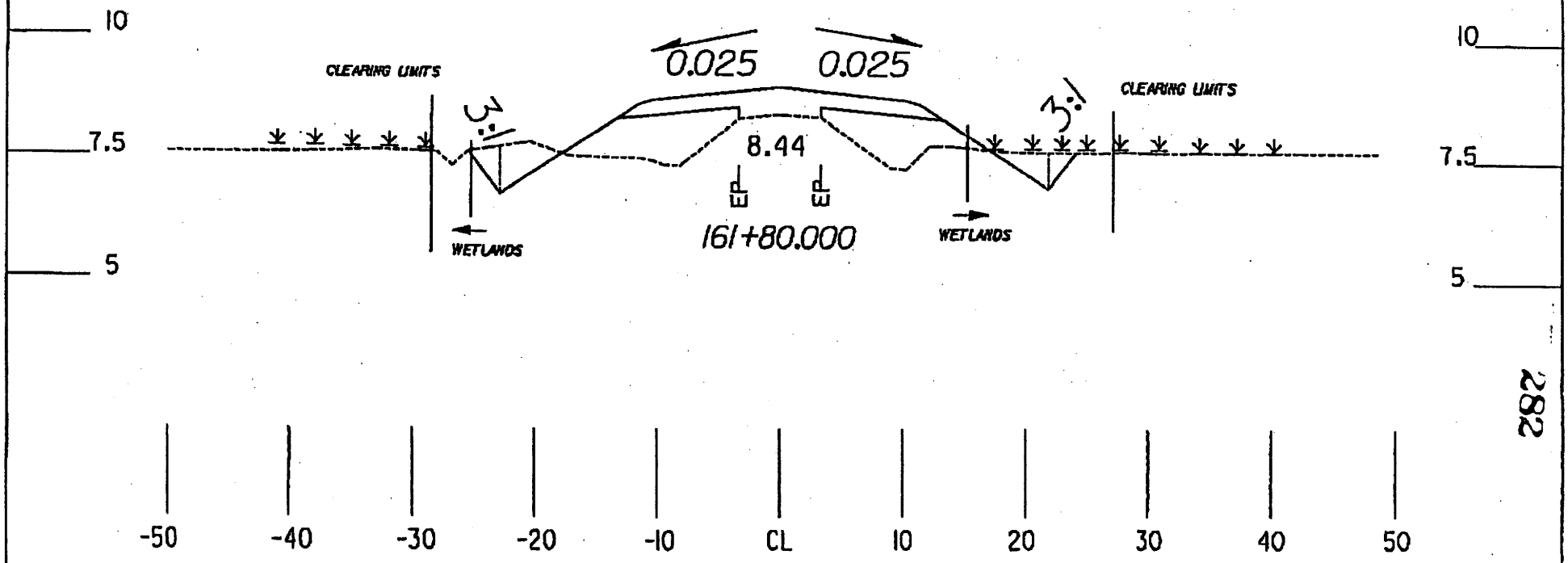
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 9 OF 24 8/23/04

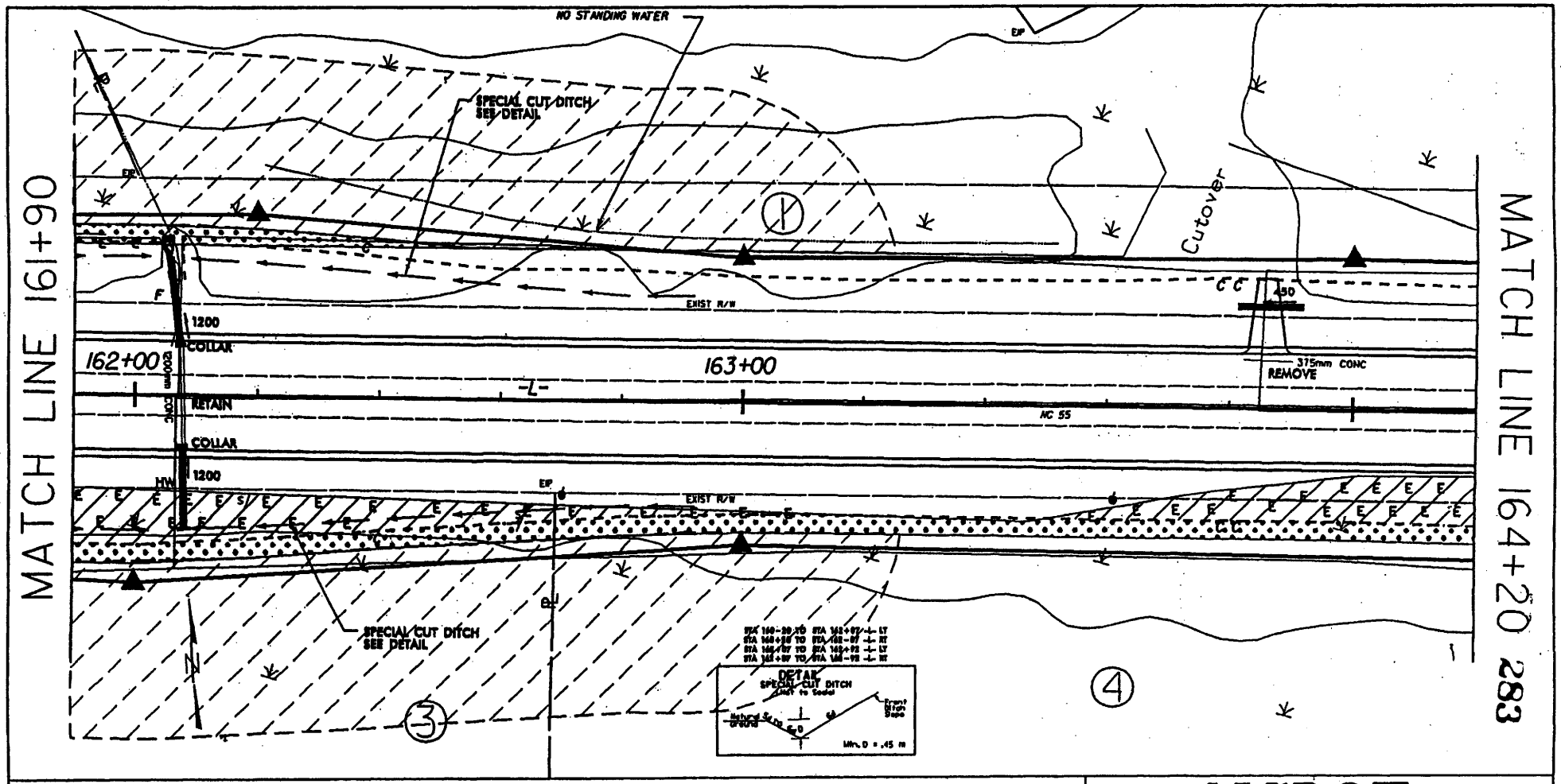


282

CROSS SECTION B-B
STA 161 + 80
SITE 2
SCALE = HORIZ. 1:500 VERT. 1:125

NCDOT
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 10 OF 24 1/19/04



MINIMUM (BOUSSINESQ) SPECIAL DITCH IMPACTS

PLAN VIEW WETLAND IMPACTS SITE 2

SCALE = 1:1000

NCDOT

DIVISION OF HIGHWAYS

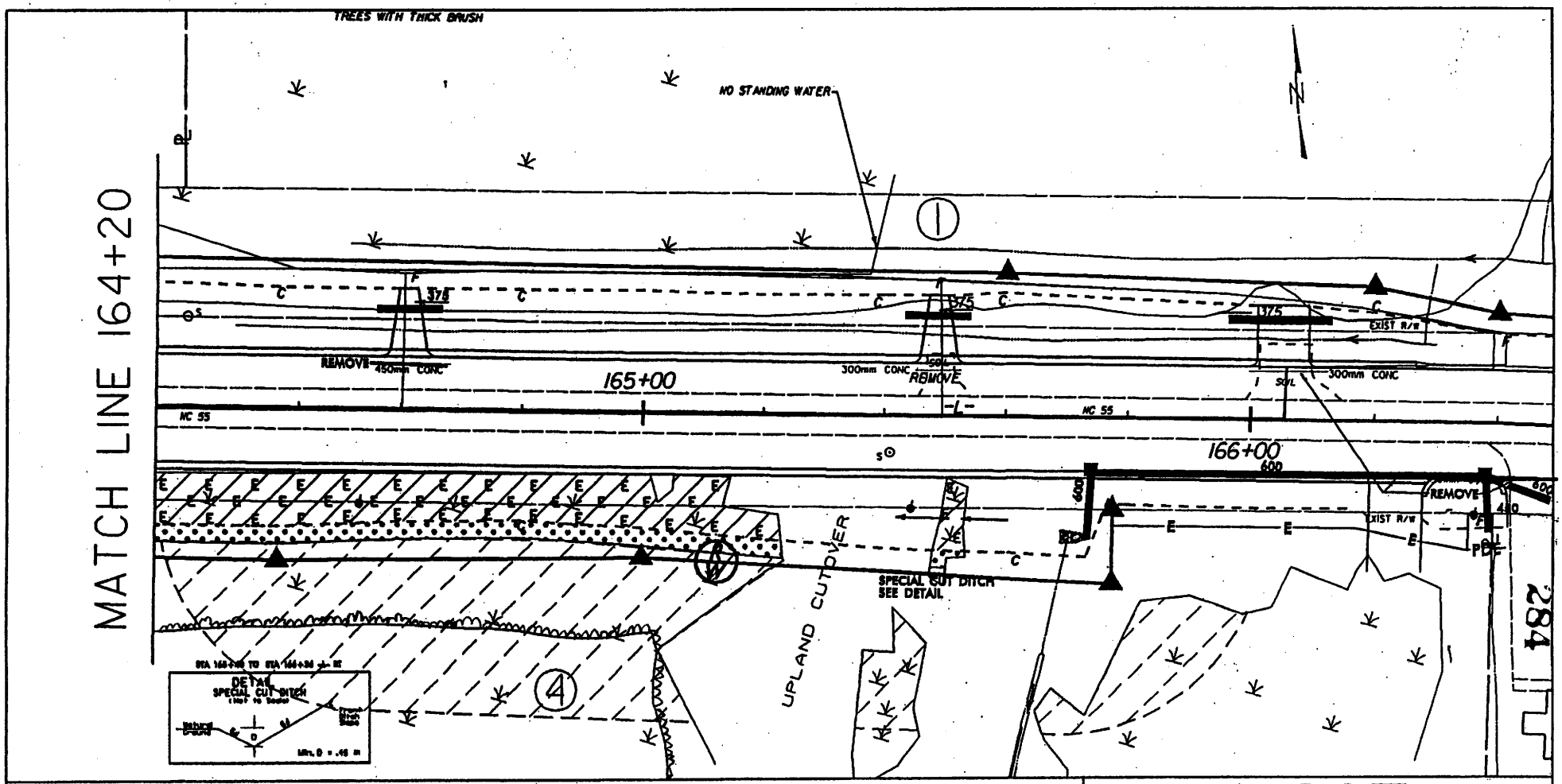
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

SHEET 11 OF 24

Rev 10/11/04
12/18/03



MINIMUM (BOUSSINESQ) SPECIAL DITCH IMPACTS

PLAN VIEW WETLAND IMPACTS SITE 2

SCALE = 1:1000

NCDOT

DIVISION OF HIGHWAYS

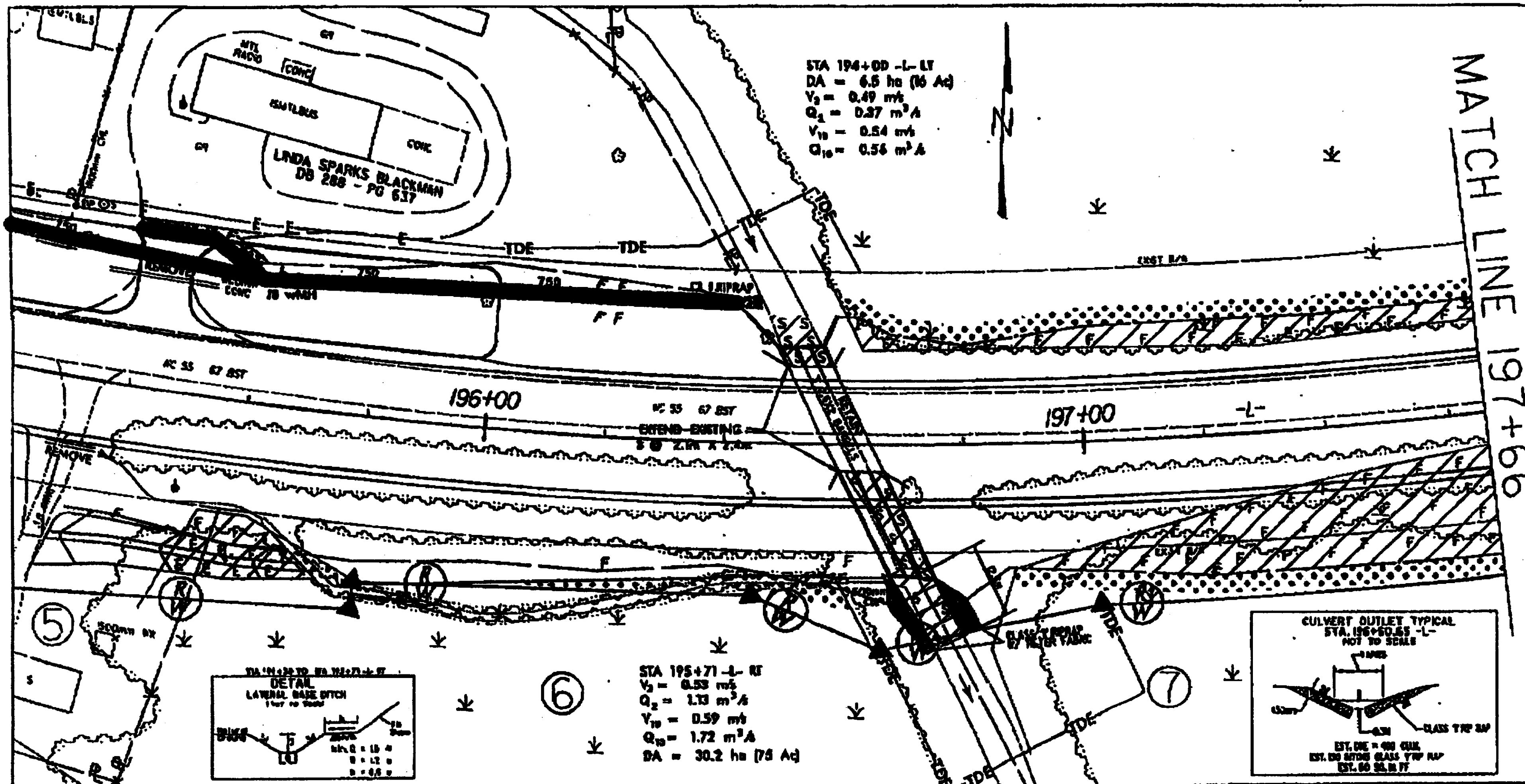
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

SHEET 12 OF 24

Rev 10/11/04
12/18/03



PLAN VIEW
STREAM & WETLAND IMPACTS
SITE 3
SCALE = 1:1000

NCDOT

DIVISION OF HIGHWAYS

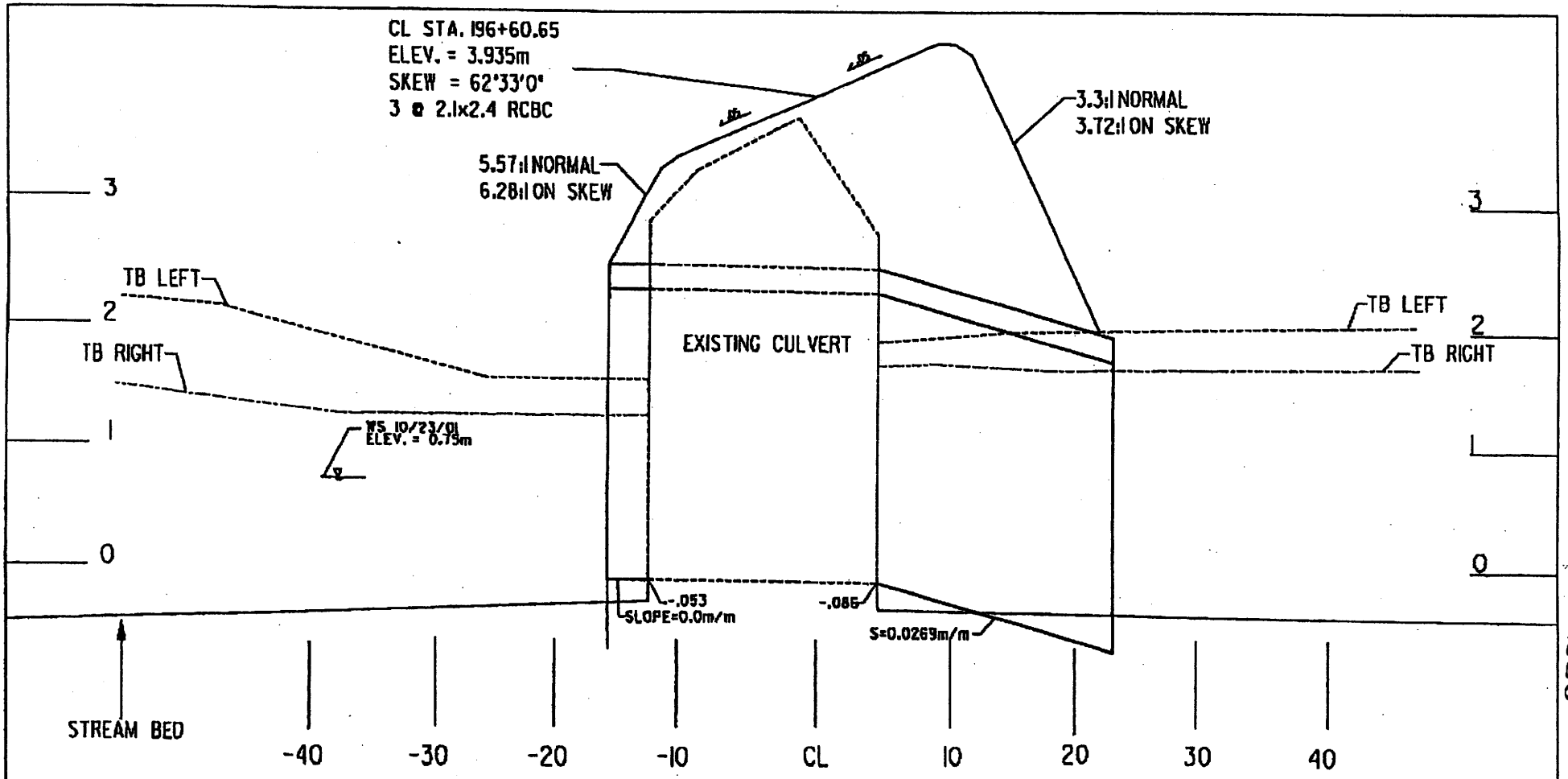
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

Rev. 11/1/04 ~~2/6/04~~

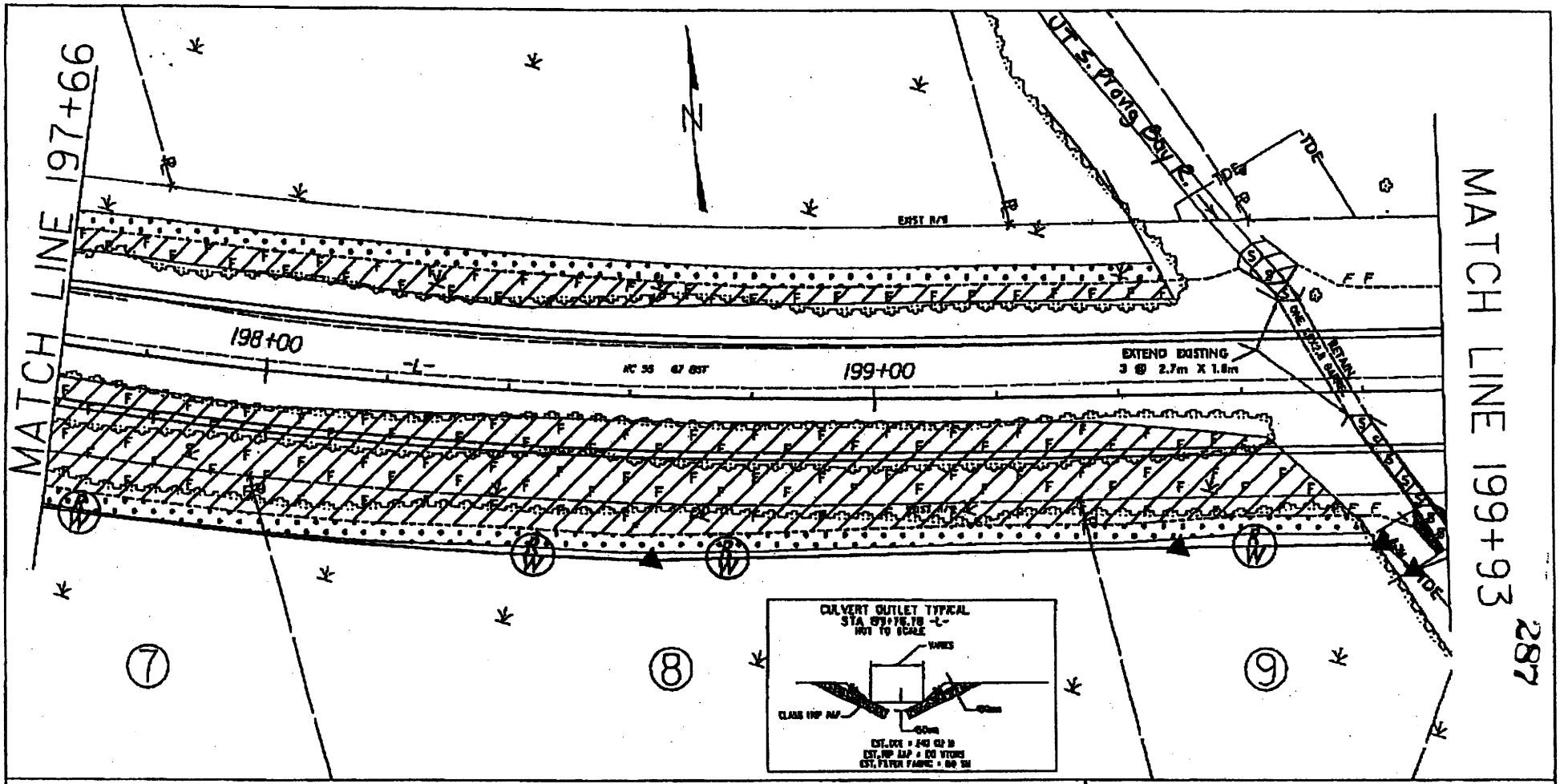
SHEET 13 OF 24



CULVERT 1 PROFILE
STA 196+60.65
SITE 3
SCALE = HORIZ. 1:500 VERT. 1:50

NCDOT
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 14 OF 24 7/15/03



PLAN VIEW
STREAM & WETLAND
IMPACTS
SITE 3
SCALE = 1:1000

NCDOT

DIVISION OF HIGHWAYS

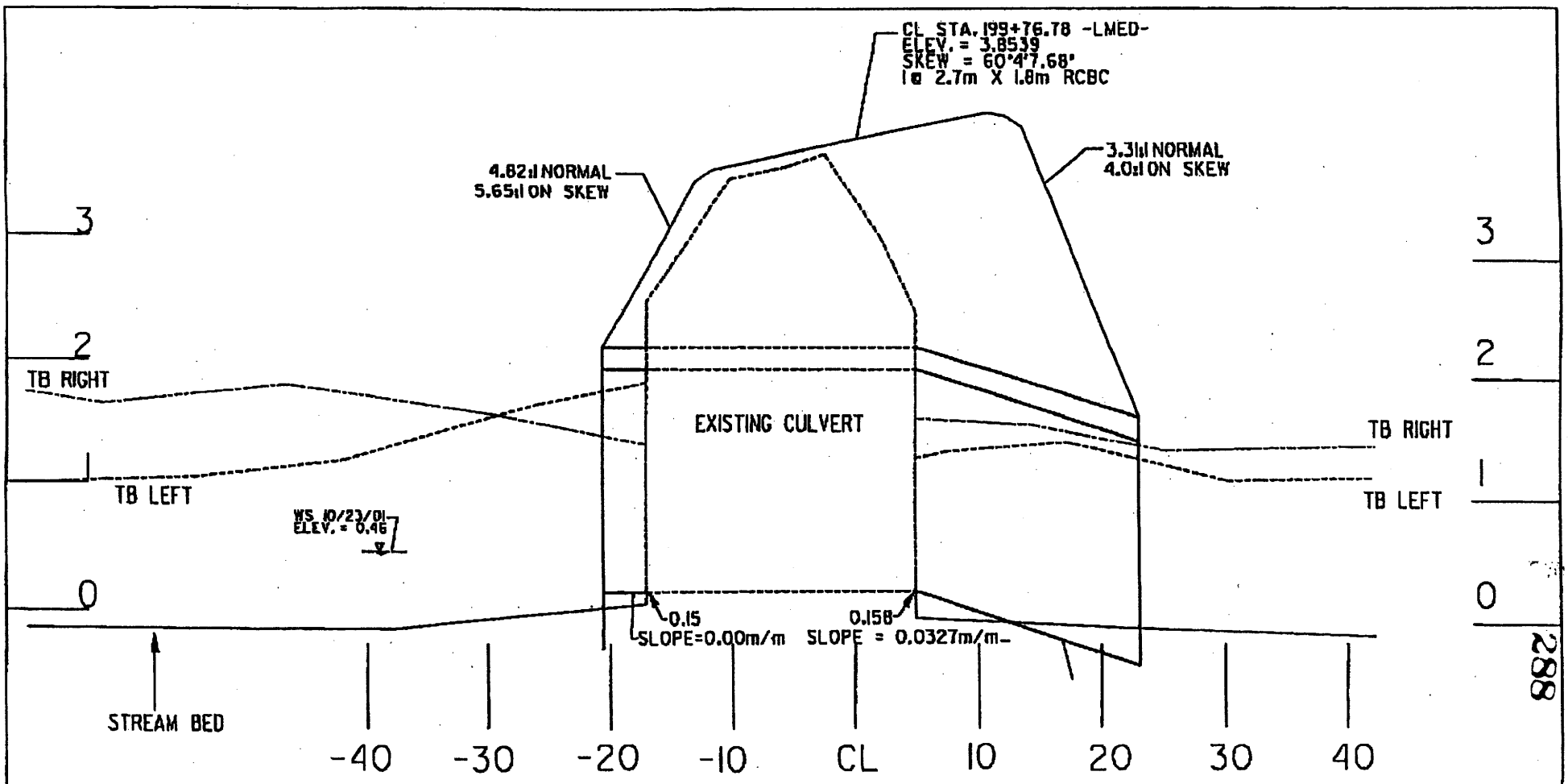
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 15 OF 24 2/6/04



CULVERT 2 PROFILE

STA 199+76.78

SITE 3

SCALE = HORIZ. 1:500 VERT. 1:50

NCDOT

DIVISION OF HIGHWAYS

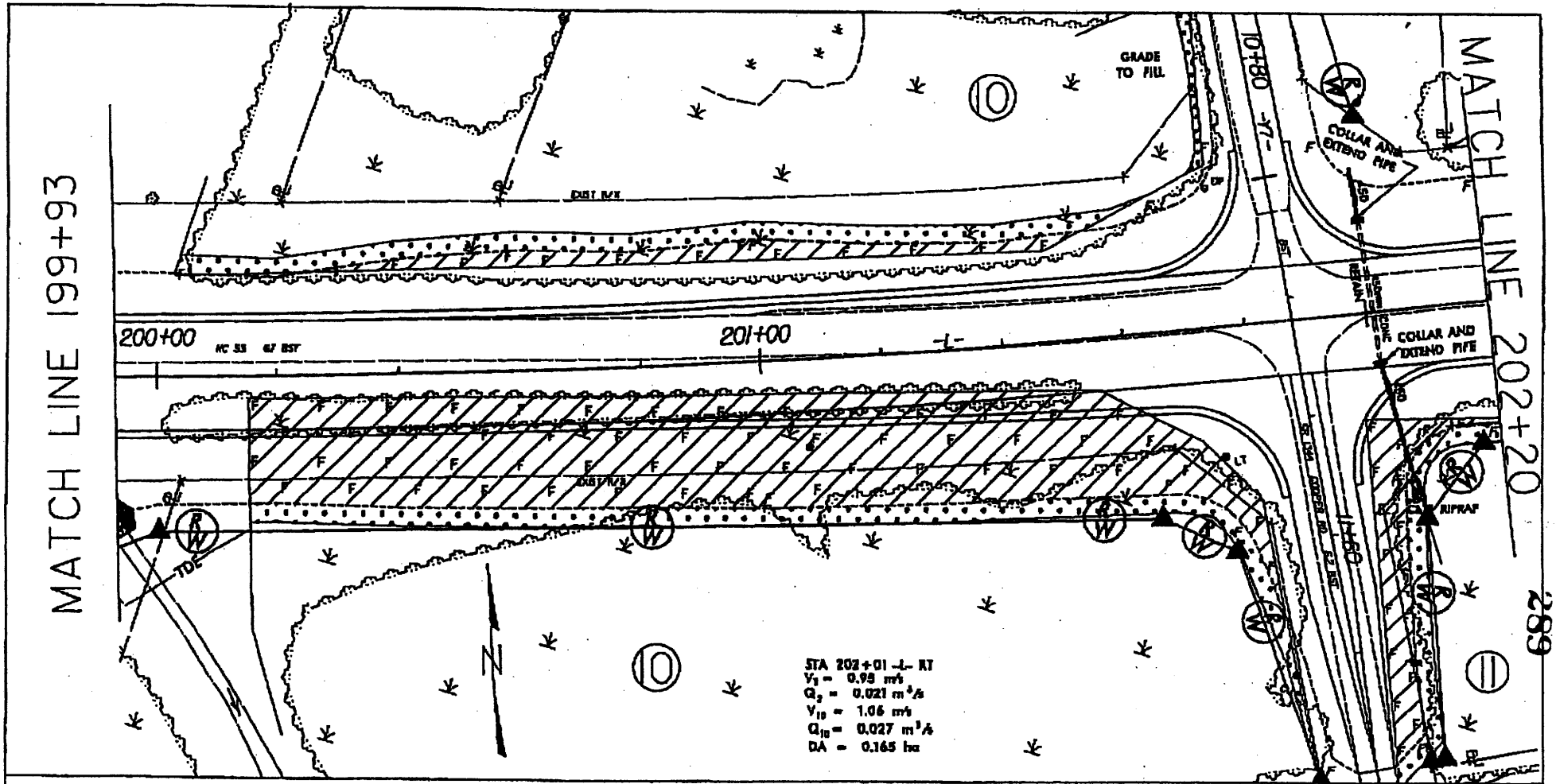
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

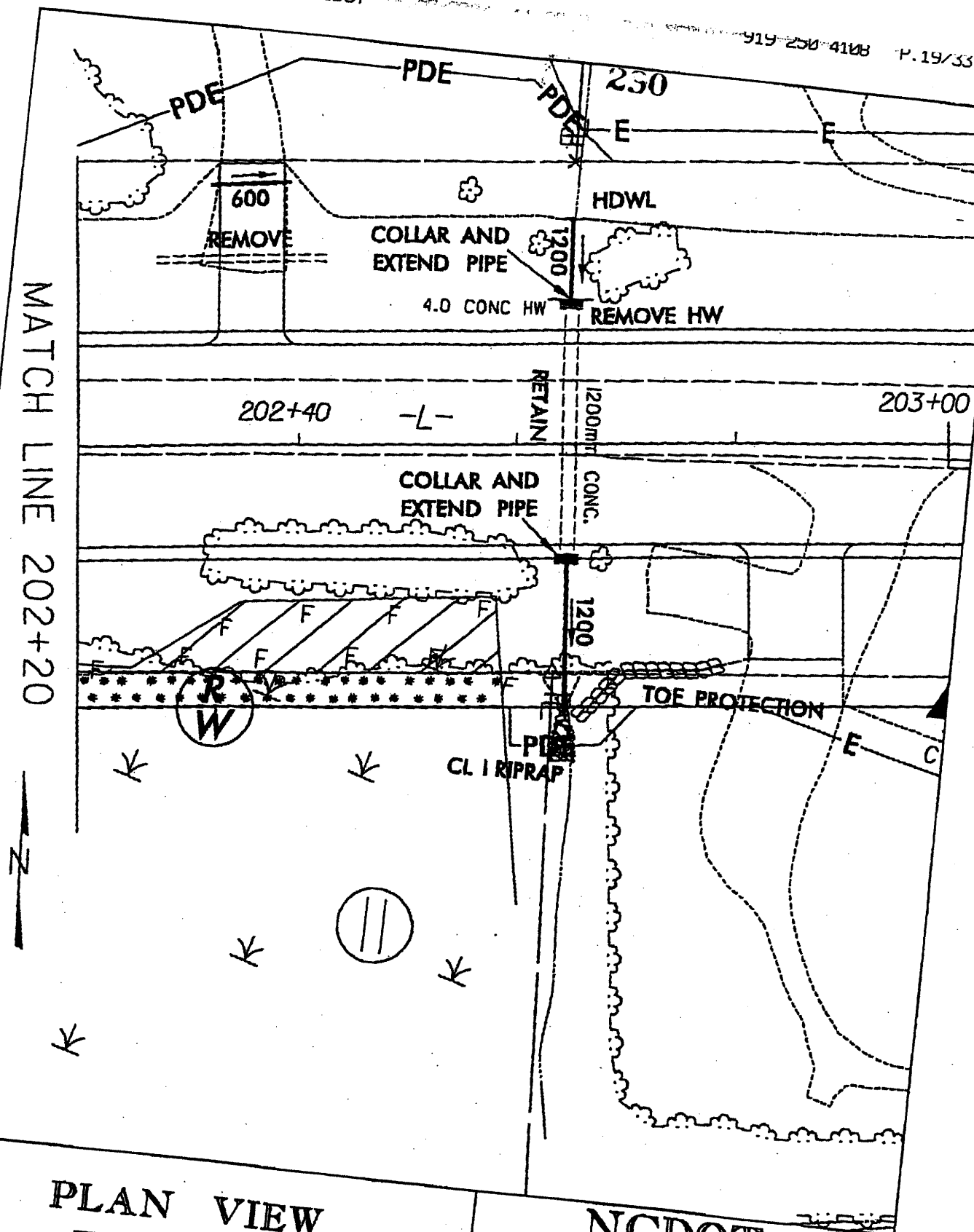
SHEET 16 OF 24 7/15/03



PLAN VIEW
STREAM & WETLAND
IMPACTS
SITE 3
SCALE = 1:1000

NCDOT
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 17 OF 24 2/6/04



PLAN VIEW WETLAND IMPACTS SITE 3

SCALE = 1:500

NCDOT

DIVISION OF HIGHWAYS

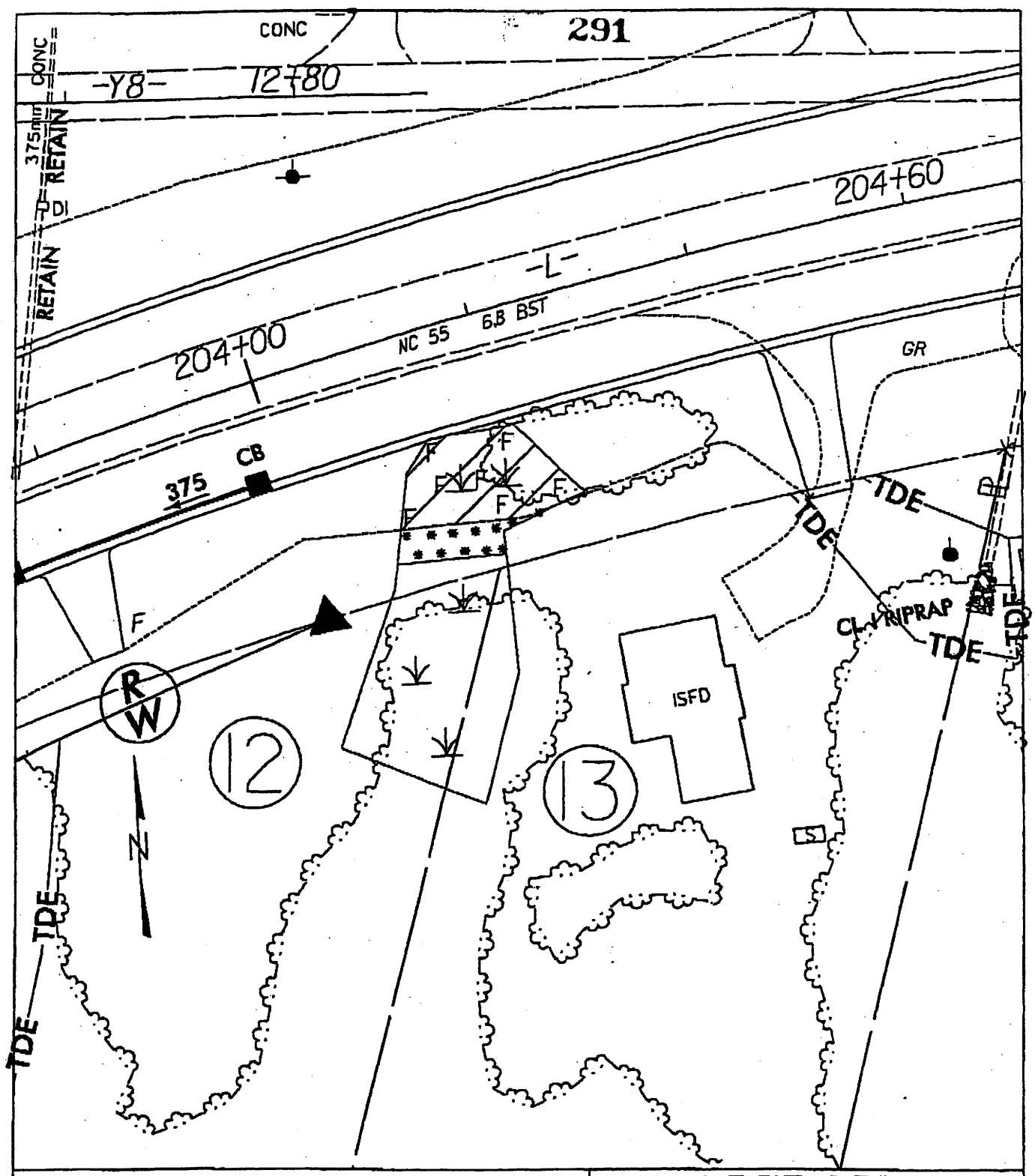
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 18 OF 24



PLAN VIEW WETLAND IMPACTS SITE 4

SCALE = 1:500

NCDOT

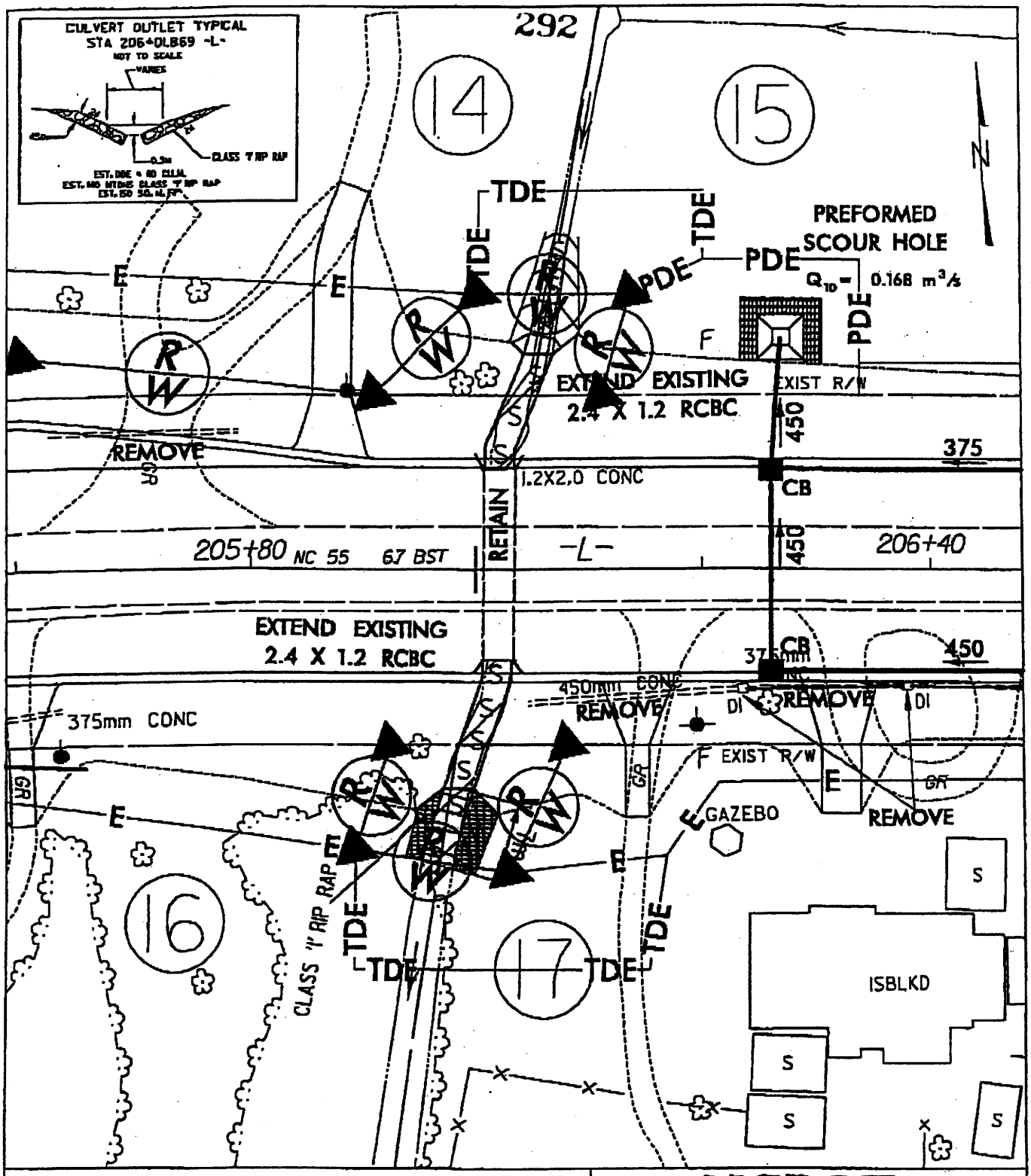
DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

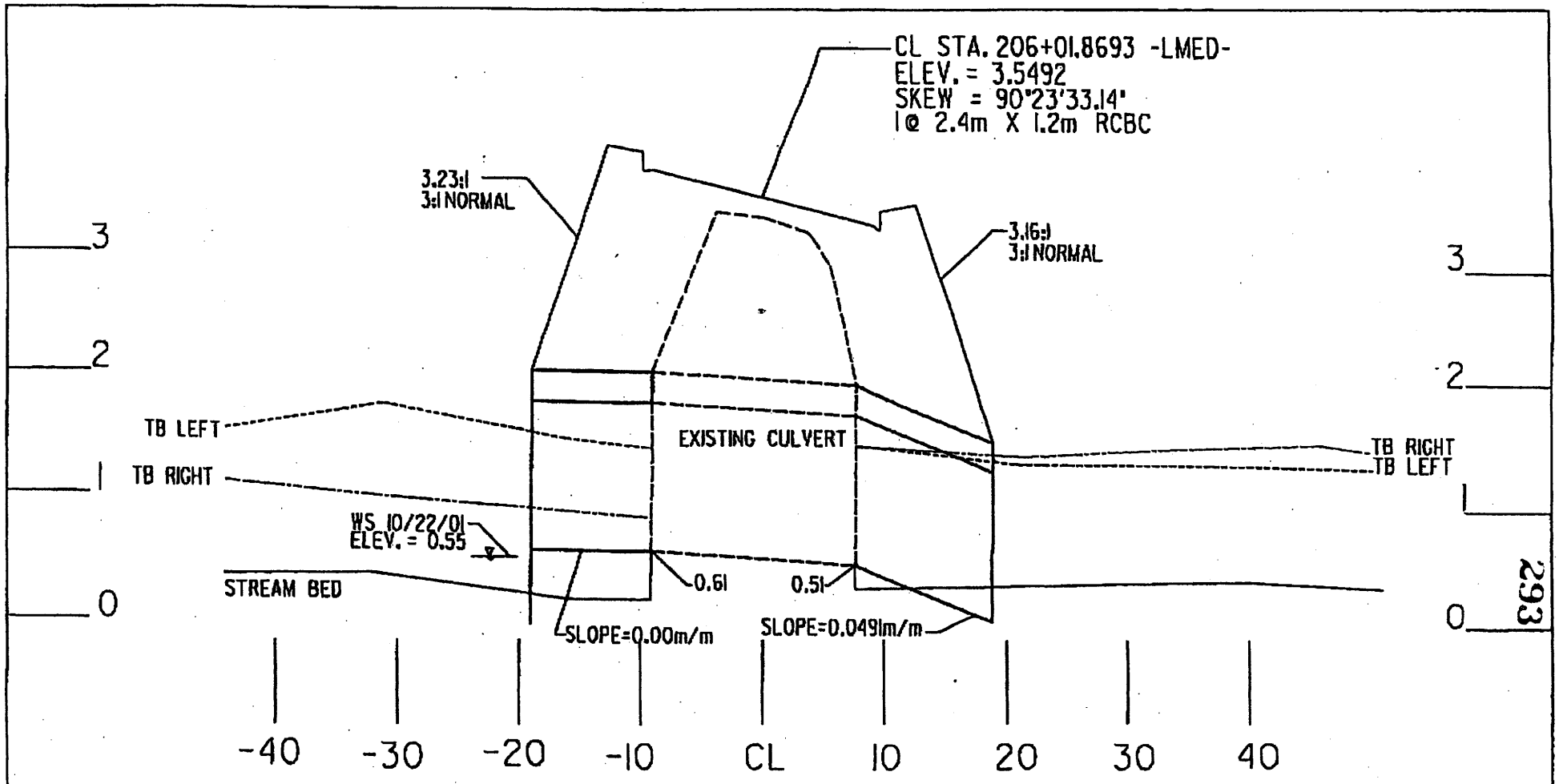
SHEET 19 OF 24 2/6/04



PLAN VIEW
STREAM
IMPACTS
SITE 5
SCALE = 1:500

NCDOT
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 20 OF 24 2/6/04



CULVERT 3 PROFILE

STA 206 + 01.87

SITE 5

SCALE = HORIZ. 1:500 VERT. 1:50

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 21 OF 24 8/6/03

293

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PROPERTY OWNERS

NAMES AND ADDRESSES

REFERENCE NO.	NAMES	ADDRESSES
1	WEYERHAEUSER CO.	PO BOX 1391 NEW BERN, NC 28563
2	GEORGE BRINSON	7960 NEUSE RD. GRANTSBORO, NC 28529
3	JAY BARRINGTON	904 LYNN ST. NEW BERN, NC 28562
4	SARAH HARRIS	420 NC HWY. 306 SOUTH GRANTSBORO, NC 28529
5	DORIS WILLIAMS	PO BOX 294 ALLIANCE, NC 28509
6	TSUNEKO TYNDALL	233 KEEL RD. GRANTSBORO, NC 28529
7	DAVID HARRIS	188 DEER RD. HUBERT, NC 28539
8	ROBERT COURTENAY SMARIDGE	2994 WILMA EDWARDS RD. ELLABELL, GA 31308
9	ROBERT COURTENAY SMARIDGE	189 FACTORY RD. HAMSTEAD, NC 28443
10	ARTHUR KELLY, JR.	PO BOX 243 GRANTSBORO, NC 28529
11	PHOEBE CAMPEN C/O GEORGIE THOMPSON	689 LICHFIELD RD. WINSTON-SALEM, NC 27104
12	JESSE BRAXTON CAHOON	52 BRINSON DR. GRANTSBORO, NC 28529
13	PAUL LEE PEGRAM	PO BOX 274 ALLIANCE, NC 28509
14	DUDLEY PAUL, JR.	PO BOX 345 ALLIANCE, NC 28509

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 22 OF 24 7/31/03

PROPERTY OWNERS

295

NAMES AND ADDRESSES

REFERENCE NO.	NAMES	ADDRESSES
15	HERMAN IRELAND	PO BOX 125 ALLIANCE, NC 28509
16	PEGGY WOOSTER	PO BOX 152 ALLIANCE, NC 28509
17	C. W. PHILLIPS	PO BOX 73 ALLIANCE, NC 28509

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

 7/31/03

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS				
			Fill In Wetlands (ac)	Temp. Fill In Wetlands (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	153+20 to 154+20 -L-				0.01	0.17					
2	155+40 to 166+08 -L-				6.25*	0.12					
3	195+45 to 202+60 -L-		2.45		0.02	0.83					
3		3 @ 2.1 X 2.4 RCBC					0.05			135.5	
3		2 @ 2.7 X 1.8 RCBC					0.02			123	
4	202+20 -L-		0.02			0.01					
5	206+00 -L-	1 @ 2.4 x 1.2 RCBC					0.02			96,1	
TOTALS:			2.47	0	6.28	1.13	0.09	0	0	354.6	0

* - There are 4.95 acres of Boussinesq Impacts at Site No. 2.

Form Revised 3/22/01

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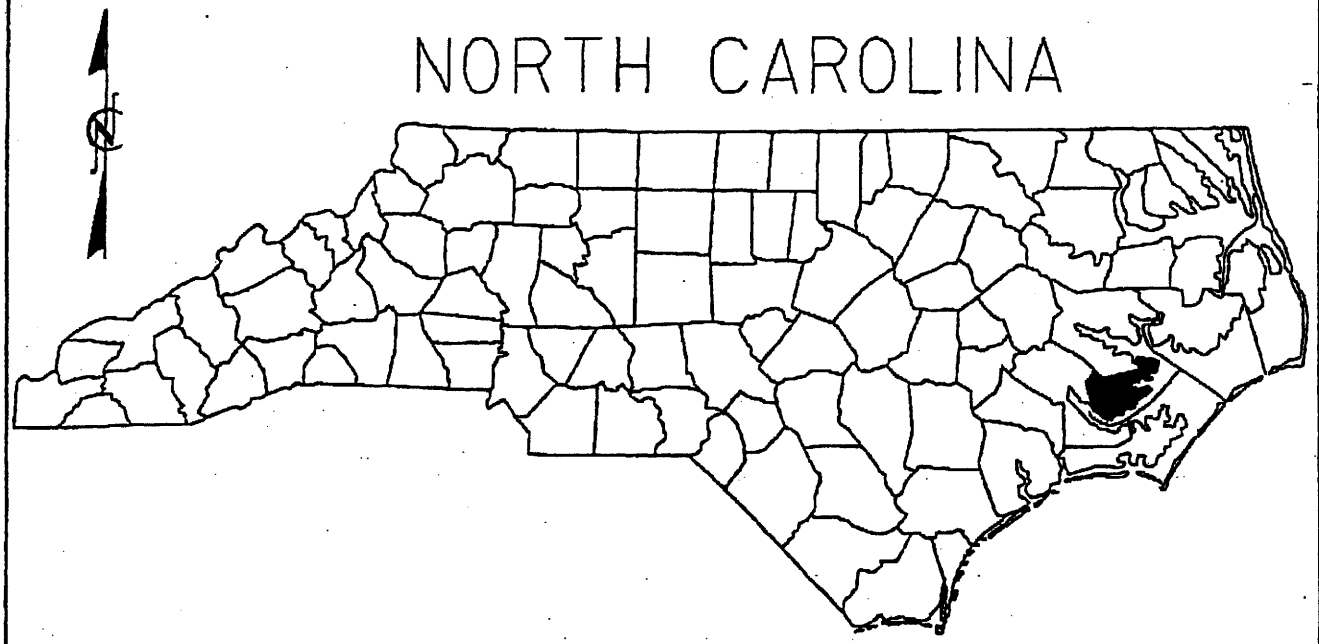
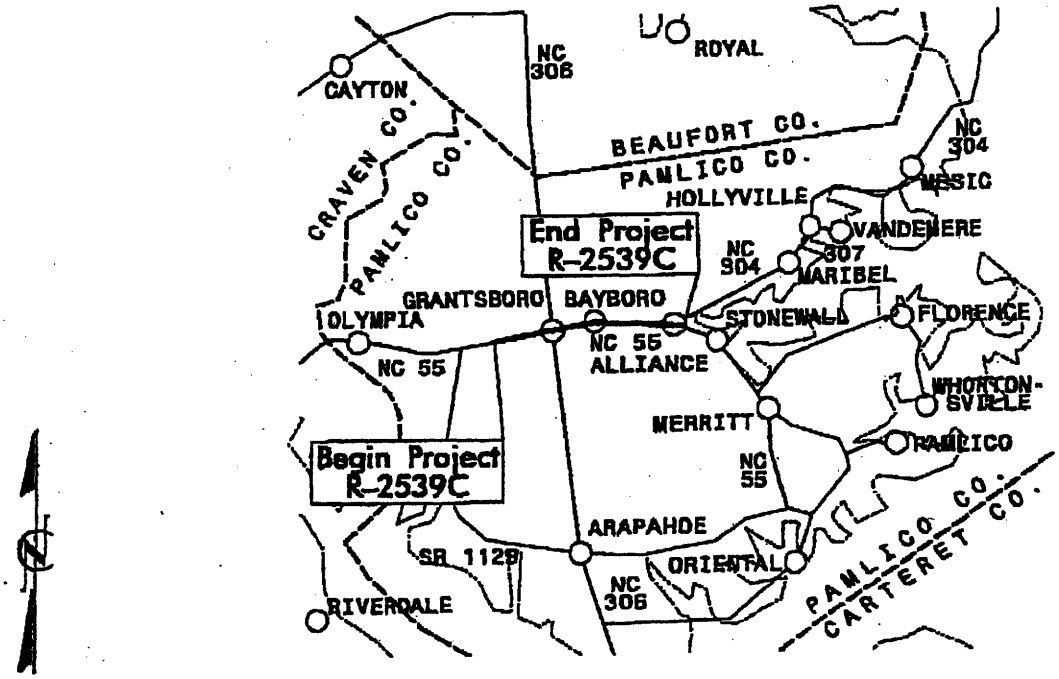
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 24 OF 24

Rev 11/2/04
8/30/2004

297





BUFFER VICINITY MAPS

NCDOT

DIVISION OF HIGHWAYS

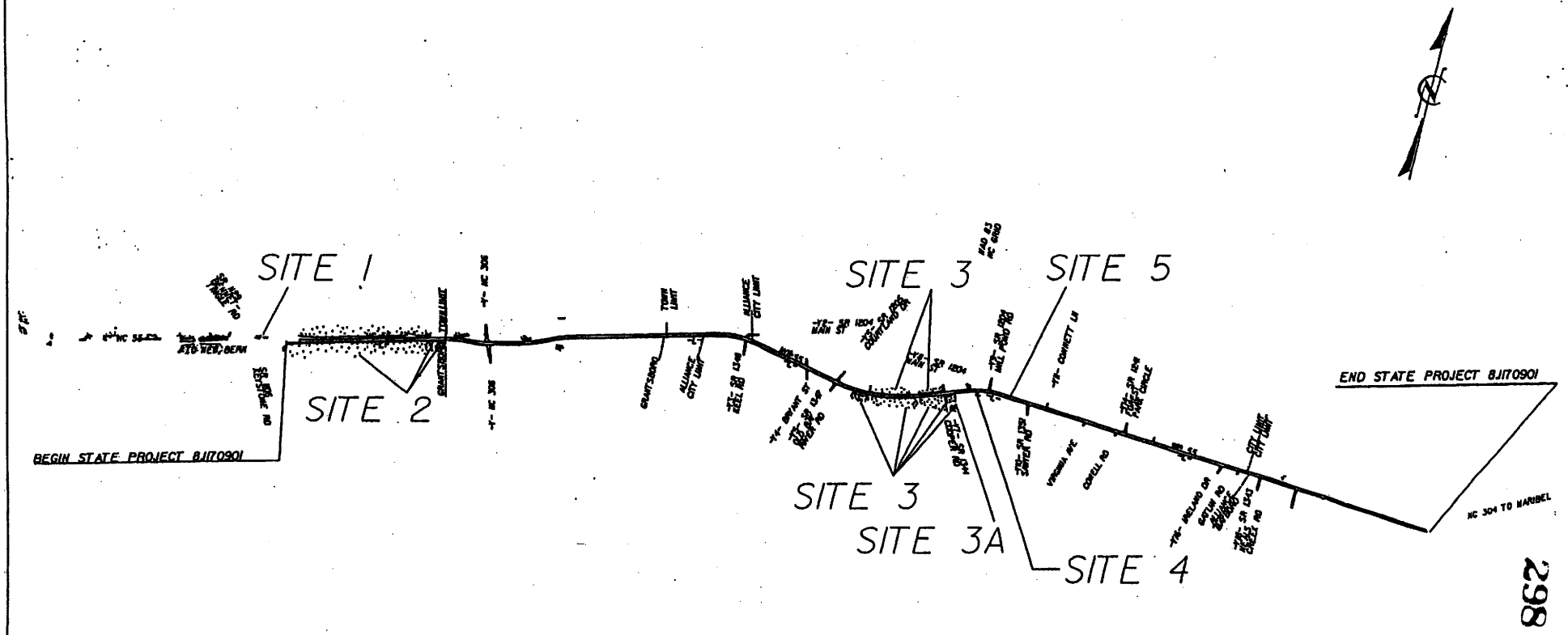
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

SHEET 1 OF 9

7/9/03



SITE MAP

NCDOT

DIVISION OF HIGHWAYS

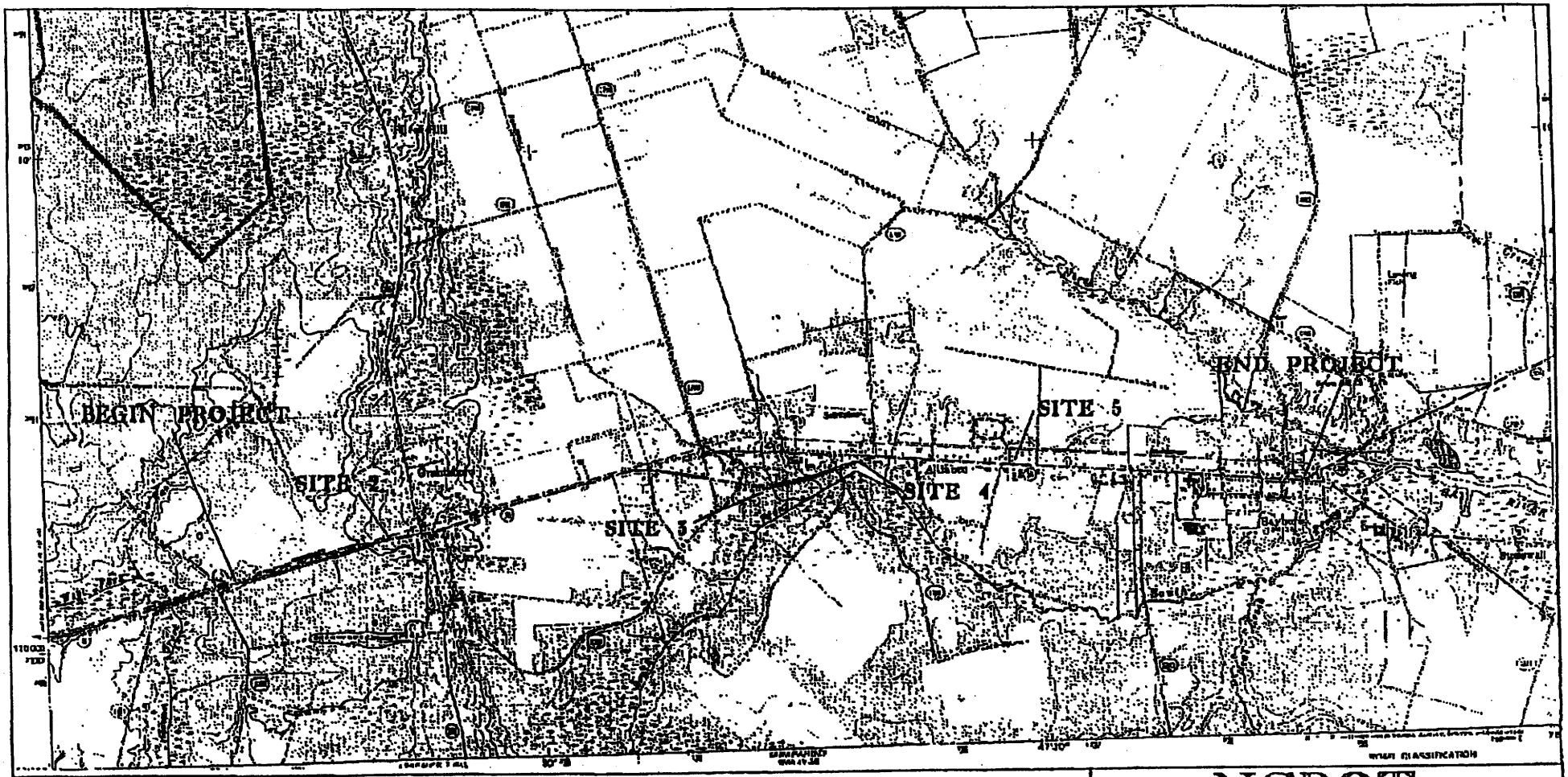
PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 2 OF 9 **8/23/04**



TOPO MAP

SCALE 1" = 4000'

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 3 OF 9 7/9/03

BUFFER 300 LEGEND

WLB — WETLAND BOUNDARY

WETLAND

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

MITIGABLE IMPACTS ZONE 1

MITIGABLE IMPACTS ZONE 2

BZ — RIPARIAN BUFFER ZONE

BZ1 — RIPARIAN BUFFER ZONE 1
30 ft (9.2m)

BZ2 — RIPARIAN BUFFER ZONE 2
20 ft (6.1m)

FLOW DIRECTION

TB — TOP OF BANK

WE — EDGE OF WATER

C — PROP. LIMIT OF CUT

F — PROP. LIMIT OF FILL

PROP. RIGHT OF WAY

NG — NATURAL GROUND

PL — PROPERTY LINE

TDE — TEMP. DRAINAGE EASEMENT

PDE — PERMANENT DRAINAGE EASEMENT

EAB — EXIST. ENDANGERED ANIMAL BOUNDARY

EPB — EXIST. ENDANGERED PLANT BOUNDARY

WATER SURFACE

LIVE STAKES

BOULDER

CORE FIBER ROLLS

PROPOSED BRIDGE

PROPOSED BOX CULVERT

PROPOSED PIPE CULVERT
12"-48" PIPES
54" PIPES & ABOVE

(DASHED LINES DENOTE EXISTNG STRUCTURES)

SINGLE TREE

WOODS LINE

DRAINAGE INLET

ROOTWAD

RIP RAP

5 — ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE

PREFORMED SCOUR HOLE (PSH)

LEVEL SPREADER (LS)

GRASS SWALE

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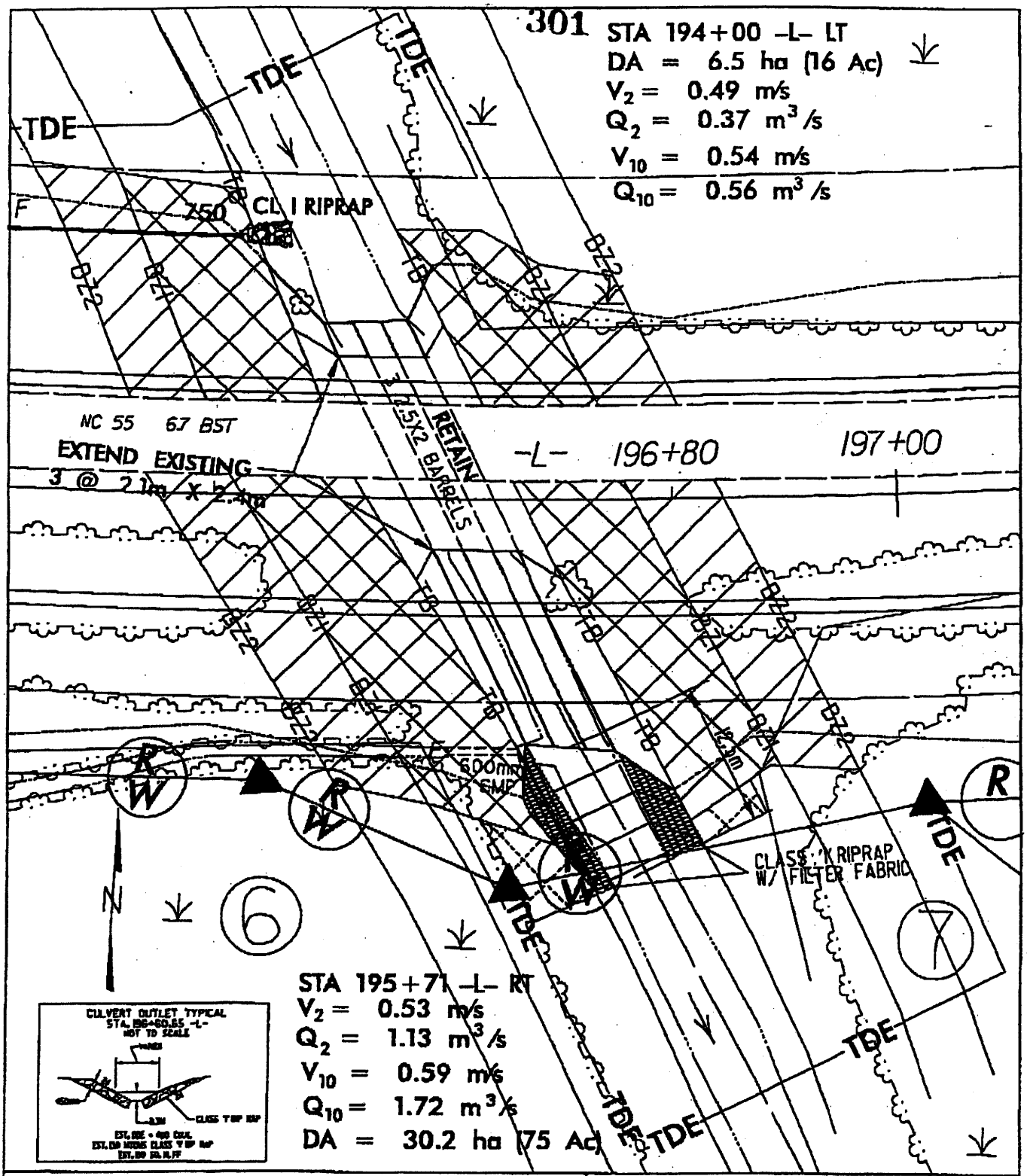
DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129 TO NC 304 IN BAYBORO

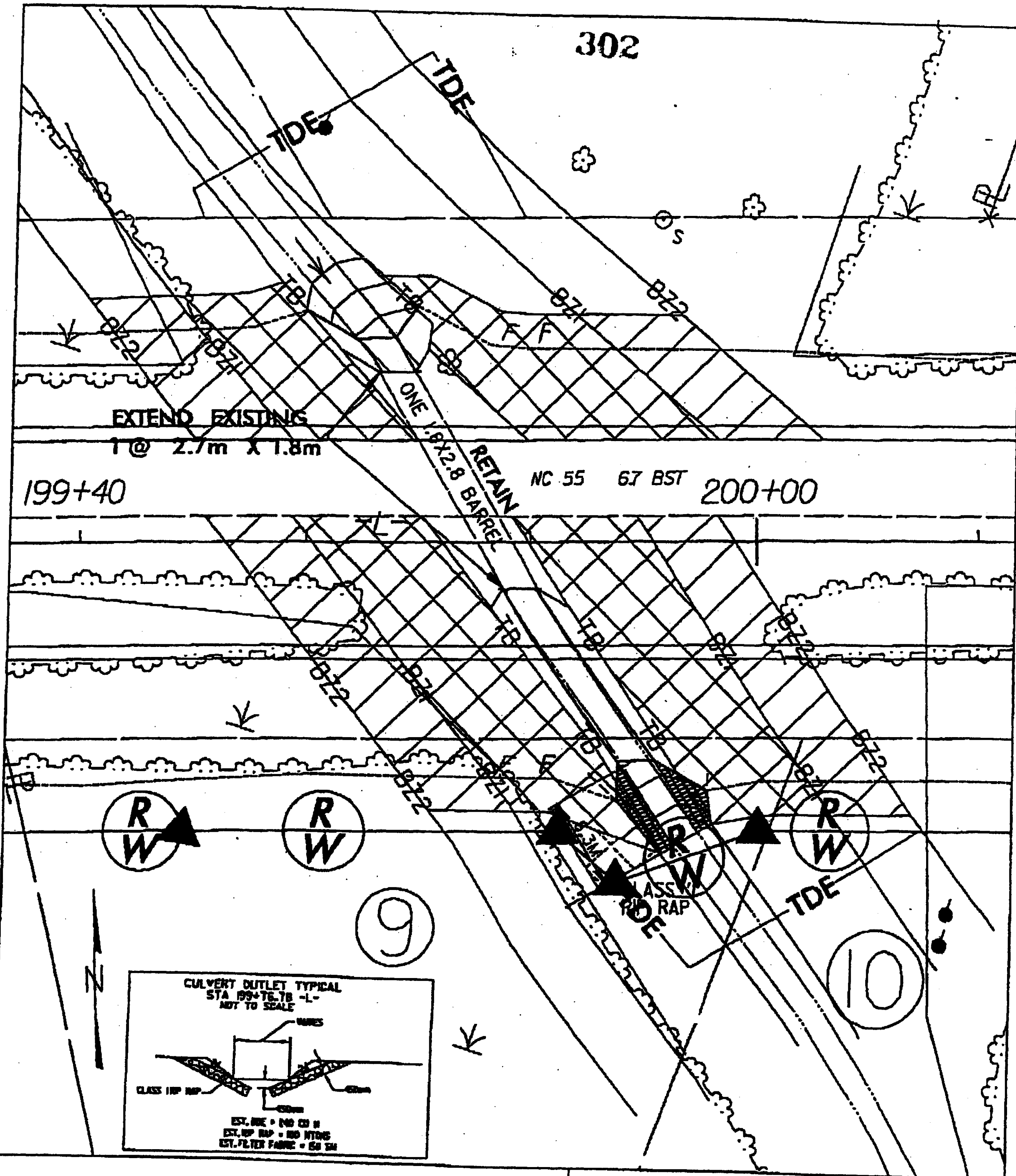
SHEET 4 OF 9 7/9/03



PLAN VIEW
BUFFER
IMPACTS
SITE 3
SCALE = 1:500

NCDOT
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 5 OF 9 2/6/04



# PLAN VIEW
# BUFFER IMPACTS
# SITE 3
SCALE = 1:500

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DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
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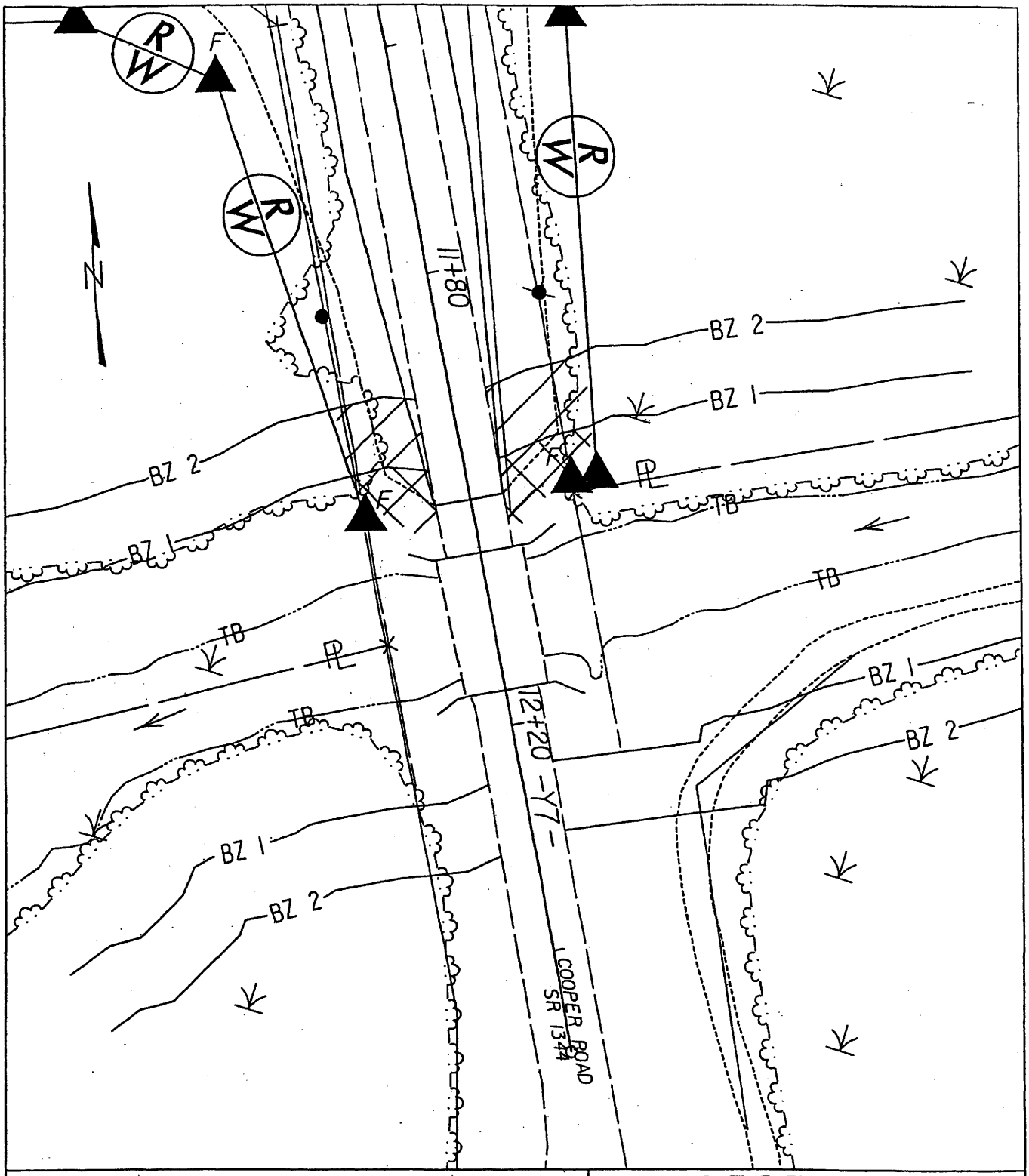
SHEET 6 OF 9 2/6/04



PLAN VIEW
BUFFER
IMPACTS
SITE 3A
SCALE = 1:500

NCDOT

DIVISION OF HIGHWAYS

PAMLICO COUNTY

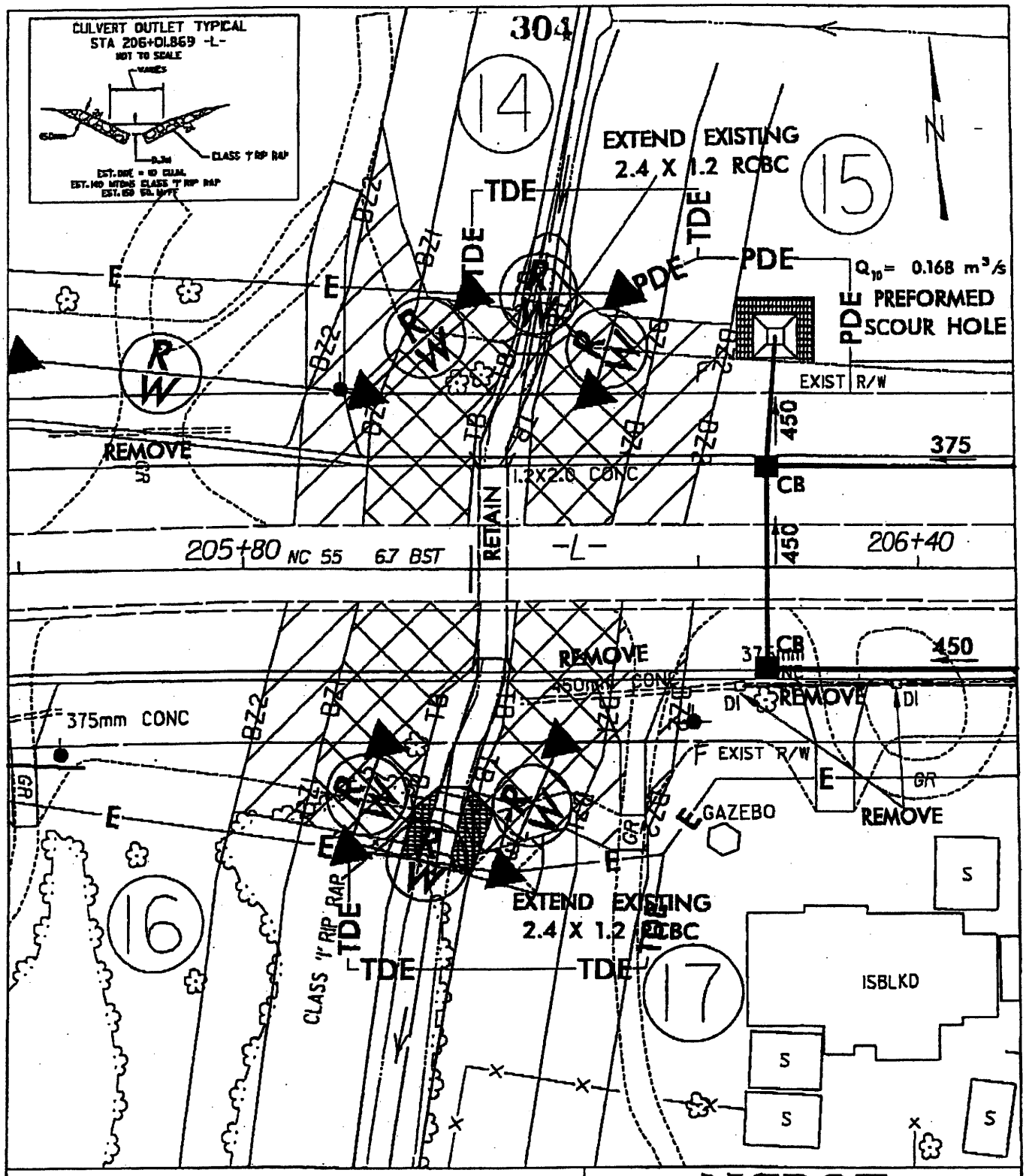
PROJECT: 8.1170901 (R-2539C)

NC 55 FROM EAST OF SR 1129

TO NC 304 IN BAYBORO

SHEET 7 OF 9

7/1/04



PLAN VIEW
BUFFER
IMPACTS
SITE 5
SCALE = 1:500

NCDOT
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT: 8.1170901 (R-2539C)
NC 55 FROM EAST OF SR 1129
TO NC 304 IN BAYBORO

SHEET 8 OF 9 2/6/04

BUFFER IMPACTS SUMMARY

			IMPACT								BUFFER REPLACEMENT	
			TYPE		ALLOWABLE			MITIGABLE				
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	ROAD CROSSING	PARALLEL IMPACT	ZONE 1 (sqft)	ZONE 2 (sqft)	TOTAL (sqft)	ZONE 1 (sqft)	ZONE 2 (sqft)	TOTAL (sqft)	ZONE 1 (sqft)	ZONE 2 (sqft)
3	3 @ 2.1 X 2.4 RCBC	196+60 -L-	X					10,793	6,495	17,288	651	
3	2 @ 2.7 X 1.8 RCBC	199+77 -L-	X					10,440	6,373	16,813	252	
3A	BRIDGE	12+10 -Y7-	X		750	1,064	1,814					
5	1 @ 2.4 X 1.2 RCBC	206+00 -L-	X		8,442	5,039	13,481				283	
TOTAL:					9,192	6,103	15,295	21,233	12,868	34,101	1,186	0

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
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SHEET 9 OF 9

9/30/04