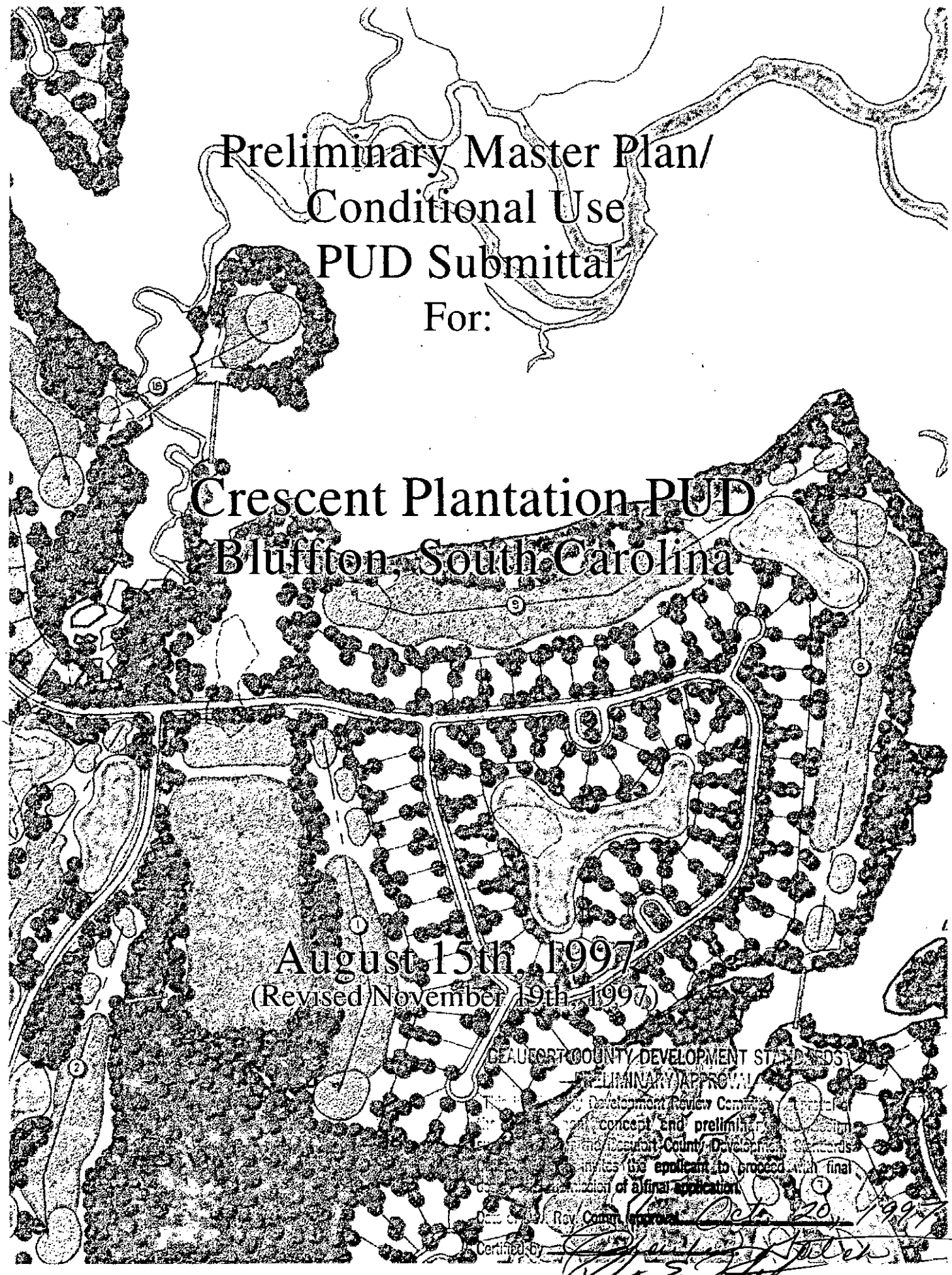
Preliminary Master Plan/ Conditional Use PUD Submittal For:

Crescent Plantation PUD Bluffton, South Carolina



August 15th, 1997
(Revised November 19th, 1997)

BEAUFORT COUNTY DEVELOPMENT STANDARDS
PRELIMINARY APPROVAL
This Development Review Committee has reviewed the concept and preliminary plan for this development in accordance with Beaufort County Development Standards and invites the applicant to proceed with final application submittal of a final application.
Date of Dev. Rev. Comm. approval Oct. 20, 1997
Certified by

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(Revised 11/19/97)

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   2. Archaeological Reconnaissance of Crescent Plantation, Beaufort County, SC
   3. Intensive Archaeological Survey of Crescent Plantation, Beaufort County, SC
G. Threatened and Endangered Species Survey Report
H. Environmental Site Assessment (Phase I)
I. Storm Water Management Master Plan
   1. Storm Water Management Narrative
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K. Sanitary Sewer Collection Master Plan
L. Intent to Serve and Comment Letters
   1. Beaufort-Jasper Water and Sewer Authority
   2. Bluffton Telephone Company, Inc.
   3. Palmetto Electric Cooperative Inc.
   4. Wastewater Management of the Low Country
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   6. South Carolina Department of Health and Environmental Control (SCDHEC)
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M. Other Agency Submittals/Preliminary Comments
   1. South Carolina Department of Transportation (SCDOT)
   2. U.S. Highway 278 Corridor Review Board

Project Developers and Consultants

Centex Homes, Inc. is pleased to list the initial professional development team that has been consulted to prepare the Crescent Plantation PUD-Preliminary Master Plan:

DEVELOPER:	Centex Homes, Inc.	Mr. Jay Thrower
GOLF COURSE ARCHITECT:	Ron Garl Golf Course Architect	Mr. Ron Garl
LAND PLANNING/ LANDSCAPE ARCHITECTURE:	Wood+Partners Inc.	Mr. Perry Wood Mr. Bruce Boysen
ENGINEERING:	Thomas & Hutton Eng. Co.	Mr. Ben Jones
ENVIRONMENTAL CONSULTANTS:	Newkirk Environmental Consultants, Inc.	Mr. Duncan Newkirk Mr. Stuart Sligh
	Whitaker Laboratory, Inc.	Mr. Joseph Whitaker
ARCHAEOLOGICAL CONSULTANTS:	Chicora Research Contribution 226	Dr. Michael Trinkley, Ph. D.
GEOTECHNICAL CONSULTANTS:	Newkirk Environmental Consultants, Inc.	Mr. Duncan Newkirk Mr. Stuart Sligh
WILDLIFE CONSULTANTS:	Newkirk Environmental Consultants, Inc.	Mr. Duncan Newkirk Mr. Stuart Sligh
LEGAL:	Bethea, Jordan & Griffin, P.A. Law Office of Lewis J. Hammet	Mr. Stephen Bird Mr. Lewis Hammet

Crescent Plantation
PUD
(Revised 9/4/97)

I. PROJECT INTRODUCTION

This application is for preliminary approval for a PUD, under Section 7.5.2.3 (B) and Section 7.5.2.4 of the Beaufort County Zoning and Development Standards Ordinance, as well as for conditional use PUD approval as allowed within Development District Zoning, to establish the Crescent Plantation PUD.

The property consists of approximately 553 acres. The property is currently zoned as Development District (DD) under Beaufort County law.

All uses and densities proposed for Crescent Plantation are allowed under current zoning. The applicant seeks approval as a conditional use PUD, under the standards of the Zoning and Standards Ordinance, and also by-right preliminary PUD Master Plan, under Section 7.5.2.3 (B) and 7.5.2.4 of the Ordinance.

Total density for the 553 acres will be a maximum of 462 residential units. A total of 450 single family homesites are planned, along with a maximum of 12 multi-family units. An 18-hole golf course, together with a clubhouse and recreational amenities are also proposed. Details of this plan are described under Section III of this Application and the accompanying Exhibit B - Crescent Plantation PUD - Preliminary Master Plan.

Present zoning would allow a maximum of approximately 4,424 units on this property, so that this application proposes a density reduction of almost 4,000 units for the overall Master Plan.

The existing conditions of the site are explained under Section II of this Application, and the full Development Plan proposed for Crescent Plantation PUD is set forth under Section III. This entire written narrative, together with all exhibits hereto, constitute the full Application.

The Applicant respectfully requests that the Development Review Team approved this preliminary Application for the Crescent Plantation PUD.

II. EXISTING CONDITIONS

The subject property is owned by Ms. Josephine W. Johnson and is under contract to the Applicant, which has full authority to submit this Application.

This application seeks a preliminary approval for by-right uses only, within a Development District, as well as conditional use approval, as provided by Beaufort County law.

The 553 acre Crescent Plantation will be bounded on the north by marshes of Oak Forest Creek, on the west by the Belfair PUD residential/golf community and by the high intensity Ashley Plantation Apartment development. The property is also bounded by a parcel owned by

the Catholic Church (institutional) to the west and by Highway 278. The moderate intensity Saw Mill Forest PUD is to the south, and lands of Trimbleston Partnership (light residential) to the east. Development District Zoning, General Commercial Zoning and PUD Zoning (Belfair and Saw Mill Forest) are adjacent to the property.

The proposed Crescent Plantation PUD is within both the River Protection overlay district and the Highway 278 corridor overlay district and the proposed development will adhere to all requirements of these overlay districts.

The attached Exhibits give detailed information regarding the existing conditions of the property. These items include:

A. The boundary survey plat of the property (Exhibit A) contains the following information:

1) Vicinity Map
2) Boundary and Dimensions
3) Existing Easements
4) Existing Roads
5) Property Owners of Adjacent Property
6) Existing Drainageways
7) Existing Wetlands and Coastal Council Critical Line
8) FEMA Zones
9) Coordinate Data

B. Delineated Wetlands are shown on (Exhibit A)

The wetlands depicted on the boundary plat were delineated by Mr. Stuart Sligh of Newkirk Environmental Consultants and surveyed by Coastal Survey in August of 1997. Mr. Jake Duncan of the U.S. Corps of Engineers field verified the wetlands on June 24, 1997. A verification request was submitted to the Corp. on August 15, 1997. A complete wetland verification application is included in Exhibit A. This application represents the wetlands field verified by Mr. Duncan and included on the Boundary Plat. The application also includes the OCRM sign-off on the critical line as depicted on the Boundary Plat. A wetland verification letter from the Army Corps of Engineers shall be provided with all individual applications for specific development permits for phases of construction within Crescent Plantation as a condition of PUD approval.

C. Existing Vegetation (Exhibit E)

An existing tree coverage plan is enclosed as Exhibit E. Much of the tract exhibits dense mixed hardwood and pine vegetation although there are some areas where the lowland forest is more open. Another predominate feature of the site are large areas of previous agriculture which today are largely in second growth pine and grass.

D. Existing Drainage (Exhibit A)

The existing drainage system on Crescent Plantation consists of freshwater and saltwater wetlands, drainage ditches and one lagoon. Two major drainage ditches enter the property from U.S. Highway 278 and traverse the property where they outfall into Forest Creek, a

tributary of the Colleton River. These ditches seem to drain several hundred acres south of U.S. Highway 278 along with a major portion of Crescent Plantation.

E. Soils are as shown on (Exhibit D)

Existing soil conditions are indicated on Exhibit D. Soils information was compiled from the Soil Survey of Beaufort and Jasper Counties prepared by the United States Department of Agriculture's Soil Conservation Service. The soils on this site range from poorly drained fine sand to excessively drained sand. The soils indicated by the survey to exist on Crescent Plantation consist of Baratari, Capers, Polawana, Ridgeland, Rosedhu, Seabrook, Seewee and Wando.

F. Archeological Reports are included as (Exhibit F.1, F.2 and F.3)

(Exhibit F.1) memorandum from Mr. Ian Hill, Historic Preservation Planner regarding his preliminary review of the archeological data submitted for Crescent Plantation.

(Exhibit F.2) an archaeological reconnaissance of Crescent Plantation, Beaufort County, South Carolina was prepared by Michael Trinkley, Ph.D., of The Chicora Foundation, Inc., in May of 1997. The reconnaissance level study revealed that the tract does contain both prehistoric and historic remains and recommended an intensive survey of the project tract be conducted.

(Exhibit F.3) an Intensive Archaeological Survey of Crescent Plantation, Beaufort County, South Carolina was conducted by The Chicora Foundation, Inc., in July of 1997. This study identified and assessed ten archaeological sites. Of these eight sites were recommended as not eligible for inclusion on the National Register of Historic Places.

Site 38BU1713 was identified as eligible for inclusion on the National Register. Information related to this site is contained on pages 45 through 51 of the Intensive Study (Exhibit F.2).

Site 38BU1715 was identified as potentially eligible for inclusion on the National Register and recommended additional testing and oral history research take place so the site can be fully assessed for its research potential.

The Crescent Plantation Conditional Use PUD will not develop the two sites identified as eligible and potentially eligible for inclusion on the National Register of Historical Places until all required studies suggested in the intensive Archaeological Survey are completed and all applicable laws and requirements have been met.

G. Threatened and Endangered Species Report (Exhibit G)

Newkirk Environmental Services has concluded based on their completed Threatened and Endangered Species Survey for Crescent Plantation that the site contains no threatened or endangered species nor critical habitats of listed species (Exhibit G). A

final report will be submitted to the USFWS and SCDNR for a letter of concurrence. No development shall occur on the Crescent Plantation property until such letter of concurrence is received or all required studies suggested are completed and all applicable laws and requirements have been met.

H. Environmental Site Assessment (Phase I) (Exhibit H)

An environmental study was prepared by Whitaker Laboratory, Inc., in July of 1997 to identify conditions that may impose an environmental liability or restrict the property's use. The report found no indication of the presence, use or disposal of hazardous waste on this property and recommended that a Phase II investigation was not necessary for the property.

I. FEMA (Exhibit A)

As per the September 29, 1986 Flood Insurance Rate Map issued by the Federal Emergency Management Agency (FEMA), there are three FEMA zones on the Crescent Plantation property. The three FEMA zones are indicated on the boundary plat (Exhibit A) and include: Zone B indicating areas between the 100 year flood and 500 year flood, Zone C indicating areas of minimal flooding and Zone A8 is an area within the 100 year flood with a base flood elevation of 14. The finished floor of habitable structures and all other facilities which qualify must be constructed above elevation 14 mean sea level in Zone A8.

J. Existing Infrastructure

Potable Water/Sanitary Sewer

There is an existing 12" diameter water main located in the Santee Cooper Powerline easement. This waterline is part of the Bluffton Water System and is owned and operated by BJWSA. Sanitary sewer service is available at the Bluffton Wastewater Treatment Plant. This treatment plant is owned and operated by BJWSA.

Electrical Service

Electrical service is provided on Crescent Plantation by Palmetto Electric Cooperative.

Telephone Service

Telephone service to Crescent Plantation is provided by Bluffton Telephone.

III. DEVELOPMENT PLAN

The project will be developed in accordance with the Crescent Plantation PUD - Preliminary Master Plan prepared by Wood+Partners, Inc., dated August 15, 1997 (revised 11/19/97) and shown on **Exhibit B.** The exact location of roads, lagoons, golf holes, recreational amenities

and other elements may vary at the time of Development Permit Applications, when more specific and final engineering data, soil data, tree survey data and site specific designs are available, provided the maximum density set herein and the general concept of residential development with the proposed amenities indicated on the Master Plan is followed and respected. Applicant proposes the uses and densities, which are described below, and which are all allowed uses and densities under current zoning.

A. LAND USES

The following land uses as designated on the master plan, shall have the following allowed permitted uses and development parameters, all of which are allowed uses under current zoning.

1. Residential Uses And Other Allowed Uses.

The Crescent Plantation development shall have the following allowed uses and densities:

a. Single Family Residential, detached or attached, up to a maximum of 450 single family residences
b. Multi Family Residential, up to a maximum of 12 multi-family units
c. Community Buildings
d. Open Space
   (1) Landscape Areas
   (2) Lagoons, Ponds
   (3) Freshwater Wetlands and Buffers
   (4) Conservation
   (5) Garden Plots
   (6) Recreational Areas
   (7) Pedestrian/bicycle Paths/network
   (8) Regulation size or par three golf course (Limit of one 18 hole course, public or private, with associated practice facilities)
e. Community Roads
f. Utilities, including but not limited to, Power, Telephone, Water, Sewer, Drainage and Lagoon
g. Construction/Development Offices and Temporary Construction Facilities
   (1) Storage
   (2) Disposal Yards
   (3) Construction Signs
   (4) Temporary Office Trailers
h. All uses in 2. - Model Homes/Sales Center

2. Model Homes/Sales Center

The Model Homes and Sales Center will be near the entrance from Highway 278, as shown on the Master Plan. This area may include office facilities associated with the

primary sale of residential lots and homes and that these offices shall be located within model homes that will be sold as single family residences at a future date.

Permitted Uses:

a. Temporary Sales, Financial Services and Contractor's Offices
b. Model Homes
c. Single Family Residential (SF)

3. Community Recreation Facilities

This Category allows for the recreational complexes to service the Crescent Plantation development. The community/golf clubhouse location is indicated on the Crescent Plantation PUD Preliminary Maser Plan. Ancillary outdoor recreational facilities may be located elsewhere within the development but limited to two additional sites and may include but are not limited to, pools, tennis courts, parks, playgrounds, trails & paths and other similar uses. These facilities may have indoor recreation, meeting, banquet, hobby and exercise areas.

Permitted Uses:

a. Recreational Buildings
b. Community Activities Centers
c. Community Offices
d. Indoor/Outdoor Recreation Facilities
  (1) Pedestrian / Bicycle Paths
  (2) Open space
e. Maintenance and Storage Facilities
f. Community Services (internally oriented for community use):
  (1) Club Houses, Game Rooms
  (2) Snack Bar/Grill, associated with the clubhouse or other community facility only
g. Auto Parking

4. Maintenance

The Maintenance Area will contain the facilities, tools and equipment necessary to maintain the common properties and amenities. These facilities may be congregated at one central site or located in separate convenient sites for different services.

Permitted Uses:
a. Vehicle Maintenance
b. Storage of Vehicles and Parts, Boats, Recreational Vehicles, and Resident Storage Units
c. Fuel Storage
d. Shops for Woodwork, Metalwork and Painting for Maintenance of Community, Greenhouses and Pump Station
e. Offices Associated with Community and Maintenance

f. Storage of Chemicals and Bulk Materials, as permitted by law

5. **Roads**

a. A total of approximately 7.7 miles of roads are proposed for Crescent Plantation, roads designed to Beaufort County standards will be allowed throughout the PUD, in locations appropriate under final site planning.
b. The roads, drainage systems, open spaces and other proposed amenities and improvements excluding the golf course and its ancillary development within Crescent Plantation shall be conveyed to the Crescent Plantation property owners association as required by the Beaufort County DSO Section 6.5.1(E)(2) which will have assessment and lien rights sufficient to ensure their maintenance. These facilities will not be offered for public dedication in the future.

6. **Wetlands (Exhibit A)**

Freshwater wetlands on the property have been delineated, surveyed and field verified by the Army Corps of Engineers. The use of these lands is controlled by the U.S. Army Corps of Engineers and South Carolina Department of Health & Environmental Control, Office of Ocean and Coastal Management Resource and unless restricted via memorandum of Agreement to the contrary, the following are **Permitted Uses:**

a. Open Space
b. Conservation easements
c. Activities in all Areas as Permitted by U.S. Army Corps of Engineers and South Carolina Department of Health & Environmental Control, Office of Ocean and Coastal Management Resource
d. Disposal of Reclaimed Water as Permitted by SCDHEC
e. Boardwalks, Bridges or other permitted structures
f. Storm Water Control and Disposal

7. **Setback and Buffers**

Setbacks and Buffers will meet or exceed the requirements of the Beaufort County Zoning and Development Standards Ordinance and will apply to the perimeter of the PUD only, as provided for under Article V Section 5.2.9.(D) (page 426) of the DSO and shall meet or exceed the standards of the River Protection overlay district and the highway corridor overlay district.

Setbacks from the edge of wetlands shall meet and or exceed the minimum requirements set forth in the Beaufort County DSO (20' minimum for single family residential, 50' minimum for multi-family residential, 30' minimum for impervious parking areas or as established by OCRM whichever is greater).

Single family detached housing shall have a minimum sideyard setback of 5 feet, minimum front yard setback of 25 feet and an minimum rear yard setback of 10 feet

unless Beaufort County Law provides for a greater setback on individual circumstances, such as provided under setback standards for marshes and wetlands.

8. Open Space

Adequate open space is required for developments in Beaufort County. Open space in the Crescent Plantation PUD, as with other PUD's, will be calculated for the boundary of the PUD and not site specific for each phase of the PUD. The approximate open space requirement based upon the suggested primary land uses (see **Exhibits B** and land use narrative), for the area covered by this application is shown below:

Single Family Residential	± 535.75 acres x 10% =	54.0 acres
Multi-Family Residential	± 1.25 acres x 40% =	0.5 acres
Ancillary Development including clubhouse site, recreation sites and maintenance area	± 16.0 acres x 15% =	2.5 acres
Total Requirement	553 acre site =	57.0 acres open spaces

The Crescent Plantation Master Plan calls for approximately 140 acres of open space, preserved wetlands, lagoons, golf and buffers **(Exhibit B)**. This does not include landscaped areas within developed parcels. Therefore, the Crescent Plantation PUD more than meets Beaufort County Zoning and Development Standards Ordinance for open space requirements. Pedestrian/bike paths and cart paths are allowed within all perimeter buffers.

B. PHASING

The Crescent Plantation PUD will be constructed in phases over an estimated 5 - 6 year period. A proposed phasing schedule is included below. The phasing sequence depicted in the proposed phasing schedule is the suggested primary phasing sequence for the Crescent Plantation and may be adjusted based upon sales absorption over the life of the development.

Crescent Plantation Phasing Assumptions

Activity	Units	
Begin Construction Spine Road Utilities and Golf Course		1/1/98
Begin Model Complex	± 12 DU	3/30/98
Begin Phase I of the Pines	± 52 DU	6/15/98

Begin Phase I of the Oaks	± 60 DU	1/1/99
Begin Phase I of the Cedars	± 43 DU	6/15/99
Golf Course Complete		9/15/99
Begin Phase II of the Pines	± 52 DU	11/30/99
Begin Phase II of the Oaks	± 60 DU	5/30/2000
Begin Phase II of the Cedars	± 42 DU	11/30/2000
Begin Phase III of the Pines	± 52 DU	5/30/2001
Begin Phase III of the Oaks	± 60 DU	11/30/2001
Begin Phase IV of the Oaks	± 29 DU	5/30/2002
Total	462 DU	

C. SITE DESIGN AND DEVELOPMENT STANDARDS

Architectural guidelines and restrictive covenants will set standards for all design and construction materials and will meet and/or exceed the Beaufort County Zoning and Development Standards Ordinance. The Development Standards Ordinance, as applicable to a by-right PUD development, will apply to future development of the property.

D. STORM WATER MANAGEMENT (EXHIBIT I)

1. The Storm Water Management Master Plan and Narrative are shown as Exhibit I.

   Storm Water runoff from the Crescent Plantation project–The Project–will be drained into a multi-purpose wet detention basin engineered for the management of water quality, erosion and flood control.

   Water Quality Control

   The design criteria and performance specifications proposed for The Project were developed in response to Beaufort County Council's mandate regarding storm water quality control. These criteria and specifications were modeled after the requirements of the St. Johns River Water Management District in Northeast Florida and contain concepts and methods which are nationally recognized as state-of-the-art.

Erosion Control

It is known that the more frequent runoff events are of prime importance as a cause of channel erosion. Consequently, the wet detention basin will be engineered to limit The Project's discharge from both the 2-year and 10-year storm events to predevelopment levels.

Flood Control

To address the concern of regional flooding, the wet detention basin will be engineered to limit The Project's discharge from the 25-year storm event to predevelopment level.

Design Criteria and Performance Specifications

For details, see enclosed document (**Exhibit I**) entitled *The Design of Wet Detention Basins for the Management of Runoff from Crescent Plantation.*

The storm water management system will be designed to meet current Beaufort County Ordinances as well as applicable state and federal standards. The outfalls from the development will discharge into the marshes of Forest Creek. Forest Creek discharges into the Colleton River.

Crescent Plantation will include a drainage system designed to attenuate the difference between predevelopment and postdevelopment runoff rates for the 2-year, 10-year and 25-year 24 hour storm events. The system will include drainage inlets, storm manholes, pipes, outfall structures, open ditches, freshwater wetlands, and retention/detention ponds.

The Storm Water infrastructure elements will meet the standards as outlined in section 5.4 Storm Water Management Standards of the Beaufort County Development Standards Ordinance and requirements of SCDHEC/OCRM. Individual projects must be submitted and approved by Beaufort County and OCRM prior to issuance of construction permits.

The Storm Water Management Master Plan is subject to modification as development progresses. Exact locations of ponds, connector pipes and outfalls for each phase will be determined prior to submitting for a Beaufort County Development Permit for that phase.

2. Third Party Review of Storm Water Management System: Enhanced Review Standards. In addition to all other applicable Beaufort County standards, prior to the issuance of any development permit for site development within Crescent Plantation PUD, the applicant shall submit storm water runoff quality design criteria to the Beaufort County Engineer, for the purpose of obtaining Third Party environmental engineer review under standards adopted by Beaufort County Council by Resolution of November 11, 1996. These are the storm water quality, Best Management Practices as made applicable to Eagles Point PUD, Okatie Community PUD, and Habersham PUD, among others. The Third Party review shall be conducted at applicant's expense by a firm chosen by Beaufort County. In addition to meeting the standards otherwise imposed by Beaufort County law, the standards resulting from the required third party review shall be imposed upon any development approval

issued within Crescent Plantation in the future. Required design criteria and Best Management Practices, as may result from the third party review, as approved by the Beaufort County Engineer, shall be an enforceable standard hereunder which may not be altered without the approval of the County Engineer, or a properly approved Amendment hereto under Beaufort County law.

E. UTILITY SERVICES

1. Potable Water (Exhibit J)

Potable water will be provided by Beaufort-Jasper Water & Sewer Authority (BJWSA). A 12 inch water main will be extended from the existing 12 inch water main located in the Santee Cooper powerline easement directly south of U.S. Highway 278. The connection to this existing water main will be made at the intersection of SC Highway 46 and the Santee Cooper Powerline. The developer will construct the water system and turn it over to BJWSA upon acceptance by South Carolina Department of Health and Environmental Control (SCDHEC). (See letters from BJWSA and SCDHEC Exhibit L).

2. Wastewater (Exhibit K)

Wastewater collection will be provided by a combination of gravity sewers, pumping stations and force mains located within Crescent Plantation. The wastewater will be pumped to Crescent Plantation Pump Station #1, shown on the Wastewater Collection Master Plan, and pumped to the Bluffton Wastewater Treatment Plant. The developer will construct the wastewater collection system and turn it over to BJWSA upon acceptance by South Carolina Department of Health and Environmental Control (SCDHEC). (See letters from BJWSA and SCDHEC **Exhibit L**).

3. Electrical Service

Electrical service will be provided by Palmetto Electric Cooperative. Service will be extended on an as needed basis as each phase of the PUD is completed.**(Exhibit L)**

4. Telecommunication Service

Telecommunication and cable television service will be provided by Hargray Telephone Company. Service will be extended on an as needed basis as each phase of the PUD is completed. (See letter, **Exhibit L**).

5. Bluffton Fire District

The Fire water supply system is capable of providing fire flow. The plan was reviewed by the Bluffton Fire District and their preliminary approval is enclosed. (See letter, **Exhibit L**).

6. **Solid Waste Disposal Services**

The project will be served by Waste Management of the Low Country which has agreed to serve the project (see letter, **Exhibit L**).

F. PROPOSED STREETS

1. Access to Crescent Plantation shall be limited to one intersection on U.S. Highway 278. This access point is indicated on the Crescent Plantation PUD/Preliminary Master Plan and has been approved by the U.S. Highway 278 Corridor Review Boards **(Exhibit M).**

2. Proposed street names for Crescent Plantation shall come from a list of names currently reserved with Ms. Nica Loving, Beaufort County Development Division, by Centex Homes. These names include:

Hunters Green
Reston Place
Highpoint
Bay Club
Oakhill
Carrington Point
Winchester
Southern Dunes
Pitching Wedge
Pavins Place
Meridian Point
Huntington Place
Dogleg Court

The proposed street names from this list shall be included on specific phases of development submitted for approval prior to issuance of any development permits for the construction thereof.

G. Access for Third Parties

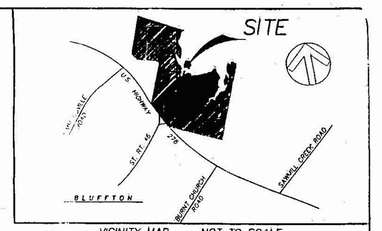
1. To the extent that Third Party owners may have access rights across portions of Crescent Plantation, Applicant shall provide for uninterrupted continuation of that access during the course of construction and thereafter. Applicant shall maintain such access in a reasonable manner and not diminish the condition or extent of any legal access, as compared to the condition and extent such historical access at the time development commences. Beaufort County recognizes that the existence and extent of any rights for third parties is a matter of private right, which this provision shall not alter, but appropriate maintenance of any existing right is made a condition of this approval.

H. Proposed Docks

1. Applicant shall not have the right to construct any boat dock facility in the adjacent creeks, rivers or marshes of Crescent Plantation. Applicant shall have the right, however, if all applicable permits and approvals are obtained, to construct a maximum of one crabbing/observation dock, which shall have no boat docking component, and the docking of any boat at such facility, if constructed, shall be prohibited.

EXHIBIT A

BOUNDARY PLAT/WETLANDS SURVEY
Wetlands Verification
Army Corps of Engineers Preliminary Comments



VICINITY MAP NOT TO SCALE

BELFAIR PLANTATION L.L.C.

WETLAND "B"
58,480 sq.ft.
1.34 acres

WETLAND "C"
5,146 sq.ft.
0.12 acres

WETLAND "D"
3,090 sq.ft.
0.07 acres

WETLAND "A"
967,690 sq.ft.
22.22 acres

WETLAND "E"
538,480 sq.ft.
12.36 acres

ZONE AB EL. 14

ZONE C

APPROX. FLOOD LINE LOCATION

EXISTING EARTH ROAD PRESCRIPTIVE EASEMENT DB. 497 PG. 415

O.C.R.M. CRITICAL LINE

MARSHES OF OAK FOREST CREEK

ISLAND 2
199,550 sq.ft.
3.42 acres

WETLAND "F"
22,265 sq.ft.
0.51 acres

WETLAND "G"
6,001 sq.ft.
0.14 acres

WETLAND "H"
49,118 sq.ft.
1.13 acres

WETLAND "U"
32,551 sq.ft.
0.75 acres

SEE INSET

WETLAND "K"
29,250 sq.ft.
0.67 acres

WETLAND "V"
41,273 sq.ft.
0.95 acres

WETLAND "U"
38,803 sq.ft.
0.89 acres

WETLAND "T"
5,869 sq.ft.
0.13 acres

ISLAND 3
84,911 sq.ft.
1.95 acres

NOW OR FORMERLY
PARCEL 2
TRIMBLESTON PARTNERSHIP

CRESCENT PLANTATION
553.02 ACRES
TOTAL (INCLUDES ISLANDS & WETLANDS)
JOSEPHINE K. JOHNSON
PB. 3, PG. 113

WETLAND "I"
99,416 sq.ft.
2.28 acres

WETLAND "L"
669,785 sq.ft.
15.38 acres

WETLAND "S"
11,382 sq.ft.
0.26 acres

WETLAND "R"
7,506 sq.ft.
0.17 acres

WETLAND "O"
357,051 sq.ft.
8.20 acres

WETLAND "P"
933,926 sq.ft.
21.44 acres

WETLAND "M"
3,730 sq.ft.
0.09 acres

WETLAND "N"
18,109 sq.ft.
0.44 acres

WETLAND "O"
47,791 sq.ft.
1.10 acres

ISLAND 1
6,940 sq.ft.
0.11 acres

INSET

BELFAIR PLANTATION L.L.C.

ASHLEY PLANTATION PHASE 2

NOW OR FORMERLY OPTION PROPERTY PHASE 3

ASHLEY PLANTATION PHASE 1

CATHOLIC CHURCH

SIGN PARCEL

LAGOON

RESIDENCE HOUSE

PALMETTO ELECTRIC OVERHEAD SERVICE LINE

PALMETTO ELECTRIC POWER LINE

LOT 14

LOT 16

LOT 15

LOT 13

OPEN SPACE

SHERIDAN COMMERCIAL CENTRE

LOT 15

LOT 13 OPEN SPACE

NOW OR FORMERLY UNION CAMP

MALCOLM JOHNSON

TO BLUFFTON

TO BEAUFORT

EXISTING DITCH

BILLBOARD NO. 831 BY WOODE, CO.

NOW OR FORMERLY J.B. JOHNSON

SAWMILL FOREST

20' INGRESS/EGRESS EASEMENT FOLLOWS EXISTING DIRT ROAD AND IS SUBJECT TO RELOCATION

EDWARD J. DERST, JR.
DB. 116, PG. 135

S.C. WILDLIFE & MARINE RESOURCE DEPT.
PB. 28, PG. 40, DATED 11/8/78

SAWMILL CREEK ROAD

U.S. HWY. 278

GRAPHIC SCALE
0 200 400 800
SCALE IN FEET

THE AREA SHOWN ON THIS PLAT IS GENERAL REPRESENTATION OF CORP OF ENGINEERS PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS, BY THEIR NATURE, ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME. BY GENERALLY DELINEATING THE PERMIT AUTHORITY OF THE CORPS OF ENGINEERS, THE CORP OF ENGINEERS IN NO WAY WAIVES THE RIGHT TO ASSERT PERMIT JURISDICTION IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY WHETHER SHOWN OR NOT. ALL PROPERTY OWNERS OR PROSPECTIVE BUYERS ARE ADVISED TO HAVE THE LINE CHECKED BY COUNCIL STAFF PRIOR TO CONSTRUCTION OR CLOSING ON THE SALE OF THIS PROPERTY.

BY _____ DATE _____

THE AREA SHOWN ON THIS PLAT IS GENERAL REPRESENTATION OF CORP OF ENGINEERS PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS, BY THEIR NATURE, ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME. BY GENERALLY DELINEATING THE PERMIT AUTHORITY OF THE DHEC-OCRM, THE OFFICE OF OCRM IN NO WAY WAIVES THE RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME ON CRITICAL AREA ON THE SUBJECT PROPERTY, WHETHER SHOWN OR NOT.

BY SIGNATURE 8-18-97 DATE

This survey on this plat is valid for three years from the date of certification w/ the cautionary language above.

SPECIAL NOTES:

1. THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, PROTECTIVE COVENANTS AND OTHER FACTS THAT MAY BE REVEALED BY A COMPLETE TITLE SEARCH.
2. WETLANDS AND S.C.C.C.L. ARE LABELED IN CONSECUTIVE ORDER UNLESS OTHERWISE NOTED AND SHALL BE CALLED FOR EVERY FIVE OR TEN LINES.
3. WETLAND BEARINGS ARE ALL SHOWN IN A NORTHLY DIRECTION.

REFERENCE PLAT:

1. A SURVEY OF 1089.66 ACRES OF BELFAIR PLANTATION BY: OCTAVIO ARANGO, S.C.R.L.S. NO. 12006 PLAT BOOK 60, PAGE 128, LAST RECORDED 5/5/97
2. A PLAT OF TRIMBLESTON PLANTATION PB. 6 PG. 36
3. A PLAT OF TRIMBLESTON PLANTATION PB. 9 PG. 26
4. A SUBDIVISION PLAT OF SAWMILL FOREST PHASE 3 BY MATHEW CRAWFORD, S.C.R.L.S. 9756, DATED 10/28/96
5. A PLAT OF 109.63 ACRES ON U.S. HWY. 278 PREPARED BY COASTAL SURVEYING CO. INC. BY MICHEAL R. DUNIGAN, DATED 8/7/91 LAST REVISED 10/1/92.
6. A PLAT OF MULTI-FAMILY PHASE 1 & OPTION PROPERTY PHASE 1 & 2, PREPARED BY THOMAS & HUTTON ENG. CO., S.C.R.L.S. NO. 12006 OCTAVIO ARANGO., DATED 5/23/96.
7. D.O.T. CONSTRUCTION PLANS FOR HWY 278
8. A PLAT OF 1481.769 ACRES OF BELFAIR PLANTATION & SURROUNDING TRACTS PREPARED BY COASTAL SURVEYING, S.C.R.L.S. JERRY RICHARDSON NO. 4784, DATED 2/28/85.

LEGEND

CMF	CONCRETE MONUMENT FOUND, 3"X3" W/PIN
IPF	IRON PIN FOUND
IPS	IRON PIN SET
CC	COMPUTED CORNER

FLOOD NOTE:

A PORTION OF THIS PROPERTY LIES IN A FEDERAL FLOOD HAZARD AREA, PANEL NO. 450025 0035D SEPTEMBER 1986

ACREAGE SCHEDULE

UPLAND ISLANDS	5.48 AC.
UPLANDS	457.05 AC.
WETLANDS	90.49 AC.
TOTAL	553.02 AC.

I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS A SURVEY AS SPECIFIED THEREIN.

RICHARD L. STROMAN S.C.R.L.S. NO. 5496

PREPARED FOR: CENTEX HOMES INC.

A BOUNDARY & WETLAND PLAT OF
CRESCENT PLANTATION
553.02 ACRES
A SECTION OF
JOHNSON PROPERTY
BLUFFTON TOWNSHIP, BEAUFORT COUNTY, SOUTH CAROLINA

COASTAL SURVEYING CO. INC. HILTON HEAD, SOUTH CAROLINA — SOUTH CAROLINA — CERTIFICATE OF AUTHORIZATION

SURVEYED BY: LC,MB,CL
DRAWN BY: W-M
CHECKED BY: RS
SCALE: 1" = 400'
DATE: 8/7/97
JOB NO.: 29497

FILE LOCATION: D:\DWG\ FILE NAME: 29497BW1.DWG

SHEET 1 OF 2

LINE	DIRECTION	DISTANCE
L1	S 18°09'31" E	23.52'
L2	S 86°06'54" W	48.45'
L3	N 89°41'49" W	40.00'
L4	S 00°18'11" W	15.00'
L5	S 89°41'49" E	40.00'
L6	S 00°18'11" W	17.83'
L7	S 89°41'49" E	44.78'
L8	S 00°18'11" W	18.33'
L9	S 89°41'49" E	44.00'
L10	S 00°18'11" W	17.83'
L11	S 89°41'49" E	44.78'
L12	S 00°18'11" W	18.33'
L13	S 89°41'49" E	44.00'
L14	S 00°18'11" W	17.83'
L15	S 89°41'49" E	44.78'
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L17	S 89°41'49" E	44.00'
L18	S 00°18'11" W	17.83'
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DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 919
CHARLESTON, S.C. 29402-0919

REPLY TO
ATTENTION OF:

00022

September 22, 1997

Regulatory Branch

Mr. Stuart Sligh
Newkirk Environmental Consultants, Inc.
Post Office Box 16609
Savannah, Georgia 31416

Re: SAC 81-97-1370(J)
Beaufort County

Dear Mr. Sligh:

This is in response to your letter dated August 15, 1997, requesting a wetland determination on behalf of Jay Thrower, on property located adjacent to U.S. Highway 278 near the junction of Highway 46, Beaufort County, South Carolina. The project area is depicted on the survey plat you submitted. The survey plat was prepared by Coastal Surveying Company, Inc. dated August 7, 1997, and entitled, "A BOUNDARY & WETLAND PLAT OF CRESCENT PLANTATION, 553.02 ACRES, A SECTION OF JOHNSON PROPERTY BLUFFTON TOWNSHIP, BEAUFORT COUNTY, SOUTH CAROLINA, Sheets 1-2."

This plat depicts wetland boundaries as established by our office. You have requested that this office verify the accuracy of this wetland mapping as a true representation of wetlands within the regulatory authority of this office. The property in question is a 553.02 acre tract owned by Centex Homes, and contains 90.49 acres of freshwater wetlands.

Based on a review of aerial photography and soil survey information, it has been determined that the surveyed wetland boundaries are an accurate representation of wetlands within our regulatory authority. This office should be contacted prior to performing any work in these areas.

If a permit application is forthcoming as a result of this delineation, a copy of this letter, as well as the verified survey plat, should be submitted as part of the application. Otherwise, a delay could occur in confirming that a wetland delineation was performed for the permit project area.

Please be advised that this wetland determination is valid for five (5) years from the date of this letter unless new information warrants revision of the delineation before the expiration date. All actions concerning this determination must be complete within this time frame, or an additional wetland delineation must be conducted.

In future correspondence concerning this matter, please refer to SAC 81-97-1370(J). You may still need State or local assent. Prior to performing any work, you should contact the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management (OCRM). A copy of this letter is being forwarded to them for their information.

00023

If you have any questions concerning this matter, please contact me at either 800-208-2054 or A/C 803-727-4330.

Respectfully,

Jake Duncan
Biologist

Copy Furnished:

Mr. H. Stephen Snyder
S. C. Department of Health
and Environmental Control
Office of Ocean and Coastal
Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

00024

NEWKIRK
ENVIRONMENTAL
CONSULTANTS, INC

August 15, 1997

Mr. Don Hill
U.S. Army Corps of Engineers
Post Office Box 919
Charleston, SC 29402

Subject: Wetland Verification
553.02-Acre Crescent Plantation
Beaufort County, South Carolina

Dear Mr. Hill:

Newkirk Environmental Consultants, Inc. (NEC, Inc.) is pleased to provide you with the following information necessary for a wetland verification of the subject 553-acre site located adjacent to Highway 278 in Beaufort County, South Carolina. The preliminary wetland determination of this site was completed by NEC, Inc. in June 1997 using methods outlined in the 1987 "Corps of Engineers Wetlands Delineation Manual"[1]. Mr. Jake Duncan of you office made a site visit on 24 June 1997 to field verify that our preliminary delineation is a true and accurate representation of the wetlands on the site.

Enclosed, please find a copy of the Spring Island USGS Quadrangle with site location depicted, surveyed plat of the referenced property, Beaufort County soil survey (Sheets 84 and 92) for the area, the National Wetlands Inventory Map of the Spring Island Quadrangle with approximate site location depicted and data sheet representing typical site conditions. Please review this information to verify the accuracy of NEC, Inc.'s preliminary wetland delineation.

Soils in the upland matched the description for the Seewee and Wando Series and exhibited bright soil colors indicative of a non-hydric condition. Other indicators including a salt and pepper appearance of the soil in the upland areas indicating that less than 70% of the sand particles are coated with organics and

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[1] Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

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192 East Bay Street, Suite 201
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Facsimile: (803) 723-6684
E-Mail: NewkirkEnv@aol.com

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Savannah, GA 31416
(912) 354-6494
Facsimile: (912) 354-7179
E-Mail: NewkirkGA@aol.com

therefore non-hydric.

The soil in the wetland areas exhibited a dark, and in some cases a mucky, A horizon indicative of a hydric condition.

Please do not hesitate to call if you have any questions regarding this project or to arrange an additional site visit if necessary.

Sincerely,

Stuart F. Sligh

Stuart F. Sligh
Senior Biologist - Savannah Office
Newkirk Environmental Consultants Inc.

Enclosures

Charleston District - Corps of Engineers - P.O. Box 919 Charleston, SC 29402

REQUEST FOR WETLANDS DETERMINATION

Date: August 15, 1997

County: Beaufort Total Acreage of Tract: 553.02 Acres

Project Name (if applicable): 553-Acre Johnson Tract

Property Owner (name,address,phone)	Agent/Developer/Engineer (name,address,phone)
Mr. Jay Thrower Centex Homes 1533 Fording Island Road, Ste 306 Hilton Head, SC 29926 (803) 837-2227	NEC, Inc. P.O. Box 16609 Savannah, GA 31416 (912) 354-6494 Attn: Stuart Sligh

Status of Project (check one)

(X) On-going site work for development purposes
( ) Development in planning stages
( ) No specific development planned at this time

Project Type - indicate the proposed use of the land in question or, if no specific work is planned at present, the current zoning or land use at the site:

(X)Residential ()Commercial ()Mixed use

()Industrial ()Agriculture ()Public Works

()Silviculture ()Aquaculture ()Other_____

Information Required to Accompany Request - Check the items submitted - forward as much information as is available. At a Minimum, the first two items must be forwarded:

(X) Accurate Location Map (from county map, USGS Quad Sheet, etc.)

(X) Survey Plat or Tax Map of the property in question

(X) Soil survey sheet (from SCS) or aerial photograph (from County Assessors Office or other source - property boundaries shown on the soil survey/photo would be very helpful).

() Topographic Survey

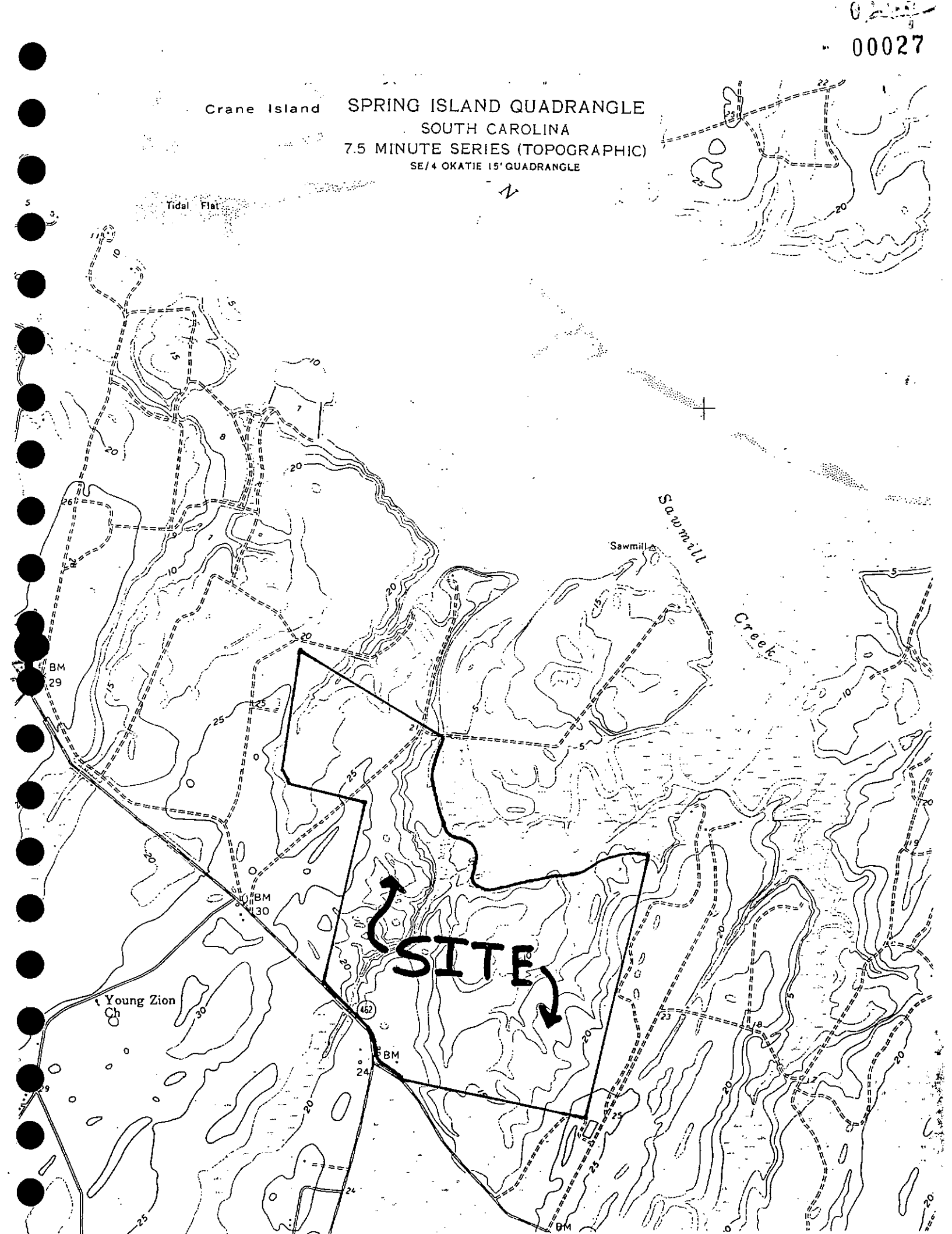
() Conceptual Site Plan for the overall development

(X) Routine On-Site Data

Signature of Property Owner or Authorized Agent: Stuart F. Sligh

The person signing this form must have the authority of the owner to authorize Corps of Engineers employees or their agents to enter onto the property for onsite investigations if such is deemed necessary. Do not sign unless you have the specific authority of the owner.

00027


Crane Island
SPRING ISLAND QUADRANGLE
SOUTH CAROLINA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 OKATIE 15' QUADRANGLE
N
Tidal Flat
Sawmill Creek
Sawmill
BM 29
BM 30
BM 24
Young Zion Ch
462
SITE

SPECIAL NOTE

This document was prepared primarily by stereoscopi analysis of high altitude aerial photographs. Wetlands wer identified on the photographs based on vegetation, visibl hydrology, and geography in accordance with Classifica

BEAUFORT AND JASPER COUNTIES, SOUTH CAROLINA — SHEET NUMBER 84 SHEET NUMBER 92



00030

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project / Site:	650 ACRE JOHNSON PROPERTY	Date:	05/20/97
Applicant / Owner:	NEWKIRK ENVIRONMENTAL CONSULTANTS	County:	BEAUFORT
Investigator:	NEWKIRK ENVIRONMENTAL CONSULTANTS	State:	SOUTH CAROLINA

Do Normal Circumstances exist on the site?	☒ Yes ☐ No	Community ID:	WETLAND A
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area?	☐ Yes ☒ No	Plot ID:	
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.LIQUIDAMBAR STYRACIFLUA	TREE	FAC	9. MYRICA CERIFERA	SHRUB	FAC
2.ACER RUBRUM	TREE	FAC	10.		
3.NYSSA BIFLORA	TREE	OBL	11.SAURURUS CERNUUS	HERB	OBL
4.			12.WOODWARDIA VIRGINICA	HERB	OBL
5.ACER RUBRUM	SAP	FAC	13.WOODWARDIA AREOLATA	HERB	OBL
6.NYSSA BIFLORA	SAP		14.		
7.PERSEA BORBONIA	SAP	FACW	15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-3 (in.)
Depth to Free Water in Pit: SURFACE (in.)
Depth to Saturated Soil: SURFACE (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☒ Inundated
- ☒ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 inches
- ☒ Water-Stained Leaves
- ☒ Local Soil Survey Data
- ☐ FAC-Neutral Test

Remarks:

SOILS

Map Unit Name
(Series and Phase): POLAWANA
Drainage Class: VERY POORLY DRAINED
Taxonomy (Subgroup): CUMULIC HUMAQUEPTO

Field Observations ☒ Yes
Confirm Mapped Type? ☐ No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 3/1			MUCKY SAND

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☒ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☒ Listed on Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks: ALL THREE CRITERIA ARE MET.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project / Site:	650 ACRE JOHNSON PROPERTY	Date:	05/22/97
Applicant / Owner:	NEWKIRK ENVIRONMENTAL CONSULTANTS	County:	BEAUFORT
Investigator:	NEWKIRK ENVIRONMENTAL CONSULTANTS	State:	SOUTH CAROLINA

Do Normal Circumstances exist on the site?	☒ Yes ☐ No	Community ID:	WETLAND L
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area?	☐ Yes ☒ No	Plot ID:	
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.NYSSA BIFLORA	TREE	OBL	9. WOODWARDIA VIRGINICA	HERB	OBL
2.LIQUIDAMBAR STYRICIFLUA	TREE	FAC	10.SMILAX ROTUNDIFOLIA	HERB	FAC
3.ACER RUBRUM	TREE	FAC	11.		
4.NYSSA BIFLORA	SAP	OBL	12.		
5.LIQUIDAMBAR STYRICIFLUA	SAP	FACW	13.		
6.ACER RUBRUM	SAP	FAC	14.		
7.PERSEA BORBONIA	SAP	FACW	15.		
8.MYRICA CERIFERA	SHRUB	FACU	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

CRITERIA ARE MET.

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: 3 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☒ Saturated in Upper 12 inches
- ☒ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 inches
- ☒ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test

Remarks:CRITERIA MET.

SOILS

Map Unit Name
(Series and Phase): POLAWANA
Drainage Class: VERY POORLY DRAINED
Taxonomy (Subgroup): CUMULIC HUMAQUEPTS

Field Observations ☒ Yes
Confirm Mapped Type? ☐ No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 2/1			LOAMY FINE SAND
12-20	B	10YR 3/1			FINE SAND

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☒ Listed on Local Hydric Soils List
- ☒ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks:CRITERIA ARE MET.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks:ALL THREE CRITERIA ARE MET.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project / Site:	650 ACRE JOHNSON PROPERTY	Date:	05/22/97
Applicant / Owner:	NEWKIRK ENVIRONMENTAL CONSULTANTS	County:	BEAUFORT
Investigator:	NEWKIRK ENVIRONMENTAL CONSULTANTS	State:	SOUTH CAROLINA

Do Normal Circumstances exist on the site?	☒ Yes ☐ No	Community ID:	UPLAND
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area?	☐ Yes ☒ No	Plot ID:	
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.QUERCUS VIRGINIANA	TREE	FACU	9. PERSEA BORBONIA	SAP	FACW
2.PINUS TAEDA	TREE	FAC	10.MYRICA CERIFERA	SHRUB	FAC
3.LIQUIDAMBAR STYRACIFLUA	TREE	FAC	11.SMILAX SMALLII	HERB	FACU
4.QUERCUS NIGRA	TREE	FAC	12.		
5.QUERCUS VIRGINIANA	SAP	FAC	13.		
6.PINUS TAEDA	SAP	FAC	14.		
7.LIQUIDAMBAR STYRACIFLUA	SAP	FAC	15.		
8.QUERCUS NIGRA	SAP	FAC	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 73%

Remarks:

CRITERIA ARE MET.

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: +20 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test

Remarks:CRITERIA ARE NOT MET.

SOILS

Map Unit Name (Series and Phase): SEEWEE

Drainage Class: SOMEWHAT POORLY DRAINED

Taxonomy (Subgroup): ENTIC HAPLAQUODS

Field Observations ☒ Yes
Confirm Mapped Type? ☐ No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3	A	10YR 4/1			SAND
3-7	A	10YR 5/3			SAND

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: CRITERIA ARE NOT MET.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No

Is this Sampling Point Within a Wetland? ☐ Yes ☒ No

Remarks: ALL THREE CRITERIA ARE NOT MET.

00036

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project / Site:	650 ACRE JOHNSON PROPERTY	Date:	05/20/97
Applicant / Owner:	NEWKIRK ENVIRONMENTAL CONSULTANTS	County:	BEAUFORT
Investigator:	NEWKIRK ENVIRONMENTAL CONSULTANTS	State:	SOUTH CAROLINA

Do Normal Circumstances exist on the site?	☒ Yes ☐ No	Community ID:	UPLAND 2
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area?	☐ Yes ☒ No	Plot ID:	
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.QUERCUS VIRGINIANA	TREE	FACU	9. ILEX AMERICANA	SAP	FAC
2.CARYA TOMENTOSA	TREE	UPL	10.MYRICA CERIFERA	SHRUB	FAC
3.PINUS TAEDA	TREE	FAC	11.VACCINIUM ABOREUM	SHRUB	FACU
4.QUERCUS NIGRA	TREE	FAC	12.PTERIDIUM AQUILINUM	HERB	FACU
5.QUERCUS VIRGINIANA	SAP	FACU	13.MITCHELLA REPENS	HERB	FACU
6.CARYA TOMENTOSA	SAP	UPL	14.HEXASTYLIS ARIFOLIUM	HERB	FAC
7.PINUS TAEDA	SAP	FAC	15.VITIS ROTUNDIFOLIA	HERB	FAC
8.QUERCUS NIGRA	SAP	FAC	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 53%

Remarks:

CRITERIA ARE MET.

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: +20 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12 inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Root Channels in Upper 12 inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test

Remarks:CRITERIA ARE NOT MET.

SOILS

Map Unit Name
(Series and Phase): WANDO
Drainage Class: EXCESSIVELY DRAINED
Taxonomy (Subgroup): TYPIC UDIPSAMMENTS

Field Observations ☒ Yes
Confirm Mapped Type? ☐ No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10YR 4/3			FINE SAND
8-20	A	10YR 5/3			FINE SAND

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☐ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks:CRITERIA ARE NOT MET.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	
Wetland Hydrology Present?	☐ Yes ☒ No	
Hydric Soils Present?	☐ Yes ☒ No	Is this Sampling Point Within a Wetland? ☐ Yes ☒ No

Remarks:ALL THREE CRITERIA ARE NOT MET.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project / Site:	650 ACRE JOHNSON PROPERTY	Date:	05/20/97
Applicant / Owner:	NEWKIRK ENVIRONMENTAL CONSULTANTS	County:	BEAUFORT
Investigator:	NEWKIRK ENVIRONMENTAL CONSULTANTS	State:	SOUTH CAROLINA

Do Normal Circumstances exist on the site?	☒ Yes ☐ No	Community ID:	WETLAND E
Is the site significantly disturbed (Atypical Situation)?	☐ Yes ☒ No	Transect ID:	
Is the area a potential Problem Area?	☐ Yes ☒ No	Plot ID:	
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.NYSSA BIFLORA	TREE	OBL	9. WOODWARDIA VIRGINICA	HERB	OBL
2.ACER RUBRUM	TREE	FAC	10.WOODWARDIA AREOLATA	HERB	OBL
3.LIQUIDAMBAR STYRACIFLUA	TREE	FAC	11.MYRICA CERIFERA	SHRUB	FAC
4.NYSSA BIFLORA	SAP	OBL	12.		
5.ACER RUBRUM	SAP	FAC	13.		
6.LIQUIDAMBAR STYRACIFLUA	SAP	FAC	14.		
7.PERSEA BORBONIA	SAP	FACW	15.		
8.OSMUNDA CINNAMOMEA	HERB	FACW	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

CRITERIA ARE MET.

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☒ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: 3 (in.)
Depth to Saturated Soil: 1 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☒ Saturated in Upper 12 inches
- ☒ Water Marks
- ☒ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☒ Oxidized Root Channels in Upper 12 inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test

Remarks:CRITERIA MET.

SOILS

Map Unit Name
(Series and Phase): POLAWANA
Drainage Class: VERY POORLY DRAINED
Taxonomy (Subgroup): CUMULIC HUMAQUEPTS

Field Observations ☒ Yes
Confirm Mapped Type? ☐ No

Profile Description

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 2/1			LOAMY FINE SAND
12-20	B	10YR 3/1			FINE SAND

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☒ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☒ Listed On National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks:CRITERIA ARE MET.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks:ALL THREE CRITERIA ARE MET.

DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 919
CHARLESTON, S.C. 29402-0919

REPLY TO
ATTENTION OF

September 2, 1997

Regulatory Branch

Mr. Benny K. Jones, Jr.
Thomas and Hutto Engineering Company
Post Office Box 14609
Savannah, Georgia 31416-1609

Dear Mr. Jones:

This is in response to your letter dated August 28, 1997, concerning the necessity for obtaining a Department of the Army (DA) permit for work associated with the Centex Homes Incorporated planned development at the Cresent Plantation in Beaufort County, South Carolina.

After reviewing the information provided, it appears that the proposed project may encroach into "waters of the United States" and, therefore, will require a DA permit before conducting any work in these jurisdictional areas.

I trust this response is adequate. If I can be of further assistance, please do not hesitate to call.

Respectfully,

Robert H. Riggs
Chief, Regulatory Branch

EXHIBIT B

CRESCENT PLANTATION PUD
Preliminary Master Plan

EXISTING TOPOGRAPHY
FOR
CRESCENT PLANTATION
BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
CENTEX HOMES
BLUFFTON, SOUTH CAROLINA

PREPARED BY:
THOMAS & HUTTON ENGINEERING CO.
SAVANNAH, GEORGIA

LAND PLANNER:
WOOD & PARTNERS, INC.
HILTON HEAD ISLAND, SOUTH CAROLINA

ENVIRONMENTAL CONSULTANTS
NEWKIRK ENVIRONMENTAL CONSULTANTS
SAVANNAH, GEORGIA

AUGUST 1, 1997

GRAPHIC SCALE

(IN FEET)
1 inch = 300 ft.

CLUBHOUSE AREA

MAINTENANCE AREA

PARCEL 2
TRIMBLESTON PARTNERSHIP

WESTBURY CONCRETE

OPEN SPACE

LOT 16

LOT 14

LOT 15

LOT 13

OPEN SPACE

SHERIDAN COMMERCIAL CENTRE

LOT 15

LOT 13

OPEN SPACE

NOW OR FORMERLY
UNION CAMP

UNION CAMP

MALCOLM JOHNSON

ST. RT. 46

EDWARD J. DERST, JR.

98.55 ACRES
INCLUDES 10.6 ACRES NORTH OF FENCE

00042

EXHIBIT C

TOPOGRAPHIC SURVEY

EXISTING SOILS FOR CRESCENT PLANTATION

BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
CENTEX HOMES
BLUFFTON, SOUTH CAROLINA

PREPARED BY:
THOMAS & HUTTON ENGINEERING CO.
SAVANNAH, GEORGIA

LAND PLANNER:
WOOD & PARTNERS, INC.
HILTON HEAD ISLAND, SOUTH CAROLINA

ENVIRONMENTAL CONSULTANTS
NEWKIRK ENVIRONMENTAL CONSULTANTS
SAVANNAH, GEORGIA

AUGUST 1, 1997

Sk
Po
Wd
Sw
Wd
Sw
Sk
Ro
Ce
Rd
Wd
Rd
Wd
Sw
Wd
Sw
Ba
Rd
Ro
CLUBHOUSE AREA
MAINTENANCE AREA
REC AREA
MARSHES OF OAK FOREST CREEK
WESTBURY CONCRETE
LOT 14
LOT 16
LOT 15
OPEN SPACE
SHERIDAN COMMERCIAL CENTRE
LOT 15
LOT 13
OPEN SPACE
NOW OR FORMERLY UNION CAMP
UNION CAMP
MALCOLM JOHNSON
S.R. 46
POWER EASEMENT
EDWARD J. DERST, JR.
38.55 ACRES

SOIL TYPE "Ba"- BARATARI
SOIL TYPE "Ce"- CAPERS
SOIL TYPE "Po"- POLAWANA
SOIL TYPE "Rd"-RIDGELAND
SOIL TYPE "Ro"- ROSEDHU
SOIL TYPE "Sk"- SEABROOK
SOIL TYPE "Sw"- SEEWEE
SOIL TYPE "Wd"- WANDO

GRAPHIC SCALE
300 0 150 300 600 1200
(IN FEET)
1 inch = 300 ft.

00044

EXHIBIT D

EXISTING SOILS MAP

EXISTING VEGETATION FOR CRESCENT PLANTATION

BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
CENTEX HOMES
BLUFFTON, SOUTH CAROLINA

PREPARED BY:
THOMAS & HUTTON ENGINEERING CO.
SAVANNAH, GEORGIA

LAND PLANNER:
WOOD & PARTNERS, INC.
HILTON HEAD ISLAND, SOUTH CAROLINA

ENVIRONMENTAL CONSULTANTS
NEWKIRK ENVIRONMENTAL CONSULTANTS
SAVANNAH, GEORGIA

AUGUST 1, 1997

GRAPHIC SCALE

300 0 150 300 600 1200

(IN FEET)
1 inch = 300 ft.

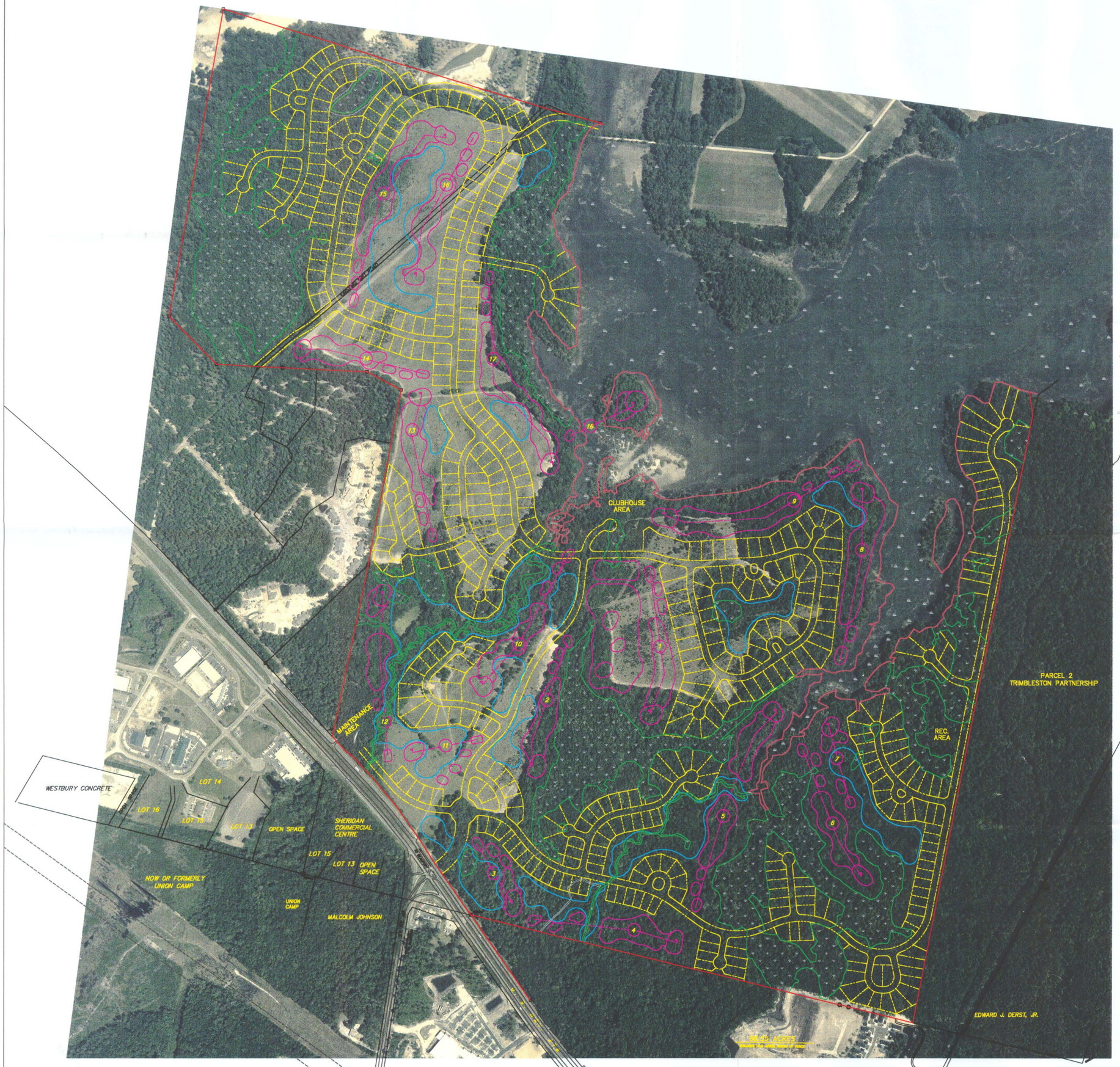


EXHIBIT E

EXISTING VEGETATION MAP

STORM WATER MANAGEMENT MASTER PLAN
FOR
CRESCENT PLANTATION
BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
CENTEX HOMES
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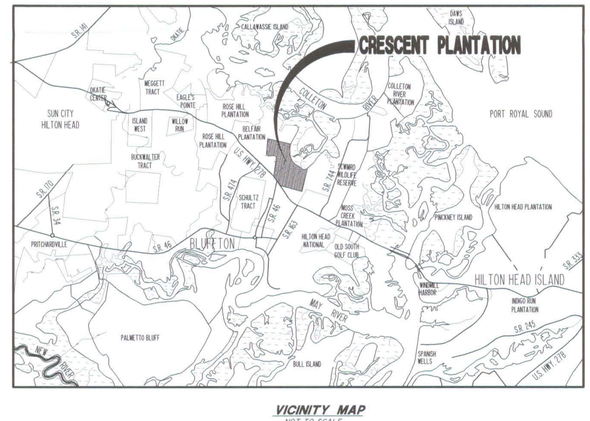
ENVIRONMENTAL CONSULTANTS
NEWKIRK ENVIRONMENTAL CONSULTANTS
SAVANNAH, GEORGIA

AUGUST 1, 1997

GRAPHIC SCALE

300 0 150 300 600 1200
(IN FEET)
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OUTFALL #2
CLUBHOUSE AREA
OUTFALL #1
OUTFALL #3
OUTFALL #4
MAINTENANCE AREA
REC. AREA
MARSHES OF OAK FOREST CREEK
PARCEL 2
TRIMBLESTON PARTNERSHIP
EDWARD J. DERST, JR.
WESTBURY CONCRETE
OPEN SPACE
LOT 16
LOT 15
LOT 14
LOT 13
OPEN SPACE
SHERIDAN COMMERCIAL CENTRE
NOW OR FORMERLY UNION CAMP
UNION CAMP
MALCOLM JOHNSON
ST. RT. 46
POWER EASEMENT
98.55 ACRES
INCLUDES 10.6 ACRES NORTH OF FENCE



VICINITY MAP
NOT TO SCALE

00048

EXHIBIT F

ARCHEOLOGICAL DATA

F. 1. Memorandum from Mr. Ian Hill, Historic Preservation Planer

F. 2. Archaeological Reconnaissance of Crescent Plantation, Beaufort County, SC

F. 3. Intensive Archaeological Survey of Crescent Plantation, Beaufort County, SC

COUNTY COUNCIL OF BEAUFORT COUNTY
BEAUFORT COUNTY JOINT PLANNING BOARD
Multi-Government Center • 100 Ribaut Road
Post Office Drawer 1228, Beaufort, SC 29901-1228
Phone: (803) 525-7138 Fax: (803) 525-7113

• 00050

August 20, 1997

MEMO TO: Maurice Ungaro, Southern Beaufort County Planner

FROM: Ian Hill, Historic Preservation Planner

RE: Crescent Plantation PUD Archaeology

I have reviewed the documents in the Crescent Plantation PUD that deal with the project archaeology (Section F). These documents are Archaeological Reconnaissance of Crescent Plantation, Beaufort County, South Carolina, Chicora Research Contribution 225, and Intensive Archaeological Survey of Crescent Plantation, Beaufort County, South Carolina, Chicora Research Contribution 226, both by the Chicora Foundation. I have also reviewed Section F (page 6) of the Existing Conditions section of the PUD submittal. In addition, I have discussed the project archaeology with Bruce Boysen, of Perry Wood and Partners, the project manager.

The reports identify 10 archaeological sites, of which one (38BU1713) was identified as eligible for inclusion in the National Register of Historic Places, and one (38BU1715) was identified as being potentially eligible for the National Register. The other eight sites were determined not eligible. Chicora Foundation recommends that no ground disturbance take place at these sites until appropriate mitigation has taken place.

In Section F (page 6) in the PUD submittal, the applicant states that, "The Crescent Plantation Conditional Use PUD will not develop the two sites identified as eligible and potentially eligible for inclusion in the National Register of Historical (sic) Places until all required studies suggested in the intensive Archaeological Survey are completed and all applicable laws and requirements have been met."

According to Mr. Boysen, since site 38BU1715 is a relatively small site it will be mitigated by data recovery, and since site 38BU1713 is a very large site, it will be mitigated by either a combination of data recovery and green spacing or by data recovery alone. He will notify me when a decision regarding this has been made. This project will require an OCRM sign off so we only need to follow the lead of the SHPO in regard to the most appropriate method of mitigation. A Memorandum of Agreement will be signed by the developer, OCRM, the SHPO, and by Beaufort County once the method of mitigation has been determined. If they do green space any areas, they will need to be identified in the PUD.

cc: Bruce Boysen, Perry Wood & Partners
Charles Gatch, Zoning Administrator
Summer Rutherford, Director of Planning

COUNTY COUNCIL OF BEAUFORT COUNTY
BEAUFORT COUNTY JOINT PLANNING BOARD
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August 26, 1997

Mr. Bruce Boysen
Wood & Partners, Inc.
P.O. Box 23949
Hilton Head Island, S.C. 29925-3949

Re: Crescent Plantation PUD

Dear Mr. Boysen:

This is to inform you that the U.S. 278 Highway Corridor Review Board has approved, by special vote, your request for approval of the access point and the landscape buffer for the Crescent Plantation PUD. The approval is with the stipulation that the existing access point that serves as a driveway to the Johnson home, and is 1200 feet from the proposed access to Crescent Plantation, be eliminated.

If you have any questions regarding this CRB action, please call me at 525-7141.

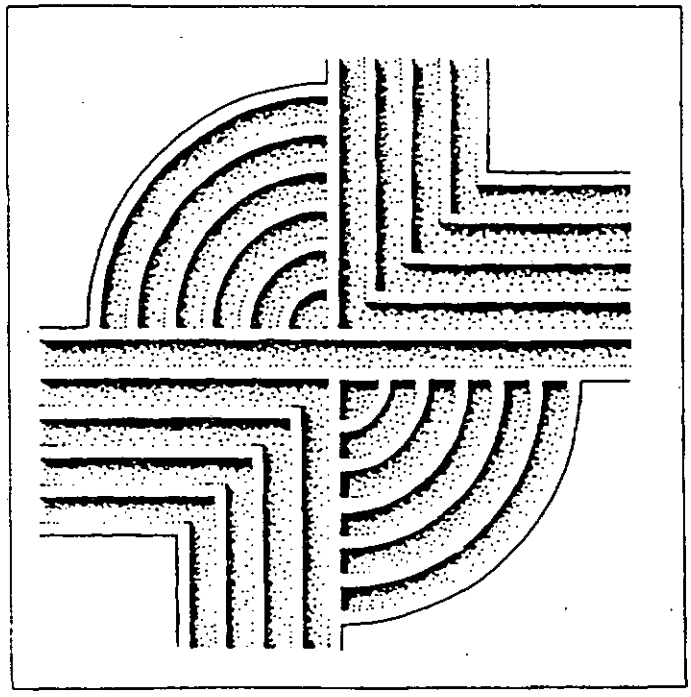
Sincerely,

Ian D. Hill
U.S. 278 CRB Administrator

cc: Charles Gatch, Zoning Administrator

00052

ARCHAEOLOGICAL RECONNAISSANCE OF CRESCENT PLANTATION, BEAUFORT COUNTY, SOUTH CAROLINA



CHICORA RESEARCH CONTRIBUTION 223

00053

ARCHAEOLOGICAL RECONNAISSANCE OF CRESCENT PLANTATION, BEAUFORT COUNTY, SOUTH CAROLINA

Prepared By:
Michael Trinkley, Ph.D.

Prepared For:
Mr. Jay Thrower, ASLA
Centex Homes
1533 Fording Island Road, Suite 308
Hilton Head Island, South Carolina 29926

Chicora Research Contribution 223

Chicora Foundation, Inc.
P.O. Box 8664 ▪ 861 Arbutus Drive
Columbia, South Carolina 29202
803/787-6910
Email: chicora1@aol.com

May 23, 1997

This report is printed on recycled, permanent paper ∞

ABSTRACT

This study reports on a reconnaissance level archaeological survey of an approximately 650 acre tract known as Crescent Plantation. Also incorporated into the review is approximately 150 acres of adjoining property which forms a portion of Trimblestone Plantation. The property is situated north of Fording Island Road (now known as U.S. 278) between Rose Hill to the west and lands primarily held by the S.C. Department of Natural Resources to the east. To the north the tracts primarily front marsh of Sawmill Creek and the Colleton River.

The study was conducted at the request of Centex Homes in compliance with a Beaufort County Ordinance (Section 6.5 of Article VI of the Zoning and Development Standards Ordinance) which requires an archaeological evaluation as part of the land planning process. The current level of investigations is limited to an archaeological and historical reconnaissance in order to determine the probable nature of cultural resources on the study tract.

Our background research included contacting the South Carolina Department of Archives and History with a request for information concerning any National Register of Historic Places buildings, districts, structures, sites, or objects in the study area, as well as the results of any structures surveys which may have been completed in the study area. No response has yet been received. We also checked the master site files held by the South Carolina Institute of Archaeology and Anthropology for any previously recorded archaeological sites in the project area. Although a number of sites had been recorded for the adjacent Belfair tract to the west and northwest, no sites were known for the study tracts.

In addition to utilizing our in-house documentation, including Chicora's previous cartographic survey of Beaufort County, we also conducted title search for the tracts at the Beaufort County Register of Mesne Conveyances, as well as additional historical research at the South Carolina Department of Archives and History and cartographic research at the Thomas Cooper Map Repository.

These studies revealed that the tract is a composite of several historic parcels, as well as documenting that the history of the area is very confused, primarily by the loss of Beaufort County land records pre-dating the Civil War. We did, however, identify at least two major historic sites anticipated to be on the survey tract.

Our field investigation found that the bulk of the survey tract is heavily wooded. Although there are several old fields, these are largely grown up in grass, pines, or second growth. There were few areas amenable to successful pedestrian survey. The field methodology include four approaches, each with specific goals.

The first was an examination of several marsh edge areas, with the goal being to evaluate the potential for marsh edge shell middens. One potential area was identified, although no subsurface testing was conducted to verify the existence of a site. Much of the tract exhibits a low marsh edge not typically conducive for Native American occupation. These same low, gradually sloping areas fronting on vast expanses of marsh are also not anticipated to exhibit high probability for historic settlements.

The second approach was an examination of the areas identified in the historic research. One was anticipated to be a major plantation development at an area of "high ground and deep water" which had been revealed in our previous cartographic study. The other was an interior settlement thought to date from the same period. Both sites were identified based on surface scatters.

The third approach was a judgmental examination of interior areas at the edge of marsh sloughs. These areas are often associated with Native American sites. This reconnaissance identified two such sites on the study tracts.

The fourth and final survey approach was an examination of interior fire plowed areas associated with low, poorly drained soils. These are typically expected to produce a low incidence of both historic and prehistoric sites. No sites were found in these area. Nevertheless, we know from research on the S.C. Department of Natural Resources tract to the east that Native American sites can be found on isolated high ground areas.

As a result of our investigations on these tracts, seven archaeological sties have been identified and recorded with the South Carolina Institute of Archaeology and Anthropology as 38BU1711 through 38BU1717. Although reconnaissance surveys are not suitable for assessing the National Register eligibility of these sites, several are very likely significant and worthy of either protection in place or more extensive study. It is also likely that additional prehistoric sites will be encountered on the property.

As a result, we are recommending that additional historical research be conducted for the survey tract in an effort to more fully reconstruct its ownership. In addition, we recommend that the tract be subjected to an intensive archaeological survey. We have incorporated an overview map of the tract, providing a tentative assessment of site probability and survey recommendations for the different areas.

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INTRODUCTION

The reconnaissance level investigation of the Crescent and Trimblestone plantations development tract was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Jay Thrower, Area Manager of Centex Homes, Coastal Carolina South. The tract consists of two distinct parcels — about 650 acres known as Crescent Plantation and about 148 acres which was cut off of Trimblestone Plantation. Both are situated north of U.S. 278 and the Town of Bluffton, in Colleton River area just before crossing over to Hilton Head Island (Figure 1).

This is an area of exceptional development. To the west are the Belfair and Rose Hill tracts. To the east there are a number of smaller housing developments and what might be referred to as "strip malls." Also to the east of the study area is a large tract owned by the S.C. Department of Natural Resources, part of which is a Heritage Trust Area.

The study tract bordered to the west and along a portion of the south by other developments. Much of the southern boundary runs along U.S. 278, previously known as Fording Island Road. A small portion of the northern boundary is also on an existing development (known as Belfair), while most fronts Sawmill Creek marsh. The eastern boundary includes a small housing project along U.S. 278, portions of Trimbleton Plantation, and the Heritage Trust lands of Victoria Bluff (Figure 2).

Originally the entire tract was likely dominated by mixed hardwoods, particularly live oak and palmetto on the higher soils. These areas would likely have been very similar to maritime forests. On the lower, inland soils there were likely areas of what today are called "Florida Scrub" — pine flatwoods which often have slight depressions and ridges characterized by a dense woody pocosin understory. There would also have been some limited areas of wetland swamps with tupelo, bay, and ash.

Although much modified by extensive agriculture, at least some of this more native vegetation is still suggested. There are areas of standing water swamp, as well as remnant areas of maritime forest. Much of the tract exhibits very dense mixed hardwood and pine vegetation (Figure 3). Dominating the causal observer's perception of the property, however, are the areas of previous agriculture which today are largely in second growth pine and grass (Figure 4).

Five soil series dominate the study tract and three are poorly to very poorly drained. The Baratari, Polawana, and Rosedhue soils all have at least seasonal water tables within 0 to 1.0 foot of the surface. The Polawana and Rosedhue soils are either frequently or commonly flooded. These soils exhibit very reduced soil profiles because of saturation (Stuck 1980:59, 79-81). It is not common to identify either historic or prehistoric sites on these soils, usually because of the poor drainage and frequent flooding. Problematic, however, are small areas or "islands" of better drained soils which do support occupation in the midst of these poorly drained soils.

Also present on the tracts are Seewee soils, characterized as somewhat poorly drained and exhibiting an Ap horizon of dark brown sand overlying A12 horizon of dark grayish brown sand (Stuck 1980:83). The Wando soils on the tract are excessively drained and have a dark brown A horizon overlying a C horizon of brown to pale yellow sand (Stuck 1980:85). These tend to exhibit fairly high site densities.

The topography of the tract appears fairly level at first, but closer inspection reveals considerable diversity, largely the result of numerous drainages. The headwaters of a small slough are found in the northwest corner of the study tract and another drainage cuts through the

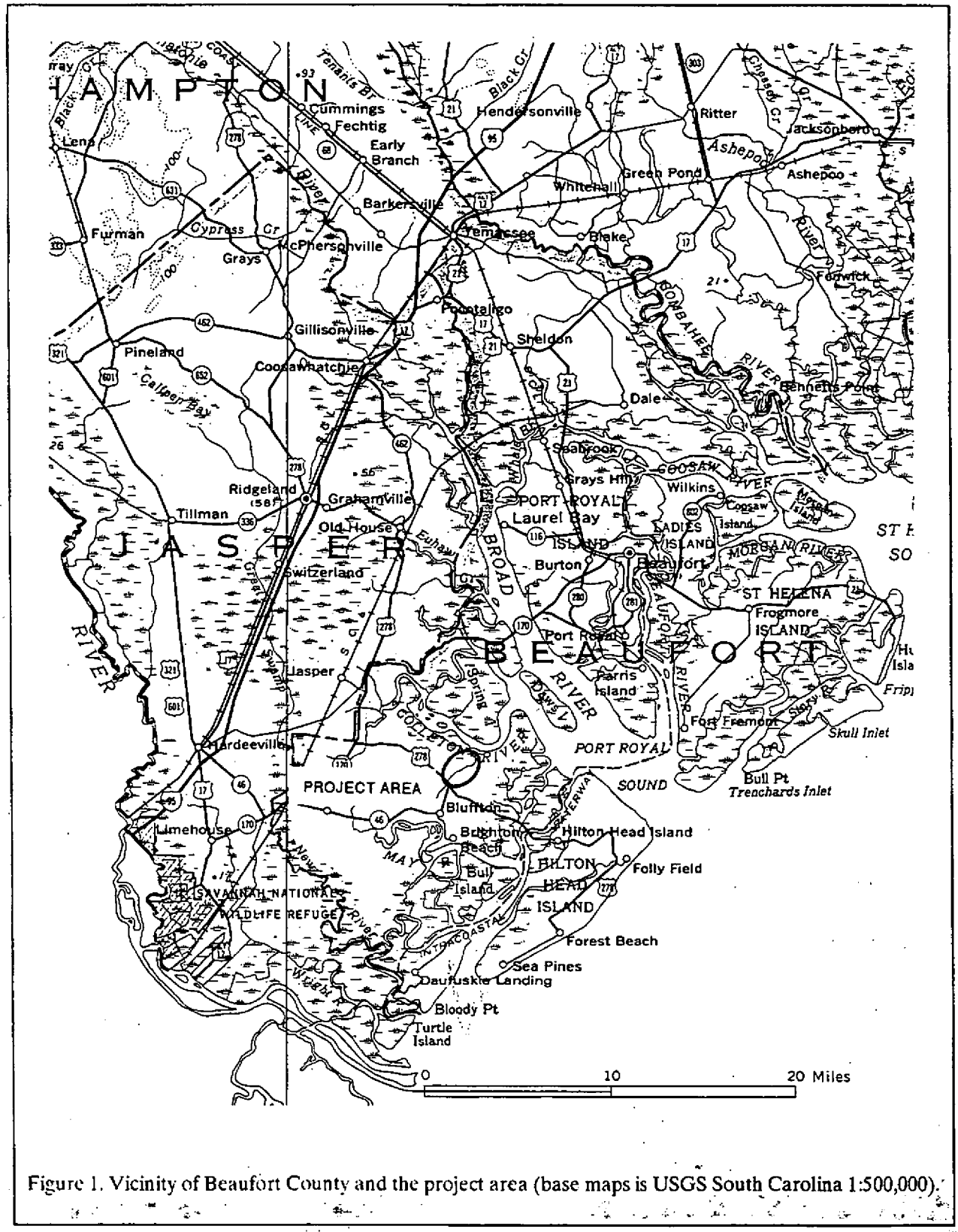


Figure 1. Vicinity of Beaufort County and the project area (base maps is USGS South Carolina 1:500,000).

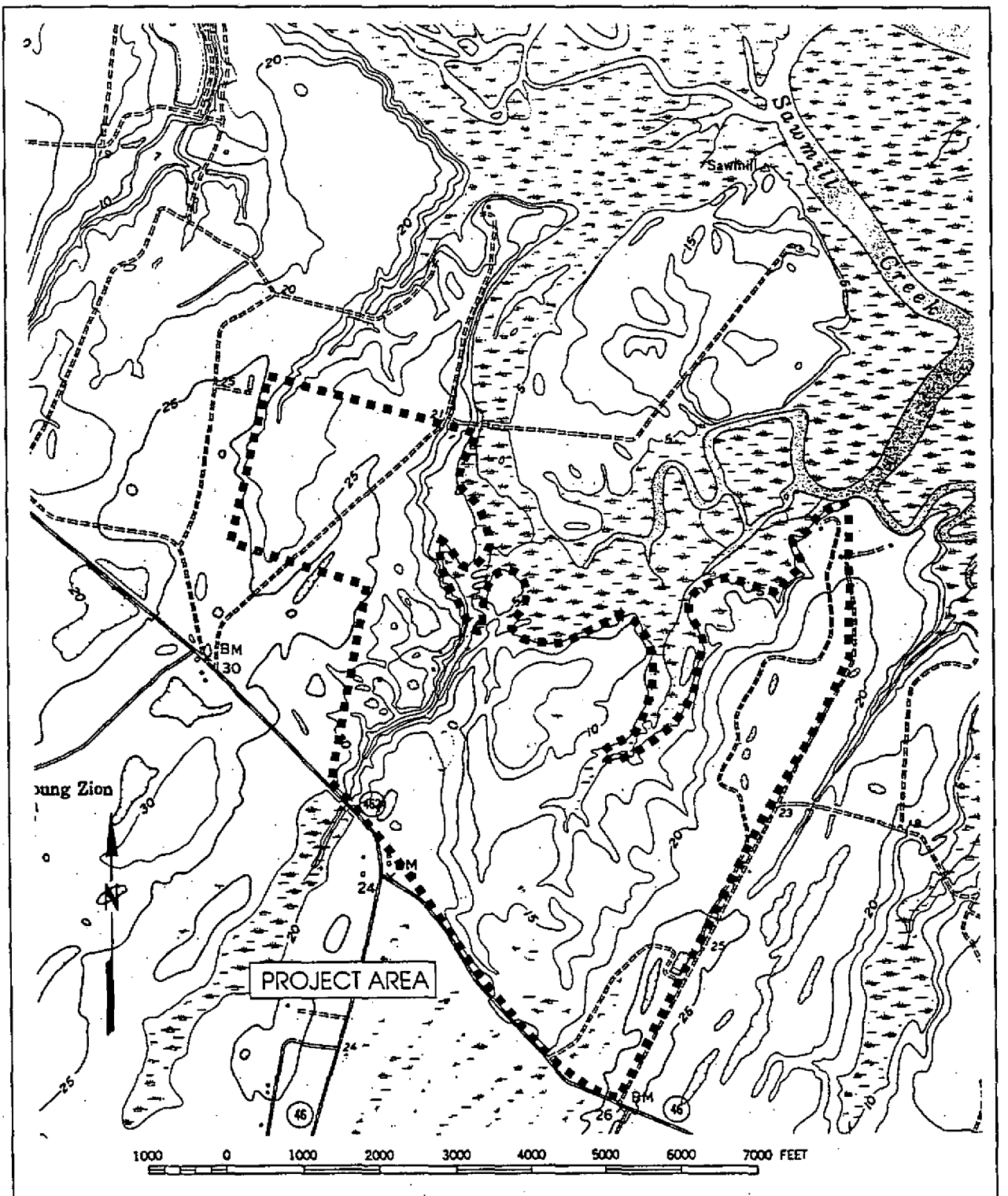


Figure 2. A portion of the USGS Spring Island 7.5' topographic map showing the project area.



Figure 3. Dense woods characterizing much of the Crescent Plantation tract.

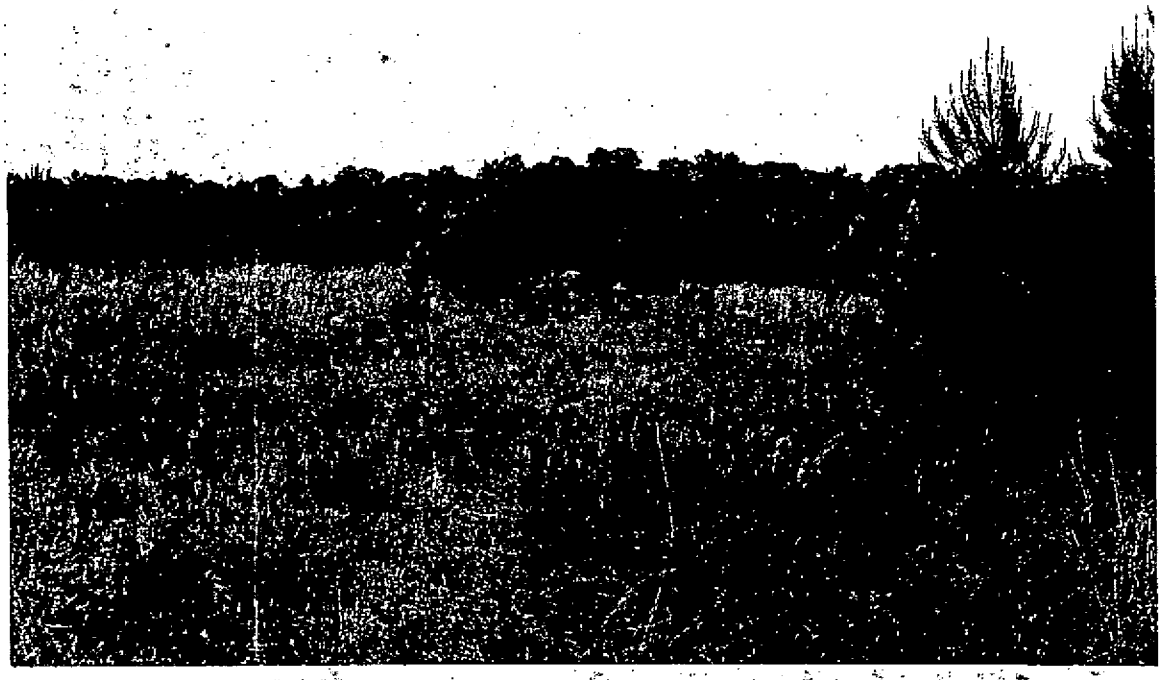


Figure 4. Second growth fields in the Crescent Plantation tract.

middle of the tract, crossing US 278. Between these two drainages the tract has elevations of about 25 feet above mean sea level (AMSL), with elevations falling off to the northwest and east.

Although the topography rises up from the central drainage to the east, the area to the immediate east tends to be low and, in areas, very wet. Elevations in this central area range from around 10 to 15 feet AMSL. A third drainage is found in the eastern third of the parcel, also running southward from Sawmill Creek. East of this drainage the ground rises more noticeably to about 20 feet AMSL.

Chicora Foundation was contacted by Mr. Jay Thrower with Centex Homes and Mr. Ben Jones with Thomas and Hutton Engineering on May 12, 1997. Representing the property owners, they requested a proposal for a reconnaissance level archaeological survey. This study was requested in compliance with the Beaufort County Archaeological and Historic Impact Assessment Ordinance, but there had been no previous contact with the County. Chicora responded to Mr. Thrower's RFP with a proposal on May 14. This was accepted by Centex Homes that same day. The reconnaissance level investigation was conducted on May 22, 1997.

Previous Investigations

Although we were requested only to undertaken an archaeological reconnaissance of the school tract, we did contact the South Carolina Department of Archives and History on May 14, 1997 and request a check of their master topographic maps to locate any NRHP buildings, districts, structures, sites, or objects in the study area. In addition, we requested a check to determine the results of any structures surveys which may have been completed in the study area. At the time of this report, we have not yet received a response to our inquiry.

In addition, Ms. Rachel Brinson-Marrs of the Foundation staff examined the State Site Files at the South Carolina Institute of Archaeology and Anthropology to confirm that no archaeological sites had been previously identified on the tract.

We also examined the previously conducted cartographic survey of Beaufort County (Hacker and Trinkley 1992), discovering that the proposed tract was thought to contain a settlement consisting of three structures plus one row of three additional buildings (Hacker and Trinkley 1992:59). This is likely a nineteenth century plantation settlement including a main house, outbuildings, and a slave settlement.

Perhaps the best known historic research for the area is H.A.M. Smith's work on Sir John Colleton's Okeetee or Devil's Elbow Barony (Figure 5). Colleton was granted the 12,000 acres in 1718 and by 1726 he had devised the parcel to his second son, Peter Colleton (Smith 1988:87). At Peter's death the barony was passed to his brother, the Honorable John Colleton, who devised the property to his son, John. It was apparently during the 1750s that the property was initially developed. By the time of the American Revolution there is good evidence that Colleton was grazing large quantities of cattle on the tract, and possibly growing some indigo (Smith 1988:88).

Smith reports that before Sir John Colleton's death in 1777 he had disposed of slightly over 6,000 acres in tracts ranging from just under 300 acres to nearly 1,700 acres to William Fripp, Thomas Farr, Benjamin Walls (apparently the area surrounding the Town of Bluffton), James Stanyarne, Edmund Bellinger, and George Hipp. The remainder of the barony went to his only daughter, Louisa Carolina Colleton, who married Admiral Richard Graves of the British Navy.

Although Louisa Graves maintained the parcel through her life, it seems likely that it had been divided into more manageable plantations. Prior to her death she, "disposed of a part of the barony lying on Colleton river to Benjamin Guerard, which part seems afterward to have become the property of Mr. William Wigg Barnwell by whom it was called 'Trimbleston'" (Smith 1988:89). At her death the remainder was divided up and sold 800 acres called Rose Hill to James Kirk, 946 acres known as the Hunting Island tract to James Kirk in 1828, 1,370 acres known as the Camp tract to Mrs. Pinckney and Mrs. Izard in 1828, 1,055 acres known as Foot Point to John

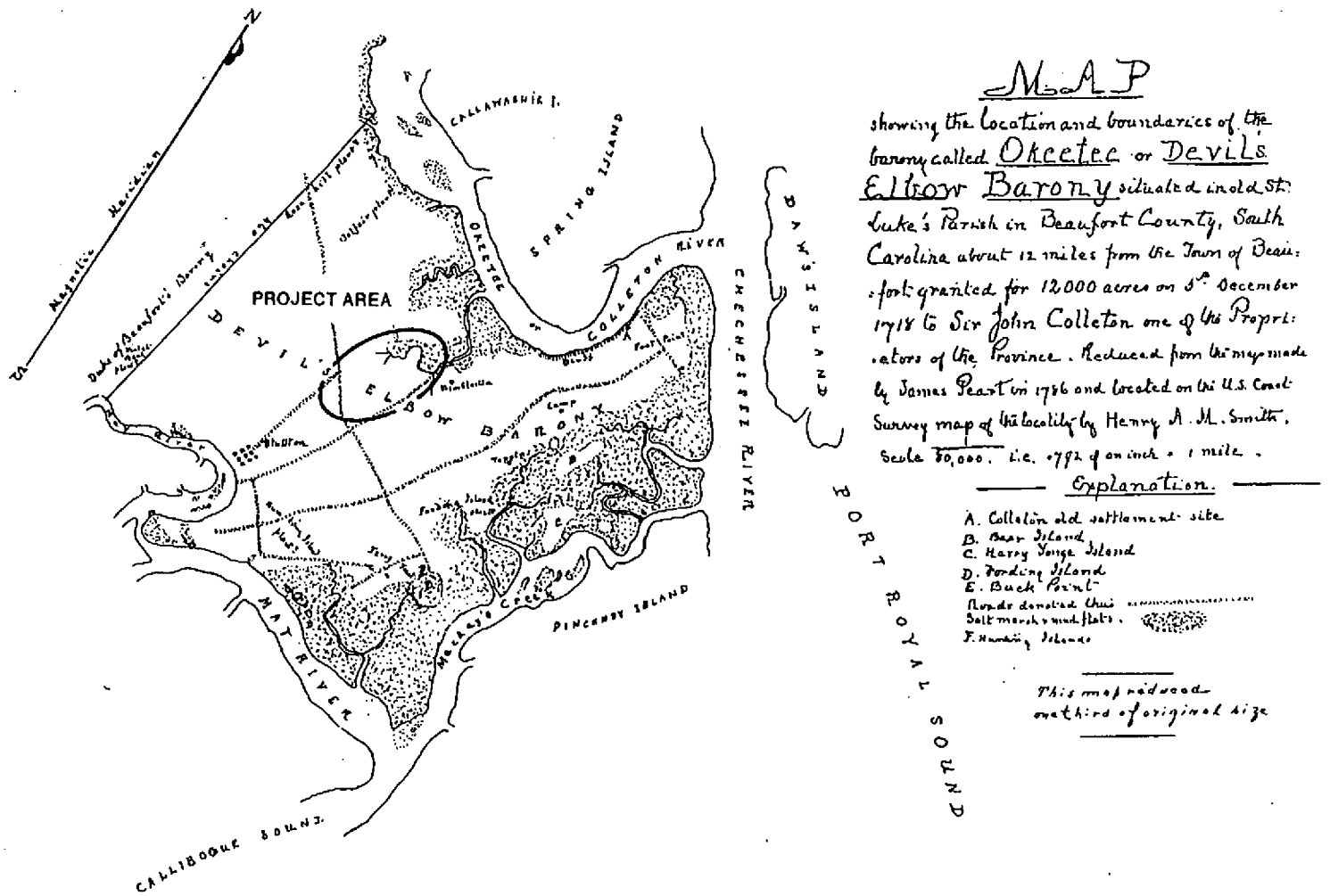


Figure 5. Drawing of the Okeetee or Okatie Barony by H.A.M. Smith.

Stoney in 1829 (see McCrady Plats 4479 and 4560 for this area), 942 acres known as the Ferry tract to John Stoney in 1829, 750 acres known as the Fording Island tract to W.J. Grayson in 1829, and in 1829 709 acres known as the Toppin tract to Miss Pinckney (Smith 1988:89-90).

Although based on a 1786 plan, H.A.M. Smith's map fails to provide much detail. What is, however, immediately apparent is that there is no obvious early plantation settlement in the project area.

The area to the west, known as Belfair, has been surveyed by Brockington and Associates and that report is available from the South Carolina Institute of Archaeology and Anthropology. As a result of that work 23 sites were identified, including 15 prehistoric sites, three historic sites, and five multi-component sites. Ten of these sites were assessed as either eligible or potentially eligible for inclusion on the National Register of Historic Places (Markham 1994: 29).

The closest site to the project area is 38BU1415, a prehistoric site identified as potentially eligible. This site measures about 455 feet by 878 feet and artifacts, primarily Middle Woodland sherds, were recovered from the plow zone. The survey study suggests that the site may have served as a base camp with subsistence strategy focusing on the nearby marsh (Markham 1994:57; see also Adams et al. 1992).

To the east of the survey tract some level of investigation has occurred on the Heritage Trust property, Foot Point Plantation, and the Victoria Bluff tract (also known as the Chicago Bridge and Iron tract). The earliest study was that by Widmer (1976) who surveyed a portion of the Victoria Bluff tract for a proposed industrial facility. His work identified a series of primarily Middle Woodland shell middens in the area. He reported that the sites fell into three categories: single shell heaps smaller than 30 feet in diameter, small clusters (2-6) of shell heaps, and multiple shell heaps (over 20) (Widmer 1976:29). Unfortunately, the Chicago Bridge and Iron tract was stripped of soil before the survey, so while sites were fairly easy to identify and artifacts were plentiful, site integrity was dramatically affected.

Extensive survey was conducted by Chicora Foundation on Foot Point Plantation in the late 1970s and early 1980s, resulting in the identification and testing of a number of shell midden sites (see Figure 6). About the same time, limited site testing was conducted on a Late Woodland St. Catherines shell midden (38BU347) found on the Heritage Trust property (Trinkley 1981:73-88). A radiocarbon sample from that site has been dated to A.D. 1380. Perhaps most significantly, this testing and survey work tends to associate these Middle Woodland sites with somewhat better drained soils on the edge of poorly drained soils that may have been ponds or sloughs. The work also revealed that better drained soils could occur as small "islands" in a "sea" of very poorly drained soil.

In addition, a St. Catherines burial mound from the same area was examined and mapped (Trinkley 1981:Figures 12; this study, Figure 7). This site suggests that many, perhaps all, of the small shell midden sites in the immediate area may represent hamlets, seasonal camps, or perhaps even macrobands within the influence sphere of this mound.

The previous work in the project area reveals a tremendous potential for both historic and prehistoric sites

Prehistoric Synthesis

There have been a number of studies prepared for the Beaufort area, and Derting et al. (1991:47-77) list 225 in their bibliography of South Carolina archaeology. There are a variety of excellent archaeological studies for the general project area which should be consulted (see especially Trinkley and Adams 1994 for an overview of previous research and Anderson et al. (1996) for a synthesis of current thought regarding the Woodland Period along the Carolina coast.

Paleoindian and Archaic Periods

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally

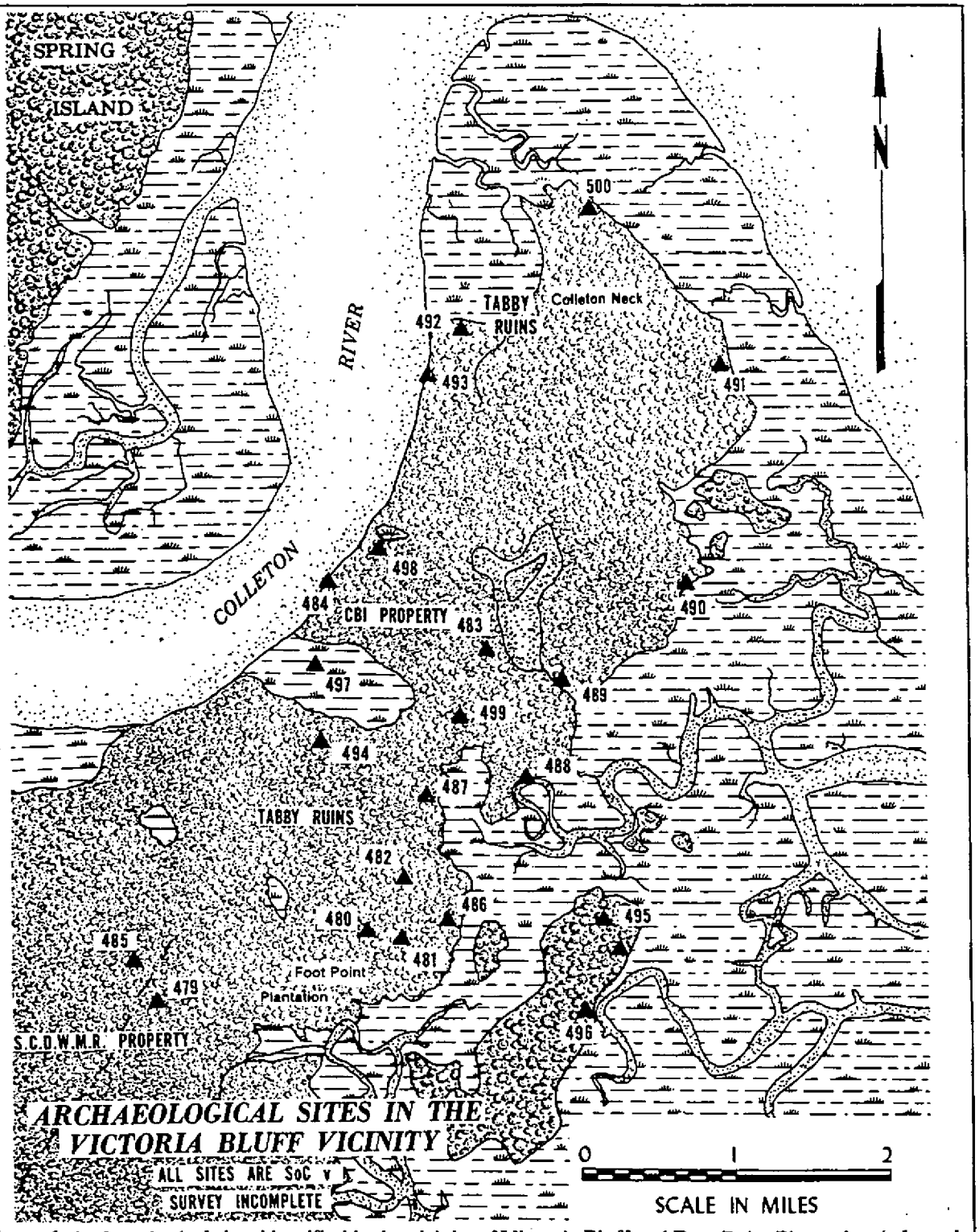


Figure 6. Archaeological sites identified in the vicinity of Victoria Bluff and Foot Point Plantation (adapted from Trinkley 1981b:Figure 11).

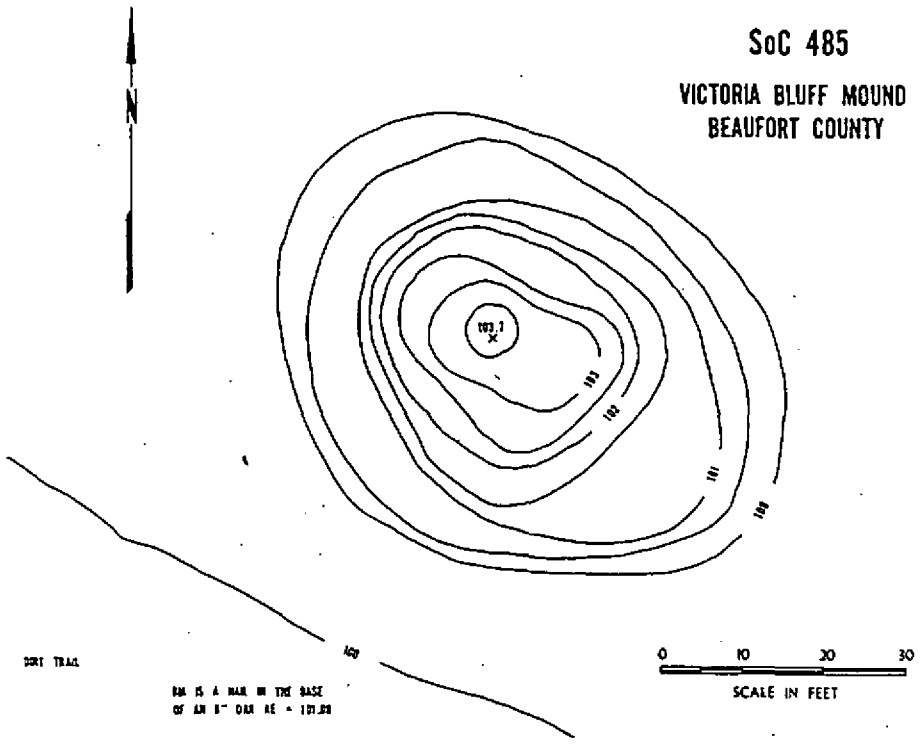


Figure 7. Contour map of the Victoria Bluff Burial Mound (adapted from Trinkley 1981b:Figure 15).

scrapers; and drill (Coe 1964; Goodyear et al. 1989; Michie 1977; Williams 1968). The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Sea level during much of this period is expected to have been as much as 65 feet lower than present, so many sites may be inundated (Flint 1971). Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coast. Archaic period assemblages are rare in the Sea Island region, although the sea level is anticipated to have been within 13 feet of its present stand by the beginning of the succeeding Woodland period (Lepionka et al. 1983:10). Brooks and Scurry note that:

> Archaic period sites, when contrasted with the subsequent Woodland period, are typically small, relatively few in number and contain low densities of archaeological material. The data may indicate that the inter-riverine zone was utilized by Archaic populations characterized by small group size, high mobility, and wide ranging exploitative

patterns (Brooks and Scurry 1978:44).

Alternatively, the general sparsity of Archaic sites in the coastal zone may be the result of a more attractive environment inland adjacent to the floodplain swamps of major drainages. Of course, this is not necessarily an alternative explanation, since coastal Archaic sites may represent only a small segment in the total settlement system.

Early Woodland

The earliest phase of the Woodland period (see Figure 8) is called Stallings, after the type site excavated by the Cosgroves in 1929 (Claflin 1931). These "Stallings Island people" produced a rich cultural assemblage of bone and antler work, polished stone items, grooved and perforated "net sinkers" or steatite disks, stone tools (including projectile points, knives, scrapers, and cruciform drills), and fiber tempered pottery (see also Williams 1968). It was over a decade before the typological significance of the Stallings ware was recognized and a formal type description was offered (Fairbanks 1942; Griffin 1943). The definitive feature of this pottery is its large quantity of fiber, now identified as Spanish Moss (Simpkins and Scoville 1981), included in the paste prior to firing.

The elaborate Savannah River drainage sites such as Stallings Island, Fennel Hill, Rabbit Mount, and Bilbo, are all characterized by large quantities of either fresh water mussels or tidal oysters, large quantities of artifacts, and abundant features. These middens, however, represent only one aspect of the Stallings settlement system. Another portion of that system is represented by Stallings sites which evidence little shell. While many of these are sparse scatters, such as Clear Mount (Stoltman 1974) and Pinckney Island (Trinkley 1981b), some evidence intensive occupation with features and a rich cultural assemblage, such as the Love (38AL10; Trinkley 1974) and Fish Haul (38BU805; Trinkley 1986) sites.

At the Fish Haul site a Stallings phase "D"-shaped structure containing about 90 square feet of floor area has been identified (Trinkley 1986:145-147) and Stoltman (1974:51-54) recovered a lean-to structure at Rabbit Mount. The function of essentially non-shell midden sites such as Love and Fish Haul is only partially understood at present, although shellfish seasonality and ethnobotanical studies (Claassen 1986; Lawrence 1986; Trinkley 1986) are beginning to suggest late fall and winter occupation. These may represent early sites when the subsistence base was diffuse, prior to intensive riverine and estuarine exploitation. Alternatively, and more likely, they may represent a seasonal round in the Stallings settlement system. Riverine shellfish may have been gathered in the fall when the Savannah River and its tributaries were low and clear, while other resources away from the river were exploited during the period of high discharge in the late winter and spring (Anderson and Schuldenrein 1985:13). Additional work within the Savannah drainage is necessary to understand more fully the relationship between large shell middens, dense non-shell upland and coastal sites, and sparse upland and coastal "scatters."

The following Thom's Creek phase dates as early as 2220±350 B.C. (UGA-584) from Spanish Mount in Charleston County (Sutherland 1974) and continues to at least 935±175 B.C. (UGA-2901), based on a date from the Lighthouse Point Shell Ring, also in Charleston County (Trinkley 1980b:191-192). The Thom's Creek phase is characterized by an artifact assemblage almost identical to that of Stallings sites. The only major differences include the replacement of fiber tempering with sand, or a clay not requiring tempering, and the gradual reduction of projectile point size.

Thom's Creek pottery, first typed by Griffin (1945), consists of sandy paste pottery decorated with the motifs common to the Stallings series, including punctations (reed and shell), finger pinching, simple stamping, incising, and very late in the phase, finger smoothed (Trinkley 1980a). Investigations at the Lighthouse Point and Stratton Place shell rings, stratigraphic studies at Spanish Mount and Fig Island, radiocarbon dates from Lighthouse Point and Venning Creek, and the study of surface collections from a number of

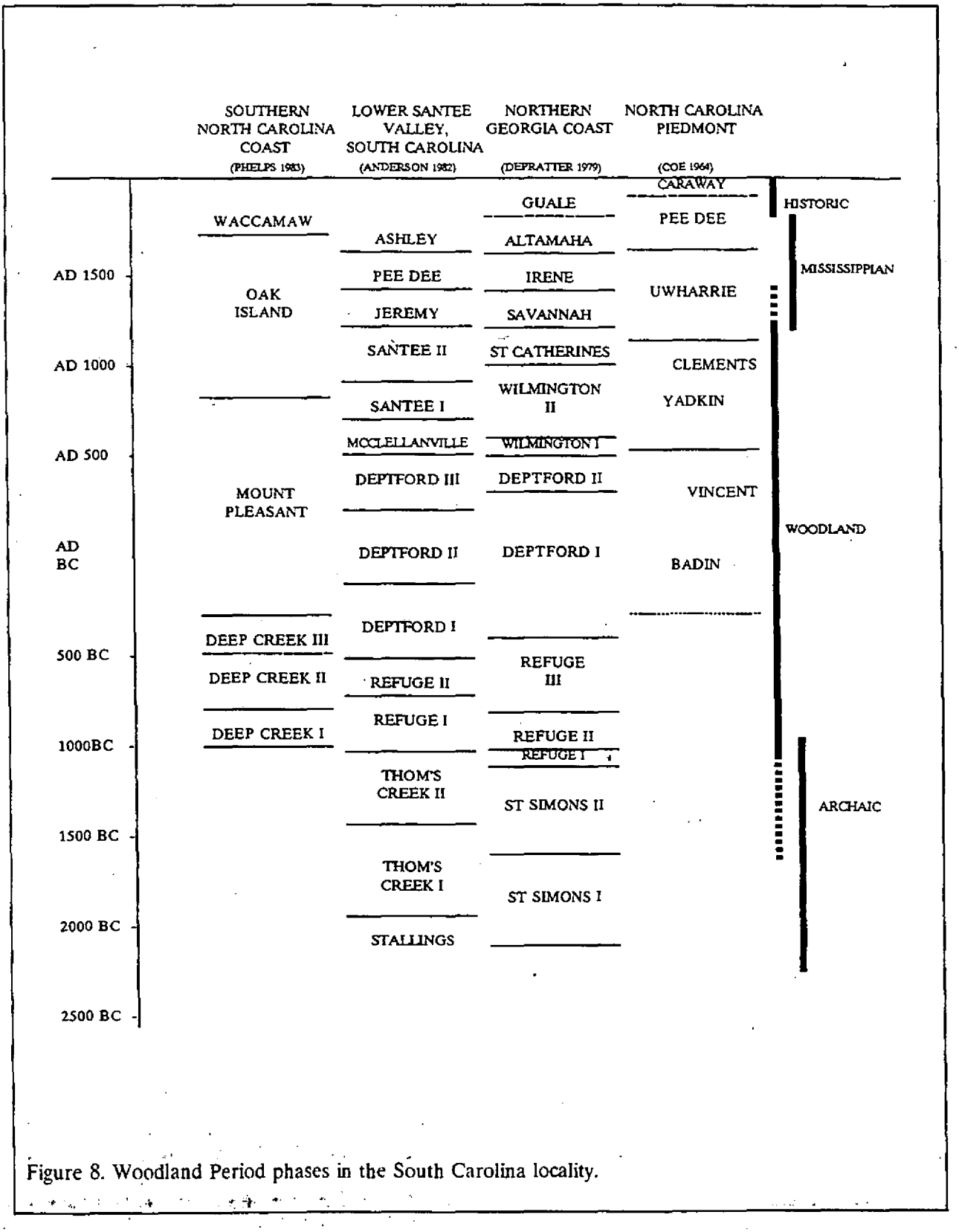


Figure 8. Woodland Period phases in the South Carolina locality.

sites, have suggested a temporal ordering of the Thom's Creek series. Reed punctated pottery appears to be the oldest, followed by the shell punctated and finger pinched motifs. Late in the Thom's Creek phase, perhaps by 1000 B.C., there is the addition of Thom's Creek Finger Smoothed (Trinkley 1983a:44). Vessel forms include deep, straight sided jars and shallow conoidal bowls. Lip treatments are simple, and coiling fractures are common. Firing of the Thom's Creek vessels is certainly better than that evidenced for Stallings, but there continues to be abundant incompletely oxidized specimens.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia. There appears to be strong concentration of Thom's Creek sites in the Santee River drainage and the central South Carolina coast (see Anderson 1975:184).

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens; small middens with only sparse shell; and large "shell rings" are found in the Thom's Creek settlement system.

Limited testing has been conducted at one small Thom's Creek non-shell midden on Sol Legare Island (38CH779) in Charleston County, South Carolina (Trinkley 1984). The site evidenced very limited reliance on shellfish and faunal remains, with the bulk of the food remains consisting of large mammals. Excavations also identified a portion of a probable Thom's Creek post structure situated about 180 feet inland from the marsh edge.

Excavations at other Coastal Zone Thom's Creek sites includes the work by Sutherland (1973, 1974) at the Spanish Mount shell midden (38CH62). While this work has never been completely published, the site appears to represent a seasonally occupied camp with a diffuse subsistence base, including reliance on shellfish, floral material, fish, and mammals.

By far the most work has been conducted at Thom's Creek phase shell rings (see Trinkley 1980b, 1985). These sites are circular middens about 130 to 300 feet in diameter, 2 to 6 feet in height, and 40 feet in width at their bases, with clear interiors. These doughnut-shaped accumulations were formed as small mounds, arranged around an open ground area, and gradually blended together. The ring itself is composed of varying proportions of shell, animal bone, pottery, soil, and other artifacts. These shell rings were apparently mundane occupation sites for fairly large social units which lived on the ring, disposed of garbage underfoot, and used the clear interiors as areas for communal activities. The sites further suggest relatively permanent, stable village life as early as 1600 B.C., with a subsistence base oriented toward large and small mammals, fish, shellfish, and hickory nut resources (Trinkley 1985).

Following Stallings and Thom's Creek are the Refuge and Deptford phases, both strongly associated with the Georgia sequence and the Savannah drainage (DePratter 1979; Lepionka et al. 1983; Williams 1968). The Refuge Phase, dated from 1070±115 B.C. (QC-784) to 510±100 B.C. (QC-785), is found primarily along the South Carolina coast from the Savannah drainage as far north as the Santee River (Williams 1968:208). Anderson (1975:184) further notes an apparent concentration of Refuge sites in the Coastal Plain, particularly along the Santee River.

The Refuge series pottery is similar in many ways to the preceding Thom's Creek wares. The paste is compact and sandy or gritty, while surface treatments include sloppy simple stamped, dentate stamped, and random punctate decorations (see DePratter 1979:115-123; Williams 1968:198-208). Anderson et al. note that these typologies are "marred by a lack of reference to the Thom's

Creek series" (Anderson et al. 1982:265) and that the Refuge Punctate and Incised types are indistinguishable from Thom's Creek wares. Peterson (1971:153) characterizes Refuge as both a degeneration of the preceding Thom's Creek series and also as a bridge to the succeeding Deptford series.

It is difficult to reconstruct the subsistence base, although the sites suggest small, seasonal camps for small groups (Trinkley 1982). The settlement fragmentation, which began at the end of the Thom's Creek phase, around 1000 B.C., probably relates to the increase in sea level, from a Thom's Creek phase low of 10 feet below the current high marsh surface at 1200 B.C. to a high of about 3 feet below the current high marsh surface at 950 B.C. (Colquhoun et al. 1980; Brooks et al. 1989). This increasing sea level drowned the tidal marshes (and sites) on which the Thom's Creek people relied. The following Refuge phase evidences the fragmentation necessary when the environment which gave rise to large sedentary populations disappeared. Hanson (1982:21-23), based on Savannah River data, suggests that subsistence stress present during the Thom's Creek phase may have resulted in an expansion of the settlement system into diverse environmental settings. It seems likely, however, that the development of mature, upland tributaries was also essential ingredient in this process (see Sassaman et al. 1989). This same "splintering" is observed on the South Carolina coast.

The Deptford culture takes its name from the type site located east of Savannah, Georgia, which was excavated in the mid-1930s (Caldwell 1943:12-16). Deptford phase sites are best recognized by the presence of fine to course sandy paste pottery with a check stamped surface treatment. This pottery is typically in the form of a cylindrical vessel with a conoidal base. The flat bottomed bowl with tetrapodal supports found at Deptford sites along the Florida Gulf coast (Milanich and Fairbanks 1980:79) is very rare in South Carolina. Other Deptford phase pottery styles include cord marking, simple stamping, a complicated stamping which resembles early Swift Creek, and a geometric stamping which consists of a series of carved triangles or diamonds with interior dots (see Anderson et al. 1982:277-293; DePratter 1979).

The Deptford technology is little better known than that of the preceding Refuge phase. Shell tools are uncommon, bone tools are "extremely rare" (Milanich and Fairbanks 1980:77), and stone tools are rare on Coastal Zone sites. All of this indicates to some researchers that "wood must have been worked into a variety of tool types" (Milanich and Fairbanks 1980:75). One type of stone tool associated with South Carolina Deptford sites is a very small, stemmed projectile point tentatively described as "Deptford Stemmed" (Trinkley 1980c:20-23). This point is the culmination of the Savannah River Stemmed reduction seen in the Thom's Creek and Refuge phases. Also found at Deptford sites are "medium-sized triangular points," probably similar to the Yadkin Triangular point (Coe 1964:45, 47, 49; Milanich and Fairbanks 1980:75-76).

Perhaps of even greater interest is the co-occurrence of the larger triangular points (such as Badin and Yadkin) with smaller triangular forms (such as Caraway) traditionally attributed to the Late Woodland and South Appalachian Mississippian periods. This situation has been reported at Coastal Plain sites (Blanton et al. 1986:107), Savannah River sites (Sassaman et al. 1989:157), and Coastal Zone sites (Trinkley 1990). Blanton et al. (1986) suggest that these point types were used at the same time, but perhaps for different tasks.

The traditional view of an estuarine Deptford adaptation with minor interior occupations must be re-evaluated based on the Savannah River drainage work of Brooks and Hanson (1987) and Sassaman et al. (1989:293-295) who suggest larger residential base camps and foraging zones along the Savannah River, coupled with smaller, household residences and foraging zones in the uplands along small tributaries.

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been

termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing (see Trinkley 1987). Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1960). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina, based on two radiocarbon dates of 120±130 B.C. (QC-1358) and A.D. 210±110 (QC-1357). The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

Middle Woodland

Although the Deptford phase is discussed as part of the Early Woodland, many authors place the phase intermediate between the Early and Middle Woodland (see, for example, Anderson et al. 1982:28, 250). Such an approach is not unreasonable, because Deptford exhibits considerable temporal range and cultural adaptations which are more characteristically Middle Woodland (see also Anderson 1985:53). The Deptford phase, however, is still part of the early carved paddle stamped tradition which is replaced by the posited northern intrusion of wrapped paddle stamping during the Middle Woodland. Clearly the Deep Creek pottery, at the same time period as Deptford, is part of this "Northern Tradition," yet the Deep Creek, on temporal grounds, is considered Early Woodland by Phelps (1983:17, 29). This is meant simply to indicate that the transition from Early to Middle Woodland is not as clear as one might wish.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. Wilmington and Hanover may be viewed as regional varieties of the same ceramic tradition. The pottery is characterized almost solely by its crushed sherd (perhaps with grog as well) temper which makes up 30 to 40% of the paste and which ranges in size from 3 to 10 mm. Wilmington was first described by Caldwell and Waring (Williams 1968:113-116) from coastal Georgia work, while the Hanover description was offered by South (1960), based on a survey of the Southeastern coast of North Carolina (with incursions into South Carolina). The Wilmington phase was seen by Waring (Williams 1968:221) as intrusive from the Carolina coast, but there is considerable evidence for the inclusion of Deptford traits in the Wilmington series. For example, Caldwell and McCann (1940:n.p.) noted that, "the Wilmington complex proper contains all of the main kinds of decoration which occur in the Deptford complex with the probable exception of Deptford Linear Checkstamped" (see also Anderson et al. 1982:275). Consequently, surface treatments of cord marking, check stamping, simple stamping, and fabric impressing may be found with sherd tempered paste.

Sherd tempered Wilmington and Hanover wares are found from at least the Chowan River in North Carolina southward onto the Georgia coast. Anderson (1975:187) has found the Hanover series evenly distributed over the Coastal Plain of South Carolina, although it appears slightly more abundant north of the Edisto River. The heartland may be along the inner Coastal Plain north of the Cape Fear River in North Carolina. Radiocarbon dates for Wilmington and Hanover range from 135±85 B.C. (UM-1916) from site 38BK134 to A.D. 1120±100 (GX-2284) from a "Wilmington House" at the Charles Towne Landing site, 38CH1. Most dates, however, cluster from A.D. 400 to 900; some researchers prefer a date range of about 200 B.C. to A.D. 500 (Anderson et al. 1982:276).

Largely contemporaneous with the sherd tempered wares are what have been termed the Mount Pleasant, McClellanville, and Santee series. The Mount Pleasant series has been developed by Phelps from work along the northeastern North Carolina coast (Phelps 1983:32-35, 1984:41-44) and is a Middle Woodland refinement of South's (1960) previous Cape Fear series. The pottery is characterized by a sandy paste either with or without quantities of rounded pebbles. Surface treatments include fabric impressed, cord marked, and net impressed. Vessels are usually conoidal, although simple, hemispherical, and globular bowls are also present. The Mount Pleasant series is found from North Carolina southward to the Savannah River (being evidenced by the "Untyped Series" in Trinkley 1981b). North Carolina dates for the series range from A.D. 265±65 (UGA-1088) to A.D. 890±80 (UGA-3849). The several dates currently available from South Carolina (such as UGA-3512 of A.D. 565±70 from Pinckney Island) fall into this range of about A.D. 200 to 900.

The McClellanville (Trinkley 1981a) and Santee (Anderson et al. 1982:302-308) series are found primarily on the north central coast of South Carolina and are characterized by a fine to medium sandy paste ceramic with surface treatment of primarily v-shaped simple stamping. While the two pottery types are quite similar, it appears that the Santee series may have later features, such as excurvate rims and interior rim stamping, not so-far observed in the McClellanville series. The Santee series is placed at A.D. 800 to 1300 by Anderson et al. (1982:303), while the McClellanville ware may be slightly earlier, perhaps A.D. 500 to 800. Anderson et al. (1982:302-304; see also Anderson 1985) provide a detailed discussion of the Santee Series and its possible relationships with the McClellanville Series. Anderson, based on the Santee area data from Mattassee Lake, indicates that there is evidence for the replacement of fabric impressed pottery by simple stamping about A.D. 800 (David G. Anderson, personal communication 1990). This may suggest that McClellanville and Santee wares are closely related, both typologically and culturally. Also probably related is the little known Camden Series (Stuart 1975) found in the inner Coastal Plain of South Carolina.

The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are known from the Mount Pleasant phase.

These Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In terms of settlement patterns, several researchers have offered some conclusions based on localized data. Michie (1980:80), for example, correlates rising sea levels with the extension of Middle Woodland shell middens further up the Port Royal estuary. Scurry and Brooks (1980:75-78) find the Middle Woodland site patterning in the Wando River affected not only by the sea level fluctuations, but also by soil types (see also Trinkley 1980b:445-446). They suggest that the strong soil correlation is the result of upland sites having functioned as extraction areas, principally for exploitation of acorns, hickory nuts, and deer. Shell midden sites, they suggest, also represent seasonal camps and therefore exhibit small size, low artifact density, and infrequent re-occupation. Ward's (1978) work in Marlboro County suggests that interior site patterning changed little from the Early to Middle Woodland. Sites continue to be found on the low, sandy ridges overlooking hardwood swamp floodplains, which suggests that while pottery styles changed, site locations, and presumably subsistence, did not (see also Ferguson 1976). Drucker and Anthony's (1978) work in Florence County, South Carolina reveals virtually

continuous short-term occupation along the terraces associated with the floodplain of Lynch's Lake. DePratter's work at the Dunlap site, however, suggests that a few, relatively stable villages were present in the Middle Woodland.

Late Woodland and South Appalachian Mississippian

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1989:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Along the central and northern South Carolina coast, Anderson et al. (1982:303-304) suggest a continuation of the Santee series into the Late Woodland. The Hanover and Mount Pleasant series may also be found as late of A.D. 1000. Along the southeastern North Carolina coast, South (1960) has defined the Oak Island complex, which is best known for its shell tempered ceramics with cord marked, fabric impressed, simple stamped, and net impressed surface finishes. The phase is briefly discussed by Phelps (1983:48-49), but curiously this manifestation is almost unknown south of the Little River in South Carolina. Very little is known about the northern coastal South Carolina Late Woodland complexes, although sites such as 38GE32 may document the occurrence of village life in the Late Woodland.

The South Appalachian Mississippian is typically characterized by the construction of truncated temple mounds, reliance on cultivated crops, the development of a social elite, and complicated stamped pottery. The best information for the coastal area comes from the only incompletely reported excavations at the Charles Town Landing site (South 1971). In addition, Anderson (1989) provides an excellent synthesis of Mississippian research in South Carolina, observing that "while we have a fair appreciation for the culmination of the Mississippian in South Carolina, its origins and immediate Woodland antecedents remains largely unknown at the present" (Anderson 1989:114; see also Anderson 1994).

Anderson also notes the need for additional research in the area of:

> relationships between Woodland and Mississippian occupations in South Carolina, particularly the mechanisms bringing about the transition between the seemingly markedly dissimilar forms of social organization and subsistence adaptation (Anderson 1989:113).

While Trinkley (1981a, 1983a, 1983b) has offered a cultural sequence for the Mississippian remains in the coastal area that encompasses the Jeremy, "classic" Pee Dee, "post-classic" Pee Dee, Wachesaw, and Kimbel series, Anderson et al. (1982:312-319) offers an alternative perspective incorporating Pee Dee and Ashley wares.

Protohistoric

The history of the numerous small coastal Indian tribes is poorly known. As Mooney noted, the coastal tribes:

> were of but small importance politically; no sustained mission work was ever attempted among them, and there were but few literary men to take an interest in them. War, pestilence, whiskey and systematic slave hunts had nearly exterminated the aboriginal occupants of the Carolinas before any body had thought them of sufficient importance to ask who they were, how they lived, or what were their beliefs and opinions (Mooney 1894:6).

In truth, our knowledge of these groups

has also been limited because too few scholars have taken an active interest in the primary sources and there has been too little desire to evaluate critically the early research by Mooney (1894) and Swanton (1952). For South Carolina Anderson (1989:117-118) briefly notes the current status of ethnohistoric research.

Historic Synopsis

The Spanish and French

The first Spanish explorations in the Carolina low country were conducted in the 1520s under the direction of Lucas Vasquez de Ayllon and Francisco Gordillo. One of the few areas explored by Gordillo which can be identified with any certainty is Santa Elena (St. Helena). Apparently Port Royal Sound was entered and land fall made at Santa Elena on Santa Elena's Day, August 18, 1520. "Cape Santa Elena," according to Quattlebaum (1956:8) was probably Hilton Head (Hoffman 1984:423).

Gordillo's accounts spurred Ayllon to seek a royal commission both to explore further the land and to establish a settlement in the land called Chicora (Quattlebaum 1956:12-17). In July 1526 Ayllon set sail for Chicora with a fleet of six vessels and has been thought to have established the settlement of San Miguel del Galdape in the vicinity of Winyah Bay (Quattlebaum 1956:23). Hoffman (1984:425) has more recently suggested that the settlement was at the mouth of the Santee River (Ayllon's Jordan River). Ferguson (n.d.:1) has suggested that San Miguel was established at Santa Elena in the Port Royal area. More recently, scholars have suggested that the settlement was on the Georgia coast, in the vicinity of St. Catherines Island (Rowland et al. 1996). Regardless, the colony was abandoned in the winter of 1526 with the survivors reaching Hispaniola in 1527 (Quattlebaum 1956:27).

The French, in response to increasing Spanish activity in the New World, undertook a settlement in the land of Chicora in 1562. Charlesfort was established in May 1562 under the direction of Jean Ribaut. This settlement fared no better than the earlier Spanish fort of San Miguel and was abandoned within the year (Quattlebaum 1956:42-56). Ribaut was convinced that his settlement was on the Jordan River in the vicinity of Ayllon's Chicora (Hoffman 1984:432). Recent historical and archaeological studies suggest that Charlesfort may have been situated on Port Royal Island in the vicinity of the Town of Port Royal (South 1982a, see also Rowland et al. 1996:23). The deserted Charlesfort was burned by the Spanish in 1564 (South 1982a:1-2). A year later France's second attempt to establish its claim in the New World was thwarted by the Spanish destruction of the French Fort Caroline on the St. John's River. The massacre at Fort Caroline ended French attempts at colonization on the southeast Atlantic coast.

To protect against any future French intrusion such as Charlesfort, the Spanish proceeded to establish a major outpost in the Beaufort area. The town of Santa Elena was built in 1566, a year after a fort was built in St. Augustine. Three sequential forts were constructed: Fort San Salvador (1566-1570), Fort San Felipe (1570-1576), and Fort San Marcos (1577-1587). In spite of Indian hostilities and periodic burning of the town and forts, the Spanish maintained this settlement until 1587 when it was finally abandoned (South 1979, 1982a, 1982b). Spanish influence, however, continued through a chain of missions spreading up the Atlantic coast from St. Augustine into Georgia. That mission activity, however, declined noticeably during the eighteenth century, primarily because of 1702 and 1704 attacks on St. Augustine and outlying missions by South Carolina Governor James Moore (Deagan 1983:25-26, 40).

The British Proprietory Period

British influence in the New World began in the fifteenth century with the Cabot voyages, but the southern coast did not attract serious attention until King Charles II granted Carolina to the Lords Proprietors in 1663. In August 1663 William Hilton sailed from Barbados to explore the Carolina territory, spending a great deal of time in the Port Royal area (Holmgren 1959). Almost chosen for the first English colony, Hilton Head Island was passed over by Sir John Yeamans in

favor of the more protected Charles Town site on the west bank of the Ashley River in 1670 (Clowse 1971:23-24; Holmgren 1959:39).

Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system, which was designed to profit the mother country by providing raw materials unavailable in England (Clowse 1971). Charleston was settled by English citizens, including a number from Barbados, and by Huguenot refugees. Black slaves were brought directly from Africa, as well as Barbados.

The Charleston settlement was moved from the mouth of the Ashley River to the junction of the Ashley and Cooper Rivers in 1680, but the colony was a thorough disappointment to the Proprietors. It failed to grow as expected, did not return the anticipated profit, and failed to evidence workable local government (Ferris 1968:124-125). The early economy was based almost exclusively on Indian trade, naval stores, lumber, and cattle. Rice began emerging as a money crop in the late seventeenth century, but did not markedly improve the economic well-being of the colony until the eighteenth century (Clowse 1971).

Meanwhile, Scottish Covenanters under Lord Cardross established Stuart's Town on Scot's Island (Port Royal) in 1684, where it existed for four years until destroyed by the Spanish. It was not until 1698 that the area was again occupied by the English. Both John Stuart and Major Robert Daniell took possession of lands on St. Helena and Port Royal islands. The town of Beaufort was founded in 1711 although it was not immediately settled. Spring Island was granted to John Cockran in 1706 in two parcels of 500 acres each (S.C. Department of Archives and History, Colonial Series, Royal Grants, volume 39, page 6). One grant mentions that the land is "part of an Island over against Alatamaha Town."

While most of the Beaufort Indian groups were persuaded to move to Polawana Island in 1712, the Yemassee, part of the Creek Confederacy, revolted in 1715. By 1718 the Yemassee were defeated and forced southward to Spanish protection. Consequently, the Beaufort area, known as St. Helena Parish, Granville County, was for the first time relatively safe from both the Spanish and the Indians. The Yemassee, however, continued occasional raids into South Carolina, such as the 1728 destruction of the Passage Fort at Bloody Point on Daufuskie Island (Starr 1984:16). In the same year the English raid on St. Augustine succeeded in breaking the Spanish influence and the remnant Indian groups made peace with the English. The results for the Beaufort area, however, were mixed. While there was a semblance of peace, frontier settlements were largely deserted, population growth was slow, and the Indian trade was diverted from Beaufort to Savannah.

The British Colonial Period

Although peace marked the Carolina colony, the Proprietors continued to have disputes with the populace, primarily over the colony's economic stagnation and deterioration. In 1727 the colony's government virtually broke down when the Council and the Commons were unable to agree on legislation to provide more bills of credit (Clowse 1971:238). This, coupled with the disastrous depression of 1728, brought the colony to the brink of mob violence. Clowse notes that the "initial step toward aiding South Carolina came when the proprietors were eliminated" in 1720 (Clowse 1971:241).

While South Carolina's economic woes were far from solved by this transfer, the Crown's Board of Trade began taking steps to remedy many of the problems. A new naval store law was passed in 1729 with possible advantages accruing to South Carolina. In 1730 the Parliament opened Carolina rice trade with markets in Spain and Portugal. The Board of Trade also dealt with the problem of the colony's financial solvency (Clowse 1971:245-247). Clowse notes that these changes, coupled with new land policies, "allowed the colony to go into an era of unprecedented expansion" (Clowse 1971:249). South Carolina's position was

buttressed by the settlement of Georgia in 1733.

By 1730 the colony's population had risen to about 30,000 individuals, 20,000 of whom were black slaves (Clowse 1971:Table 1). The majority of these slaves were used in South Carolina's expanding rice industry. In the 1730 harvest year 48,155 barrels of rice were reported, up 15,771 barrels or 33% from the previous year (Clowse 1971:Table 3). Although rice was grown in the Beaufort area, it did not become a major crop in South Carolina until after the Revolutionary War. Rice was never a significant crop on the Beaufort Sea Islands, where ranch farming was favored because of its economic returns and favorable climate (Starr 1984:26-27). Elsewhere, however, rice monoculture shaped the social, political, and economic systems which produced and perpetuated the coastal plantation system prior to the rise of cotton culture.

Although indigo was known in the Carolina colony as early as 1669 and was being planted the following year, it was not until the 1740s that it became a major cash crop (Huneycutt 1949). While indigo was difficult to process, its success was partially due to it being complementary to rice. Huneycutt notes that planters were "able to 'dovetail' the work season of the two crops so that a single gang of slaves could cultivate both staples" (Huneycutt 1949:18). Indigo continued to be the main cash crop of South Carolina until the Revolutionary War fatally disrupted the industry.

During the Revolutionary War the British occupied Charleston for over two and one-half years (1780-1782). A post was established in Beaufort to coordinate forays into the inland waterways after Prevost's retreat from the Battle of Stono Ferry (Federal Writer's Project 1938:7; Rowland 1978:288). British earthworks were established around Port Royal and on Ladys Island (Rowland 1978:290). The removal of the royal bounties on rice, indigo, and naval stores caused considerable economic chaos during and after the war with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

The Antebellum Period

While freed of Britain and her mercantilism, the new United States found its economy thoroughly disrupted. There was no longer a bounty on indigo, and in fact Britain encouraged competition from the British and French West Indies and India "to embarrass her former colonies" (Huneycutt 1949:44). As a consequence the economy shifted to tidewater rice production and cotton agriculture. Lepionka notes that "long staple cotton of the Sea Islands was of far higher value than the common variety (60 cents a pound compared to 15 cents a pound in the late 1830s) and this became the major cash crop of the coastal islands" (Lepionka et al. 1983:20). It was cotton, in the Beaufort area, that brought a full establishment of the plantation economy. Lepionka concisely states that:

> [t]he cities of Charleston and Savannah and numerous smaller towns such as Beaufort and Georgetown were supported in their considerable splendor on this wealth . . . . An aristocratic planter class was created, but was based on the essential labor of black slavery without which the plantation economy could not function. Consequently, the demographic pattern of a black majority first established in colonial times was reinforced (Lepionka et al. 1983:21).

Mills, in 1826, provides a thorough commentary on the Beaufort District noting that:

> Beaufort is admirably situated for commerce, possessing one of the finest ports and spacious harbors in the world . . . . There is no district in the state, either better watered, of more extended navigation, or possessing a larger portion of rich land, than Beaufort: more than one half of the territory is rich swamp land, capable of being improved so as

> to yield abundantly (Mills 1826:367).

Describing the Beaufort islands, Mills comments that they were "beautiful to the eye, rich in production, and withal salubrious" (Mills 1826:372). Land prices ranged from $60 an acre for the best, $30 for "second quality," and as low as 25 cents for the "inferior" lands. Grain and sugarcane were cultivated in small quantities for home use while:

> [t]he principal attention of the planter is . . . devoted to the cultivation of cotton and rice, especially the former. The sea islands, or salt water lands, yield cotton of the finest staple, which commands the highest price in market; it has been no uncommon circumstance for such cotton to bring $1 a pound. In favorable seasons, or particular spots, nearly 300 weight has been raised from an acre, and an active field hand can cultivate upwards of four acres, exclusive of one acre and half of corn and ground provisions (Mills 1826:368).

Reference to the 1860 agricultural census reveals that of the 891,228 acres of farmland, 274,015 (30.7%) were improved. In contrast, only 28% of the State's total farmland was improved, and only 17% of the neighboring Colleton District's farm land was improved. Even in wealthy Charleston District only 17.8% of the farm land was improved (Kennedy 1864:128-129). The cash value of Beaufort farms was $9,900,652, while the state average by county was only $4,655,083. The value of Beaufort farms was greater than any other district in the state for that year, and only Georgetown listed a greater cash value of farming implements and machinery (perhaps reflecting the more specialized equipment needed for rice production).

The record of wealth and prosperity, such as it was, is tempered by the realization that it was based on the racial imbalance typical of Southern slavery. In 1820 there were 32,199 people enumerated in Beaufort District, 84.9% of whom were black (Mills 1826:372). While the 1850 population had risen to 38,805, the racial breakdown had changed little, with 84.7% being black (83.2% were slaves). Thus, while the statewide ratio of free white to black slave was 1:1.4, the Beaufort ratio was 1:5.4 (DeBow 1853:338).

Civil War and the Postbellum

Hilton Head Island fell to Union forces on November 7, 1861 and was occupied by the Expeditionary Corps under the direction of General T.W. Sherman. Beaufort, deserted by the Confederate troops and the white towns-people, was occupied by the Union forces several weeks later. A single white person, who remained loyal to the Federal government, was found on Ladys Island (Johnson 1969:189). Hilton Head became the Headquarters for the Department of the South and served as the staging area for a variety of military campaigns. A brief sketch of this period, generally accurate, is offered by Holmgren (1959), while a similarly popular account is provided by Carse (1981). As a result of Hilton Head and Beaufort's early occupation by Union forces, all of the plantations fell to military occupation, a large number of blacks flocked to the area, and a "Department of Experiments" was born. An excellent account of the "Port Royal Experiment" is provided by Rose (1964), while the land policies on St. Helena are explored by McGuire (1985).

Recently, Trinkley (1986) has examined the freedmen village of Mitchelville on Hilton Head Island. One result of the Mitchelville work was to document how little is actually known about the black heritage and postbellum history of the sea islands. Even the social research spearheaded by the University of North Carolina's Institute for Research in Social Science at Chapel Hill in the early twentieth century (e.g. Johnson 1969, Woofter 1930) failed to record much of the activities on islands such as Hilton Head.

McGuire (1982, 1985) provides a detailed account of the land policies in the area during the Civil War and her studies should be consulted for

detailed information. In general, however, blacks slowly came to own a large proportion of the available land. Certificates of possession were eventually issued for a number of the sea island plantations (McGuire 1982:36). During the postbellum period previous owners slowly came forward to reclaim, or redeem, land confiscated by the Federal government. The 1872 redemption process was not totally successful, partially because some tracts had such low value. By the 1890s a program was established to provide owners unsuccessful at either restoration or redemption with token compensation (McGuire 1982:77; S.C. Department of Archives and History, Secretary of State Records, Beaufort County Tax Claims, Direct Tax Compensation Book IX/2/4/3B).

During the late nineteenth century most of the sea island plantations continued as a rural, isolated agrarian communities. The new plantation owners attempted to forge an economic relationship with the free black laborers and found a multitude of problems, including the need to pay higher wages, increasing problems with the cotton boll weevil, and decreasing fertility. The letters of G.C. Hardy, the manager of the Eustis Plantation on Ladys Island in the 1870s, clearly reveal the problems faced during this period. Hardy, in his letters to Frederic Eustis, discusses the rising labor costs and the serious losses of cotton to the boll weevil (South Caroliniana Library, Frederic A. Eustis Collection).

In the 1870s a new form of livelihood was introduced -- the mining of phosphate for fertilizer. While both land and river rock mining were conducted in South Carolina, the Beaufort area saw primarily river dredging to acquire the phosphate ore present as gravel, although land mining of phosphate nodules also took place (Mathews et al. 1980:27, 31). As the industry began to decline in the early twentieth century, blacks returned to agriculture and oyster factories.

Woofter (1930) provides information on the agricultural practices of the St. Helena blacks in the early twentieth century, noting that the population was largely stable, with most blacks remaining in the vicinity of their parents' "home" plantations (Woofter 1930:265). While islands, such as St. Helena, which were large and easily accessible began to change more rapidly during this period, the smaller, more isolated islands, such as Hilton Head, maintained very clear connections with the past which have been repeatedly documented through oral histories.

Historic Synthesis of the Project Area

There are relatively few maps of the project area and most offer only minimal information. Among the most detailed is used in the previously discussed cartographic survey.

This map is the U.S. Coast Survey, Chart 55, "Coast of South Carolina and Georgia from Hunting Island to Ossabaw Island." Although it dates from 1873, it was surveyed just prior to the Civil War. The chart therefore reflects the appearance of the area at about the time of the Civil War. The map reveals that most of the survey tract was in dense woods, with only one small field just south of the plantation settlement and pasture area (or old fields) to the south and west of the cultivated field (Figure 9).

Several other maps, not incorporated in the original cartographic survey, were also examined for additional information. Figure 10 is the ca. 1780 map of the Beaufort area from the Dartmouth College Library's Scavenius Collection. This shows that a settlement, labeled Scotone, was situated in the general project area. Given the scale and rendering of the map, it is possible only to place the settlement somewhere between the Colleton River bend and the Bluffton area. Although it shows the location of "Colleton," which corresponds to Smith's "Colleton Old Settlement Site," Smith fails to mention a Scotone or show any settlement in this area. Moreover, there is no Scotone listed in the S.C. Department of Archives and History Combined Alphabetic Inventory.

While it seems likely that Scotone was the last name of an occupant it is not clear if the individual was an owner, or perhaps simply an overseer. It is also possible that this settlement is the location of one of those tracts disposed of by Colleton prior to his death in 1777. Given the condition of Beaufort County land records it may

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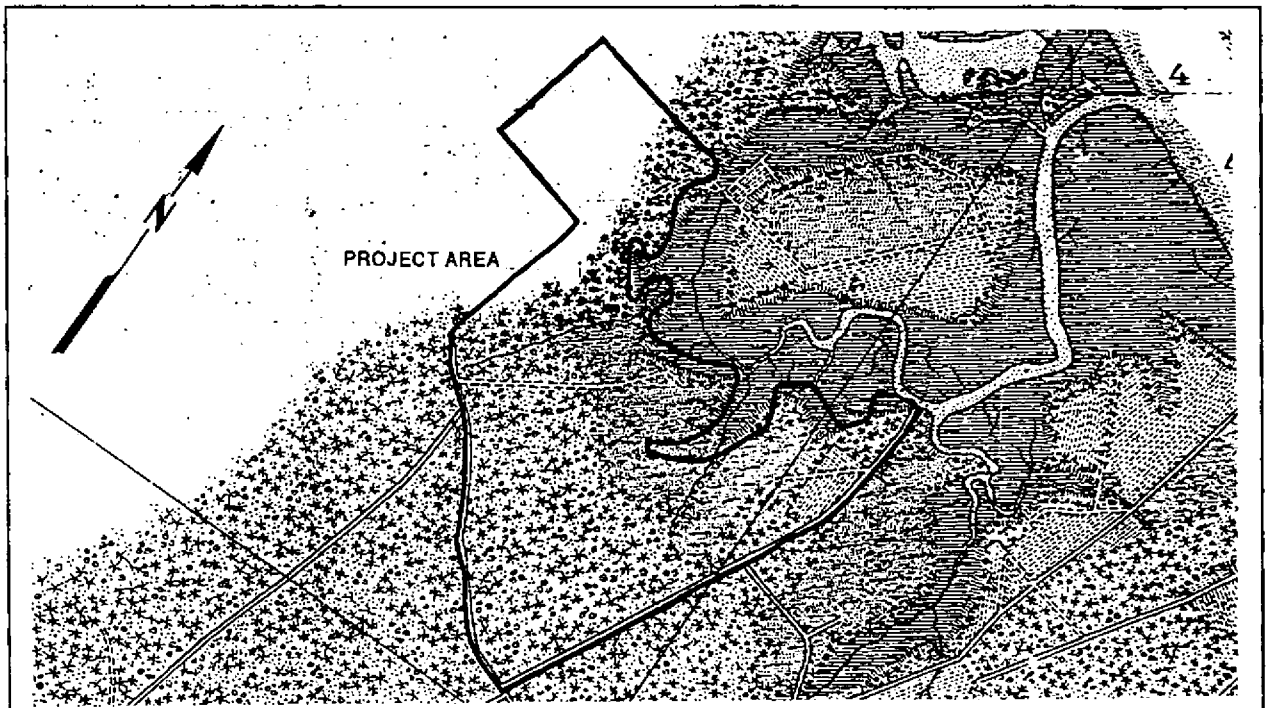


Figure 9. Portion of the 1873 Coastal Survey Chart 55 showing the project area.

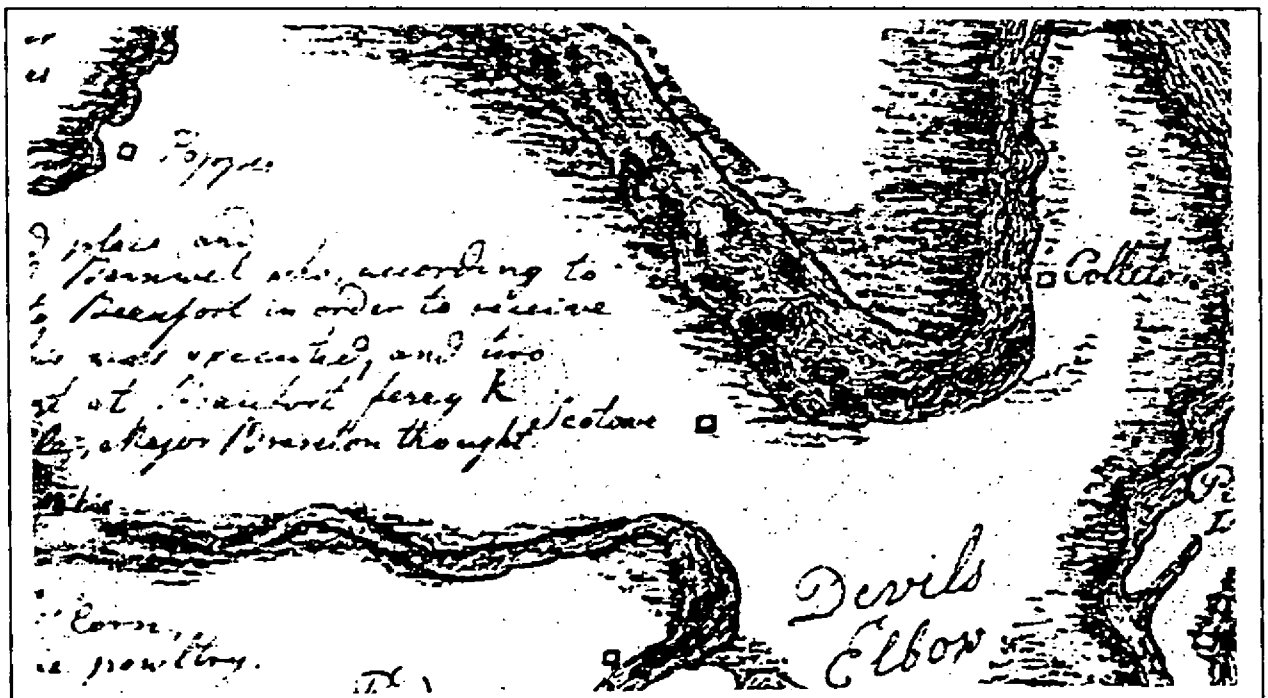


Figure 10. The project area from ca. 1780 (Scavenius Collection, Dartmouth College).

be possible to obtain a clear title on all of the various parcels.

Figure 11 "Map Showing the Location of the Lands of the South Carolina Land and Improvement Company" dates from 1877 and reveals that the study parcel was part of the organization's holdings. It also reveals that there are at least two settlements on the survey tract — those of Woodward and Stoney. The location of these settlements is confirmed by the 1873 Law and Kirk map of Beaufort County.

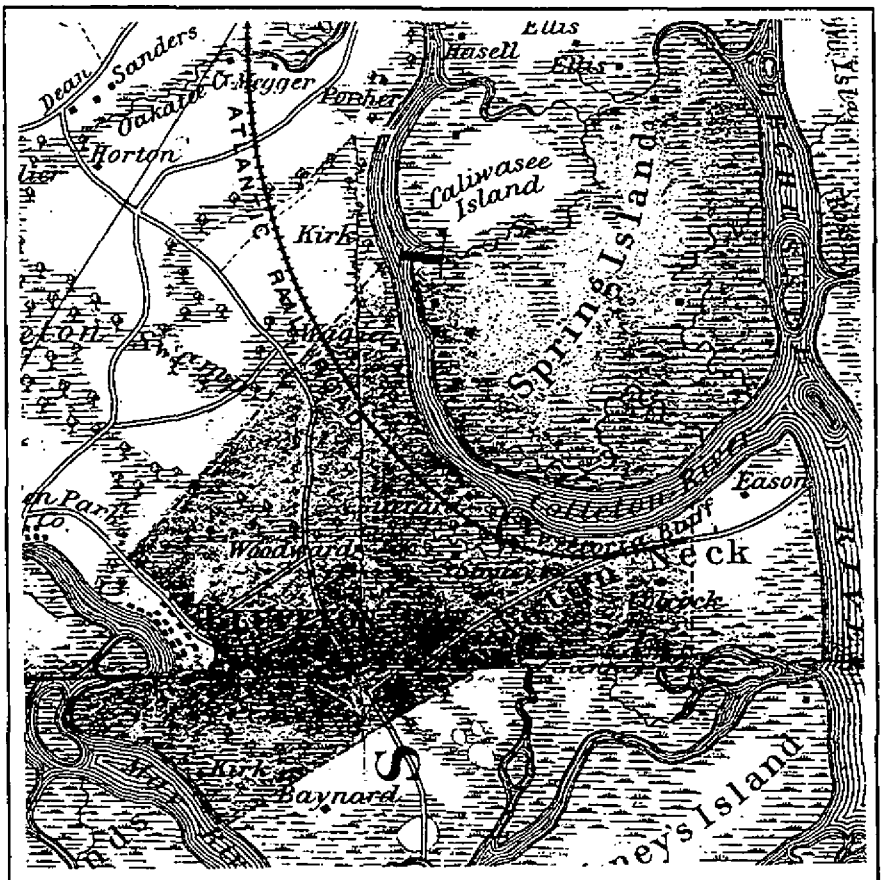


Figure 11. South Carolina Land and Improvement Company lands in the project area about 1877.

Figure 12 is the 1920 edition of the Okatie 15' topographic map published by the Corp of Engineers from field work conducted in 1912. This map is of exceptional importance since it reveals that the plantation settlement shown in Figure 9 was still standing. The only other structure on the study tract at this time was in the north central area adjacent to the marsh of Sawmill Creek.

Figure 13, from 1937, suggests that activity in the study area was minimal. The only structure shown for the tract is along US 278 , opposite SC 462. Just off the tract, to the west, was the Belfair School, listed as being for "Negroes." A similar facility, Foot Point School, is situated off the tract to the east.

The title search for the study tract was exceedingly difficult. Although 1.5 person days were devoted to this work, it was impossible to either complete the chain or to even identify reasonably detailed plats to allow certain property delineations.

Of course, we began with two separate tracts. TMS R600 032 0000 0001 is Crescent Plantation proper and consists of 665 acres. It is currently owned by Josephine W. Johnson and was inherited through the will of her husband, Malcomb Johnson (Beaufort County Probate Court WB J, page 111). The other tract, TMS R600 032 0000 0002 encompasses 148 acres and is currently owned by Trimbleton Partnership. It was acquired in 1973 from J. Wilton Graves, Robert L. Graves, and Henry H. Claussen (Beaufort County RMC, DB 211, page 838).

The main tract, Crescent Plantation, was acquired by Johnson from James B. Walker of Bluffton in 1945 for the purchase price of $8,000 (Beaufort County RMC, DB 63, page 58). At that time the property was described as being on the "Fording Island Public Road one mile north of

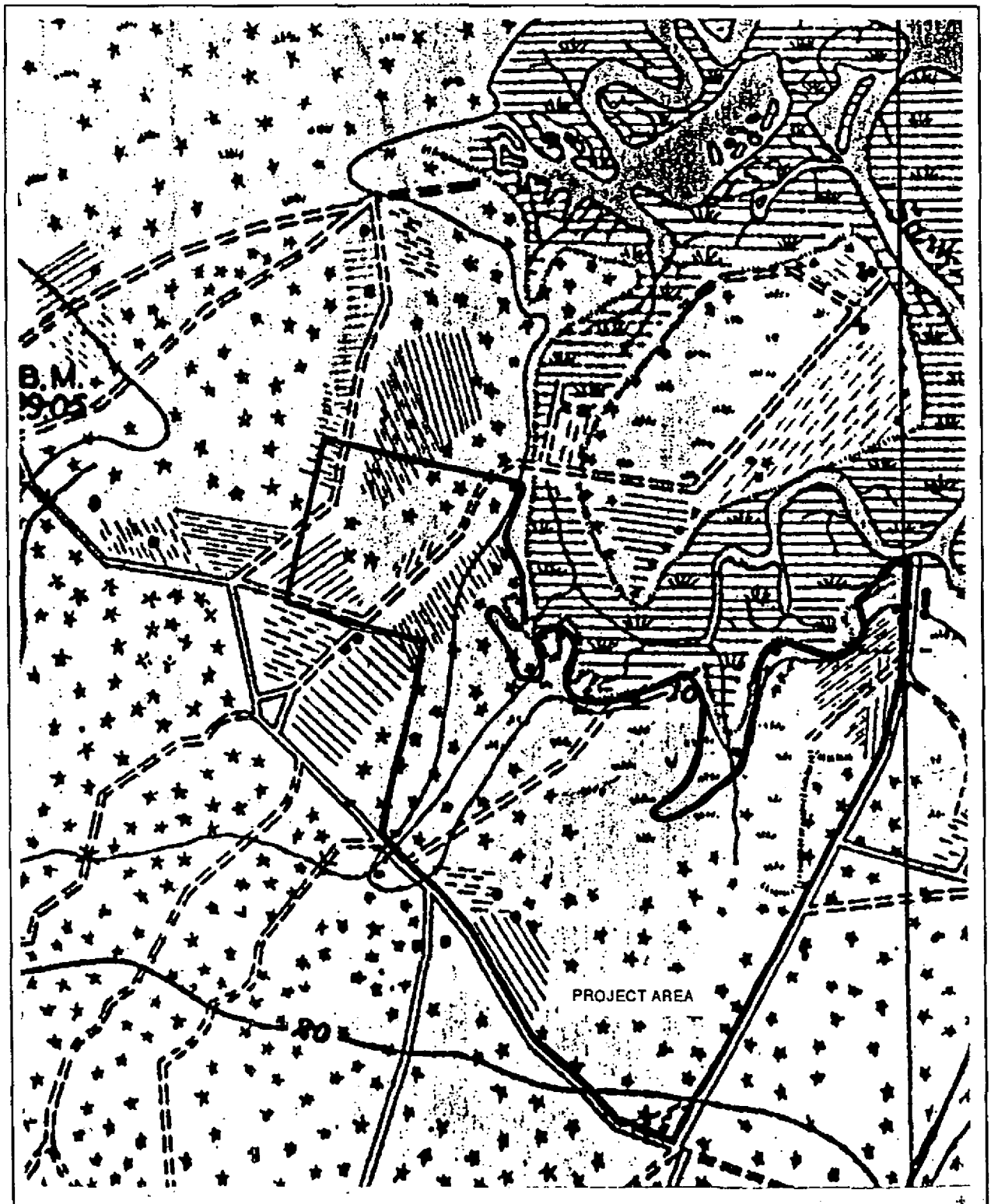


Figure 12. Portion of the 1920 Okatie 15' topographic map showing the project area.

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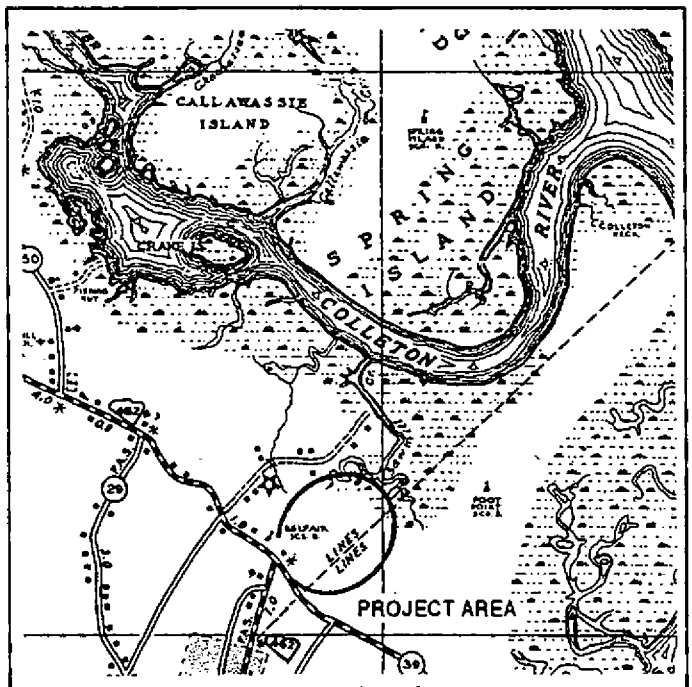


Figure 13. Portion of the 1937 General Highway and Transportation Map of Beaufort County.

Bluffton on the marshes of Chechessee River." The description indicated that it was bounded to the north by Oak Forest Plantation and the marshes of Chechessee, to the east by Trimblestone [sic] Plantation owned by the Simmons, to the south by Fording Island Road and portions of the old Hunting Island tract, and to the west by the Old Barnwell tract and a portion of Oak Forest Plantation. The deed also makes reference to a 1934 plat (Beaufort County RMC, PB 3, page 113) which is reproduced as Figure 14.

Both the recital and the plat, therefore, continued to use the plantation names of at least the early nineteenth century. What isn't, however, clear is what tract this plantation evolved from, especially when Figure 14 is compared to H.A.M. Smith's map of the Okeetee Barony (Figure 5).

Tracing Crescent Plantation beyond 1945 proved very difficult. There was no listing in the cross-index for James B. Walker, although it is possible that he may have acquired the tract through an inheritance. In an effort to bypass this difficulty, we picked up the title with the South Carolina Land and Improvement Company, which we know from Figure 11 owned the study tract.

The South Carolina Land and Improvement Company purchased four different tracts in six different purchases. From Cox, Southern, and Keeney the company acquired Spring Island (Beaufort County RMC, DB 10, pages 457, 458, and 619). They acquired Camp Plantation from Colcock (Beaufort County RMC, DB 10, page 584), Oak Forest Plantation from Southern (Beaufort County DB 10, page 585), and Trembleton Plantation from Mackay and Keeney (Beaufort County RMC, DB 10, page 617). It still was not clear which of these tracts encompassed what is today known as Crescent Plantation.

John M. Mackay and William Keeney sold a "plantation late the residence of Rev. James Stoney, called Trembleton" on April 20, 1876. This suggests that the residence shown on Figure 11 as "Stoney" was the Trembleton tract, although H.A.M. Smith (Figure 5) shows the Trembleston residence slightly further to the east. Nevertheless, the recital for the plantation reveals that it is bounded to the north by the Colleton River, to the east by Charles Colcock Pinckney and Buckingham Plantation, to the south by "lands of William Pope, deceased, now owned by Dr. James R. Kirk," and to the west by lands of Pope (Beaufort County RMC, DB 10, page 617). This almost certainly is the Trembleston Plantation to the east of the study tract.

Charles J. Colcock sold his 700 acre Camp Plantation to the South Carolina Land and Improvement Company on January 6, 1877 for $5,000. The plantation was bounded to the north and east by Colleton River and lands of Foot Point Land Co., to the east and south by lands of Foot Point Land Company and Delworth Creek, to the south by Delworth and Toppin Creeks, separating the tract from Bear Island, and to the west by the "estate of Charles Colcock Pinckney, known as Toppin and the lands formerly belonging to the Rev. James Stoney and known as Trembleton and on waters of Colleton River" (Beaufort County RMC, DB 10, page 584). This places the Camp

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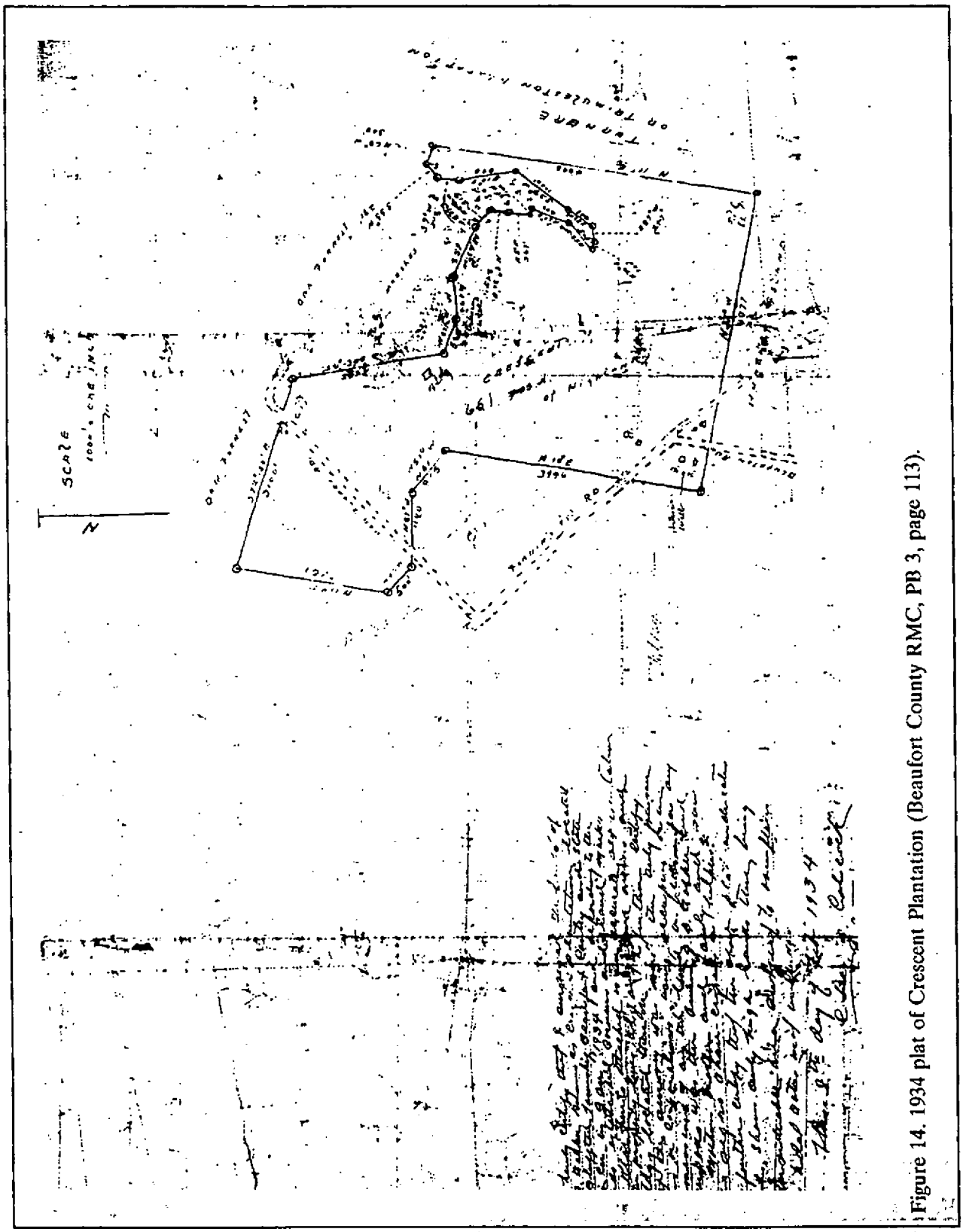


Figure 14. 1934 plat of Crescent Plantation (Beaufort County RMC, PB 3, page 113).

Plantation to the east of Trembleton tract, almost exactly in the location implied by H.A.M. Smith in his Figure 5.

The final tract, Oak Forest, was sold by John P. Southern to the South Carolina Land and Improvement tract, on February 2, 1877 for $3 and other valuable considerations (Beaufort County RMC, DB 10, page 585). The 800 acre tract was bounded on the north and east by the Colleton River, on the south by the estate of William Pope and on the west by lands formerly of Paul Seabrook and now George A. Trenholm. Although there is no plat of this tract, and H.A.M Smith fails to show any settlement associated with Oak Forest, there is a plat of the Oak Forest Marsh (Beaufort County RMC, DB 19, page 68) which shows the tract as likely being situated between the junction of Telfair Creek and the Colleton River to the west and the junction of Saw Mill Creek and Colleton River to the east (Figure 15). This suggests that Oak Forest *may* have included at least some portion of Crescent Plantation.

The descriptions of these tracts also suggest that Pope held at least some lands which almost certainly were the bulk of modern Crescent Plantation. This is further confirmed by Bailey (1984:451). The South Carolina Land and Improvement map also makes reference to the Woodward settlement. This was almost certainly Mrs. E.C. Woodward, who in the 1870 census was 57 years old and residing in St. Lukes Parish.

William Pope, often called Squire Pope, was a prominent land owner in the Beaufort area during the late antebellum. With the fall of Hilton Head in 1861, Pope took refuge in Sandersville, Georgia, where he died in 1862 (Bailey 1984:451-452). A March 20, 1862 letter from Gertrude Pope Woodward in Sandersville, Georgia informed Heppy (Heph J. Pope, one of Pope's granddaughters) of his death, remarking, "his health was bad for a long time – but the loss of his property, & the loss of his grandchildren, all coming upon him at once, was more than he could bear, [and] he soon sunk under the weight of his afflictions" (South Carolina Historical Society, Pope Correspondence File 11-550).

At least by 1868 Pope's wife, Sarah, had returned to the Beaufort area and was living in Bluffton. In one letter Sarah Pope remarks:

> our village is very dull, everybody seems discouraged at the times and finding it so hard to live – It is a great pity for this is such a pleasant place to live at, if it was only the same that it was before the war (South Carolina Historical Society, Pope Correspondence File 11-550).

None of her letters, however, mentions restoration efforts and previous research (Trinkley 1989:54-55, Trinkley 1990:28-31) reveals the complexity of the Pope holdings.

Why no grantee deed for this property coming into the ownership of the South Carolina Land and Improvement Company is unknown. In fact, throughout all of this preliminary research, we were unable to identify any conveyances from Pope's heirs. It is likely that much more research will be necessary in order to fully understand the complexity of Crescent Plantation.

The adjacent tract of Trimbleston Plantation does not appear nearly as confused, although it has passed through a number of hands. The Graves, who sold the 148 acres to Trimbleton Partnership, acquired the tract from Gerald B. Graves and Stephen R. Graves in 1969 for $150,000 (Beaufort County RMC, DB 167, page 247). They, in turn, had acquired it that same year from John Samuel Graves III for $5 and love and affection (Beaufort County RMC, DB 164, page 86.

Graves had acquired the tract in 1945 from Louisa B. Simmons for $3,000. The parcel was bordered to the north by Oak Forest Creek, to the east and southeast by the remainder of Trimbleton, owned by Simmons, to the south and southwest by C.E. Ulmer, and to the west and northwest by Malcomb Johnson, the owner of Crescent Plantation. A plat was prepared of the tract (Figure 16; Beaufort County RMC, PB 6, page 36). The accompanying deed, however, notes that the:

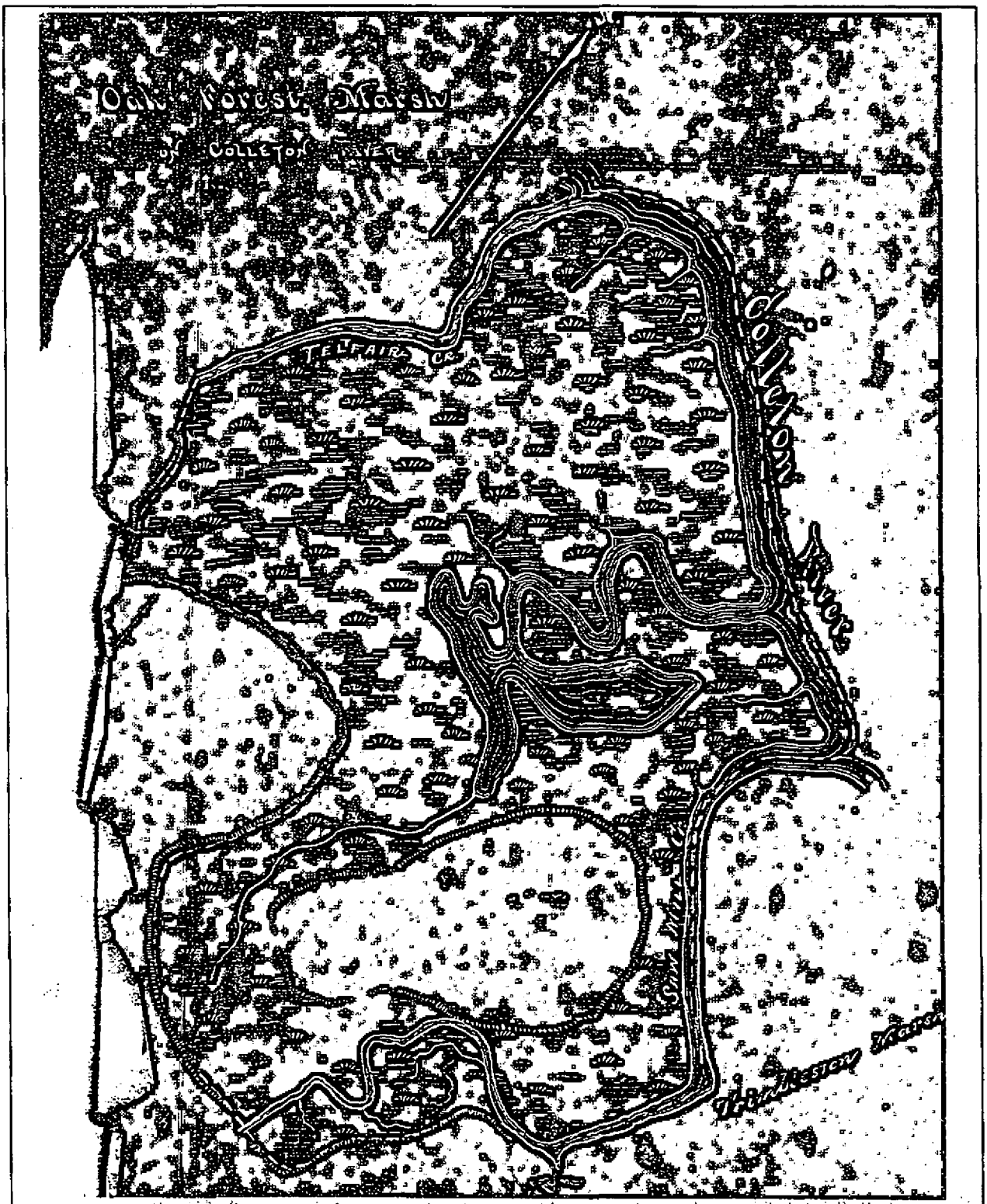


Figure 15. Marshes of Oak Forest Plantation (Beaufort County RMC, DB 19, page 68).

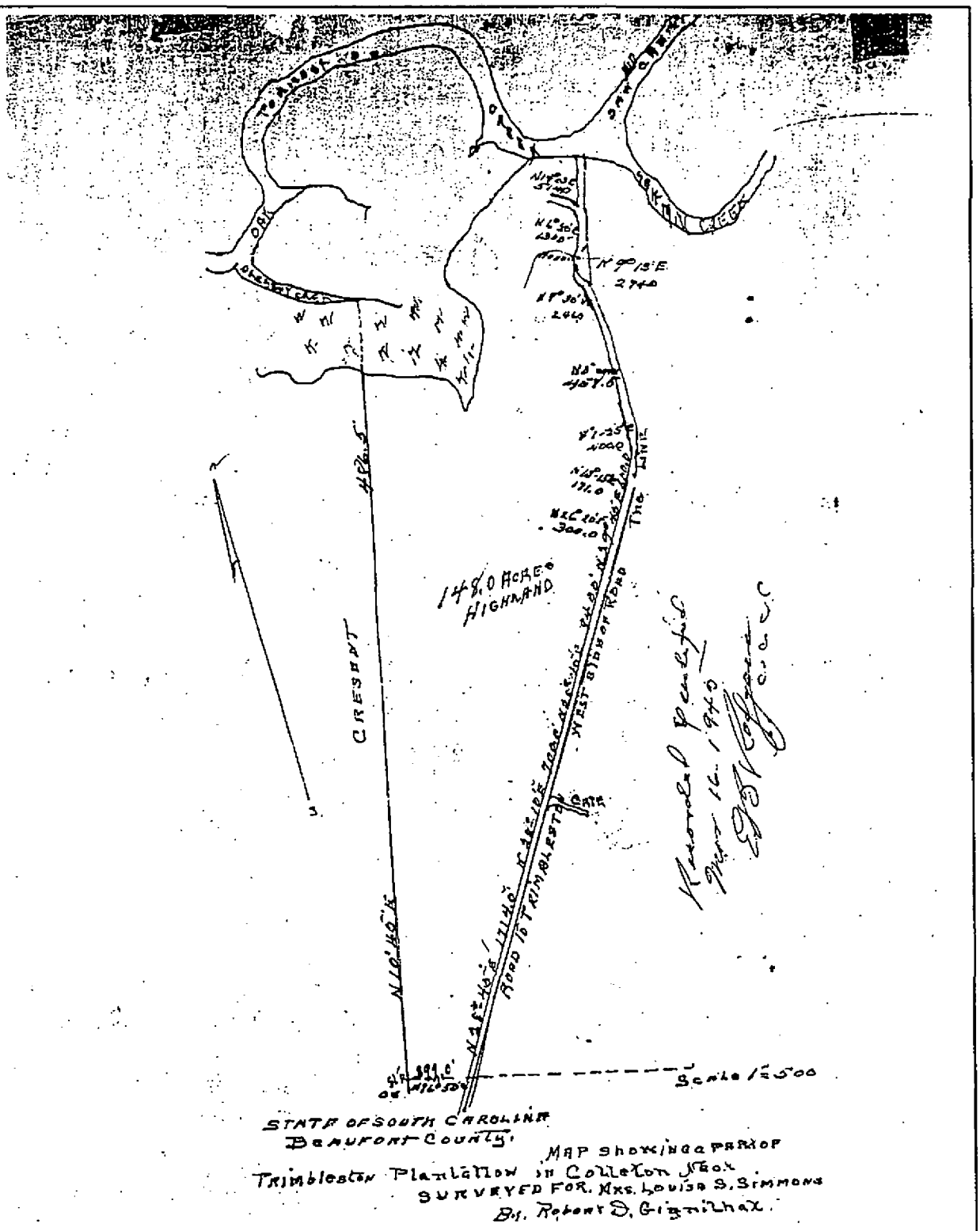


Figure 16. 1945 plat of a portion of Trimbleton Plantation (Beaufort County RMC, PB 6, page 36).

> plat shows a certain house in the northwest corner of the property as being a part of such tract. However, the west side of the road on the side of the house is the line and the house is not be [sic] included as part of the above described tract (Beaufort County RMC, DB 63, page 237).

This parcel was the western edge of the much larger tract acquired by Simmons in 1942 from Gladys M. Murdaugh for $7,000 (Beaufort County RMC, DB 59, page 238). That tract, accounting for 1800 acres, included Toppin and Trimbleston plantations and was described as bounding to the west and northwest on the lands of Walker and the Colleton River, to the southeast by the lands of Crams (owner of Foot Point Plantation), Morin, and Hog Bluff River, and south on the lands of Morin and Ulmer.

Murdaugh, strangely enough, had acquired the property in 1941 from Louisa B. Simmons for $7,500. Perhaps Simmons was going through a period of weak finances, since the deed specifies that not only were the 1800 acre Tippin and Trimbleston plantations being sold, but also all of the farm equipment on the tracts. This included three vehicles; boats and bateaux;, motors; a tractor; various farm tools; livestock including 10 horses, one mule, 49 head of cattle, hogs, goats, sheep, and approximately 10 dogs; as well as "all household goods and fixtures now located in the dwelling houses located on the above described property" (Beaufort County RMC, DB 57, page 254).

Louisa Simmons, using her married name of Louisa S. Turnure, acquired the property on March 5, 1930 from Elise Huger Harrison et al. for $100. The purchased tract included 765 acres of land in Toppin Plantation and 800 acres in Trimbleton Plantation (Beaufort County RMC, DB 48, page 50).

Elise Huger Harrison, Caroline Pinckney Huger, Emma Huger Barrow, Percival E. Huger, and Clarmont Huger Lee, heirs of J.A. Huger (who died in 1915) and Mary Elliott Huger (who died in 1919) had acquired the property from the Trimblestone Land Company, also on March 5, 1930. This dead indicates that the land company had been established by Huger as a tax shield, and that the land was no longer necessary, suggesting that the conveyance was made to clear the title and allow the Huger heirs to dispose of the property (Beaufort County RMC, DB 48, page 49). In fact, Joseph A. Huger had sold the Trimbleston and Toppin tracts, along with Daws Island, to The Trimblestone Land Company in 1897 (Beaufort County RMC, DB 22, page 250). The 800 acre Trimbleston Plantation was described as the residence of Rev. James Stoney, deceased. It was bounded to the north by Colleton River, to the east by Charles Colcock Pinckney's land (see Beaufort County RMC, DB 41, page 685 for the purchase of this 100 acre tract by W.M. Simmons, apparently adding it the remainder of Trimbleston) and Buckingham Plantation, to the south by the lands of William Pope, deceased, lately Dr. James Kirk, and to the west by lands of William Pope, deceased. Clearly, these lands of Pope are Crescent Plantation.

Huger had obtained the plantation in 1890 from Louis W. Haskell and Langdon Cheves for $3,600 (Beaufort County RMC, DB 17, page 15). Described as Trimbleton and the "late residence of Reverend James Stoney, deceased," the deed provided the same recital as the later transfer to The Trimblestone Land Company.

Cheves had become a partial owner of Trimbleston in 1882, when Haskell had sold an interest in the property (Beaufort County RMC, DB 13, page 157). Haskell himself acquired the plantation when the S.C. Land and Improvement Company was forced to sell off its holdings in the late 1870s and early 1880s (Beaufort County RMC, DB 17, page 15). And, as previously discussed, Trimbleton had been acquired by the S.C. Land and Improvement Company in 1876 from John M. Mackay and William Keeney. Cole notes that:

> The name of "Trimblestone" was given to this tract when it came under the ownership of William Wigg Barnwell. Dr. George Mosse Stoney bought the 800-acre

> plantation from Barnwell, his brother-in-law, and gave it to his son, Dr. James Stoney, when he married Mary Clara Reed on April 5, 1842 (Cole 1979:73).

H.A.M Smith, of course, reminds us that Louisa Graves had sold a portion of the Colleton Barony to Benjamin Guerard, which part seems afterward to have become the property of Mr. William Wigg Barnwell by whom it was called 'Trimbleston'" (Smith 1988:89). With these last pieces, a fairly complete chain of title is possible for the eastern edge of the survey parcel.

Although this brief overview of the available historic documents fails to reveal precise building locations, it does provide a preliminary (and provisional) chain of title for portions of the study parcel, combined with clear documentation of the area's significance. It also suggests that a more detailed archival search, emphasizing primary documents is absolutely essential. Furthermore, this initial historical reconnaissance reveals that at least a week of historical research will likely be necessary to fully piece together the complexities of the Crescent Plantation. Our current study also warns us that there are likely to be numerous gaps in the historical documents, making the archaeological research that much more significant to our understanding of the area.

FIELD INVESTIGATIONS AND RESULTS

Methodology

The background research revealed that the fields in the survey tract were cultivated at least as far back as the 1939 aerials of the tract (CDU 4-186 and CDU 4-125, Thomas Cooper Map Repository, University of South Carolina). The 1959 aerials for the project area (CDU 4AA-65, Thomas Cooper Map Repository, University of South Carolina) reveal that the cultivation pattern was stable and that very little land was going in or out of cultivation.

Our field investigation discovered that while these traditionally cultivated fields had been cleared as recently as three years ago, many were today largely covered in second growth pine and grass. Sometime between 1994 and 1997 most of the fields had been taken out of cultivation, with the result that surface survey conditions were generally very poor. The only exceptions to this was the field closest to US 278, portions of which appear to have been cultivated as recently as last year. It appears, however, that the bulk of this farming is associated with food plots for wildlife.

We also found that the wooded tracts were typically associated with the less productive, lower, and more moist soils. These wooded areas ranged from very dense stands of mixed pine and hardwood, to open stands of immature maritime forest, to open stands of swamp timber.

Given the limited time for the reconnaissance survey our first focus was on an effort to identify historic sites suggested by the cartographic and documentary research. In particular, we were interested in recovering the Woodward site, which appeared to be the main settlement on Crescent Plantation, and the Stoney site, which appeared to be the main settlement on the adjacent Trembleston Plantation tract.

Our second focus was on spot checking areas traditionally considered to be high probability areas for archaeological remains — areas of well drained soils bordering inland sloughs and areas along the marsh edge.

Both goals were accomplished using pedestrian survey techniques, visually exploring open areas and walking the marsh edge. No subsurface testing was conducted during this survey since the goals were to evaluate the potential of the survey tract to yield archaeological materials. Since the entire 600 acre tract could not be examined, Figure 17 reveals those areas which have been examined during this study. It is important to realize that any subsequent subsurface survey on this tract should incorporate these previously explored areas, not only to evaluate identified site boundaries, but also to ensure that additional sites do not exist.

As will be discussed below, both of the sites projected by the cartographic research were found — once again demonstrating the value of the cartographic research conducted for Beaufort County. In virtually every case examined by Chicora, the projected site has been located in the field. This is a tribute not only to the value of the technique and the precision of the plotting, but also to the accuracy of the original maps.

Identified Sites

Seven archaeological sites were identified during this reconnaissance study — five on the Crescent Plantation tract and two on the adjoining Trimbleston tract. These sites are briefly described below.

Since this was a reconnaissance level investigation and no subsurface examinations were conducted, it is not possible to assess the National Register eligibility of the identified sites. Nevertheless, we offer comments concerning the probable significance of the sites, based on the best

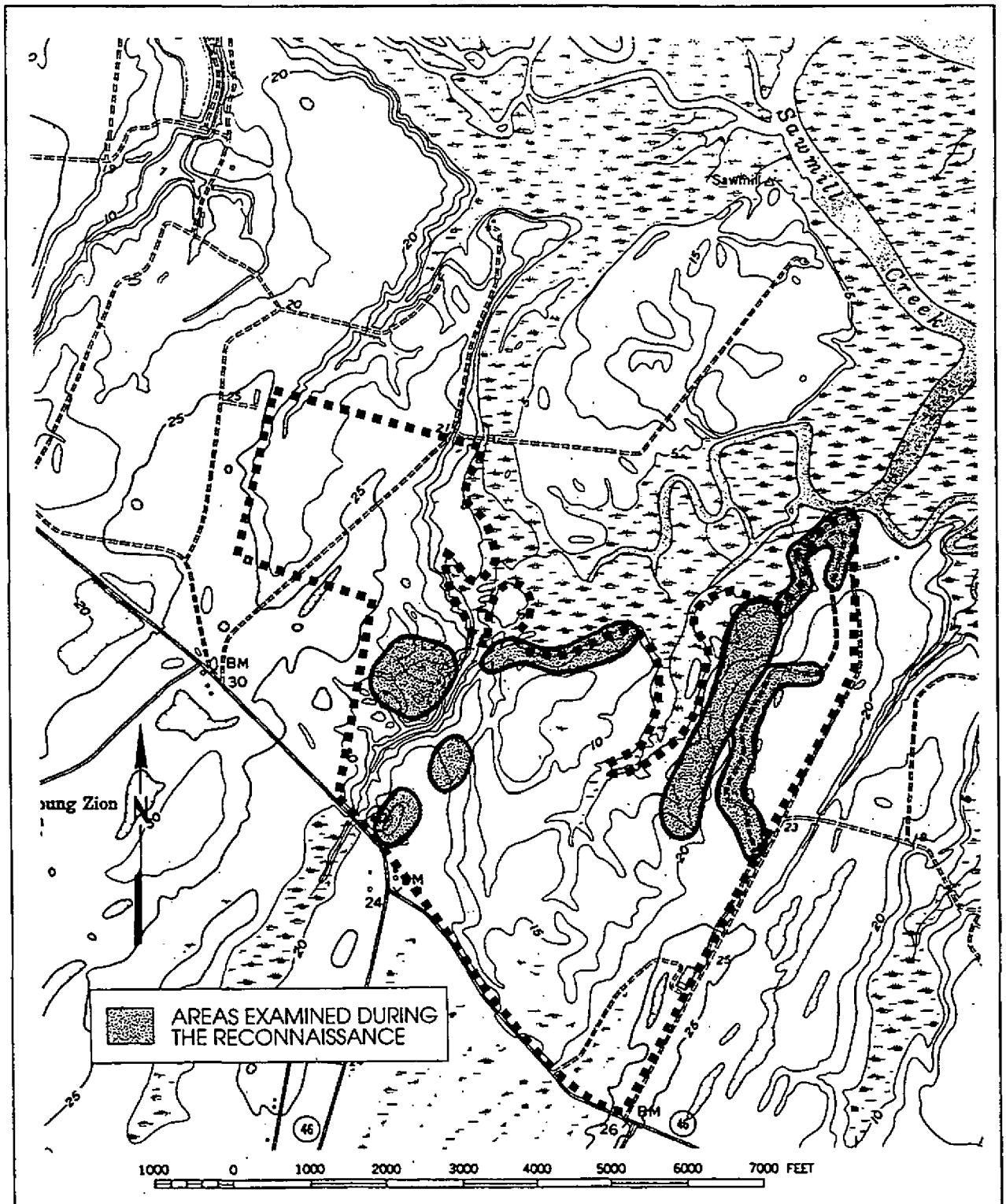


Figure 17. Areas of the study tract examined during this reconnaissance survey.

currently available information. These sites, however, will require more detailed assessment should development proceed on the study tract.

38BU1711

This site is situated at the south edge of the field on the western third of the study tract and the central UTM coordinates are E513840 N3569780. At the time of this survey the site area was beginning to be heavily overgrown in grass and second growth pine. Surface visibility was under 25%. The topography was fairly level with elevations of about 8 feet above mean sea level (AMSL), although the ground falls off to the south and the east, toward a tributary of Sawmill Creek. The soils in site area were sandy, identified as the Wando series.

Although only five artifacts could be recovered under these survey conditions, they were spread out over an area measuring about 150 feet in diameter. The materials recovered include four undecorated whitewares and one small prehistoric sherd. Occasional brick fragments were observed in the field, but much more common were fragments of oyster shell, likely plowed out of subsurface middens.

Clearly a much more intensive survey is needed in this area to fully assess the site, determine its boundaries, and establish its context. It does, however, appear that it represents a small late nineteenth century, possibly early twentieth century tenant settlement at the edge of the agricultural field. The prehistoric pottery is likely associated with the field's proximity to the marsh slough. The dispersed shell suggests that there may be subsurface shell pits or pockets.

38BU1712

This site was found on the east central edge of the western-most field, at an elevation of about 8 feet AMSL overlooking a steep slope eastward toward a tributary of Sawmill Creek. This slough appears to have at least some fresh water associated with it, given the vegetation and ponding. This, however, may represent the result of historic modifications. The site is situated on a slight rise of sand soil, identified as the Wando series. The central UTM coordinates are E514040 N3569820.

The site was partially exposed in a dirt road running between the slough and field edge, but was also traced into the field itself. Shell is abundant in this area, but does not appear to be concentrated in any particular area. Surface visibility was less than 25% and a thin stand of pines was also invading this area of the field. Five fragments of pottery were found dispersed in an area measuring about 50 feet in diameter. The recovered materials include four fragments of Stallings Plain and one probable Deptford Plain sherd.

The material is suggestive of a very small campsite, possibly of a single family unit, visiting the slough area and taking advantage of the sandy rise. Material is sparse, but additional survey is certainly necessary.

38BU1713

This site is very similar to 38BU1712 and is situated in an almost identical setting. The central UTM coordinates are E514080 N3569900, placing the sites about 250 feet apart. This site is also on the field edge, overlooking the slough of Sawmill Creek. Like 38BU1712, it too is on a small rise of sandy Wando series soils about 50 feet in diameter.

Materials recovered from this site include one Deptford Plain sherd, one Deptford Fabric Impressed sherd, one Irene Complicated Stamped sherd, and one unidentifiable sherd. The collection reveals a diversity similar to 38BU1712, again reflective of several episodes of short-term use. It seems reasonable to speculate that these sites were used because of their proximity to the slough and there higher elevations than the surrounding field.

38BU1714

This is a fairly large site situated at the north end of the field in the central third of the survey tract. At the time of the survey this field was fairly open, exhibiting surface visibility from 25

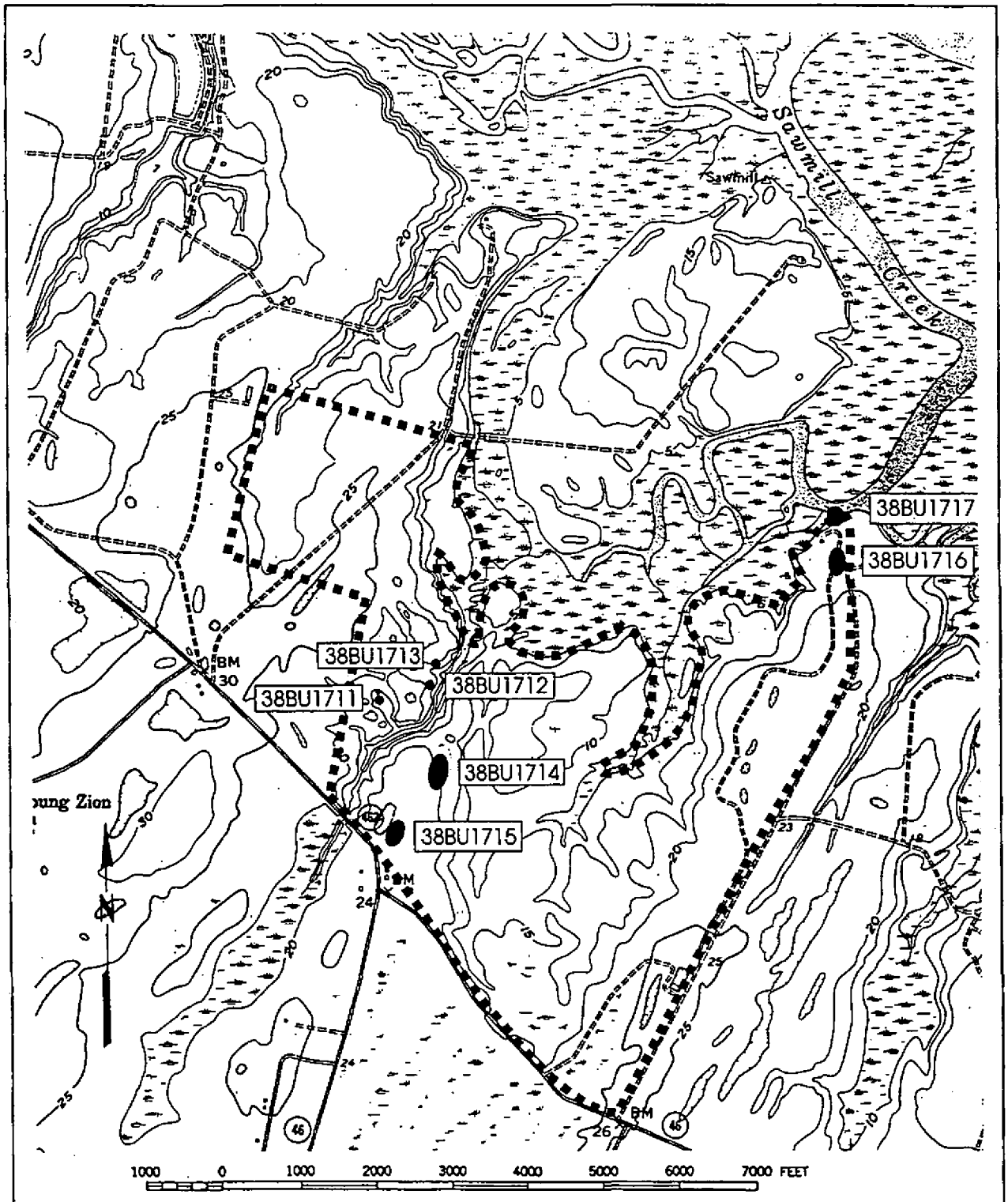


Figure 18. Sites identified during the reconnaissance survey.

to 50%, with the higher visibility associated with a wildlife food plot used by hunters. The central UTM coordinates for the site are E514080 N3569500 and the site measures about 350 feet north-south and 150 feet east-west.

The topography in the field is fairly level and the site exhibits an elevation of about 8 to 10 feet AMSL. There is, however, a pronounced slope to the east, toward another slough of Sawmill Creek and to the west, toward the slough of the creek associated with 38BU1712 and 38BU1713. The soils are well drained Wando sands.

Both prehistoric and historic materials are associated with this site. Prehistoric materials include two Deptford Plain sherds, seven small sherds, and a chert flake. Historic materials include four undecorated whitewares, one undecorated pearlware, one green edged pearlware, one fragment of aqua glass, and one slate fragment. Also present in the field, but not collected are a number of brick and mortar fragments.

Based on the location, the linear orientation, and the diversity of materials, this site may be the Woodward settlement shown on several historic maps, including the 1877 map for the South Carolina Land and Improvement Company (Figure 11). It may also be the earlier Pope settlement. If so, it is possible that additional survey will reveal not only a main plantation settlement, but also the slave settlement associated with the plantation. This is a potentially significant site.

38BU1715

This site is situated immediately west of the entrance road to the plantation in a fallow field which has been plowed within the last season. The central UTM coordinates are E513880 N3569300. The topography in this area is very level, with an elevation of about 20 feet AMSL. Soils associated with this site as not as well drained as those associated with the other sites on the tract and are identified as Seewee sandy loams. Materials were found scattered over an area measuring about 200 feet in diameter. One of the many fingers of Sawmill Creek seems always near virtually every site encountered in the survey and in this instance a slough is found about 500 feet to the west.

Artifacts were fairly dense at this site, in spite of the generally low surface visibility (under 25%). Materials recovered include nine undecorated whitewares, two polychrome stamped whitewares, one white porcelain, one yellowware, one fragment of brown glass, two fragments of blue glass, eight pieces of aqua glass, two fragments of milk glass, four manganese glass fragments, three pieces of clear bottle glass, and two window glass fragments. Also present on this site were abundant fragments of bricks and mortar.

Although this site may represent a portion of the Woodward settlement, the artifacts are more suggestive of an early twentieth century settlement. Consequently, this site likely is the single structure shown on the 1937 highway map (Figure 13), but not shown on the 1920 Okatie topographic map (Figure 12).

38BU1716

This site is found on the Trimbleston Plantation portion of the survey tract, nearly at the end of the road leading to the peninsula. The materials were recovered from the dirt road cut about 600 feet from the end of the road, in an area which is today heavily wooded. Surface visibility away from the road was 0%. The central UTM coordinates for the site are E515700 N3570350.

Topography in the site area is level, with an elevation of about 15 feet AMSL. The soils are Wando sands. Materials were found scattered along nearly 550 feet of the dirt road, although no effort was made to evaluate how far the site extended to the east and west.

Materials recovered from this area include four undecorated whitewares, two blue transfer printed whitewares, one whiteware with a blue applique, one porcelain, one brown stoneware, three fragments of black glass, one fragment of blue glass, and one fragment of aqua glass. Also associated with the scatter of ceramics were occasional fragments of brick, some of them

representing at least a third of a brick in size.

This collection appears consistent for a nineteenth century plantation and the site location is almost identical to that shown on several maps (including Figure 9) for the Stoney settlement. Given the quantity of materials found in the road, it is likely that the site may be very dense. It is likely to be a very significant site, although additional survey is necessary to establish boundaries and isolate individual structure locations.

38BU1717

This site is situated at the end of Trimbleston Road, on high ground overlooking the waters of Sawmill Creek. The location was probably the landing associated with the Stoney settlement, although today the area is dominated by the ruins of a twentieth century oyster cannery. The central UTM coordinates are E515720 N3570480. The elevation is about 15 to 20 feet AMSL and the soils are classified as Wando series, although the peninsula seems to have been enlarged by the dumping of processed oyster shells.

The site consists of the ruins of a timber dock, a trackway to transport the oysters from the boats to the cannery, the cannery building which includes internal fixtures such as the processing counters, and a variety of industrial materials associated with the processing efforts. These remains are found in an area measuring about 150 feet in diameter, although the dumped oysters spread out from this core. Nearby are several buildings which appear to be more recent and probably represent summer homes.

One discussion of oyster factories (where oysters were shucked) and canneries (where they were actually processed and canned) is that by Burn for Daufuskie Island (Burn 1991:429-441). More interest has been devoted to the commercial importance of the industry (see, for example, McKenzie et al. 1980:132-138). The industry came to the area in the early 1890s. Although the depression of the 1930s seriously limited oystering and oyster processing, it continued until pollution in the 1950s was so severe that clean beds were too distant to support the industry. Between 1890 and 1905 as many as 16 steam canneries operated along the lower South Carolina coast. By 1919, however, there were only five canneries in the Charleston area and six in the Beaufort area (McKenzie et al.



Figure 19. Possible lens of shell midden eroding into Sawmill Creek from a high bluff near deep water.

1980:135).

It seems likely that the site on Trimbleston was probably used in the 1940s and 1950s, given the construction techniques. If so, it represents one of the last few in operation in South Carolina. This, however, must be confirmed by additional historic research and supported by oral history. There is, at present, no good context for the evaluation of this type of site. Consequently, considerable historic research will likely be necessary to evaluate 38BU1717.

Other Areas Examined

In addition to the areas where sites were identified, Figure 17 reveals that other areas were also examined. It is appropriate to briefly explain our findings in these areas as well.

We found that the marsh edge for most of the tract was low, typically not over 2 feet above the marsh. No evidence of shell middens were found in these areas, likely because there is not sufficient elevational difference between the "high ground" and the "marsh." In contract, several potential shell middens were found on the Trimbleston tract where the high ground is upwards of 3 to 6 feet above the marsh and water is in closer proximity to the bluff edge. Although these sites were not investigated or recorded, Figure 19 shows one such area.

An effort was also made to examine several inland areas classified as poorly drained. In each case we found that the soils were very poorly drained, that standing water was present in lower areas, that the soils were heavy reduced, and that the topography was generally level, excepting the occasional depressions.

CONCLUSIONS

Nature of the Sites

The range of site types identified by the Crescent Plantation reconnaissance is impressive, including what appear to be short-term prehistoric camps and very long-term historic settlements. The time range is also impressive and spans the period from at least 2000 B.C. to perhaps as late as A.D. 1950.

As was expected based on previous surveys in the project area, this reconnaissance level study yielded firm historical evidence of at least antebellum occupation. There is also evidence, albeit less secure, of at least late eighteenth century occupation. Previous studies to the east and west have also yielded a variety of both prehistoric and historic sites. It comes as no surprise, therefore, that this reconnaissance investigation, consisting of only two person days of study, produced seven archaeological sites. There is little question that additional archaeological study will produce a variety of additional sites.

The sites dominated by prehistoric remains are found primarily on high, well drained soil in relatively close proximity to the marsh edge. At the present time, two primarily prehistoric sites have been identified -- both situated on the west edge of a marsh slough. These sites are characterized by relatively high elevations, sand soils, and their proximity to slough environs. Such sites have the potential to address a broad range of potentially significant research questions, including the fundamental issues of settlement and subsistence. In spite of these features, there is legitimate concern regarding their integrity and there is concern that plowing may have completely removed in situ materials, leaving behind only plowed middens dispersed across broad areas.

Additional prehistoric components are also found at sites primarily containing historic remains, emphasizing that some site selection factors were consistently important throughout time. It is likely that prehistoric sites are also found eroding from the high bank of Sawmill Creek.

The sites dominated by historic remains are found slightly further away from the marsh edge, but are still closely associated with well drained soils during the nineteenth century. Most significant of these are those associated with the Woodward and Stoney settlements. These almost certainly began during the early antebellum and were occupied by both master (or overseer) and slave during the period up to the Civil War. Although this area was not held by Union forces, it was close enough to Hilton Head that plantations likely ceased operation during the Civil War and relatively little is known about their postbellum operation.

During the early twentieth century some historic sites begin to be located in areas less well drained, apparently to take advantage of improving road systems. This move may also have taken place to open up additional prime lands to cultivation. This period of tenancy in the Beaufort area is no better understood, with relatively research devoted to integrating both historic documents and historic archaeology. Moreover, one site identified during the reconnaissance documents the area's oyster industry -- which has received little previous scholarly attention, in spite of its extraordinary economic and social impact.

Recommendations

Although it is not possible, based on this reconnaissance level study, to make recommendations regarding National Register eligibility, it is possible to report that the study tract does contain both prehistoric and historic remains. At least some of these are likely to be large and potentially complex sites. In addition, there is a strong potential that additional sites will be identified in the project area.

Recommended Historic Documentation

As a result, we recommend that the tract receive thorough historic research. While the current study has likely succeeded in identifying the bulk of the maps available, it is possible that the Direct Tax Commission extended their survey to this area. If so, the National Archives may have some very detailed maps that will add considerable information concerning the features present.

In addition, it is very important that the title for this tract continue to be researched, since that information is essential to the historical context against which the sites are evaluated, as well as the correct interpretation of the archaeological remains. There remain a wealth of potentially significant documentation, including the agricultural and slave schedules, the records dealing with Abandoned Lands, and the records associated with the process of reclaiming these lands. There may also be records providing greater insight on the twentieth century use of the tract. In particular, it is very important that a historical context for the oystering industry be developed. The previous commercial and economic work in this area provides an excellent foundation.

In sum, it is likely that the historic research for this tract will require between one and two weeks. With appropriate, long-range planning the costs can be minimized by dealing with the National Archives records through mail requests. Otherwise, it will be necessary to schedule at least three days in Washington, D.C. to allow time to retrieve significant documents.

Recommended Field Investigations

The archaeological sites identified thus far emphasize the importance of conducting an intensive archaeological survey of the project tract. In addition, the current study, combined with previous research in the area, helps us to evaluate the archaeological potential of different areas. Clearly not all portions of the Crescent tract are equally likely to contain either prehistoric or historic remains.

Figure 20 provides a generalized overview of archaeological potential, showing three levels of archaeological survey. It is very important to emphasize that this is very generally drawn and is intended only to graphically portray the different levels of survey intensity appropriate for the tract.

Areas of high archaeological probability are those which exhibit one or more characteristics:

- well drained soils, typically Wando or occasionally Seewee;
- higher elevations, especially when compared to the immediate surroundings;
- close proximity to marsh or swamp slough environs; and
- marsh edge areas with distinct bluffs and generally closer proximity to water.

These areas are thought to exhibit the highest potential for archaeological remains. In fact, five of the seven sites thus far identified have been found in the areas defined as high probability.

These areas warrant survey using shovel testing at intervals of no more than every 100 feet on transects spaced no further apart than every 100 feet. This approach is most appropriate for wooded areas.

In areas which have been previously cultivated an even better survey approach would be to cultivate the fields and allow them to be rained on. Such surface surveys (assuming there are no buried A horizons, which are not reported for Wando soils) provide a much greater assurance of recovering archaeological sites than traditional shovel testing.

It is likely that many of the sites found using either of these techniques will need to be tested at either closer intervals or through the placement of formal test units. Of greatest concern is the integrity of the plowed prehistoric sites. It may be appropriate, in some cases, to strip off the

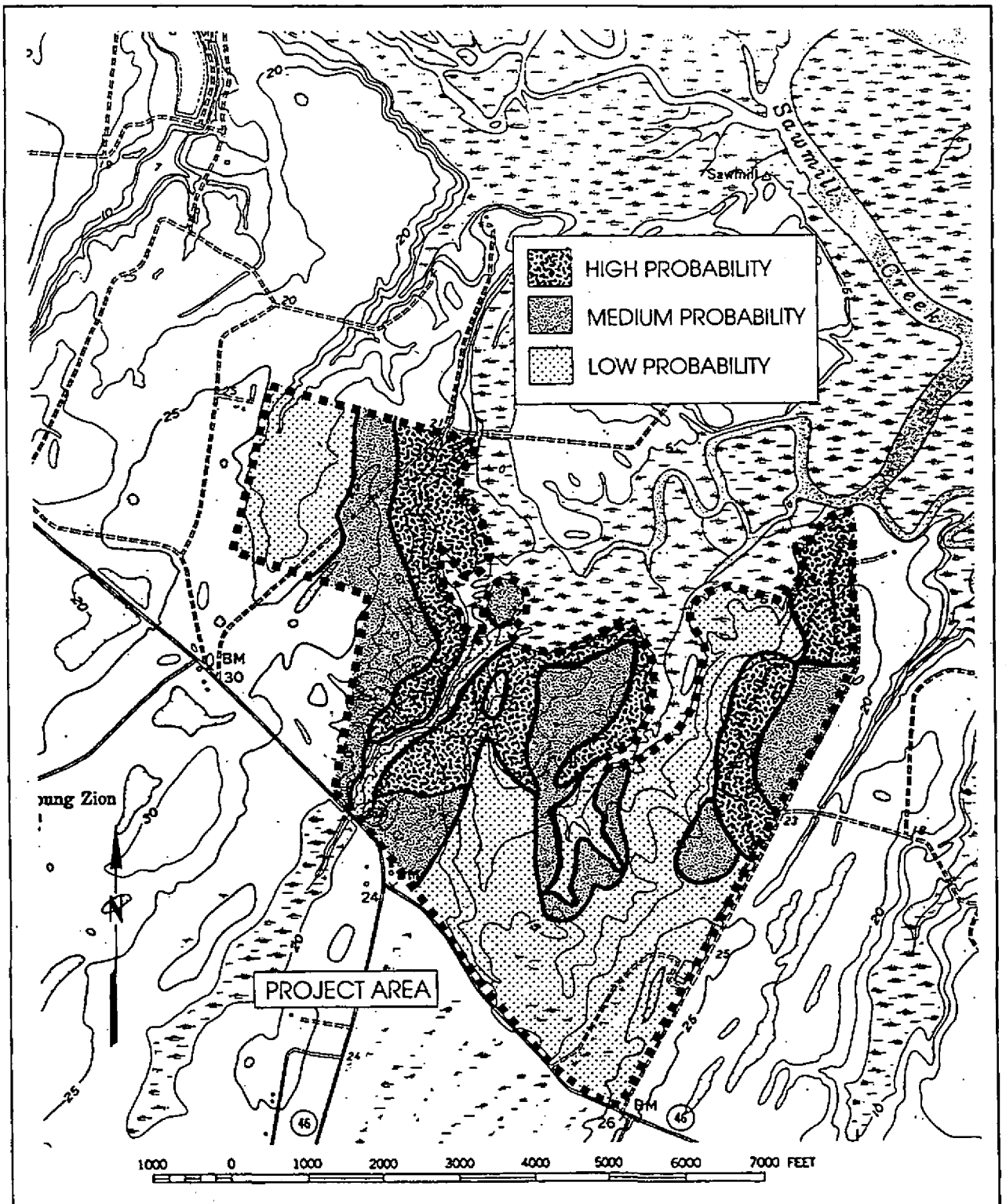


Figure 20. Archaeological probabilities for the study tract.

overlying plowzone to determine if features are still preserved. An alternative approach may include geophysical survey techniques on identified sites, such as either conductivity or resistivity studies. Shell filled pits should be fairly obvious in the sandy matrix using either approach.

Areas of medium archaeological probability are those which exhibit one or more characteristics:

- moderately drained soils, typically Seewee or occasionally Baratari when associated with a slough edge; and
- close proximity to marsh or swamp slough environs; and

These areas are thought to exhibit an intermediate potential for archaeological remains. While five of the seven identified sites were found in high probability areas, the remaining two were found in medium probability areas.

If plowing is a viable option, then these areas are recommended to receive the same level of investigation as high probability areas. The reason for this is that pedestrian surface survey tends to be very quick and effective. It is likely that the areas can be quickly covered with very little effort.

If, however, the areas must be shovel tested, then we recommend that the tests be conducted at 200 foot intervals on transects spaced every 200 feet. A sampling strategy should be developed to provide closer interval testing, as a check against the possibility that this testing may miss smaller, yet potentially significant, sites.

Areas of low archaeological probability are those which exhibit one or more characteristics:

- poorly to very poorly drained soils, typically Baratari, Rosedhue, and Polawana series;
- areas of standing water or which exhibit a water table within the upper 1.0 foot of soil and which exhibit characteristically reduced soils; and
- areas with very low topography, especially relative to nearby areas.

These areas are thought to exhibit a low to very low potential for archaeological remains. Although several such areas were examined during the current reconnaissance level study, no archaeological sites were found. In addition, while shell was frequently found dispersed in the fields at higher elevations, shell was never observed in these lower soils.

Although the likelihood of discovering archaeological sites in these areas is very low, they should still be inspected wherever possible. Therefore, if the woods are adequately open to permit walking transects spaced 200 feet apart, this should be done. In those areas where the vegetation prohibits, or severely hinders, such an approach, we feel confident recommending that no survey be undertaken, with the provision that development activities must cease for any late discoveries.

Cemeteries

Cemeteries are among the most difficult of all sites to identify, even in an intensive survey. We have found no indication of burial grounds on the study tract — none are shown on any of the historic maps or plats, there are none indicated on the soil survey, and there are none indicated on the identified modern historic documents. Nevertheless, that two antebellum plantations (Crescent and Trimbleston) existed in the survey area strongly suggest that African American cemeteries may be present. Slave burial grounds were often associated with plantations and continued to be used in the postbellum.

While we hope that any such burial grounds may be found during an intensive survey, this cannot be assured. As a consequence, development activities must always be especially

careful if bones, gravestones, or other features are found. It is a felony under South Carolina law to disturb burial grounds, even those which are not marked.

Summary

Based on the reconnaissance level investigations, we strongly recommend that if the study tract is to be developed, that an intensive archaeological survey be conducted. Such a study will likely be required by the Beaufort County Planning Department and will certainly be required if any state or federal permits, licenses, or funds are involved. Examples of such state or federal funding would include, but not be limited to, the filling of wetlands, storm water and sewer plans, or OCRM permitting.

The historical research, as previously discussed, will likely require one to two weeks, while the field investigations will require about two weeks. Report production may require four weeks. Consequently, from a planning perspective, cultural resources studies should be allowed at least two months at the survey stage. If sites eligible for inclusion on the National Register are identified additional time should be allotted for either developing green spacing plans for data recovery excavations.

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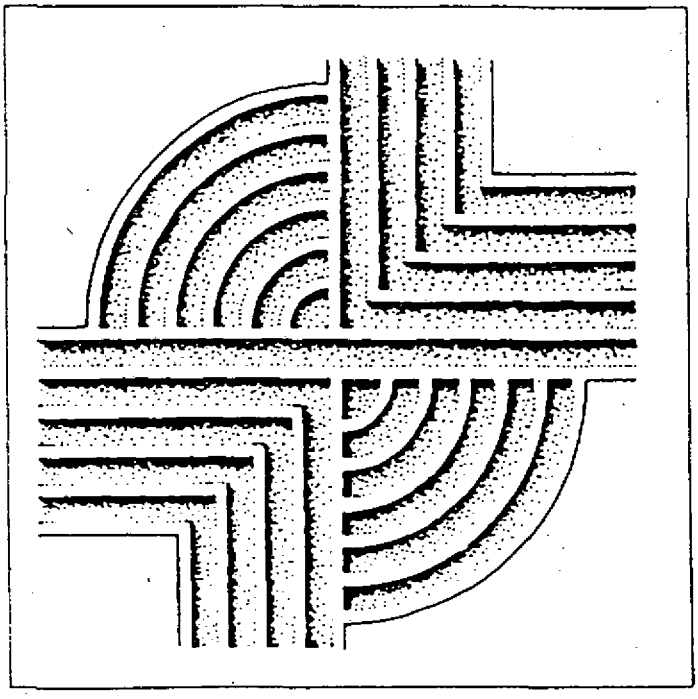
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INTENSIVE ARCHAEOLOGICAL SURVEY OF CRESCENT PLANTATION, BEAUFORT COUNTY, SOUTH CAROLINA



CHICORA RESEARCH CONTRIBUTION 226

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INTENSIVE ARCHAEOLOGICAL SURVEY OF CRESCENT PLANTATION, BEAUFORT COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive archaeological survey of an approximately 650 acre tract known as Crescent Plantation. The property is situated north of Fording Island Road (now known as U.S. 278) between Rose Hill to the west and lands primarily held by the S.C. Department of Natural Resources to the east. To the north the tracts primarily front marsh of Sawmill Creek and the Colleton River.

The study was conducted at the request of Centex Homes in compliance with a Beaufort County Ordinance (Section 6.5 of Article VI of the Zoning and Development Standards Ordinance) which requires an archaeological evaluation as part of the land planning process. This tract, as well as approximately 150 acres of adjoining property forming a portion of Trimblestone Plantation, had been previously examined at a reconnaissance level about a month earlier. Based on the findings of the reconnaissance level investigation, this intensive survey was undertaken.

The background research for the reconnaissance level study included contacting the South Carolina Department of Archives and History with a request for information concerning any National Register of Historic Places buildings, districts, structures, sites, or objects in the study area, as well as the results of any structures surveys which may have been completed in the study area. There are no sites in their files which are on the National Register and there has been no previous architectural surveys in this area. We also checked the master site files held by the South Carolina Institute of Archaeology and Anthropology for any previously recorded archaeological sites in the project area. Although a number of sites had been recorded for the adjacent Belfair tract to the west and northwest, no sites were known for the study tract.

In addition to utilizing our in-house documentation, including Chicora's previous cartographic survey of Beaufort County, we also conducted title search for the tracts at the Beaufort County Register of Mesne Conveyances, as well as additional historical research at the South Carolina Department of Archives and History, the South Carolina Historical Society, the Charleston County Register of Mesne Conveyances, and cartographic research at the Thomas Cooper Map Repository.

These studies have traced the survey tract back at least to the antebellum and reveal that while the parcel was known as a plantation, it appears to have been a minor holding.

Our field investigations focused on the excavation of shovel tests, primarily at 100-foot intervals, since the bulk of the tract was either in woods or in overgrown fields. Some areas of the survey tract, because of low, wet soils and the distance from marsh or creek frontage, were surveyed using shovel tests at 200-foot intervals.

As a result of our intensive investigations on the tract, ten archaeological sties have been identified and recorded with the South Carolina Institute of Archaeology and Anthropology as 38BU1711 through 38BU1715, and 38BU1720 through 38BU1724. Four of these sites contain both prehistoric and historic components, three sites include only prehistoric remains, and three additional sites revealed only historic materials.

Of these ten sites, eight are recommended as not eligible for inclusion on the National Register of Historic Places, one site (38BU1713) is recommended eligible for inclusion on the National Register and one site (38BU1715) is recommended as potentially eligible.

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INTRODUCTION

Background

A reconnaissance level investigation of the Crescent and Trimblestone plantations development tract was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Jay Thrower, Area Manager of Centex Homes, Coastal Carolina South in late May 1997. The study tract consisted of two distinct parcels – about 650 acres known as Crescent Plantation and about 148 acres which was cut off of Trimblestone Plantation. Both are situated north of U.S. 278 and the Town of Bluffton, in Colleton River area just before crossing over to Hilton Head Island (Figure 1).

The Crescent Plantation area has seen considerable development. To the west are the Belfair and Rose Hill tracts. To the east there are a number of smaller housing developments and what might be referred to as "strip malls." Also to the east of the study area is a large tract owned by the S.C. Department of Natural Resources, part of which is a Heritage Trust Area.

As a result of that study (Trinkley 1997), seven sites were identified (38BU1711 through 38BU1717). We recommended that additional historical research be conducted for the survey tract in an effort to more fully reconstruct its ownership. Further, we recommended that the tract be subjected to an intensive archaeological survey, incorporating into our reconnaissance level investigation a map of the tract, providing a tentative assessment of site probability and survey recommendations for the different areas.

On June 3, Centex Homes requested that Chicora prepare a technical and budgetary proposal for undertaking the recommended intensive study. This was prepared and submitted that same day. It was approved by Centex Homes on June 4, with the field investigations being conducted from Monday, June 9 through Friday, June 13. The principal investigator for the project was Dr. Michael Trinkley. The field crew included Mr. Gregg Dickey, Mr. Ian Hamer, Mr. Hollis Lawrence, and Mr. Brian Young. A total of 207.5 person hours were spent conducting the survey.

The study tract is bordered to the west and along a portion of the south by other developments. Much of the southern boundary runs along U.S. 278, previously known as Fording Island Road. A small portion of the northern boundary is also on an existing development (known as Belfair), while most fronts Sawmill Creek marsh. The eastern boundary includes a small housing project along U.S. 278, portions of Trimbleton Plantation, and the Heritage Trust lands of Victoria Bluff (Figure 2). The portion of Trimbleton Plantation incorporated into the reconnaissance level study was excluded from this intensive survey.

Additional historical research was conducted by the principal investigator on June 16 and June 17. The collections of the South Carolina Historical Society were examined and an effort was made to locate duplicate copies of early antebellum deeds in the Charleston County Register of Mesne Conveyance.

The laboratory work was conducted at the Chicora labs in Columbia on June 18 and June 19. During this work all materials were evaluated for conservation needs. No materials were found which warranted conservation treatments. Additional information concerning curation is available at the end of this section.

Goals and Methods

The primary goals of this study were, first, to identify the archaeological resources of the survey area and, second, to assess the ability of those resources to contribute significant archaeological, historical, or anthropological data. The second aspect essentially involves the site's

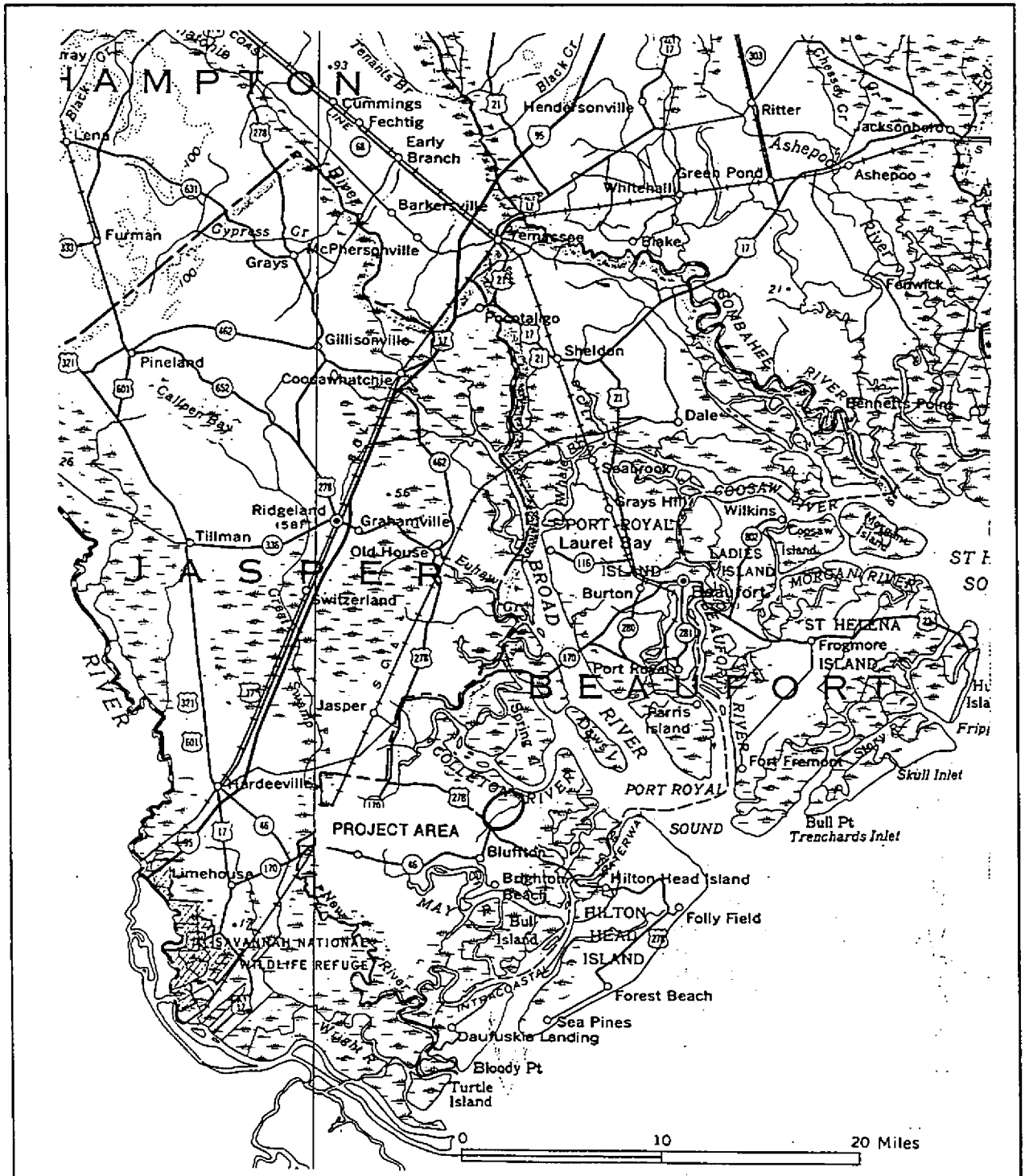


Figure 1. Vicinity of Beaufort County and the project area (base maps is USGS South Carolina 1:500,000).

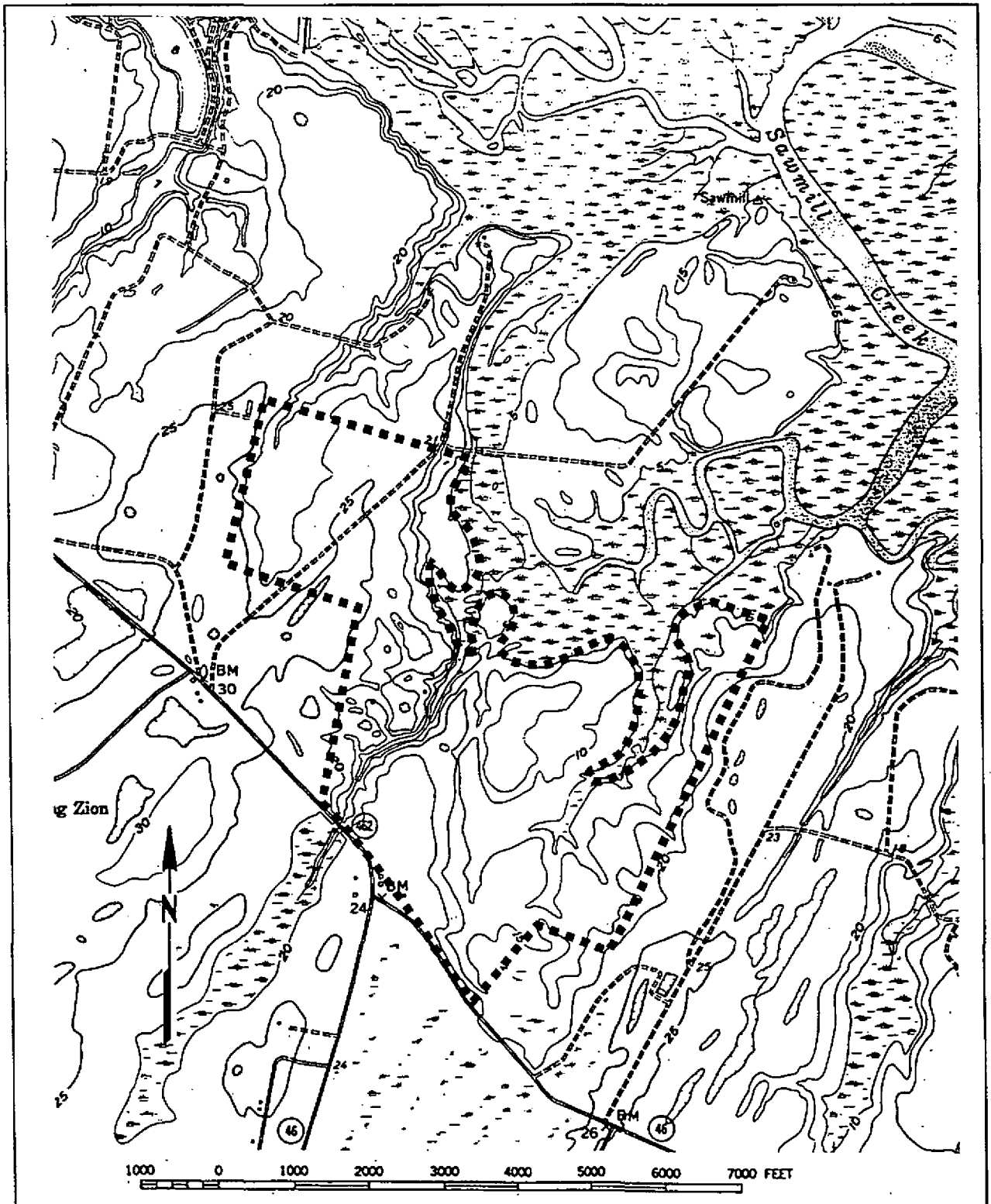


Figure 2. A portion of the USGS Spring Island 7.5' topographic map showing the project area.

eligibility for inclusion on the National Register of Historic Places, although Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead compliance agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The previous reconnaissance level study found the tract consisted of both dense woods and heavily overgrown fields with limited surface visibility. Figure 3 was developed to provide a generalized overview of the area's archaeological potential, showing three levels of archaeological survey.

Areas of high archaeological probability were defined as those which exhibited one or more characteristics:

- well drained soils, typically Wando or occasionally Seewee;
- higher elevations, especially when compared to the immediate surroundings;
- close proximity to marsh or swamp slough environs; and
- marsh edge areas with distinct bluffs and generally closer proximity to water.

These areas were thought to exhibit the highest potential for archaeological remains. In fact, five of the seven sites identified in the reconnaissance level study were found in the areas defined as high probability.

These areas warrant survey using shovel testing at intervals of no more than every 100 feet on transects spaced no further apart than every 100 feet. It was suggested that while this was appropriate for the wooded sections, it might be possible to plow the extant fields, allowing better surface visibility and permitting a pedestrian survey in these areas. Timing, however, did not allow this approach and they, too, were subjected to shovel testing.

Areas of medium archaeological probability were those which exhibited one or more characteristics:

- moderately drained soils, typically Seewee or occasionally Baratari when associated with a slough edge; and
- close proximity to marsh or swamp slough environs; and

These areas were thought to exhibit an intermediate potential for archaeological remains. While five of the seven sites identified in the preliminary study were found in high probability areas, the remaining two were found in medium probability areas.

We again suggested that plowing and a pedestrian survey would be the most cost-effective, and likely most revealing survey technique. If this was not possible, we recommended that shovel tests be conducted at 200 foot intervals on transects spaced every 200 feet. A sampling strategy should be developed to provide closer interval testing, as a check against the possibility that this testing may miss smaller, yet potentially significant, sites.

Areas of low archaeological probability were defined as those which exhibited one or more characteristics:

- poorly to very poorly drained soils, typically Baratari, Rosedhue, and Polawana series;
- areas of standing water or which exhibit a water table within the upper 1.0 foot of soil and which exhibit characteristically reduced soils; and
- areas with very low topography, especially relative to nearby areas.

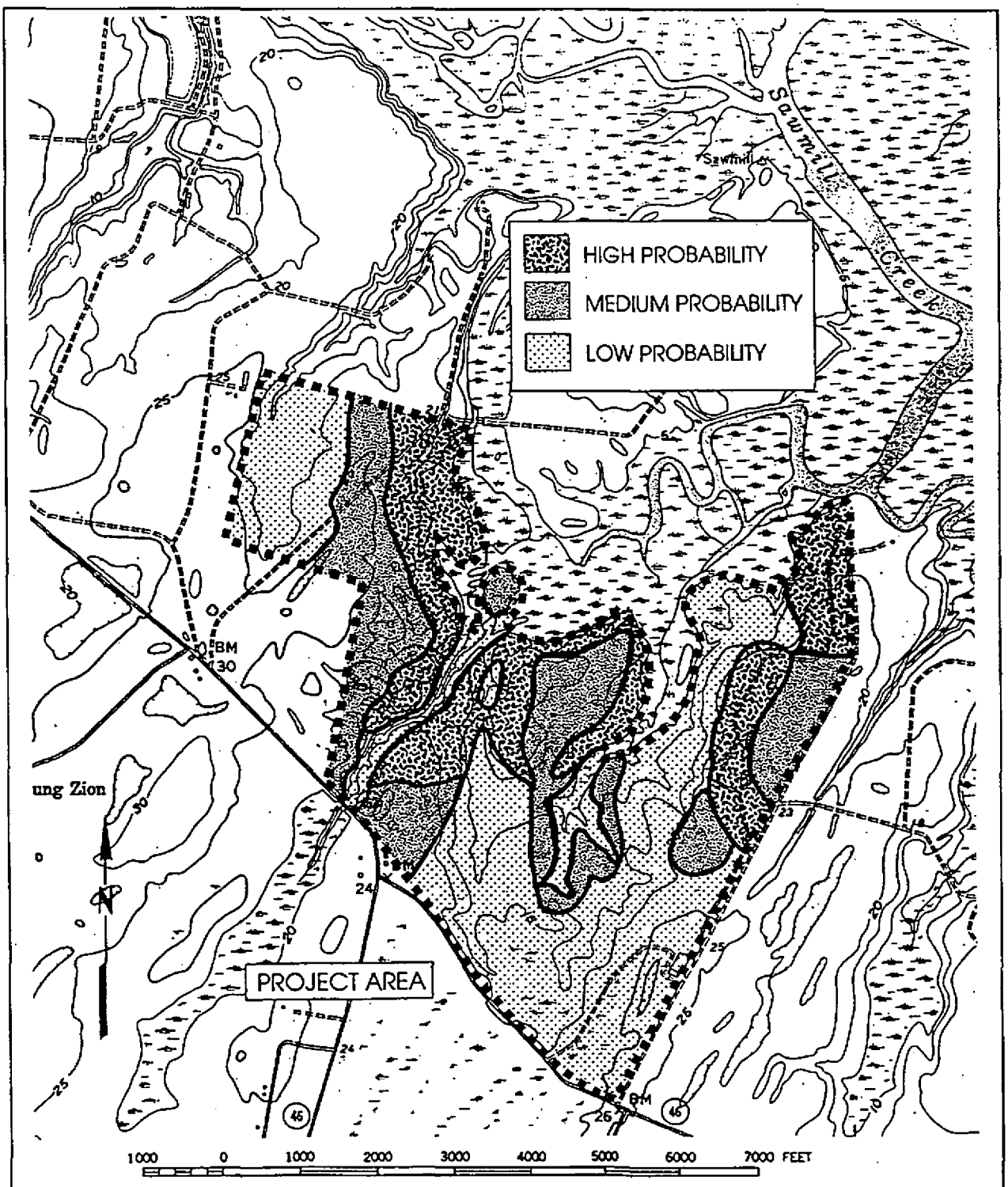


Figure 3. Projected site probabilities for the Crescent Plantation tract (adapted from Trinkley 1997:Figure 20).

These areas are thought to exhibit a low to very low potential for archaeological remains. Although several such areas were examined during the reconnaissance level study, no archaeological sites were found. In addition, while shell was frequently found dispersed in the fields at higher elevations, shell was never observed in these lower soils.

Although the likelihood of discovering archaeological sites in these areas was thought to be very low, we recommended that they still be inspected wherever possible. One option, if the woods were sufficiently open to permit walking transects spaced 200 feet apart, that this approach be implemented.

These recommendations were implemented with only minor modifications. All of the high probability areas were examined using shovel tests at 100 foot intervals along transects spaced 100 feet apart. In addition, about half of the moderate probability areas were also surveyed using shovel tests at 100 foot intervals along transects spaced 100 feet apart. In the remaining 50% of the moderate probability areas we implemented shovel testing at 200 foot intervals along transects spaced 200 feet apart. In the areas of low probability, we conducted pedestrian survey with judgmental shovel testing (both to confirm soil conditions and also to explore unusual features). In addition, a few areas of the survey tract, limited to about 40 acres along the western edge and 50 acres in the central portion, were not surveyed because of consistently low, wet soils and very dense vegetation. Figure 4 reveals the level of survey used during the current study.

For the purpose of this study a site is identified as three or more artifacts within a 25-foot area. The boundaries of sites in open fields were marked and then additional, closer interval passes were made through the area to collect a representative sample of exposed materials. None of the sites were subjected to intensive, or controlled, surface collections.

Sites identified either through the shovel testing or through surface collections were subjected to close interval (50-foot) shovel testing on a cruciform through the site. In several cases the level of site testing exceeded simple cruciform testing, providing an extra degree of certainty regarding the site evaluation. The site testing allowed information to be gathered on subsurface remains, soil conditions, and also on site boundaries.

All shovel tests were about 1-foot square and were excavated to subsoil, typically 1.0 to 1.5 feet in depth. All fill was screened through ¼-inch mesh with the tests backfilled immediately afterwards. All materials recovered from shovel testing, except brick and mortar which were noted and discarded in the field, were bagged. Shovel tests were sequentially numbered.

Notes were retained on representative shovel tests and photographs were taken of individual sites if warranted in the opinion of the field director. At each site the information necessary for the completion of a South Carolina Institute of Archaeology and Anthropology site form was collected.

Once identified, sites were evaluated for their potential eligibility for inclusion on the National Register of Historic Places. This assessment process follows that outlined by Townsend et al. (1993) in *National Register Bulletin* 36. This evaluative processes involves five steps, forming a clearly defined, explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as artifacts, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site *might* be able to address, given the data

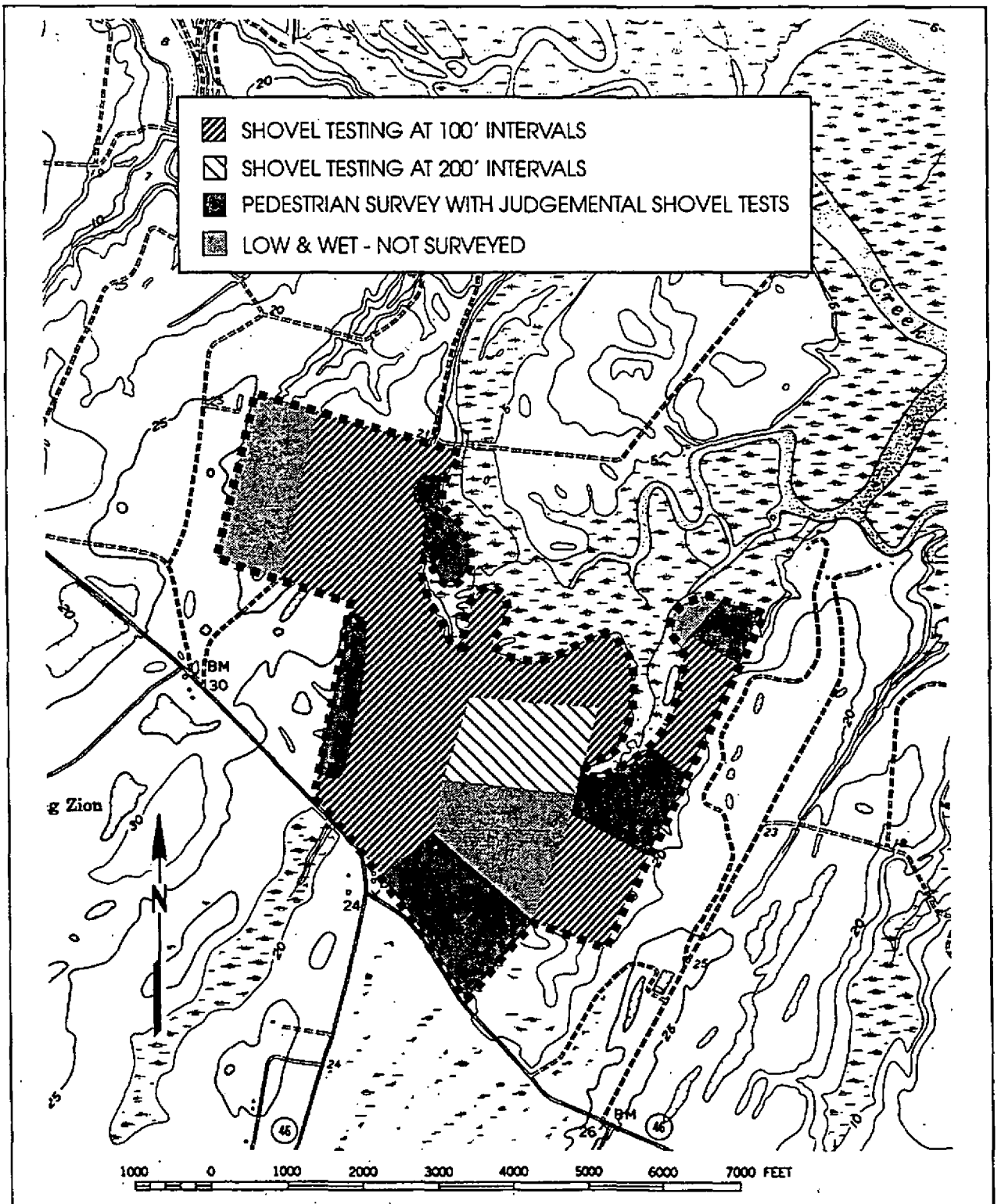


Figure 4. Survey methods used during the intensive investigation of the Crescent Plantation tract.

sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets are sufficiently well preserved to address the research questions; and

- identification of "important" research questions among all of those which might be asked and answered at the site.

Taking each of these steps individually, the first is simply to determine what is present at the site – for example, are features present, what types of artifacts are present, from what period does the site date? This represents the collection of basic, and essential, information concerning the site and the types of research contributions it can offer. Obviously there is no reason to propose research on eighteenth century plantation development if only early twentieth century ceramics are present. Nor is it perhaps appropriate to explore questions focused on subsistence if no faunal materials are present in the collection. This first step is typically addressed through the survey investigations, often with supporting documentation provided by historic research.

Next, it is important to understand the historic context of the site – what is the history of the project area and of the specific locality? Research questions must be posed with an understanding of this context and the context helps to direct the focus of research. The development of a historic context can be a lengthy process. The historic synopsis in this study provides a preliminary context for a wide range of different site types, although we recognize that it many ways it is superficial and lacking in detail.

Associated with the development of the context is the formation of research questions ***applicable to the site, its context, and its data sets***. Often this research will grow out of previous projects in the area. Certainly topics of exceptional interest continue to be the examination of Middle Woodland ceramics and settlement systems, the spread of eighteenth and nineteenth century plantations into the Lower Coastal Plain, and the development and lifeways of tenancy in the region. Each of these topics is more fully discussed in the following historic overview.

Next it is essential to compare the data sets with the research questions – the information necessary to address the research questions must be present at the site, else posing the question is meaningless in the evaluative process. Focusing on small projects, it may be more appropriate to concentrate on only one or perhaps two research questions and devote the energy necessary to fully explore them, then to propose a range of questions which can be only superficially explored with the data sets or resources available.

Finally, Townsend et al. recognize that not all research questions are of equal importance and that only those of fairly high value should be considered in the evaluation of National Register eligibility. Of all the steps this may be the most difficult to address. Some research questions proposed may seem pedestrian. Our society has viewed history as great events happening to great individuals. Many view architectural significance with the same jaundiced eye – significance being equated with white columns and famous architects. And certainly if the available archaeological studies of low country plantations are examined, there is a similar bias toward big plantations with relatively grand lifeways. Curiously, we know much less about the common planter, the yeoman farmer, or the tenant – and their probably more vernacular architecture – than we do about the famous or the high style. Some historians have referred to the common man as the "invisible person." Others have offered some understanding using the concept of the "marginal man." It is consequently important to understand that significance of archaeological research questions is not judged from the perspective of the wealth, or power, or prestige of the historic persons involved. It is judged from the perspective of what the research can tell us about the past that traditional historical research cannot.

This approach, of course, has been developed for use documenting eligibility of sites

actually being nominated to the National Register of Historic Places where the evaluation process must stand alone, with relatively little reference to other documentation where only, typically, one discrete site is being considered. In the case of survey evaluations some modifications of the approach seem reasonable, if not actually essential. Regardless, the approach advocated by Townsend et al. encourages researchers to carefully consider, and justify, their recommendations regarding National Register eligibility.

Curation

Archaeological site forms have been filed with the South Carolina Institute of Archaeology and Anthropology. The field notes and artifacts resulting from these investigations will be curated with that institution using their proveniencing system which consists of site number-site provenience number- artifact number.

ENVIRONMENTAL BACKGROUND

Physiography

Beaufort County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the south and southeast by the Atlantic Ocean, to the east by St. Helena Sound, to the north and northeast by the Combahee River, to the west by Jasper and Colleton counties and portions of the New and Broad rivers. The mainland primarily consists of nearly level lowlands and low ridges. Elevations range from about sea level to slightly over 100 feet above mean sea level (AMSL) (Mathews et al. 1980:134-135).

The topography of the tract appears fairly level at first, but this is largely biased by most observers failure to take into account the subtle ridge and swale topography which characterizes much of the low country. Closer inspection reveals considerable diversity, largely the result of numerous drainages. The headwaters of a small slough are found in the northwest corner of the study tract and another drainage cuts through the middle of the tract, crossing US 278. Between these two the tract reveals elevations of about 25 feet AMSL, with elevations falling off to the northwest and east.

Although the topography rises up from the central drainage to the east, the area to the immediate east tends to be low and, in areas, very wet. Elevations in this central area range from around 10 to 15 feet AMSL. A third drainage is found in the eastern third of the parcel, also running southward from Sawmill Creek. East of this drainage the ground rises more noticeably to about 20 feet AMSL.

Climate

In the early nineteenth century the Beaufort climate was described as "one of the healthiest" (Mills 1826:377), although Thomas Chaplin's antebellum journal describing life at nearby Tombee Plantation on St. Helena Island presents an entirely different picture (Rosengarten 1987). In 1864 Charlotte Forten wrote that "yellow fever prevailed to an alarming extent, and that, indeed the manufacture of coffins was the only business that was at all flourishing (Forten 1864:588).

The major climatic controls of the area are latitude, elevation, distance from the ocean, and location with respect to the average tracks of migratory cyclones. The project's latitude of about 32° 20'N places it on the edge of the balmy subtropical climate typical of Florida. As a result, there are relatively short, mild winters and long, warm, humid summers. The large amount of nearby warm ocean water surface produces a maritime climate, which tends to moderate both the cold and hot weather. The Appalachian Mountains, about 220 miles to the northwest, block shallow cold air masses from the northwest, moderating them before they reach the sea islands (Landers 1970:2-3; Mathews et al. 1980:46).

Maximum daily temperatures in the summer tend to be near or above 90°F and the minimum daily temperatures tend to be about 68°F. The summer water temperatures average 83°F. The abundant supply of warm, moist and relatively unstable air produces frequent scattered shatters and thunderstorms in the summer. Winter has average daily maximum and minimum temperatures of 63°F and 38°F respectively. Precipitation is in the form of rain associated with fronts and cyclones; snow is uncommon (Janiskee and Bell 1980:1-2).

The average yearly precipitation is 49.4 inches, with 34 inches occurring from April through October, the growing season for most low country crops. Nearby Hilton Head Island has approximately 285 frost free days annually (Janiskee and Bell 1980:1; Landers 1970). This mild climate, as Hilliard (1984:13) notes, is largely

responsible for the presence of many southern crops, such as cotton and sugar cane.

The coastal area is at a moderately high risk of tropical storms, with 169 hurricanes being documented from 1686 through 1972 (Mathews et al. 1980:56). The last Category 5 hurricane which hit this area was the August 27, 1893 storm which had winds of 120 miles per hour and a storm surge of 17 to 19.5 feet. Over 1,000 people in South Carolina were reported killed by this storm (Mathews et al. 1980:55). Other notable historic storms have occurred in 1700, 1752, 1804, 1813, and 1885.

Geology and Soils

The coastal region is covered in sands and clays originally derived from the Appalachian Mountains and which are organized into coastal, fluvial, and aeolian deposits. These were transported to the coast during the Quaternary period and were deposited on bedrock of the Mesozoic Era and Tertiary period. These sedimentary bedrock formations are only occasionally exposed on the coast, although they frequently outcrop along the fall line (Mathews et al. 1980:2).

The Pleistocene sediments are organized into topographically distinct, but lithologically similar terraces parallel to the coast. These terraces have elevations ranging from 215 feet down to sea level. The terraces, representing previous sea floors, were apparently formed at high stands of the fluctuating, though falling, Atlantic Ocean and consist chiefly of sand and clay (Cooke 1936).

The mainland soils are Pleistocene in age and tend to have more distinct horizon development and diversity than the younger soils of the Sea Islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The topography is generally reflected in the soil survey for the tract.

Five soil series dominate the study tract (Figure 5) and three are poorly to very poorly drained. The Baratari, Polawana, and Rosedhue soils all have at least seasonal water tables within 0 to 1.0 foot of the surface. The Polawana and Rosedhue soils are either frequently or commonly flooded. The Baratari soils are found on broad, low areas and are saturated with water for at least six months out of the year. These soils exhibit very reduced soil profiles because of saturation (Stuck 1980:59, 79-81). A horizons have black (10YR2/1) to light gray (10YR6/1) sands ranging from about a foot to as deep as nearly 2.8 feet, overlying B horizons of dark reddish brown (5YR2/2) or C horizons of very dark grayish brown (10YR3/2) sands.

It is not common to identify either historic or prehistoric sites on these soils, usually because of the poor drainage and frequent flooding. Problematic, however, are small areas or "islands" of better drained soils which do support occupation in the midst of these poorly drained soils. Although not common, this type of setting has been identified in some areas along the coast.

Also present on the tracts are Seewee soils, characterized as somewhat poorly drained and exhibiting an Ap horizon of dark brown (10YR2/2) sand overlying A12 horizon of dark grayish brown (10YR4/2) sand (Stuck 1980:83). The Wando soils on the tract are excessively drained and have a dark brown (10YR4/3) A horizon overlying a C horizon of brown (10YR5/3) to pale yellow (2.5YR7/4) sand (Stuck 1980:85). These tend to exhibit fairly high site densities.

Capers soils are found on tidal flats and along the lower reaches of larger streams that empty into the tidal flats. These soils are flooded by brackish water or saltwater at least twice per month and, in some places, twice daily. They are typically not associated with archaeological sites.

Floristics

Originally the entire tract was likely dominated by mixed hardwoods, particularly live oak and palmetto on the higher soils. These areas would likely have been very similar to maritime forests. On the lower, inland soils there were likely areas of what today are called "Florida Scrub" — pine flatwoods which often have slight depressions and ridges characterized by a dense woody pocosin

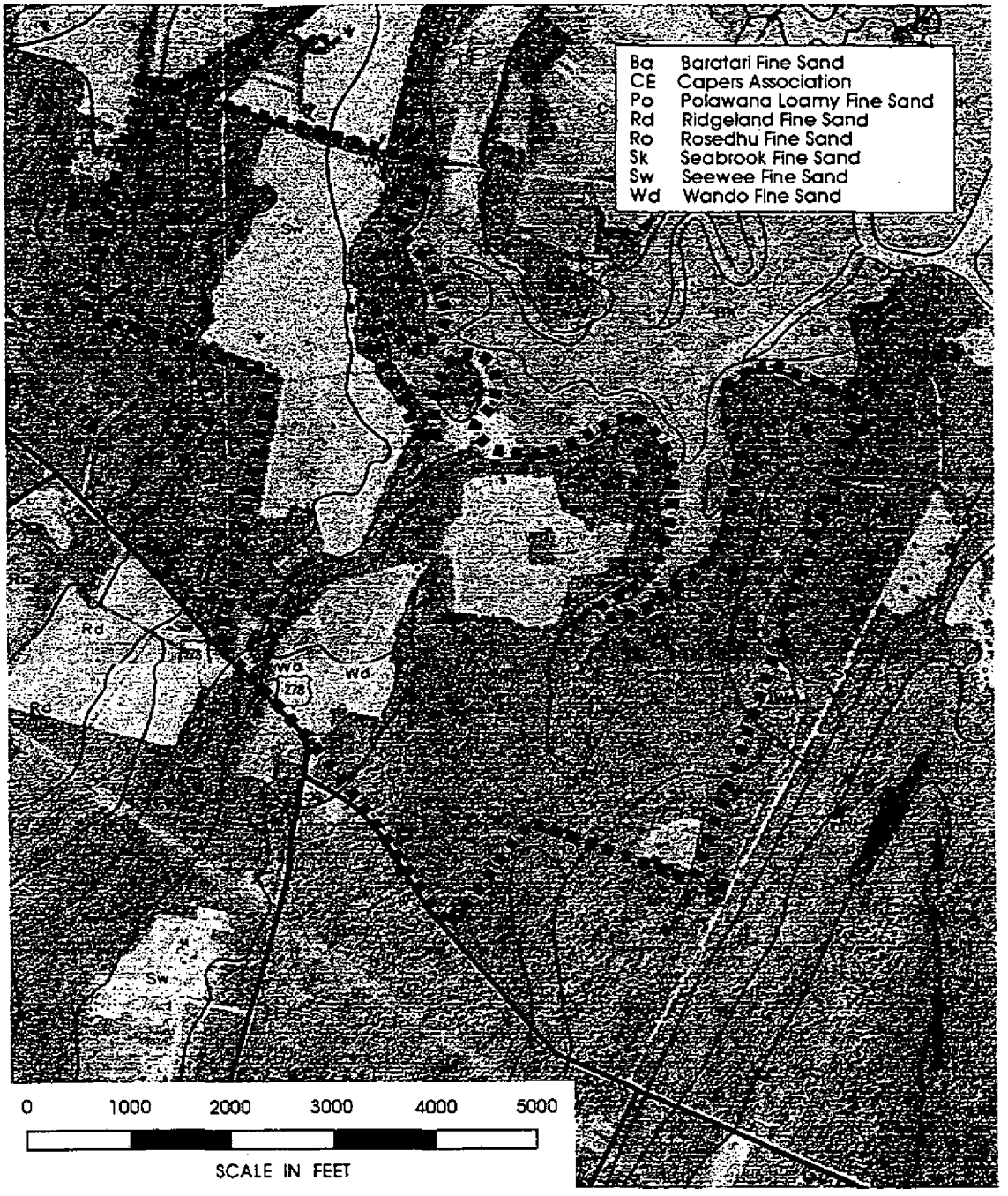


Figure 5. Soil survey for the study tract (adapted from Stuck 1980:Maps 84 and 92).



Figure 6. Dense hardwood and pine vegetation with an understory of palmetto and scrub.



Figure 7. Maritime hardwood with open understory of occasional palmetto.

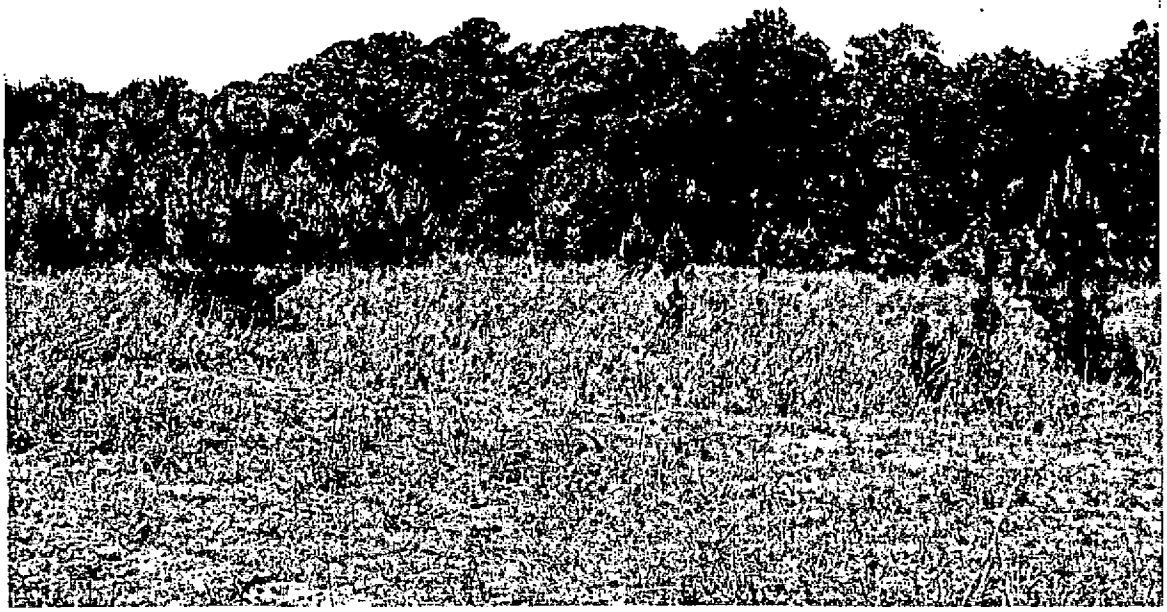


Figure 8. Old agricultural fields now in second growth broom sedge and pines.



Figure 9. Old agricultural field planted in pines with an open understory.

understory. There would also have been some limited areas of wetland swamps with tupelo, bay, and ash.

Although much modified by extensive agriculture, at least some of this more native vegetation is still suggested. There are areas of standing water swamp, as well as remnant areas of maritime forest. Much of the tract exhibits very dense mixed hardwood and pine vegetation (Figure 6), although there are areas where the lowland forest is more open, resembling what was probably typical for much of the region (Figure 7).

Dominating the causal observer's perception of the property, however, are the areas of previous agriculture which today are largely in second growth pine and grass (Figure 8). In a few areas previous agricultural fields have been planted in pine, creating a ecosystem with a fairly open understory (Figure 9).

Robert Mills, discussing Beaufort District in the early nineteenth century, stated:

> besides a fine growth of pine, we have the cypress, red cedar, and live oak . . . white oak, red oak, and several other oaks, hickory, plum, palmetto, magnolia, poplar, beech, birch, ash, dogwood, black mulberry, etc. Of fruit trees we have the orange, sweet and sour, peach, nectarine, fig, cherry (Mills 1826:377).

He also cautioned, however, that "some parts of the district are beginning already to experience a want of timber, even for common purposes" (Mills 1826:383) and suggested that at least 25% of a plantation's acreage should be reserved for woods.

PREHISTORIC AND HISTORIC SYNTHESIS

Previous Investigations

At the initiation of the previous reconnaissance level investigation, the South Carolina Department of Archives and History was contacted with a request that they check of their master topographic maps to locate any NRHP buildings, districts, structures, sites, or objects in the study area. In addition, we requested a check to determine the results of any structures surveys which may have been completed in the study area. Dr. Tracy Power of that agency reported that there were no recorded sites for the project area (Dr. Tracy Power, personal communication 1997). In addition, Ms. Rachel Brinson-Marrs of the Foundation staff examined the State Site Files at the South Carolina Institute of Archaeology and Anthropology to confirm that no archaeological sites had been previously identified on the tract.

In addition, we examined the previously conducted cartographic survey of Beaufort County (Hacker and Trinkley 1992), discovering that the proposed tract immediately to the east, on Trimbleton Plantation, was thought to contain a settlement consisting of three structures plus one row of three additional buildings (Hacker and Trinkley 1992:59). This is likely a nineteenth century plantation settlement including a main house, outbuildings, and a slave settlement. It was recorded as 38BU1716 during the reconnaissance study, but is outside the boundaries of the current intensive survey.

As previously discussed the findings of this reconnaissance level study (Trinkley 1997) lead to the decision to conduct an intensive survey on the project tract.

Perhaps the best known historic research for the area is H.A.M. Smith's work on Sir John Colleton's Okeetee or Devil's Elbow Barony (Figure 10). Colleton was granted the 12,000 acres in 1718 and by 1726 he had devised the parcel to his second son, Peter Colleton (Smith 1988:87). At Peter's death the barony was passed to his brother, the Honorable John Colleton, who devised the property to his son, John. It was apparently during the 1750s that the property was initially developed. By the time of the American Revolution there is good evidence that Colleton was grazing large quantities of cattle on the tract, and possibly growing some indigo (Smith 1988:88).

Smith reports that before Sir John Colleton's death in 1777 he had disposed of slightly over 6,000 acres in tracts ranging from just under 300 acres to nearly 1,700 acres to William Fripp, Thomas Farr, Benjamin Walls (apparently the area surrounding the Town of Bluffton), James Stanyarne, Edmund Bellinger, and George Hipp. The remainder of the barony went to his only daughter, Louisa Carolina Colleton, who married Admiral Richard Graves of the British Navy.

Although Louisa Graves maintained the parcel through her life, it seems likely that it had been divided into more manageable plantations. Prior to her death she, "disposed of a part of the barony lying on Colleton river to Benjamin Guerard, which part seems afterward to have become the property of Mr. William Wigg Barnwell by whom it was called 'Trimbleston'" (Smith 1988:89). At her death the remainder was divided up and sold 800 acres called Rose Hill to James Kirk, 946 acres known as the Hunting Island tract to James Kirk in 1828, 1,370 acres known as the Camp tract to Mrs. Pinckney and Mrs. Izard in 1828, 1,055 acres known as Foot Point to John Stoney in 1829 (see McCrady Plats 4479 and 4560 for this area), 942 acres known as the Ferry tract to John Stoney in 1829, 750 acres known as the Fording Island tract to W.J. Grayson in 1829, and in 1829 709 acres known as the Toppin tract to Miss Pinckney (Smith 1988:89-90).

Although based on a 1786 plan, H.A.M. Smith's map fails to provide much detail. What is,

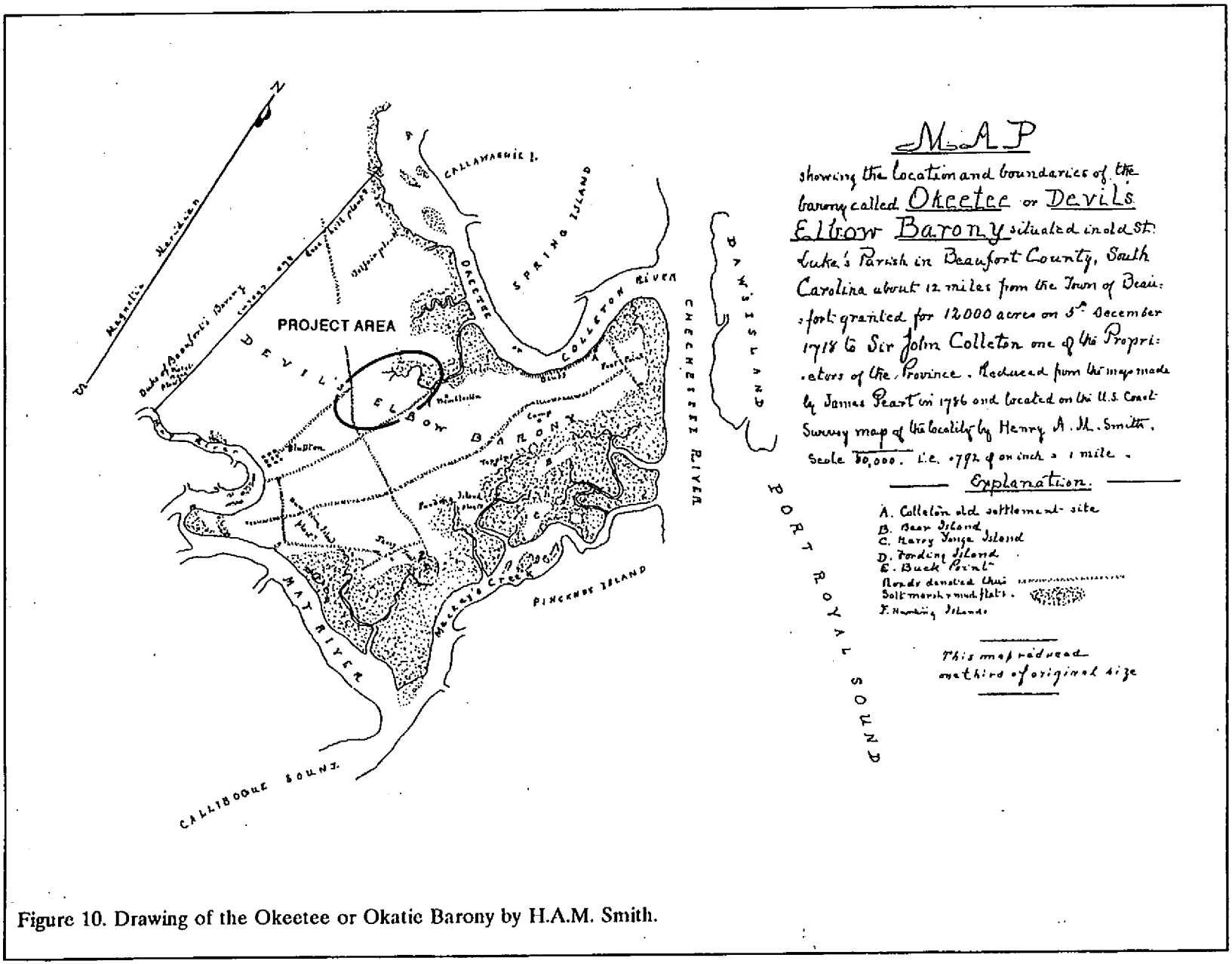


Figure 10. Drawing of the Okeetee or Okatie Barony by H.A.M. Smith.

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however, immediately apparent is that there is no obvious early plantation settlement in the project area.

The area to the west, known as Belfair, has been surveyed by Brockington and Associates and that report is available from the South Carolina Institute of Archaeology and Anthropology. As a result of that work 23 sites were identified, including 15 prehistoric sites, three historic sites, and five multi-component sites. Ten of these sites were assessed as either eligible or potentially eligible for inclusion on the National Register of Historic Places (Markham 1994: 29). This work followed on the previous research in the Belfair area by Chicora Foundation (Adams et al. 1992). This study, which focused on the Pecan Grove Tract, identified one site which was recommended as potentially eligible for inclusion on the National Register and another recommended as eligible.

The closest site to the project area (excluding those found on the tract during the reconnaissance study) is 38BU1415, a prehistoric site identified as potentially eligible. This site measures about 455 feet by 878 feet and artifacts, primarily Middle Woodland sherds, were recovered from the plow zone. The survey study suggests that the site may have served as a base camp with subsistence strategy focusing on the nearby marsh (Markham 1994:57; see also Adams et al. 1992).

To the east of the survey tract some level of investigation has occurred on the Heritage Trust property, Foot Point Plantation, and the Victoria Bluff tract (also known as the Chicago Bridge and Iron tract). The earliest study was that by Widmer (1976) who surveyed a portion of the Victoria Bluff tract for a proposed industrial facility. His work identified a series of primarily Middle Woodland shell middens in the area. He reported that the sites fell into three categories: single shell heaps smaller than 30 feet in diameter, small clusters (2-6) of shell heaps, and multiple shell heaps (over 20) (Widmer 1976:29). Unfortunately, the Chicago Bridge and Iron tract was stripped of soil before the survey, so while sites were fairly easy to identify and artifacts were plentiful, site integrity was dramatically affected.

Extensive survey was conducted by Chicora Foundation on Foot Point Plantation in the late 1970s and early 1980s, resulting in the identification and testing of a number of shell midden sites (see Figure 11). About the same time, limited site testing was conducted on a Late Woodland St. Catherines shell midden (38BU347) found on the Heritage Trust property (Trinkley 1981:73-88). A radiocarbon sample from that site has been dated to A.D. 1380. Perhaps most significantly, this testing and survey work tends to associate these Middle Woodland sites with somewhat better drained soils on the edge of poorly drained soils that may have been ponds or sloughs. The work also revealed that better drained soils could occur as small "islands" in a "sea" of very poorly drained soil.

In addition, a St. Catherines burial mound from the same area was examined and mapped (Trinkley 1981:Figure 15; this study, Figure 12). This site suggests that many, perhaps all, of the small shell midden sites in the immediate area may represent hamlets, seasonal camps, or perhaps even macrobands within the influence sphere of this mound.

The previous work in the project area reveals a tremendous potential for both historic and prehistoric sites.

Prehistoric Synthesis

There have been a number of studies prepared for the Beaufort area, and Derting et al. (1991:47-77) list 225 in their bibliography of South Carolina archaeology. There are a variety of excellent archaeological studies for the general project area which should be consulted (see especially Trinkley and Adams 1994 for an overview of previous research and Anderson et al. (1996) for a synthesis of current thought regarding the Woodland Period along the Carolina coast.

Paleoindian and Archaic Periods

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end

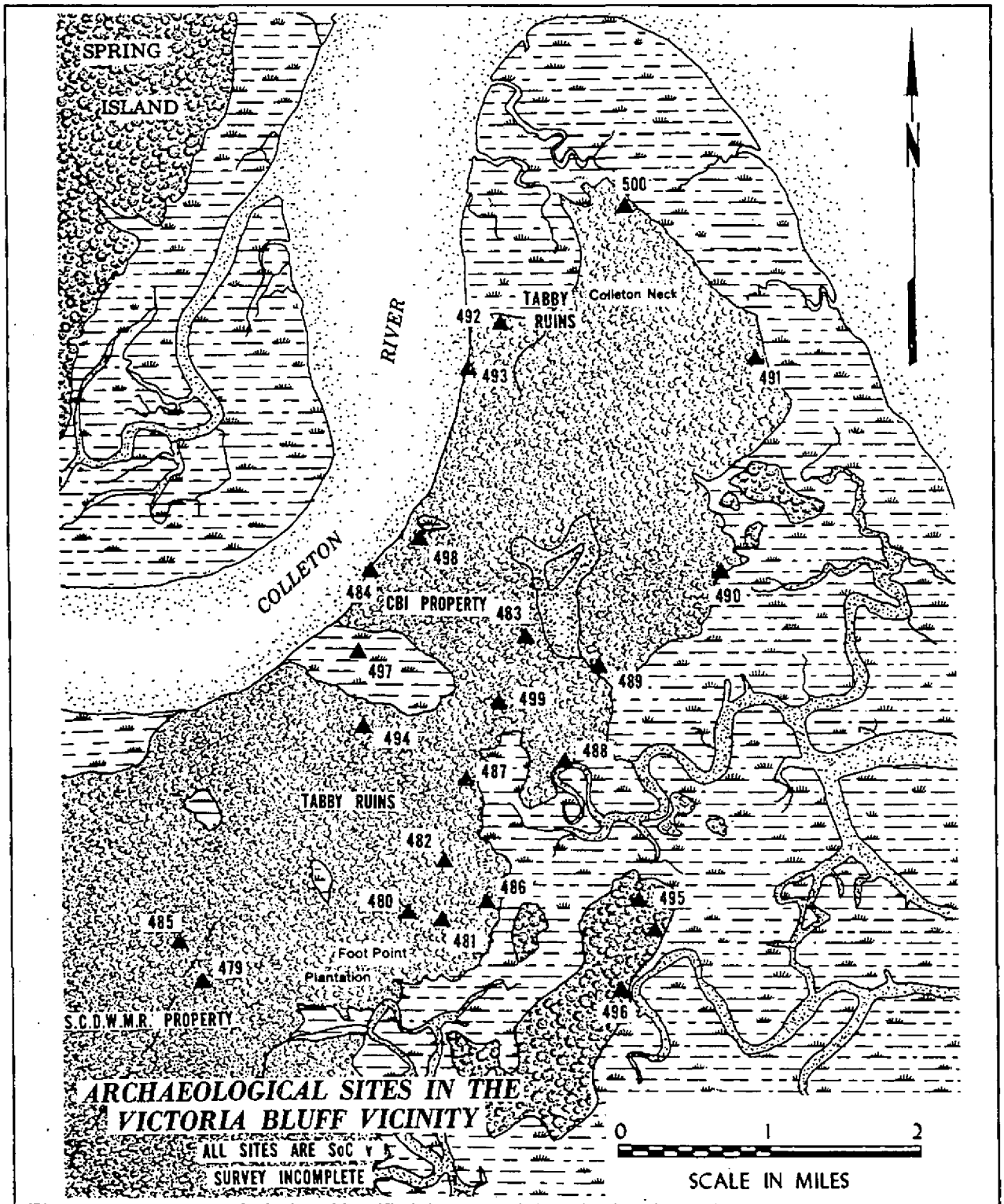


Figure 11. Archaeological sites identified in the vicinity of Victoria Bluff and Foot Point Plantation (adapted from Trinkley 1981b:Figure 11).

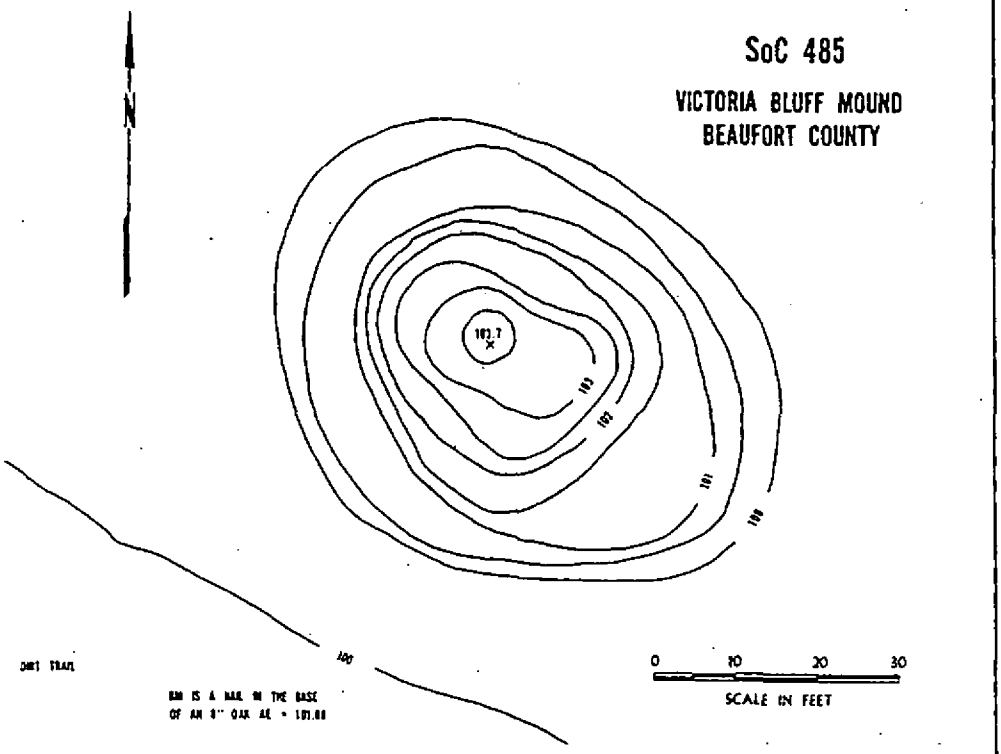


Figure 12. Contour map of the Victoria Bluff Burial Mount (adapted from Trinkley 1981b:Figure 15).

scrapers; and drill (Coe 1964; Goodyear et al. 1989; Michie 1977; Williams 1968). The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Sea level during much of this period is expected to have been as much as 65 feet lower than present, so many sites may be inundated (Flint 1971). Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coast. Archaic period assemblages are rare in the Sea Island region, although the sea level is anticipated to have been within 13 feet of its present stand by the beginning of the succeeding Woodland period (Lepionka et al. 1983:10). Brooks and Scurry note that:

> Archaic period sites, when contrasted with the subsequent Woodland period, are typically small, relatively few in number and contain low densities of archaeological material. The data may indicate that the interriverine zone was utilized by Archaic populations characterized by small group size, high mobility, and wide ranging exploitative

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patterns (Brooks and Scurry 1978:44).

Alternatively, the general sparsity of Archaic sites in the coastal zone may be the result of a more attractive environment inland adjacent to the floodplain swamps of major drainages. Of course, this is not necessarily an alternative explanation, since coastal Archaic sites may represent only a small segment in the total settlement system.

Early Woodland

The earliest phase of the Woodland period (see Figure 13) is called Stallings, after the type site excavated by the Cosgroves in 1929 (Claflin 1931). These "Stallings Island people" produced a rich cultural assemblage of bone and antler work, polished stone items, grooved and perforated "net sinkers" or steatite disks, stone tools (including projectile points, knives, scrapers, and cruciform drills), and fiber tempered pottery (see also Williams 1968). It was over a decade before the typological significance of the Stallings ware was recognized and a formal type description was offered (Fairbanks 1942; Griffin 1943). The definitive feature of this pottery is its large quantity of fiber, now identified as Spanish Moss (Simpkins and Scoville 1981), included in the paste prior to firing.

The elaborate Savannah River drainage sites such as Stallings Island, Fennel Hill, Rabbit Mount, and Bilbo, are all characterized by large quantities of either fresh water mussels or tidal oysters, large quantities of artifacts, and abundant features. These middens, however, represent only one aspect of the Stallings settlement system. Another portion of that system is represented by Stallings sites which evidence little shell. While many of these are sparse scatters, such as Clear Mount (Stoltman 1974) and Pinckney Island (Trinkley 1981b), some evidence intensive occupation with features and a rich cultural assemblage, such as the Love (38AL10; Trinkley 1974) and Fish Haul (38BU805; Trinkley 1986) sites.

At the Fish Haul site a Stallings phase "D"-shaped structure containing about 90 square feet of floor area has been identified (Trinkley 1986:145-147) and Stoltman (1974:51-54) recovered a lean-to structure at Rabbit Mount. The function of essentially non-shell midden sites such as Love and Fish Haul is only partially understood at present, although shellfish seasonality and ethnobotanical studies (Claassen 1986; Lawrence 1986; Trinkley 1986) are beginning to suggest late fall and winter occupation. These may represent early sites when the subsistence base was diffuse, prior to intensive riverine and estuarine exploitation. Alternatively, and more likely, they may represent a seasonal round in the Stallings settlement system. Riverine shellfish may have been gathered in the fall when the Savannah River and its tributaries were low and clear, while other resources away from the river were exploited during the period of high discharge in the late winter and spring (Anderson and Schuldenrein 1985:13). Additional work within the Savannah drainage is necessary to understand more fully the relationship between large shell middens, dense non-shell upland and coastal sites, and sparse upland and coastal "scatters."

The following Thom's Creek phase dates as early as 2220±350 B.C. (UGA-584) from Spanish Mount in Charleston County (Sutherland 1974) and continues to at least 935±175 B.C. (UGA-2901), based on a date from the Lighthouse Point Shell Ring, also in Charleston County (Trinkley 1980b:191-192). The Thom's Creek phase is characterized by an artifact assemblage almost identical to that of Stallings sites. The only major differences include the replacement of fiber tempering with sand, or a clay not requiring tempering, and the gradual reduction of projectile point size.

Thom's Creek pottery, first typed by Griffin (1945), consists of sandy paste pottery decorated with the motifs common to the Stallings series, including punctations (reed and shell), finger pinching, simple stamping, incising, and very late in the phase, finger smoothed (Trinkley 1980a). Investigations at the Lighthouse Point and Stratton Place shell rings, stratigraphic studies at Spanish Mount and Fig Island, radiocarbon dates from Lighthouse Point and Venning Creek, and

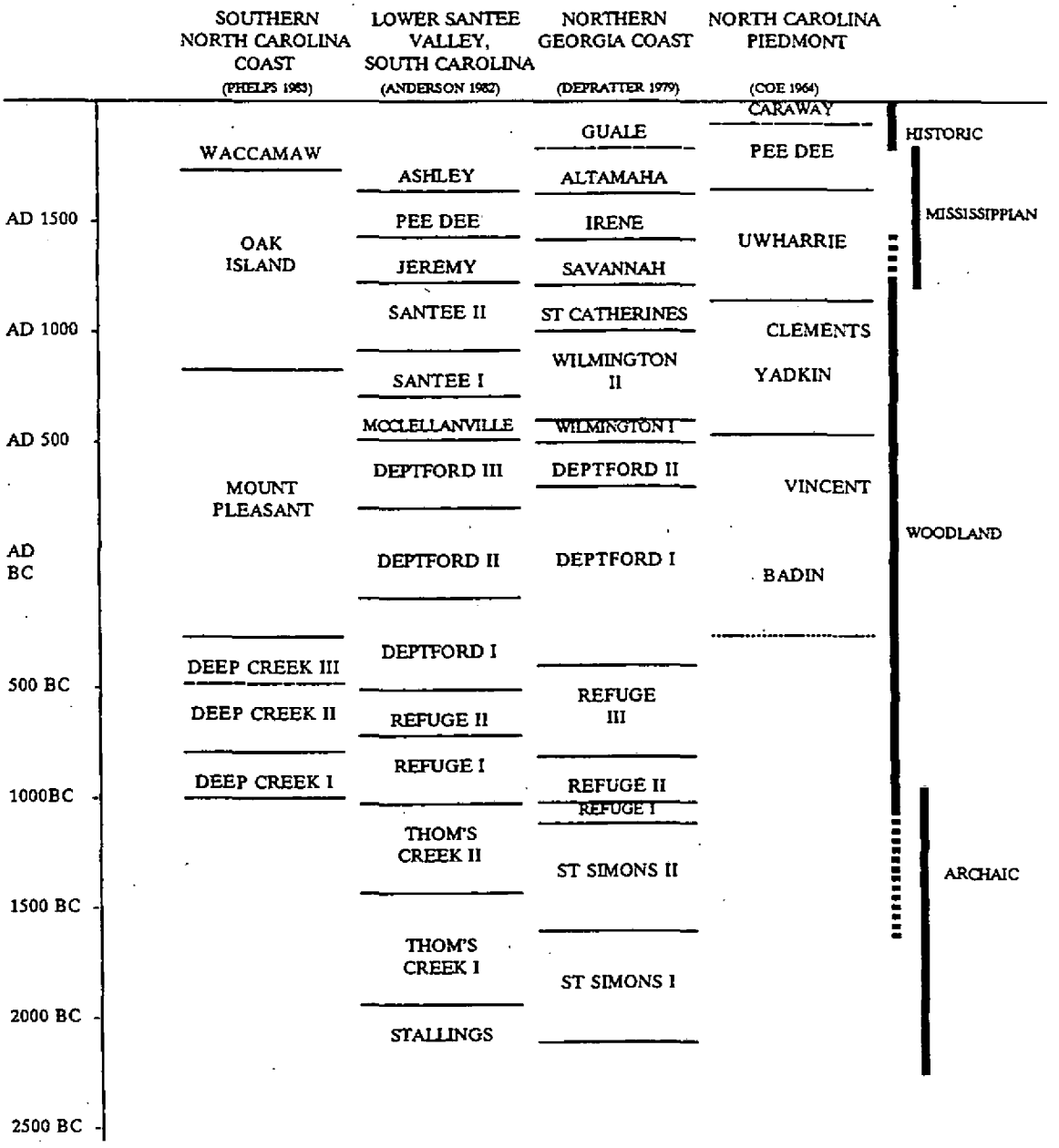


Figure 13. Woodland Period phases in the South Carolina locality.

the study of surface collections from a number of sites, have suggested a temporal ordering of the Thom's Creek series. Reed punctated pottery appears to be the oldest, followed by the shell punctated and finger pinched motifs. Late in the Thom's Creek phase, perhaps by 1000 B.C., there is the addition of Thom's Creek Finger Smoothed (Trinkley 1983a:44). Vessel forms include deep, straight sided jars and shallow conoidal bowls. Lip treatments are simple, and coiling fractures are common. Firing of the Thom's Creek vessels is certainly better than that evidenced for Stallings, but there continues to be abundant incompletely oxidized specimens.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia. There appears to be strong concentration of Thom's Creek sites in the Santee River drainage and the central South Carolina coast (see Anderson 1975:184).

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens; small middens with only sparse shell; and large "shell rings" are found in the Thom's Creek settlement system.

Limited testing has been conducted at one small Thom's Creek non-shell midden on Sol Legare Island (38CH779) in Charleston County, South Carolina (Trinkley 1984). The site evidenced very limited reliance on shellfish and faunal remains, with the bulk of the food remains consisting of large mammals. Excavations also identified a portion of a probable Thom's Creek post structure situated about 180 feet inland from the marsh edge.

Excavations at other Coastal Zone Thom's Creek sites includes the work by Sutherland (1973, 1974) at the Spanish Mount shell midden (38CH62). While this work has never been completely published, the site appears to represent a seasonally occupied camp with a diffuse subsistence base, including reliance on shellfish, floral material, fish, and mammals.

By far the most work has been conducted at Thom's Creek phase shell rings (see Trinkley 1980b, 1985). These sites are circular middens about 130 to 300 feet in diameter, 2 to 6 feet in height, and 40 feet in width at their bases, with clear interiors. These doughnut-shaped accumulations were formed as small mounds, arranged around an open ground area, and gradually blended together. The ring itself is composed of varying proportions of shell, animal bone, pottery, soil, and other artifacts. These shell rings were apparently mundane occupation sites for fairly large social units which lived on the ring, disposed of garbage underfoot, and used the clear interiors as areas for communal activities. The sites further suggest relatively permanent, stable village life as early as 1600 B.C., with a subsistence base oriented toward large and small mammals, fish, shellfish, and hickory nut resources (Trinkley 1985).

Following Stallings and Thom's Creek are the Refuge and Deptford phases, both strongly associated with the Georgia sequence and the Savannah drainage (DePratter 1979; Lepionka et al. 1983; Williams 1968). The Refuge Phase, dated from 1070±115 B.C. (QC-784) to 510±100 B.C. (QC-785), is found primarily along the South Carolina coast from the Savannah drainage as far north as the Santee River (Williams 1968:208). Anderson (1975:184) further notes an apparent concentration of Refuge sites in the Coastal Plain, particularly along the Santee River.

The Refuge series pottery is similar in many ways to the preceding Thom's Creek wares. The paste is compact and sandy or gritty, while surface treatments include sloppy simple stamped, dentate stamped, and random punctate decorations (see DePratter 1979:115-123; Williams 1968:198-208). Anderson et al. note that these typologies are

"marred by a lack of reference to the Thom's Creek series" (Anderson et al. 1982:265) and that the Refuge Punctate and Incised types are indistinguishable from Thom's Creek wares. Peterson (1971:153) characterizes Refuge as both a degeneration of the preceding Thom's Creek series and also as a bridge to the succeeding Deptford series.

It is difficult to reconstruct the subsistence base, although the sites suggest small, seasonal camps for small groups (Trinkley 1982). The settlement fragmentation, which began at the end of the Thom's Creek phase, around 1000 B.C., probably relates to the increase in sea level, from a Thom's Creek phase low of 10 feet below the current high marsh surface at 1200 B.C. to a high of about 3 feet below the current high marsh surface at 950 B.C. (Colquhoun et al. 1980; Brooks et al. 1989). This increasing sea level drowned the tidal marshes (and sites) on which the Thom's Creek people relied. The following Refuge phase evidences the fragmentation necessary when the environment which gave rise to large sedentary populations disappeared. Hanson (1982:21-23), based on Savannah River data, suggests that subsistence stress present during the Thom's Creek phase may have resulted in an expansion of the settlement system into diverse environmental settings. It seems likely, however, that the development of mature, upland tributaries was also essential ingredient in this process (see Sassaman et al. 1989). This same "splintering" is observed on the South Carolina coast.

The Deptford culture takes its name from the type site located east of Savannah, Georgia, which was excavated in the mid-1930s (Caldwell 1943:12-16). Deptford phase sites are best recognized by the presence of fine to course sandy paste pottery with a check stamped surface treatment. This pottery is typically in the form of a cylindrical vessel with a conoidal base. The flat bottomed bowl with tetrapodal supports found at Deptford sites along the Florida Gulf coast (Milanich and Fairbanks 1980:79) is very rare in South Carolina. Other Deptford phase pottery styles include cord marking, simple stamping, a complicated stamping which resembles early Swift Creek, and a geometric stamping which consists of a series of carved triangles or diamonds with interior dots (see Anderson et al. 1982:277-293; DePratter 1979).

The Deptford technology is little better known than that of the preceding Refuge phase. Shell tools are uncommon, bone tools are "extremely rare" (Milanich and Fairbanks 1980:77), and stone tools are rare on Coastal Zone sites. All of this indicates to some researchers that "wood must have been worked into a variety of tool types" (Milanich and Fairbanks 1980:75). One type of stone tool associated with South Carolina Deptford sites is a very small, stemmed projectile point tentatively described as "Deptford Stemmed" (Trinkley 1980c:20-23). This point is the culmination of the Savannah River Stemmed reduction seen in the Thom's Creek and Refuge phases. Also found at Deptford sites are "medium-sized triangular points," probably similar to the Yadkin Triangular point (Coe 1964:45, 47, 49; Milanich and Fairbanks 1980:75-76).

Perhaps of even greater interest is the co-occurrence of the larger triangular points (such as Badin and Yadkin) with smaller triangular forms (such as Caraway) traditionally attributed to the Late Woodland and South Appalachian Mississippian periods. This situation has been reported at Coastal Plain sites (Blanton et al. 1986:107), Savannah River sites (Sassaman et al. 1989:157), and Coastal Zone sites (Trinkley 1990). Blanton et al. (1986) suggest that these point types were used at the same time, but perhaps for different tasks.

The traditional view of an estuarine Deptford adaptation with minor interior occupations must be re-evaluated based on the Savannah River drainage work of Brooks and Hanson (1987) and Sassaman et al. (1989:293-295) who suggest larger residential base camps and foraging zones along the Savannah River, coupled with smaller, household residences and foraging zones in the uplands along small tributaries.

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958).

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This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing (see Trinkley 1987). Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1960). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina, based on two radiocarbon dates of 120±130 B.C. (QC-1358) and A.D. 210±110 (QC-1357). The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

Middle Woodland

Although the Deptford phase is discussed as part of the Early Woodland, many authors place the phase intermediate between the Early and Middle Woodland (see, for example, Anderson et al. 1982:28, 250). Such an approach is not unreasonable, because Deptford exhibits considerable temporal range and cultural adaptations which are more characteristically Middle Woodland (see also Anderson 1985:53). The Deptford phase, however, is still part of the early carved paddle stamped tradition which is replaced by the posited northern intrusion of wrapped paddle stamping during the Middle Woodland. Clearly the Deep Creek pottery, at the same time period as Deptford, is part of this "Northern Tradition," yet the Deep Creek, on temporal grounds, is considered Early Woodland by Phelps (1983:17, 29). This is meant simply to indicate that the transition from Early to Middle Woodland is not as clear as one might wish.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. Wilmington and Hanover may be viewed as regional varieties of the same ceramic tradition. The pottery is characterized almost solely by its crushed sherd (perhaps with grog as well) temper which makes up 30 to 40% of the paste and which ranges in size from 3 to 10 mm. Wilmington was first described by Caldwell and Waring (Williams 1968:113-116) from coastal Georgia work, while the Hanover description was offered by South (1960), based on a survey of the Southeastern coast of North Carolina (with incursions into South Carolina). The Wilmington phase was seen by Waring (Williams 1968:221) as intrusive from the Carolina coast, but there is considerable evidence for the inclusion of Deptford traits in the Wilmington series. For example, Caldwell and McCann (1940:n.p.) noted that, "the Wilmington complex proper contains all of the main kinds of decoration which occur in the Deptford complex with the probable exception of Deptford Linear Checkstamped" (see also Anderson et al. 1982:275). Consequently, surface treatments of cord marking, check stamping, simple stamping, and fabric impressing may be found with sherd tempered paste.

Sherd tempered Wilmington and Hanover wares are found from at least the Chowan River in North Carolina southward onto the Georgia coast. Anderson (1975:187) has found the Hanover series evenly distributed over the Coastal Plain of South Carolina, although it appears slightly more abundant north of the Edisto River. The heartland may be along the inner Coastal Plain north of the Cape Fear River in North Carolina. Radiocarbon dates for Wilmington and Hanover range from 135±85 B.C. (UM-1916) from site 38BK134 to A.D. 1120±100 (GX-2284) from a "Wilmington House" at the Charles Towne Landing site, 38CH1. Most dates, however, cluster from A.D. 400 to 900; some researchers prefer a date range of about 200

B.C. to A.D. 500 (Anderson et al. 1982:276).

Largely contemporaneous with the sherd tempered wares are what have been termed the Mount Pleasant, McClellanville, and Santee series. The Mount Pleasant series has been developed by Phelps from work along the northeastern North Carolina coast (Phelps 1983:32-35, 1984:41-44) and is a Middle Woodland refinement of South's (1960) previous Cape Fear series. The pottery is characterized by a sandy paste either with or without quantities of rounded pebbles. Surface treatments include fabric impressed, cord marked, and net impressed. Vessels are usually conoidal, although simple, hemispherical, and globular bowls are also present. The Mount Pleasant series is found from North Carolina southward to the Savannah River (being evidenced by the "Untyped Series" in Trinkley 1981b). North Carolina dates for the series range from A.D. 265±65 (UGA-1088) to A.D. 890±80 (UGA-3849). The several dates currently available from South Carolina (such as UGA-3512 of A.D. 565±70 from Pinckney Island) fall into this range of about A.D. 200 to 900.

The McClellanville (Trinkley 1981a) and Santee (Anderson et al. 1982:302-308) series are found primarily on the north central coast of South Carolina and are characterized by a fine to medium sandy paste ceramic with surface treatment of primarily v-shaped simple stamping. While the two pottery types are quite similar, it appears that the Santee series may have later features, such as excurvate rims and interior rim stamping, not so-far observed in the McClellanville series. The Santee series is placed at A.D. 800 to 1300 by Anderson et al. (1982:303), while the McClellanville ware may be slightly earlier, perhaps A.D. 500 to 800. Anderson et al. (1982:302-304; see also Anderson 1985) provide a detailed discussion of the Santee Series and its possible relationships with the McClellanville Series. Anderson, based on the Santee area data from Mattassee Lake, indicates that there is evidence for the replacement of fabric impressed pottery by simple stamping about A.D. 800 (David G. Anderson, personal communication 1990). This may suggest that McClellanville and Santee wares are closely related, both typologically and culturally. Also probably related is the little known Camden Series (Stuart 1975) found in the inner Coastal Plain of South Carolina.

The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are known from the Mount Pleasant phase.

These Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In terms of settlement patterns, several researchers have offered some conclusions based on localized data. Michie (1980:80), for example, correlates rising sea levels with the extension of Middle Woodland shell middens further up the Port Royal estuary. Scurry and Brooks (1980:75-78) find the Middle Woodland site patterning in the Wando River affected not only by the sea level fluctuations, but also by soil types (see also Trinkley 1980b:445-446). They suggest that the strong soil correlation is the result of upland sites having functioned as extraction areas, principally for exploitation of acorns, hickory nuts, and deer. Shell midden sites, they suggest, also represent seasonal camps and therefore exhibit small size, low artifact density, and infrequent re-occupation. Ward's (1978) work in Marlboro County suggests that interior site patterning changed little from the Early to Middle Woodland. Sites continue to be found on the low, sandy ridges overlooking hardwood swamp floodplains, which suggests that while pottery styles changed, site locations, and presumably subsistence, did not (see also Ferguson

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1976). Drucker and Anthony's (1978) work in Florence County, South Carolina reveals virtually continuous short-term occupation along the terraces associated with the floodplain of Lynch's Lake. DePratter's work at the Dunlap site, however, suggests that a few, relatively stable villages were present in the Middle Woodland.

Late Woodland and South Appalachian Mississippian

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1989:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Along the central and northern South Carolina coast, Anderson et al. (1982:303-304) suggest a continuation of the Santee series into the Late Woodland. The Hanover and Mount Pleasant series may also be found as late of A.D. 1000. Along the southeastern North Carolina coast, South (1960) has defined the Oak Island complex, which is best known for its shell tempered ceramics with cord marked, fabric impressed, simple stamped, and net impressed surface finishes. The phase is briefly discussed by Phelps (1983:48-49), but curiously this manifestation is almost unknown south of the Little River in South Carolina. Very little is known about the northern coastal South Carolina Late Woodland complexes, although sites such as 38GE32 may document the occurrence of village life in the Late Woodland.

The South Appalachian Mississippian is typically characterized by the construction of truncated temple mounds, reliance on cultivated crops, the development of a social elite, and complicated stamped pottery. The best information for the coastal area comes from the only incompletely reported excavations at the Charles Town Landing site (South 1971). In addition, Anderson (1989) provides an excellent synthesis of Mississippian research in South Carolina, observing that "while we have a fair appreciation for the culmination of the Mississippian in South Carolina, its origins and immediate Woodland antecedents remains largely unknown at the present" (Anderson 1989:114; see also Anderson 1994).

Anderson also notes the need for additional research in the area of:

> relationships between Woodland and Mississippian occupations in South Carolina, particularly the mechanisms bringing about the transition between the seemingly markedly dissimilar forms of social organization and subsistence adaptation (Anderson 1989:113).

While Trinkley (1981a, 1983a, 1983b) has offered a cultural sequence for the Mississippian remains in the coastal area that encompasses the Jeremy, "classic" Pee Dee, "post-classic" Pee Dee, Wachesaw, and Kimbel series, Anderson et al. (1982:312-319) offers an alternative perspective incorporating Pee Dee and Ashley wares.

Protohistoric

The history of the numerous small coastal Indian tribes is poorly known. As Mooney noted, the coastal tribes:

> were of but small importance politically; no sustained mission work was ever attempted among them, and there were but few literary men to take an interest in them. War, pestilence, whiskey and systematic slave hunts had nearly exterminated the aboriginal occupants of the Carolinas before any body had thought them of sufficient importance to ask who they were, how they lived, or what were their beliefs and opinions (Mooney 1894:6).

In truth, our knowledge of these groups has also been limited because too few scholars have taken an active interest in the primary sources and there has been too little desire to evaluate critically the early research by Mooney (1894) and Swanton (1952). For South Carolina Anderson (1989:117-118) briefly notes the current status of ethnohistoric research.

Historic Synopsis

The Spanish and French

The first Spanish explorations in the Carolina low country were conducted in the 1520s under the direction of Lucas Vasquez de Ayllon and Francisco Gordillo. One of the few areas explored by Gordillo which can be identified with any certainty is Santa Elena (St. Helena). Apparently Port Royal Sound was entered and land fall made at Santa Elena on Santa Elena's Day, August 18, 1520. "Cape Santa Elena," according to Quattlebaum (1956:8) was probably Hilton Head (Hoffman 1984:423).

Gordillo's accounts spurred Ayllon to seek a royal commission both to explore further the land and to establish a settlement in the land called Chicora (Quattlebaum 1956:12-17). In July 1526 Ayllon set sail for Chicora with a fleet of six vessels and has been thought to have established the settlement of San Miguel del Galdape in the vicinity of Winyah Bay (Quattlebaum 1956:23). Hoffman (1984:425) has more recently suggested that the settlement was at the mouth of the Santee River (Ayllon's Jordan River). Ferguson (n.d.:1) has suggested that San Miguel was established at Santa Elena in the Port Royal area. More recently, scholars have suggested that the settlement was on the Georgia coast, in the vicinity of St. Catherines Island (Rowland et al. 1996). Regardless, the colony was abandoned in the winter of 1526 with the survivors reaching Hispaniola in 1527 (Quattlebaum 1956:27).

The French, in response to increasing Spanish activity in the New World, undertook a settlement in the land of Chicora in 1562. Charlesfort was established in May 1562 under the direction of Jean Ribaut. This settlement fared no better than the earlier Spanish fort of San Miguel and was abandoned within the year (Quattlebaum 1956:42-56). Ribaut was convinced that his settlement was on the Jordan River in the vicinity of Ayllon's Chicora (Hoffman 1984:432). Recent historical and archaeological studies suggest that Charlesfort may have been situated on Port Royal Island in the vicinity of the Town of Port Royal (South 1982a, see also Rowland et al. 1996:23). The deserted Charlesfort was burned by the Spanish in 1564 (South 1982a:1-2). A year later France's second attempt to establish its claim in the New World was thwarted by the Spanish destruction of the French Fort Caroline on the St. John's River. The massacre at Fort Caroline ended French attempts at colonization on the southeast Atlantic coast.

To protect against any future French intrusion such as Charlesfort, the Spanish proceeded to establish a major outpost in the Beaufort area. The town of Santa Elena was built in 1566, a year after a fort was built in St. Augustine. Three sequential forts were constructed: Fort San Salvador (1566-1570), Fort San Felipe (1570-1576), and Fort San Marcos (1577-1587). In spite of Indian hostilities and periodic burning of the town and forts, the Spanish maintained this settlement until 1587 when it was finally abandoned (South 1979, 1982a, 1982b). Spanish influence, however, continued through a chain of missions spreading up the Atlantic coast from St. Augustine into Georgia. That mission activity, however, declined noticeably during the eighteenth century, primarily because of 1702 and 1704 attacks on St. Augustine and outlying missions by South Carolina Governor James Moore (Deagan 1983:25-26, 40).

The British Proprietory Period

British influence in the New World began in the fifteenth century with the Cabot voyages, but the southern coast did not attract serious attention until King Charles II granted Carolina to the Lords Proprietors in 1663. In August 1663 William Hilton sailed from Barbados to explore the Carolina territory, spending a great deal of time in the Port Royal area (Holmgren 1959). Almost chosen for the first English colony, Hilton Head

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Island was passed over by Sir John Yeamans in favor of the more protected Charles Town site on the west bank of the Ashley River in 1670 (Clowse 1971:23-24; Holmgren 1959:39).

Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system, which was designed to profit the mother country by providing raw materials unavailable in England (Clowse 1971). Charleston was settled by English citizens, including a number from Barbados, and by Huguenot refugees. Black slaves were brought directly from Africa, as well as Barbados.

The Charleston settlement was moved from the mouth of the Ashley River to the junction of the Ashley and Cooper Rivers in 1680, but the colony was a thorough disappointment to the Proprietors. It failed to grow as expected, did not return the anticipated profit, and failed to evidence workable local government (Ferris 1968:124-125). The early economy was based almost exclusively on Indian trade, naval stores, lumber, and cattle. Rice began emerging as a money crop in the late seventeenth century, but did not markedly improve the economic well-being of the colony until the eighteenth century (Clowse 1971).

Meanwhile, Scottish Covenanters under Lord Cardross established Stuart's Town on Scot's Island (Port Royal) in 1684, where it existed for four years until destroyed by the Spanish. It was not until 1698 that the area was again occupied by the English. Both John Stuart and Major Robert Daniell took possession of lands on St. Helena and Port Royal islands. The town of Beaufort was founded in 1711 although it was not immediately settled. Spring Island was granted to John Cockran in 1706 in two parcels of 500 acres each (S.C. Department of Archives and History, Colonial Series, Royal Grants, volume 39, page 6). One grant mentions that the land is "part of an Island over against Alatamaha Town."

While most of the Beaufort Indian groups were persuaded to move to Polawana Island in 1712, the Yemassee, part of the Creek Confederacy, revolted in 1715. By 1718 the Yemassee were defeated and forced southward to Spanish protection. Consequently, the Beaufort area, known as St. Helena Parish, Granville County, was for the first time relatively safe from both the Spanish and the Indians. The Yemassee, however, continued occasional raids into South Carolina, such as the 1728 destruction of the Passage Fort at Bloody Point on Daufuskie Island (Starr 1984:16). In the same year the English raid on St. Augustine succeeded in breaking the Spanish influence and the remnant Indian groups made peace with the English. The results for the Beaufort area, however, were mixed. While there was a semblance of peace, frontier settlements were largely deserted, population growth was slow, and the Indian trade was diverted from Beaufort to Savannah.

The British Colonial Period

Although peace marked the Carolina colony, the Proprietors continued to have disputes with the populace, primarily over the colony's economic stagnation and deterioration. In 1727 the colony's government virtually broke down when the Council and the Commons were unable to agree on legislation to provide more bills of credit (Clowse 1971:238). This, coupled with the disastrous depression of 1728, brought the colony to the brink of mob violence. Clowse notes that the "initial step toward aiding South Carolina came when the proprietors were eliminated" in 1720 (Clowse 1971:241).

While South Carolina's economic woes were far from solved by this transfer, the Crown's Board of Trade began taking steps to remedy many of the problems. A new naval store law was passed in 1729 with possible advantages accruing to South Carolina. In 1730 the Parliament opened Carolina rice trade with markets in Spain and Portugal. The Board of Trade also dealt with the problem of the colony's financial solvency (Clowse 1971:245-247). Clowse notes that these changes, coupled with new land policies, "allowed the colony to go into an era of unprecedented expansion"

(Clowse 1971:249). South Carolina's position was buttressed by the settlement of Georgia in 1733.

By 1730 the colony's population had risen to about 30,000 individuals, 20,000 of whom were black slaves (Clowse 1971:Table 1). The majority of these slaves were used in South Carolina's expanding rice industry. In the 1730 harvest year 48,155 barrels of rice were reported, up 15,771 barrels or 33% from the previous year (Clowse 1971:Table 3). Although rice was grown in the Beaufort area, it did not become a major crop in South Carolina until after the Revolutionary War. Rice was never a significant crop on the Beaufort Sea Islands, where ranch farming was favored because of its economic returns and favorable climate (Starr 1984:26-27). Elsewhere, however, rice monoculture shaped the social, political, and economic systems which produced and perpetuated the coastal plantation system prior to the rise of cotton culture.

Although indigo was known in the Carolina colony as early as 1669 and was being planted the following year, it was not until the 1740s that it became a major cash crop (Huneycutt 1949). While indigo was difficult to process, its success was partially due to it being complementary to rice. Huneycutt notes that planters were "able to 'dovetail' the work season of the two crops so that a single gang of slaves could cultivate both staples" (Huneycutt 1949:18). Indigo continued to be the main cash crop of South Carolina until the Revolutionary War fatally disrupted the industry.

During the Revolutionary War the British occupied Charleston for over two and one-half years (1780-1782). A post was established in Beaufort to coordinate forays into the inland waterways after Prevost's retreat from the Battle of Stono Ferry (Federal Writer's Project 1938:7; Rowland 1978:288). British earthworks were established around Port Royal and on Ladys Island (Rowland 1978:290). The removal of the royal bounties on rice, indigo, and naval stores caused considerable economic chaos during and after the war with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

The Antebellum Period

While freed of Britain and her mercantilism, the new United States found its economy thoroughly disrupted. There was no longer a bounty on indigo, and in fact Britain encouraged competition from the British and French West Indies and India "to embarrass her former colonies" (Huneycutt 1949:44). As a consequence the economy shifted to tidewater rice production and cotton agriculture. Lepionka notes that "long staple cotton of the Sea Islands was of far higher value than the common variety (60 cents a pound compared to 15 cents a pound in the late 1830s) and this became the major cash crop of the coastal islands" (Lepionka et al. 1983:20). It was cotton, in the Beaufort area, that brought a full establishment of the plantation economy. Lepionka concisely states that:

> [t]he cities of Charleston and Savannah and numerous smaller towns such as Beaufort and Georgetown were supported in their considerable splendor on this wealth . . . . An aristocratic planter class was created, but was based on the essential labor of black slavery without which the plantation economy could not function. Consequently, the demographic pattern of a black majority first established in colonial times was reinforced (Lepionka et al. 1983:21).

Mills, in 1826, provides a thorough commentary on the Beaufort District noting that:

> Beaufort is admirably situated for commerce, possessing one of the finest ports and spacious harbors in the world . . . . There is no district in the state, either better watered, of more extended navigation, or possessing a larger portion of rich land, than Beaufort: more than one half of the territory is rich swamp land, capable of being improved so as

> to yield abundantly (Mills 1826:367).

Describing the Beaufort islands, Mills comments that they were "beautiful to the eye, rich in production, and withal salubrious" (Mills 1826:372). Land prices ranged from $60 an acre for the best, $30 for "second quality," and as low as 25 cents for the "inferior" lands. Grain and sugarcane were cultivated in small quantities for home use while:

> [t]he principal attention of the planter is . . . devoted to the cultivation of cotton and rice, especially the former. The sea islands, or salt water lands, yield cotton of the finest staple, which commands the highest price in market; it has been no uncommon circumstance for such cotton to bring $1 a pound. In favorable seasons, or particular spots, nearly 300 weight has been raised from an acre, and an active field hand can cultivate upwards of four acres, exclusive of one acre and half of corn and ground provisions (Mills 1826:368).

Reference to the 1860 agricultural census reveals that of the 891,228 acres of farmland, 274,015 (30.7%) were improved. In contrast, only 28% of the State's total farmland was improved, and only 17% of the neighboring Colleton District's farm land was improved. Even in wealthy Charleston District only 17.8% of the farm land was improved (Kennedy 1864:128-129). The cash value of Beaufort farms was $9,900,652, while the state average by county was only $4,655,083. The value of Beaufort farms was greater than any other district in the state for that year, and only Georgetown listed a greater cash value of farming implements and machinery (perhaps reflecting the more specialized equipment needed for rice production).

The record of wealth and prosperity, such as it was, is tempered by the realization that it was based on the racial imbalance typical of Southern slavery. In 1820 there were 32,199 people enumerated in Beaufort District, 84.9% of whom were black (Mills 1826:372). While the 1850 population had risen to 38,805, the racial breakdown had changed little, with 84.7% being black (83.2% were slaves). Thus, while the statewide ratio of free white to black slave was 1:1.4, the Beaufort ratio was 1:5.4 (DeBow 1853:338).

Civil War and the Postbellum

Hilton Head Island fell to Union forces on November 7, 1861 and was occupied by the Expeditionary Corps under the direction of General T.W. Sherman. Beaufort, deserted by the Confederate troops and the white towns-people, was occupied by the Union forces several weeks later. A single white person, who remained loyal to the Federal government, was found on Ladys Island (Johnson 1969:189). Hilton Head became the Headquarters for the Department of the South and served as the staging area for a variety of military campaigns. A brief sketch of this period, generally accurate, is offered by Holmgren (1959), while a similarly popular account is provided by Carse (1981). As a result of Hilton Head and Beaufort's early occupation by Union forces, all of the plantations fell to military occupation, a large number of blacks flocked to the area, and a "Department of Experiments" was born. An excellent account of the "Port Royal Experiment" is provided by Rose (1964), while the land policies on St. Helena are explored by McGuire (1985).

Recently, Trinkley (1986) has examined the freedmen village of Mitchelville on Hilton Head Island. One result of the Mitchelville work was to document how little is actually known about the black heritage and postbellum history of the sea islands. Even the social research spearheaded by the University of North Carolina's Institute for Research in Social Science at Chapel Hill in the early twentieth century (e.g. Johnson 1969, Woofter 1930) failed to record much of the activities on islands such as Hilton Head.

McGuire (1982, 1985) provides a detailed account of the land policies in the area during the Civil War and her studies should be consulted for

detailed information. In general, however, blacks slowly came to own a large proportion of the available land. Certificates of possession were eventually issued for a number of the sea island plantations (McGuire 1982:36). During the postbellum period previous owners slowly came forward to reclaim, or redeem, land confiscated by the Federal government. The 1872 redemption process was not totally successful, partially because some tracts had such low value. By the 1890s a program was established to provide owners unsuccessful at either restoration or redemption with token compensation (McGuire 1982:77; S.C. Department of Archives and History, Secretary of State Records, Beaufort County Tax Claims, Direct Tax Compensation Book IX/2/4/3B).

During the late nineteenth century most of the sea island plantations continued as a rural, isolated agrarian communities. The new plantation owners attempted to forge an economic relationship with the free black laborers and found a multitude of problems, including the need to pay higher wages, increasing problems with the cotton boll weevil, and decreasing fertility. The letters of G.C. Hardy, the manager of the Eustis Plantation on Ladys Island in the 1870s, clearly reveal the problems faced during this period. Hardy, in his letters to Frederic Eustis, discusses the rising labor costs and the serious losses of cotton to the boll weevil (South Caroliniana Library, Frederic A. Eustis Collection).

In the 1870s a new form of livelihood was introduced -- the mining of phosphate for fertilizer. While both land and river rock mining were conducted in South Carolina, the Beaufort area saw primarily river dredging to acquire the phosphate ore present as gravel, although land mining of phosphate nodules also took place (Mathews et al. 1980:27, 31). As the industry began to decline in the early twentieth century, blacks returned to agriculture and oyster factories.

Woofter (1930) provides information on the agricultural practices of the St. Helena blacks in the early twentieth century, noting that the population was largely stable, with most blacks remaining in the vicinity of their parents' "home" plantations (Woofter 1930:265). While islands, such as St. Helena, which were large and easily accessible began to change more rapidly during this period, the smaller, more isolated islands, such as Hilton Head, maintained very clear connections with the past which have been repeatedly documented through oral histories.

Historic Synthesis of the Project Area

There are relatively few maps of the project area and most offer only minimal information. Among the most detailed is used in the previously discussed cartographic survey.

This map is the U.S. Coast Survey, Chart 55, "Coast of South Carolina and Georgia from Hunting Island to Ossabaw Island." Although it dates from 1873, it was surveyed just prior to the Civil War. The chart therefore reflects the appearance of the area at the close of the antebellum period. The map reveals that most of the survey tract was in dense woods, with only one small field just south of the plantation settlement and pasture area (or old fields) to the south and west of the cultivated field (Figure 14). The cultivated fields are off the survey tract, being part of neighboring Trimbleston Plantation.

Several other maps, not incorporated in the original cartographic survey, were also examined for additional information. Figure 15 is the ca. 1780 map of the Beaufort area from the Dartmouth College Library's Scavenius Collection. This shows that a settlement, labeled Scotone, was situated in the general project area. Given the scale and rendering of the map, it is possible only to place the settlement somewhere between the Colleton River bend and the Bluffton area. Although it shows the location of "Colleton," which corresponds to Smith's "Colleton Old Settlement Site," Smith fails to mention a Scotone or show any settlement in this area. Moreover, there is no Scotone listed in the S.C. Department of Archives and History Combined Alphabetic Inventory.

While it seems likely that Scotone was the last name of an occupant it is not clear if the individual was an owner, or perhaps simply an overseer. It is also possible that this settlement is the location of one of those tracts disposed of by

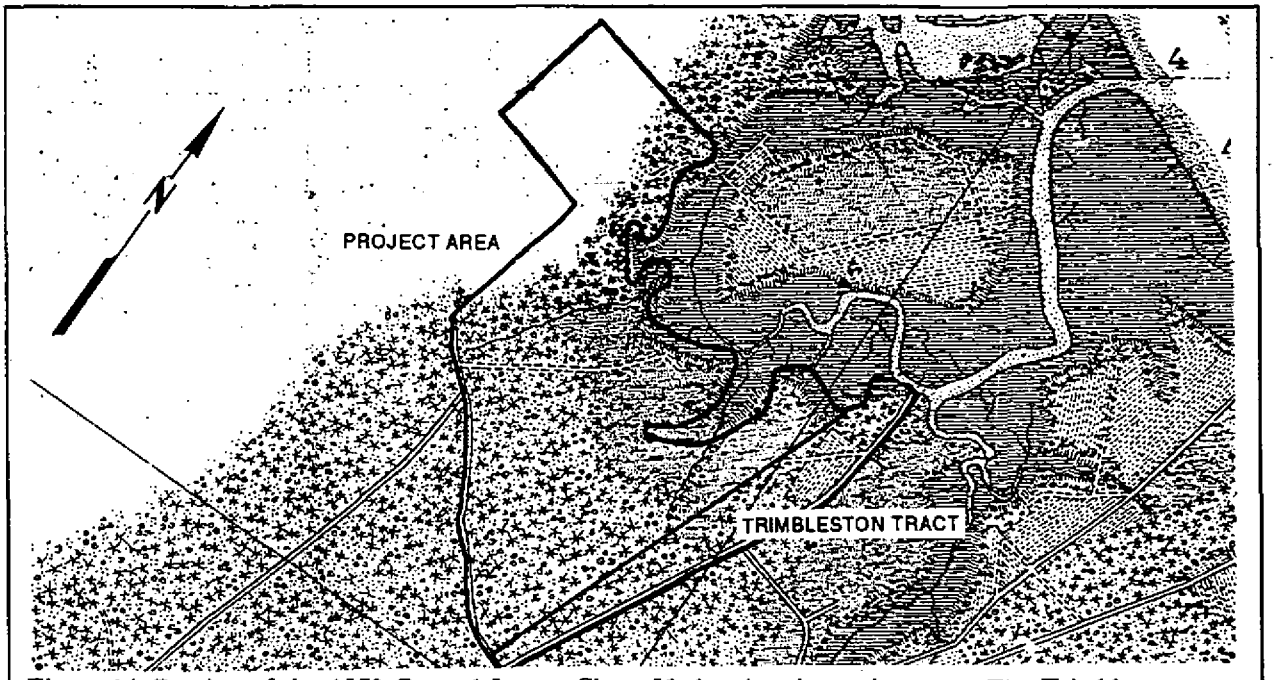


Figure 14. Portion of the 1873 Coastal Survey Chart 55 showing the project area. The Trimbleston tract was included in the reconnaissance level study, but is not included in this intensive examination.

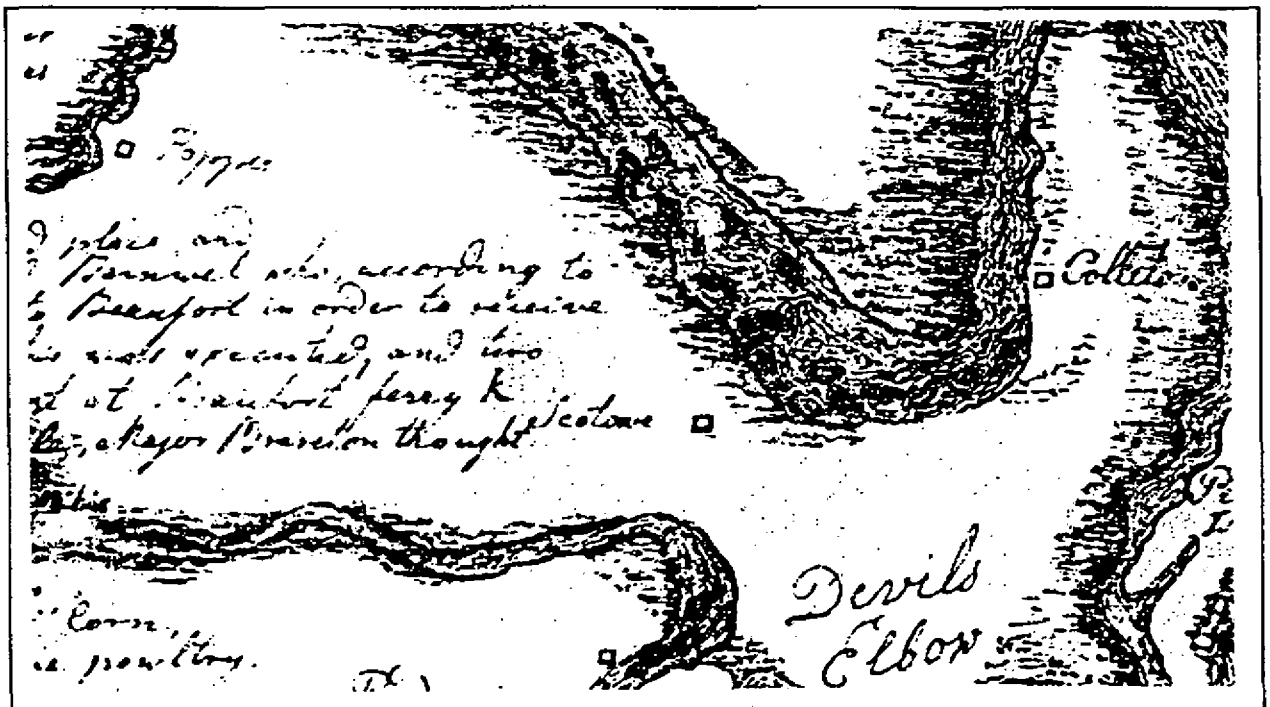


Figure 15. The project area from ca. 1780 (Scavenius Collection, Dartmouth College).

Colleton prior to his death in 1777. Given the condition of Beaufort County land records it may be possible to obtain a clear title on all of the various parcels.

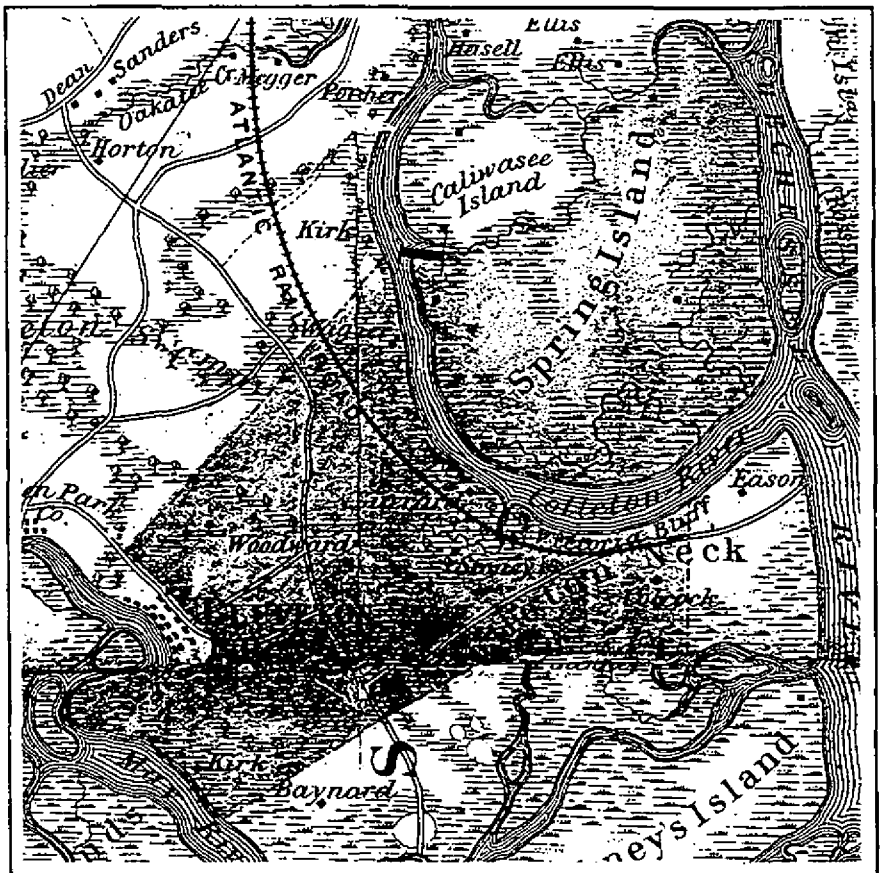


Figure 16. South Carolina Land and Improvement Company lands in the project area about 1877.

Figure 16 "Map Showing the Location of the Lands of the South Carolina Land and Improvement Company" dates from 1877 and suggests (incorrectly as research has revealed) that the study parcel was part of the organization's holdings. It also reveals that there are at least two settlements on the survey tract — those of Woodward and Stoney. The location of these settlements is confirmed by the 1873 Law and Kirk map of Beaufort County.

Figure 17 is the 1920 edition of the Okatie 15' topographic map published by the Corp of Engineers from field work conducted in 1912. This map is of exceptional importance since it reveals that the plantation settlement shown in Figure 14 was still standing. The only other structure on the study tract at this time was in the north central area adjacent to the marsh of Sawmill Creek.

Figure 18, from 1937, suggests that activity in the study area was minimal. The only structure shown for the tract is along US 278, opposite SC 462. Just off the tract, to the west, was the Belfair School, listed as being for "Negroes." A similar facility, Foot Point School, is situated off the tract to the east.

The title search for the study tract was exceedingly difficult. One and a half person days were devoted to this work during the reconnaissance study, with an additional two person days during the intensive survey efforts. This work allowed a provisional chain to be developed, taking the property back to the Pope ownership in the antebellum. It was not, however, possible, to trace the ownership from Pope back to the colonial period.

TMS R600 032 0000 0001 is Crescent Plantation proper and consists of 665 acres. It is currently owned by Josephine W. Johnson and was inherited through the will of her husband, Malcomb Johnson (Beaufort County Probate Court WB J, page 111).

The main tract, Crescent Plantation, was acquired by Johnson from James B. Walker of Bluffton in 1945 for the purchase price of $8,000 (Beaufort County RMC, DB 63, page 58). At that time the property was described as being on the "Fording Island Public Road one mile north of

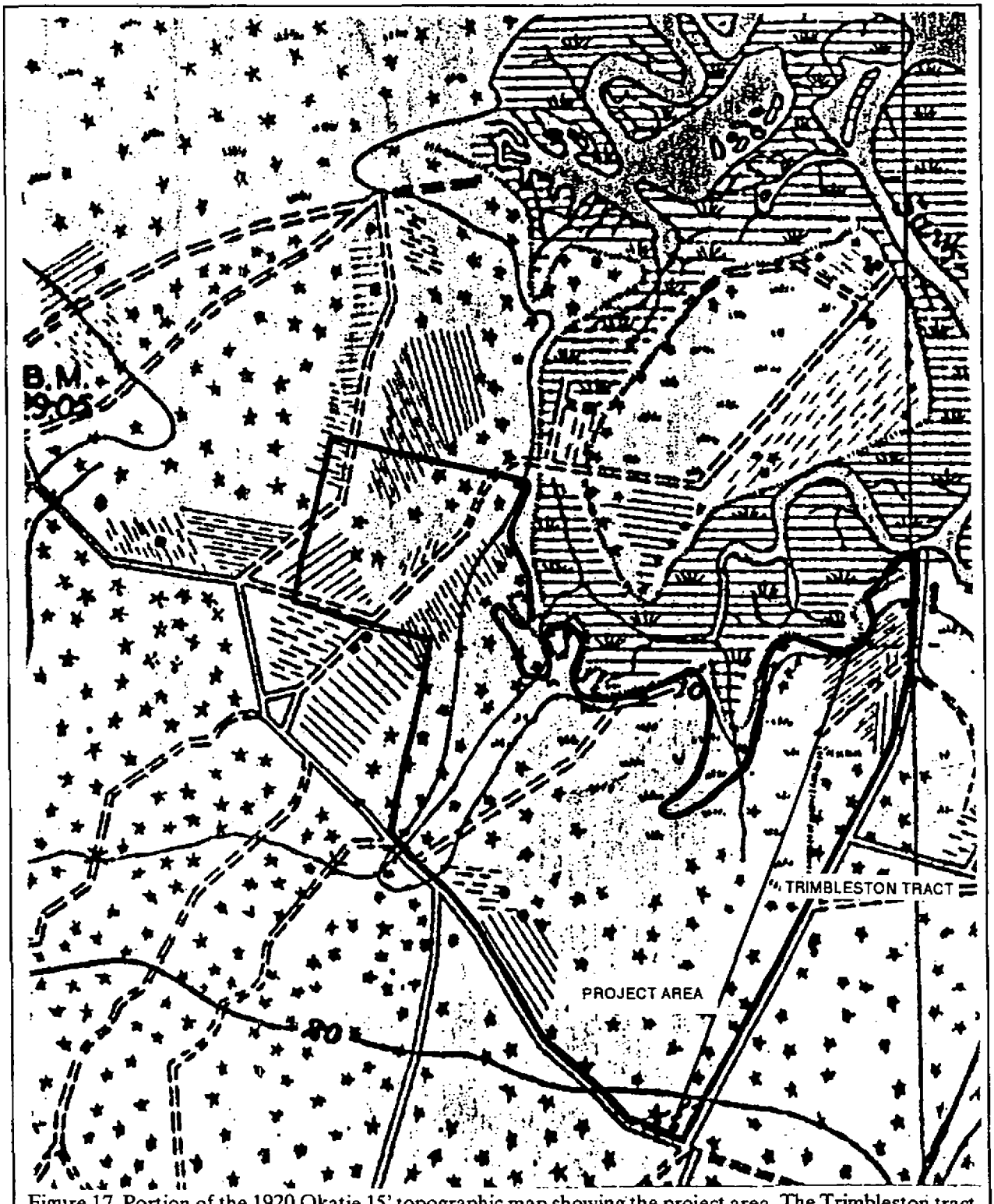


Figure 17. Portion of the 1920 Okatie 15' topographic map showing the project area. The Trimbleston tract was included in the reconnaissance study, but was excluded from this intensive examination.

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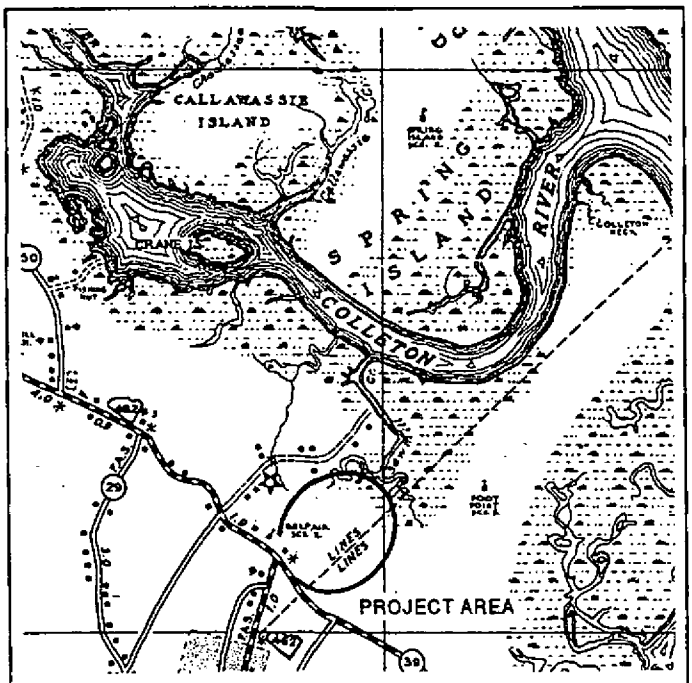


Figure 18. Portion of the 1937 General Highway and Transportation Map of Beaufort County.

Bluffton on the marshes of Chechessee River." The description indicated that it was bounded to the north by Oak Forest Plantation and the marshes of Chechessee, to the east by Trimblestone [sic] Plantation owned by the Simmons, to the south by Fording Island Road and portions of the old Hunting Island tract, and to the west by the Old Barnwell tract and a portion of Oak Forest Plantation. The deed also makes reference to a 1934 plat (Beaufort County RMC, PB 3, page 113) which is reproduced as Figure 19. The surveyor's notation on this plat reveals the only residents on the property were the "owner J.B. Walker and his mother's brother and family and saw three negro share-croppers or helps." Clearly the plantation, by the 1930s, was being little used.

Both the recital and the plat continued to use the plantation names of at least the early nineteenth century. What isn't, however, clear is what tract this plantation evolved from, especially when Figure 14 is compared to H.A.M. Smith's map of the Okeetee Barony (Figure 10).

Walker purchased the property in October 1905 from the Carolina National Bank of South Carolina for $1,500 (Beaufort County RMC, DB 27, page 307). The Bank had purchased the property, apparently as an investment, from William Elliott about a year earlier, in September 1904, for $1,266 (Beaufort County RMC, DB 26, page 31). The Bank made about 18% profit on their investment — not a bad return for the time, even counting the taxes paid on the land.

It was Elliott, however, who most profited from his sale of Crescent Plantation, since he had purchased it for only $5 from Washington A. Clark in December 1903 (Beaufort County RMC, DB 24, page 656). After only eight months time he was to see a return of $1,261 on his $5 investment.

The seller, Washington A. Clark, had purchased the tract in April 1899 at a sheriff's sale for only $50 (Beaufort County RMC, DB 22, page 342). The deed reveals that the plantation, "known as Crescent" was bounded to the north by Oak Forest Plantation and the Colleton River, to the east by Trimbleton Plantation, to the south by Hunting Island Plantation, and to the west by Oak Forest Plantation. At the time it was thought to contain "seven hundred acres more or less." The property was being sold as a result of a judgement brought against Eliza C. Woodward for $818 in favor of Walter B. Montieth.

Woodward, of course, was the daughter of William and Sarah Pope and had acquired the property through her mother's will (Beaufort County Will P-002), dated March 20, 1873.

Although it was thought originally that the property had passed through the hands of the South Carolina Land and Improvement Company, they have failed to show up in the title. It is possible, of course, that they had an option on the property, especially since they were acquiring property around the time of Sarah Pope's death. The deeds for the company's acquisitions, however, reveal that Pope held at least some lands which almost certainly were the Crescent Plantation. This is further confirmed by Bailey

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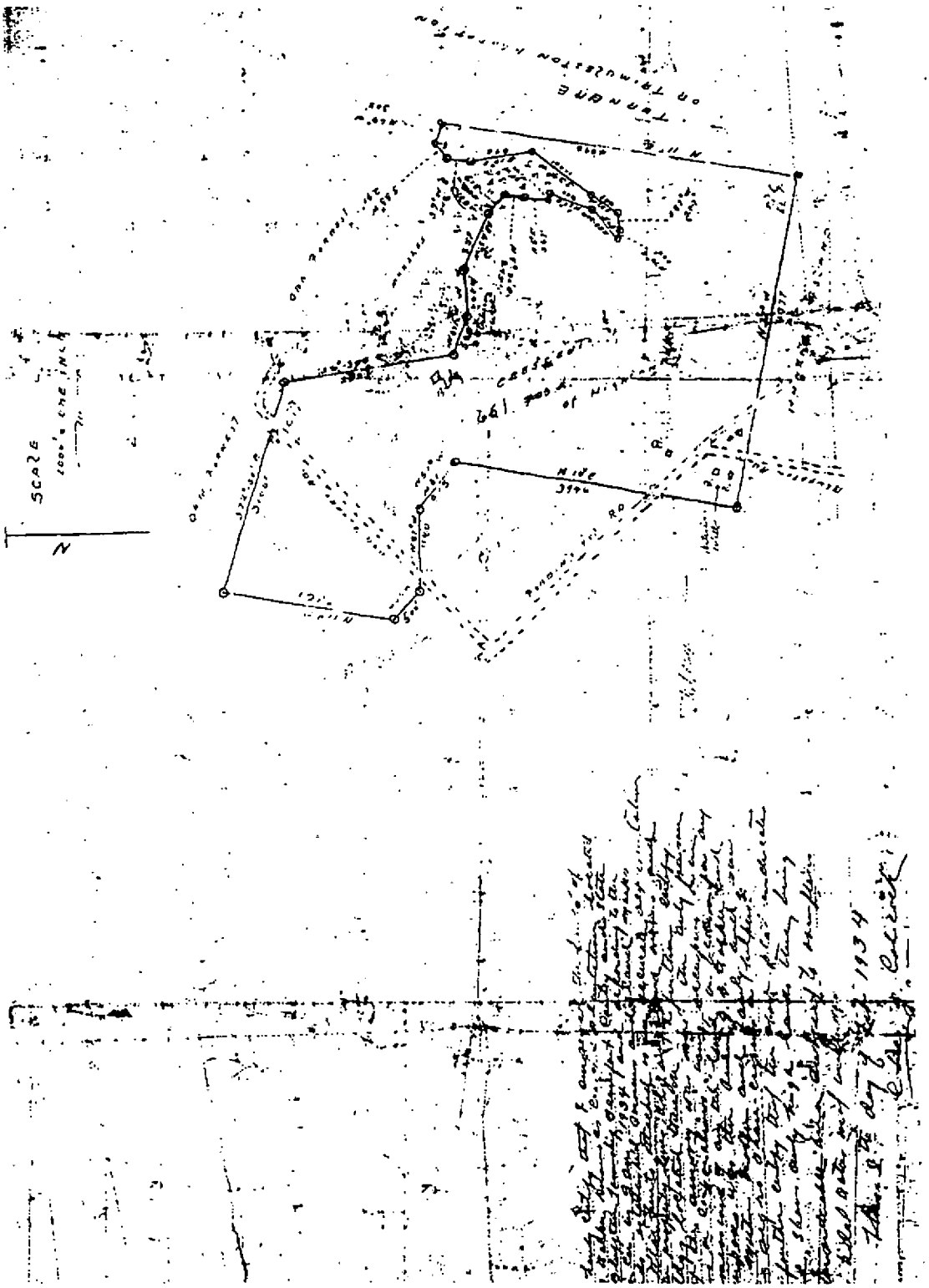


Figure 19. 1934 plat of Crescent Plantation (Beaufort County RMC, PB 3, page 113).

(1984:451). The South Carolina Land and Improvement map also makes reference to the Woodward settlement. This was almost certainly Mrs. E.C. Woodward, who in the 1870 census was 57 years old and residing in St. Lukes Parish.

William Pope, often called Squire Pope, was a prominent land owner in the Beaufort area during the late antebellum. With the fall of Hilton Head in 1861, Pope took refuge in Sandersville, Georgia, where he died in 1862 (Bailey 1984:451-452). A March 20, 1862 letter from Gertrude Pope Woodward in Sandersville, Georgia informed Heppy (Heph J. Pope, one of Pope's granddaughters) of his death, remarking, "his health was bad for a long time — but the loss of his property, & the loss of his grandchildren, all coming upon him at once, was more than he could bear, [and] he soon sunk under the weight of his afflictions" (South Carolina Historical Society, Pope Correspondence File 11-550).

At least by 1868 Pope's wife, Sarah, had returned to the Beaufort area and was living in Bluffton. In one letter Sarah Pope remarks:

> our village is very dull, everybody seems discouraged at the times and finding it so hard to live — It is a great pity for this is such a pleasant place to live at, if it was only the same that it was before the war (South Carolina Historical Society, Pope Correspondence File 11-550).

Only a year later she comments to another granddaughter, Ellen:

> life is so uncertain I don't know if we will ever meet again in this world, I see nothing to live for, all trouble and disappointment (South Carolina Historical Society, Pope Correspondence File 11-550).

None of her letters, however, mentions restoration efforts and previous research (Trinkley 1989:54-55, Trinkley 1990:28-31) reveals the complexity of the Pope holdings.

As mentioned previously, it has not been possible to determine how Pope came to acquire Crescent Plantation, or from what tract or tracts in the Colleton Barony it was carved. We do know, however, that Camp Plantation, when originally created by Louisa Graves in the second quarter of the nineteenth century at its sale to "Mrs. Pinckney and Mrs. Izard" contained about 1,370 acres, although by the end of the nineteenth century it was described as only 700 acres. The missing 670 acres is almost exactly the acreage of modern Crescent Plantation — providing at least one clue to its origin.

Although this brief overview of the available historic documents fails to reveal precise building locations, it does provide a preliminary (and provisional) chain of title for the study parcel, combined with clear documentation of the area's significance. Our current study also warns us that there are many gaps in the historical documents, making the archaeological research that much more significant to our understanding of the area.

IDENTIFIED SITES

Introduction

A total of ten sites were identified during the intensive archaeological survey of the Crescent Plantation tract (Figure 20). Each of these sites is briefly described and its National Register eligibility is assessed in this section. One of the sites, a prehistoric Stalling phase midden, is recommended as eligible for inclusion on the National Register, while a second site, a historic owner's residence, is recommended as potentially eligible. Recommendations regarding the sites, primarily associated with green spacing or data recovery, are included in the following section.

38BU1711

This site is situated at the south edge of the field on the western third of the study tract and was first encountered during the reconnaissance level study. At that it was identified on the basis of surface materials found during the pedestrian survey. The central UTM coordinates are E513840 N3569780 and the site is found on a level terrace overlooking a drainage to the south and east, with the ground sloping in those directions. Elevations in the site core are about 18 feet AMSL. The soils in site area were sandy, identified as the Wando series.

At the time of the reconnaissance survey the site area was beginning to be heavily overgrown in grass and second growth pine. Surface visibility was under 25%. Conditions had not changed dramatically by the time of the intensive study, although it was immediately noted that almost no materials were found on the surface.

Only five artifacts could be recovered under the original survey conditions, they were spread out over an area measuring about 150 feet in diameter. The materials recovered include four undecorated whitewares and one small prehistoric sherd. Occasional brick fragments were observed in the field, but much more common were fragments of oyster shell, likely plowed out of subsurface middens. The intensive survey included a brief walk-over survey which identified only one additional surface item — a fragment of green bottle glass. The site boundaries shown in Figure 21 are based on the dispersion of shell and a small quantity of brick and mortar. The site measures about 75 feet north-south by 125 feet east-west — slightly smaller than originally estimated during the reconnaissance study.

Survey Transect 5 had failed to identify any materials associated with the site, so site testing consisted of an initial cruciform in the eastern edge of the open area. Shovel tests were excavated at 25 foot intervals covering an area measuring 150 feet north-south by 100 feet east-west. When none of these tests produced artifacts, additional tests were conducted in the field area, extending just within the southern woods line (Figure 21). A total of 21 shovel tests were excavated in this testing program. None of the tests yielded artifacts, although one did produce a small fragment of brick.

A 2-foot square test unit was excavated in the northeast quadrant of the site. The unit revealed a dark brown (10YR3/3) sandy plowzone about 0.7 foot in depth overlying a yellow (10YR7/6) sandy subsoil which was excavated to a depth of 1.1 feet to verify that no deeper deposits were present. A single fragment of green glass, recovered in the plowzone, was the only artifact present in the unit.

Data sets from this site are very scarce. Although the initial surface collection produced relatively few artifacts, the following intensive survey was able to identify even less. Likewise, the shovel tests and test unit were largely negative, producing only two specimens, No concentrations of shell or brick rubble were observed during the

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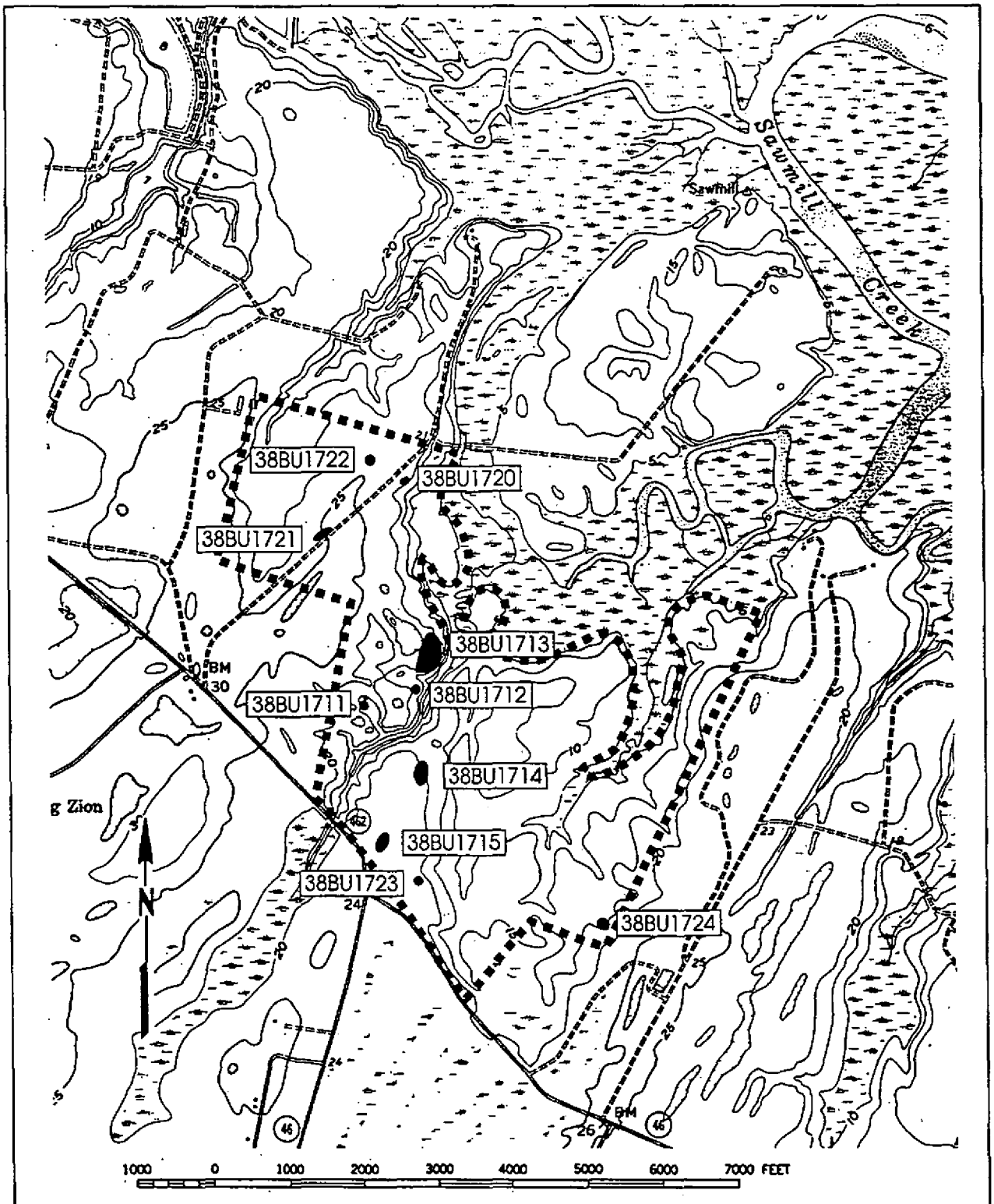


Figure 20. Sites identified on the Crescent Plantation survey tract.

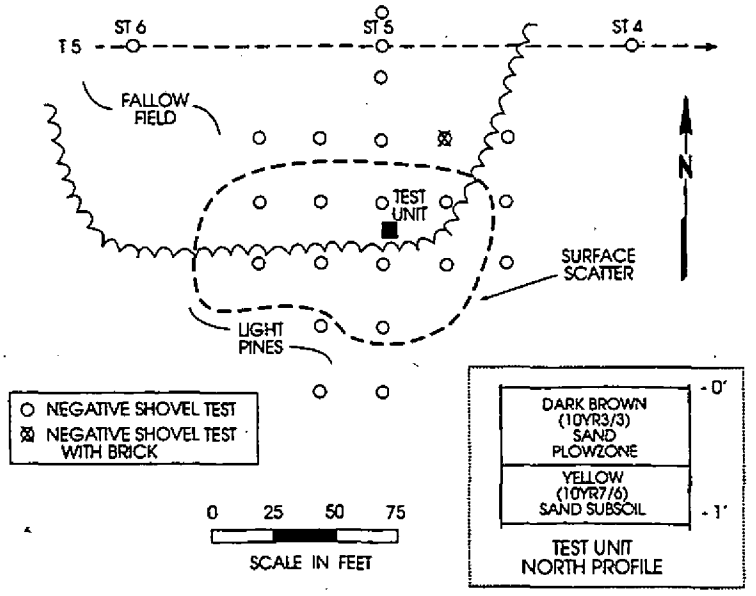


Figure 21. Sketch map and profile for 38BU1711.

intensive survey, so it seems unlikely that there are subsurface features.

This site is clearly indicated on any of the available historic maps, and we are inclined to believe that it may represent a tenant house. The prehistoric sherd is likely associated with one of the several prehistoric sites in the immediate area, or may represent the remains associated with an isolated camp. While there are a variety of questions appropriate to such prehistoric and historic settlements, this site's data sets do not seem capable of addressing these questions. Consequently, we recommend this site as not eligible for inclusion on the National Register of Historic Places. No additional management activities are necessary, pending the concurrence of the State Historic Preservation Office.

38BU1712

This site was found during the reconnaissance on the east central edge of the western-most field, at an elevation of about 18 feet AMSL overlooking a steep slope eastward toward a tributary of Sawmill Creek. This slough appears to have at least some fresh water associated with it, given the vegetation and ponding. This, however, may represent the result of historic modifications. The site is situated on a slight rise of sand soil, identified as the Wando series. The central UTM coordinates are E514040 N3569820.

The site was partially exposed in a dirt road running between the slough and field edge, but was also traced into the field itself. Shell is abundant in this area, but does not appear to be concentrated in any particular area. Surface visibility was less than 25% and a thin stand of pines was also invading this area of the field. Five fragments of pottery were found dispersed in an area measuring about 50 feet in diameter. The recovered materials include four fragments of Stallings Plain and one probable Deptford Plain sherd.

During the intensive survey no materials were observed on the surface, but ST 1 on Transect 34 (later designated 500R500 for testing purposes) did produce two small sherds. These remains were found in woods on a level terrace immediately above the drainage to the east (Figure 22). The hardwoods in this area appear to be 40 to 50 years old, suggesting that the area had been previously cultivated (which is consistent with the profile found in the test unit at the site). In addition, we found that the creek is actively eroding westward, resulting in a high, steep bluff.

A series shovel tests were placed at 25 foot

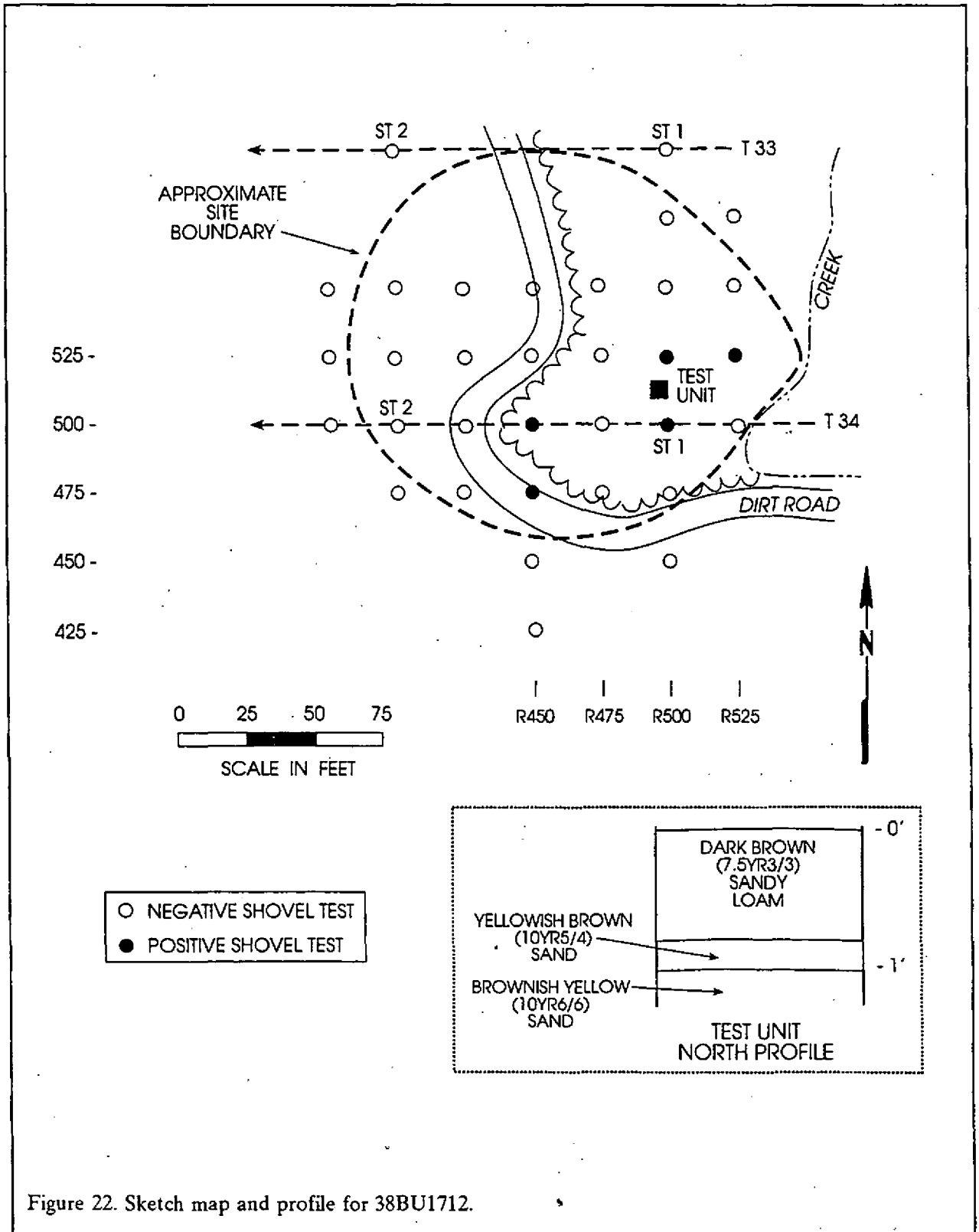


Figure 22. Sketch map and profile for 38BU1712.

intervals covering both the wooded area and the portion of the site originally found in the field to the west. Thirty-one shovel tests were excavated in the immediate site area, with five producing materials (Table 1).

A 2-foot square test unit was placed in the vicinity of three positive shovel tests at the western edge of the site (Figure 22). This unit produced five small sherds and revealed about 0.8 foot of dark brown (7.5YR3/3) sandy loam overlying a yellowish-brown (10YR5/4) sand on top of a brownish-yellow (10YR6/6) sand. This profile is consistent with Wando soils and suggests that even the portion of the site now in hardwoods had been previously cultivated.

The site boundaries, estimated to be 150 feet in diameter, are based on both the original surface scatter and the current site testing. The material is suggestive of a very small campsite, possibly of a single family unit, visiting the slough area and taking advantage of the sandy rise. Material is sparse and the data sets present are limited to pottery, much of which is heavily fragmented from plowing. No shell lenses or zones were encountered and shell, while present on the surface, is sparse. Based on this, we recommend the site as not eligible for inclusion on the National Register. With the concurrence of the State Historic Preservation Office, we do not believe any additional management activities will be necessary at this site.

Table 1.
Artifacts Recovered from Testing at 38BU1712.

	Deptford CM	St. Catherines UID	Small Sherds
475R450	1		
500R450	1		
500R500			2
525R500		1	2
525R525			1
Test Unit 1			5

CM = cord marked, UID = unidentified

38BU1713

This site, also first identified during the reconnaissance study, was thought to be very similar to 38BU1712 — indicating how wrong site assessments can sometimes be during reconnaissance studies.

The site was thought be limited to a small rise of sandy Wando soils about 50 feet in diameter and situated on the field edge, overlooking the slough of Sawmill Creek. Materials recovered from this site during the reconnaissance included one Deptford Plain sherd, one Deptford Fabric Impressed sherd, one Irene Complicated Stamped sherd, and one unidentifiable sherd. The collection seemed to reveal a diversity similar to 38BU1712, reflective of several episodes of short-term use. It seemed reasonable to speculate that these sites were used because of their proximity to the slough and there higher elevations than the surrounding field.

During the intensive survey we found that shell and artifacts were uniformly present from this location northward for nearly 800 feet and extended from the slough or creek westward for a maximum of about 300 feet. The central UTM coordinates for the site were found to be E514080 N3570100. Much of the site is in fallow field, although toward the southern end, the area originally identified in the reconnaissance study includes sparse pines. A dirt road is found around the eastern edge of the site, leading to a trailer and then westward toward Malcomb Johnson Road (Figure 23).

Although the site was overgrown in weeds, reducing surface visibility in most areas to less than 25% (Figure 24), a small collection was made. The materials from the site include two Stallings Plain, one Deptford Plain, one Irene Plain, and one chert flake. In assessing the results of the 100 foot interval survey we noticed that of the approximately 16 shovel tests covering the site area, only one had produced materials. In spite of this our pedestrian survey had identified an area of very dense surface shell (Figures 23 and 25) following a sandy ridge running roughly north-south through the area, parallel to the slough. In addition, we also found what appeared to be a

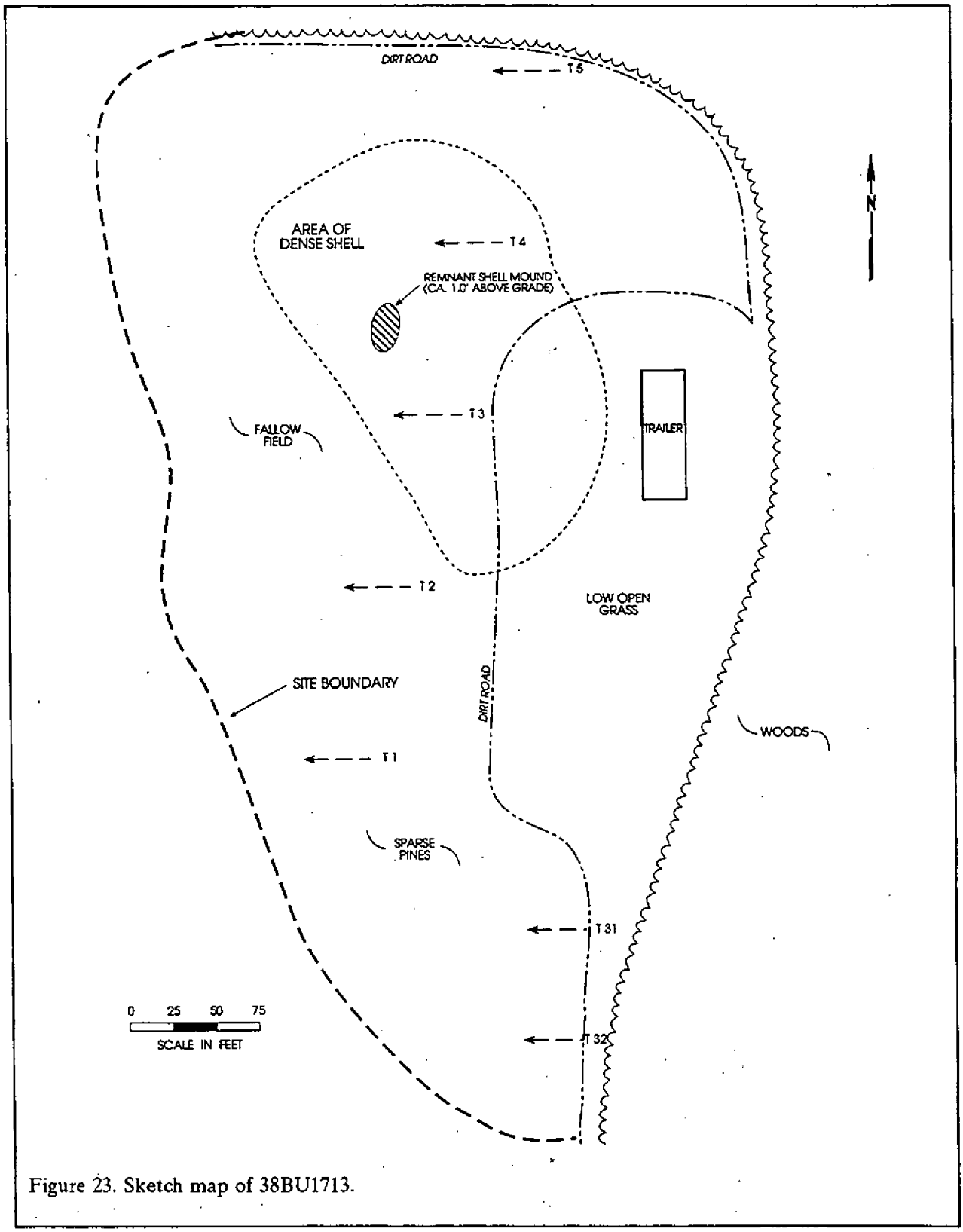


Figure 23. Sketch map of 38BU1713.



Figure 24. Shovel testing 38BU1713. Photograph taken from the site core looking south-southeast.

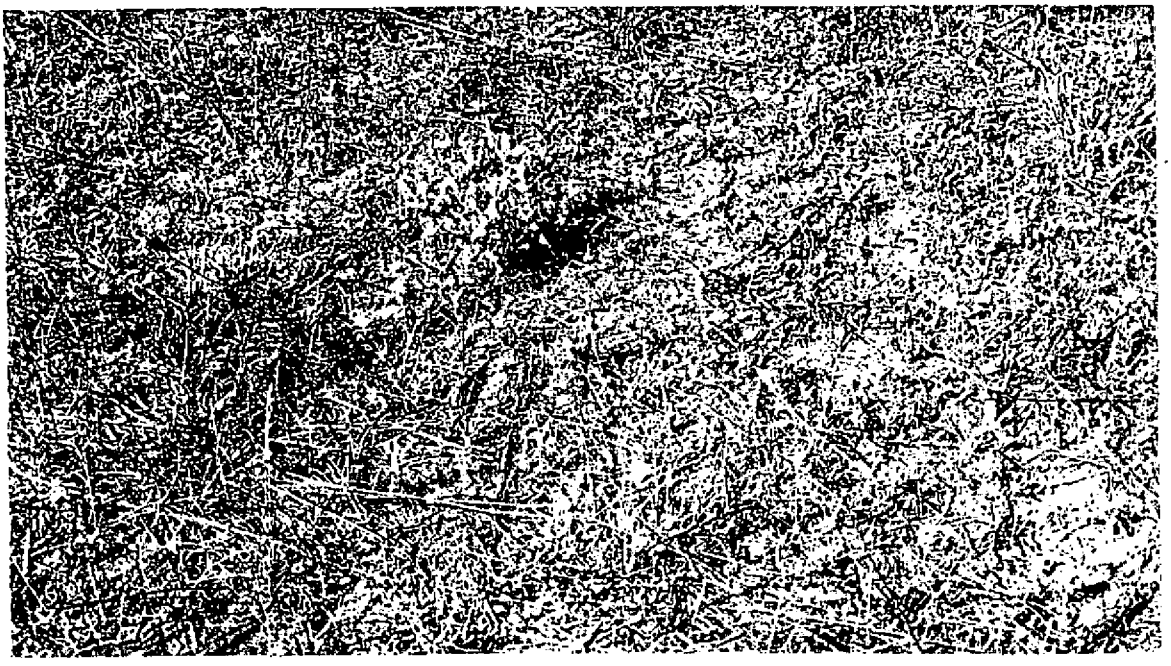


Figure 25. View of shell on surface in the site core.

Table 2.
Artifacts from testing of the northern third of 38BU1713.

	Stallings	Deptford		St. Catherines		Savannah					Worked
	Plain	CM	Plain	CM	Plain	CS	Comp	Plain	Small	Bone	Bone
375R475	1										
400R475	1								2		
425R475							1				
450R500									3		
475R475									1		
475R500		1							2		
500R450				1							
500R500			1								
500R525						1		3	1		
500R600									1		
500R625									1		
525R425									1		
525R475									1		
525R500						1					
525R525									2		
525R550									1		
525R575									1		
550R425									1		
550R475								1			
550R575		1									
600R500									1		
600R575				1							
650R500		1									
675R500		1									
Test Unit 1	23									12	1
Test Unit 2	1									4	
Test Unit 3	8									2	

CM = cord marked, CS = check stamped, Comp = complicated stamped

remnant shell mound, composed of oyster shell, periwinkle, and whelk, within this concentration area. This suggested that more intensive testing of the site was absolutely essential for assessment purposes.

Our first testing focused on the northern third of the site, shown in Figure 26, covering Transects 4 and 5, and extending northward into the woodsline. In this area 77 shovel tests were excavated, with 23 (30%) producing artifacts and an additional 11 (14%) shell but no artifacts. The materials recovered from this testing are tabulated in Table 2.

The testing not only revealed the diversity, and density, of the site area, but also suggested that shell and artifacts may be mutually exclusive. That is, where shell is dense, perhaps representing remnant middens, there are relatively few artifacts. And, where artifact density is high, perhaps representing domestic areas, shell middens were absent. Clearly additional research is necessary to confirm this suspicion.

Three 2-foot units were excavated, primarily on the southern edge of this testing, in the core of the site. Test Units 1 and 2 revealed a mixed plowzone with dense shell, overlying yellowish-brown (10YR5/6) subsoil. Test Unit 3, however, was excavated in an area of remnant midden. This unit revealed midden to the depth of

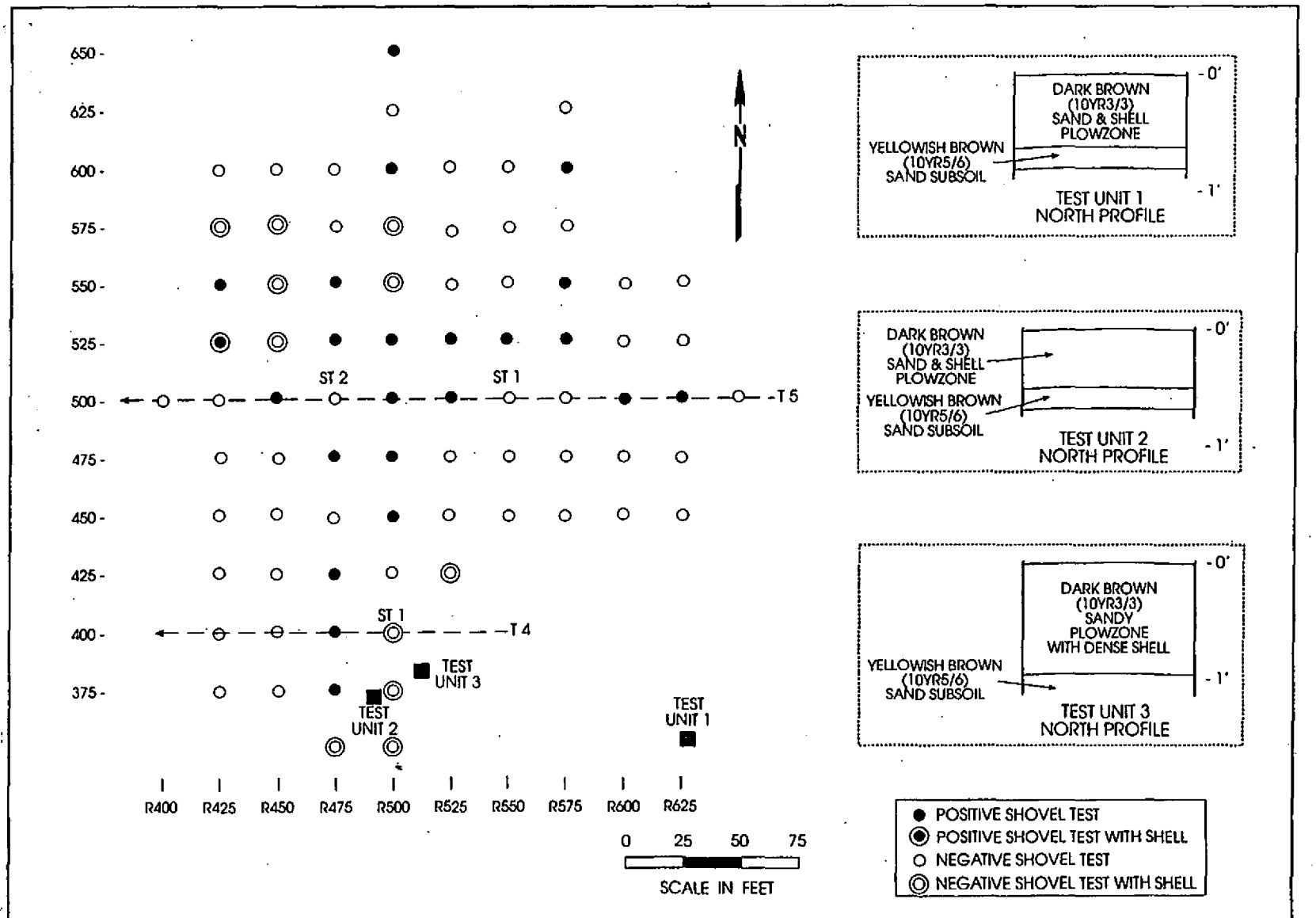


Figure 26. Testing locations and profiles of units in the northern third of 38BU1713.

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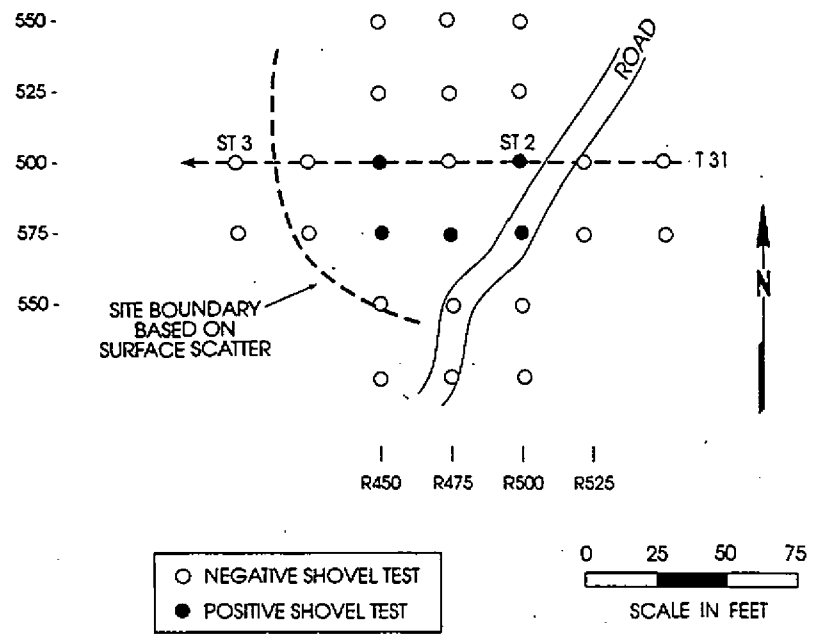


Figure 27. Sketch map of the south edge of 38BU1713.

about 1.0 foot overlying the same sandy subsoil (Figure 26). In addition, these three units are interesting since only Stallings pottery was recovered. Coupled with the pottery was a fragment of worked antler from one unit and each unit produced a moderate quantity of animal bone — indicating that the shell density is sufficient to preserve faunal remains, in spite of plowing.

The south edge of the site was also explored, although in considerably less detail. Shovel Test 2 on Transect 31 (identified as 500R500 in the southern edge testing program) yielded one Stallings Plain sherd (Figure 27). We chose to test off this positive, opening a total of 24 additional shovel tests. Four of these (17%) were positive (see Table 3).

This site exhibits a wide range of data sets. We have identified an area of what appears to be intact midden, as well as site core which exhibits very dense (although fragmented) shell. While not conclusive, this strongly suggests that features will be found in the site core. Based on comparison with other sites these may include shellfish steaming pits, structures, and possibly burials. We have found a range of Late Archaic to Mississippian wares present in the tests, although it appears that the site core is dominated by the Late Archaic Stallings pottery, which dates to as early as about 2500 B.C. The test units have also revealed that animal bone is well preserved in the site core, in spite of plowing. It appears that the shell has not only neutralized the acidic soils, but has also helped minimize fragmentation. Finally, the testing has also produced one piece of worked bone — a probable antler projectile point, a tool common in the Late Archaic and Early Woodland Stallings and Thom's Creek sites.

The range of questions appropriate for Stallings phase sites is quite substantial, primarily because so few have been professionally examined.

Table 3.
Artifacts Recovered from Shovel Testing at the Southern Edge of 38BU1713.

	Stallings Plain	Deptford CM	Irene CS	Irene Small
475R450			1	
475R475	2	1		
475R500		1		
500R450				1
500R500	1			

CM = cord marked, CS = complicated stamped

Chief among the research interests include efforts to explore the subsistence base of the Stallings people living at the site. Explaining the research at Mims Point in Edgefield County on the Savannah River, Sassaman notes that, "little is known about the subsistence patterns of Late Archaic populations in the Middle Savannah River Valley" (Sassaman 1993:9). Little more is known about the Stallings subsistence pattern along the coast, especially since much of the work has either not been written up (such as at Spanish Mount on Edisto Island) or has not produced large faunal collections (for example, although Espenshade et al. [1994] examined a Stallings midden on Spring Island, no faunal material was collected). Consequently, research at 38BU1713 has the potential to explore subsistence research using unbiased samples collected through both flotation and waterscreening.

In addition, Sassaman (1993:8) makes the important observation that large Stallings sites typically represent a "complex amalgam of long-term, repeated occupations" while small sites — such as 38BU1713 — have the potential to help refine typological and chronological issues. Fundamental to this is the collection of pottery in discrete features with associated charred material for radiometric dating. Although such features are not proven to exist at 38BU1713, the dense, apparently intact midden suggests that they will be found. In addition, our own recent investigation of Thom's Creek wares at Secessionville (38CH1456) suggests that typological issues must also be tackled using a broad spectrum of petrographic analyses. Such work has never be undertaken in any methodic way at a Stallings site. The presence of seemingly large quantities of Stallings wares suggests that this approach is practical at 38BU1713.

Sassaman also outlines a range of other research issues. Although his "settlement organization" topics focus on the probability of non-shell middens along the Savannah being precursors to the large shell middens, it seems that his observations concerning the function of the various sites is reasonable and supported by a broad range of research. Exploration of 38BU1713 is expected to help address similar questions for the coastal region. Careful examination of the midden should be incorporated with the opening of aerially broad expanses of the site. This may reveal distinctions between domestic areas and trash areas which have been suggested by the shovel testing data.

It is clear from even this abbreviated discussion of research potential that 38BU1713 has the ability to address a broad range of issues important to our understanding of Stallings phase sites. Consequently, we recommend 38BU1713 as eligible for inclusion on the National Register of Historic Places under Criterion D. The site should either be avoided, with preservation in place, or should be subjected to detailed data recovery excavations.

38BU1714

This site was initially encountered during the reconnaissance study and was thought to represent a fairly large site situated at the north end of the field in the central third of the survey tract. At the time of the reconnaissance study this field was fairly open, exhibiting surface visibility from 25 to 50%, with the higher visibility associated with a wildlife food plot used by hunters. The central UTM coordinates for the site are E514080 N3569500 and the site was estimated to measure about 350 feet north-south and 150 feet east-west.

The topography in the field is fairly level, although careful examination reveals that the site is situated on a low sand ridge, at an elevation of about 15 feet AMSL, parallel to an inland slough swamp of Sawmill Creek to the east. The soils are well drained Wando sands.

Both prehistoric and historic materials are associated with this site during the initial study. Prehistoric materials included two Deptford Plain sherds, seven small sherds, and a chert flake. Historic materials included four undecorated whitewares, one undecorated pearlware, one green edged pearlware, one fragment of aqua glass, and one slate fragment. Also present in the field, but not collected were a number of brick and mortar

fragments.

Based on the location, the linear orientation, and the diversity of materials, this site was suggested to represent the Woodward settlement shown on several historic maps, including the 1877 map for the South Carolina Land and Improvement Company (Figure 11). It may also be the earlier Pope settlement.

The current survey found the site area essentially as reported in the earlier reconnaissance investigation. Materials were still present on the surface, defining boundaries roughly corresponding to the natural topography. Materials declined toward the eastern slough, toward the toe of the ridge to the west, and toward the low woods to the north of the site. The southern end of the field contained second growth pine and while materials were found in this area they were very sparse.

Surface materials in the northern third of the site included two undecorated pearlwares, one blue hand painted pearlware, two undecorated whitewares, two blue transfer printed whitewares, two alkaline glazed stonewares, one fragment of blue glass, one fragment of clear glass, one Thom's Creek Plain sherd, and three small prehistoric sherds. In contrast, the central third of the field produced two undecorated whitewares, one kaolin pipe stem, four St. Catherines Cord Marked sherds, one St. Catherines sherd with an unidentifiable surface treatment, two Deptford Cord Marked sherds, three Deptford Plain sherds, and one unidentified prehistoric sherd. Although the boundary was indistinct, no materials were collected from the surface of the southern end of the field.

Only one of the initial 100-foot interval shovel tests through this area produced artifacts. Shovel Test 2 from Transect 68 yielded one Thom's Creek Reed Drag and Jab sherd. In an effort to improve the collection from this site, and attempt to identify subsurface historic materials associated with the antebellum occupation of the tract, we conducted 50-foot shovel tests on north-south lines through the entire field (Figure 28). Of the 112 shovel tests only five produced materials and all of these remains were prehistoric. Test 1000R200 produced one chert Caraway point; the test at 1200R200 yielded two small sherds; 1200R300 produced one Deptford UID sherd and one small prehistoric sherd; 1250R250 contained one St. Catherines Cord Marked sherd; and the shovel test at 1250R300 produced a small sherd.

A two-foot square unit was excavated at the north end of the site, in the vicinity of the densest surface material. A single porcelain ceramic was recovered from this unit. It revealed about 0.9 foot of brown (10YR5/3) sand overlying a brownish-yellow (10YR6/6) sand subsoil with distinct plowscars at the base of the unit.

Table 4.
Mean Ceramic Date for 38BU1714.

	Date Range	Mean Date (xi)	(fi)	fi x xi
Pearlware, blue hand painted	1780-1820	1800	1	1800
edged	1780-1830	1805	1	1805
undecorated	1780-1830	1805	3	5415
Whiteware, blue trans printed	1831-1865	1848	2	3696
undecorated	1813-1900	1860	6	11169
			13	23,876

23,876 ÷ 13 ≈ 1836.6

This site has produced a small, but interesting, historic assemblage. Perhaps most interesting is that the collection does include some early nineteenth century materials and the mean ceramic date of the collection (reconnaissance and intensive surveys combined) is 1836.6 (Table 4). This is without question the earliest historic site identified on the study tract. The date, and the quality of materials present, suggest a relatively high status occupation — perhaps an overseer or even an owner of modest means. As such there are a variety of questions appropriate to such a site (see, for example, Adams et al. 1995 and Trinkley and Hacker 1996).

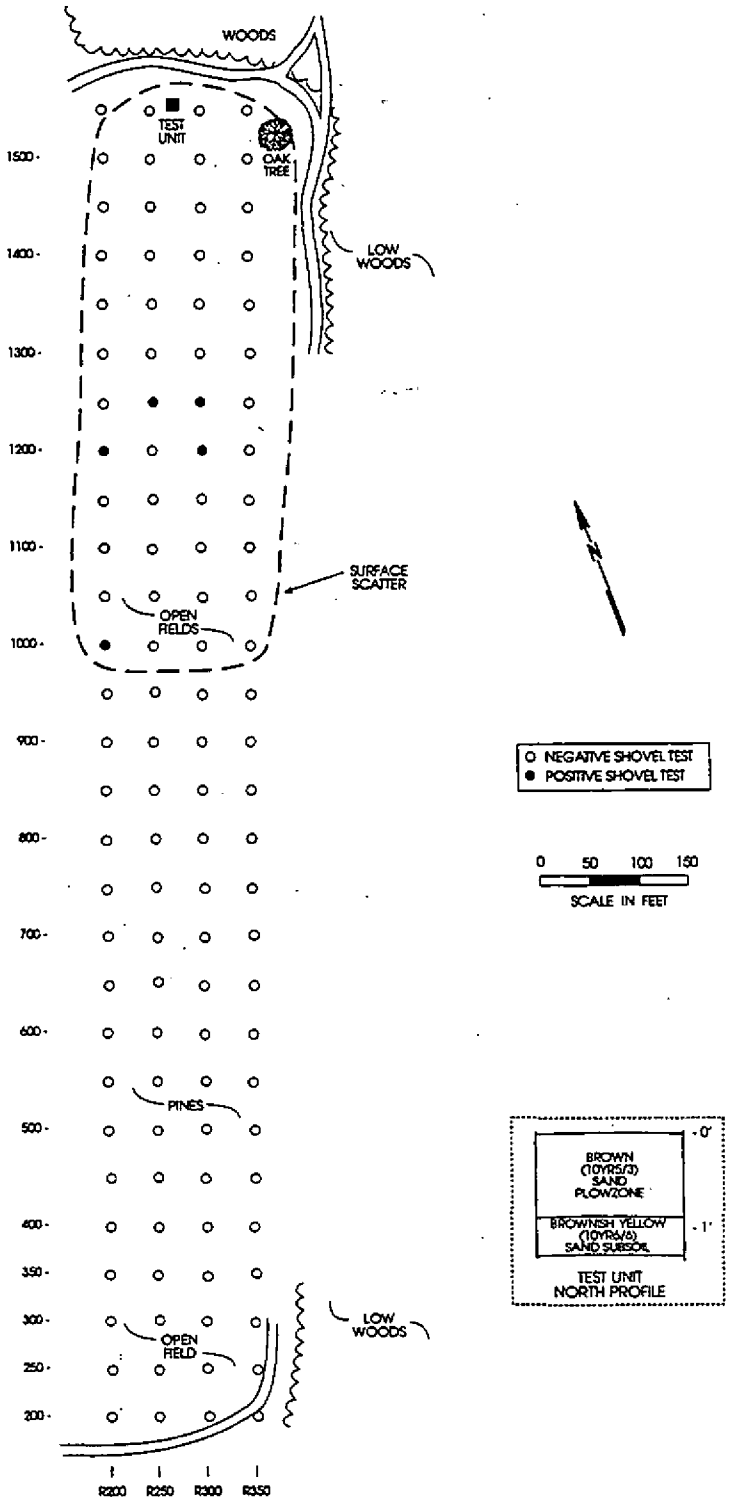


Figure 28. Sketch map and profile for 38BU1714.

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Unfortunately, the data sets from the site are very limited. The surface collection (like most) is dominated by kitchen artifacts. The shovel tests not only fail to round out this assemblage — they fail to even produce any historic materials. Even the close interval testing fails to identify any material perhaps from this plantation occupation. It appears that the site has suffered from extraordinary plowing. Materials associated with the site appear to have been dispersed over a elongated area (collections during the current study cover an area about 150 feet east-west, but about 500 feet north-south). There seems to be little evidence that architectural remains, such as foundations or even activity areas have survived.

As a result, the site is recommended as not eligible for inclusion on the National Register of Historic Places. This is unfortunate, since the remains in this field likely represent the main complex at Crescent Plantation from the antebellum period. Regardless, pending the concurrence of the State Historic Preservation Officer no additional management activities for the site are recommended.

38BU1715

This site, initially identified during the reconnaissance study, is situated immediately west of the entrance road to the plantation in a fallow field which has been plowed within the last season. The central UTM coordinates are E513880 N3569300. The topography in this area is very level, with an elevation of about 20 feet AMSL and a slight slope westward toward a slough of Sawmill Creek. The soils associated with this site as not as well drained as those found with the other sites on the tract and are identified as Seewee sandy loams. Materials were found scattered over an area measuring about 200 feet in diameter during our initial study.

During the reconnaissance, artifacts were fairly dense at this site, in spite of the generally low surface visibility (under 25%). Materials recovered include nine undecorated whitewares, two polychrome stamped whitewares, one white porcelain, one yellowware, one fragment of brown glass, two fragments of blue glass, eight pieces of aqua glass, two fragments of milk glass, four manganese glass fragments, three pieces of clear bottle glass, and two window glass fragments. Also present on this site were abundant fragments of bricks and mortar.

By the time the intensive survey was conducted this field had grown up even more, but it was still possible to make another surface collection. Materials collected included eight undecorated whitewares, one annular whiteware, one yellowware, one white porcelain ceramic, one Bristol slipped stoneware fragment, one piece of brown glass, one fragment of black glass, one aqua glass fragment, one manganese glass, a fragment of a kaolin pipe stem, and one iron cotter pin.

This surface collection was used to define the boundaries of the site, which appeared to closely resemble those obtained during the previous investigation. The site was then cruciformed, with shovel tests being excavated at 25-foot intervals north-south and east-west (Figure 29). This began to reveal that the site was perhaps larger than indicated by the surface scatter. Eventually 42 shovel tests were excavated. Six of these contained artifacts, while an additional nine contained only brick fragments. The site boundary was defined on the basis of shovel tests with artifacts and those tests with only brick were

Table 5.
Artifacts Recovered from Shovel Testing at 38BU1715.

			Container Glass				
	WW	SW	br	cl	mg	aq	Nail
300R125	1		1				
325R125		1		1			
350R125	1		1		1		
375R125							1
375R150						1	
375R200							2

WW = whiteware, SW = stoneware, br = brown, cl = clear, mg = manganese, aq = aqua

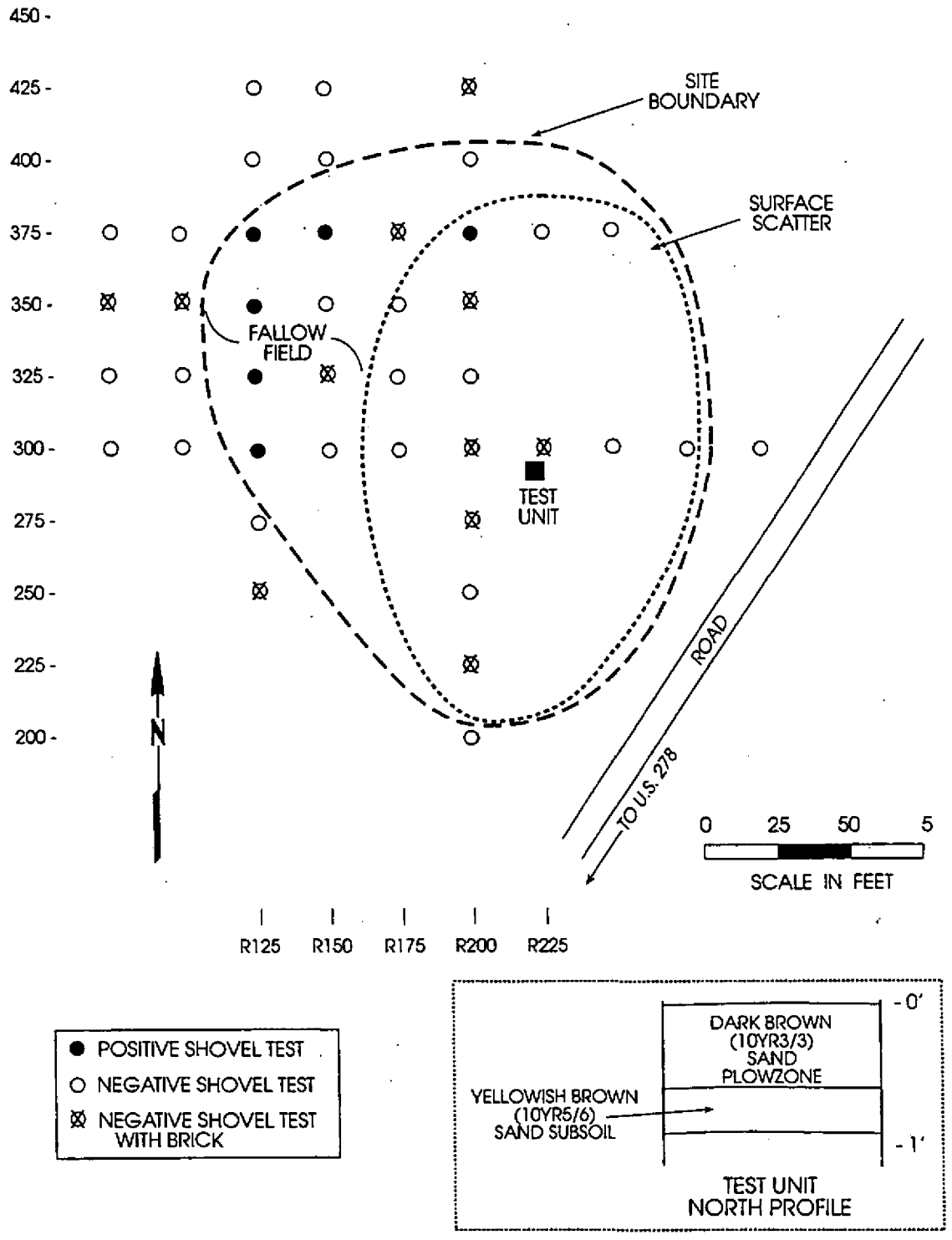


Figure 29. Sketch map and profile for 38BU1715.

excluded from the site boundary. We anticipated that brick, through mechanisms such as salvage and also because they were larger, might travel greater distances from their original locations than smaller artifacts. Consequently, this work suggested that the site measures about 200 feet north-south by about 175 feet east-west.

A 2-foot square test unit was excavated in the center of the site, revealing a rather thin plowzone of dark brown (10YR3/3) sand overlying a yellowish-brown (10YR5/6) sand subsoil. The thin plowzone may be the result of only limited plowing in this area. Less likely, it may suggest that the upper surface was stripped off with the building debris. Materials recovered include one undecorated whiteware ceramic, one fragment of manganese glass, two fragments of aqua glass, and six nail fragments. The quantity of architectural remains in the unit suggest that the unit was perhaps located in the immediate house area.

The materials recovered in the shovel tests are itemized in Table 5. These items, however, are consistent with those found in the previous shovel tests. Although this site may represent a portion of the Woodward settlement, the artifacts are more suggestive of an early twentieth century settlement. Consequently, we believe that this site likely is the single structure shown on the 1937 highway map (Figure 18), but not shown on the 1920 Okatie topographic map (Figure 17). The property owner reports that this was a relative's house which burned, although additional details were not collected during the reconnaissance level study.

This site may have the potential to address a broad range of questions regarding early twentieth settlement in the project area. There is relatively little known about tenancy in the sea islands, and even less about owners' residences. Nevertheless, the current level of survey could not fully document the condition of this site. For example, it is unclear if architectural remains are present or if additional buildings may be associated with the main house. It is also unclear if the structure was intentionally removed after burning. In addition, we have not pursued the potential for oral history information to supplement archaeological investigations.

Consequently, we recommend this site as potentially eligible for inclusion on the National Register, recommending that additional testing, as well as oral history research take place to allow the site to be more fully assessed.

38BU1720

This site was identified during the intensive survey and is situated in the northeastern edge of the northern fallow field overlooking Sawmill Creek to the east. The central UTM coordinates are E513980 N3570700 and the site is at an elevation of about 20 feet AMSL. The soils in the site area are Wando sands and the surface visibility at the time of the intensive survey was good, with about 70% visibility.

The site was first encountered in a pedestrian overview of the area. Materials recovered include nine undecorated whitewares, one white porcelain, one stoneware fragment, one fragment of clear glass, one milk glass fragment, and three pieces of manganese glass. These items were spread over an area measuring about 170 feet northeast-southwest by 80 feet northwest-southeast. Curiously, the two transects crossing the site (numbers 21 and 22) failed to identify any materials (Figure 30).

Subsequently, 37 shovel tests were excavated on a grid pattern at 25-foot intervals. Six of these tests produced small quantities of primarily historic remains, although one Savannah Plain sherd was recovered from 275R250. The historic materials recovered from the site are identified in Table 6.

In addition, a 2-foot square test unit was excavated in the southern portion of the site, near several of the positive shovel tests. This unit yielded one undecorated whiteware, one blue transfer printed whiteware, three fragments of manganese glass, one unidentified stamped brass object, and four small prehistoric sherds. The unit revealed a plowzone about 0.8 foot in depth with distinct plowscars overlying the brownish-yellow (10YR6/8) sandy subsoil.

It is likely, based on the assemblage and

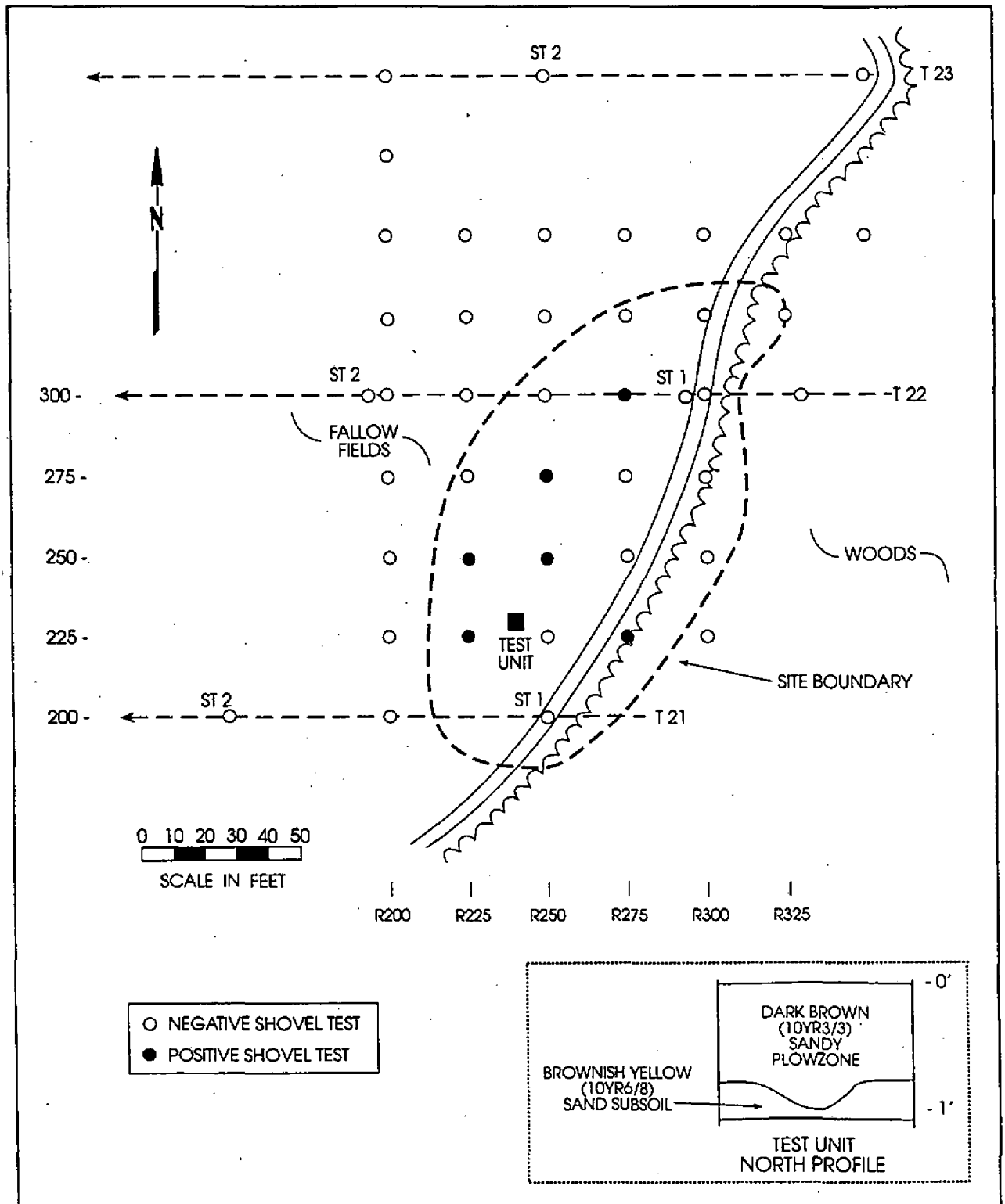


Figure 30. Sketch map and profile for 38BU1720.

location of this site, that it represents a tenant settlement. Such sites have the potential to contribute information regarding late nineteenth and early twentieth century lifeways that is available from no other sources. The data sets at 38BU1720, however, are relatively sparse. We did not, for example, identify concentrations of brick rubble which might have been associated with remnant foundations. Nor did we encounter intact structural remains or even trash piles in the woods to the east of the site. The presence of a relatively deep plowzone and distinct plowscars suggests that the site may have been damaged by cultivation, if not by its physical removal from the landscape.

Table 6.
Historic Artifacts Recovered from Shovel Testing at 38BU1720.

	WW	Porc	mg	PS	small sherd
225R225			1		
225R275	2				
250R225			2		1
250R250				1	
300R275		1			

WW = whiteware, Porc = porcelain, mg = manganese glass, PS = pipe stem

Consequently, we recommend this site as not eligible for inclusion on the National Register. Pending the concurrence of the State Historic Preservation Office no additional management activities are necessary.

38BU1721

This site was encountered during the pedestrian survey. Although it failed to be found in the shovel testing, surface materials were observed as the transects were being walked. The site is situated at the southern end of the northwestern fallow field and is found on the west edge of a sand ridge overlooking a marsh or swamp slough about 800 feet to the west. Vegetation on the site, which is bisected by a dirt road, consists of very sparse grass. The fields, while currently fallow, appear to have been heavily plowed in the past, although the bulk of the materials were found in or adjacent to the dirt road. The central UTM coordinates for the site are E513760 N3570500.

Materials found on the surface include one undecorated whiteware ceramic, three fragments of clear glass, five small prehistoric sherds, two

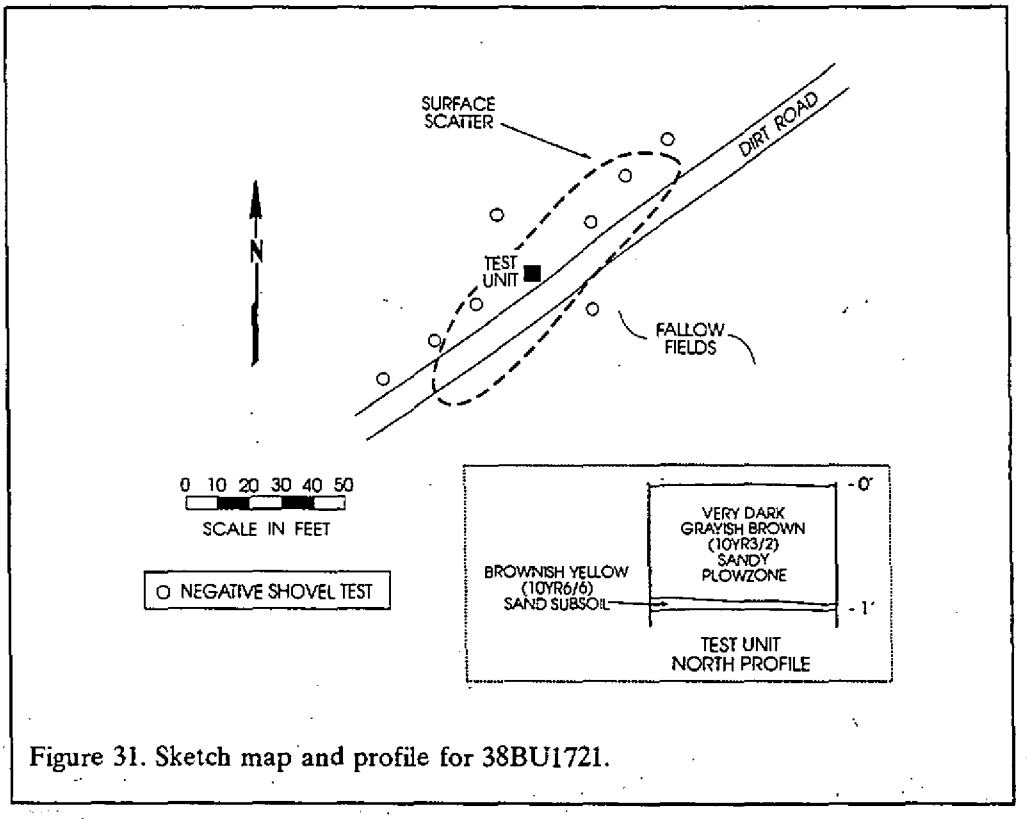


Figure 31. Sketch map and profile for 38BU1721.

Deptford Check Stamped sherds, one unidentifiable prehistoric sherd, three chert flakes, two fragments of quartz shatter, one quartz core, and one quartz hammerstone. These materials were found spread over an area measuring about 100 feet northeast-southwest by 20 or 30 feet northwest-southeast (Figure 31).

In an effort to further explore this site, it was cruciformed by eight shovel tests at 25-foot intervals. All of these tests were negative. In addition, a 2-foot unit in the center of the site was also negative. This test reveals about 0.95 foot of very dark grayish-brown (10YR3/2) sandy loam plowzone overlying a brownish yellow (10YR6/6) sand subsoil.

This site is primarily of interest because of the lithic materials . While these lithics are a rare data set, especially for the project area, there are very few additional materials. Few sherds were recovered, there is no evidence of faunal or floral remains, and the shovel tests do not indicate any buried remains. The site is very small, possibly elongated by the road. It appears that the site has been completely destroyed by either the bisecting road or cultivation. In any event, we recommend the site as not eligible for inclusion on the National Register.

area is about 18 feet AMSL.

The site was first encountered in Shovel Test 5 on Transect 26 (later designated 200R200 for testing purposes), with the recovery of a Deptford Check Stamped sherd. In spite of good surface visibility (in excess of 50%) a survey inspection of the site area failed to reveal any additional materials. A very light scatter of shell

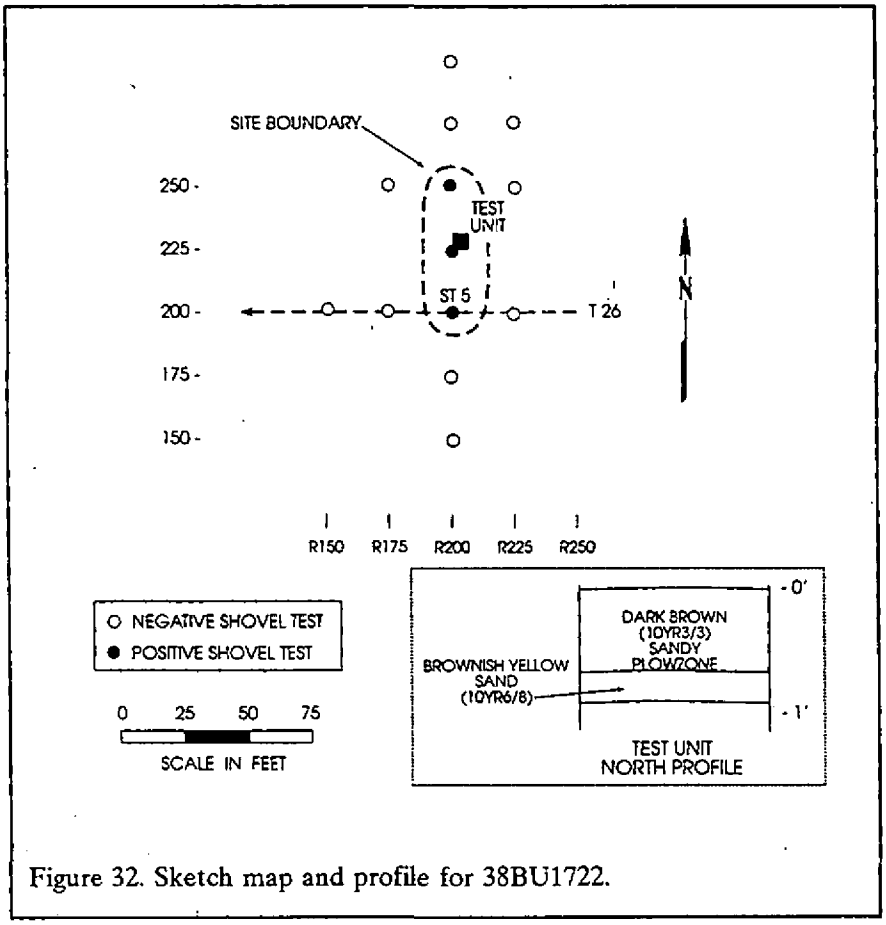


Figure 32. Sketch map and profile for 38BU1722.

38BU1722

Site 38BU1722 is situated at the north edge of the survey tract in the northwestern fallow field. The area is best described as an interior plain with no close water or marsh source (tributaries of Sawmill Creek are about 1,000 feet to the east and west of the site). The central UTM coordinates are E513940 N3570800 and the elevation in the site

was noted, but it appeared too spotty to assist in estimating the site size.

In order to better establish the site boundaries, as well as to explore site density and diversity, the are was cruciformed with shovel tests at 25-foot intervals (Figure 32). Two additional tests — both to the north of the initial test — were positive. Shovel tests 225R200 and 250R200 both

produced single small sherds. Tests to the east, west, and south failed to reveal any additional materials. A 2-foot unit was excavated in the middle of the identified scatter, but failed to produce any additional materials. The unit did reveal a dark brown (10YR3/3) sandy loam plowzone overlying a brownish-yellow (10YR6/8) sand subsoil. Although the soils in this area are classified as Seewee, this unit is more representative of Wando soils, suggesting that the site may occupy a small area of better drained soil.

The data sets from this site are very sparse, consisting of only pottery. In addition, the quantity of material is very limited and there is no indication of intact midden deposits. In fact, it appears that the site may have consisted of a single, small shell midden which was dispersed by plowing. The site does not appear able to address the broad range of questions appropriate for Early Woodland sites in the Beaufort locality. Consequently, we recommend this site as not eligible for inclusion on the National Register. With the concurrence of the State Historic Preservation Office no additional management activities are necessary at this site.

38BU1723

Site 38BU1723 was encountered during a pedestrian survey of the low, wet woods in the central southern portion of the survey tract. The site is situated about 50 feet north of an old dirt road which runs from the cultivated fields at the southern edge of Crescent Plantation eastward, into the very low bottoms. Portions of this road were flooded during the survey, evidence of the very poor drainage in this area. The central UTM coordinates for the site are E513940 N3570800. The site is found on a terrace overlooking a creek or slough draining northward into Sawmill Creek. The elevation is about 10 feet AMSL and the vegetation is dominated by hardwoods with a very sparse understory of palmettos (Figure 33). Surface visibility was near zero because of the dense leaf litter.

Initially the survey encountered two holes. One measured about 6.5 feet deep and had its spoil dumped primarily along the southern and western margins. The other hole was more oval and was only 4.5 feet deep. There was noticeably less spoil associated with this second depression, although some mounding was present. In addition, a row of four crepe myrtles were found to the west of the depressions, running perpendicular to the dirt road (Figure 34).

A series of four transects (numbered from 104 to 107) were laid out running north-south through the depressions at 25-foot intervals. Shovel tests were excavated along these transects at 25-foot intervals. Shovel Test 2 on Transect 106 was positive, yielding a single stoneware ceramic. None of the other tests produced material. All of the shovel tests revealed fine gray sands characteristic of highly reduced soils and typical of such wet conditions. The soils in this area are classified as belonging to the Seewee series.

Because the shovel tests had failed to identify any site core, no test unit was excavated. In addition, the site dimensions of about 100 feet north-south and 150 feet east-west are based on encompassing the various identified features.

This is a very interesting site. Although only one traditional artifact (the stoneware fragment) was recovered, there are landscape alterations — a road, the plantings, and the two depressions — which suggest that some activity took place at this location. We considered the possibility that the depressions represent stills, but there were no glass container fragments, no metal piping, or other debris typical of such sites. There was no evidence of wood charcoal or burning. Excavation in the base of both depressions produced only clean sand below the recent humus deposits. We also considered that the depressions might have been for watering cattle, but at least the larger of the two is far too steep and neither appears to have penetrated the water table (although both were wet).

In sum, we have been unable to account for the features and activity which took place at this site. While we dislike leaving the site unexplained, the data sets are very limited and it seems unlikely that the site can address significant



Figure 33. View of 38BU1723 from the dirt road looking north.

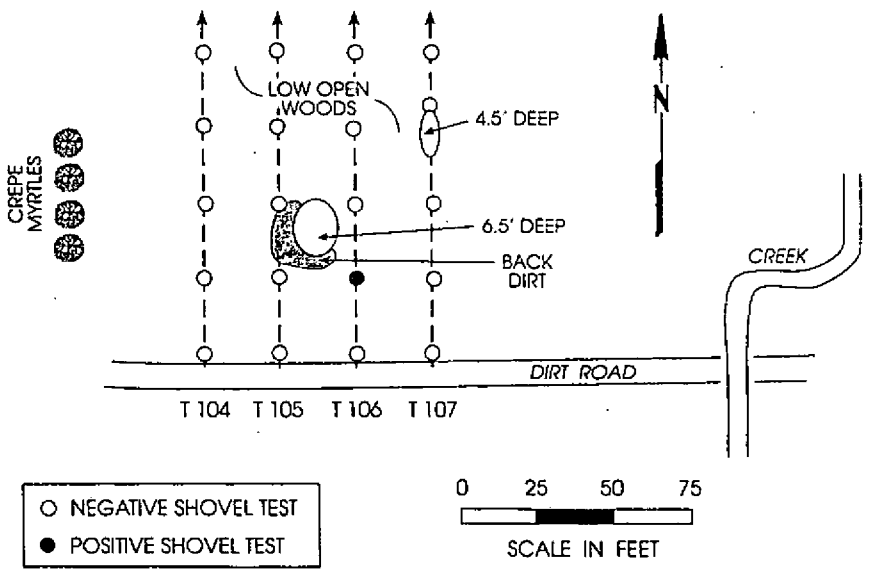


Figure 34. Sketch map of 38BU1723.

research questions. Consequently, we recommend this site as not eligible for inclusion on the National Register. With the concurrence of the State Historic Preservation Officer, no additional management activities at the site should be necessary.

38BU1724

This site was encountered during 100-foot shovel testing on the southwestern edge of the survey tract, immediately north of a new housing development. The central UTM coordinates are E514900 N3568820 and the site is in an old field, now in planted pines. The topography gradually slopes to the west, toward a drainage which is in dense hardwoods and formed the western boundary of our shovel testing efforts in this portion of the survey tract.

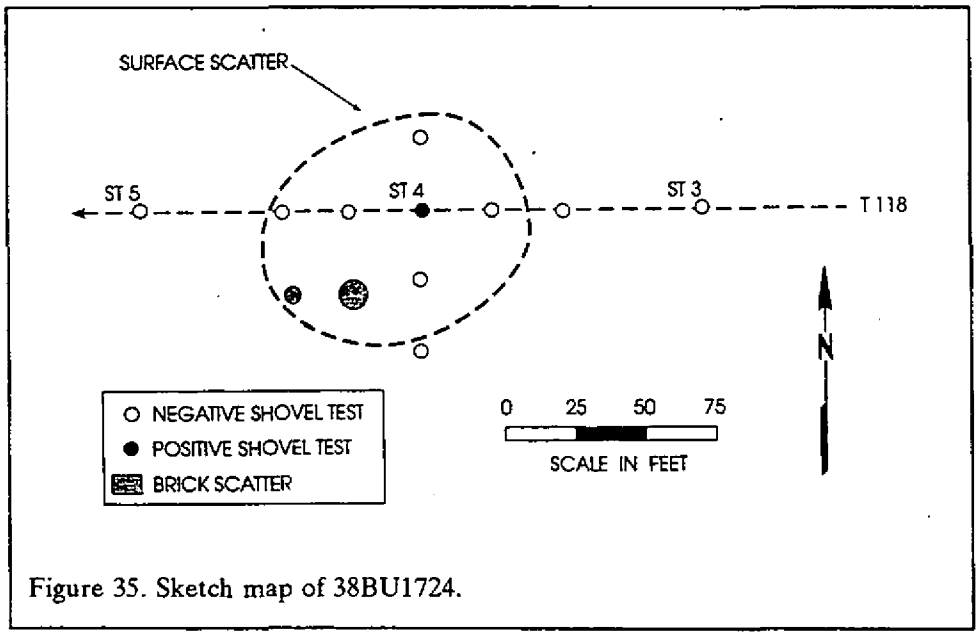


Figure 35. Sketch map of 38BU1724.

In the site area the elevation was about 10 feet AMSL and the soils are classified as Ridgeland sands. Surface visibility is limited by pine needles, but the understory is very light.

Shovel Test 4 on Transect 118 produced what appears to be a modern example of a tortoiseshell or clouded ware ceramic. The site was cruciformed off this shovel test, with all of the other tests being negative (Figure 35). The pedestrian inspection of the site area revealed two scatters of modern brick, some of which were still articulated with cement mortar, although the mass was displaced. Also identified were several sheets of roofing tin. The inspection also produced another example of the modern tortoiseshell or clouded ware, as well as an undecorated whiteware. Also present, but not collected, were several unidentifiable iron masses, perhaps representing very corroded iron stove fragments.

The remains from this site were clustered in an area measuring about 100 feet north-south by 200 feet east-west. This area was more heavily grown up than the surrounding woods and included several hardwood trees. When ca. 1970 aerial photographs of the area are examined, this field is clearly shown being cultivated and there is a small hardwood grove in the vicinity of the site. The site probably represents a tenant house in the corner of the field. When the land went out of cultivation the house was apparently removed. Based on the amount of disturbance observed in the testing, and the near absence of materials, it is likely that it was bulldozed. This demolition technique, observed at other coastal plain sites, has been found to significantly reduce the artifact density of sites.

Based on the limited data sets and the amount of damage to the site, we are recommending 38BU1724 as not eligible for inclusion on the National Register. With the concurrence of the State Historic Preservation Office no additional management activities will be required.

CONCLUSIONS

Introduction

As a result of the intensive survey of the approximately 650 acre Crescent Plantation southeast of Rose Hill and north of the town of Bluffton in Beaufort County, ten archaeological sites were identified and assessed. Of these, eight are recommended as not eligible for inclusion on the National Register of Historic Places.

One site, 38BU1713, is recommended as eligible for inclusion on the National Register under Criterion D, that it has yielded, or may be likely to yield, information important in prehistory or history. This site includes a range of prehistoric components, dating from about 2200 B.C. to as late as perhaps A.D. 1400. Of special interest, however, are intact middens associated with Stallings phase materials.

This site is found in a fallow agricultural field and on a residential lot. Portions of the site have received fairly intensive shovel testing, as well as the excavations of several 2-foot units. These tests have documented a wide range of data sets and have also demonstrated that the site possesses very high integrity.

It seems unlikely that the site, given its size, can be avoided by construction activities. One approach suggested by Centex Homes is "banking" the site, preserving it under a gold course. This approach to site preservation is not well documented in the archaeological literature. The single best authority concerning site protection methods, *The Archaeological Sites Protection and Preservation Notebook*, published by the Environmental Impact Research Program of the Army Corps of Engineers, offers ambiguous and often very limited, even contradictory, conclusions regarding the effectiveness of this approach.

For example, the document, "Experiments on the Effects of Site Burial on Archaeological Materials," found only limited damage in one study setting, and a variety of recommendations are offered. These include:

- sites proposed for burial should be subjected to sufficient excavation to document the site prior to burial;
- a permeable geotextile fabric should be placed over the site prior to burial and this should be followed by 1 to 3 feet of uncompacted fine-grained soil, i.e. DG, followed by normal fill;
- fill should minimize chemical contamination of the site;
- fill placement should avoid damage to the surface or near-

Table 7.
Archaeological Sites Identified in the Project Tract

Site Number	Components	Site Size (ft.)	Eligibility
38CH1711	Prehistoric and Historic	75x125	NE
38CH1712	Prehistoric camp	125x175	NE
38CH1713	Prehistoric middens	800x300	E
38CH1714	Historic plantation	500x150	NE
38CH1715	Historic - manager's house	200x175	PE
38CH1720	Historic - tenant house	170x80	NE
38CH1721	Prehistoric and Historic	100x20	NE
38CH1722	Prehistoric scatter	60x20	NE
38CH1723	Historic	100x150	NE
38CH1724	Historic - tenant house	100x200	NE

NE = not eligible for inclusion on the National Register
PE = potentially eligible for inclusion on the National Register
E = eligible for inclusion on the National Register

surface of the site, which requires avoidance of site deposits by construction traffic:

- a plan should be developed to allow later access to the site, if necessary;
- the location of the site must be formally delineated so that it can be relocated as necessary; and
- the burial plan should evaluate the affect of the water table and any associated changes on the site.

In contrast to this approach, "Site Burial as a Means of Preserving Archaeological Sites," takes a more conservative approach, noting that site burial is likely to have detrimental impact on a variety of archaeological materials, including faunal, floral, and shellfish remains — all of which are significant components of 38BU1713. In particular, the article warns of a number of potential problems, including a more acid environment, compression caused by increased soil weight, wet-dry conditions, and increased levels of microorganisms.

In other words, there seems to be little available information on the appropriateness of this particular approach. Certainly the precautions recommended by "Experiments on the Effects of Site Burial on Archaeological Materials" seem minimally appropriate. To these we recommend careful review of the comments offered by Trinkley (1994:79-83) on site burial at Charleston National Golf Course.

The other site, 38BU1715, is recommended as potentially eligible for inclusion under Criterion D, that it has yielded, or may be likely to yield, information important in prehistory or history. The potentially eligible site has been evaluated as possibly capable of addressing significant research questions regarding late nineteenth and early twentieth century ownership in the Lower Coastal Plain of South Carolina.

The site is found in a fallow cultivated field and a grab collection, coupled with limited shovel testing, yielded a fairly large number of artifacts, with many more present but not collected. It is possible, based on the current documentary evidence, that the site is the home of a property owner or manager. The artifacts appear to be somewhat higher status and certainly the quantity of materials present seems significantly higher at this site than others (especially so-called tenant sites) in the immediate area.

If the site can be avoided by construction activities then no additional work is necessary to complete the evaluation process. The sites can be "green spaced" and protected through a historic easement.

If this is not possible for the site then it will be necessary to collect additional information in order to determine whether the site is eligible for inclusion on the National Register.

We recommended that the site be plowed, allowed to be rained on, and then subjected to an intensive, close interval, controlled collection, coupled with both formal excavations and collection of oral history. This approach has been used with very good success at other sites and is likely to produce the required information in a cost-effective manner.

It may be that this level of effort will be adequate to address the research potential of the tested site. If so, then the site will be evaluated as not eligible for inclusion on the National Register. Alternatively, it may be that the site will be found eligible for the National Register, indicating that it does contain additional significant information. Under these circumstances, it is still possible to green space the site, simply avoiding it. Or, it will likely be possible to conduct data recovery excavations at the site, which will allow the significant information to be collected. Afterwards, no additional management activities at the site will be necessary and the land may be used as necessary.

Late Discoveries and Cemeteries

While unlikely, it is always possible that additional archaeological sites may be present on the tract, but were not identified during these studies. Contractors should be made aware that if brick concentrations, pottery, arrowheads, bottles, bone, or other potentially historic remains are encountered work should be suspended and either Chicora Foundation or the State Historic Preservation Office should be notified. These late discoveries should be evaluated prior to any construction related activities.

Cemeteries are among the most difficult of all sites to identify, even in an intensive survey. We have found no indication of burial grounds on the study tract — none are shown on any of the historic maps or plats, there are none indicated on the soil survey, and there are none indicated on the identified modern historic documents. The intensive survey failed to encounter any areas which appear to be burial grounds. Nevertheless, that two antebellum plantations (Crescent and Trimbleston) existed in the survey area strongly suggest that African American cemeteries may be present. Slave burial grounds were often associated with plantations and continued to be used in the postbellum. As a consequence, development activities must always be especially careful if bones, gravestones, or other features are found. It is a felony under South Carolina law to disturb burial grounds, even those which are not marked.

Site Locations and Methodological Considerations

This survey is of special interest since it failed to identify the normal range of plantation activities typically associated with low country tracts. Although the property is a historic plantation, traced back to the early nineteenth century, it appears to have seen relatively minor development. The survey did encounter one site, 38BU1714, which exhibits materials appropriate for this period. It appears, based on the limited information available, to be a manger's or overseer's settlement. Badly plowed, there remains no architectural information and only limited data sets for domestic activity.

Missing is any resemblance of a slave settlement. This suggests that Pope, and perhaps earlier owners, rotated slaves from other plantations to this one as necessary. Given the close proximity of Pope's holdings this would have been a cost-effective approach for helping to make marginal lands economically viable.

Site density in the survey tract is very low — 1 site every 65 acres — especially when compared to some of the surrounding tracts. Yet this is almost certainly the result of the plantation's low, poorly drained soils that hampered development over the past 200 years. In fact, it appears that even prior to the historic era, Native Americans also avoided much of the tract in favor of nearby sandy ridges offering better drainage and, perhaps just as importantly, better access to the marshes and creeks. Comparison of Figures 5 and 20 reveals that 50% of the sites are found on Wando soils, 30% are on Seewee soils, and the two remaining sites are on Ridgeland and Baratari soils. The preference for sandy, well-drained soils, is very strong, especially considering that so much of the Crescent tract consists of Baratari, Polawana, Rosedhu, Ridgeland, and Seabrook soils.

Finally, it is worthy of mention that several of these sites, including those recommended as eligible and potentially eligible, were either missed or nearly missed by traditional shovel testing methodology. This should be no surprise and concerns with shovel testing have been reported in several previous Chicora studies. Nevertheless, shovel testing, typically at 100 foot intervals. remains the most common approach for site identification.

While there is not likely to be any alternative methodology that performs better, it is nevertheless important to recognize the limitations of shovel testing and the importance, where possible, of combining alternative approaches of site discovery. We had, for example, encouraged the plowing of the Crescent tract, allowing a combination of shovel testing with a pedestrian survey. This, unfortunately, was not possible. Work in other locations, however, suggests that such an

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approach is much more likely to identify the full range of archaeological sites present (see, for example, Trinkley et al. 1996:139).

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EXHIBIT G

THREATENED AND ENDANGERED SPECIES SURVEY REPORT

NEWKIRK
ENVIRONMENTAL
CONSULTANTS, INC

September 4, 1997

Mr. Ben Jones
Thomas and Hutton Engineering Company
P.O. Box 14609
Savannah, GA 31416

RE: Threatened and Endangered Species Survey
553.02-Acre Crescent Plantation
Beaufort County, South Carolina

Dear Mr. Jones:

As per your request, this letter is to inform you that we have completed a Threatened and Endangered Species Survey of the above referenced tract and made the determination that the subject site contains no threatened or endangered species nor the critical habitats of the listed species. Therefore, it is our opinion that the proposed project will not impact any individual or population of a listed species.

Please note that the final report of findings will be presented to the U.S. Fish and Wildlife and South Carolina Department of Natural Resources with the 404 Permit Application for final written concurrence of our findings.

If you have any questions or need additional information concerning the findings of our threatened and endangered species survey please contact me at (912) 354-6494.

Sincerely,

Stuart F. Sligh

Stuart F. Sligh
Senior Biologist - Savannah Office
NEWKIRK ENVIRONMENTAL CONSULTANTS, INC.

cc: Mr. Bruce Boysen - WPI

Charleston, SC Office
192 East Bay Street, Suite 201
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NEWKIRK
ENVIRONMENTAL
CONSULTANTS, INC

August 15, 1997

Mr. Bruce Boysen
Perry Wood and Partners
P.O. Box 7427
Hilton Head Island, SC 29938

RE: Threatened and Endangered Species Survey
553.02-Acre Crescent Plantation
Beaufort County, South Carolina

Dear Mr. Boysen:

As per your request, this letter is to inform you of our threatened and endangered species survey work completed to date on the Crescent Plantation Tract which is located adjacent to Highway 278 and Belfair Plantation in Beaufort County, South Carolina. The threatened and endangered species survey was conducted to determine the potential occurrence of animal and plant species listed as endangered or threatened by current state and federal regulations [Federal Endangered Species Act of 1973 (16 USC 1531-1543) and the South Carolina Non-Game and Endangered Species Conservation Act of 1974 (58-2384)].

Newkirk Environmental Consultants, Inc. has completed a preliminary Threatened and Endangered Species Survey of the subject site where plant communities and habitats were observed and noted to determine if they match the habitat types where the listed species have potential to occur. If the potential habitat was found on the site, all plants observed within the potential habitat were identified at least to the genus taxonomic unit level to determine if the observed plant may be a listed species.

The U.S. Fish and Wildlife Service (USFWS) lists the following plant and animal species as endangered or threatened in Beaufort County, South Carolina.

West Indian manatee (Trichecus manatus)
Bald eagle (Haliaeetus leucocephalus)
Wood stork (Mycteria americana)
Red-cockaded woodpecker (Picoides borealis)
Artic peregrine falcon (Falco peregrinus tundrius)
Piping plover (Charadris melodus)
Kemp's ridley sea turtle (Lepidochelys kempi)
Leatherback sea turtle (Dermochelys coriacea)
Loggerhead sea turtle (Caretta caretta)

Charleston, SC Office
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Green sea turtle (Chelonia mydas)
Shortnose sturgeon (Acipenser brevirostrum)
Canby's dropwort (Oxypolis canbyi)
Pondberry (Lindera melissifolia)
Chaff-seed (Schwalbea americana)

Correspondence is being solicited from the South Carolina Department of Natural Resources (SCDNR) to gather existing data concerning the presence or potential occurrence of threatened or endangered species on the subject site

The Red Cockaded Woodpecker (RCW) survey area the survey on the site was conducted using the "Guidelines for the Preparation of Biological Assessments and Evaluation for the Red-Cockaded Woodpecker".[1] These guidelines include methods for identifying areas to survey as well as actual survey methods for determining the presence of the RCW. The guidelines state that timber stands that exhibit the following criteria should be surveyed when making a determination for the likely occurrence of RCW's. The criteria are:

- Mixed pine and hardwood stands over 60 years of age
- mixed pine and hardwood under 60 years of age that contain clumps of pine trees over 60 years of age
- stands containing pine sawtimber, including stands thought to be generally less than 60 years of age but containing scattered or clumped trees over 60 years of age
- hardwood-pine over 60 years of age adjacent to pine and pine-hardwood over 30 years of age.

In timber stands on the site where favorable RCW habitat is located, a 100 percent coverage pedestrian survey is being conducted by walking transects in a north and south direction.

It is NEC, Inc.'s preliminary opinion that future development of the 553.02-acre Crescent Plantation site is not expected to impact any individual or population of any listed threatened or endangered species. As stated above, we are in the process of finalizing our report of findings to submit to the USFWS and SCDNR for a letter of concurrence stating that there are no listed species located on the site.

---

[1]Henry, V. Gary. Guidelines for the Preparation of Biological Assessments and Evaluations for the Red-Cockaded Woodpecker. U.S. Fish and Wildlife Service Southeast Region. September 1989. Not Paginated.

We will plan to finalize our threatened and endangered species survey report and submit the report to the regulatory agencies concurrent with the Wetlands 404 Permit Application. We anticipate the completion of the report by August 30, 1997.

If you have any questions or need additional information please contact me at (912) 354-6494.

Sincerely,

Stuart F. Sligh
Senior Biologist - Savannah Office
Newkirk Environmental Consultants, Inc.

EXHIBIT H

ENVIRONMENTAL SITE ASSESSMENT (PHASE I)



2500 TREMONT ROAD
SAVANNAH, GEORGIA 31405
PHONE (912) 234-0696 • FAX (912) 233-5061

WHITAKER LABORATORY INC.
P.O. BOX 7081
SAVANNAH, GEORGIA 31418
FAX 912/233-5061

2500 TREMONT RD.

912/234-0696

July 30, 1997

Centex Homes
c/o Thomas & Hutton Engineering Co.
PO Box 14609
Savannah, GA 31416

Re: Environmental Site Assessment
Phase I -
Crescent Plantation (proposed)
Bluffton Township
Beaufort County, South Carolina

Gentlemen:

We have completed the above subject study and are pleased to present this report with our findings and conclusions. This evaluation was performed to identify conditions that may impose an environmental liability or restrict the property's land use.

Should any questions arise concerning the results of this report, or if we can be of further assistance, please contact us.

Respectfully submitted,

WHITAKER LABORATORY, INC.

Joseph F. Whitaker

Joseph F. Whitaker, EIT

Henry R. Coleman

Henry R. Coleman, PE

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A. INTRODUCTION:

The purpose of an environmental Phase I site assessment is to evaluate the potential of a property to contain contamination. Contamination of a site can occur within the subsurface soils, surface water, groundwater and/or existing structures. In general, contamination of a site occurs as a result of present or past activities on or adjacent to the property. The following report addresses the findings of this assessment.

B. SCOPE OF INVESTIGATION:

The scope of this investigation was to identify and report any existing conditions, or potential conditions, which might impose an environmental liability or restrict the use of this property. The field work for this assessment involved the following:

1. A visual reconnaissance of the site to examine for possible sources or evidence of contamination.

2. A visual reconnaissance of adjacent properties.

3. A review of available information such as ownership records, aerial photographs, property cards, fire insurance maps and soil maps.

4. A review of the EPA's "Facility Index System" (FINDS) report to determine if this site or other sites in the area are involved in regulatory activity with respect to hazardous materials.

C. LOCATION:

This site is located in the Bluffton Township of Beaufort County, South Carolina. The property is situated northeast of U. S. Highway 278 approximately one-mile north of Bluffton and opposite the intersection of South Carolina Highway 46 with U. S. Highway 278.

See the Site Location Map in the Appendix for additional information.

D. PROPERTY DESCRIPTION:

This 690 acre parcel, known as Crescent Plantation, has three large cleared areas that were cultivated for agricultural use up into the 1980's by Malcolm J. Johnson. The high ground cleared areas are surrounded by moderately wooded lands with marsh lands towards the north. The site contains a frame house occupied by Josephine Johnson, the current owner, as the heir of Malcolm J. Johnson. Also, Ms Johnson's daughter lives in a mobile home on the site.

Access to the site is from U. S. Highway 278 which bounds most of the southwest property line.

See the Site Plan and Photographs in the Appendix for additional information.

E. GEOLOGY:

The subject site is in the Southeast Coastal Plain. This region includes all of Florida and the southern parts of Georgia, Alabama and South Carolina. The surficial deposits are comprised of unconsolidated Pleistocene age sand, gravel, silt and shell beds. These surficial deposits are underlain by the Hawthorne formation, a Miocene-age clay and silt layer.

The Hawthorne formation overlies a thick sequence of semi-consolidated to consolidated limestones and dolomites known as the Floridian aquifer. The Floridian aquifer is one of the most productive aquifers in the United States and is the principal groundwater resource for the region.

F. FINDS REPORT:

The Environmental Protection Agency publishes a Facility Index System (FINDS) report which lists facilities in this area involved in regulatory activities relating to the use, storage or generation of hazardous materials. Our review of the FINDS report indicates this site has not been involved in regulated activity. There were also no listings found for adjacent properties.

G. REVIEW OF PUBLIC RECORDS:

We have examined ownership records for this site at the Beaufort County Courthouse in Beaufort, South Carolina. A deed recorded in Book 63, page 58 indicates that Malcolm J. Johnson purchased this site from James B. Walker in August of 1945. A devise/descent field in Will Book 4, page 11, vested the title to Josephine W. Johnson in August of 1980.

No indication of industrial or commercial usage of this property by previous owners was found during our search.

H. SURROUNDING LAND USE:

This site is bound by the following properties:

North: Marsh of Sawmill Creek and lands of Oak Forest Plantation Development;

East: Lands of Trimbleston Plantation;

South: Sawmill Creek Forest, a residential development;

Southwest: U. S. Highway 278;

West: Land occupied by Ashley Plantation Apartments towards the south and Belfair Plantation towards the north.

A review of surrounding properties found no visual evidence to indicate these sites may have environmentally impacted the subject property.

I. SITE RECONNAISSANCE:

A visual evaluation of the property was performed with the purpose of recording the suspected presence of stored, spilled or otherwise managed hazardous and/or non-hazardous industrial or commercial grade solid/liquid waste products or related visible residue such as hydrocarbon based materials, chemicals or PCBs.

The inspection of the referenced site was completed on November 19, 1996. Ray Martin conducted this inspection. The site visit consisted of a walk around the perimeter of the property along transect lines running basically north to south and east to west through the property. The inspection also included a detailed examination of the subject site with emphasis placed on the existence of underground storage tanks (USTs), aboveground storage tanks (ASTs), chemical storage containers, electrical equipment possibly containing polychlorinated biphenyl (PCB) dielectric fluid, surface water conditions, point and non-point sources of water discharge, waste disposal areas and other areas of potential environmental concern. Records of all observations were recorded during the inspection and photographs were taken for documentation. Photographs are exhibited in the Appendix.

A small amount of windblown trash was observed along U. S. Highway 278. A few pieces of concrete pipe (Photo Plate 4) and a small pile of tires (Photo Plate 5) were observed near the western property line. We consider these items to be inert and, therefore, not a threat to the environment. However, all such items should be removed from the site in the event of development.

A review of available aerial photographs as pertaining to land usage was also performed. These photographs are in the Appendix of this report.

J. CONCLUSIONS:

1. Our assessment of this site has found no evidence to indicate that previous owners have environmentally impacted the subject site.

2. A review of EPA regulatory records reveal no listing which would indicate that regulated activity took place within the limits of this site.

3. Our assessment has found no reason to suspect that surrounding properties have environmentally impacted the subject lot.

4. A Phase II investigation is recommended when probable cause or evidence of environmental concern is discovered at a site. As a result of this assessment, it is our opinion that a Phase II investigation is unwarranted for this property.

K. LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

A Phase I Environmental Site Assessment (ESA's) comprises a number of individual elements whose basic nature and extent are determined in accordance with the standard of care applicable to Phase I ESA's. In addition, the contents of an ESA are governed by items such as the specified scope of work and fees. As such, we believe we have prepared this report in accordance with the applicable standard of care and specified scope of work. However, please note our services intentionally did not include inquiries with respect to lead based paint, asbestos, outdoor air quality, wetlands or the identification of endangered or protected plant and animal species. Similarly, the determination of historical and archaeological sites is beyond the scope of this assessment.

Phase I Environmental Site Assessments by their very nature are limited. WHITAKER LABORATORY, INC. has endeavored to meet what it believes is the applicable standard of care and, in so doing, is obliged to advise its client of the above mentioned limitations. WHITAKER LABORATORY, INC. believes that providing information about limitations is essential to help its client identify and thereby manage its risks. These risks cannot be eliminated but can be further minimized through additional research not generally associated with a standard Phase I Environmental Site Assessment.

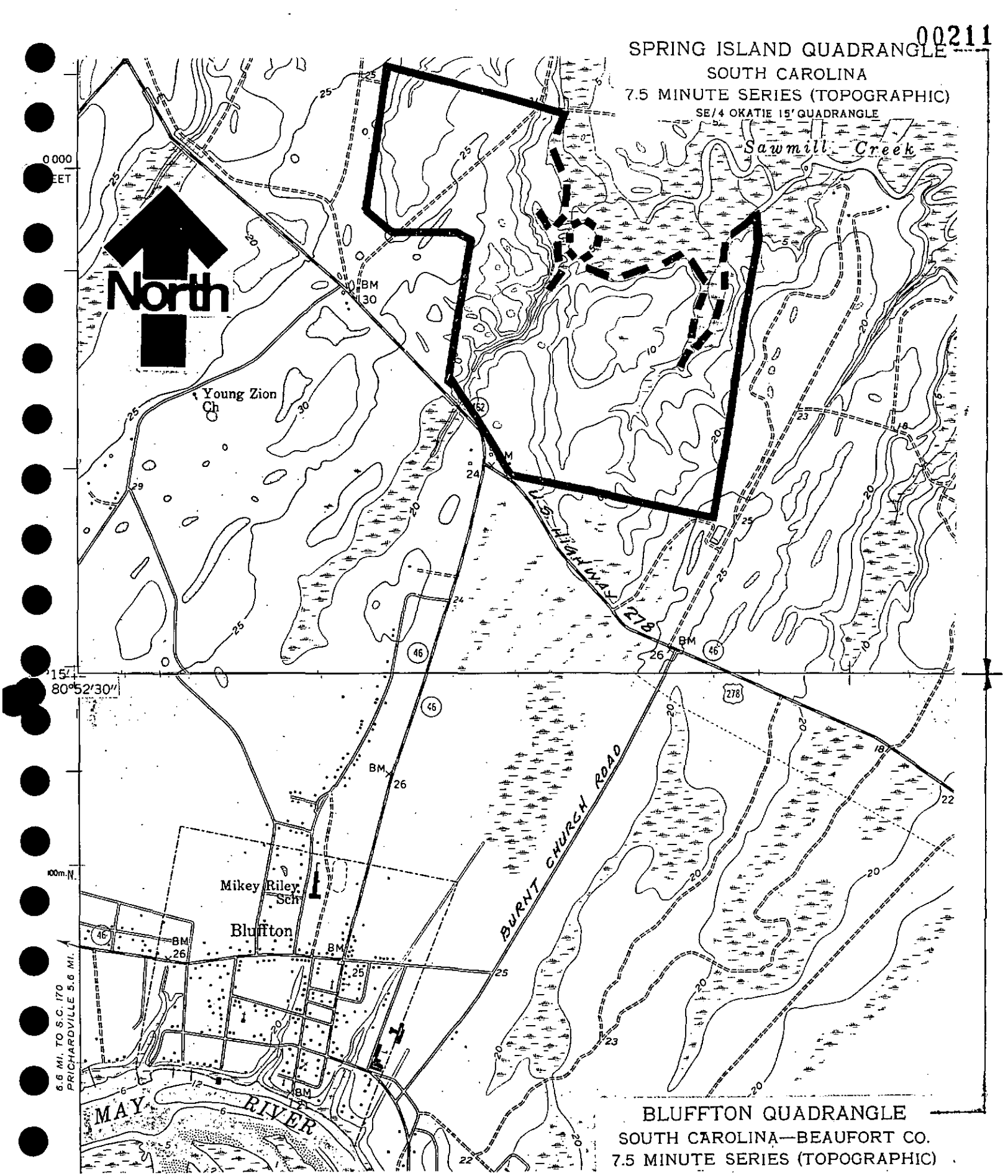
The findings and opinions conveyed in this report are based on information that we obtained from a variety of sources which we believe are reliable. Nonetheless, WHITAKER LABORATORY, INC. cannot and does not guarantee the authenticity or reliability of the information it has relied upon. Our findings and opinions are based on information that we obtained on given dates, through records review, site review and related activities. It is possible for unknown site conditions to exist and for conditions we observed to have changed since initial review. Therefore, this report does not warrant or guarantee that the subject site is free of environmental defects. Accordingly, WHITAKER LABORATORY, INC.'s liability for any matter in conjunction with this report is limited to the fee paid by the client for the preparation of the report.

This report is for the sole use and benefit of our client and may not be used or relied upon by any person or entity without written consent.

APPENDIX

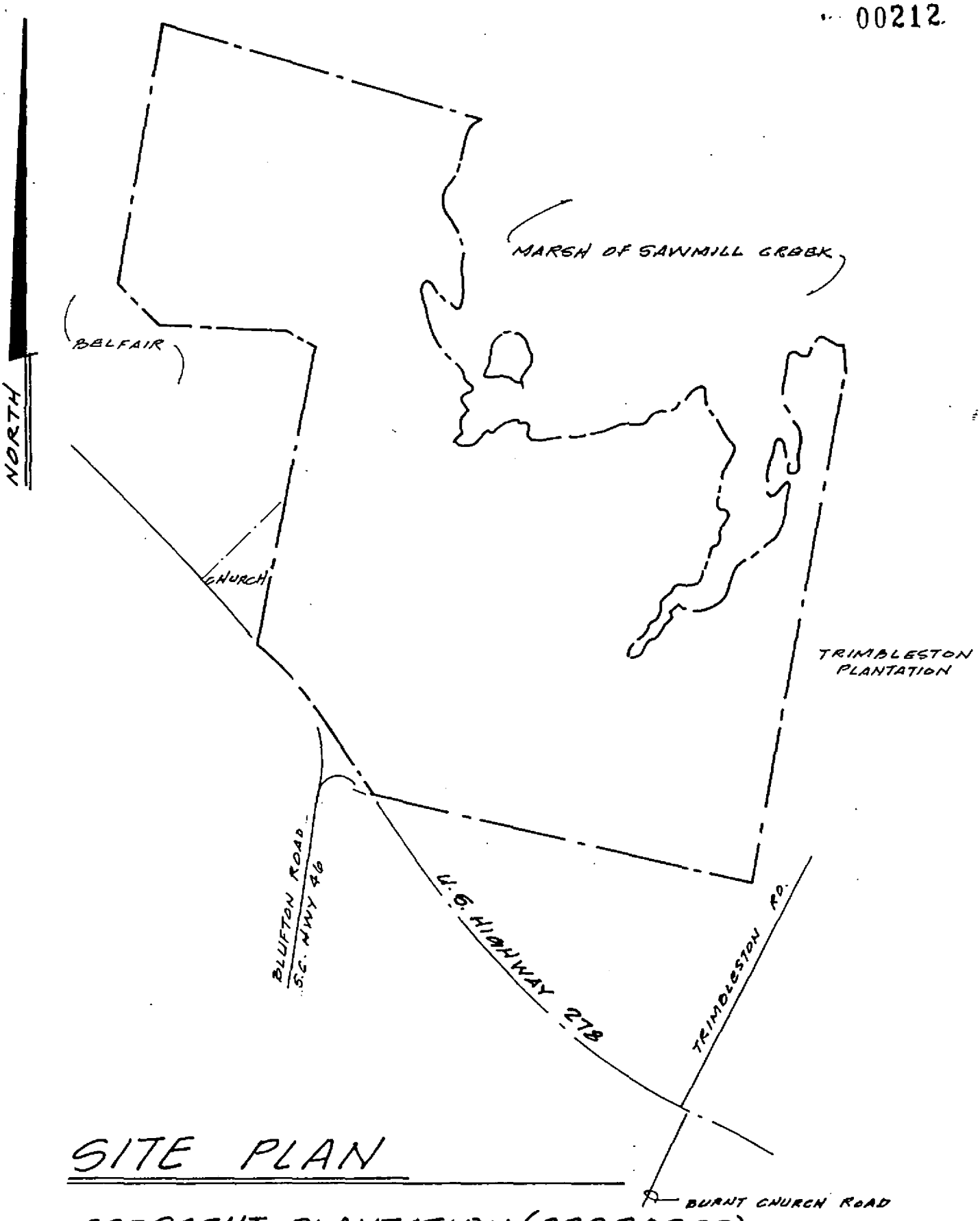
Site Location Map
Site Plan
Photographs
1988 Aerial Photograph

00211



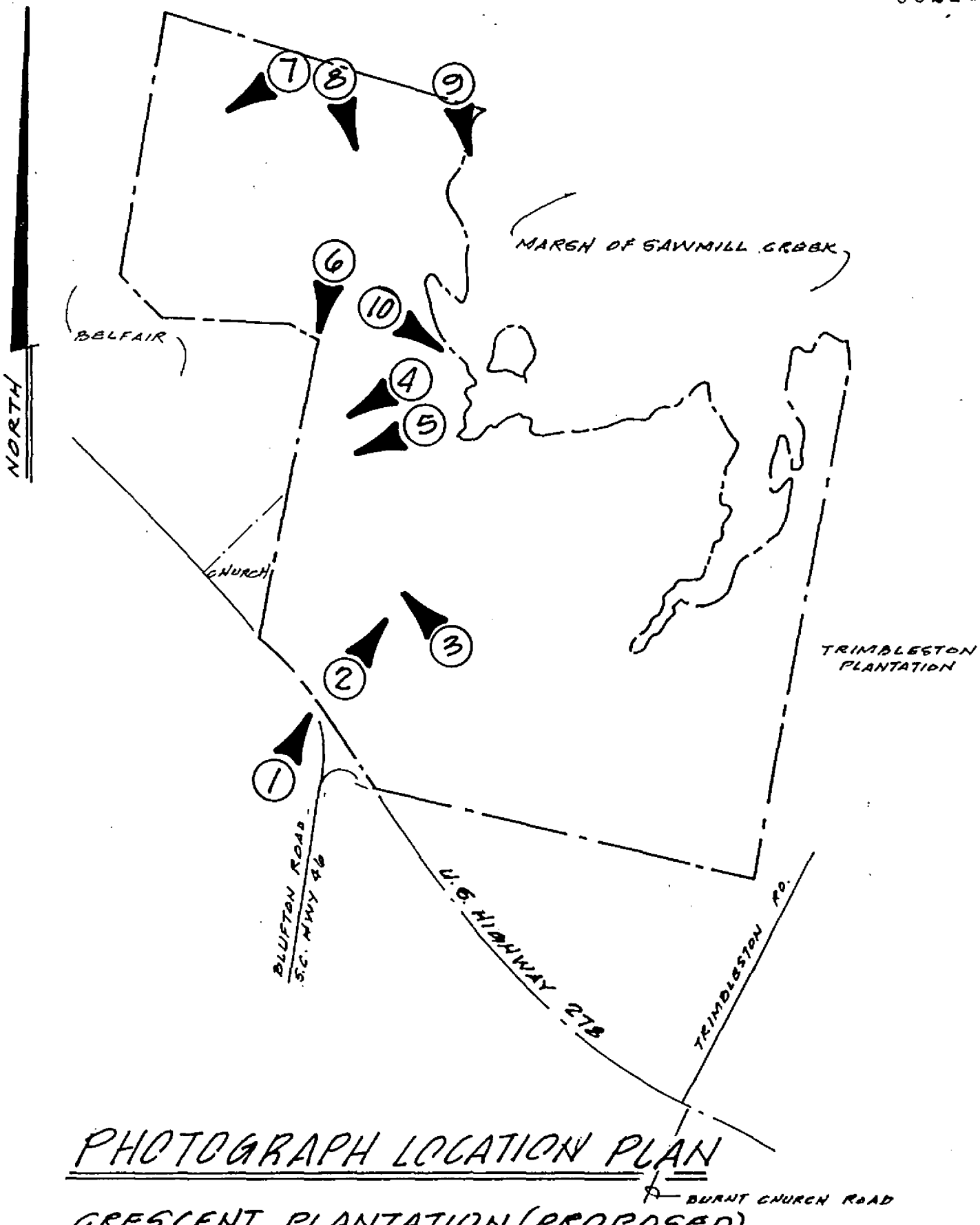
SITE LOCATION MAP

CRESCENT PLANTATION (PROPOSED)
BEAUFORT COUNTY, S.C.



SITE PLAN

CRESCENT PLANTATION (PROPOSED)
BEAUFORT COUNTY, S.C.



PHOTOGRAPH LOCATION PLAN

CRESCENT PLANTATION (PROPOSED)
BEAUFORT COUNTY, S.C.

PHOTOGRAPH PLATE NUMBER
DIRECTION OF VIEW

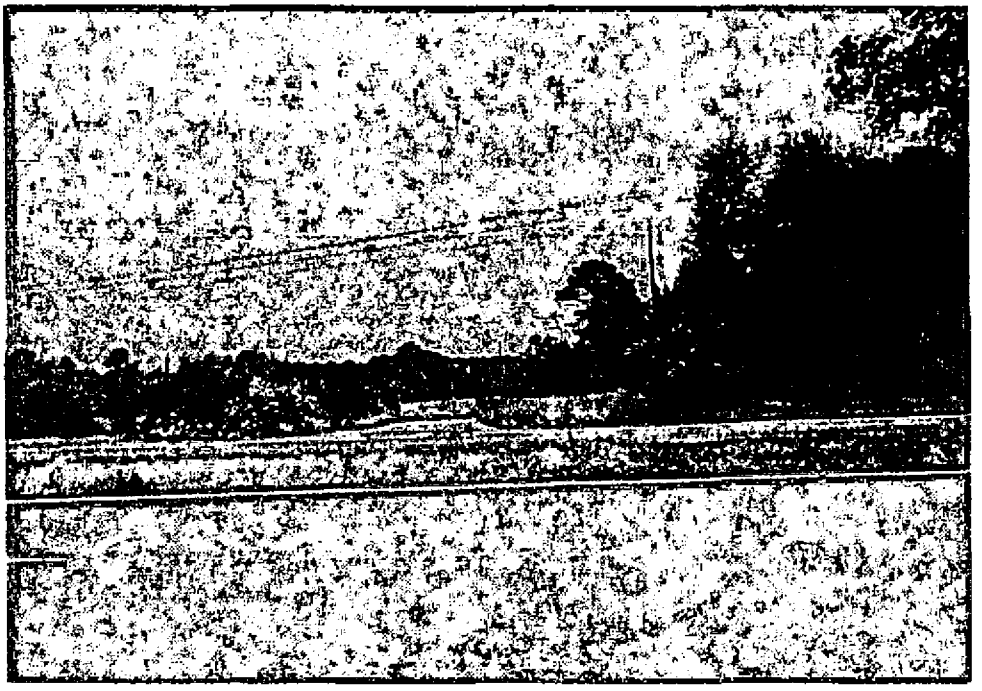


PLATE 1 VIEW NORTHEAST AT EXISTING ENTRANCE ROAD



PLATE 2 VEHICLE PATH

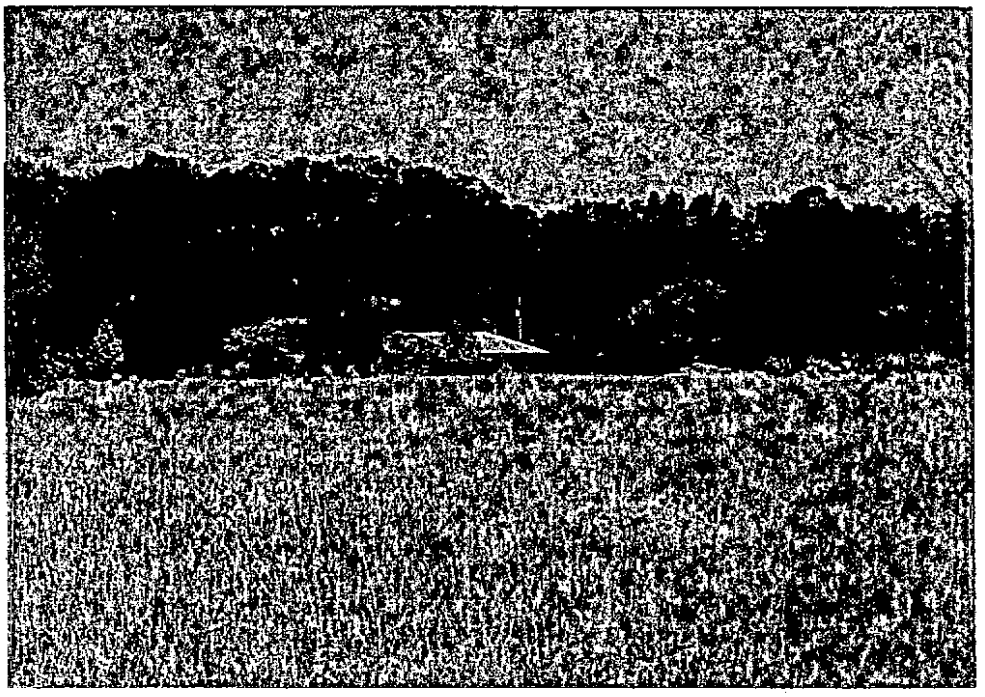


PLATE 3 VIEW NORTHWEST TOWARD FRAME HOUSE



PLATE 4 OLD AUTO TIRES

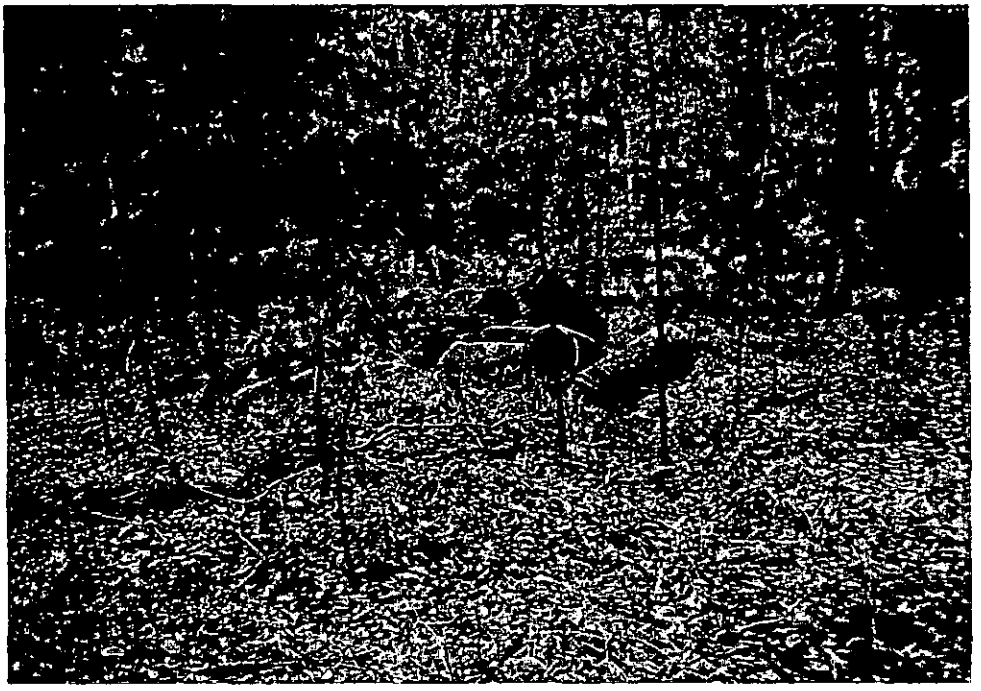


PLATE 5 OLD CONCRETE PIPE



PLATE 6 VIEW SOUTH DOWN PROPERTY LINE

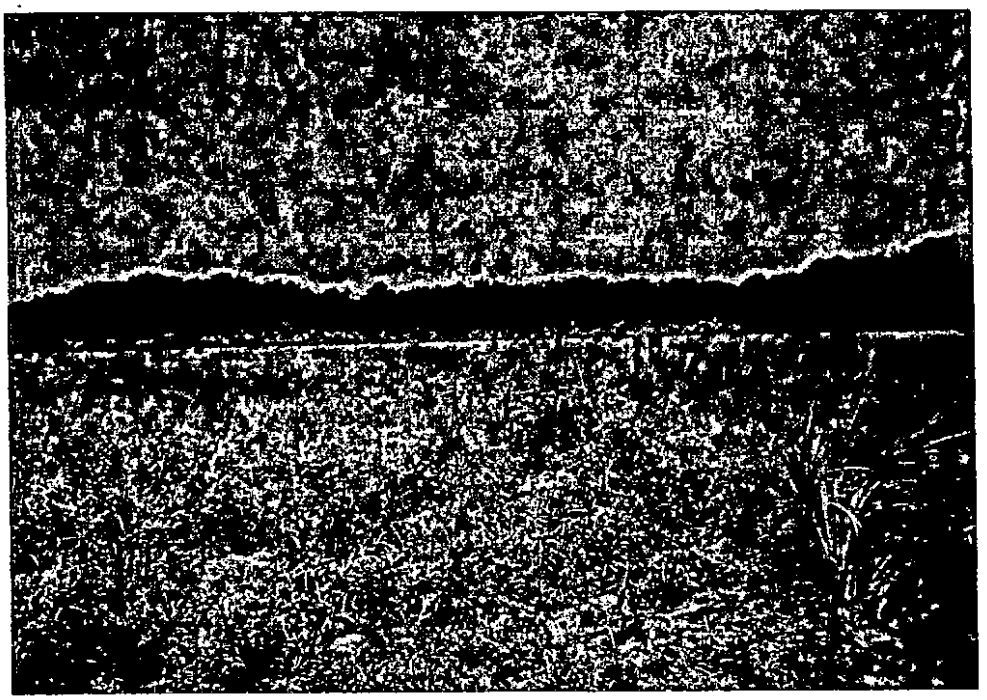


PLATE 7 VIEW SOUTHWEST ACROSS ABANDONED FARM LAND

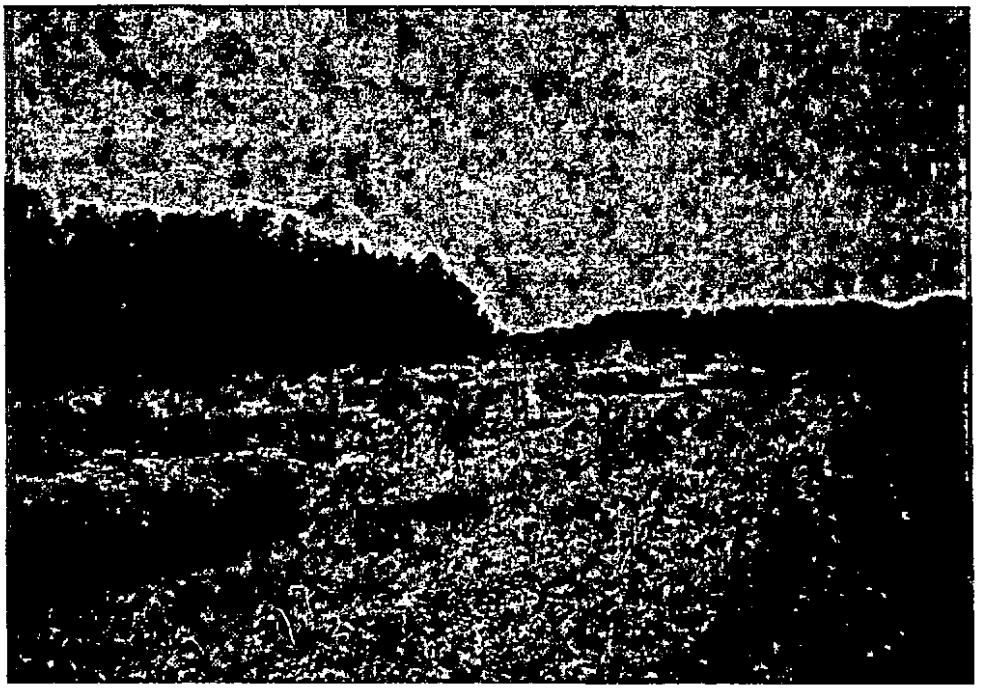


PLATE 8 VIEW SOUTHEAST ACROSS ABANDONED FARM LAND

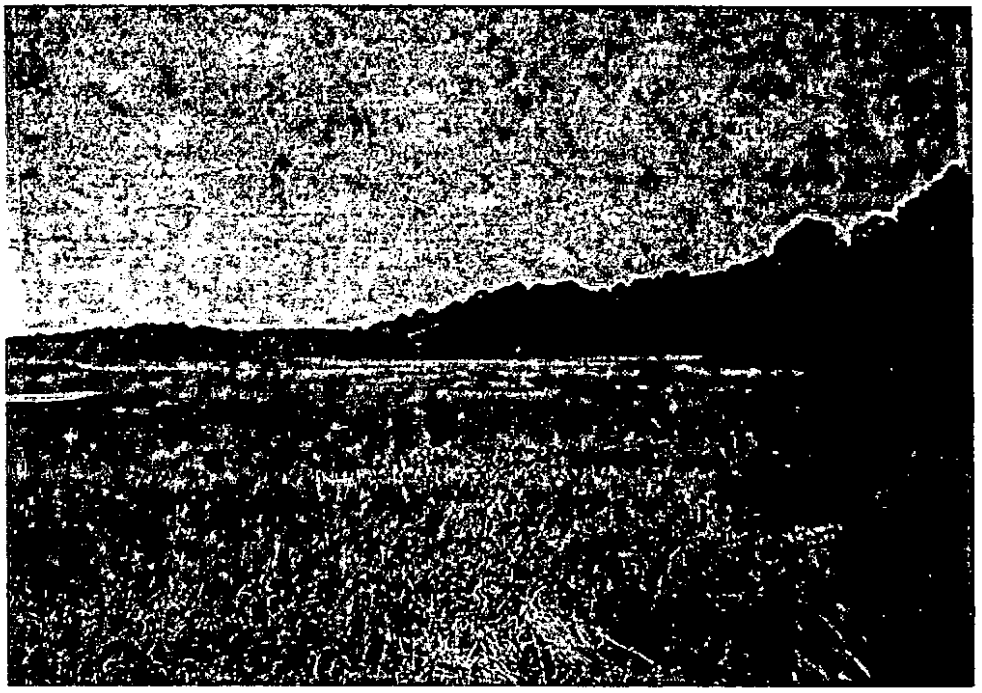


PLATE 9 VIEW SOUTH OF PROPERTY LINE ALONG THE MARSH

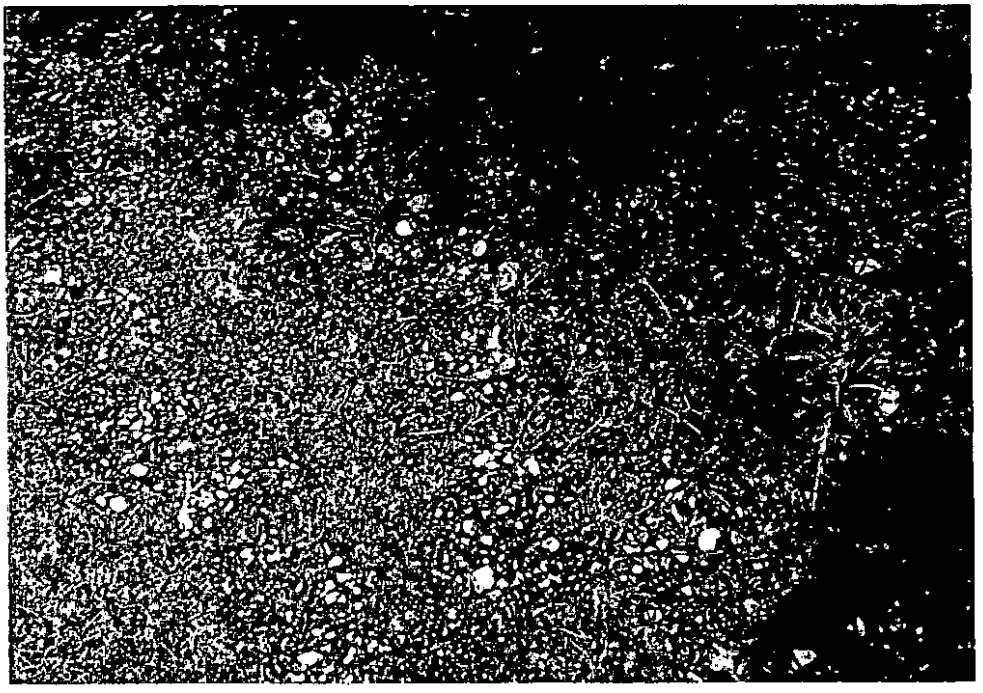


PLATE 10 APPEARS TO BE RUINS OF OLD INDIAN MOUND

NOTE:
THIS PORTION OF AERIAL PHOTOGRAPH WAS NOT AVAILABLE AT THIS TIME

North



1988 AERIAL PHOTOGRAPH
CRESCENT PLANTATION (PROPOSED)
BEAUFORT COUNTY, S.C.

EXHIBIT I

STORMWATER MANAGEMENT MASTER PLAN
1. Stormwater Management Narrative

WATER DISTRIBUTION MASTER PLAN
FOR
CRESCENT PLANTATION
BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
CENTEX HOMES
BLUFFTON, SOUTH CAROLINA

PREPARED BY:
THOMAS & HUTTON ENGINEERING CO.
SAVANNAH, GEORGIA

LAND PLANNER:
WOOD & PARTNERS, INC.
HILTON HEAD ISLAND, SOUTH CAROLINA

ENVIRONMENTAL CONSULTANTS
NEWKIRK ENVIRONMENTAL CONSULTANTS
SAVANNAH, GEORGIA

AUGUST 8, 1997

GRAPHIC SCALE
300 0 150 300 600 1200
(IN FEET)
1 inch = 300 ft.

UTILITY LEGEND
- 12" WATER MAIN
- 8" WATER MAIN
- 2" WATER MAIN
- WATER VALVE
- FIRE HYDRANT
- EXISTING 12" WATER MAIN

CLUBHOUSE AREA
MAINTENANCE AREA
REC. AREA
MARSHES OF OAK FOREST CREEK
PARCEL 2 TRIMBLESTON PARTNERSHIP
EDWARD J. DERST, JR.
DB. 146, PG. 195
98.55 ACRES
INCLUDES 10.6 ACRES NORTH OF FENCE
WESTBURY CONCRETE
OPEN SPACE
LOT 16
LOT 15
LOT 14
LOT 13
OPEN SPACE
SHERIDAN COMMERCIAL CENTRE
LOT 15
LOT 13
OPEN SPACE
NOW OR FORMERLY UNION CAMP
UNION CAMP
MALCOLM JOHNSON
POWER EASEMENT

00221

WATER RESOURCES ENGINEERING

THE DESIGN OF WET DETENTION BASINS FOR THE MANAGEMENT OF RUNOFF FROM CRESCENT PLANTATION

The Project

Design Criteria and Performance Specifications
for
Water Quality, Erosion, and Flood Control

THOMAS & HUTTON ENGINEERING CO.
Savannah, Georgia • 5th September 1997

CONTENTS

Contents—i
Figures & References—ii

THE WET DETENTION BASIN—1

THE BASIN
THE CONTROL ELEVATION
THE ANTECEDENT CONDITION

DESIGN OF THE PERMANENT POOL

THE VOLUMETRIC DESIGN—3
THE GEOMETRIC DESIGN—4
THE VERTICAL ALIGNMENT

DESIGN OF THE OVERLYING ZONE

THE WATER QUALITY CONTROL FUNCTION—5
The Water Quality Volume
The Performance

THE EROSION & FLOOD CONTROL FUNCTIONS—6
The Storms
The Tailwater Elevations
The Performance

FIGURES & REFERENCES

FIGURES

FIGURE 1 / WET DETENTION BASIN—Page 2

REFERENCES

St. Johns River Water Management District. (1996). *Applicant's Handbook—Management and Storage of Surface Waters.* Palatka, FL.

American Society of Civil Engineers. (1992). "Design and Construction of Urban Stormwater Management Systems." *Manuals and reports on engineering practice No. 77,* ASCE, New York.

U.S. Soil Conservation Service. (1961). "Rainfall Frequency Atlas of the United States." *Technical paper No. 40,* U.S. Department of Commerce, Washington, D.C.

THE WET DETENTION BASIN

See FIGURE 1

THE BASIN

The Basin consists of a man-made impoundment containing a permanent water pool and an overlying zone in which the influent runoff temporarily increases the depth of the pool while it is simultaneously stored and released at appropriate discharge rates via an engineered outlet structure.

THE CONTROL ELEVATION

The water surface elevation of the permanent pool is controlled by the invert of the lowest discharge device located in the outlet structure. This is the lowest elevation at which The Basin can discharge and it is known as **The Control Elevation.**

The Control Elevation plays a central role in the design of wet detention basins for two reasons:

It compartmentalizes The Basin into two independent design elements—**The Permanent Pool & The Overlying Zone**; and,

It aligns The Basin vertically with respect to regulatory boundary conditions which pertain to The Basin's water quality control function—see Page 4.

THE ANTECEDENT CONDITION

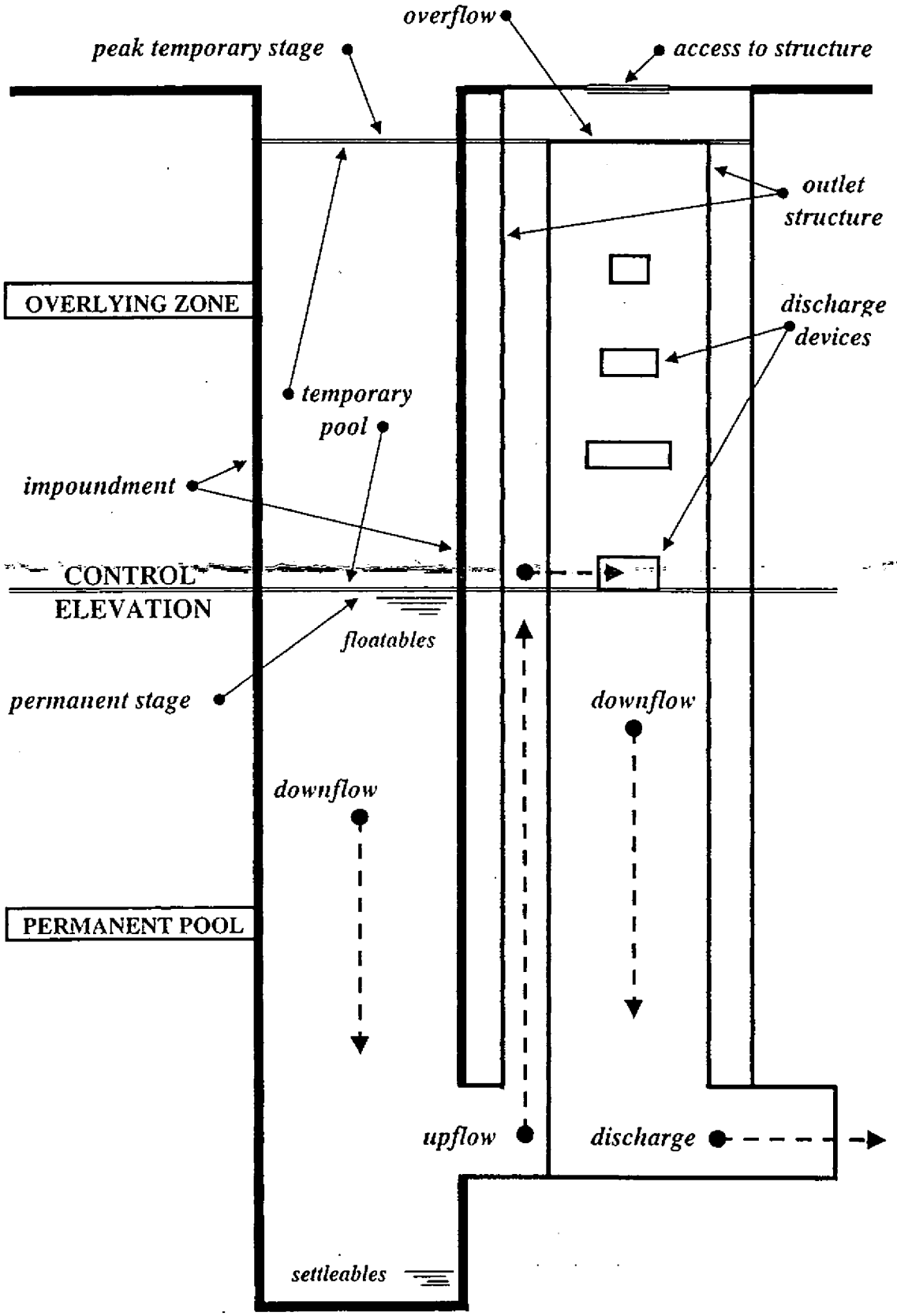
The Overlying Zone is engineered to perform specific discharge functions during various and independent runoff events—a water quality control event and multiple erosion and flood control events.

Since the runoff events are independent by design, The Basin's water surface elevation at the onset of each event is assumed to be The Control Elevation.

FIGURE 1

WET DETENTION BASIN

Schematic Section W/ Concealed Double-Ring Outlet Structure



DESIGN OF THE PERMANENT POOL

During storms, influent runoff replaces treated waters detained within The Permanent Pool after the previous storm. Since removal of nutrients and metals primarily occurs during the relatively long quiescent period between storms, design of The Permanent Pool is central to the water quality control function of wet detention basins.

THE VOLUMETRIC DESIGN

Except as stipulated below, The Permanent Pool has a volume of water which provides a residence time of 21 days based on the wet-season average daily runoff rate to The Basin.

For projects which have direct discharge to Waters-of-the-State classified as either (a) Shellfish Harvesting Waters (Class SFH) or (b) Outstanding Resource Waters (Class ORW), The Permanent Pool volume computed above is increased by either (a) 25% or (b) 50% respectively. Direct discharge is a discharge located within one thousand hydraulic feet of the classified water.

The Project has no direct discharges to any of the classified waters listed above.

The computational procedure for sizing The Permanent Pool is detailed below with an example.

1. Compute the wet-season (four consecutive wettest months) average daily **rainfall rate P.**

   Location: Beaufort County
   Average wet-season rainfall = 24.1 inches
   Length of wet season = 122 days

   $P = 24.1 \text{ in} / 122 \text{ d} = 0.2 \text{ in/d}$

2. Compute the wet-season average daily **runoff rate R.**

   Drainage area A = 100 acres
   Weighted runoff coefficient C = 0.5

   $R = PAC = [(0.2 \text{ in/d})(100 \text{ ac})(0.5)] / (12 \text{ in/ft}) = 0.833 \text{ ac ft/d}$

3. Compute the pool volume V for a residence time T of 21 days.

   $V = RT = (0.833 \text{ ac ft/day})(21 \text{ d}) = 17.5 \text{ ac ft}$

THE GEOMETRIC DESIGN

Maximum depth for benthic oxygenation = 12 feet

Mean depth for vegetation control = $V / A \geq 4$ feet, where:

V = pool volume, acre feet
A = pool area at control elevation, acres

Configuration ratio for short-circuit control = $L^2 / A \geq 2$, where:

L = flow length from inlet to outlet, feet
A = pool area at control elevation, square feet

THE VERTICAL ALIGNMENT

The Control Elevation is set at or above the highest of the following elevations.

Ambient Groundwater: The postdevelopment normal groundwater table elevation as estimated by The Project's geotechnical engineer.

Mean Annual High Tailwater: The mean of the **annual high tailwater series** data set.

For tidal areas in Beaufort County, this elevation is the mean annual high tide elevation.

For non-tidal areas in Beaufort County without gaging stations, this elevation is either that:

Calculated by The Engineer for the 2-year, 24-hour storm event of 4.5 inches of rainfall with an SCS Type III distribution; or,

Estimated by a professional with competency in the analysis and interpretation of hydrobiological indicators.

DESIGN OF THE OVERLYING ZONE

The overlying zone is an engineered system consisting of (a) the outlet structure—**The Structure**—and (b) the volume of live storage available between the control elevation and the overflow elevation—**The Temporary Pool**.

The Structure contains discharge devices—orifices and/or weirs—which are engineered in conjunction with The Temporary Pool to provide specific discharge functions under various and independent design runoff events.

THE WATER QUALITY CONTROL FUNCTION

The Water Quality Volume

Regardless of the volumetric requirements of The Basin's flood control function—see Page 6—and except as stipulated below, The Temporary Pool has a volume of available live storage equal to at least 1.0 inch of runoff over the entire area contributing drainage to The Basin.

For projects which have direct discharge to Waters-of-the-State classified as either (a) Shellfish Harvesting Waters (Class SFH) or (b) Outstanding Resource Waters (Class ORW), The Temporary Pool volume computed above is increased by either (a) 25% or (b) 50% respectively. Direct discharge is a discharge located within one thousand hydraulic feet of the classified water.

The Project has no direct discharges to any of the classified waters listed above.

The Performance

The Structure discharges 50% of the specified water quality volume in no less than 48 hours and no more than 60 hours following the runoff event—see the example below.

> Specified water quality volume = 100 ac ft
> 50% of the specified water quality volume = 50 ac ft
> **Maximum** volume discharged within the first 48 hours = 50 ac ft
> **Minimum** volume discharged within 48 to 60 hours = 50 ac ft

The Basin's water quality control function verifies when subjected to hydrodynamic analysis using the FEMA-approved unsteady flow computer model **Advanced ICPR**, Streamline Technologies, Winter Park, Florida. The analysis assumes that the runoff enters The Basin as a slug load—that is, all at once—and that the tailwater elevation remains at or below The Control Elevation throughout the entire discharge event.

THE EROSION & FLOOD CONTROL FUNCTIONS

The Storms

The design flood control runoff events in Beaufort County are those associated with the following 24-hour synthetic storms with an SCS Type III distribution.

Erosion Control

2-year, 4.5-inch storm
10-year, 7-inch storm

Flood Control

25-year, 8-inch storm

The Tailwater Elevations

For receiving waters influenced by tidal cycles, the design tailwater is the peak stage elevation which would exist in the receiving water from a storm equal to The Project's design storm computed with the **mean annual high tide elevation** as the boundary condition.

For receiving waters without tidal influences, the design tailwater is the peak stage elevation which would exist in the receiving water from a storm equal to The Project's design storm computed with the **mean annual high water elevation** as the boundary condition.

The Performance

The Structure limits The Basin's discharge rate to the peak discharge rate which existed at pre-development for each of the design runoff events stipulated above.

The Temporary Pool has sufficient available volume to accumulate runoff without The Basin's water surface rising above the overflow elevation during each of the design runoff events.

The Basin's flood control function verifies when subjected to hydrodynamic analysis using the FEMA-approved unsteady flow computer model **Advanced ICPR**, Streamline Technologies, Winter Park, Florida. The analysis assumes that the design tailwater elevation stays constant throughout the entire discharge event.

EXHIBIT J

WATER DISTRIBUTION MASTER PLAN

SANITARY SEWER COLLECTION MASTER PLAN
FOR
CRESCENT PLANTATION
BEAUFORT COUNTY, SOUTH CAROLINA

PREPARED FOR:
CENTEX HOMES
BLUFFTON, SOUTH CAROLINA

PREPARED BY:
THOMAS & HUTTON ENGINEERING CO.
SAVANNAH, GEORGIA

LAND PLANNER:
WOOD & PARTNERS, INC.
HILTON HEAD ISLAND, SOUTH CAROLINA

ENVIRONMENTAL CONSULTANTS
NEWKIRK ENVIRONMENTAL CONSULTANTS
SAVANNAH, GEORGIA

AUGUST 8, 1997

GRAPHIC SCALE

300 0 150 300 600 1200
(IN FEET)
1 inch = 300 ft.

SEWER MANHOLE
PUMP STATION
FORCE MAIN

PUMP STATION #4
164 LOTS SERVED
70 GPM FLOW

PUMP STATION #2
150 LOTS SERVED
140 GPM FLOW

PUMP STATION #3
72 LOTS SERVED
32 GPM FLOW

PUMP STATION #1
117 LOTS SERVED
225 GPM FLOW

CLUBHOUSE AREA
MAINTENANCE AREA
REC. AREA

MARSHES OF OAK FOREST CREEK

PARCEL 2
TRIMBLESTON PARTNERSHIP

EDWARD J. DERST, JR.
DB. 46, PG. 135

98.55 ACRES
INCLUDES 10.6 ACRES NORTH OF FENCE

FOR CONTINUATION
SEE INSET "A"

INSET "A"
SCALE: 1"=2000'

EDWARD J. DERST, JR.
S.C. WILDLIFE & MARINE RESOURCE DEPT.
PROPOSED 8" FORCE MAIN
15 ACRE SURFACE TREATMENT SITE
HILTON HEAD NATIONAL
BRUIN ST.
BRUNT CHURCH ROAD
46

WESTBURY CONCRETE
LOT 14
LOT 16
LOT 15
LOT 13
OPEN SPACE
SHERIDAN COMMERCIAL CENTRE
LOT 15
LOT 13
OPEN SPACE
NOW OR FORMERLY UNION CAMP
UNION CAMP
MALCOLM JOHNSON
POWER EASEMENT

00232

EXHIBIT K

SANITARY SEWER COLLECTION MASTER PLAN

Crescent Plantation PUD

Preliminary Master Plan

Sheet 1 of 1

August 15th, 1997
(Revised November 19th, 1997)

Prepared for:

Centex Homes, Inc.
Bluffton, South Carolina

Prepared by:

Wood+Partners Inc.
Landscape Architects / Land Planners
Hilton Head Island, South Carolina

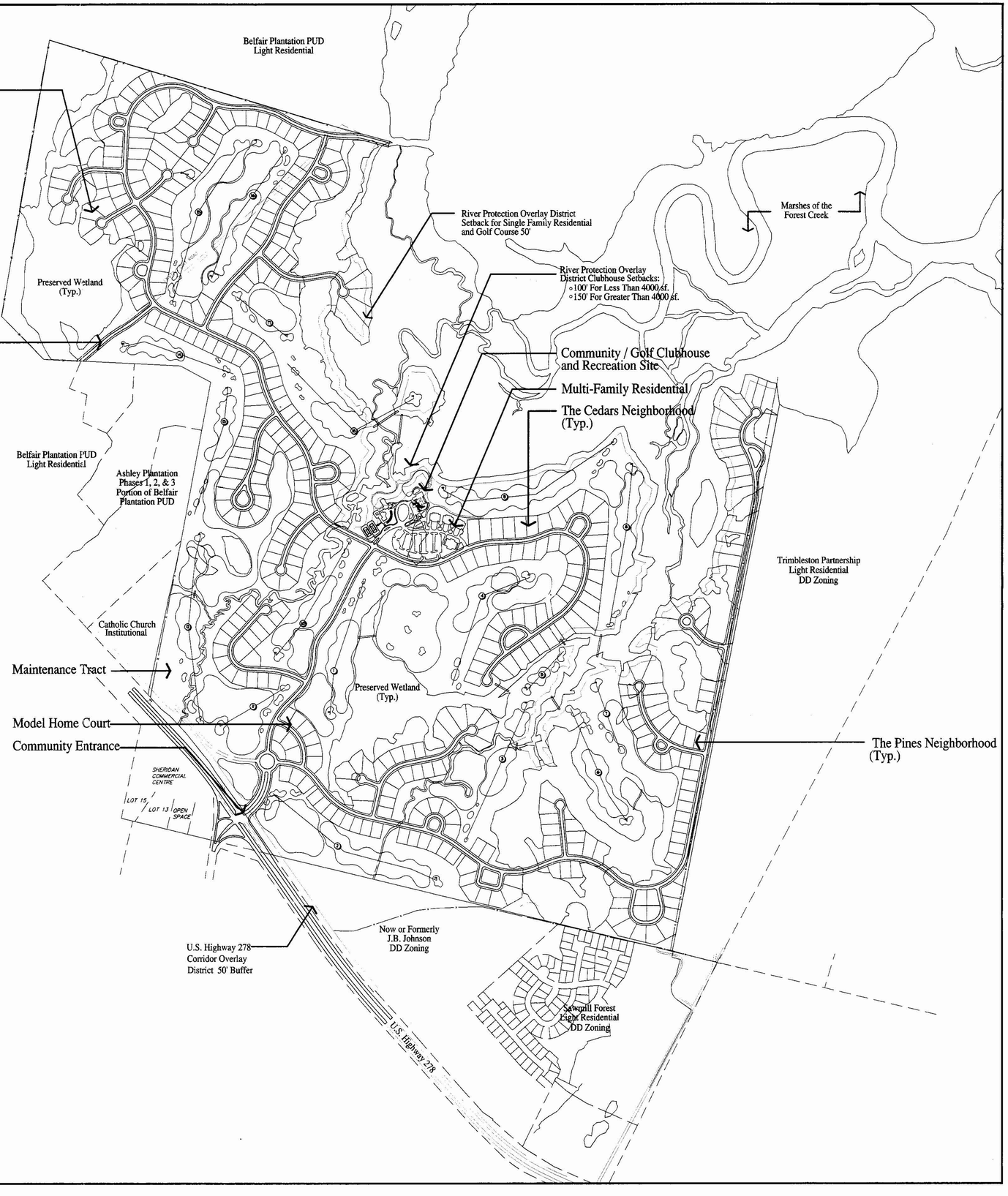
Thomas & Hutton Engineering, Inc.
Engineers / Surveyors
Savannah, Georgia

Ron Garl
Golf Course Architect
Lakeland, Florida

Newkirk Environmental Consultants, Inc.
Environmental Consultants
Savannah, Georgia

Chicora Foundation, Inc.
Archeological Survey
Columbia, South Carolina

Lewis J. Hammet
Attorney-at-Law
Bluffton, South Carolina



Development Summary:

Development Summary:	DU's
The Oaks Neighborhood	
Single Family Residential	199
Subtotal:	199 DU's
The Cedars Neighborhood	
Single Family Residential	73
Multi-Family Residential (3 - 4 unit bldgs)	12
Model Court	12
Subtotal:	97 DU's
The Pines Neighborhood	
Single Family Residential	140
Subtotal:	140 DU's
Future Residential Development	26
Subtotal:	26 DU's
Total Residential Development	462 DU's
Total Net Acres ± 553 Total Acres less ± 1.0 Acre Access Easement and ± 90.5 Acre Wetlands	± 462 AC.
Net Density	± 1 DU/NetAc.

Ancillary Development:	Acres
Community / Golf Clubhouse and Recreation Site	± 11.0 AC.
Community / Golf Maintenance Area	± 3.0 AC.
Total Ancillary Development:	± 14.0 AC.

Open Space Summary	Acres
Preserved Wetlands Existing Wetlands ± 90.5 AC. Approximate Wetlands Fill ± 9.50 AC. Including: ◦ Fill @ Isolated Wetlands ± 3.40 AC. ◦ Fill @ Road Crossings ± 2.70 AC. ◦ Wetland Excavations ± 3.40 AC.	± 81.0 AC.
Perimeter Buffers	± 34.0 AC.
Wetland Buffers	± 25.0 AC.
Total Open Space:	± 140.0 AC.

BEAUFORT COUNTY DEVELOPMENT STANDARDS
PRELIMINARY APPROVAL
This Development Review Committee approval of concept and preliminary design of a project only authorizes the applicant to proceed with final design and submission of a final application.
Date of this Preliminary approval Oct. 20, 1997
Certified by

0' 200' 400' 800' 1200' 1600'

North

Base information taken from a Boundary and Wetland plat of Crescent Plantation (553.02 acres), A section of Johnson Property, Bluffton Township, Beaufort County, South Carolina dated 8/7/97 and prepared by Coastal Surveying Co., Inc.
All acreage calculations within the Development Summary are approximate and subject to change based on final engineering.

00234

G:\ARCHIVE\CRESDEV\7071lu.dwg Wed Nov 19 10:45:57 1997 Plotted by: DB

EXHIBIT L

INTENT TO SERVE AND COMMENT LETTERS
Beaufort-Jasper Water and Sewer Authority
Bluffton Telephone Company, Inc.
Palmetto Electric Cooperative, Inc.
Wastewater Management of the Low Country
Bluffton Fire District
South Carolina Department of Health and Environmental Control (SCDHEC)
Department of Health and Environmental Control (DHEC)/Office of Ocean and Coastal Resource Management (OCRM)

BEAUFORT - JASPER WATER & SEWER AUTHORITY

POST OFFICE BOX 2149 / BEAUFORT, SOUTH CAROLINA 29901-2149 00236
803/521/9200 803/521/2008 Engineering & Operations FAX 803/521/9203

DEAN MOSS, General Manager

September 4, 1997

Mr. Benny K. Jones, Jr., P.E.
Thomas & Hutton Engineering Co.
Post Office Box 14609
Savannah, Georgia 31416

Re: Water and Sewer Service Availability - Crescent Plantation

Dear Benny:

The Authority has reviewed your request for water and sewer service for the above referenced development and offers the following:

Water - Water service is available to the property. Sufficient capacity exists in the Bluffton system (DHEC #0710003) to supply Crescent Plantation.

Sewer - Sewer service is available to the property. Sufficient capacity exists in the Bluffton WWTP (ND 0069191) to treat Crescent Plantation flows.

A pre-design conference will be required. If you have any questions, please give me a call.

Sincerely,

Ed Saxon, P.E.
Chief Engineer

mm

JAMES A CARLEN, III CHAIRMAN MICHAEL L. BELL VICE CHAIRMAN JOHN L. BALLANTYNE, P.E. SECRETARY/TREASURER
THOMAS C. DAVIS THADDEOUS Z. COLEMAN CHARLENE COOLER
C. SCOTT GRABER, ESQ. JOHN T. GRAVES JOHN D. ROGERS

Bluffton Telephone Co.
INCORPORATED

July 15, 1997

Mr. Benny K. Jones, P.E.
THOMAS & HUTTON ENGINEERING COMPANY
PO BOX 14609
Savannah, GA 31416

Dear Mr. Jones:

SUBJ: Crescent Tract

Bluffton Telephone Company, Inc. intends to provide all necessary telecommunications service to the above captioned project.

If you have any questions, please feel free to call me at 686-1253.

Sincerely,

Tom Brown

Tom W. Brown
Bluffton Project Manager

gs

PALMETTO
ELECTRIC COOPERATIVE INC.

July 17, 1997

Thomas & Hutton Engineering Company
Mr. Benny K. Jones, Jr., P. E.
P. O. Box 14609
Savannah, Ga. 31416-1609

Re: Crescent Tract
Beaufort County, South Carolina

Dear Mr. Jones:

Palmetto Electric Cooperative, Inc. has ample power available to provide service to the above-referenced location. Please provide all electrical load data, construction schedules, etc. at least ninety (90) days prior to construction to allow for proper planning on our part. There may also be aid-to-construction charges. When you have finalized your Master Plan a "cad" file will also be required.

Palmetto Electric has a very successful lighting program that we would like to discuss with you at your convenience.

If you have any questions or if I may be of further assistance, please do not hesitate to contact me.

Sincerely,

PALMETTO ELECTRIC COOPERATIVE, INC.

Daniel O. Wood
McGarvey's District Operations Manager

00239

July 17,1997

Thomas & Hutton Engineering Co.
PO Box 14609
Savannah, Ga. 31416-1609

Re: Crescent Tract
Beaufort County, SC.
Capability to serve

To Whom It May Concern,

Waste Management of the Low Country agrees to supply waste removal services and portable toilets to the Crescent Tract being developed.

Once the project is complete, Waste Management will also be able to provide trash services as required.

Waste Management, with over 25 years of experience, appreciates the confidence you have shown in us.

Respectfully,

Bill Shaw
Sales Manager
Waste Management of the Low Country

00240

APPLICANT (DEVELOPER) NAME, Centex Homes Corp.	ADDRESS: 1533 Fording Island Road Suite 308 Hilton Head Island, SC 29926	ZONE: PUD PHONE # (803) 837-2227	
PROJECT NAME: Crescent Tract		TYPE: RESIDENTIAL/GOLF	LOCATION: US HWY 278
TAX MAP # 32	PARCEL # 1	# LOTS/UNITS: 616	DENSITY: 1.0
LAND AREA: 650 AC.	BUILDING AREA: 2500 SF	HEIGHT (FINISHED GRADE TO ROOF EAVES): 16 ft.	
NUMBER OF BUILDINGS: 616		HEIGHT (FINISHED GRADE TO BOTTOM OF HIGHEST WINDOW): 4 ft.	
FIRE DISTRICT: Bluffton		FIRE OFFICIAL CLAY GRAVES	
PROPOSED WATER SUPPLY SYSTEM: BJWSA		ACCESS/ROADS/PARKING SURFACING: PAVED	

BASED ON A REVIEW OF THE SITE PLAN AND INFORMATION SUBMITTED BY THE APPLICANT, I HEREBY

- ☑ APPROVE
- ☑ APPROVE WITH CONDITIONS
- ☐ DISAPPROVE

☑ PRELIMINARY
☐ FINAL

(FIRE OFFICIAL)

7/25/97
(DATE)

CONDITIONS: PRELIMINARY APPROVAL ONLY. NO DEVELOPMENT OR CONSTRUCTION AT THIS TIME

CERTIFICATIONS OF COMPLIANCE

DATE INSPECTION WAS REQUESTED	D.S.O. PERMIT #

BASED ON AN INSPECTION OF THE SUBJECT PROJECT

☐ THE FOLLOWING DEFICIENCIES OR CORRECTIONS ARE NOTED AND MUST BE ADDRESSED;

☐ THE COMPLETED PROJECTS IS IN COMPLIANCE WITH THE FIRE SAFETY STANDARDS OF THE DEVELOPMENT STANDARDS ORDINANCE.

(FIRE OFFICIAL)

(DATE)

D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

Low Country District
Environmental Quality Control
1313 Thirteenth Street
Port Royal, SC 29935
803-522-9097 Fax: 803-522-8463

Serving
Beaufort, Colleton,
Hampton and Jasper Counties

August 6, 1997

Mr. Benny K. Jones, Jr., P.E.
Thomas & Hutton Engineering Co.
P.O. Box 14609
Savannah, Georgia 31416-1609

RE: Crescent Plantation
Beaufort County

Dear Mr. Jones:

I am in receipt of your request for preliminary approval of water and sewer service to the proposed development. As stated in your letter, the proposed development consists of an 18 hole golf course, a golf clubhouse, club facilities, approximately 552 single family homes and 64 multi-family units.

Provided that the Beaufort-Jasper Water & Sewer Authority has the capacity and is willing to provide water and sewer service, preliminary approval could be given. As you know, appropriate permits would have to be issued prior to the initiation of any construction of water or sewer lines. This preliminary approval does not mean that construction permits would ever be issued.

Should you have any questions or comments, please let me know.

Sincerely,

Penny Cornett
District Engineer
Environmental Quality Control
Low Country District EQC

South Carolina
DHEC
Department of Health and Environmental Control
P.O. Box 587, Beaufort, SC 29901

Commissioner: Douglas E. Bryant

Board: John H. Burriss, Chairman
William M. Hull, Jr., MD, Vice Chairman
Roger Leaks, Jr., Secretary
Richard E. Jabbour, DDS
Cyndi C. Mosteller
Brian K. Smith
Rodney L. Grandy

Promoting Health, Protecting the Environment

Bureau of Ocean and Coastal Resource Management
Christopher L. Brooks, Bureau Chief

July 24, 1997

Mr. Ben Jones
Thomas & Hutton Engineering Co.
PO Box 14609
Savannah, GA 31416-14609

Re:Crescent Tract
Conceptual Stormwater Master Plan
Beaufort County

Dear Mr. Jones:

The staff of SCDHEC-OCRM has reviewed the draft preliminary storm drainage master plan for the above referenced project and it does meet our initial planning requirements. However, OCRM will require that a wetland master plan and a final stormwater master plan be submitted for the entire project prior to certification of the first phase of development.

The certification staff at OCRM does not object to Beaufort County proceeding with conceptual master plan review for this project; however, before any individual planning for development or before any construction may occur, the office of OCRM will require that a land disturbance permit (per S.C. Stormwater Management and Sediment Reduction Act)be obtained.

Stormwater design of this project shall incorporate runoff storage standards for shellfish waters before entering into the Colleton River, which is classified as *Outstanding Resource Waters*. All development shall be consistent with the S.C. Stormwater and Sediment Reduction Act and the S.C. Coastal Zone Management Program. Because of the proposed amount of disturbance within the project, the stormwater management regulations require the engineer to design the basins and provide calculations to meet a removal efficiency of 80 percent for suspended solids or 0.5 ML/L peak settleable concentration, which ever is less. A specific sequence of construction operations must also be approved by this office prior to certification. The disposition of any archeological and/or historic areas on the site shall be addressed prior to the issuance of any land disturbance permits. If you have any questions or comments regarding this review, please do not hesitate to contact our office.

Sincerely,

Billy Webster
Engineer Associate III

cc: Mr. Stephen Snyder
Mr. Joseph Fersner, PE

BW/mastsw2/bw

recycled paper

EXHIBIT M

OTHER AGENCY SUBMITTALS/PRELIMINARY COMMENTS
South Carolina Department of Transportation (SCDOT)
U.S. Highway 278 Corridor Review Board

SCDOT
South Carolina
Department of Transportation

13 Munch Drive
Beaufort, South Carolina 29902

803-524-7255
Fax-803-524-3478

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 1
To: Ben Jones	From Ron Oddo
Co.	Co.
Dept.	Phone #
Fax #	Fax #

July 15, 1997

Mr. Benny K. Jones, Jr., P.E.
Thomas & Hutton Engineering Company
P.O. Box 14609
Savannah, Georgia 31416-1609

RE: Crescent Tract

Dear Mr. Jones:

I have reviewed your plans for the proposed commercial access point on US-278, Fording Island Road, and the project appears feasible in concept. When detailed development plans are available please submit them to this office along with a drainage plan, erosion and sediment plan and a copy of the DHEC sign off letter. At that time I will work with you to address the specific details of the access point.

If I can answer any questions or assist you further please don't hesitate to contact me.

Sincerely,

Ron Oddo
Encroachment Permits Inspector

RWO/ro
cc: Robert Clark, District Traffic Engineer, District 6
File D6/BEA/RO A: Feasibility

AN EQUAL OPPORTUNITY/
AFFIRMATIVE ACTION EMPLOYER

COUNTY COUNCIL OF BEAUFORT COUNTY
BEAUFORT COUNTY JOINT PLANNING BOARD
Multi-Government Center • 100 Ribaut Road
Post Office Drawer 1228, Beaufort, SC 29901-1228
Phone: (803) 525-7138 Fax: (803) 525-7113

August 26, 1997

Mr. Bruce Boysen
Wood & Partners, Inc.
P.O. Box 23949
Hilton Head Island, S.C. 29925-3949

Re: Crescent Plantation PUD

Dear Mr. Boysen:

This is to inform you that the U.S. 278 Highway Corridor Review Board has approved, by special vote, your request for approval of the access point and the landscape buffer for the Crescent Plantation PUD. The approval is with the stipulation that the existing access point that serves as a driveway to the Johnson home, and is 1200 feet from the proposed access to Crescent Plantation, be eliminated.

If you have any questions regarding this CRB action, please call me at 525-7141.

Sincerely,

Ian D. Hill
U.S. 278 CRB Administrator

cc: Charles Gatch, Zoning Administrator

Architectural Guidelines

The Crescent

39 SHERIDAN PARK CIRCLE, SUITE 3 BLUFFTON, SC 29910 843-815-3544 FAX 843-815-3545

4. A landscaping plan that uses rock or crushed rock as a predominant element will not be accepted.

5. In general, proposed plant material should be easily available, salt tolerant, unappetizing to deer, drought resistant and cold hardy.

6. Planting design:

   a. A simple massing of plant materials is generally the most effective method of creating a successful planting scheme. Lawn areas are encouraged in open areas around homes where sunlight is available for a good portion of the day. Otherwise, wooded areas should be preserved and enhanced by the selective introduction of ground cover and edge plantings. Plant material, berms, fences and walls should also be incorporated in to the design of outdoor spaces for functional use such as to provide screening and privacy.

   b. At driveway entrance, for reasons of safety, no planting which obstructs sight lines at driveway entrances (between 2' and 6' above streets and roadways) shall be permitted.

9. Tree Protection

   a. No tree with a trunk diameter measuring 6" or more at a distance of 4' above ground level (DBH) shall be removed, or effectively removed through damage, without written approval by the ACC.

   b. The ACC may designate specific trees, which must be protected through the clearing, and construction phases with barriers erected at least 6' from the trunk of trees.

10. Walks, retaining walls, or other hardscape improvements will be identified by material and dimensions, including height above finished grade.

11. Exposed foundation walls on street-facing façade will be planted with a minimum of 5-gallon plants spaced to cover exposed wall in a maximum of 2 years.

12. All landscape improvements and sodded areas will be covered by an irrigation system.

13. Silt fences elsewhere required by these guidelines will remain in place and be properly maintained until the landscape inspection has been successfully completed.

14. Landscaping of lots adjacent to the golf course will be additionally required to landscape the areas of said lot adjacent to the golf course and if the plan calls for grass, the acceptable grasses are: Fescue, Zoysa, Centipede or St.


#303
00249

LAUGHLIN & BOWEN
ATTORNEYS AT LAW
100 Exchange Street, Suite 101
P. O. Drawer 21119
HILTON HEAD ISLAND, SOUTH CAROLINA 29925-1119

DREW A. LAUGHLIN
JOHN R. C. BOWEN

TELEPHONE
(843)689-5700
FACSIMILE
(843)689-9300
E MAIL ADDRESS
drew@laughlinandbowen.com

September 5, 2003

Craig Lovett
Vice President
Centex Homes
39 Sheridan Park Circle, St. 3
Bluffton, SC 29910

Re: Crescent Tree Issue

Dear Mr. Lovett:

We represent several Crescent homeowners in connection with claims arising from the death of native trees on their properties as a result of insect infestation caused by Centex's failure to follow accepted tree protection procedures. In all cases, our clients selected their home sites and paid premiums for them because of the presence of the native trees. I believe that you and/or William Cuttler, Construction Manager at Centex, have previously had communication with some of our clients, including Tom Conner, C. L. Melenyzer, and Mr. and Mrs. Holger Marbach.

My clients have provided and we have reviewed several pieces of correspondence from Centex that pertain to this issue. We have reviewed this correspondence and the conditions on site with forestry experts. Our experts tell us, unequivocally, that the insect infestation was a direct result of the improper and inadequate methods employed by Centex and, had Centex followed the proper procedures, the infestation would have been avoided.

Our clients consider Centex responsible for the costs associated with removing the dead trees, restoring any damage to the properties during the removal process, and for compensation equivalent to the diminution in value of the lots or the cost of replacing the lost trees with trees of the same species and size. Our clients are prepared to resort to litigation if that is what is required to force Centex to accept responsibility for the conditions that it has created.

Please direct this letter to persons having sufficient authority to respond with a satisfactory solution.

Yours truly,

LAUGHLIN & BOWEN

Drew A. Laughlin

DAL/sb
cc: Tom Conner
C. L. Melenyzer ✓
Mr. and Mrs. Marbach
William Cuttler, Construction Manager, Centex
Eric Lundblad, Customer Service Manager, Centex

CENTEX HOMES

September 16, 2003

Mr. Drew A. Laughlin
Laughlin & Bowen
PO Drawer 21119
Hilton Head Island, SC 29925-1119

Re: Crescent Tree Issue

Dear Mr. Laughlin:

I am Regional General Counsel for the Mid-Atlantic Region of Centex Homes, which includes our Hilton Head market. Your letter of September 5, 2003, regarding the Crescent tree issue has been referred to me for response.

I have discussed this matter with Mr. Craig Lovette, our Area Manager for the Hilton Head market. While our operations personnel regret that this situation has developed, clearly it is not a problem which we have caused or for which we have some legal liability. In fact, I believe the division's offer to absorb a portion of the cost of removing the damaged trees exceeds their obligation and is very reasonable in approach.

I don't understand the legal theory pursuant to which you are advancing your demand. Certainly there is no implied warranty against insect infestation or other acts of God. It is also clear that we did not make any commitment or express warranty with regard to the survival of trees. To the contrary, each buyer's purchase contract clearly and specifically indicates that we do not have responsibility for native trees. In fact, one of the phrases included in the general disclosures portion of the contract specifically states in bolded type "**All native trees become the sole responsibility of the Purchaser after closing**". The contract also clearly indicates that lot premiums are not tied to trees, views or any other lot characteristics.

I hope that your clients will understand that the basis for our legal position is reasonable and makes common sense. If not, then they should considering seeking a resolution using the binding arbitration process which the contract provides as the method for resolving any disputes between them and us.

Please let me know if I have misconstrued your position.

Sincerely,

James B. Watkins
Vice President & Regional General Counsel

JBW/mc
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MID-ATLANTIC REGION - LEGAL DEPARTMENT
CENTEX REAL ESTATE CORPORATION - MANAGING GENERAL PARTNER
5400 GLENWOOD AVENUE, SUITE 100 • RALEIGH, NORTH CAROLINA 27612-3228 • TELEPHONE 919/789-4880 • FASCIMILE 919/789-4882

LAUGHLIN & BOWEN
ATTORNEYS AT LAW
100 Exchange Street, Suite 101
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HILTON HEAD ISLAND, SOUTH CAROLINA 29925-1119

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JOHN R. C. BOWEN

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E MAIL ADDRESS
drew@laughlinandbowen.com

September 26, 2003

James B. Watkins
Vice President and Regional General Counsel
Centex Homes Mid-Atlantic Region
5400 Glenwood Avenue, Suite 100
Raleigh, NC 27612-3228

Re: Crescent Tree Issue

Dear Mr. Watkins:

The claim is not based on an "implied warranty against insect infestation or other acts of God." The basis of the claim is clearly stated in my letter to Mr. Lovett. Centex charged a premium for the lots because they were treed and Centex failed to follow accepted procedures to protect the trees during the clearing and construction process. It was Centex's negligence, not acts of God, that was responsible for the death of these trees.

Yours truly,

LAUGHLIN & BOWEN

Drew A. Laughlin

DAL/sb
cc: Tom Conner (w/enc.: Mr. Watkins letter dated Sept. 16, 2003)
C. L. Melenyzer (w/enc.: Mr. Watkins letter dated Sept. 16, 2003)

September 30, 2003

Mr. Drew A. Laughlin
Laughlin & Bowen
PO Drawer 21119
Hilton Head Island, SC 29925-1119

Re: Crescent Tree Issue

Dear Mr. Laughlin:

I am in receipt of your September 26 response to my letter of September 16.

We did not charge a premium because the lot was treed. The contract specifically states the opposite.

But, even if we did, as I clearly pointed out in my letter, the purchaser specifically, and in bolded writing as part of the contract, acknowledged and accepted that we have no duty toward purchaser with regard to the trees. In addition to this negligence claim not being supported by other required elements, I don't believe that a negligence claim can be supported without a duty.

But, I guess that is what binding arbitration is for. So that people have the opportunity to get a neutral party to agree (or not) with their position. We are confident we can do so.

Sincerely,

James B. Watkins
Vice President & Regional General Counsel

JBW/mc

cc: Craig Lovette

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LAUGHLIN & BOWEN
ATTORNEYS AT LAW
100 Exchange Street, Suite 101
P. O. Drawer 21119
HILTON HEAD ISLAND, SOUTH CAROLINA 29925-1119

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drew@laughlinandbowen.com

October 15, 2003

James B. Watkins
Vice President & Regional General Counsel
Centex Homes
5400 Glenwood Avenue, Suite 100
Raleigh, NC 27612-3228

Re: Crescent Tree Issue

Dear Mr. Watkins:

Thank you for your September 30 letter.

It is hard to believe that Centex's position is that it had no duty to observe commonly accepted procedures for protecting trees during construction. My clients bought lots with healthy native trees. Centex killed them by failing to make any effort to conform to accepted guidelines for their protection during construction. The whole matter is really that simple.

Centex's own architectural guidelines for The Crescent require the protection of trees. Methods for protecting trees during construction are published in, among other places, the South Carolina Forestry Commission's website (www.state.sc.us/forest) A copy of the guidelines published on this website are enclosed for your consideration. As stated on the website:

> The decision to protect and preserve trees on a construction site is an important one.
>
> Many sites are chosen for residential or business use simply because the site contains a beautiful shade tree or offers a wooded environment. Often the very trees which are highly valued for their contribution to the aesthetic appeal of the site are inadequately protected or cared for during construction.
>
> A few careful and well-planned steps may make a difference between a post-construction disappointment and a proud and satisfied new owner.

Again, we have discussed this situation with Forestry experts. They agree that these trees would be healthy today but for Centex's failure to take simple steps to protect them during construction.

Yours truly,

LAUGHLIN & BOWEN

Drew A. Laughlin

DAL/sb
Enc.
cc: Thomas M. Conner (w/enc.)
C. L. Melenyzer (w/enc.)

00256

South Carolina
FORESTRY COMMISSION

Protecting Trees During Construction



The decision to protect and preserve trees on a construction site is an important one.

Many sites are chosen for residential or business use simply because the site contains a beautiful shade tree or offers a wooded environment. Often the very trees which are highly valued for their contribution to the aesthetic appeal of a site are inadequately protected or cared for during construction.

A few careful and well planned steps may make the difference between a post-construction disappointment and a proud and satisfied new owner.

Develop a Tree Construction Plan
Follow Tree Protection Guidelines
Tree Wounds

Develop a Tree Construction Plan

The first step in a tree protection plan is to determine which trees can and should be saved. The following questions should be answered:

- Is the tree a desirable species? Is the tree healthy? Will it provide shade where I want it?
- If the tree is left growing in a small space, will it survive? Will it be the correct size when it reaches maturity? Will it have enough growing space?
- Would it be easier and less costly to replace the tree or protect it? What will it cost to protect the tree during construction?
- Will the tree fit well into my landscape plan?

Large trees within 10 feet of buildings and drives may be damaged and later become hazardous. Plan to build a safe distance away from large trees, or remove them before construction.

Some trees in poor condition should not be saved. It may be safer and cheaper to remove old slow growing trees and those with extensive rot or diseased woody tissue before construction begins.

Keep trees that are well-located, vigorous, and have desirable characteristics; require the minimum protection to save them. Remove trees that are obviously located in the immediate construction area and will be damaged by soil compaction, cutting of roots, or grade changes.

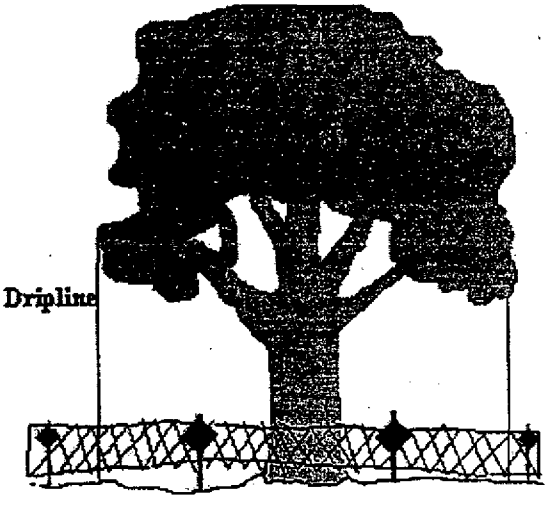
Top of Page

00257

Follow Tree Protection Guidelines

Follow these guidelines to protect trees during construction:

- Mark trees to be saved with surveyor's flagging or ribbon.
- Construct barricades made of wood or wire fencing around trees to establish a tree protection zone. Extend barricades as far out as the branch spread of the trees. If disturbance within this area is unavoidable, the tree barricade should be located a minimum of one foot from the tree for each one inch diameter of tree trunk (for example, ten feet from a tree ten inches in diameter). Place heavy equipment, supplies, ditches, and underground utility lines outside the tree protection zone. If an underground line must go near a tree, require the contractor to tunnel or auger underneath major roots without cutting them.
- Place Tree Protection Signs on barricade.
- Include a tree protection clause in the construction contract forbidding grading, filling, ditching, equipment parking, or material storage within the tree protection zone. Include penalties for violations of the tree protection clause and damage to trees.
- Fertilize protected trees to increase vigor and aid in overcoming stress. Prune deadwood and broken branches. Follow the guidelines on tree care that are available from the Forestry Commission.
- Designate one corridor for site access, preferably where the driveway or parking area will be located. Limit construction equipment access, material storage, fuel tanks, chemical or cement rinsing, vehicle parking and site-office locations to non-tree areas. Keep construction equipment away from the trunk or tree protection zone of trees to be saved. Do not allow trash or debris to be burned beneath trees.



Barricades that extend beyond the dripline are a good way to protect trees during construction.

Top of Page

Tree Wounds

00258



If trees are wounded or stressed during construction, they are more susceptible to insect and disease attack. Any wounds to the bark should be cleaned to sound wood by removing loose bark and wood, leaving a smooth edge around the wound. no application of a wound dressing is necessary.

For more information contact your Urban Forester

Top of Page

SCFC Home Page / Urban Forestry / Reference Resources

LAUGHLIN & BOWEN
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100 Exchange Street, Suite 101
P. O. Drawer 21119
HILTON HEAD ISLAND, SOUTH CAROLINA 29925-1119

DREW A. LAUGHLIN
JOHN R. C. BOWEN

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E MAIL ADDRESS
drew@laughlinandbowen.com

November 13, 2003

James B. Watkins
Vice President & Regional General Counsel
Centex Homes
5400 Glenwood Avenue, Suite 100
Raleigh, NC 27612-3228

Re: Crescent Tree Issue

Dear Mr. Watkins:

It certainly appears that "what we have here is a failure to communicate".

We are aware of the terms of the contract. We simply do not agree with Centex's position that the contract grants Centex a prospective license to intentionally or negligently kill the trees on the properties our clients contracted to purchase. As we have previously stated, the problem is that Centex Homes did not take reasonable precautions.

Frankly, Centex's response to this whole affair does nothing to inspire confidence in its willingness to stand behind its work or its commitment to customer satisfaction.

Yours truly,

LAUGHLIN & BOWEN

Drew A. Laughlin

DAL/sb
cc: Thomas M. Conner (w/enc.: Mr. Watkins' letter dated Oct. 30, 2003)
C. L. Melenyzer (w/enc.: Mr. Watkins' letter dated Oct. 30, 2003)

CENTEX HOMES

October 30, 2003

Mr. Drew A. Laughlin
Laughlin & Bowen
PO Drawer 21119
Hilton Head Island, SC 29925-1119

Re: Crescent Tree Issue

Dear Mr. Laughlin:

I am in receipt of your October 15 response to my letter of September 30.

Attached is a copy of a page from the Conner contract. Please see Section 8, which sets forth the agreement of the parties with regard to the preservation of native trees. The provision which I have highlighted states "Although precautions are taken, Centex Homes cannot guarantee either the preservation, protection, or extended health of native trees. Dead trees, within the landscaped area will be removed as requested by Purchaser, if noted prior to closing. **All native trees become the sole responsibility of Purchaser after closing.**"

The agreement of the parties is straightforward and very clear. That is, we did not agree to take the responsibility for preserving the health of existing trees and specifically obtained the purchaser's agreement with that position.

Sincerely,

James B. Watkins

James B. Watkins
Vice President & Regional General Counsel

JBW/mc
Attachment

cc: Craig Lovette – Centex Homes, Area Manager

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MID-ATLANTIC REGION - LEGAL DEPARTMENT
CENTEX REAL ESTATE CORPORATION - MANAGING GENERAL PARTNER
5400 GLENWOOD AVENUE, SUITE 100 • RALEIGH, NORTH CAROLINA 27612-3228 • TELEPHONE 919/789-4880 • FASCIMILE 919/789-4882

6. HOMESITE INSPECTION

Purchasers have walked the homesite and understand the property boundaries and any existing easements, wetlands, etc. with the sales representative. Purchasers were shown location and understand of all appurtenances (fire hydrants, light poles, manholes, transformers (green boxes), blowoffs, culvert boxes, etc.) related to the homesite via the use of the following: pre-sales plot plan, utility as-builts, home-fit study and mylar overlays.

7. PLACEMENT OF HOME ON SITE

Due to the varying field conditions which will be assessed on each homesite just prior to the start of construction, Centex must maintain control over the siting of the home and appurtenances. We, consequently, reserve the right to utilize reversed floor plans, determine drive side, and the extent of additional clearing and grading necessary. We also must reserve the right to offer credit and/or revisions in lieu of decks, patios, porches, and drive widths which are determined as infeasible by our construction staff. Although we regret the necessity of these reservations, they are necessary to control the aesthetic value of the overall community, and allow better control of the site specific costs, ultimately allowing for better values to our customers.

8. LANDSCAPING

Centex Homes will fine grade and landscape the front, side, and rear areas of the yard as was disturbed during the development, and lot clearing process. Sod and plant beds will be installed, according to a ratio of 70% sod and 30% plant beds, in disturbed areas. Undisturbed, wetlands, and wooded natural areas will be left as is. Clearing and disturbances of natural areas, in order to provide underground utility services to the home, may be necessary. These areas will be left unlandscaped and allowed to return to their natural state. On deep wooded homesites, Centex Homes reserves the right to limit the amount of clearing and landscaping on the rear of the property to 40 feet from the rear most portion of the home. The remaining undisturbed area will be left in its natural state. Decisions regarding the removal of trees on the property are at the sole discretion of the Centex Homes construction staff. In general, all trees that are deemed aesthetically valuable to the homesite and the entire community will be left on the property. Those that are in or within close vicinity of the homes footprint or concrete flatwork areas will be removed. Additionally, trees that impede the drainage of the site, or overall community drainage plan will be removed. Although precautions are taken, Centex Homes cannot guarantee either the preservation, protection, or extended health of native trees. Dead trees, within the landscaped area will be removed as requested by Purchaser if noted prior to closing. **All native trees become the sole responsibility of the Purchaser after closing.** Sod is alive and healthy when cut from the farms and installed on your property. All landscaping requires a continuous maintenance program, which includes proper watering, fertilization, mowing, and weed control. Upon closing, this maintenance is the responsibility of the homeowner. Trees planted by Centex Homes will be warranted for 30 days. Bushes will be warranted for 60 days after closing. Deficiencies other than those noted prior to closing will not be warranted by Centex Homes.

9. MODEL HOMES FEATURES

Our model homes often contain items that are not included in the base price of your home. Optional upgrades in floor coverings, interior cabinets and trim, lighting, and appliances along with decorator items, such as furniture and wall coverings often appear in each model home. Many of these items are available at additional cost. Standard features vary per neighborhood. Please refer to your neighborhood interior/exterior standard features disclosure regarding the standard features of your new home.

10. PRODUCT IMPROVEMENT

In an effort for continuous improvement, Centex Homes reserves the right to make changes and substitutions in building materials, fixtures, and plans without prior written notice.

11. RADON NOTICE

The United States Environmental Protection Agency ("EPA") has indicated that a number of homes in the United States experience elevated levels of radon gas. Radon is a naturally occurring gas which is caused by the radioactive decay of the element radium. Since radium is contained in the earth's crust and dissolves readily in water, radon can be found virtually everywhere. Radon gas can enter the home through a variety of sources, such as through joints or normally occurring cracks in concrete floors, or walls, floor drains, and sumps. This phenomenon can occur in any home. Once inside an enclosed space, such as a home, radon can accumulate. EPA has stated that prolonged exposure to elevated concentrations of radon decay products has been associated with increase in the risk of lung cancer. EPA recommends that actions be initiated to reduce excessive indoor radon levels. The EPA and state and local environmental authorities are best equipped to render advice regarding the risk which may exist in a particular area, methods available to detect and measure radon levels, and what, if any, remedial measures may be advisable in particular circumstances to reduce the risk of radon exposure.

Centex Homes makes no warranty or representation of any kind, express or implied, regarding the presence of radon gas in a Centex built home.

12. WETLANDS

A portion of the homesite has ☐ has not ☒ been classified as "wetlands" and/or deed restricted buffer areas under the Clean Water Act. Purchaser understands that unless a permit is obtained from the Army Corps. of Engineers, Purchaser cannot excavate from or deposit material in that designated area or do any other work which may affect " .... . the course, location, condition or capacity of navigable waters, including rivers and streams" (Federal Register November 13,1986). The homesite has been designed so that the home and all other improvements constructed by the builder will not impact the wetland area. Centex homes will not disturb, disrupt, or clear any area designated as a "wetland" during the course of construction.

13. FLOODZONE

A portion of the homesite has ☐ has not ☒ been classified as being in a flood zone which may require flood insurance. (This is subject to verification by final survey).

CENTEX HOMES

_____ (Initial)

4/3/02

PURCHASER

_____ (Initial)

_____ (Initial)

LAUGHLIN & BOWEN
ATTORNEYS AT LAW
100 Exchange Street, Suite 101
P. O. Drawer 21119
HILTON HEAD ISLAND, SOUTH CAROLINA 29925-1119

DREW A. LAUGHLIN
JOHN R. C. BOWEN

TELEPHONE
(843)689-5700
FACSIMILE
(843)689-9300
E MAIL ADDRESS
drew@laughlinandbowen.com

December 23, 2003

James B. Watkins
Vice President & Regional General Counsel
Centex Homes
5400 Glenwood Avenue, Suite 100
Raleigh, NC 27612-3228

Re: Crescent Tree Issue

Dear Mr. Watkins:

Enclosed is a copy of a report dated December 5, 2003 by Dr. Donald L. Ham on the cause of the tree damage at The Crescent. As you can see from Dr. Ham's impressive resume, he is a preeminent forestry expert. His report leaves no doubt that the trees were damaged as a result of construction damage that could have been easily prevented.

We ask that Centex review Dr. Ham's report and reconsider its position on this matter. We would be pleased if we can come to some agreement. If not, please let us know so that we can proceed with asserting a claim.

The report recommends that the trees be removed as soon as possible. We intend to begin this process. If you wish to offer assistance, or if you require additional inspections before the trees are removed, please let me know immediately.

Yours truly,

LAUGHLIN & BOWEN

Drew A. Laughlin

DAL/sb
Enc.
cc: Thomas M. Conner (w/o enc.)
C. L. Melenyzer (w/o enc.)

00263

CENTEX HOMES

HILTON HEAD/The Crescent
GENERAL DISCLOSURES

1. UNAVAILABLE CHANGES

Plans and specifications supersede model displays and existing structures. Changes that affect the following are not available:

1. Foundations or footings (size or configurations)
2. Interior load bearing partitions
3. Heated square footage of structure
4. Location of Utility Equipment
5. Fireplace location/Per Plan
6. Electrical meter or main panel locations
7. HVAC equipment locations
8. Certain plumbing, waste or vent locations
9. Front Exterior Design

2. AVAILABLE OPTIONS

Standard Option - Pre-priced additional feature, that is included in the Centex Homes Option Book, available for selection and not included in the base price of the house.

Non Standard Option - a requested additional feature, that is not included in the Centex Homes Option Book, available for selection and not included in the base price of the house. The price and feasibility of this option must be determined by the Centex Homes estimating department. These options are available only prior to the original sales agreement and will not be considered after such time.

In addition to the standard features outlined, Centex Homes offers a list of neighborhood specific standard options available at an additional cost. As it is to our mutual benefit to include your selections of these items on the original sales agreement, our sales staff will be glad to review our standard options with you. The following guidelines apply:

A. Standard options may be financed at the time of the original sales agreement with two exceptions:

1. If the appraised value is higher than the base price, but under the final sales price including customer selected options, the Purchaser will be required to pay in cash the net difference between the appraised value and the final sales price.

2. On government loans, standard options may not exceed 5 % of the original sales price excluding premiums and screen porches. Anything over 5 % will require an advance non-refundable deposit equal to the amount over the set percentage at the time of the original sales agreement.

B. In addition to the standard options, non standard options may be available. All non-standard options will require an advance non refundable deposit of the full purchase price of the non-standard option at the time of the original sales agreement.

3. CHANGE ORDER POLICY

A change order is any single item which a customer requests to be changed from our standard plans and specifications. These change orders may be allowed and processed after the original Sales Agreement with certain guidelines:

A. Changes after Sales Agreement for standard options will require an advance non-refundable deposit equal to the amount of the standard options selected. Certain changes made may require additional charges.
B. Certain changes will not be accepted after construction has begun.
C. Centex Homes reserves the right to deny any changes that may impact the current contracted target closing date.
D. Non-standard options are not available after the original Sales Agreement date.

4. COLOR & LIGHTING SELECTION GUIDELINES

Our selections coordinator is available on all "to be built homes." Our selections coordinator will contact you within ten (5) days of your accepted sales agreement date to set an appointment for selections. These selections should take approximately one hour.

A EXTERIOR & INTERIOR COLOR SELECTIONS

To preserve the aesthetic integrity of the entire community, Centex Homes reserves the right to approve or deny all exterior color choices based on the surrounding homes. Some colors may not be available due to change in suppliers, discontinued colors, etc.

One (1) carpet color throughout can be selected. If you desire more colors, the additional charge is $250.00 per color. For vinyl floor selections, up to two (2) patterns can be chosen.

B. HOMES UNDER CONSTRUCTION

If your home is under construction and selections are still available, you must have an appointment with the Sales Representative within two (2) working days of your signing the sales agreement.

5. BLACK BOOK DISCLAIMER

All information contained within the Black Book of a given community, including pre-sale plot plans, homesite lot fit studies, and utility as-builts, has been compiled with as much accuracy as is possible, but cannot be verified until actual installation is completed. Appurtenances that are located on the utility as-builts represent what is generally most visible from the street. Items such as T.V. and telephone pedestals, and electrical junction boxes, are not designated on the utility as-builts, and may be installed on any given homesite either before or after closing. Local utility companies reserve the right to locate any and all appurtenances where necessary to provide utilities to the entire neighborhood. Cable TV is provided for in our utility planning. However, the builder has no control over when cable TV may actually be available to your new home. Right of ways may be disturbed upon installation, responsibility is of the installation company and not Centex Homes.

CENTEX HOMES

(Initial)

4/3/02

PURCHASER

(Initial)

(Initial)

08/02/01

GENERAL DISCLOSURES Page 2 of 3

6. HOMESITE INSPECTION
Purchasers have walked the homesite and understand the property boundaries and any existing easements, wetlands, etc. with the sales representative. Purchasers were shown location and understand of all appurtenances (fire hydrants, light poles, manholes, transformers (green boxes), blowoffs, culvert boxes, etc.) related to the homesite via the use of the following: pre sales plot plan, utility as-builts, home fit study and mylar overlays.

7. PLACEMENT OF HOME ON SITE
Due to the varying field conditions which will be assessed on each homesite just prior to the start of construction, Centex must maintain control over the siting of the home and appurtenances. We, consequently, reserve the right to utilize reversed floor plans, determine drive side, and the extent of additional clearing and grading necessary. We also must reserve the right to offer credit and/or revisions in lieu of decks, patios, porches, and drive widths which are determined as infeasible by our construction staff. Although we regret the necessity of these reservations, they are necessary to control the aesthetic value of the overall community, and allow better control of the site specific costs, ultimately allowing for better values to our customers.

8. LANDSCAPING
Centex Homes will fine grade and landscape the front, side, and rear areas of the yard as was disturbed during the development, and lot clearing process. Sod and plant beds will be installed, according to a ratio of 70% sod and 30% plant beds, in disturbed areas. Undisturbed, wetlands, and wooded natural areas will be left as is. Clearing and disturbances of natural areas, in order to provide underground utility services to the home, may be necessary. These areas will be left unlandscaped and allowed to return to their natural state. On deep wooded homesites, Centex Homes reserves the right to limit the amount of clearing and landscaping on the rear of the property to 40 feet from the rear most portion of the home. The remaining undisturbed area will be left in its natural state. Decisions regarding the removal of trees on the property are at the sole discretion of the Centex Homes construction staff. In general, all trees that are deemed aesthetically valuable to the homesite and the entire community will be left on the property. Those that are in or within close vicinity of the homes footprint or concrete flatwork areas will be removed. Additionally, trees that impede the drainage of the site, or overall community drainage plan will be removed. Although precautions are taken, Centex Homes cannot guarantee either the preservation, protection, or extended health of native trees. Dead trees, within the landscaped area will be removed as requested by Purchaser if noted prior to closing. ~~All native trees become the sole responsibility of the Purchaser after closing.~~ Sod is alive and healthy when cut from the farms and installed on your property. All landscaping requires a continuous maintenance program, which includes proper watering, fertilization, mowing, and weed control. Upon closing, this maintenance is the responsibility of the homeowner. Trees planted by Centex Homes will be warranted for 30 days. Bushes will be warranted for 60 days after closing. Deficiencies other than those noted prior to closing will not be warranted by Centex Homes.

9. MODEL HOMES FEATURES
Our model homes often contain items that are not included in the base price of your home. Optional upgrades in floor coverings, interior cabinets and trim, lighting, and appliances along with decorator items, such as furniture and wall coverings often appear in each model home. Many of these items are available at additional cost. Standard features vary per neighborhood. Please refer to your neighborhood interior/exterior standard features disclosure regarding the standard features of your new home.

10. PRODUCT IMPROVEMENT
In an effort for continuous improvement, Centex Homes reserves the right to make changes and substitutions in building materials, fixtures, and plans without prior written notice.

11. RADON NOTICE
The United States Environmental Protection Agency ("EPA") has indicated that a number of homes in the United States experience elevated levels of radon gas. Radon is a naturally occurring gas which is caused by the radioactive decay of the element radium. Since radium is contained in the earth's crust and dissolves readily in water, radon can be found virtually everywhere. Radon gas can enter the home through a variety of sources, such as through joints or naturally occurring cracks in concrete floors, or walls, floor drains, and sumps. This phenomenon can occur in any home. Once inside an enclosed space, such as a home, radon can accumulate. EPA has stated that prolonged exposure to elevated concentrations of radon decay products has been associated with increase in the risk of lung cancer. EPA recommends that actions be initiated to reduce excessive indoor radon levels. The EPA and state and local environmental authorities are best equipped to render advice regarding the risk which may exist in a particular area, methods available to detect and measure radon levels, and what, if any, remedial measures may be advisable in particular circumstances to reduce the risk of radon exposure.
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A portion of the homesite has ☐ has not ☒ been classified as "wetlands" and/or deed restricted buffer areas under the Clean Water Act. Purchaser understands that unless a permit is obtained from the Army Corps. of Engineers, Purchaser cannot excavate from or deposit material in that designated area or do any other work which may affect " .... the course, location, condition or capacity of navigable waters, including rivers and streams" (Federal Register November 13,1986). The homesite has been designed so that the home and all other improvements constructed by the builder will not impact the wetland area. Centex homes will not disturb, disrupt, or clear any area designated as a "wetland" during the course of construction.

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CENTEX HOMES
(Initial)
4/13/04

PURCHASER
(Initial)
(Initial)

GENERAL DISCLOSURES Page 3 of 3

14. CONTIGUOUS PROPERTY
It is understood by all parties concerned in this transaction that Centex Homes cannot represent nor guarantee ownership, zoning, or land usage for any property beyond the boundaries of this subdivision as recorded. Further, it is understood that no such representation has been made by Centex Homes personnel.

15. PREMIUMS
Some of the homesites in this community have homesite premiums set by Centex Homes. Premiums are not necessarily privacy, view, or specific premiums. Premiums are determined by a variety of factors and generally define the Seller's opinion of the desirability of a particular homesite when compared with other homesites in the community. If you are purchasing a homesite you perceive as having a privacy or view, you should be aware that the privacy or view seen from your homesite today is not guaranteed. Existing views or privacy may be altered or impaired by future construction by Seller, by other developers, by growth of vegetation or trees, by fences, and/or by other factors not presently known. Seller makes absolutely no representation as to the scope or extent of any view or privacy now or in the future.

16. PRIVATE INSPECTIONS
Purchaser, at Purchaser's expense, may have the Property and all improvements inspected one time prior to closing by a mutually agreed upon independent property inspector.

If such inspection is made, the following guidelines must be met:

1. Prior to commencement of the inspection, Purchaser and Seller shall agree in writing upon the inspector. Inspections performed by a home inspector that are not approved by Centex Homes will not be acknowledged by Centex Homes.
2. A Centex Homes field manager must be present during the inspector visit.
3. The Purchaser will be responsible for scheduling the appointment for the inspection with the field manager.
4. The appointment is to be scheduled during normal working hours and must be in accordance with the production schedule of the field manager.
5. Private Inspectors may not attend the New Home Orientation meetings between Purchaser and Seller.
6. Centex Homes will act on all private inspector recommendations only as it pertains to our contractual obligations or commitments and Building code as interpreted by the governing municipalities building inspector.
7. Any written report prepared by the inspector shall be delivered to Seller not later than ten days prior to the Pre-Settlement Orientation.
8. Requests for additional inspection or engineering services by the Purchaser's inspector shall be the financial responsibility of the Purchaser.

17. PRE-SETTLEMENT ORIENTATION
The Field Manager will meet with the Purchaser several days prior to closing to explain the use and care of the home, and to allow the Purchaser to inspect the quality and condition of the home prior to closing. Centex Homes will address and resolve any discrepancies in the home prior to closing, and ask the customer to acknowledge all items are acceptable to them by signature before closing. In order for this to take place, it is imperative that the Purchaser(s) make arrangements to be available for the Pre-Settlement Orientation themselves several days prior to closing. Excluding weekends and holidays.

18. WARRANTY
Your home comes with a one year Builders Warranty which is detailed in your "Homeowner's Maintenance and Builder's Warranty" It is understood that this is the manual Centex Homes will use as its guideline for any warranty claims on your home, and that the guidelines of the warranty book will be the extent of our coverage. Certain products in your home carry a longer manufacturers warranty which is available to you as a consumer warranty between you and the manufacturer. It will be necessary for you to make time in your schedule to meet a Centex representative to walk the home at each meeting, as well as allow us access to your home during normal working hours. It is the responsibility of the Purchaser to notify Centex Homes of an emergency or an item that has the potential of causing further home damage if left unattended. Centex Homes cannot be responsible for verbal requests for service to the Field Manager or Sales Agent except in the case of an emergency. Your home also comes with a 10 year limited warranty provided by Residential Warranty Corporation. Please read and familiarize yourself with both of these warranties.

19. ENVIRONMENTAL
Purchaser acknowledges that he/she understands that this community is subject to specific guidelines regarding environmental protection and storm water quality management, as defined by the storm water quality design and monitoring proposal adopted by Beaufort County. Purchaser additionally acknowledges that he/she has been given a copy of the recorded "Master Declaration of Covenants, Conditions and Restrictions for Crescent Pointe Golf Course and Residential Community" and understands that all activities within the community must comply to this document.

These outline specifications have been prepared to fulfill your general information needs. However, because they are not intended to be complete, we expect and invite your inquiries with regards to other matters of concern. Purchaser hereby acknowledges these disclosures prior to the signing of this Sales Agreement.

CENTEX HOMES	PURCHASER
Acceptance	Beverly A Conner
Date 4/3/02	Thomas M Conner
Submitted By:	Date 3-25-02

CENTEX HOMES

CLAIMS BETWEEN THE PARTIES AFTER CLOSING ARE SUBJECT TO MANDATORY ARBITRATION

Hilton Head

REAL ESTATE SALES AGREEMENT

THIS SALES AGREEMENT is entered into and executed this 25 day of March, 2002 by and between Centex Homes, ("Seller") and Thomas M. & Beverly C. Conner ("Purchaser", whether one or more)

1. Seller agrees to sell and Purchaser agrees to buy on the terms set forth below, that certain tract of land, together with the dwelling thereon or to be erected thereon (the "Property") described as follows:

Lot 325 Community Waterford Subdivision The Crescent

County of Beaufort State of South Carolina

Street Address 6 Colonade Circle Plan Type Southport A

A dwelling has been or shall be constructed by Seller in accordance with the plan type including extras (if any) as shown on the attached Sales Agreement Pricing Addendum (the "Dwelling"). Seller has constructed or shall construct the Dwelling substantially in accordance with Seller's plans and specifications, which supercede model home displays, if any. If Seller is unable to obtain the exact materials or fixtures specified in the plans, specifications or Sales Agreement Pricing Addendum through Seller's ordinary or usual sources of supply, Seller shall have the right to substitute materials of similar pattern, design and quality. Other changes may be necessary, acquired or authorized by the governmental authorities having jurisdiction over the property. Seller is not required to notify Purchaser of the substitution of materials or fixtures unless it materially affects the quality or value of the dwelling. Final inspection and approval by the Federal Housing Administration, Veterans Administration, mortgage lender or local government agency shall constitute certification of completion of the dwelling in substantial conformity with the terms hereof.

Seller will build the dwelling on or before September 2002 (the "Target Completion Month"); JMC bcc (Initial) provided, however, that if construction is delayed by acts of God, labor disputes, Seller's inability to obtain material or labor, inclement weather, delays caused by Purchaser and any other cause beyond the reasonable or practical control of Seller, then the Target Completion Date shall be extended for a number of days equal to the period of any such delay. Seller shall not be liable to Purchaser for any delays in completion and will not reimburse Purchaser for rental, storage, moving or any other expenses arising from Seller's failure to achieve the Target Completion Date. In any event, however, Seller agrees to complete construction of the dwelling within one year after the date of this Sales Agreement plus such additional period of time equal to periods of delay in completion caused by impossibility of performance for reasons beyond the control of Seller. If the dwelling will not fit on the lot at the minimum setback requirements or cannot be constructed on the lot, Seller shall notify Purchaser and this Sales Agreement shall be terminated and the deposit returned to Purchaser. Upon return of the deposit, neither party shall have a further obligation to the other.

2. Terms of Sale

		Earnest Money & Deposits	
Basic Sales Price	$ 264,900	Lot Reservation	$
Lot Premium	$ 15,000	With Sales Agreement	$ 15,367.00
Sales Agreement Pricing Addendum net of lot premium	$ 27,442	Non Standard Option (non-refundable)	$
Total Sales Price	$ 307,342	Total	$
Deposit 5%	$ 15,367		$
Loan Amount	$		

Deposit shall be made payable to Centex Homes. Purchaser acknowledges that Seller may use these funds prior to Closing and are not held in an escrow account. The additional deposits shall be deposited with Seller as indicated, and applied first to any cash down payment required and next to Purchaser's closing costs. In addition to the total purchase price, Purchaser agrees to pay closing costs as provided in Section 4, and all prepaid expense items including, but not limited to homeowners insurance premiums, taxes, mortgage insurance premiums, homeowner's association fees, interest and funding fees, if any. Real property taxes for the year shall be prorated on a calendar year basis to the date of closing. Purchaser acknowledges when options are financed, an appraisal will be required to determine the full value of the home including options. If the appraised value is lower, purchaser will be required to decrease the amount financed and pay cash for these options upon notification but prior to closing.

3. This is X is not ____ an all cash sale. If an all cash sale, evidence of available funds to close will be required prior to the execution of this sales agreement. Seller will pay as closing costs deed preparation, recording fees, and South Carolina recording fee. Purchaser will pay all remaining closing costs. If not an all cash sale, closing costs will be paid as described in the Financing Addendum and loan proceeds will be paid at closing through the mortgage loan described in the attached Financing Addendum.

4. Prior to closing, in the event Seller is paying closing costs, Seller will cause a title report to be prepared and delivered to the lender which issues a commitment to make the mortgage loan to Purchaser. Seller will cause a title insurance company to issue to said mortgage company a lenders policy of title insurance and to Purchaser, at Purchaser's expense, an owners policy of title insurance. Said owners policy will insure title to the property in Purchaser's name in an amount equal to the purchase price, subject to no exceptions other than standard printed exceptions and all other recorded matters such as (i) covenants, conditions and restrictions; easements, rights of way, (ii) zoning laws, regulations and set back requirements; matters contained in the recorded plat map; regulations and ordinances of governmental authorities relating to the property; (iii) mineral reservations and other interests of record. If this is a cash sale, Seller will not be responsible for obtaining a title report or owner's policy of title insurance but Purchaser may at its sole expense cause a title report and owner's policy of title insurance to be issued. Seller will not provide Purchaser with an abstract of title.

CENTEX HOMES

(Initial)

Date

PURCHASER

JMC (Initial) CC (Initial)

3-25-02 Date

5. This Sales Agreement has been executed in cooperation with Kevin King licensed salesperson / broker, with (Company/Address) Charter One Realty Central Park II Park Ln. Hilliard at a commission rate of 4 %

6. If the community where the Property is located falls within the jurisdiction of a homeowner's association ("Association"), then at closing Purchaser will automatically become a member thereof. The activities, privileges, rights and responsibilities of the Association are fully described in the declaration of covenants, conditions and restrictions (or similar document) (therein called the "declaration"), affecting the property and in the articles of incorporation and by-laws of the Association, which have been given to the Purchaser a copy of which he acknowledges. In general, the Association is responsible for the operation, maintenance, and repair of the common areas, including landscaping and recreational amenities, if any. The Association is empowered to levy assessments (which are currently set at $ 660 per year) against all owners for the purpose of performing these and other duties and these assessments constitute a lien on the Property, if unpaid.

7. Further Documents. At any time and from time to time after the execution of this Agreement, and whether prior to or after the close of escrow, Purchaser and Seller shall, upon the request of the other, execute and deliver such further instruments and documents as such party may reasonably request in order to carry out the intent and purpose of this Agreement

8. Closing of the Sale

Within seven days after the dwelling is complete, as evidenced by an occupancy permit (or within seven days after mortgage loan approval, if the residence is complete), Purchaser agrees to close by paying the balance of the purchase price and signing all necessary closing documents. If purchaser is unable to close due to no fault of the Seller, Purchaser agrees to compensate Seller for the carrying costs of the home at a rate of $ 50 per day. At closing, Seller will convey marketable fee simple title to Purchaser, free and clear of liens and encumbrances other than matters of record, unviolated restrictive covenants, easements and taxes for the year (if not then payable), which will be prorated. Seller will also deliver possession of the Property at closing, but Purchaser shall have no right to occupy the Property or to store any personalty therein or thereon until the closing is completed. Acceptance of the deed by Purchaser shall signify and confirm full and satisfactory performance of this agreement by Seller. If Seller shall be unable to convey a good and marketable general warranty deed and Purchaser is not in default hereunder, Seller shall refund Purchaser's binder and upon the making of such refund, this Sales Agreement shall become null and void and neither party shall have further claims against the other by reason hereof.

9. Default by Either Party Prior to Closing of the Sale

If prior to closing, this Sales Agreement is not performed by Purchaser in accordance with its terms, it may be terminated by Seller and upon such termination Seller may retain all amounts paid by Purchaser hereunder as liquidated damages. Such damages are not a penalty, but represent actual damages which Seller will sustain upon a default by Purchaser, which damages will be substantial but not capable of precise determination. In such event, Purchaser will not file any action against Seller seeking the return of any portion of the payments made under this Sales Agreement or any reduction in the amount of such liquidated damages.

If prior to closing, this Sales Agreement is not performed by Seller in accordance with its terms, Seller being in default and Purchaser not being in default hereunder, Purchaser may seek specific performance by filing suit within 30 days from date of default, or terminate this Sales Agreement by giving proper written notice thereof to Seller. Seller, upon receipt of such notice of termination, shall within 30 days return to Purchaser all sums theretofore paid by Purchaser to Seller hereunder and pay $250 to Purchaser, such sums being agreed upon as liquidated damages as a result of Seller's default because of the difficulty and uncertainty of ascertaining actual damages. No other damages, rights or remedies (whether or not Purchaser shall elect to terminate this Sales Agreement) shall in any case be collectible, enforceable or available to Purchaser

Purchaser's Performance. Purchaser acknowledges that Seller has agreed to the sales price for the home and otherwise entered into this Contract with the express understanding that Seller will utilize Seller's standard construction and contract administration processes and procedures in constructing the home and otherwise performing this Contract, without disruption of or interference with those procedures from Purchaser. Purchaser shall be in default of this Contract if Purchaser engages in specific acts or a course of dealing, which materially disrupts Seller's, standard and customary contract performance process including but not limited to the following actions:

- failure to make choices or take other actions required of Purchaser within the indicated time frames
- refusal to deal with the particular people whom Seller has designated as its representative to perform certain aspects of this Contract, such as the designated field manager, salesperson, closing administrator or other representatives of Seller designated for particular parts of Seller's contract performance
- interfering with or attempting to direct or supervise the performance of Seller, or Seller's subcontractors or material suppliers in the performance of this Contract or any aspect of their work
- refusal to acknowledge Purchaser's acceptance or approval of work which complies with the plans and specifications and is otherwise performed in a good and workmanlike manner as would be customarily accepted in the applicable trade
- other actions similar in nature to the foregoing which would have the effect of delaying the construction schedule, increasing Seller's cost of performance, modifying the plans and specifications or otherwise substantially impeding Seller's performance.

10. Arbitration of Disputes Following Closing

Seller prides itself on having many satisfied customers. In the unlikely event that a dispute relating to the marketing, sale, design, construction or conveyance of the home arises between Purchaser and Seller after closing of the home purchase, including a claim for personal injury or misrepresentation, Purchaser and Seller agree to resolve the dispute exclusively through binding arbitration.

The arbitration will be conducted by the American Arbitration Association, in accordance with its Commercial Arbitration rules. Judgment on the award made by the arbitrator may be entered in any court having jurisdiction over the dispute. If a party uses litigation to enforce this provision or the arbitration award, the court will award such party its court costs and reasonable attorney's fees. If there are preliminary steps that would have to be followed under state law before a lawsuit could be commenced, such as mediation, those steps must be followed before the arbitration can begin. Compliance with these state law provisions, and any negotiations or settlement attempts made before arbitration, do not constitute waiver of arbitration.

This provision will survive the closing of the purchase of the home and the default of either party. It is binding on Seller and Purchaser and on their respective successors and assigns. If Seller chooses, it can have its supplier(s) and contractor(s) whose work or supplies are involved in the dispute included as parties to the arbitration. If all or a portion of the dispute is covered by a written warranty agreement issued to Purchaser by a party other than Seller, then the dispute or applicable portion will be resolved through the warranty agreement. Any portion of the dispute not covered by the warranty agreement will be resolved as provided in this provision. The parties acknowledge that this agreement evidences a transaction involving interstate commerce. The United States Arbitration Act will govern the interpretation and enforcement of this provision.

CENTEX HOMES PURCHASER DCC (Initial) Date 3-25-02

4/3/02 PURCHASER [illegible] (Initial) Date 3-15-02

11. Warranty Provisions

The making of final payment by Purchaser to Seller of the purchase price shall constitute a waiver and complete release of all claims by Purchaser against Seller with respect to the property and this Sales Agreement except those described in the pre-occupancy inspection report or those expressly covered by the warranty hereafter provided.

Seller will deliver to Purchaser Seller's standard form of homeowner's warranty against defects in workmanship and materials, a copy of which is available to Purchaser. Purchaser agrees to accept said homeowner's warranty in lieu of all other warranties whatsoever, whether expressed or implied by law and including, but not limited to, implied warranties of good workmanlike construction and habitability. Manufacturers of the consumer products and appliances included in the Dwelling may provide separate limited warranties for their products, but no changes or additions will be made to such manufacturers limited warranties. Seller shall have no responsibility for any manufacturers service, repairs, or replacement of their consumer products.

12. Miscellaneous

a. This Sales Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors and assigns; provided that Purchaser shall not assign or transfer this Sales Agreement or any of Purchaser's rights hereunder, and any assignments not approved in writing by Seller shall be null and void and Seller may at Seller's option, immediately terminate this Sales Agreement.

b. In the event of a total destruction of dwelling by fire, windstorm, hail, earthquake, explosion or other casualty prior to the closing, Purchaser or Seller may terminate this Sales Agreement if the dwelling cannot be restored prior to the target completion date.

c. Whenever the context shall so require, the singular shall include the plural; the masculine gender shall include the feminine and neuter and vice versa.

d. This Sales Agreement embodies the entire agreement between Seller and Purchaser with respect to the Property. No amendment or modification of this Sales Agreement (including sales agreements for changes in construction of "extras") shall be valid unless contained in writing executed by both parties.

e. Time is hereby declared to be of the essence in the performance by Purchaser of each of the Purchaser's obligations.

f. All notices and demands to be given or served pursuant to the terms of this Sales Agreement shall be given by certified or registered mail, return receipt requested, addressed to the parties at their respective addresses set forth herein and will be deemed delivered and received three (3) days after deposit into the United States mail with sufficient postage.

g. If two or more persons are named as Purchaser herein, any one of them is authorized to act as agent for, with the right to bind.

h. Purchaser is prohibited from recording this Sales Agreement or any memorandum hereof and upon attempted recordation this Sales Agreement shall at Seller's option, become null and void and all rights of Purchaser hereunder shall cease and terminate.

i. Purchaser realizes and acknowledges that entry upon the project or the property during construction can be dangerous and those hazards may exist which are not observable. Purchaser's entry shall be solely at his own risk. Purchaser does hereby waive any and all claims against Seller for injury or loss to person or property arising out of or in connection with such entry by Purchaser or any other person accompanying him or entering at his direction, and Purchaser shall defend and hold Seller harmless from and against injury, loss, damage, or expense to persons or property arising out of or in connection with any such entry. Purchaser may not enter the property without Seller's permission. Alterations, changes, or additions to the dwelling while under construction by purchaser or any parties other than those contracted by Centex construction staff will not be allowed and may be removed or repaired at the expense of the Purchaser.

j. No alterations, changes or additions shall be made in the construction of the dwelling nor shall any extra work or materials be performed or added by Seller unless approved by duly authorized agent of Seller in accordance with Centex Homes change order policy.

k. It is understood that Purchaser is buying a completed dwelling and that Seller is not acting as a contractor for Purchaser in the construction of a dwelling. Purchaser will acquire no right, title or interest in the dwelling except the right and obligation to purchase the same in accordance with the terms of this Sales Agreement and upon its completion.

l. Purchaser understands and agrees that the size of the homesites, the exact location of sidewalks and driveways (if any), the landscaping, and the drainage patterns of the homesites will differ from the model home plans, drawings or renderings that Purchaser may have examined.

m. Land adjacent to or surrounding the Property which is not owned by Seller is not within Seller's control. Seller cannot and does not guarantee ownership, zoning, or land usage for any properties beyond the boundaries of the recorded subdivision in which the Property is located. Tentative plans may exist for the use of certain parcels. Plans for the use of property owned by Centex Homes or others may be changed at any time. Purchaser agrees not to rely on any representation pertaining to the foregoing unless the same are in writing and signed by an officer of Centex Homes.

n. Any Sales Representation of square footages has the following meaning: Total square footages of a house are measured to the outside of the foundation. Total square footage and for room sizes may vary from sales brochures or blueprints.

13. Non Reliance By Purchaser

Purchaser hereby represents to Seller that Purchaser has not relied and is not relying upon any warranties, promises, guarantees or representations made by Seller, any agent of Seller, or anyone else acting or claiming to act on behalf of Seller with respect to the purchase by Purchaser of the Property or the other matters set forth herein unless specifically reduced to writing and made a part of this Sales Agreement.

14. This agreement shall not be binding upon Seller unless and until it is signed by the Div. Pres., Controller or other authorized officer of Seller. Acceptance and deposit of a check from Purchaser prior to the agreement being binding on Seller shall be done solely for the security of such payment. If the agreement is not signed within ten business days from the date on page one, the Seller will refund any payments made by the Purchaser without interest and neither party shall have any liability hereunder.

15. Purchaser hereby represents and acknowledges that a true and correct copy of this Sales Agreement was delivered to Purchaser, with all spaces completed, prior to execution, and that Purchaser has read and understands each and every portion hereof.

CENTEX HOMES, a Nevada general partnership
By: CENTEX REAL ESTATE CORPORATION,
a Nevada corporation, Its managing general partner
2430 Mall Drive Suite 450 N. Charleston, SC 29418

PURCHASER

Acceptance [signature] ...

Date 4/5/02 ...

Mortgage Co. : ...

Type Financing ...

Centex Sales Agents LYNN MANGUM 2.00 %

X [signature] CLOMAX

[signature]

Date 3/25/02

Street Address 457 Salkum Drive

City Hillsborough State NH Zip 03244

Home Phone 412 341-4574 Work 412 600-0841 Email tkpeal@cityscape.com Work ...

00269

CENTEX HOMES

HILTON HEAD

SALES AGREEMENT PRICING ADDENDUM

Date 3-25-02

Plan Type Southport A

Presale/Undecorated Show Home (CIRCLE)

Purchaser Conner, Thomas & Beverly

Lot 325 Block ____ Subdivision The Crescent/WF

Property Address 6 Colonade Ct

Salesperson Lynn Arrington

Any options selected on this addendum are subject to the determination and feasibility of Centex Homes. It is understood that these items will increase the price of the home. Purchaser acknowledges when options are financed, an appraisal will be required to determine the full value of the home including options. If the appraised value is lower, purchaser will be required to decrease the amount financed and pay cash for these options upon notification but prior to closing.

LIST OF CHANGES AND DESCRIPTION Base Price $ ~~274,900~~ 264,900

ITEM #		PRICE
1	12-001B Range: 30" Radiant Cooktop	333
2	02-010A 42" Kitchen Cabinets - White	2268
3	02-015A Bath Cabinets White	356
4	02-033A White Kitchen Island	818
5	02-109A Raise Bath Cabinets	150
6	02-200A Roll-out Waste Basket Under Counter	128
7	06-002B Upgrade to Tile - Utility Rm.	412
8	06-003B Upgrade to Tile - Hall Bath	196
9	06-004B Upgrade to Tile - Master Bath	656
10	06-053B Upgrade to Tile - Foyer Extension	1602
11	06-063B Upgrade to Tile - Powder Room	265
12	06-076B Upgrade to Tile - Other Bath	334
13	06-201B Upgrade to Tile Kitchen/Break (ON 45)	2071
14	06-034B Upgrade to WOOD - Dining Rm	2024

PAGE TOTAL OPTION PRICE $ 11,673

TOTAL OPTION PRICE $ 11,673

CARRIED FORWARD ADJUSTED SALES PRICE $ 276,573

P & E Approval _____ Date _____

CENTEX HOMES

Acceptance _____

Date 4/5/02

PURCHASER

Thomas M Conner

Beverly C Conner

10/20/01

00270

39 Sheridan Park Circle, Suite 3
Bluffton, SC 29910
Office 843-815-3544
Fax 843-815-3545

CENTEX HOMES
Charleston Division – Hilton Head

Fax

To: Hillary Austin From: Craig Lotta

Fax: Pages: 8 (including cover)

Phone: Date: Feb 23 2004

Re: CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

Conner requested pages of Contract
Lot 325 The Crescent.

The required fire flow shall be determined according to the Insurance Services Office's determination guide.

(E) **Utilities Underground:**

All electrical, telephone, and gas utility lines in a development shall be installed according to plans and specifications approved by the respective utility companies providing such service. In addition, all such utility lines shall be installed underground, unless it is determined that a variance to allow for overhead facilities is warranted due to exigencies of construction, undue and unreasonable hardship, or other conditions to the development.

Section 5.2.4 Monuments and Markers:

All property corners shall be identified with a concrete or iron rod monument. For horizontal control and to reestablish lost monuments, concrete control monuments shall be placed on corners of the subdivision.

To establish vertical control for use with setting finished floor elevations, construction of drainage systems, and benchmark monuments referenced to NGVD 1929, shall be located a minimum of one every 4 acres, and reference elevations shall be placed on the subdivision plat.

Section 5.2.7 Tree Protection Standards

No development shall be undertaken, except in conformance with the provisions of this Section.

Section 5.2.7.1 Intent

It is the expressed intent of these tree protection standards that all site planning and design for development of land be undertaken with a survey of trees on the property and that the final placement of buildings, structures, and roads, utilities, and other features minimizes the removal of existing trees on the property.

Section 5.2.7.2 Protected Trees

No person shall cut, destroy, cause to be destroyed or remove any tree trunk diameter at breast height (dbh) of eight (8") inches (25 inch circumference) or larger or any Dogwood, Redbud or Magnolia tree with a trunk diameter of four (4") inches dbh or larger in preparation for, anticipation of or in conjunction with any development activity as defined in Section 2.2 until such removal has been approved as part of the overall site development approval process of this ordinance. The saving of existing trees less than the protected size is encouraged and may be utilized in some cases to meet the requirements of Section 5.2.7.7 pertaining to replacement of trees that are approved for removal. Upon written certification of a certified arborist or forester and upon development plan approval, sick or diseased trees may be removed.

Section 5.2.7.3 Tree Survey Required

A survey of all trees with a trunk diameter of eight (8") inches dbh and larger and all dogwoods, redbuds, and magnolia trees with a trunk diameter of four (4") inches dbh and larger shall be made within the area to be modified from its natural state and seventy-five (75') feet beyond in each direction or to the property lines, whichever is less. The survey shall be conducted and certified by a registered land surveyor or engineer and include the type and size of trees. Tree surveys for streets shall extend twenty-five (25') feet beyond either side of the street right-of-way lines.

Applications for subdivision approval must also include an estimate of existing tree cover on each lot of the proposed subdivision indicating tree types, average size, and approximate density of trees per acre.

Residential/commercial lot tree cover estimates may be certified by a registered land surveyor, engineer, or landscape architect.

Section 5.2.7.4 Site Design Emphasis on Significant Trees

While all types of trees are protected under these standards, special emphasis is placed on preservation of large trees and certain significant and more valued species listed herein. The highest site design priority shall be given to preservation of live oaks with a trunk diameter of twenty-four (24") inches or larger. Removal of this valued tree is highly discouraged, and will only be approved upon the determination of the Development Review Team that all responsible design alternatives have been explored by the applicant and removal cannot be avoided. If a twenty-four (24") inch or larger significant tree must be removed, the planting of new trees of the same species or live oak trees, if the same species is not available, totaling the same number of inches in diameter will be required, only 50% of which may be allowed to be used for credit towards the minimum requirement of 15 trees per acre.

Significant Trees

American Holly
Bald Cypress
Black Oak
Black Tupelo
Cedars
Dogwood (4")
Hickory
Live Oak
Palmetto (may be relocated on site)
Pecan
Redbud (4")
Red Maple
Southern Red Oak
Southern Magnolia (4")
Sycamore
Walnut
Any other species 24" diameter and larger

For development sites that do not contain any or very few of these significant trees, design emphasis should be shifted to preserving other species present.

Section 5.2.7.5 Minimum Tree Coverage

The minimum allowable post-development tree cover for all development shall be fifteen (15) existing trees, eight (8") inches, dbh (diameter breast height) and larger, per acre of disturbed area. Pairs or groups of trees with trunk spacing or separation of five (5') feet or less shall count as one (1) tree towards meeting the minimum allowable coverage. Each tree with a trunk diameter of thirty-six (36") inches dbh or larger may count as two (2) trees towards meeting the minimum allowable coverage.

Disturbed area shall mean the limits of the site project activity (buildings, roads, parking areas, retention ponds and the like) including the required front, rear and side yard setbacks or to the property line, whichever is less.

Section 5.2.7.6 Tree Replacement

(A) In those cases where site design alternatives cannot achieve the minimum allowable existing tree cover or where predevelopment tree cover is less than the prescribed minimum, the Developer shall be required to plant two (2) replacement hardwood trees of the same type cut down or one (1) live oak tree, with a minimum trunk diameter of 2.5 inch dbh for each existing protected tree under the minimum requirement of fifteen (15) trees per acre of disturbed area.

(B) Proposed or required planted or replacement tree design, types and locations, shall be prepared by a certified arborist or landscape architect and should take into account site soil types and conditions, existing tree species to be preserved and their locations, and the species to be planted that would be best suited to site conditions, proposed activities and impervious surface areas.

(C) Existing significant hardwood trees and dogwood trees, less than eight (8") inches dbh but not less than 2.5" dbh, may be used in place or relocated on-site to meet prescribed minimums in lieu of purchased trees. Planted or re-located trees should be appropriately designated as such on the site plan and placed so as to enhance the overall landscaping of the site. Required replacement trees in residential subdivisions should be planted on the residential lots outside of the assumed building area.

(D) In commercial projects, replacement trees should be utilized in landscaped islands to enhance parking area and areas of the project site most visible to traveled thoroughfares.

(E) Where the Development Review Team determines that a reduced plantback is necessary due to the size and shape of property and/or structures, and/or other design limitation, or other viable site constraints, such reduction shall be subject to a general forestation fee. This fee shall be the actual and verified cost of the required tree plantback, per tree reduced and shall be paid to the Treasurer of Beaufort County before final approval is given for the development plan. The funds collected through this forestation fee shall be used by Beaufort County to plant trees and other landscaping in highway medians, along-side roads and on other public properties as deemed appropriate.

(F) The survival of any tree planted and/or replanted as above shall be guaranteed with a tree maintenance and replacement bond for a period of one year. The required bond amount shall equal 125% of the actual cost to replace each tree that is planted or relocated (replanted) on the development site.

(G) All trees preserved, planted or relocated on the site must be protected and nurtured for the life of the project approved. Any tree lost subsequent to development approval and certification of compliance shall be replaced with 2 ½" dbh tree of the same type, or live oak, with a minimum height of twelve (12') feet at planting. In the event any twenty-four (24") inch dbh or larger live oak is lost subsequent to development, it shall be replaced with an equivalent number of caliper inches of live oaks each with a minimum diameter of 2 ½" dbh and height of twelve (12') feet.

Section 5.2.7.7 Tree Protection Zones

Tree protection zones shall be established and maintained for each tree preserved or planted on a development site. The area within the tree protection zone must be open and unpaved except where approved perforated pavers may be utilized or tree aeration systems and tree wells installed.

If a Developer can demonstrate that a tree protection zone less than that described can be designed so as not to injure the tree under consideration, based upon the use of a certified arborist, the Development Staff Review Team may approve the alternate tree protection zone.

(A) Maintaining open space around the base of a tree is one of the most important factors in promoting the health and longevity of the tree. The root system within the drip line is generally considered to be the critical root zone.

(B) A permanent tree protection zone surrounding both preserved and planted trees shall be established. This tree protection zone shall apply during the construction phase, as well.

(C) Tree protection zones should vary according to the species, size location, and health of a tree and be designed for maximum flexibility of shape and minimum effectiveness of size. However, where compelling information to the contrary regarding a particular tree in its particular setting is not available the minimum tree protection zones shall be established as follows:

(1) For existing trees: a circle with a radius of one half foot for every inch of D.B.H. or five feet, whichever is greater (the circle of protection may be offset as much as 1/3 of its total diameter).

(2) For newly planted trees:

a. understory tree: a circle with a radius of two (2') feet

b. overstory tree: a circle with a radius of three (3') feet

(3) For Palmetto trees, a circle with a radius of two (2') feet

(D) The size of the protection zone may be reduced, the shape adjusted, or other encroachments may occur within the zone where any of the following measures or techniques are deemed to sufficiently mitigate such a change and certified as acceptable by a reputable tree service, arborist, or other qualified party:

(1) limb and root pruning
(2) fertilization
(3) aeration
(4) irrigation
(5) restoring the natural grade of the soil
(6) tree feeders
(7) porous paving materials
(8) tree well

(E) In general, where a tree well is used it should encompass at least half the area beneath the canopy of the tree and extend in every direction no less than half way from the trunk to the tree's dripline.

(F) Prior to commencing construction or any site alterations a conspicuous four (4') foot high barrier sufficiently prominent visually to prevent encroachment by people and vehicles shall be erected around the protection zone and approved by the Building Official. Barriers may be erected around groupings of trees, where feasible. Use of orange polyethylene safety fencing or a similar material is recommended. The barrier shall remain in place until the Certificate of Occupancy is issued.

(G) Passive forms of tree protection - such as continuous rope or flagging - may be utilized to mark tree save areas which are remote from areas of land disturbance, if approved by the Building Official. Signage designating such areas shall be put in place.

(H) No building materials, dirt, debris, oils, paints, or any other materials, equipment, or vehicles shall be placed or deposited within the protection area nor shall any trenching or paving be done within the protection area.

(I) No change in grade shall be permitted within the tree protection zone except for a two (2") inch cut or two (2") inch fill of topsoil, sod or mulch.

(J) Underground utility lines shall be routed around and away from tree protection zones. Necessary installation through protection zones shall be accomplished through tunneling rather than cutting open trenches (which sever tree roots).

(K) Where machinery must pass within a tree protection zone during construction, approval shall be required from the Building Official. To protect tree roots from excessive compaction during construction, special cushioning measures may be required by the Building Official such as a heavy layer of chip mulch or pine straw or a "bridge" of boards.

(L) Remedial site reclamation and tree care procedures (such as those mentioned in (D) above, may be required at the reasonable discretion of the Building Official when encroachment or construction activity within protective zones has caused damage to either a tree or tree growing site. Any such treatment shall be in accordance with accepted International Society of Arboriculture practices. Such treatment shall occur prior to the issuance of a Certificate of Occupancy. At the discretion of the Building Official the planting of additional trees may be required if trees are damaged or destroyed.

Section 5.2.7.8 Tree Protection During Construction

Those trees designated for preservation as shown on the approved landscape plan and/or development site plan shall be marked on site with a bright blue ribbon encircling the trunk and a minimum four (4') foot high barricade shall be erected around each tree or clusters of trees at a distance no less than the extent of the required tree protection zone from the base of the tree or preferably at the drip line the tree. No construction activity, other than finish grading in accordance with the provisions of Section 5.2.7.7, or any storage of construction materials or parking of vehicles during construction is allowed within the barricaded area.

Section 5.2.7.9 Master Plans

It is recognized that certain large tracts of land are master planned for residential development or planned unit developments and are developed in phases over many years. Large portions of these planned developments remains forest lands for many years and periodically require removal of certain trees in order to maintain a healthy forest and allow remaining trees to grow better.

For those residential lands of twenty (20) acres and larger, silviculture or selective thinning will be allowed subject to the following conditions:

(A) An approved preliminary plan or master plan on file with the Beaufort County Zoning and Development Administrator.

(B) An application for a development permit for selective harvesting must be filed and include a map or plat of the property indicating the area to be harvested together with silviculture plan prepared by a registered forester or horticulturist. The silviculture plan must contain proposed methods for protection of hardwoods from damage during the timber operation.

(C) Only pine trees may be harvested and only to the extent that there remains in the harvest area the minimum site coverage standards of Section 5.2.7.5.

(D) Clear cuts are strictly prohibited.

Section 5.2.7.10 Special Conditions/Exemptions

(A) Golf Courses

For new golf course developments, and for additions to, or renovations of, existing golf courses, the following tree surveying and replacement standards will apply:

(1) Those areas in which golf course clubhouses, cart barns, snack bars, rest facilities, maintenance buildings, storage areas, and parking lots are to be located will adhere fully to all foregoing sections of this Ordinance.

(2) Active playing areas (including proposed fairways, adjoining mowed grass rough, and new water hazards) and outdoor practice/training areas (including driving range, practice putting greens, etc.) will be exempt from the tree survey requirements of Section 5.2.7.3, and will instead require survey, including species, size and location, of all hardwood trees with a trunk diameter of twenty-four (24") inches dbh or larger.

Such areas will also be exempt from the tree replacement requirements of Section 5.2.7.6, except as such apply to all hardwood trees of twenty-four (24") inches dbh or greater located within these areas.

(3) All other portions of the golf course property shall have trees with a trunk diameter of twelve (12") inches dbh or greater surveyed. Any trees of this size which are proposed to be removed will be replaced pursuant to Section 5.2.7.6 requirements, regardless of species.

(B) Commercial Sod Farms and Vegetable Farms

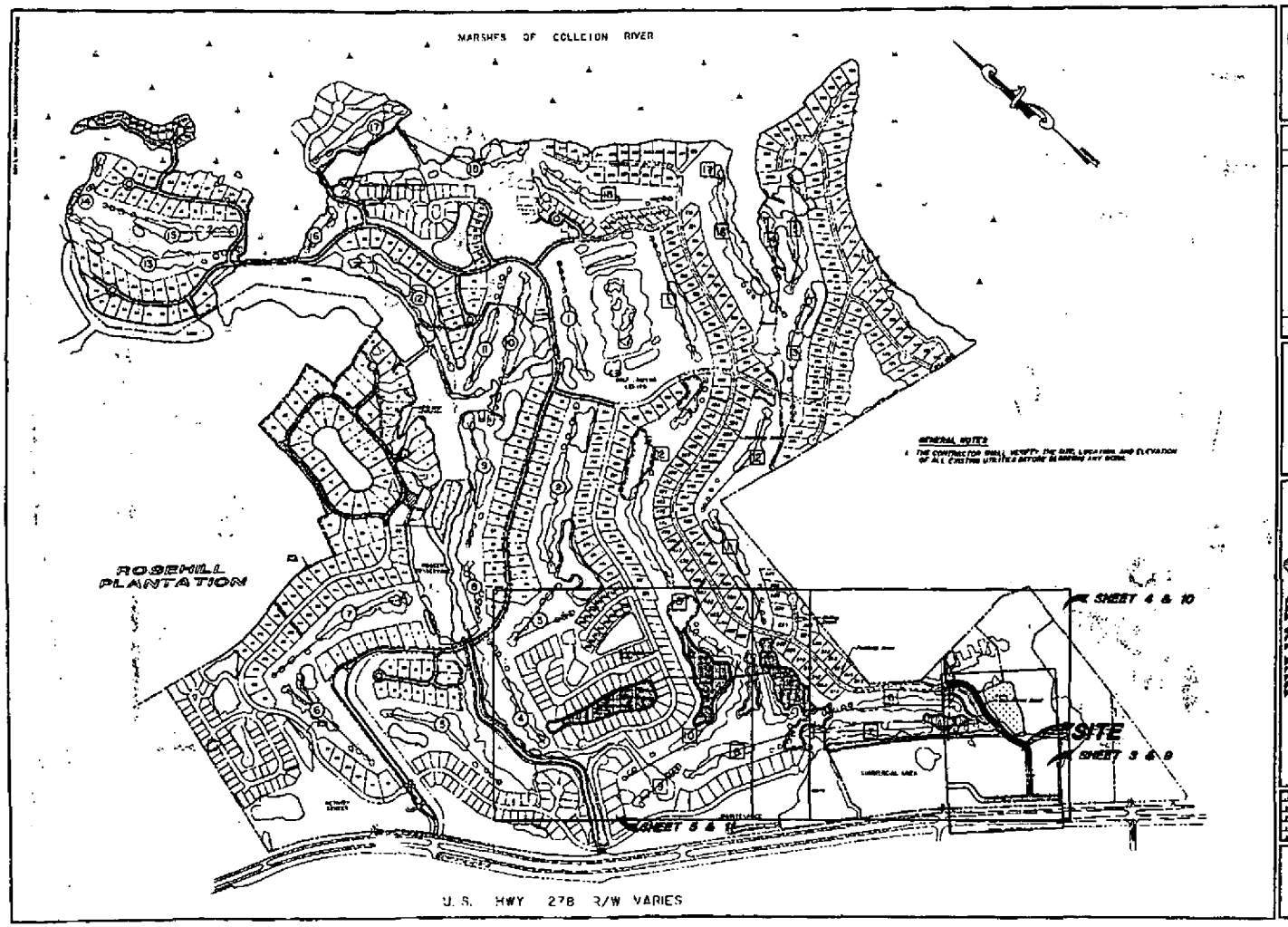
The active growing areas, plus a twenty (20') foot roadway circumscribing such areas, of proposed new sod and vegetable farms, or of areal expansions of such existing farming areas, shall be exempt from all requirements of this Ordinance."

Section 5.2.8 Pollution, Nuisance, and Hazard.

No development shall be undertaken, except in conformance with the provisions of this Section.

(A) No development shall directly contribute to pollution of the land, air, or water; constitute a nuisance; or pose a hazard to life or property. Conformance with all existing local, state, and federal statutes shall be construed as conformance with this provision.

(B) **Aesthetic Standards**. Any junk yard, storage or work area, or other such area shall be screened with a fence or buffer approved by he Development Review Team.



THOMAS & HUTTON ENGINEERING CO.

BELFAIR

BEAUFORT COUNTY, SOUTH CAROLINA

OAK FOREST ROAD

LOCATION MAP

2

00278

SEE SHEET #10
OAK FOREST ROAD 50' R/W
FRONTAGE ROAD 50' R/W
LEGEND
Wetland
Wetland
Wetlands
ASHLEY PLANTATION APARTMENTS PHASE II
THOMAS & HUTTON
BELAIR
OAK FOREST ROAD
SOIL EROSION & SEDIMENTATION CONTROL PLAN
9

00279

CENTEX HOMES
Charleston Division

Craig Lovette
Area Manager
Hilton Head Market

Office: (843) 815-3544
Fax: (843) 815-3545
cell 321-1335
39 Sheridan Park Circle, Suite 3
Bluffton, SC 29910

cloverte@centexhomes.com

WHILE YOU WERE OUT

FOR _____ DATE _____ TIME _____ A.M. P.M.

M Craig Lovette

OF Centex Homes

PHONE ☐ FAX ☒ MOBILE 843 321 1335
AREA CODE NUMBER EXTENSION

MESSAGE

☐	PHONED
☐	RETURNED YOUR CALL
☐	PLEASE CALL
☐	WILL CALL AGAIN
☐	CAME TO SEE YOU
☐	WANTS TO SEE YOU

SIGNED

Tops FORM 4008

North Dakota
MANUFACTURING EXTENSION PARTNERSHIP *Inc.*

C.L. MELENYZER IV
843-757-2250
5 Colonade Court • Bluffton, SC 29910
FAX: 843-757-2250 • clmiv@ndmep.com
www.ndmep.com

a NIST MEP | Network Affiliate

- About 90 trees are dead & need to come down.

Drew Laughlin is homeowners' attorney
C.L. Melenyzer

LINE TABLE		
LINE	BEARING	LENGTH
L1	N48°43'37"W	87.44
L2	N56°21'12"E	7.85
L3	S49°39'14"E	63.12
L4	S53°13'26"E	52.17
L5	S58°32'46"E	29.57
L6	S62°36'06"E	22.90
L7	S64°12'47"E	25.09
L8	S67°45'32"E	26.85
L9	S82°32'39"E	6.24
L10	S15°25'45"E	22.66
L11	N58°52'32"E	27.82
L12	S73°43'08"E	21.57
L13	S86°56'05"E	36.64
L14	N86°29'52"E	33.82
L15	N80°40'07"E	50.97
L16	N72°00'09"E	28.98
L17	N67°33'55"E	34.29
L18	N62°01'48"E	74.89
L19	N52°17'10"E	46.16
L20	N02°20'18"E	33.77
L21	S48°59'56"E	26.08
L22	N69°03'38"W	45.13
L23	S76°49'18"W	42.36
L24	N49°24'56"W	41.74
L25	N30°45'14"W	44.23
L26	N42°31'05"W	62.07
L27	N36°28'30"W	56.18
L28	N54°09'50"W	49.96
L29	N57°58'39"W	49.35
L30	N12°32'37"W	87.04
L31	N60°26'52"E	91.58
L32	N38°57'18"E	69.57
L33	S36°42'53"E	66.49
L34	S45°56'52"E	66.02
L35	S71°59'09"E	66.01
L36	S77°09'51"E	49.14
L37	N78°13'30"E	49.14

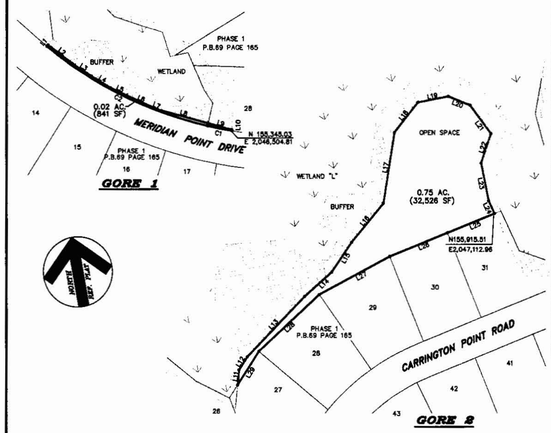
CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	Ch Brg	DELTA
C1	320.00	394.11	369.67	S71°16'58"W	70°33'54"
C2	320.00	137.99	136.93	N61°04'50"W	24°42'25"
C3	525.00	21.02	21.02	N49°52'25"W	02°17'38"

LINE TABLE		
LINE	LENGTH	BEARING
L272	0.98	S36°57'26"W
L273	222.85	N75°10'20"W
L274	56.93	S89°49'10"W
L275	71.78	N59°37'22"W
L276	57.46	N73°07'31"W
L277	92.32	S89°35'59"W
L278	94.26	N13°12'21"W
L279	1574.88	S73°07'05"E
L280	472.22	S75°09'54"E
L281	101.71	S00°15'00"E
L282	112.20	N44°47'27"W
L283	72.21	S51°13'54"W
L284	34.84	S30°03'36"W
L285	50.48	S18°51'50"W
L286	23.97	S18°25'40"W
L287	38.73	S01°00'20"E
L288	58.32	S14°51'37"E
L289	29.36	N58°58'19"W
L290	61.63	N19°14'05"E

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C23	50.00'	50.93'	48.76'	N01°50'52"E	58°21'39"
C24	30.00'	24.38'	23.72'	N04°02'56"W	46°34'03"
C25	175.00'	216.49'	202.95'	N54°40'29"E	70°52'47"
C26	325.00'	85.13'	84.89'	N82°40'35"W	15°00'30"
C27	975.00'	520.00'	513.86'	N74°54'06"W	30°33'28"
C28	375.00'	88.37'	88.17'	N66°22'26"W	13°30'09"
C29	535.00'	161.31'	160.70'	N81°45'46"W	17°16'30"
C30	475.00'	288.59'	284.17'	N72°59'42"W	34°48'38"
C31	410.00'	228.50'	225.55'	N69°58'14"W	31°55'55"
C32	410.00'	123.58'	123.11'	S85°25'44"W	17°16'10"
C33	185.00'	12.83'	12.83'	S52°57'07"E	03°58'30"

GRAPHIC SCALE
0 50 100 200
SCALE IN FEET

00285



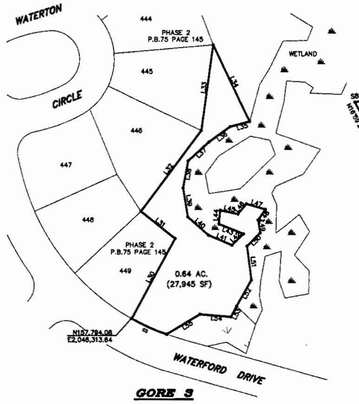
GORE 1

GORE 2

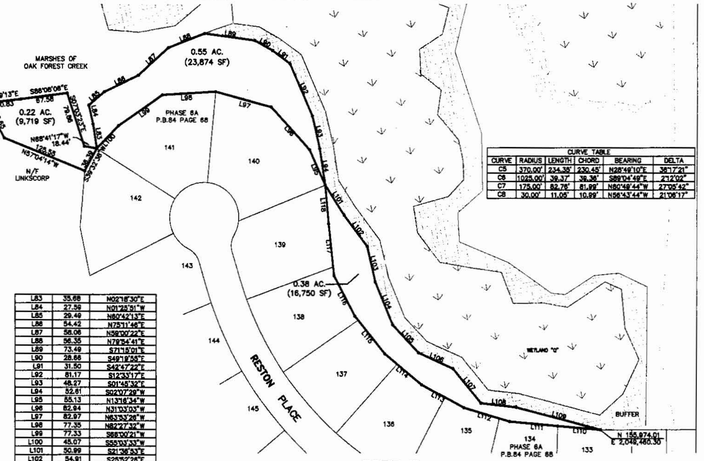
LINE TABLE		
LINE	LENGTH	BEARING
L1	3.44	N51°44'06"E
L2	43.84	S42°31'12"E
L3	33.34	S45°48'08"E
L4	32.02	S48°17'17"E
L5	28.36	S53°38'22"E
L6	41.22	S54°35'00"E
L7	7.53	S62°45'45"E
L8	75.27	S83°48'18"E
L9	35.66	S87°14'13"E
L10	1.32	S12°52'38"W
L11	21.48	N18°32'28"E
L12	22.16	N43°53'08"E
L13	119.12	N54°55'08"E
L14	52.30	N58°36'17"E
L15	50.99	N45°07'41"E
L16	72.19	N80°29'20"E
L17	109.29	N18°39'26"E
L18	54.99	N49°09'23"E
L19	44.81	N80°00'00"E
L20	33.84	S06°46'58"E
L21	50.82	S20°28'20"E
L22	44.04	S28°45'17"W
L23	54.95	S00°21'03"E
L24	20.03	S14°56'33"E
L25	73.33	S78°56'35"W
L26	90.00	S78°56'35"W
L27	115.25	S72°36'18"W
L28	118.70	S56°15'58"W
L29	56.56	S43°40'48"W
L30	130.00	N38°46'39"E
L31	62.78	N40°57'46"W
L32	144.80	N48°01'07"W
L33	123.30	N18°01'43"E
L34	121.35	N11°52'01"E
L35	29.45	S86°06'33"W
L36	37.58	S69°03'28"W
L37	40.00	S59°09'36"W
L38	39.23	S21°52'36"W
L39	41.69	S01°30'36"W
L40	38.48	S37°41'22"E

LINE TABLE		
LINE	LENGTH	BEARING
L41	37.21	S56°13'02"E
L42	23.11	N56°54'43"E
L43	36.18	N37°41'36"W
L44	18.56	N18°18'32"E
L45	28.26	S87°11'36"E
L46	18.97	N50°05'41"E
L47	28.50	S82°34'58"E
L48	18.23	S48°37'18"W
L49	18.49	S01°51'18"E
L50	26.89	S20°42'56"W
L51	48.72	S03°37'46"W
L52	42.53	S40°57'17"E
L53	17.48	S38°50'36"W
L54	43.13	N74°12'28"W
L55	55.82	S70°13'34"W
L56	50.77	S68°21'28"W
L57	7.53	N18°37'45"W
L58	50.30	N84°11'03"E
L59	11.31	S21°39'34"W
L60	71.30	S80°44'30"E
L61	72.20	S86°43'46"E
L62	83.35	S78°35'21"E
L63	1.84	S78°35'21"E
L64	44.37	S83°09'34"E
L65	62.57	N86°35'20"E
L66	62.57	N80°14'18"E
L67	63.87	N81°44'05"E
L68	62.63	N20°18'41"E
L69	35.05	N57°48'18"E
L70	30.10	N02°00'28"E
L71	65.91	S07°39'50"E
L72	7.67	S78°57'21"E
L73	172.83	S06°32'18"W
L74	498.25	N76°26'49"W
L75	56.25	N13°23'34"E
L76	12.37	S31°21'45"W
L77	54.36	S00°32'37"E
L78	21.63	S71°43'32"E
L79	28.94	N70°21'43"W
L80	5.67	S82°27'19"W
L81	34.38	S62°11'47"W
L82	24.85	S72°11'44"W

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	575.00'	33.91'	30.90'	S87°47'28"E	3°34'41"
C2	575.00'	260.60'	258.36'	S53°01'03"E	25°58'05"
C3	328.00'	58.33'	58.25'	S58°06'00"E	8°45'17"
C4	50.00'	108.85'	88.59'	N52°54'29"E	124°43'48"



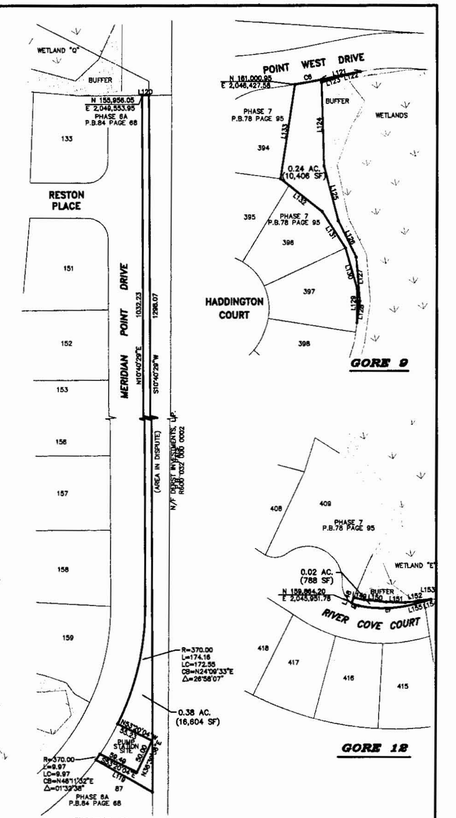
GORE 3



GORE 7

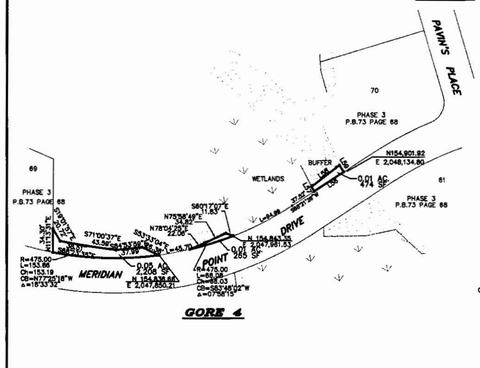
CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C5	370.00'	224.39'	220.45'	N26°49'10"E	36°17'21"
C6	1025.00'	39.31'	39.38'	S89°04'48"E	2°12'02"
C7	175.00'	82.76'	81.99'	N80°48'44"W	27°05'42"
C8	30.00'	11.05'	10.99'	N56°43'44"W	21°06'17"

LINE TABLE		
LINE	LENGTH	BEARING
L83	35.68	N02°18'30"E
L84	27.59	N01°28'31"W
L85	29.49	N80°42'13"E
L86	54.42	N73°31'46"E
L87	58.06	N58°00'22"E
L88	56.35	N78°34'41"E
L89	73.49	S71°15'01"E
L90	28.86	S49°18'09"E
L91	31.50	S45°47'42"E
L92	81.17	S14°33'17"E
L93	48.27	S01°48'32"E
L94	52.61	S02°07'28"W
L95	55.13	N13°16'34"W
L96	82.84	N31°33'30"W
L97	82.97	N53°33'28"W
L98	77.35	N82°12'22"W
L99	77.33	S66°00'01"W
L100	45.07	S55°03'23"W
L101	50.99	S21°36'33"E
L102	54.91	S25°52'26"E
L103	53.20	S00°27'28"E
L104	66.46	S11°18'39"E
L105	54.34	S33°17'34"E
L106	54.54	S64°30'14"E
L107	63.85	S28°18'09"E
L108	51.80	S72°36'28"E
L109	125.75	S64°18'27"E
L110	51.89	N74°01'13"W
L111	70.08	N73°48'36"W
L112	68.00	N62°14'48"W
L113	68.00	N50°48'06"W
L114	68.00	N39°17'24"W
L115	68.00	N27°48'42"W
L116	64.99	N16°40'36"W
L117	74.31	N04°58'36"E
L118	55.33	N00°41'17"E
L119	54.24	N14°20'39"W
L120	10.00	S78°18'31"E
L121	58.93	N80°48'10"E
L122	27.36	S88°14'28"W
L123	30.54	S83°59'24"W
L124	119.43	S06°14'39"W
L125	80.55	S04°01'43"E
L126	57.90	S15°53'44"E
L127	82.90	S06°06'38"W
L128	31.04	S18°41'34"W
L129	47.78	N14°20'39"W
L130	61.45	N05°29'32"W
L131	81.45	N22°13'27"W
L132	75.63	N41°06'56"W
L133	135.07	N15°41'47"E
L134	89.33	N29°29'40"E
L135	78.84	N39°36'00"E
L136	90.00	N40°24'12"E
L137	30.06	S48°10'18"E
L138	13.51	S70°56'00"W
L139	207.57	S38°17'31"E
L140	27.27	S78°02'46"W
L141	4.10	N18°56'39"E
L142	92.25	N21°18'39"E
L143	45.75	S33°29'13"E
L144	45.78	S25°28'26"E
L145	58.63	S21°46'34"W
L146	41.98	N47°27'04"W
L147	25.12	N28°54'51"E
L148	7.88	N33°57'38"E
L149	15.39	S64°31'15"E
L150	31.92	S72°08'16"E
L151	27.44	S77°17'22"E
L152	37.08	S85°56'06"E
L153	0.79	S78°08'46"E
L154	10.27	S85°37'38"E
L155	13.38	S85°37'38"E
L291	68.33	N76°51'55"E
L292	45.05	N78°19'39"E
L293	76.90	S71°30'23"E
L294	35.44	S88°33'28"E

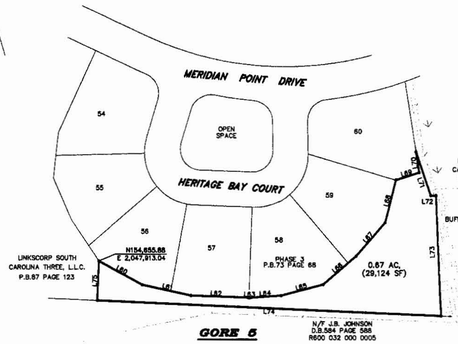


GORE 8

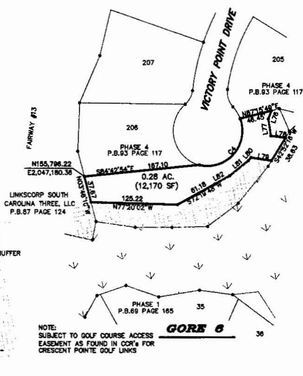
GORE 9



GORE 4

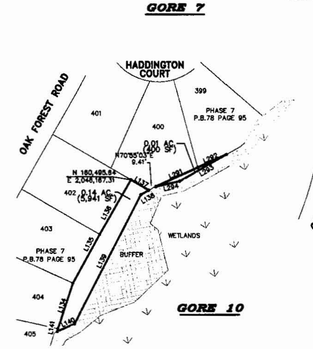


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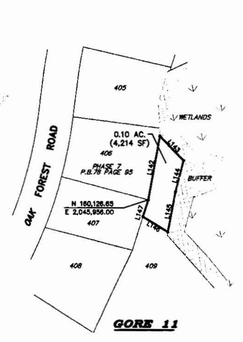


GORE 6

NOTE:
SUBJECT TO GOLF COURSE ACCESS EASEMENT AS FOUND IN CDK's FOR CRESCENT POINTE GOLF LINKS



GORE 10



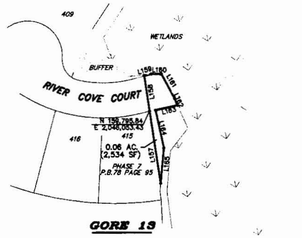
GORE 11

GORE 19

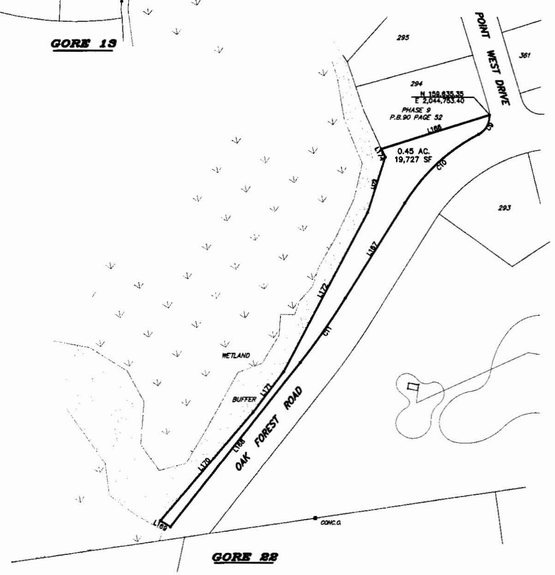
GORE 23

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C9	30.00'	33.92'	32.15'	S41°09'00"W	64°47'24"
C10	275.00'	146.37'	144.64'	S58°15'20"W	30°29'42"
C11	975.00'	113.30'	113.23'	N48°19'23"E	6°39'37"
C12	50.00'	24.38'	23.73'	N17°36'31"E	46°34'03"
C13	50.00'	84.48'	81.04'	N13°43'36"W	108°01'16"
C14	25.62'	21.28'	20.67'	S25°51'18"E	47°34'58"
C15	47.62'	39.20'	38.10'	S13°33'36"E	47°09'56"

LINE TABLE		
LINE	LENGTH	BEARING
L157	104.63	N02°04'16"E
L158	50.32	N02°04'53"E
L159	10.27	N85°37'28"E
L160	14.87	S78°06'45"E
L161	39.11	S17°46'22"E
L162	10.64	S12°56'23"E
L163	32.32	S86°24'37"W
L164	55.22	S01°40'01"E
L165	50.85	S18°52'51"W
L166	163.95	N83°38'40"E
L167	160.84	S43°01'59"W
L168	299.50	S42°27'06"W
L169	18.78	N48°33'11"W
L170	204.34	N81°48'36"E
L171	72.17	N48°32'08"E
L172	257.59	N38°57'11"E
L173	80.79	N28°37'12"E
L174	12.85	N14°02'30"W
L175	62.82	N05°40'31"W
L176	12.45	N22°37'18"E
L177	11.55	S24°23'06"E
L178	12.57	S28°27'09"W
L179	18.08	S09°01'47"E
L180	42.33	N84°42'17"E
L181	30.11	S30°12'54"E
L182	55.70	S84°42'17"W
L183	21.75	S09°31'47"E
L184	5.84	S86°22'48"W
L185	14.12	S77°19'38"E
L186	48.73	S64°56'21"W
L187	48.15	S33°56'29"W
L188	48.77	S33°36'32"W
L189	55.85	N87°41'45"W
L190	130.00	N12°40'22"E

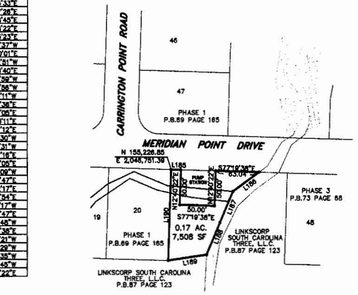


GORE 19



GORE 22

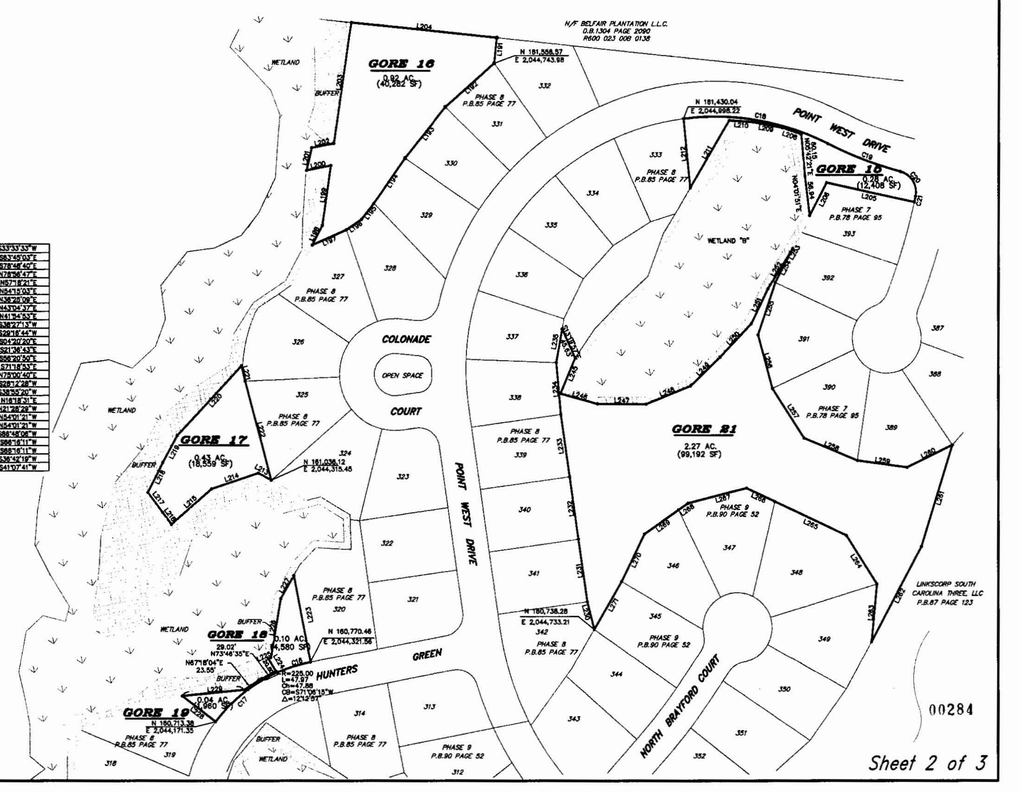
CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C16	225.00'	50.67'	50.56'	S83°39'48"W	12°54'08"
C17	225.00'	55.58'	55.45'	S96°37'39"W	18°57'35"
C18	350.00'	213.02'	211.63'	S69°17'24"E	34°51'15"
C19	525.00'	112.86'	112.65'	S58°20'21"E	12°19'06"
C20	30.00'	45.69'	41.40'	S82°52'15"E	87°15'21"
C21	575.00'	8.69'	8.69'	S23°02'30"W	0°34'09"



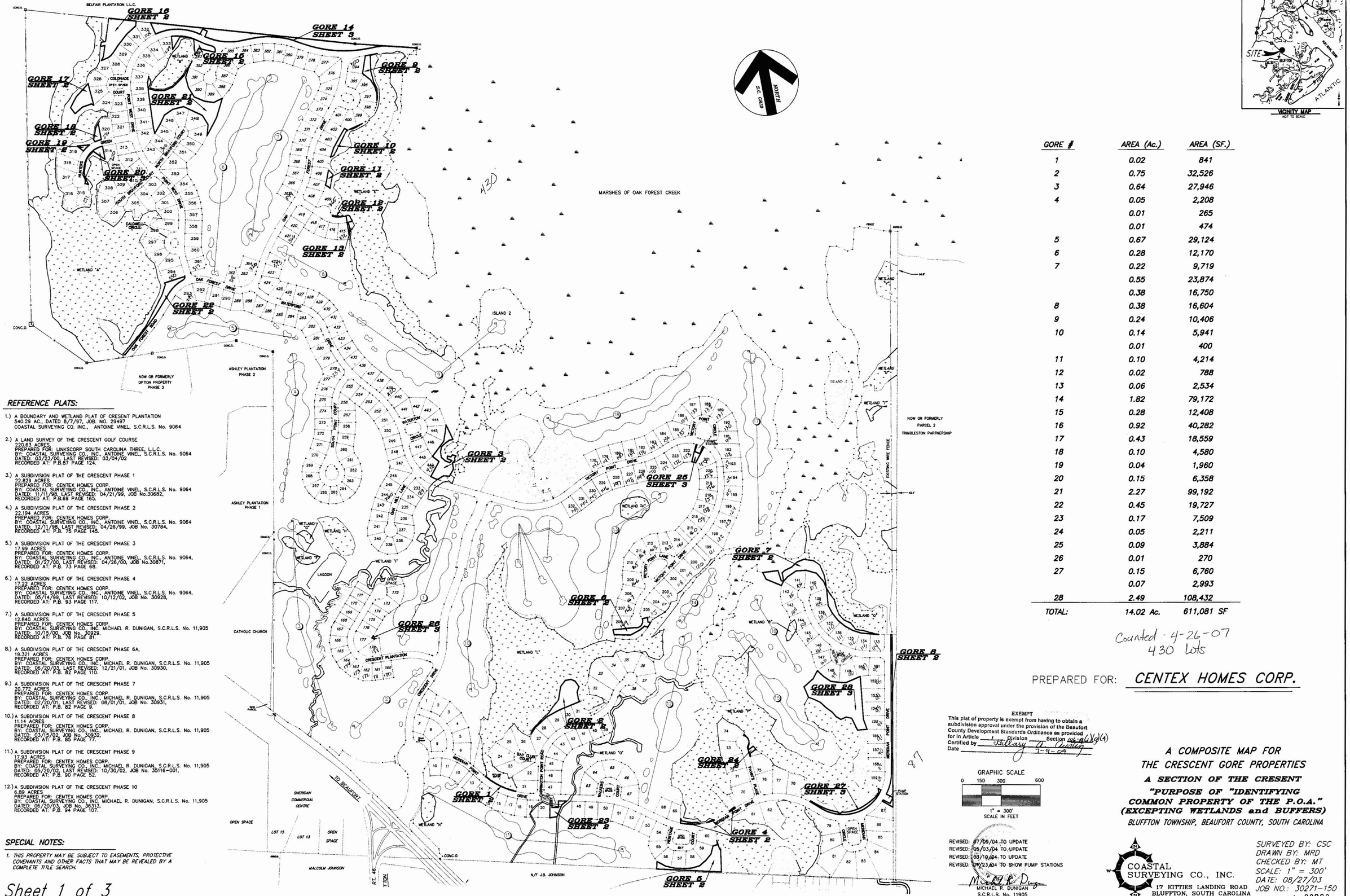
GORE 24

LINE TABLE		
LINE	LENGTH	BEARING
L191	36.78	S16°32'29"W
L192	83.47	S56°36'09"W
L193	83.47	S46°46'21"W
L194	78.84	S45°48'56"W
L195	28.38	S48°36'31"W
L196	26.58	S64°26'08"W
L197	54.35	S77°30'43"W
L198	31.46	N38°39'04"E
L199	86.24	N18°07'59"E
L200	35.68	S86°54'38"E
L201	32.89	N33°08'43"E
L202	32.64	N86°54'38"E
L203	173.83	N18°07'59"E
L204	211.73	S73°07'06"E
L205	130.00	N86°40'58"E
L206	53.18	S39°27'13"E
L208	29.03	N80°14'54"W
L209	42.90	N68°03'36"W
L210	34.52	N75°15'48"W
L211	111.70	S41°12'47"W
L212	89.44	N00°14'47"E
L213	21.06	N46°36'18"W
L214	71.51	S82°24'08"W
L215	76.54	S06°56'38"E
L216	21.25	N26°10'37"W
L217	35.55	N26°04'27"W
L218	47.85	N37°41'16"E
L219	43.84	N39°30'01"E
L220	134.39	N63°34'13"E
L221	22.35	S02°00'41"E
L222	146.82	S03°56'22"E
L223	123.82	S00°00'00"E
L224	23.14	N21°07'22"W
L225	4.13	N74°05'24"E
L226	85.42	N20°30'15"E
L227	37.80	N40°42'07"E
L228	80.37	N41°43'48"E
L229	80.12	S84°32'41"E
L230	41.07	N02°28'08"W
L231	80.00	N02°32'12"E
L232	80.00	N02°52'12"E
L233	80.00	N02°52'12"E
L234	74.37	N05°48'38"E
L235	48.63	N20°54'53"E

LINE TABLE		
LINE	LENGTH	BEARING
L245	54.85	S33°53'33"W
L246	50.52	S83°45'00"E
L247	70.80	S78°46'40"E
L248	68.99	N78°56'47"E
L249	59.09	N57°18'21"E
L250	63.96	N54°15'00"E
L251	50.53	N38°26'09"E
L252	60.46	N43°54'37"E
L253	5.84	N41°54'53"E
L254	54.15	S38°27'15"W
L255	76.09	S26°18'44"W
L256	79.10	S04°20'20"E
L257	54.46	S21°36'43"E
L258	83.75	S66°30'54"E
L259	72.84	S71°18'53"E
L260	72.86	N75°09'46"E
L261	151.58	S28°12'28"W
L262	153.85	S38°52'20"W
L263	82.56	N18°18'31"E
L264	83.79	N21°28'28"W
L265	113.77	N54°01'31"W
L266	45.19	N54°01'31"W
L267	87.35	S86°48'08"W
L268	18.61	S86°18'11"W
L269	80.20	S86°18'11"W
L270	73.49	S36°42'19"W
L271	79.05	S41°07'41"W



00284



VICINITY MAP
NOT TO SCALE

GORE #	AREA (Ac.)	AREA (SF.)
1	0.02	841
2	0.75	32,526
3	0.64	27,946
4	0.05	2,208
	0.01	265
	0.01	474
5	0.67	29,124
6	0.28	12,170
7	0.22	9,719
	0.55	23,874
	0.38	16,750
8	0.38	16,604
9	0.24	10,406
10	0.14	5,941
	0.01	400
11	0.10	4,214
12	0.02	788
13	0.06	2,534
14	1.82	79,172
15	0.28	12,408
16	0.92	40,282
17	0.43	18,559
18	0.10	4,580
19	0.04	1,960
20	0.15	6,358
21	2.27	99,192
22	0.45	19,727
23	0.17	7,509
24	0.05	2,211
25	0.09	3,884
26	0.01	270
27	0.15	6,760
	0.07	2,993
28	2.49	108,432
TOTAL:	14.02 Ac.	611,081 SF

Counted - 4-26-07
430 Lots

PREPARED FOR: CENTEX HOMES CORP.

REFERENCE PLATS:

1.) A BOUNDARY AND WETLAND PLAT OF CRESENT PLANTATION
540.29 AC., DATED 8/7/97, JOB. NO. 29497
COASTAL SURVEYING CO. INC., ANTOINE VINEL, S.C.R.L.S. No. 9064

2.) A LAND SURVEY OF THE CRESCENT GOLF COURSE
220.63 ACRES
PREPARED FOR: LINKSCORP SOUTH CAROLINA THREE, L.L.C.
BY: COASTAL SURVEYING CO., INC., ANTOINE VINEL, S.C.R.L.S. No. 9064
DATED: 03/23/00 LAST REVISED: 03/04/02
RECORDED AT: P.B.87 PAGE 124.

3.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 1
22.829 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., ANTOINE VINEL, S.C.R.L.S. No. 9064
DATED: 11/11/98, LAST REVISED: 04/21/99, JOB No.30682,
RECORDED AT: P.B.69 PAGE 165.

4.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 2
22.194 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., ANTOINE VINEL, S.C.R.L.S. No. 9064
DATED: 12/11/98, LAST REVISED: 04/26/99, JOB No. 30784,
RECORDED AT: P.B. 75 PAGE 145.

5.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 3
17.99 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., ANTOINE VINEL, S.C.R.L.S. No. 9064,
DATED: 01/27/00, LAST REVISED: 04/26/00, JOB No.30871,
RECORDED AT: P.B. 73 PAGE 68.

6.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 4
17.22 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., ANTOINE VINEL, S.C.R.L.S. No. 9064,
DATED: 08/18/99, LAST REVISED: 10/12/02, JOB No. 30928,
RECORDED AT: P.B. 93 PAGE 117.

7.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 5
12.840 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC. MICHAEL R. DUNIGAN, S.C.R.L.S. No. 11,905
DATED: 10/15/00, JOB No. 30929,
RECORDED AT: P.B. 76 PAGE 81.

8.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 6A,
19.321 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., MICHAEL R. DUNIGAN, S.C.R.L.S. No. 11,905
DATED: 06/20/03, LAST REVISED: 12/21/01, JOB No. 30930,
RECORDED AT: P.B. 82 PAGE 110.

9.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 7
20.772 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., MICHAEL R. DUNIGAN, S.C.R.L.S. No. 11,905
DATED: 02/20/01, LAST REVISED: 08/01/01, JOB No. 30931,
RECORDED AT: P.B. 82 PAGE 9.

10.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 8
11.14 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., MICHAEL R. DUNIGAN, S.C.R.L.S. No. 11,905
DATED: 03/15/02, JOB No. 30932,
RECORDED AT: P.B. 85 PAGE 77.

11.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 9
17.93 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC., MICHAEL R. DUNIGAN, S.C.R.L.S. No. 11,905
DATED: 05/20/02, LAST REVISED: 10/30/02, JOB No. 35116-001,
RECORDED AT: P.B. 90 PAGE 52.

12.) A SUBDIVISION PLAT OF THE CRESCENT PHASE 10
6.89 ACRES
PREPARED FOR: CENTEX HOMES CORP.
BY: COASTAL SURVEYING CO., INC. MICHAEL R. DUNIGAN, S.C.R.L.S. No. 11,905
DATED: 06/20/03, JOB No. 36313,
RECORDED AT: P.B. 94 PAGE 107.

SPECIAL NOTES:

1. THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, PROTECTIVE COVENANTS AND OTHER FACTS THAT MAY BE REVEALED BY A COMPLETE TITLE SEARCH.

EXEMPT
This plat of property is exempt from having to obtain a subdivision approval under the provision of the Beaufort County Development Standards Ordinance as provided for in Article 1 Division — Section 106-6.6.1.2.(4)
Certified by Bleasy M Dunigan
Date 7-9-04

GRAPHIC SCALE
0 150 300 600
1" = 300'
SCALE IN FEET

REVISED: 07/09/04 TO UPDATE
REVISED: 05/03/04 TO UPDATE
REVISED: 03/10/04 TO UPDATE
REVISED: 01/23/04 TO SHOW PUMP STATIONS

MICHAEL R. DUNIGAN
S.C.R.L.S. No. 11905

A COMPOSITE MAP FOR THE CRESCENT GORE PROPERTIES

A SECTION OF THE CRESENT "PURPOSE OF "IDENTIFYING COMMON PROPERTY OF THE P.O.A." (EXCEPTING WETLANDS and BUFFERS)

BLUFFTON TOWNSHIP, BEAUFORT COUNTY, SOUTH CAROLINA

COASTAL SURVEYING CO., INC.
17 KITTIES LANDING ROAD
BLUFFTON, SOUTH CAROLINA
29910 (843) 757-4466

SURVEYED BY: CSC
DRAWN BY: MRD
CHECKED BY: MT
SCALE: 1" = 300'
DATE: 08/27/03
JOB NO.: 30271-150
00283

MARSHES OF OAK FOREST CREEK

WETLAND "V"

WETLAND "U"

ISLAND 3

WETLAND "T"

WETLAND "Q"

L74 L75 L76 L77 L73 L72 L71 L70 L69 L68 L67 L66 L65 L64 L63 L62 L61 L60 L59 L58 L57 L56 L55 L54 L53 L52 L51 L50 L49 L48 L47 L46 L45 L44 L43 L42 L41 L40 L39 L38 L37 L36 L35 L34 L33 L32 L31 L30 L29 L28 L27 L26 L25 L24 L23 L22 L21 L20 L18 L19 L17 L16 L14 L15 L12 L11 L10 L9 L8 L7 L6 L5 L4 L3 L2

CMF 50.1'

IPF

261'

55.8'

274'

340'

622'

659'

425'

290'

178'

42.4'

144'

N11°25'43"W 486.44'

N52°25'24"W 400.0'

S11°08'11"W 4875.04'

DISPUTED AREA

EXISTING WIRE FENCE

PROPERTY LINE AS SHOWN ON REFERENCE # 2 PB. 6 PG. 36.

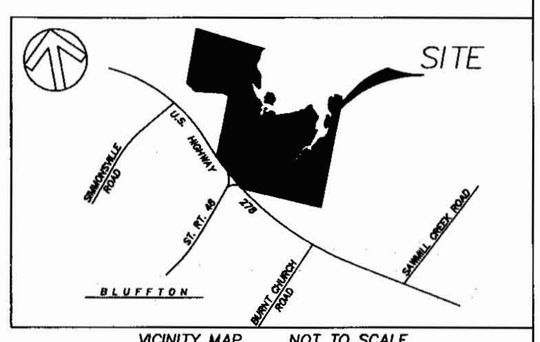
NOW OR FORMERLY
PARCEL 2
TRIMBLESTON PARTNERSHIP

4.3 ACRES
DISPUTED AREA

31.73 ACRES (TOTAL)
(1,382,404 SF)
(INCLUDES 4.3 ACRES OF DISPUTED AREA)
A.P.N. R600-032-000-0001

141 140 142 139 143 138 144 137

00282



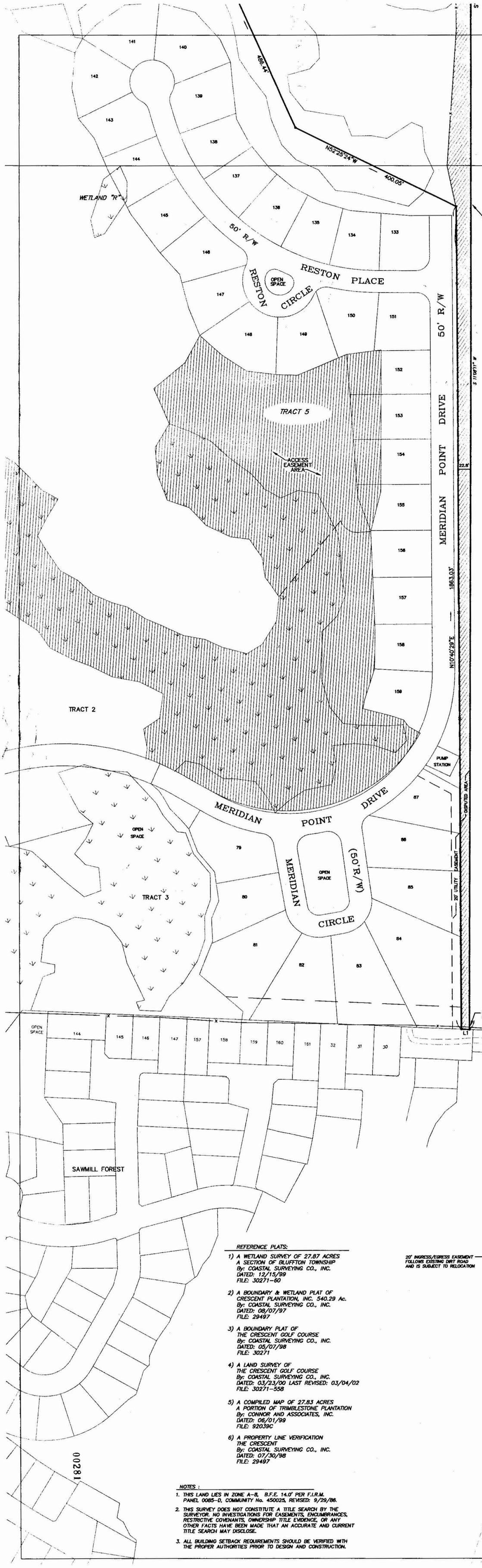
VICINITY MAP NOT TO SCALE

GRAPHIC SCALE
0 50 100 200
SCALE IN FEET

LEGEND

⊡ CMF	CONCRETE MONUMENT FOUND, 3"X3" W/PIN
○ IPF	IRON PIN FOUND
○ IPS	IRON PIN SET

LINE TABLE		
LINE	BEARING	LENGTH
L1	N76°26'49"W	18.01
L2	S79°08'57"W	90.05
L3	N70°13'23"W	34.04
L4	S61°08'17"W	61.88
L5	N89°04'54"W	53.72
L6	N74°33'14"W	43.66
L7	N04°44'35"W	44.70
L8	N31°32'20"E	44.46
L9	N39°00'39"E	56.74
L10	N42°41'13"E	66.22
L11	N59°11'46"E	73.16
L12	N83°59'33"E	23.92
L13	S42°40'21"E	14.36
L14	N87°40'39"E	15.19
L15	N83°33'09"E	6.87
L16	N21°29'19"W	20.13
L17	N47°35'16"E	26.05
L18	N85°19'42"W	23.56
L19	S79°52'52"W	22.20
L20	N26°54'21"E	29.97
L21	N51°18'45"E	39.09
L22	N07°16'10"W	26.24
L23	N24°15'36"E	62.39
L24	N41°54'50"E	26.49
L25	S80°57'32"E	34.31
L26	N60°20'50"E	30.27
L27	N33°47'36"E	70.83
L28	S59°53'40"E	50.47
L29	N56°33'16"E	57.47
L30	N75°26'09"E	39.84
L31	S61°48'40"E	15.00
L32	N65°31'14"E	37.93
L33	N37°31'04"E	58.63
L34	N61°19'54"E	21.75
L35	N20°08'57"W	31.05
L36	N37°31'39"E	48.22
L37	N53°26'14"E	46.92
L38	N08°56'45"E	28.41
L39	N13°39'15"E	44.58
L40	N84°36'52"E	41.07
L41	N11°21'02"W	23.90
L42	N00°48'46"E	55.27
L43	N10°20'21"E	69.87
L44	N19°52'58"E	56.05
L45	N00°27'38"W	69.47
L46	N36°15'27"E	56.44
L47	N51°34'19"E	19.52
L48	N17°40'14"E	48.47
L49	N25°59'14"E	70.58
L50	N03°26'08"E	40.25
L51	N34°32'34"W	47.39
L52	N17°54'30"E	46.87
L53	N06°18'34"W	52.06
L54	N08°10'44"E	66.07
L55	N25°12'13"E	56.91
L56	N02°32'42"W	50.23
L57	N17°19'13"W	61.71
L58	N17°33'09"W	44.56
L59	N57°59'34"W	59.40
L60	N31°04'28"W	72.25
L61	N21°28'40"W	67.58
L62	N09°19'20"W	60.22
L63	N11°24'15"W	54.06
L64	N08°25'32"E	118.33
L65	N18°52'20"E	58.08
L66	N04°18'18"W	75.04
L67	N18°50'24"E	65.10
L68	N28°53'16"E	77.81
L69	S82°07'46"E	55.60
L70	S54°37'25"E	92.05
L71	N82°10'59"E	40.35
L72	N16°37'59"E	77.31
L73	N13°40'43"E	82.78
L74	N85°55'58"E	44.22
L75	S69°17'38"E	67.08
L76	S69°06'44"E	118.29
L77	S77°01'03"E	109.08



REFERENCE PLATS:

1) A WETLAND SURVEY OF 27.87 ACRES
A SECTION OF BLUFFTON TOWNSHIP
By: COASTAL SURVEYING CO., INC.
DATED: 12/15/99
FILE: 30271-60

2) A BOUNDARY & WETLAND PLAT OF
CRESCENT PLANTATION, INC. 540.29 Ac.
By: COASTAL SURVEYING CO., INC.
DATED: 08/07/97
FILE: 29497

3) A BOUNDARY PLAT OF
THE CRESCENT GOLF COURSE
By: COASTAL SURVEYING CO., INC.
DATED: 05/07/98
FILE: 30271

4) A LAND SURVEY OF
THE CRESCENT GOLF COURSE
By: COASTAL SURVEYING CO., INC.
DATED: 03/23/00 LAST REVISED: 03/04/02
FILE: 30271-558

5) A COMPILED MAP OF 27.83 ACRES
A PORTION OF TRIMBLESTONE PLANTATION
By: CONNOR AND ASSOCIATES, INC.
DATED: 06/01/99
FILE: 92039C

6) A PROPERTY LINE VERIFICATION
THE CRESCENT
By: COASTAL SURVEYING CO., INC.
DATED: 07/30/98
FILE: 29497

NOTES :

1. THIS LAND LIES IN ZONE A-8, B.F.E. 14.0' PER F.I.R.M. PANEL 0085-D, COMMUNITY No. 450025, REVISED: 9/29/86.
2. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. NO INVESTIGATIONS FOR EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS HAVE BEEN MADE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
3. ALL BUILDING SETBACK REQUIREMENTS SHOULD BE VERIFIED WITH THE PROPER AUTHORITIES PRIOR TO DESIGN AND CONSTRUCTION.

GRAPHIC SCALE
0 50 100 200
SCALE IN FEET

REVISED: 06/28/06 UPDATE AUDITOR'S NUMBER

" I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "B" SURVEY AS SPECIFIED THEREIN. ALSO THERE ARE NO VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN."

Michael R. Dunigan
MICHAEL R. DUNIGAN
S.C.R.L.S. No. 11,905

SOUTH CAROLINA COASTAL SURVEYING COMPANY, INC. No. C00637 CERTIFICATE OF AUTHORIZATION

PREPARED FOR: MR. & MRS. JOE McCOLLOUGH

EXEMPT
This plat of property is exempt from having to obtain a subdivision approval under the provision of the Beafort County Development Standards Ordinance as provided for in Article 1 Division Section 106-84(b)
Certified by Michael R. Dunigan
Date 1-24-06

A BOUNDARY SURVEY
OF
31.73 ACRES
A PORTION OF
N/F PARCEL 2 TRIMBLESTON PARTNERSHIP
BLUFFTON TOWNSHIP, BEAUFORT COUNTY, SOUTH CAROLINA

SCALE: 1" = 100' SURVEYED BY: CSC
DATE: 05/01/06 DRAWN BY: MRD
JOB No.: 40,340B CHECKED BY: MT

COASTAL SURVEYING CO., INC.
49 RIVERWALK BLVD.
BUILDING 8
RIDGELAND, SC. 29936
(843) 645-4446