

**North Carolina Department of Transportation
PROJECT ENVIRONMENTAL CONSULTATION FORM
I.D. No. U-2525B**

I. GENERAL INFORMATION

- a. Consultation Phase: Right of Way
- b. Project Description Greensboro Eastern Loop from North of US 70
Relocation to US 29 North of Greensboro
- c. WBS Element Number 34821.1.1
- d. Document Type: State Final Environmental Impact Statement, August 12, 1994
State Record of Decision, March 7, 1995

II. CONCLUSIONS

The above environmental document has been reevaluated as required by 23 CFR 771. It was determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted below in Section III. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

III. CHANGES IN PROPOSED ACTION AND ENVIRONMENTAL CONSEQUENCES

DESIGN CHANGES

The following minor design changes were made since the completion of the State Record of Decision (SROD) in 1995:

The interchange at US 29 was changed from a Texas Type Box interchange to a Directional (Freeway to Freeway) type of interchange due to an increase in the traffic forecast and the Strategic Highway Corridor Vision of making US 29 an interstate (Future I- 785). The proposed Directional (Freeway to Freeway) interchange will impact approximately 3 businesses and at least 13 homes in or near Quail Oaks subdivision located off of SR 2568 (Assembly Road) adjacent to the US 29 interchange. Noise analyses which included Traffic Noise Modeling were performed, and the results showed that there are no anticipated noise impacts in accordance with NCDOT's Traffic Noise Abatement Policy; therefore, noise abatement is not required for the subdivision. Additional control of access was added along US 29 north and south of the interchange, and service roads were included to provide access to homes and businesses in these areas.

The construction limits were extended along SR 2565 (Hicone Road) east and west of the US 29 / SR 2565 interchange for additional lanes to accommodate interchange turning movements. Additional right of way was added; however, no additional homes or businesses were impacted.

The interchange at SR 2770 (Huffine Mill Road) was redesigned to accommodate the need for loops, if needed, in the future. Two homes will be impacted due to the additional right of way and control of access needed for the redesigned interchange.

An alignment shift was made to reduce impacts to the National Register-eligible Schoolfield-Hatcher Farm. A Memorandum of Agreement (MOA) was prepared and coordinated with the NC Historic Preservation Office to ensure impacts to the Schoolfield-Hatcher Farm were minimized (See Appendix A). A Historic Structures and Landscape Recordation Plan (See Appendix A) and an Archaeological Monitoring Plan (See Appendix B) were prepared for the Schoolfield-Hatcher Farm.

An advertised public meeting was held on January 27, 2009 to show the changes listed above to the public. Approximately 148 people attended the meeting.

As required by 23 CFR 772, a noise wall survey was mailed to the property owner adjacent to the noise wall located at the SR 2827 (Four Mile Loop Road) – Relocated US 70 (Burlington Road) interchange. Based on the survey results, this proposed noise wall will not be constructed.

The City of Greensboro has requested that sidewalks be added to the project. Further coordination is needed with the City of Greensboro regarding the specific sidewalk locations. A municipal agreement will be executed for Greensboro's participation.

WATER RESOURCES

Water resources within the project area are all located within the Cape Fear River Basin (sub-basin 03-06-02, US Geological Survey [USGS] Hydrologic Unit 03030002) and are DWQ Class C;NSW. The following streams occur within the project study area: North Buffalo Creek, 26 unnamed tributaries (UTs) to North Buffalo Creek, 5 UTs to South Buffalo Creek, and 8 UTs to Unnamed Tributary at Camp Burton (not included in FEIS).

Neither High Quality Waters (HQW), Water Supplies (WS-I: undeveloped watersheds or WS-II: predominately undeveloped watersheds), nor Outstanding Resource Waters (ORW) occur within 1.0 mile of the project study area. No streams in the project study area are designated as North Carolina Natural or Scenic Rivers or as National Wild and Scenic Rivers. North Buffalo Creek occurs within the project study area and is listed on the Final 2006 303(d) list of impaired waters due to "impaired biological integrity." In addition, all 26 UTs to North Buffalo Creek drain into this section of North Buffalo Creek within 1.0 mile of the project study area. Further, all 5 UTs to South Buffalo Creek drain into a section of South Buffalo Creek designated as Section 303(d) waters, due to "turbidity", within 1.0 mile of the project study area.

PROTECTED SPECIES

At the time the FEIS was published, the USFWS listed no federally threatened or endangered species in Guilford County. As of January 31, 2008, the U.S. Fish and Wildlife Service (USFWS) listed the small whorled pogonia (*Isotria medeoloides*) as the only federally protected species for Guilford County. Surveys for small whorled pogonia will be required for U-2525B due to the presence of potential, but limited, habitat. These surveys will be conducted within two years of the project Let date.

The bald eagle is protected under the Bald and Golden Eagle Protection Act. Due to the distance between the U-2525B project limits and the closest open water habitat suitable for the bald eagle (minimum of 1.6 mile), no habitat exists for this species.

A review of the North Carolina Natural Heritage Program (NCNHP) database, updated August 27, 2008, indicated no occurrences of protected species within one mile of the project study area.

As of January 31, 2008, the U.S. Fish and Wildlife Service (USFWS) listed the Carolina darter as a Federal Species of Concern.

IV. LIST OF ENVIRONMENTAL COMMITMENTS

See attached green sheets for Project Commitments.

V. COORDINATION

Current project proposals have been discussed with others as follows:

Roadway Design Unit:	<u>Danny Gardner, P.E.</u>	<u>March 24, 2009</u> Date
Hydraulics Unit:	<u>Randy Henegar, P.E.</u>	<u>March 26, 2009</u> Date
Permits Section:	<u>David Bailey</u>	<u>November 14, 2008</u> Date
Noise and Air Quality Section:	<u>Greg Smith, P.E.</u>	<u>March 24, 2009</u> Date
Historic Architecture Section:	<u>Mary Pope Furr</u>	<u>March 24, 2009</u> Date
Archaeology Section:	<u>Paul Mohler</u>	<u>March 25, 2009</u> Date
Public Involvement Section:	<u>Ed Lewis</u>	<u>March 25, 2009</u> Date
Community Studies Section:	<u>Steve Gurganus</u>	<u>March 25, 2009</u> Date

VI. NCDOT CONCURRENCE



Lisa M. Feller, P.E. - Project Planning Engineer
Project Development and Environmental Analysis Branch

3/31/09
Date



Beverly G. Robinson - Project Engineer
Project Development and Environmental Analysis Branch

3/31/09
Date

PROJECT COMMITMENTS

Greensboro Eastern Loop from North of US 70 Relocation
to US 29 North of Greensboro
Guilford County
WBS Element 34821.1.1
TIP Project U-2525B

Current status, changes, or additions to the project commitments as shown in the environmental document for the project are printed in italics.

Project Development & Environmental Analysis Branch and Roadway Design Unit

Noise abatement measures will continue to be considered throughout the design phase of the project.

NOTE: Based on the noise wall survey results, the noise wall at the SR 2827 (Four Mile Loop Road) – Relocated US 70(Burlington Road) interchange will not be built. Also, based on the noise analyses performed for the SR 2568 (Assembly Road) area at the US 29 interchange, the results showed that there are no anticipated noise impacts in accordance with NCDOT's Traffic Noise Abatement Policy. Noise abatement is not required for Quail Oaks subdivision.

Sidewalks will be incorporated into the project. Further coordination is needed with the City of Greensboro regarding the specific sidewalk locations. A municipal agreement will be executed for Greensboro's participation.

Hydraulics Unit

The final designs will be coordinated with appropriate state and local officials and the Federal Emergency Management Agency (FEMA) to assure compliance with FEMA, state, and local floodway and floodplain regulations.

NOTE: Standard Commitment.

Bridges will be considered during the design phase at major waterway and floodplain crossings.

NOTE: Bridges span North Buffalo Creek, and the bridge at SR 2825 (Camp Burton Road) was lengthened to span an unnamed tributary of North Buffalo Creek and wetlands.

The design of any necessary drainage structures at greenways will be coordinated with the Guilford County Parks and Recreation Department.

NOTE: There are no greenways located within the U-2525B project limits.

Location and Surveys Unit

Geodetic survey control monuments will be located during design, and the U.S. Coast and Geodetic Survey and North Carolina Geodetic Survey will be notified of their location.

NOTE: Standard Commitment.

Roadside Environmental Unit, Hydraulics Unit and Division 7

NCDOT's "Best Management Practices for Protection of Surface Waters" will be implemented, where applicable, including hazardous spill catch basins in water supply watershed critical areas where the roadway crosses a water supply.

NOTE: Standard Commitment.

Geotechnical Unit and Division 7

Any underground storage tanks discovered during construction will be reported to the North Carolina Division of Environmental Management.

NOTE: Standard Commitment.

Project Development and Environmental Analysis Branch

Mitigation for unavoidable wetland loss will be provided through implementation of a wetland mitigation plan developed during the permitting phase of the project.

NOTE: Standard Commitment.

Recommendations to restore stream segments to resemble the destroyed habitat will be considered where practicable. Banks and beds of relocated channels will be stabilized with vegetation or other protective devices as practicable, including consideration of using logs to line banks.

NOTE: NCDOT plans to use on-site stream mitigation, including relocation, restoration, and enhancement to offset unavoidable impacts to existing streams caused by the Greensboro Eastern Loop construction.

Surveys for small whorled pogonia will be required for U-2525B due to the presence of potential, but limited, habitat. These surveys will be conducted within two years of the project Let date.

A combined Screening ICE and ICE Land Use Scenario Assessment will be completed prior to obtaining permits for the project.

Project Development and Environmental Analysis Branch and Division 7

Historic Architecture Stipulations:

1. **Recordation:**
Prior to the initiation of construction, NCDOT will record the existing condition of the Schoolfield-Hatcher Farm and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A).
2. **Landscape Plan:**
In consultation with SHPO and the property owner, NCDOT will develop a landscape plan for the Schoolfield-Hatcher property. Installation of plantings will be limited to the non-wooded areas of the parcel north and east of the roadway. As the installed plantings mature, they are intended to form a natural buffer between the roadway and the farm's primary structures. NCDOT will replace in kind any landscape elements which die within two years of installation.
3. **Shifted Roadway Alignment:**
The original middle alternative alignment (ALT-1) will be shifted away from the farm's primary structures as described in the shifted alternative (ALT-2) (Appendix A).

NOTE: The alignment was shifted as described in the shifted alternative (ALT-2) to reduce impacts to the Schoolfield-Hatcher Farm.

4. **Access:**
The new transportation facility with control-of-access fencing will divide the farm into two discontinuous parcels. Access to the first parcel, containing the house and primary farm structures, will be retained via the current driveway. NCDOT will provide a cul-de-sac to allow access to the second parcel.

NOTE: The driveway and cul-de-sac are included in the U-2525B final design plans.

Archaeological Commitments:

1. **Archaeological Monitoring**
*The NCDOT will monitor initial ground-disturbing activities within the property limits of Sites 31GF452** (Schoolfield-Hatcher Farm, U-2525B) and 31GF466 (Site in SE Quadrant of the proposed SR 2352 (North Elm Street) interchange, U-2525C) in accordance with the attached Archaeological Monitoring Plan (see Appendix B).*

2. *Archaeological Data Recovery*
Sites 31GF456 (Site near Summit Avenue, U-2525C) and 31GF466 (Site in SE Quadrant of the proposed SR 2352 (North Elm Street) interchange, U-2525C) are recommended as eligible for the National Register of Historic Places (NRHP). Both archaeological sites will be avoided by the Undertaking as currently designed; however, if design plans change prior to construction thereby causing an adverse impact to either of these sites, the NCDOT, in consultation with the SHPO and USACE will develop archaeological Data Recovery Plans (DRPs) in order to mitigate the adverse impact(s) to these sites. Given their proximity to the Undertaking, a visual barrier will be placed along the proposed ROW in order to avoid and prevent any disturbance(s) to these sites.

NOTE: Both sites are located within the U-2525C project limits and will be reviewed during future consultations for U-2525C.

3. *Cemetery Removal and Relocation*
The May/Hudson Cemetery (Site 31GF445** in the NE quadrant of the proposed interchange at SR 2770 (Huffine Mill Road), U-2525B) cannot be avoided and will be relocated in accordance with the provisions of NCGS Chapter 65.
4. *Access-Denied Areas*
Of the five (5) areas not surveyed during the study due to denial of access, only the Louise Coble parcel (15.64 acres within the proposed SR 2770 (Huffine Mill Road) interchange, U-2525B) is to be affected by the Undertaking and will require additional investigations once access has been granted or ROW has been acquired and prior to any construction activities.

Project Development and Environmental Analysis Branch, Roadside Environmental Unit and Division 7

NCDOT will adhere to Design Standards for Sensitive Watersheds in the areas of the 5 unnamed tributaries(UTs) of South Buffalo Creek that drain into a section of the creek designated as Section 303(d) waters due to turbidity.

APPENDIX A

Memorandum of Agreement

**MEMORANDUM OF AGREEMENT
AMONG THE
UNITED STATES ARMY CORPS OF ENGINEERS,
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
GREENSBORO EASTERN/NORTHERN URBAN LOOP
GUILFORD COUNTY, NC
TIP U-2525 B&C**

WHEREAS, the Regulatory Division of the United States Army Corps of Engineers (USACE), Wilmington District, is considering the issuance of a permit to the North Carolina Department of Transportation (NCDOT), pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), for construction of the Greensboro Eastern/Northern Urban Loop, Guilford County, North Carolina (the Undertaking); and

WHEREAS, the USACE and NCDOT, have determined that the Undertaking will adversely effect the National Register-eligible Schoolfield-Hatcher Farm; and

WHEREAS, the USACE and NCDOT have consulted with the North Carolina State Historic Preservation Officer (SHPO), pursuant to 36 CFR 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and 33 CFR 325 Appendix C; and

WHEREAS, Dewey Hatcher, Primary Trustee for the Schoolfield-Hatcher Farm, has participated in the consultation and has been invited to concur in this Memorandum of Agreement (MOA);and

WHEREAS, by signing this MOA, the Signatory or Concurring Party does not necessarily signify that the party approves of the Undertaking, but rather that the provisions of the MOA are an appropriate means to mitigate effects on the Schoolfield-Hatcher Farm; and

WHEREAS, the USACE has notified the Advisory Council on Historic Preservation (Council) of the adverse effect and it has declined to comment or participate in the consultation; and

WHEREAS, Signatory or Concurring Party status is achieved only through signing this MOA.

NOW, THEREFORE, the USACE, NCDOT, and the SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on the historic property.

STIPULATIONS

I. Historic Architecture

The USACE will include the following four Historic Architecture stipulations as part of any permit issued to NCDOT for the Undertaking:

1. *Recordation:*
Prior to the initiation of construction, NCDOT will record the existing condition of the Schoolfield-Hatcher Farm and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A).
2. *Landscape Plan:*
In consultation with SHPO and the property owner, NCDOT will develop a landscape plan for the Schoolfield-Hatcher property. Installation of plantings will be limited to the non-wooded areas of the parcel north and east of the roadway. As the installed plantings mature, they are intended to form a natural buffer between the roadway and the farm's primary structures. NCDOT will replace in kind any landscape elements which die within two years of installation.
3. *Shifted Roadway Alignment:*
The original middle alternative alignment (ALT-1) will be shifted away from the farm's primary structures as described in the shifted alternative (ALT-2).
4. *Access:*
The new transportation facility with control-of-access fencing will divide the farm into two discontinuous parcels. Access to the first parcel, containing the house and primary farm structures, will be retained via the current driveway. NCDOT will provide a cul-de-sac to allow access to the second parcel.

II. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), if NCDOT identifies additional cultural resource(s) during construction and determine them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the USACE and SHPO contacted. If after consultation with the Signatory and Concurring Party additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory and Concurring Party, will develop and implement appropriate protection/mitigation measures for the resource(s). Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70 as well as 33 CFR 325 Appendix C .

III. Dispute Resolution

Should any of the Signatory or Concurring Party object within (30) days to any plans or documentation provided for review pursuant to this Agreement, the

USACE shall consult with the objecting party(ies) to resolve the objection. If the USACE or objecting party(ies) determines that the objection cannot be resolved, the USACE will forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide the USACE with recommendations which the USACE will take into account in reaching a final decision regarding the dispute, or
- B. Notify the USACE that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the USACE, in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USACE's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

IV. Amendments

Should any of the Signatory or Concurring Party to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agree upon, the dispute resolution process set forth in Stipulation III will be followed.

V. Termination

Any of the Signatory or Concurring Party may terminate the MOA by providing notice to the other party(ies), provided that the party(ies) will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800 and 33 CFR 325 Appendix C. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

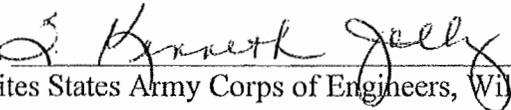
VI. Duration

Unless terminated pursuant to Stipulation V above, this MOA will be in effect until USACE, in consultation with the other Signatory and Concurring Party(ies), determines that all of its terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to seek issuance of a permit from USACE for construction of the Undertaking.

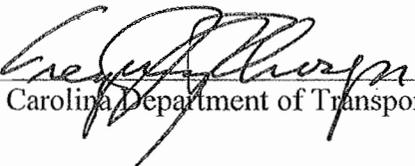
Execution of this Memorandum of Agreement by the USACE, North Carolina SHPO, and other Concurring Party, its subsequent filing with the Council and implementation of its terms evidence that USACE, has afforded the Council an opportunity to comment on

the Undertaking, and that the USACE, has taken into account the effects of the Undertaking on the Schoolfield-Hatcher Farm.

AGREED:

By:  Date: 10-2-08
United States Army Corps of Engineers, Wilmington District

By:  Date: 9/17/08
North Carolina State Historic Preservation Officer

By:  Date: 19 Sept 08
North Carolina Department of Transportation

FILED:

By: _____
Advisory Council on Historic Preservation

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG THE
UNITED STATES ARMY CORPS OF ENGINEERS,
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
GREENSBORO EASTERN/NORTHERN URBAN LOOP
GUILFORD COUNTY, NC
TIP U-2525 B&C**

Execution of this Memorandum of Agreement by the USACE, North Carolina SHPO, and other Concurring Parties, its subsequent filing with the Council and implementation of its terms evidence that USACE, has afforded the Council an opportunity to comment on the Undertaking, and that the USACE, has taken into account the effects of the Undertaking on the Schoolfield-Hatcher Farm.

CONCUR:

Date: _____
Dewey Hatcher, Primary Trustee for Schoolfield-Hatcher Farm

CONCUR:

Alma J. Larson Date: Oct. 12, 2008
Alma Larson, Trustee for Schoolfield-Hatcher Farm

Date: _____
Irene Jones, Trustee for Schoolfield-Hatcher Farm

Date: _____
Bill Hatcher, Trustee for Schoolfield-Hatcher Farm

APPENDIX A

Historic Structures and Landscape Recordation Plan
Greensboro Eastern and Northern Urban Loop
Guilford County, North Carolina
TIP U-2525 B&C
WBS# 34821.1.1

Photographic Requirements

- Overall views of the Schoolfield-Hatcher Farm and surrounding landscape (elevations and oblique views).
- Selected photographic views of the Schoolfield-Hatcher house and outbuildings.
- Views of the property and landscape showing the relationship to existing road(s).

Photographic Format

- All images will be captured, labeled, and stored according to the North Carolina State Historic Preservation Office's, "Policy and Guidelines for Digital Photography for Historic Property Surveys, National Register Nominations and NRAC PowerPoint Presentations, Revised April 2008."

Copies and Curation

- One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One (1) set of all photographic documentation will be deposited in the files of the Historic Architecture Group of the NCDOT.

McKNIGHT MILL ROAD

BRIARWIDE ROAD

1" = 300'

U-2525B
ALT-1

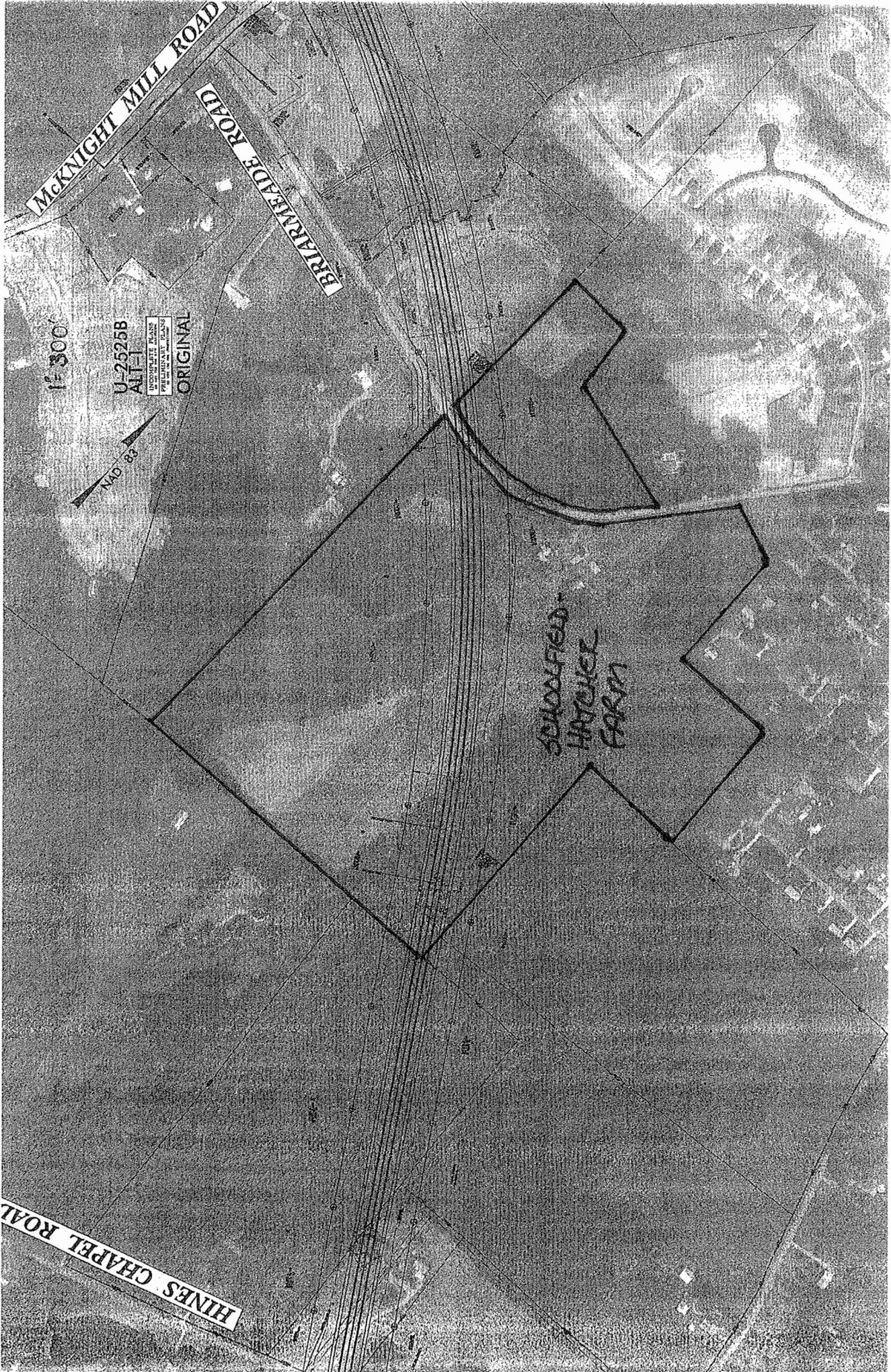
INCOMPLETE PLANS
PRELIMINARY PLANS

ORIGINAL



SCHOLDFIELD
HATCHER
FARM

HINES CHAPEL ROAD



1" = 300'
U-2525B
ALT-2

INCOMPLETE PLANS
PRELIMINARY PLANS
SHIFTED

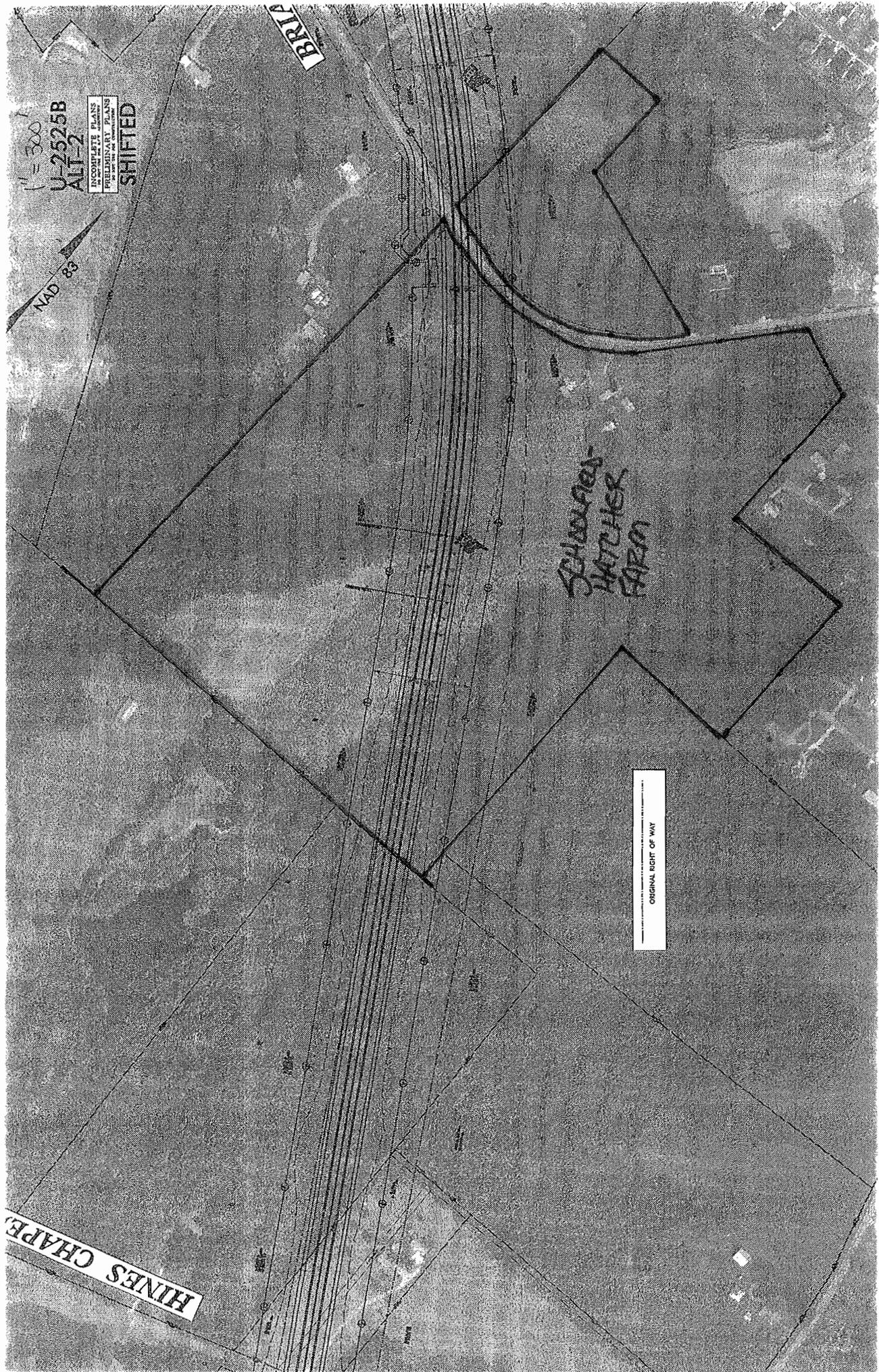
NAD 83

BRITZ

SCHUMMER
HATCHER
FARM

ORIGINAL RIGHT OF WAY

HINES CHAPEL



APPENDIX B

Archaeological Monitoring Plan

Archaeological Monitoring Plan

TIP No. U-2525 B&C
Greensboro Eastern and Northern Urban Loop
WBS# 34821.1.1
Guilford County, North Carolina

- The contractor will contact the NCDOT (Archaeology Group) when ground-disturbing activities are anticipated within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange).
- The contractor will provide 48-hours notice to the NCDOT (Archaeology Group) prior to ground-disturbing activities within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange). The 48-hour period will begin upon acknowledgment by the NCDOT (Archaeology Group) that the contractor has contacted them.
- The NCDOT (Archaeology Group) will be on-site during ground-disturbing activities in order to monitor said activities within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange). Monitoring activities may include, but not be limited to: 1) cleaning and photographing areas exposed during construction, 2) mapping both plan and profile views of open trenches, and 3) collecting materials or artifacts exposed during construction. The NCDOT (Archaeology Group) will have the authority to halt all construction work within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange) in order to assess the need for further archaeological excavations.
- Should archaeological resource(s) deemed eligible for the National Register of Historic Places (NRHP) be discovered during the monitoring phase as determined by the NCDOT (Archaeology Group), then all work will be halted within the limits of the NRHP resource and the State Historic Preservation Office will be contacted. As per the Memorandum of Agreement (MOA), the SHPO will consult with the NCDOT (Archaeology Group), on-site if necessary, in order to develop appropriate protection/mitigation measures for the resource(s). Appropriate measures for the resource(s) may include preservation in place, photographing and mapping, and/or additional archaeological excavations.
- Both the SHPO and the NCDOT (Archaeology Group) will agree upon and provide to the contractor a written description of the measures required for the resource(s). The description will include a schedule for implementing and completing the measures. Upon receipt of written confirmation from the NCDOT (Archaeology Group) that the resource measures have been completed, construction activities may resume in the location containing the resource.