MANAGEMENT SUMMARY OF AN ARCHAEOLOGICAL SURVEY OF THE SPRING ISLAND BRIDGE, SPRING AND CALLAWASSIE ISLANDS, BEAUFORT COUNTY, SOUTH CAROLINA

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Introduction

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Glen McCaskey, consultant to the developer of the Spring Island property (Callawassie Development Corporation). This survey tracts are located on the western shore of Spring Island and the eastern shore of Callawassie Island in Beaufort County. Spring and Callawassie islands are bordered to the north by the Chechessee River and Creek respectively and to the south by the Colleton River. The two islands are separated by the Callawassie Creek, which runs north-south. Callawassie Island is separated from the mainland by Chechessee Creek. The Broad River lies to the east of Spring Island.

Both islands are currently owned and being developed by the same interest, the Callawassie Development Corporation. Callawassie Island has been previously surveyed by Michie (1982; see also Brooks et al. 1982), while Spring Island has received some limited reconnaissance survey by Lepionka et al. (1986). These previous investigations had not identified any archaeological sites in the vicinity of the proposed bridge tracts, each approximately 3.7 acres in extent. Because Michie’s (1982) investigation of Callawassie Island was largely a "peripheral edge" survey and Lepionka’s (Lepionka et al. 1986) survey of Spring was strictly a reconnaissance study, the South Carolina State Historic Preservation Office has requested that a more intensive investigation be conducted in the vicinity of the proposed bridge.

The two islands are separated by approximately 1400 feet of marsh and two small tidal creeks at the bridge location. This survey involved only the two "landing" areas on each side of the bridge. No survey was conducted in the marsh or in the tidal creeks. This investigation involved only an area 400 feet square on both Callawassie and Spring islands; it did not encompass either the eventual road network or the construction access roads.

The bridge and associated road will include two 12 foot travel lanes and a single 6 foot bike lane. The road will have 8 foot shoulders and the toe of the fill from the bridge approach will cover an area approximately 80 feet in width.

Based on discussions with the consultant for this project it was determined that the scope of this study would involve one day of field work and two days of analysis and report production. Chicora’s proposal to conduct this work was accepted on August 7 and the field work was conducted by the author and Ms. Mona
Figure 1. A portion of the Spring Island USGS map showing the project location.
Grunden on August 10. A total of 16 person hours were devoted to this work. Because of the urgency of the construction schedule and the results of the investigation, this detailed management summary is being submitted in lieu of a detailed report.

Arrangements have been made to curate the collections from these investigations at The Environmental and Historical Museum of Hilton Head Island as Accession Number 1989.3. All field records will be provided to the institution on pH neutral, alkaline buffered paper. Additional information on the processing and conservation of the artifacts may be found in a subsequent section of this management summary. All materials will be curated in perpetuity.

Effective Environment

Beaufort County is situated in the Lower Coastal Plain of South Carolina and is bounded to the south and southwest 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 (MSL) (Mathews et al. 1980:134-135).

The county is drained by four primarily coastal or saltwater river systems (the May, New, Broad-Pocotaligo-Coosawhatchie, and Broad rivers) and one river with a significant freshwater discharge (the Combahee River), which pays a significant role in historic rice cultivation. Because of the low topography, however, many low gradient interior drainages are present as either extensions of tidal streams and rivers or flooded bays and swales. There are many diverse wetland communities influenced by tidal inundation and river flow. Upland vegetation is primarily pine or mixed hardwoods and pine, and only 15% of the county is currently cultivated (while about 5% of the total land area is urbanized) (Mathews et al. 1980:135).

The geology of the county is characteristic of the coastal plain, with unconsolidated water-laid beds of sands and clays up to 20 feet in thickness overlying thick beds of soft marl (Stuck 1980:3). Callawassie and Spring islands consist of primarily the Wando-Seabrook-Seewee soil associations which range from excessively well drained to somewhat poorly drained soils that are primarily sandy. In the project area on Callawassie Island the soils are classified as Eulonia fine sandy loams, which are typically moderately well drained but slowly permeable soils formed in clayey Coastal Plain sediment (Stuck 1980:Map 75, 69). The field investigations, however, revealed that the soils over the lower two-thirds of the tract were more similar to the poorly drained Bladen series. On Spring Island the soils in the project
area tend to be better drained and are classified as the Wando series (Stuck 1980; Map 75).

On Callawassie Island the elevations in the proposed bridge area ranges from 7 to 11 feet MSL with no sharp delineation between the marsh and the high ground. Vegetation is primarily oak (both live and black) and pine. Understory vegetation is limited to small clumps. On Spring Island the elevations range from 7 to 14 feet with a bank about 2 to 3 feet high separating the island from the Callawassie Creek marsh. Vegetation is similar to that on Callawassie Island with live oak, pine and sweet gum dominating the area.

Background Research

This project did not involve additional historical or archival research for either Callawassie or Spring islands. The previous work by Michie (1982) and Baldwin (in Lepionka et al. 1986) provides some preliminary background for the islands. Review of these documents and the published plats, however, reveals no documented historic period occupation.

The previous archaeological surveys (Lepionka et al. 1986 and Michie 1982) likewise reveal the presence of no archaeological remains in the immediate project area. The Callawassie Island Burial Mound (38BU19) is located approximately 1600 feet to the west-northwest of the project and a village associated with the mound may be located to the northwest of 38BU19 (see Brooks et al. 1982:56).

No additional sites for the project area are on file at the South Carolina Institute of Archaeology and Anthropology. Additional information on the archaeology of the area may be obtained from Brooks et al. (1982), Lepionka et al. (1986), and Michie (1982). Summaries of Beaufort area history are presented by Dabbs (1983), Johnson (1969), Trinkley (1986, 1987, 1988, and 1989), and Wooten (1936), while sources such as Pearson (1906) provide additional primary source documentation for the area. McGuire (1984) provides a detailed account of land ownership in the postbellum period. These sources should be consulted for additional information general to the Beaufort District.

Based on the available previous studies and the presented data on the soils and drainage typical of the Callawassie and Spring island tracts, the Callawassie Island location was not judged to exhibit a high probability for either prehistoric or historic occupation. The Spring Island location, because of its somewhat better drained soils and higher topography, was judged to exhibit moderate archaeological potential.
Field Methods

The initially proposed field techniques involved the placement of shovel tests along several transects through the study areas, with all fill being screened through 1/4-inch mesh. In addition, the marsh edge would also be examined for evidence of eroding middens or disturbed sites.

This emphasis on shovel testing is required by the tracts' extensive woods coverage, which was anticipated to severely restrict surface visibility. The examination of the marsh edge is consistent with previous findings that sites tend to cluster adjacent to the marsh. The intensity of shovel testing was to be based on information concerning soil drainage, with areas of poorly drained soils receiving less intensive investigation. As previously discussed, the Callawassie Island tract consists largely of somewhat poorly drained soils and was therefore expected to produce few, if any, archaeological sites. The Spring Island project area contains better drained soils which was judged to have moderate archaeological potential.

Should sites be identified by the shovel testing, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the Principal Investigator.

All soil would be screened through 1/4-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1 foot. All cultural remains would be collected, except for shell, mortar, and brick, which would be qualitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

These plans were put into effect with no significant variations. A total of 16 shovel tests were excavated within the Callawassie tract. Tests 1 through 9 were placed at 50 foot intervals along the centerline of the bridge. Tests 10 through 12 were placed at 50 foot intervals along a parallel transect 100 feet south of the centerline in the area of higher ground. Tests 13 through 16 were placed at 50 foot intervals along a parallel transect 100 feet north of the centerline, also in an area of higher ground. All tests were excavated to the subsoil, which in this area varied from 0.6 to 1.1 foot in depth. The soils within the eastern two-thirds of the corridor were found to be low, poorly drained, and chemically reduced.

A total of 32 shovel tests were excavated within the Spring Island tract. Tests 1 through 8 and 21 through 26 were placed
along the bridge centerline from the marsh inland at 30 foot intervals. Tests 9, 10, and 16 through 20 were placed along a parallel transect 100 feet to the south. This southern transect began at the marsh and ran inland for a distance of 180 feet. Tests 27 through 32 were placed along a parallel transect 100 feet to the north of the centerline and also ran inland for a distance of 180 feet. Tests 11 through 15 were placed radiating out at 15 foot intervals from a discovered site.

Surface survey was conducted only along the marsh edge and in the access roads for these two areas. Elsewhere the ground cover prevented any meaningful surface examination.

Laboratory Analysis

The cleaning of artifacts was conducted in Columbia at the Chicora Foundation laboratory on August 11, 1989. Cataloging is completed and has used the format established by The Environmental and Historical Museum of Hilton Head Island. The collections are curated under Accession Number 1989.3. The recovered specimens were examined for their conservation needs as required by professional curation practices. The recovered artifacts are judged to be stable and no treatments have been undertaken.

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. Prehistoric ceramics were classified using common coastal South Carolina types (DePratter 1979; Trinkley 1983).

Results

No archaeological sites were encountered during the surface survey of the marsh edge or the access roads. No sites were found on the Callawassie Island tract, probably because of the low topography and generally poor soil drainage characteristics.

One site was identified on Spring Island as a result of the shovel tests. This site, designated 38BU1203, was first identified in Shovel Test 10. Five additional tests were placed to the north, south, and west of the initial find, but only one of these (Test 15, 15 feet to the south of Test 10) yielded additional remains. The collection from this site consists of two small, unidentifiable sherds (probably Early to Middle Woodland based on the fine sand temper).

Site 38BU1203 is located about 200 feet east of the marsh edge and 100 feet south of the bridge centerline. The UTM coordinates are E514580 N3579220. Vegetation is typical of the project area and consists of mixed oak and pine with a moderate understory of brambles. The site is estimated to measure about 20
feet north-south by 15 feet east-west. The site elevation is 13 feet MSL. The soil profile consists of 0.5 to 0.8 foot of humic brown sand overlying a light brown sand to a depth of 0.8 to 1.2 feet. Below this was encountered white sand to a maximum shovel test depth of 1.4 feet. The recovered material was found in the interface between the brown and light brown sand.

This site is not within the bridge right-of-way, although it is subject to construction damage because of its proximity to the project. Damage to the site will probably be extensive given the shallow depth at which materials were recovered and the sandy nature of the soils.

Site Significance and Recommendations

Site 38BU1203 appears to represent a small Early to Middle Woodland scatter. Artifact quantity is very low (2 specimens from six tests) and diversity is equally low (only small sherds were recovered; there is no indication of faunal, floral, or lithic remains). Based on the absence of shell or other discrete features and the shallow depth of the material, the site appears to lack integrity. Consequently, the site is not recommended as eligible for inclusion on the National Register of Historic Places. Adequate mitigation appears to have taken place with the site's recordation and no further work is recommended.

While this site is not capable of providing much additional information, its identification does provide data on site settlement patterns on Spring Island. Its presence, albeit ephemeral, in an area judged to have moderate archaeological potential, offers additional verification of the predictive model used in the area.

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