

Marine Institute at Sapelo Island

Introduction

The University of Georgia Marine Institute at Sapelo Island is part of the School of Marine Programs. It is located on a barrier island midway along the Georgia coast between the Savannah and St. Mary's rivers, and is bordered to one side by the Atlantic Ocean and to the other by a pristine salt marsh. The Marine Institute occupies a landscape composed of marshes, upland, and tidal creeks that has been designated as a National Estuarine Research Reserve by the National Oceanographic and Atmospheric Administration (NOAA).⁶¹⁶ The Marine Institute leases land from the National Estuarine Research Reserve, which has several primary functions, among them to provide opportunities for scientists to investigate the workings of the estuarine systems, to offer public education and compatible recreation, and to protect and monitor natural and cultural resources.

The waters and marshes of Sapelo Island National Estuarine Research Reserve are used by the research faculty of the University of Georgia Marine Institute and other scientists for a variety of projects. Scientific publications by research faculty and visiting scientists are collected and reprinted by the Marine Institute. The Institute also conducts a meteorological and hydrological monitoring program, which provides continuously recorded data on parameters such as wind speed and direction, sunlight, rainfall, barometric pressure, relative humidity, air and water temperature, salinity, conductivity and pH of tidal waters, and tide heights at three locations.⁶¹⁷

The Marine Institute has served as a field research laboratory for estuarine scientists since its establishment in 1953. With a mission to provide access and facilities for graduate and undergraduate classes where students can experience field research and gain an appreciation of the Georgia coast, the Marine Institute centers around ecosystem-level and other studies of salt marsh processes, estuarine complexes, and nearshore coastal ecosystems. The Marine Institute is internationally recognized for its contributions to the scientific understanding of watershed-marsh-coastal ocean complexes, the flow of energy, nutrients, and minerals, and the role of microbial processes through the land-sea interface.⁶¹⁸

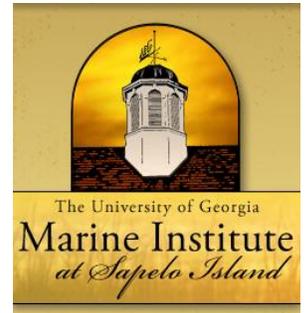


Figure 497. Emblem for Marine Institute at Sapelo Island.

616. University of Georgia-MI, 2016A.

617. Alice G. Chalmers, ed., *The Ecology of the Sapelo Island National Estuarine Research Reserve* (Sapelo Island, Georgia: National Oceanic and Atmospheric Office of Coastal Resource Management and Georgia Department of Natural Resources, 1997), 11–12.

618. University of Georgia, "University of Georgia Marine Institute at Sapelo Island; Visiting the Institute," accessed May 3, 2016, <http://ugami.uga.edu/visit/about.htm>

One of the key areas of ecological field study and research is the Duplin River estuary. The Duplin River estuary includes unspoiled coastal salt marsh and tidal creeks, areas that are among the earth's most biologically productive systems. Following the passage of the Coastal Zone Management Act by Congress in 1972, which authorized the federal government to provide aid to individual states in establishing and managing natural field laboratories for research and education, the State of Georgia proposed the Duplin estuary as a National Estuarine Sanctuary in 1975. The U.S. Department of Commerce approved the proposal and the State of Georgia acquired the land, which was designated in December 1976 as the Sapelo Island National Estuarine Sanctuary. The site was later renamed the Estuarine Research Reserve. Since then, the U.S. Department of Commerce has designated twenty additional estuarine reserves as part of a National Estuarine Research Reserve (NEER) program. The National Oceanic and Atmospheric Administration (NOAA) administers the system for the U.S. Department of Commerce. As part of the program, Sapelo Island represents Georgia in the Carolinian biogeographic region and is the focus for NEER support of estuarine scientific research and education in Georgia.⁶¹⁹

The National Estuarine Research Reserve occupies one-third of the 16,500-acre Sapelo Island, and is composed by the Duplin River estuary and several upland tracts. The University of Georgia Marine Institute, which holds a long-term lease of an area that measures approximately 1,500 acres at the south end of the island, contracts to conduct continuous scientific monitoring at four sites, with regularly collected data compiled and reported to NOAA on a quarterly and annual basis.⁶²⁰

The remainder of the island is administered as a Wildlife Management Area by the Georgia Department of Natural Resources, with the exception of the Hog Hammock community. This residential enclave is comprised of the descendants of African American plantation workers, many of whom now work for the Marine Institute. Approximately 100 people are full time residents of Sapelo Island, including employees of the Marine Institute.⁶²¹ The island also features evidence of previous properties spanning some 200 years of European-American settlement and industrial history.

The Marine Institute occupies a collection of buildings and structures associated with the historic estate of R. J. Reynolds. The long-standing heritage of the center as a scientific field station, and its former use as an estate are expressed in the physical design of the campus, its built resources, and the connections between the cultural uses and the natural environment. Changes that have been made to accommodate the scientific use of former properties have included the adaptive reuse of historic estate buildings and the construction of new facilities for residences and research. These changes have generally respected patterns of spatial organization associated with the property that preceded institutional use. Sapelo Island has also been the subject of extensive archaeological investigation, and is known to have long supported cultural activities and occupation, with

619. Chalmers, i.

620. *Ibid.*, ii.

621. University of Georgia, "University of Georgia Marine Institute at Sapelo Island; Visiting the Institute."

evidence of pre-European Contact and early Spanish use, as well as Colonial American and antebellum-period agriculture prevalent.

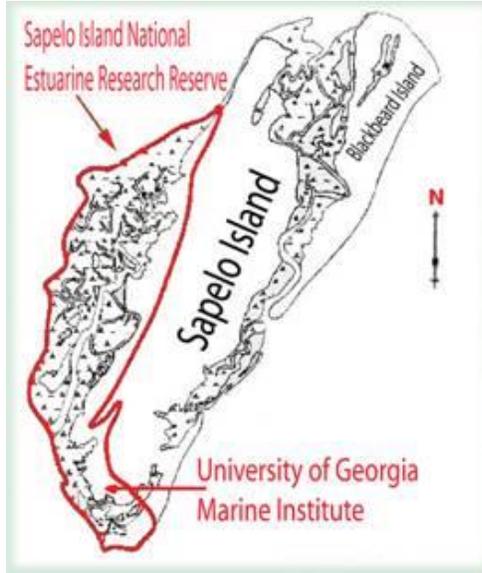


Figure 498. Sapelo Island and Marine Institute. (Source: University of Georgia)

The Marine Institute property appears eligible for listing in the National Register of Historic Places at the national and state levels under Criteria A, C, and D in the areas of Agriculture, Architecture, and Science for its association with plantation and estate development under Thomas Spalding, Howard Coffin, and Richard J. Reynolds between 1802 and 1953, and its subsequent role as a scientific research facility between 1953 and 1966, which constitutes the 50-year age consideration for listing. Notable features of the property include buildings, structures, roads, gardens, docks, field patterns, and land uses that continue to convey their historic associations with the period of significance.

The narrative that follows traces the history of the property and its development and use, and suggests the historic contexts that relate to its use as a University of Georgia research facility. The historical background information is followed by an inventory and assessment of the building, landscape, and archaeological features associated with the property. To facilitate the organization of cultural resource identification and evaluation, the campus is divided into a series of character areas. For each character area, the primary historic resources and their character-defining features are described and their significance assessed according to the categorization system developed for purposes of this study. The inventory and assessment is followed by assessment of the National Register eligibility of the property, and the identification of any individually eligible resources and historic districts associated with the property.

Campus Historic Context

Historical Background

Sapelo Island is believed to have supported human inhabitants since at least 2700 BC. American Indians are believed to have initially used the northwestern portion of the island for ceremonial activities. Shell rings survive today that relate to this use.

During the seventeenth century, San Jose de Zapala (St. Joseph de Sapala) established a mission on the island. Although the mission was later destroyed, Sapelo Island continues to bear an Anglicized version of his name.

In 1733, Georgia was established as a British colony, and Sapelo was claimed as a part of Georgia.



Figure 499. Map of Sapelo Island showing the location of the Marine Institute and other areas of the island. (Source: University of Georgia Marine Institute)



Figure 500. Shell ring, northwest corner of Sapelo Island, possibly part of an American Indian ceremonial site. (Source: Nicholas Honerkamp, 2005. The Digital Archaeological Record (iDAR id: 366399))

At the end of the eighteenth century, Mary Musgrove, a Creek Indian interpreter for James Oglethorpe, founder of the Colony of Georgia, claimed Sapelo and two other barrier islands in payment for her service. Although Colonial leaders contested her claim, the Georgia legislature eventually sold Sapelo Island and gave the proceeds to Musgrove. The island changed hands multiple times throughout the century. In 1802, Thomas Spalding bought 4,000 acres at the south end of the island, where the Marine Institute is located today.⁶²²



Figure 501. Drawing reportedly of Mary Musgrove, Creek Indian interpreter for James Oglethorpe, and first claimant of Sapelo Island. (Source: <http://www.gpb.org/news/2015/05/13/forgotten-women-part-3-mary-musgrove>)

622. Chalmers.

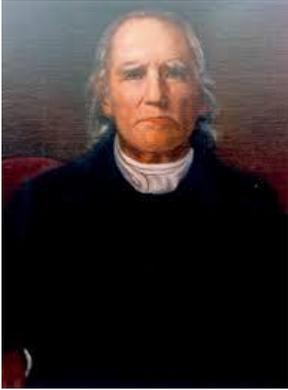


Figure 502. Thomas Spalding (1774–1851), who acquired 4,000 acres on Sapelo in 1802 and practiced progressive farming. (Source: Sullivan, 2010)

Spalding, a progressive farmer, eventually acquired the majority of the island, which he cleared and planted or used for pasture. Whatever woodland existed at the time was removed and a series of canals and ditches, many of which still exist, were established to drain swampy areas and to convey water to cropfields. Spalding introduced a number of different plants to the island, including bermudagrass (*Cynodon dactylon*), Cherokee rose (*Rosa laevigata*), and mulberry (*Morus spp.*). Spalding wrote extensively for agricultural magazines and was a proponent of tabby construction, which he also wrote about.⁶²³ In the 1810s, he constructed a large house with tabby walls, the ruins of which were later incorporated into the Coffin/Reynolds Mansion.⁶²⁴



Figure 503. 1858 drawing of the Spalding house by Spalding's niece, Sallie Spalding McKinley. (Source: Sullivan, 2010)

After Spalding's death in 1851, which was followed by Union raids during the Civil War, the carefully cultivated island fell into disrepair.⁶²⁵ Although a Georgia consortium purchased the land at the beginning of the twentieth century and repaired the house, which had fallen into ruin, it was not until automotive pioneer, Howard E. Coffin, acquired the property in 1912 that conditions improved. Coffin and his wife, Matilda made Sapelo Island their permanent home and began to enact significant changes. Coffin constructed new roads and paved them with shells, cleared the long-fallow agricultural fields and planted crops, used his engineering skills (and dynamite) to dig irrigation canals, cut pine timber, established a sawmill to process the lumber, built barns and other farm structures, maintained a herd of free-ranging dairy cattle, started a shrimp and oyster cannery on Barn Creek to process locally caught seafood, and constructed a boat yard and marine railway at the present-day Marine Institute site. These various commercial activities provided employment for the several hundred African Americans who resided on the island, many of whom were descended from former slaves.⁶²⁶

623. Ibid.

624. Sullivan, Buddy. "The Historic Buildings of Sapelo: A 200-year Architectural Legacy" in *Occasional Papers of the Sapelo Island NERR* Vol. 2 (2010), 1–2.

625. Ibid.

626. Ibid., 7.

Coffin engaged noted architect Albert Khan to redesign the Spalding House using a sketch done by Spalding's niece in the 1850s as a guide to incorporate the original tabby walls. The Coffins entertained extensively at Sapelo; many wealthy and well-known individuals, including two U.S. presidents, visited the island and were introduced to Coffin's agricultural innovations, hunting preserve, exotic scenery, and palatial verandas of the redesigned house resplendent with marble statues and pots of blooming flowers. President Calvin Coolidge and his wife, Grace, so enjoyed the Coffin's hospitality that they had their portraits painted at Sapelo.⁶²⁷



Figure 504. The painting of President Calvin Coolidge's portrait by Francis "Frank" O. Salisbury, a British artist who painted Queen Elizabeth and six U.S. presidents. Coolidge sat for his portrait in the library at the Coffin house on Sapelo Island. (Source: <https://crackerpilgrim.com/2013/12/26/the-coolidges-in-georgia-winter-1928/>)

The Great Depression depleted Coffin's investments, and he was forced to sell Sapelo Island in order to maintain his other interests. The property was acquired in 1934 by Richard J. Reynolds, Jr., heir to his family's tobacco company fortune. Almost immediately, Reynolds hired Philip T. Shutze, a prominent Atlanta architect, to redesign the Coffin House. The work was completed by 1936. Architect Augustus E. Constantine, who would later become known for his Mid-Century Modern architecture, designed and rebuilt the farm complex at the south end of Sapelo Island, which was also completed in 1936. These buildings formed the nucleus of the Sapelo Marine Biology Laboratory in 1953.⁶²⁸ Like the Coffins, Reynolds entertained extensively on the island, and there are many accounts of excessive parties and the exploits of his guests. For a short period, he opened his house and some of the buildings in the quadrangle to paying resort guests as a way of avoiding taxes.⁶²⁹

627. Ibid.

628. Ibid., 11–12.

629. Chalmers, 1997; Gary W. Barrett and Terry L. Barrett, with Foreword by Eugene P. Odum. *Holistic Science: The Evolution of the Georgia Institute of Ecology (1940–2000)* (Ann Arbor, Michigan: Sheridan Books, 2011).



Figure 505. R.J. Reynolds, Jr., heir to the tobacco fortune, served as a Lieutenant-Commander in the Navy during World War II as a navigator for a Pacific task force, and felt an affinity for the water for the rest of his life. (Source: <http://www.tobaccofree.org/book/>)

Reynolds became interested in Coffin's agricultural activities and worked to perpetuate them. He maintained and enlarged the dairy herd, continued cultivation of crops in the fields at the south end of the island, and worked to ensure that his "Sapelo Plantation" remained a self-sustaining establishment.⁶³⁰ By 1939, Reynolds had built docks and a boathouse on South End Creek and commissioned the Sapelo Island utility vessel, *Kit Jones*, named for Katherine T. Jones, wife of Bill Jones, Sr., a close friend and advisor to both Coffin and Reynolds. Reynolds later gave the boat, the docks, and the boathouse to the University of Georgia for laboratory use.⁶³¹

630. Chalmers.

631. Sullivan "The Historic Buildings of Sapelo," 14.

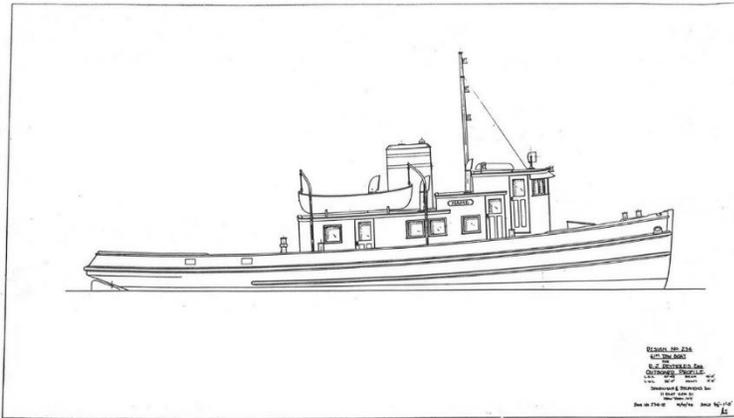


Figure 506. The *Kit Jones* as designed by R. J. Reynolds, Jr. (Source: The Wooden Boat Forum)

The Institute, which began as the Sapelo Marine Biology Laboratory, was created in 1953 as the result of an invitation by R. J. Reynolds, Jr. to the University of Georgia to study the productivity of coastal waters and marshes.⁶³² In 1948, Eugene P. Odom, now considered the “Father of Modern Ecology” and at the time a University of Georgia Zoology Professor with a great interest in Sapelo’s fauna, with a graduate student, Donald Scott, led Reynolds to consider using his land for scientific study instead of turning it into an exclusive hideaway for the wealthy.⁶³³ Reynolds, impressed with the idea, formed the Georgia Agricultural and Forestry Research Foundation, and in 1952 invited University of Georgia President O. C. Aderholt and others, including Odom, to tour his holdings. Aderholt, in turn, asked his delegates for a plan of how the island could be used; only Odom was enthusiastic about the island’s possibilities. Odom and Scott prepared a preliminary proposal emphasizing coordinated research in aquatic and terrestrial environment, which Reynolds and his staff deemed feasible. A contract with the University of Georgia and the Foundation was finalized and in the summer of 1953, the Sapelo Marine Biology Laboratory opened.⁶³⁴

In 1954, the first University of Georgia staff members moved into an existing barn, the present day Marine Institute Laboratory (UGA 6074), and set up a rudimentary laboratory and offices in the cow stalls and adjacent rooms on the south side of the ground floor. A diesel generator was installed to provide electricity. Staff and their families lived in buildings located on the central quadrangle, present day South End Office Building (UGA 6076), South End Apartment Building (UGA 6077), and possibly the Maintenance and Lab Complex (UGA 6078). Although comfortable, these buildings, completed by 1936, had no air conditioning or heat. Odom frequently visited and stayed for extended periods, while also assigning graduate students to work at the facility.⁶³⁵

632. Barrett and Barrett.
 633. Ibid.
 634. Ibid.
 635. Ibid.



Figure 507. South End Apartment Building. The building was used to house guests of the Reynolds, and later scientists and their families.

Reynolds also took an interest in the laboratory, even though he was not a full-time resident. Although not as interested in the science, he did enjoy engaging the scientists, and often visited their classes and invited them to dinner, hunts, and parties. Early on he gave them a jeep to get around the island. After realizing that a single vehicle was not enough, he purchased an entire fleet for the scientists to use. Reynolds also purchased heaters and television sets with antennas that received Savannah and Jacksonville stations for the apartments, and hosted a free weekly movie night in the barn second floor theater. Later, when he began spending more time on the island, he had electric power run from the mainland to support air conditioning for the apartments and the laboratory equipment.⁶³⁶

In 1953, Odom and his brother published the groundbreaking text, *Fundamentals of Ecology*, and set forth the modern theory of ecology. According to Odom, ecology is not a branch of any other science, but an integrated discipline that brought all sciences together.⁶³⁷ Odom's work at UGA went on to elaborate on this theory through the establishment and work of the Savannah River Ecology Laboratory, the Marine Science Institute, the School of Ecology, and the writing of additional books on the subject.⁶³⁸

By 1959, the focus of the laboratory work began to change. Biology was no longer the only discipline involved; geologists and other scientists increasing looked at coastal processes and sediments to reflect the shift to the study of ecological processes. The Laboratory was then renamed the University of Georgia Marine Institute, and the Georgia Agricultural and Forestry Research Foundation became the Sapelo Island Research Foundation. Eventually the Foundation would drop the word "Research" from its name.⁶³⁹

Reynolds, suffering from emphysema, divided his time between treatment in Switzerland and living full-time at Sapelo Island.⁶⁴⁰ He died in 1964.

636. Ibid.

637. Goldman, 2002.

638. Ibid.

639. Barrett and Barrett.

640. Ibid.; Sullivan, "The Historic Buildings of Sapelo."



Figure 508. Eugene P. Odom, center, and various directors stand under the new University of Marine Institute sign attached to the Barn. (Source: University of Georgia Marine Institute)

The early 1970s is often considered the era of environmentalism. In 1970, Congress passed the National Environmental Policy Act, and established the Environmental Protection Agency (EPA). The Clean Air Act was also passed. In 1972, Congress passed the Coastal Zone Management Act, which provided federal aid to individual states to establish and manage natural field laboratories for research and education, as well as the Clean Water Act. The resources of Sapelo Island began to be securitized by a large number of agencies. In 1976, Sapelo Island's Duplin River estuary site received formal designation as the Sapelo Island Estuarine Research Reserve. The Marine Institute was contracted to conduct continuous scientific monitoring at four sites in the Reserve.⁶⁴¹

Now, more than sixty years after its founding, the University of Georgia Marine Institute has achieved an international reputation as one of the major contributors to scientific understanding of the complex interactions of watershed-marsh-coastal ocean complexes, the flow of energy, nutrients, and minerals, and the role of microbial process through the land-sea interface. Since 1953, the Marine Institute has served as a pristine natural laboratory for basic studies in salt marsh and estuarine ecology. It has distinguished itself with a long history of coastal research by resident and visiting researchers from across the world and disciplines, and as a cradle of modern ecological studies.⁶⁴²

A timeline illustrating site history and development is provided in Appendix C.

641. Chalmers.

642. University of Georgia Marine Institute, 2016B.



Figure 509. The “Teal boardwalk” built by John Teal in the late 1950s to facilitate study of the salt marsh at Sapelo Island. (Source: University of Georgia Marine Institute)

Chronology of Development and Use

Information on Sapelo Island’s physical development has been drawn from a variety of sources associated with the local history and the Sapelo Island National Estuarine Research Reserve. Buddy Sullivan, local historian and Director of the Sapelo Island National Estuarine Research Reserve from 1993 to 2013, has written numerous books and articles on the history of coastal Georgia and Sapelo Island, including *Sapelo: A History*, published in 1989 with three later editions. A new book on the history of Sapelo Island was published in 2017 by the University of Georgia Press. Additional articles by Mr. Sullivan are available on the Sapelo Island National Estuarine Research Reserve website.

Recent and ongoing archaeological investigations have involved professional scientific study of the island’s history. Of particular interest has been the history of the island’s African American residents, originally as slaves and later as freedmen and employees of the island’s estates. Sapelo Island will be a subject of continued study into the future, and the historic landscapes and resources on the Marine Institute’s lands will contribute to that study.

Historic landscape and building resources developed along the island’s southern edge, where the Marine Institute is located, have been related to the area’s use as an agricultural plantation and estate during the nineteenth and early twentieth centuries. Three general periods of development relate to these uses: Spalding Plantation (1802–1912); Coffin Estate (1912–1934); Richard J. Reynolds Estate (1934–1953). A fourth period of development relate to the research and conservation activities that grew out of the estate use (1953 to present).

Early Cultural Occupation and Use of Sapelo Island (circa 2700 BC–1802 AD)

Small villages were established on the northwest end of Sapelo Island as early as 2700 BC. The people of these villages constructed vast shell rings accumulated large collections of refuse in several areas of the island. By 1150 BC, these deposits had been repurposed for use as ceremonial centers. Archaeological

investigations have revealed evidence of cultural use of the island dating to between 1200 BC to AD 550, as well as AD 950 to 1350.

At the time of Spanish settlement in the region, circa sixteenth and seventeenth centuries, the local inhabitants of the Georgia coast were known as the Guale. The Guale settled in small, matrilineal groups. Their lifeways were highly disrupted by Spanish settlement, and the constant battling between the Spanish and English, and their attacks on Indian groups. Raids by the English, Yamasee, and Westos resulted in consolidation of the Guale on Sapelo Island as they were forced out of their villages. The earliest colonial occupation of Sapelo Island began in 1610 with the establishment of a Spanish Mission known as San José de Sapala, for whom the island is named. In 1684, English pirates targeted many of the Spanish missions along the South Atlantic, leading to the abandonment of the mission on Sapelo Island. Subsequently, the Yamasee occupied the mission and village until it was raided and destroyed by the Spanish two years later. Archaeologists appear to have located the site of the mission during the 2010s.

With the Spanish mission destroyed, the balance of power began to shift in favor of the English, but it was not until 1733, when Georgia was established as a British colony, that the English began to gain a foot-hold along the Georgia coast.

The Plantation and Reconstruction Periods: Thomas Spalding and His Descendants (1802–1912)

In 1802, Thomas Spaulding bought 4,000 acres of land on the south end of Sapelo, eventually acquiring additional land that included the island in its entirety. Spalding developed a plantation there between 1807 and his death in 1851. With extensive planting knowledge gained by helping his father run a plantation, Spalding became an innovator in the cultivation and processing of sugar and Sea Island long-staple cotton. Spalding was a proponent of scientific agriculture and an early advocate of crop rotation and diversification. He experimented with various crops at Sapelo Island, including rice, indigo, silk, olives, and oranges. He wrote extensively for agricultural journals and corresponded with others who were also working on agricultural innovations.

From this agricultural tradition stems a history of slavery. People enslaved from the west coast of Africa in the eighteenth and nineteenth century were brought to Sapelo Island. After the Civil War, with the end of slavery, many chose to stay on Sapelo Island, forming the 464-acre community known as Hog Hammock. Former slaves of West African descent along the Georgia, South Carolina, and North Florida coast formed a unique cultural group known as the Gullah Geechee. Residents of Sapelo Island are among the last groups maintaining the Gullah Geechee cultural tradition.

Spalding was the first planter in the Georgia tidewater to experiment with the cultivation of sugar cane. When he built his tabby sugar works overlooking Barn Creek in 1809, Spalding became the first sugar manufacturer in Georgia. The animal-powered sugar mill that he constructed became a model for similar establishments along the south Atlantic seaboard. Spalding's cultivation of Sea Island cotton, which grew exclusively on the sea islands and immediate coastal

mainland, set the standard by which contemporary planters patterned their own cotton operations.⁶⁴³

Much of Spalding's land on Sapelo Island was cleared for cultivation or pasture during his tenure. He also dug a system of ditches and canals to drain parts of the island interior that remain visible today. Spalding also introduced several plant species that were not native to the region, some of which can still be found there today. These include bermudagrass, Cherokee rose, mulberry, wisteria (*Wisteria spp.*), and Osage orange (*Maclura pomifera*).⁶⁴⁴ He sold live oak (*Quercus virginiana*) timber to the government for shipbuilding, with a scattering of individual live oaks left in the uplands to provide shade for the workers in the fields. At the height of Spalding's agricultural efforts the southern half of Sapelo Island, including Kenan Field, was cleared of most of its natural vegetation except for the dunes and a band of woods along the salt marsh on the western side of the island. Live oaks and other hardwoods were left standing in areas near buildings, particularly the South End mansion, some undrained wet areas, and the scattered trees in the fields.

In 1808, Spalding sold five acres at the southern tip of the island, including a small island, to the federal government for a lighthouse, which was constructed in 1819–1820. Spalding constructed his plantation house, the South End House, circa 1809–1810 on the site of the current Reynolds Mansion within today's Marine Institute property. Reynolds Mansion is built on the foundations of the earlier residence and incorporates some of its original walls. Spalding designed the house with Greek and Italianate detailing. He was acquainted with Thomas Jefferson and known to have visited Monticello in 1809. The design of the house may have been influenced by the visit. The South End House featured an unroofed portico, 30 feet long and 20 feet wide, with wings on each side half the height of the main building, one housing the kitchen and the other the plantation office.⁶⁴⁵

Spalding is known for perfecting tabby as a construction material. He used it to construct many of the plantation buildings, including the South End House. He was responsible for the popularity of use of tabby construction in tidewater Georgia during the early nineteenth century; this construction material had been popular with the Spanish and was later adopted by early American settlers of coastal Georgia in the 1730s, including at Wormsloe Plantation.⁶⁴⁶

It is assumed that Spalding also constructed outbuildings and other structures on his property. Evidence of the layout and use of the site may survive today in the form of field patterns and road alignments. The sugar works Spalding built on Barn Creek and a residence on the south end of the island, are among the oldest standing structures within McIntosh County; these are located outside of the Marine Institute property.⁶⁴⁷

643. Sullivan et al., *Sapelo Island National Estuarine Research Reserve Management Plan, 2008–2013* (2008), 38; Chalmers, 8.

644. Chalmers, 9.

645. Sullivan et al. 2008, 37-38.

646. Sullivan, "The Historic Buildings of Sapelo," 1–2.

647. *Ibid.*, 1.

Spalding is reported to have deplored the practice of slavery and envisioned its eventual abolishment, while also recognizing it as a necessity in the Southern economy. He personally owned 300 to 400 slaves involved in the work of his plantations on the South End, at Kenan Field, and at Chocolate. In 1860, 130 slaves were recorded living on the South End in twenty-four dwellings at five locations. One of the largest was a settlement at Shell Hammock, which falls within the present-day Marine Institute property.⁶⁴⁸

Spalding maintained the plantation until his death in 1851, at which time the property was inherited by his descendants. During the early years of the Civil War, the island was abandoned by the Spalding family, but continued to be occupied by former slaves. Union soldiers involved in a blockade of the Southeastern coastline visited the island from time to time to hunt and recreate. After the war, the South End House was vandalized and fell into ruin. The fields were abandoned to natural succession after the Civil War.⁶⁴⁹

Several hundred freedmen remained on Sapelo Island after the war, and acquired title to property at Hog Hammock, Raccoon Bluff, Shell Point, Behaviour, and Belle Marsh. They engaged in subsistence agriculture or were hired as labor in small-scale cotton and cattle-raising activities.

Spalding descendants otherwise retained ownership of most of the South End, and several family members resided there during the Reconstruction and postbellum periods. Thomas Spalding II (1847–1885), grandson of Thomas Spalding, owned the largest portion of the South End, including the remains of the South End House. Two other Spalding families lived further north. The families cultivated cotton without success due to the lack of capital and adequate labor, and also raised cattle, which were sold to captains of timber ships in the sounds.⁶⁵⁰

In 1910, a group of investors from Macon, Georgia, acquired the south end of the island and developed it as a hunting preserve. They rehabilitated the South End House as a hunting lodge.⁶⁵¹



Figure 510. South End House as restored by the Macon Hunting Club, 1912. (Source: Sullivan 2014, 10)

The Estate Period I: Howard Coffin (1912–1934)

648. Buddy Sullivan, "Sapelo Island Settlement and Land Ownership: An Historical Overview 1865-1970" in *Occasional Papers of the Sapelo Island NERR* Vol. 3 (2014), 1-2; Sullivan et al., 2008, 38.

649. Sullivan et al, 44.

650. Sullivan, "Sapelo Island Settlement and Land Ownership," 9.

651. Chalmers, 8.

One of the visitors to Sapelo Island was Howard Coffin, who came to the island in 1911 for a hunting trip. A year after his visit, Coffin purchased much of the island from the Sapelo Island Company and the five families who owned most of the remainder of land at the time.⁶⁵²

Coffin made arrangements with the few white residents of Sapelo when he bought the island in 1912, that they were allowed the right of first refusal of their property upon their death or moving from the island. In this manner, Coffin eventually came to own all of the former Spalding and related lands on the island by 1934, with the exception of the various African American communities. Coffin also acquired the 200 acres of Little Sapelo Island across the Duplin River from the main island in 1920, which he used as a hunting preserve.⁶⁵³

Coffin is responsible for the layout and construction of much of the South End as we know it today. He worked to establish and repair a road network that provided access to all parts of the island. He built shell roads and a water garden, and drilled numerous artesian wells.

In 1913, Coffin made improvements to the South End House for use as a winter retreat. It was at this time that the outdoor reflecting pool on the front lawn was added. Following World War I, he rebuilt the house, creating the mansion that currently exists by 1925. During the five year period of renovation, only the outer walls of the main building were left standing, around which he rebuilt the house. An indoor swimming pool was added, as were a second floor ballroom and bedrooms, a basement game room and service areas, and a south wing residential section.⁶⁵⁴

The greenhouse northeast of the mansion was built in 1925, and a dairy and stable complex of wood buildings was constructed at the quadrangle on the present site of the Marine Institute. Coffin also constructed a power generating plant to provide electricity. Circa 1927, the two-story dormitory building was built southwest of the mansion as an administrative building, staff residence, and possibly a garage.⁶⁵⁵

Coffin also reintroduced agriculture to the island, clearing the drainage canals and cultivating crops. He attempted to grow Sea Island cotton, but a boll weevil invasion ended the effort. Other agricultural endeavors included the raising of beef and dairy cattle, cultivation of other crops, and construction of a shrimp and oyster cannery and commissary on Barn Creek that employed many of the island's African American residents. Duck ponds were built on the island's north end. In support of his interest in hunting, Coffin raised ring-necked pheasants and turkeys, in addition to the Chachalaca, a Central American species, and while also planting oleander (*Nerium oleander*).⁶⁵⁶

Coffin also introduced commercial pine timbering and sawmill operations. The sawmill he built on the island to process the pine timber provided additional

652. Ibid.; Sullivan, "Sapelo Island Settlement and Land Ownership," 11.

653. Sullivan et al. 2008, 11.

654. Ibid., 41.

655. Ibid., 43; Rob Crawford et al. *Preservation Plan for the University of Georgia Marine Institute at Sapelo Island, Georgia* (2002), 3.

656. Chalmers, 8.

employment for community members.⁶⁵⁷

Coffin built the Marsh Landing dock in 1928 to accommodate his private 124-foot yacht, the *Zapala*. He constructed a small boat-building yard on the south end of the island adjacent to the quadrangle, with a marine railway to haul boats from the water, remnants of which still exist.⁶⁵⁸ The 1930 federal census listed 345 African Americans and 52 whites living on Sapelo Island, during the peak period of Coffin's island operations.⁶⁵⁹

Coffin was also involved in developments at St. Simons and Sea Island, Georgia, where he worked to develop the Cloister Hotel. Overextended on these projects after the financial crash of 1929, Coffin was forced to sell Sapelo Island in order to maintain ownership of his resort property.⁶⁶⁰ It was purchased by Richard J. Reynolds in 1934.

The Estate Period II: Richard J. Reynolds (1934–1953)

Richard J. Reynolds, heir to the R.J. Reynolds Tobacco Company fortune, continued Coffin's work in developing Sapelo Island. In the late 1930s, he maintained and enlarged the dairy herd and cultivated crops on the south end of the island. The stucco-clad dairy barn and the other present-day buildings on the quadrangle were built in 1936 to replace the wood structures built earlier by Coffin. The island's electrical and communications systems were also upgraded.⁶⁶¹

Reynolds further renovated the South End mansion, employing Atlanta architect Philip T. Shutze to add to the mansion Coffin had built in 1925. The mansion underwent modernization, including the addition of air conditioning, while the south wing was remodeled as a nursery, and the upstairs ballroom was converted into the Circus Room.⁶⁶²

Reynolds used the Long Tabby building as a guesthouse and a summer camp for children between 1948 and 1952. In later years, Reynolds operated the South End mansion as the Sapelo Plantation Inn.

Richard Reynolds also continued Howard Coffin's timbering operations on the island. During the 1950s, a good deal of timber was cut from the north end of the island and sold. The remnants of the Reynolds sawmill and sawdust pile are still in evidence at the Lumber Landing on the Duplin River. The selective cutting of timber, and related timber management programs, has continued under the Georgia Department of Natural Resources.⁶⁶³

During the 1930s and 1940s, Reynolds endeavored to consolidate the various African American communities on the island into a single location at Hog Hammock by purchasing their land at Raccoon Bluff, Shell Hammock, and elsewhere, and trading it for land at Hog Hammock. Because many island

657. Sullivan et al., 48.

658. Ibid., 43.

659. Sullivan, "Sapelo Island Settlement and Land Ownership," 12.

660. Chalmers, 9.

661. Ibid.; Sullivan et al., 44.

662. Ibid.

663. Ibid., 48.

residents depended on Reynolds for employment, they were generally amenable to the sale. Communities that were purchased included Shell Hammock within the area leased by the Marine Institute. By the time of his death in 1964, Reynolds claimed ownership of the entire island, with the exception of 443 acres at Hog Hammock.⁶⁶⁴

In 1949, the Sapelo Island Research Foundation was founded by Reynolds, and in 1953 the Marine Institute was established on the south end of Sapelo Island through an agreement with the University of Georgia. Reynolds provided the quadrangle buildings, the dairy barn, and the dairy barn's upstairs theater to the University of Georgia for use in conducting scientific ecological and estuarine research.⁶⁶⁵

The Marine Institute Period (1953–Present)

The south end of the island was deeded to the Sapelo Island Research Foundation created by Reynolds in 1949. In 1953, the Marine Institute was established through an agreement with the University of Georgia.

Over the years, the Marine Institute has converted the interior of the dairy barn and other buildings around the quadrangle to support its operations. The character of the overall estate landscape has been maintained even as many of the former estate buildings remain in use. Some of the features that are less suitable for adapted reuse have been allowed to deteriorate.



Figure 511. University of Georgia boat basin and Marine Institute complex in the 1960s. (Source: Sullivan 2010, 11)

The Marine Institute's use of the South End property is outlined in a Memorandum of Agreement executed in 1976 upon purchase of the South End property by the State of Georgia from Annemarie Schmidt Reynolds, Richard's widow. The original Memorandum of Agreement was amended and renewed in 1994, providing for lease of the property for an additional fifty years.⁶⁶⁶

664. Chalmers, 9; Sullivan et al., 44.

665. Chalmers, 10; Sullivan et al., 44.

666. Sullivan et al., Appendix E.

The agreement outlines the stipulations relating to lease of the land to the Regents of the University System of Georgia for the purpose of conducting scientific research and educational activities. The agreement indicates that the University is responsible for maintaining the premises in reasonably good order and repair. Residences on the property may be used by University of Georgia staff, visitors, and their families. The Georgia Department of Natural Resources, the agreement's lessor, is responsible for maintenance of roads, ditches, and bridges, and provides transportation, security, and other services to the island.

A separate agreement was created for administration of the Reynolds Mansion within the leased lands; in this agreement, the Department of Natural Resources is responsible for maintaining the mansion and renting it to the general public for events. From 1978 to 1994, the Marine Institute operated the Reynolds Mansion on a lease basis to educational, scientific, and cultural groups for use as a conference center. Since the 1994 agreement, the Department's Park Division has managed and operated the mansion. It has its own resident house manager and a housekeeping and grounds staff who are state employees and residents of the Hog Hammock island community. Although the mansion falls within the Sapelo Island National Estuarine Research Reserve, the Reserve has no supervisory role as regards the operation of the facility.⁶⁶⁷

667. Ibid., 59.

Overview Description of the Marine Institute at Sapelo Island



Figure 512. Context map illustrating the location of Sapelo Island within the state of Georgia. (Source: Wiss, Janney, Elstner Associates, Inc., 2016)

The University of Georgia Marine Institute at Sapelo Island falls within the Coast and Sea Islands physiographic province, approximately 280 miles southeast of Athens. Sapelo Island is approximately 10 miles in length and 2-1/2-miles wide at the widest point. It is one of thirteen barrier islands that protect the coast of Georgia. Sapelo Island falls within McIntosh County, the closest town is Meridian, Georgia, which is where the ferry that provides access to the island is based.

The Marine Institute at Sapelo Island campus is located on a 1,500-acre tract that includes uplands, salt marsh, sand dunes and beach, and encompasses much of the southern end of Sapelo Island. The Marine Institute falls within the Sapelo Island National Estuarine Research Reserve. The parcel contains most of the built structures on Sapelo Island.

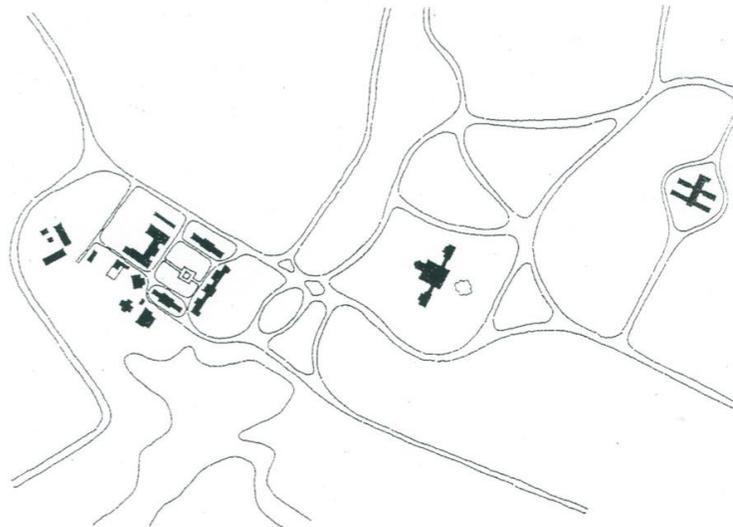


Figure 513. Reynolds estate and Sapelo Marine Institute roads and buildings. (Source: Surber 1989, 19)

Several staff residences, a small trailer complex and a utility building occupy a tract of high ground known as Shell Hammock, which overlooks Doboy Sound just west of a diked enclosure built by R. J. Reynolds. To the east of this enclosure lies the hub of research activity, the Marine Institute Laboratory, which occupies the large brick and stucco former Dairy Barn built by Reynolds in the 1930s. The Marine Institute campus is built around a complex of buildings constructed by Reynolds between 1934 and 1936 that form a quadrangle on the site of an earlier farm and stable compound. The laboratory houses the primary research facilities for the Marine Institute. Also located in this structure are a small theater, faculty offices, and a marine science library.

Support facilities for the laboratory include general-purpose storage buildings; an inoperative power plant built in the 1930s; a microwave building and tower; carpentry and machine shops; an inoperative marine railway built in the 1920s; apartment building; administrative building; research and education dormitory; residences on Shell Hammock used for permanent staff; and a trailer complex for

interns and visiting students and faculty. The Marine Institute operates the Azalea Cottage, built by Reynolds in the mid-1930s, for University of Georgia officials, guests and visiting scientists, in addition to several staff residences.⁶⁶⁸

The Marine Institute occupies several historic buildings that have been adapted for use as research and support facilities. Roads, gardens, and landscape features designed for estate purposes are also found throughout the property.

668. Ibid., 90-91.

Identification of Sapelo Marine Institute Character Areas

For purposes of this study, the Marine Institute property on Sapelo Island has been divided into four discrete landscape character areas. Character areas are land bays or geographic areas that share similar physical traits or characteristics, a similar period of physical development, or are otherwise unified by land use, topography, vegetative character, design, or historic associations. The character areas used to describe campus resources include:

- A. South End Mansion Landscape
- B. The Quadrangle
- C. Shell Hammock
- D. South End Marsh and Beach

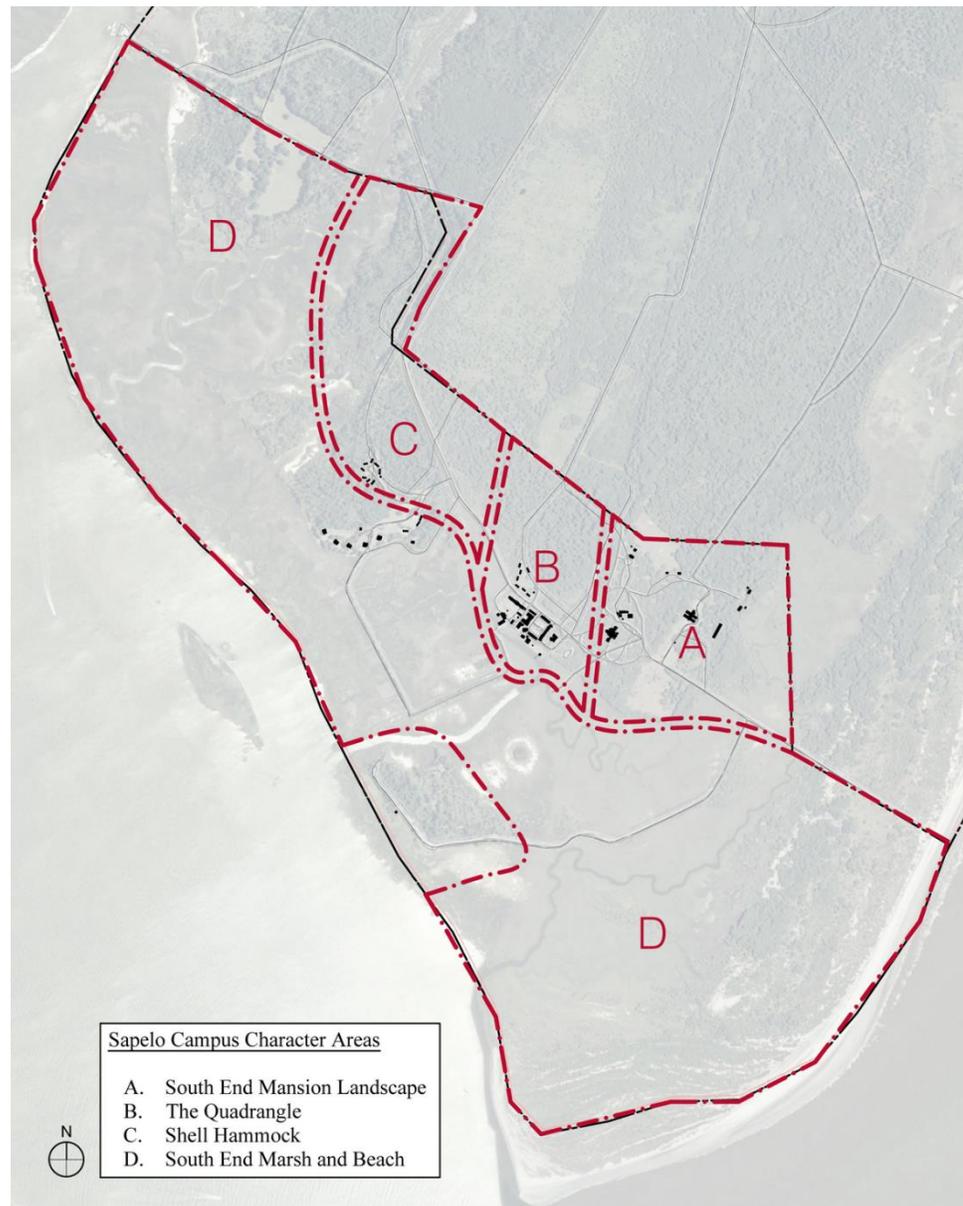


Figure 514. Character areas of the University of Georgia Marine Institute. (Source: Wiss, Janney, Elstner Associates, Inc., 2016)

Identification and Evaluation of Historic Resources by Character Area

The pages that follow identify, describe, and assess the building, landscape, and archaeological resources associated with the property by character area. An overview description of the character area introduces each section. The introduction is followed by brief descriptions of historic landscape, building, and archaeological resources, and a general assessment of their historical integrity.

Previous studies related to the buildings on the Marine Institute property were prepared in 1989 and 2002 and have been consulted, referenced, and cited below as appropriate. The 1989 study, prepared by Surber Barber Architects, Inc. of Atlanta, Georgia for the Department of Natural Resources, assessed maintenance and repair needs and provided recommendations for building reuse. The 2002 study, prepared by students of the University of Georgia, was a preservation plan that outlines the property's historic context, documents existing buildings, and provides guidelines for maintenance and reuse. The assessments that follow build on these studies.

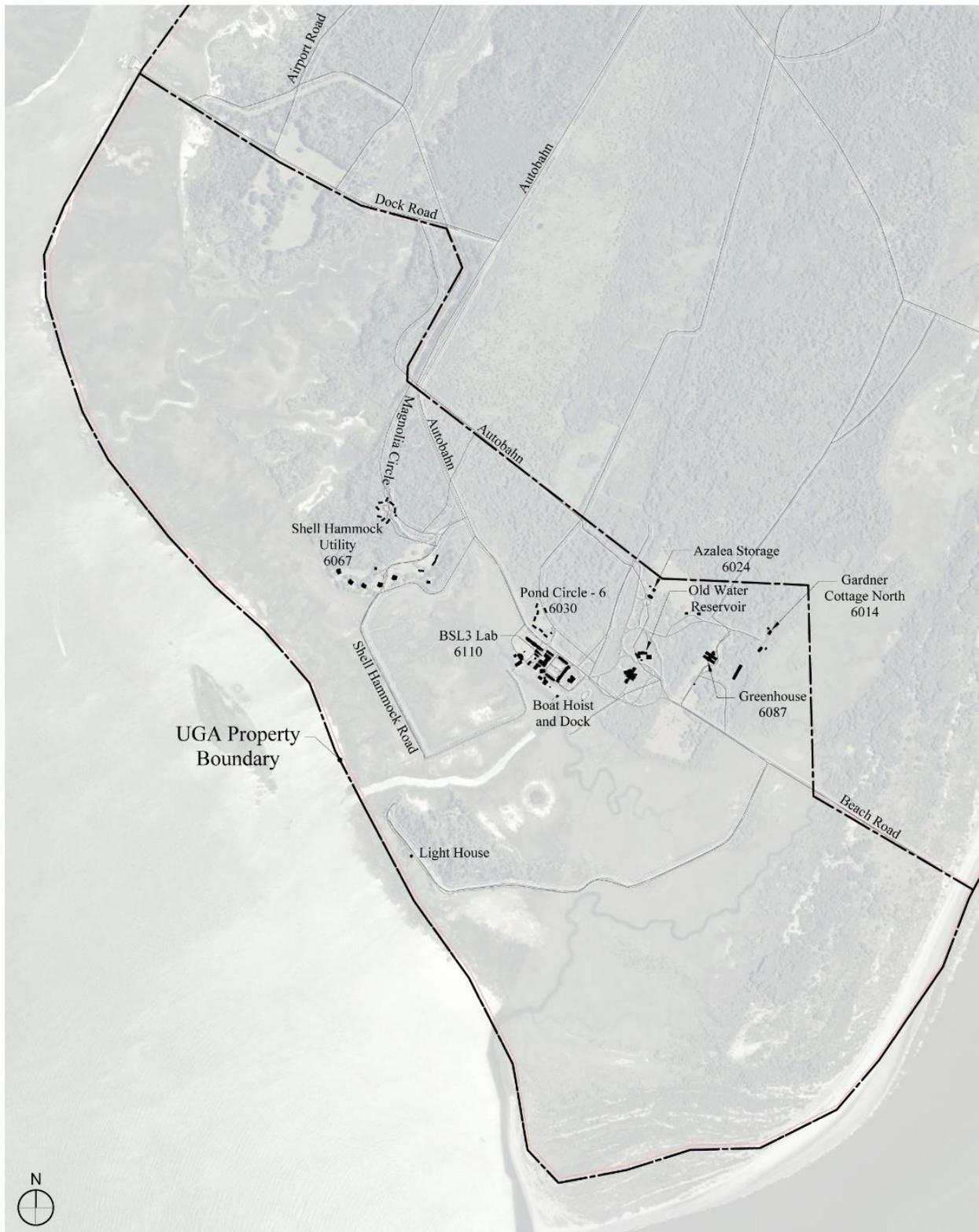


Figure 515. Resources of the University of Georgia Marine Institute. (Source: Wiss, Janney, Elstner Associates, Inc., 2016)

South End Mansion Landscape

The South End Mansion Landscape character area has been the center of plantation and estate life on Sapelo Island since the construction of the original South End House by Thomas Spalding in 1809–1810. Our knowledge of the original character and layout of Spalding’s landscape is limited, but it is possible that today’s landscape reflects its overall organizational structure. Spalding’s house was reconstructed by Howard Coffin in 1920–1925 and has remained the landscape’s focal point for over two hundred years. The building was further renovated by R.J. Reynolds and is today known as the Reynolds Mansion.

The Reynolds Mansion sits at the center of the landscape area, facing southeast toward the ocean. It is approached from the northwest, which is the back of the complex. A network of lanes extends through the landscape around the mansion, providing access to different buildings and areas. Open lawn filled with large live oak and other canopy trees surround the mansion. On axis with the symmetrical front entrance of the mansion, Nanny Goat Beach Road provides access to the ocean and beach. On axis with the rear of the mansion is a densely overgrown water garden. The lawn area extends to the south where a tennis court is located. Access to the marsh occurs to the south of the tennis court.

Building Resources

Buildings located within the South End Mansion Landscape character area include the most prominent and significant structures on Sapelo Island. For the most part, these buildings are related to the Coffin and Reynolds estate periods of the island’s history and were the center of island social and administrative life. The character area’s three primary historic buildings have been adaptively reused and are maintained in good condition. A former dormitory has been vacant for many years, is minimally maintained, and is in danger of being lost. All of these buildings are oriented with the same north-south and east-west axes within the landscape.



Figure 516. Reynolds Mansion, 2015.

Reynolds Mansion – UGA 6017 (1925, Category 1). As noted above, the Reynolds Mansion is the focus point of the South End landscape and was the center of life on Sapelo Islands’ estate. Constructed in 1809–1810 by Thomas Spalding as the South End House, the building was a single-story structure that featured a central block flanked to either side by pavilions. The central block had an open portico facing southeast on its primary elevation with six Ionic columns. The building was constructed of tabby walls, 3 feet thick.

The South End House fell into ruin when abandoned during the Civil War. The walls remained, and in 1911 the house was reconstructed as a hunting lodge. Howard Coffin renovated the house in 1913 shortly after purchasing the island estate. Between 1920 and 1925, Coffin dismantled and completely rebuilt the structure as the two-story mansion that exists today. Coffin retained and built upon the tabby walls of the original Spalding House. The mansion thus retains the location, orientation, and footprint of the original house. Staff and support buildings were constructed to the north. R.J. Reynolds further renovated the mansion complex after he purchased the estate in 1934, and today the building bears his name.

The Marine Institute operated the mansion as a conference center from 1978 to 1994 after the state’s purchase of the South End property. Since 1994, the mansion has been operated as a rental event venue by the Georgia Department of Natural Resource (DNR) Park Division, which maintains the building complex and the grounds around it. Since 1995, the Reynolds Mansion has undergone a phased restoration with participation of the DNR Park Division, the Sapelo Island Restoration Foundation, Inc. (a non-profit organization), and the Sapelo Island National Estuarine Research Reserve.⁶⁶⁹ The building and grounds are in good condition, retain integrity, and are assessed as Category 1.



Figure 517. Azalea Cottage, 2015.

Azalea Cottage – UGA 6085 (1934, Category 2). Azalea Cottage was built circa 1936 by R.J. Reynolds as a small private residence. It is located at a remote

669. Sullivan et al, 90.

location north of the Reynolds Mansion. Reynolds later used the cottage as a retirement home and had an oxygen system installed to help him deal with his emphysema. The cottage has also served as the Marine Institute Director's house.⁶⁷⁰ The cottage is currently unoccupied but is sometimes used to house guests.

Azalea Cottage is a compact two-story painted stucco building with living spaces on the first floor and bedrooms on the second floor. Pilasters frame the primary facade at the building's corners and a parapet masks the sloping roof behind. The first floor is organized around a central living room that opens to the rear of the building. The second floor includes a large master bedroom with adjacent spaces and two smaller bedrooms.

The 2002 preservation plan notes that the cottage had been recently painted with elastomeric paint, membrane roofing had been installed, and the building's casement windows had been replaced with new vinyl windows. Existing windows are double-hung. Significant architectural detailing has been retained, including built-in shelving and ceramic tile. The 2002 plan also noted moisture infiltration problems. Despite the window changes, the cottage retains high integrity and is assessed as Category 2.



Figure 518. Azalea apartment, front and side view, 2015.

Azalea Apartment – UGA 6086 (1934, Category 2). The Azalea apartment is located to the north of the Azalea Cottage and was constructed by 1934 as a garage for the cottage. In the 1970s, the garage was converted into a two-bedroom apartment to house children of the director.⁶⁷¹

The Azalea apartment is a small rectangular painted stucco building with a front portico. The building has a roof of terra cotta shingles, while the portico has a flat copper roof. The two former garage doors on the left side of the building have been infilled with wood siding. The former driveway has been removed though



Figure 519. Azalea Apartment, rear and side view.

670. Crawford et al., 4.

671. Ibid.

its trace can be seen in the lawn on the west side of the cottage. False shutters flanking windows from the 1970 renovation have been removed.

The 2002 preservation plan noted that the building was in poor condition due to moisture issues, and maintenance repairs still appear to be needed. The Azalea apartment retains overall integrity and is assessed as Category 2.



Figure 520. Dormitory, front view.

Dormitory – UGA 6082 (1927, Category 2). The Dormitory is located southwest of the Reynolds Mansion. The building is oriented with its principal facade facing the mansion landscape and its back toward the Quadrangle. The Dormitory and the mansion are separated by a shallow ravine.

The Dormitory was built circa 1927 by Howard Coffin following his reconstruction of the mansion in 1925. The building was designed by George Ball of Brunswick, Georgia, to be used as garage and office space, with housing on the second floor. If it was used as a garage, the building was later renovated to remove its evidence. The building was used later by Reynolds for overflow guests.⁶⁷²

An assessment prepared in 1986 by Surber Barber indicates that the Dormitory was in use at that time as a residence for overnight field trip groups and as overflow for use of the mansion. The building has been vacant since at least 2002 when the Marine Institute preservation plan was prepared.

The Dormitory is two stories high, U-shaped in plan, and constructed of wood with a stucco exterior finish. A portion of the building is set above a reinforced concrete basement. The primary facade faces southeast toward the mansion landscape and features an open arcade with arched openings. Photographs and drawings from the 2002 and 1986 plans show the arched openings infilled with partitions and windows. The building retains its original wood casement windows and screens.



Figure 521. Dormitory.



Figure 522. Dormitory.



Figure 523. Dormitory.

672. Ibid., 3; Sullivan et al, 43.

The first floor has a small entrance hall, large kitchen, and rooms that may have been used for administration and bedrooms. The second floor features a large central room that probably served as a living room as well as other common rooms, bedrooms, and bathrooms, and a sleeping porch. The primary front second floor rooms open onto a terrace over the flat-roofed, first floor arcade.

The Dormitory is lightly constructed and may be in compromised structural condition due to water infiltration and associated deterioration. The building has a high degree of integrity and is assessed as Category 2. A more detailed assessment of its current condition is warranted.



Figure 524. Greenhouse.

Greenhouse – UGA 6087 (1927, Category 2). The Greenhouse is located northeast of the Reynolds Mansion along a lane that extends north from Nanny Goat Beach Road. The 2002 preservation plan states that the Greenhouse was built in 1929 by Howard Coffin and used to grow exotic plants for the mansion and water garden.⁶⁷³

The Greenhouse is large, H-shaped, and oriented in the same north-south and east-west axes as the mansion and other estate buildings. The foundation walls and floor of the Greenhouse are concrete. The walls rise to a height of approximately 3 feet. Above the walls is a steel greenhouse framework, with the wood frame remnants of awning windows at the bottom and gable steel roof framework above. Glass no longer remains in the Greenhouse framework. Inside, tables, heating, and other features remain. The Greenhouse Cottage is attached to the west end of the structure.

Despite broken and missing glass, the Greenhouse retains historic integrity and is assessed as Category 2.



Figure 525. Greenhouse.

673. Crawford et al., 4.



Figure 526. Greenhouse Cottage.

Greenhouse Cottage – UGA 6087 (1934, Category 2). The Greenhouse Cottage is located at the west end of the Greenhouse constructed by Howard Coffin in 1927. The 2002 preservation plan states that cottage was built in 1938 by R.J. Reynolds, with an addition added in 1955 and interior alterations completed in 1963. The basic form and character of the cottage is similar to the two Gardener Cottages located to the northeast, which are said to have been Sears houses erected by Reynolds in the mid-1930s. The Greenhouse Cottage served as the main groundskeeper’s residence. The building currently serves as housing for staff members of the Marine Institute.⁶⁷⁴

The Greenhouse Cottage is a wood-framed building with a painted stucco finish. It is rectangular in shape and aligned with the axis of the Greenhouse. It has an enclosed front vestibule and side wing. The gable roof has wide dormers and a clipped (jerkinhead) gable, and is roofed with asphalt shingles.

Although in need of repairs, the Greenhouse Cottage retains integrity and is assessed as Category 2.

674. Ibid.



Figure 527. Sears house.

Sears house – UGA 6088 (1934, Category 1). The Sears house is located on a lane northeast of the Reynolds Mansion and northwest of the Greenhouse. The building was purchased from a catalogue and shipped to the island. It housed members of Reynolds’ staff and was adapted as a residence for staff of the Marine Institute.⁶⁷⁵

The Sears house is a simple rectangular cottage with a gambrel roof and front screened porch spanning the width of the facade. The roof has a long second-story dormer. The wood-framed building has exterior wood siding and painted brick veneer on the first floor front facade. The building retains integrity and is assessed as Category 1.

Sears garage – UGA 6089 (1934, Category 1). The garage at the Sears house is a simple wood frame structure with a gable roof and wood siding. The building has circular wooden vents on each gable. It retains its hinged wood garage doors and has a shed addition on its right side. The garage retains integrity and is assessed as Category 1.

675. Ibid.



Figure 528. Gardener Cottage No. 1.



Figure 529. Gardener Cottage No. 2.

Gardener's Cottages No. 1 and No. 2 – UGA 6090, 6014 (1934, Category 2).
Gardener Cottages No. 1 and No. 2 face each other at the end of a lane northeast of the Greenhouse. They sit at the edge of the marsh that separates the main portion of the island from the beach and ocean to the east.

The 2002 preservation plan notes that these two Gardener Cottages were Sears houses shipped to the island and assembled in the mid-1930s by R. J. Reynolds after his purchase of the estate. The cottages housed members of Reynolds staff. Today they house staff of the Marine Institute.

The cottages are simple rectangular one-and-one-half-story residences. The wood-framed structures are covered with wood siding. Open porches and entrances are on the gable ends, which have clipped (jerkinhead) gables. Windows are reported to be modern replacements. Cottage No. 2 has two

dormers with clipped gables on each side on the second floor, roof level. The buildings have asphalt shingle roofing.

The Gardener Cottages have a high degree of historic integrity and are assessed as Category 2.

Gardener Cottages No. 1 and No. 2 Outbuildings – UGA 6091, 6015 (1934, Category 2). Gardener Cottage Outbuildings No. 1 and No. 2 are located in the yard area adjacent to the two cottages. Outbuilding No. 1 is located to the front side of the cottage at the edge of the marsh. Outbuilding No. 2 is located behind and to the left of its cottage.

The two outbuildings were probably constructed at the same time as the cottages. The buildings are small, rectangular utility sheds of wood frame construction with wood siding. The buildings have rusted metal roofing in a pole-barn form with four wood brackets supporting the front overhangs. Outbuilding No. 1 has wood infill on its left side, and Outbuilding No. 2 has metal siding on its right side.

The two sheds are in need of repairs but retain integrity and are assessed as Category 2.



Figure 531. Slat House.

Slat House – UGA 6025 (1953, Category 2). The Slat House is a small one-story, wood-framed residence located east and in the vicinity of the Greenhouse. The cottage is rectangular, almost square, in shape and has wood siding and a hipped roof with rusted metal roofing. The cottage has paired wood casement windows. A long, open animal shelter is located adjacent to the building.

The Slat House is vacant and may be in danger of loss. The building is subject to moisture from the ground and surrounding vegetation. The area is overgrown with vegetation. Although in need of repairs, the Slat House retains integrity and is assessed as Category 2.



Figure 530. Slat House.



Figure 532. Slat House.

Landscape Resources



Figure 533. South End Mansion landscape.

Mansion lawn and groves (date undetermined, Category 2). Surrounding the Reynolds Mansion and throughout the character area is a landscape characterized by open lawn and rows and groves of mature shade trees. In the vicinity of the mansion are a variety of walks and landscape structures, including fountains and sitting areas. Groves of live oak and other trees shade much of the landscape, creating an area of stunning character. The landscape in the vicinity of the Reynolds Mansion is maintained by the Georgia DNR. The date of origin of the mansion lawn and groves is not documented in archival material reviewed for this study. It is assessed as Category 2.



Figure 534. Live Oak Lane.

Tree lined road network (date undetermined, Category 2). A network of narrow asphalt- and shell-paved roads links the Reynolds Mansion with other areas of the property, including the Azalea Cottage, Greenhouse, Quadrangle, and beach. The road network passes through groves and allées of mature live oak trees. The

road network within the Marine Institute property is maintained by the Georgia DNR. Its date of origin is not documented in archival material reviewed for this study. It is assessed as Category 2.



Figure 536. Water Garden.

Water Garden (1923, Category 2). The Water Garden is a historic landscape designed by Howard Coffin in 1923. It is aligned with the west axis of the Reynolds Mansion and is located north of the Quadrangle. The garden is accessed via a narrow wooden bridge and path from which arises a series of densely vegetated small islands set within interlocking water features. The garden was designed to represent all of the world's continents. At the center is an arbor comprised of Doric concrete columns with a wood trellis above. The garden is minimally maintained. It is assessed as Category 2.



Figure 537. Water Garden.



Figure 538. Tennis court.

Tennis court (date undetermined, Category 2). Located in the grove of live oak trees south of the Reynolds Mansion between the mansion and the marsh is a tennis court. The court is paved and the net remains. The tennis court is

surrounded by a chain link fence. There is an open formal, columned wood trellis on the center of one side of the court. The tennis court and trellis are in poor condition. Although their date of origin is not documented in archival material reviewed for this study, they are associated with the historic mansion and are assessed as Category 2.



Figure 539. Boardwalk to the marsh.

Teal boardwalk (date undetermined, Category 2). A two-plank wide elevated walkway leads from the area near the tennis court out over the marsh. The walkway is elevated at an even elevation, but varies from between a few inches and more than 6 feet above the marsh. The walk was first built by John Teal during the late 1950s to facilitate research into the energy budget of the salt marsh.⁶⁷⁶ Its specific date of origin is not documented in archival material reviewed for this study. It is assessed as Category 2.

676. University of Georgia, "Marine Institute on Sapelo Island Visiting," available at <https://ugami.uga.edu/visitors/>, accessed June 5, 2017.



Figure 540. Brick wall and stormwater management system.

Brick Wall and Stormwater Management System (date undetermined, Category 2). Two low, mortared brick wall features are located at the edge of the marsh near the Teal boardwalk trailhead. Metal and terra cotta pipes extend through the walls, or from the banks nearby. These features are likely associated with culverts, swales, and other related stormwater management structures. They are assessed as Category 2.



Figure 541. Azalea Cottage road trace.

Road and path traces (date undetermined, Category 2). The yard in the vicinity of the Azalea Cottage exhibits evidence of former roads and paths in the form of level areas edged by low stone or concrete curbs, and some pavement remains. Although their date of origin is not documented in archival materials reviewed for this study, these systems likely date to the Reynolds era and are assessed as Category 2.

Sundial (date undetermined, Category 2). The ruins of a formal stone, concrete, and copper sundial is located on the lawn in front of the Azalea Cottage. Part of

the sundial is broken in pieces around the base of the pedestal. Although its specific date of origin is not documented in archival materials reviewed for this study, this feature likely dates to the Reynolds era and is assessed as Category 2.

Grill (date undetermined, Category 2). An upright metal grill is also in the lawn near the Azalea Apartment. Its association and date of origin have not been determined. It may date to the Marine Institute period.

Birdbath (date undetermined, Category 2). There is a cast concrete birdbath located in the lawn area near the Azalea Apartment. Its association and date of origin have not been determined. It may date to the Marine Institute period.

Nanny Goat Beach Road (date undetermined, Category 2). Nanny Goat Beach Road is a long, narrow lane that approaches the principal facade of the Reynolds Mansion on axis, and extends from the mansion landscape through the area where the Greenhouse and Orchard are located to the marsh and beach beyond. Its association and date of origin have not been determined. It may date to the Reynolds period.



Figure 542. Remains of the Orchard. (Source: UGA College of Environment + Design)

Orchard/Allée (circa 1923, Category 2). The orchard and allée are historical landscape features built by Howard Coffin. They are located southeast of the mansion landscape. The orchard is currently in poor condition due to the loss of many of the original trees and the need for pruning and other care and attention of the existing trees. It is assessed as Category 2.

Palmetto Tree Plantings (date undetermined, Category 2). A formal double row of palmetto trees marks the entrance into the large greenhouse. These trees may date to the Coffin period and are assessed as Category 2.

Road and Fencing (date undetermined, Category 2). Linking the Greenhouse to the cottages nearby is an earthen two-track road. Wood post and rail fencing marks a former boundary between separate areas of the property. This road likely dates to the Reynolds period and are assessed as Category 2.

The Quadrangle

The Quadrangle character area is located to the west of the Reynolds Mansion and includes the former agricultural and work area of the historic Reynolds

estate. The entrance road to the estate complex from Marsh Landing Dock and north portions of the island passes along the north side of the Quadrangle. To the south is the marsh and dock area where boats can access Doboy Sound.

The Quadrangle was established by Howard Coffin in the mid-1920s as a dairy operation and stable complex composed of a collection of wooden buildings arranged to form a quadrangle. R.J. Reynolds replaced these buildings between 1934 and 1936 with buildings constructed of concrete and designed by Augustus E. Constantine, using a similar layout. This area may also have been used as an agricultural and work area during the Spalding plantation period.

To the south and southwest of the Quadrangle are additional work and support buildings, including the Maintenance Building, Power House, Carpenter Shop, Filling Station, and several storage buildings.

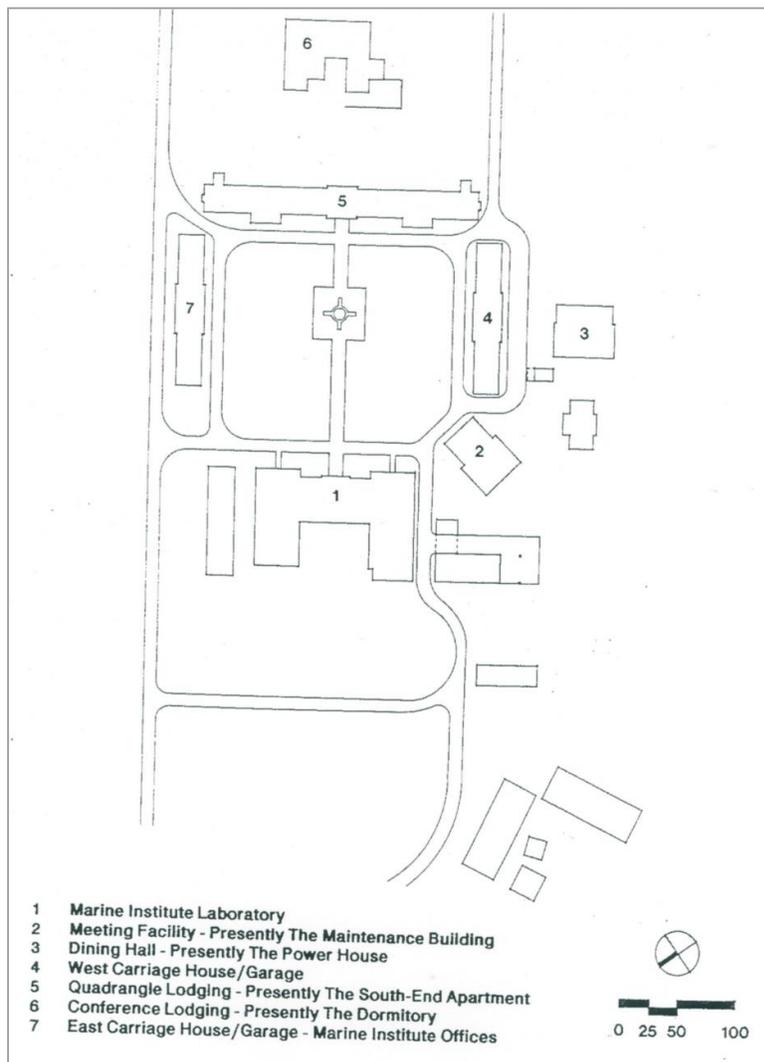


Figure 543. Quadrangle site plan. (Source: Surber, 7)

Building Resources

The buildings of the Quadrangle constitute the core structures of the Marine Institute. All but the new Dormitory are former estate structures that have been

adaptively reused. The buildings are generally in good condition and have been well maintained.



Figure 544. Power House.



Figure 545. Power House.

Power House – UGA 6016 (1934, Category 2). The Power House is located south of the Quadrangle near the water’s edge. It was built by Reynolds circa 1940 to generate power for the estate. It once housed three diesel generators that powered the mansion and agricultural buildings.⁶⁷⁷

The Power House has two rooms. The larger one is on the west. It housed the generators, while the smaller room on the east was a control room. Like other Reynolds buildings, the Power House is a substantial concrete building in good structural condition. The building has a flat roof surrounded by a low parapet. At the time of the 1989 Surber study, the building still housed two large generators that were no longer in use. The 2002 preservation plan noted that the building was structurally sound but in deteriorating condition.⁶⁷⁸ The Power House has recently been rehabilitated to accommodate meeting space in accordance with a recommendation provided in the 1989 Surber study. The rehabilitation was of high quality and appears to be in accordance with the Secretary of the Interior’s Standards. Rusted metal stacks on the west side of the building were retained. The Power House retains integrity and is assessed as Category 2.

677. Crawford et al., 3.

678. Surber & Barber Architects, Inc., “Historic R.J. Reynolds Mansion and Adjacent Structures, Sapelo Island, Georgia” (Atlanta, Georgia: Department of Natural Resources, 6 October 1989), an appendix of Crawford et al, 27; Crawford et al., 18.



Figure 546. Lumber storage and wet lab.

Lumber storage and wet lab – UGA 6069 and South End Equipment Storage No. 2 – UGA 6070 (1966, Category 2). The lumber storage and wet lab and South End Equipment Storage No. 2 are located to the east of the Plumbing Shop. Both are long, rectangular buildings sited perpendicular to one another to create an L-shaped exterior space facing south toward the marsh.

Side and rear walls of the two buildings are constructed of concrete block. The west end of the Equipment Storage building is open and is missing its large doors. Within the L formed by the two buildings the facades feature several large doors and metal sheeting. A section of masonry wall occurs at the west end of the Equipment Storage building. The gable roofs of the two buildings are covered with modern prefabricated metal roofing panels in good condition. The roofs have wood trusses.

These buildings are utilitarian in character and are in good to fair condition. They are assessed as Category 2.

Marine Institute Auto Shop – UGA 6071 (1934, Category 2). The Marine Institute Auto Shop is located at the southwest corner of the Quadrangle and is oriented diagonally to its axes. The building was constructed along with other Quadrangle buildings, but its roof and upper floor were rebuilt after a fire in the mid-1980s.⁶⁷⁹ Formerly known as the Maintenance Building, the structure is currently used as an auto repair shop and for storage.

The Marine Institute Auto Shop is a two-story concrete structure with stuccoed exterior walls. In plan, the building has a front rectangular portion with an entrance on center, and a second floor gable end that faces the Quadrangle. The rear portion has second floor gable ends oriented perpendicularly to the front.



Figure 547. Lumber storage and wet lab.



Figure 548. Lumber storage and wet lab.

679. Crawford et al., 3.



Figure 549. Marine Institute Auto Shop.

The building is a reinforced concrete slab structure with steel beams that support an attic, and a wood frame roof. After the fire, the original tile roofing was replaced with red-colored asphalt shingles; original dormers were not replaced. Like other Quadrangle buildings, the original metal casement windows have been replaced with vinyl double-hung windows.⁶⁸⁰

The Marine Institute Auto Shop is in good condition and retains sufficient integrity to convey its historic associations, despite the 1980s fire and the replacement windows. It is assessed as Category 2.



Figure 550. Carpenter shop.

Carpenter shop – UGA 6072 (1936, Category 2). The carpenter shop is located to the south of the Marine Institute Laboratory. It was likely constructed in 1936 in conjunction with other improvements initiated by R. J. Reynolds. Boat repair

680. Ibid., 21; Surber 24..

was probably a primary use for the building. Today the building is used for vehicle maintenance and storage.

The carpenter shop is L-shaped in plan with a large rectangular north-south room divided from a smaller room to the east by an open vehicle passageway. The two rooms are unified at the roof level by a continuous parapet that masks the building's flat roof. The building features concrete walls on its north and west elevations and large metal and glass windows and doors on its east and south elevations. A wide flat overhang extends around the east and south elevations of the larger room. The roof is supported by steel beams, bar joists, and posts.

The carpenter shop is in good condition though in need of maintenance. It retains integrity and is assessed as Category 2.



Figure 553. Marine Institute Laboratory.

Marine Institute Laboratory – UGA 6074 (1936, Category 2). The Marine Institute Laboratory is a two-story structure that has been adapted from its original use as the Dairy Barn and stable as built by R.J. Reynolds. The building was constructed in 1936 shortly after Reynolds' purchase of the property in 1934, and replaced earlier buildings on the site constructed by Howard Coffin in the 1920s.⁶⁸¹

Reynolds' Dairy Barn originally featured a tiled milk laboratory, darkroom, and theater and was outfitted with hot and cold running water and steam heat. The barn was converted to laboratory use in the 1950s when the Marine Institute was established. In 1985–1986, the north wing hay loft was converted to laboratory space and fire stair towers were added behind the building for emergency egress.⁶⁸²

The Marine Institute Laboratory is two stories tall, with a large space beneath its high gabled roof. The building is U-shaped in plan with its principal facade facing east toward the Quadrangle. The principal facade has a central entrance set



Figure 551. Carpenter shop.



Figure 552. Carpenter shop.



Figure 554. Marine Institute Laboratory.



Figure 555. Marine Institute Laboratory.

681. Sullivan et al., 44.

682. Crawford et al., 3.

within a slightly projecting arched bay. The main body of the building is oriented north-south, but includes rear wings at the two ends.

The wings project at the principal facade with gabled fronts and modern entrances at the first and second floor levels and a barn loft door and projecting hood above. The modern doors are located within former barn door openings that likely matched those on the rear of the wings and were used for livestock but have been infilled.



Figure 556. Marine Institute Laboratory.

The building is constructed of concrete walls and floors with stuccoed exterior walls. The roof is orange terra cotta tiles that were replaced in-kind in 2015.

The roof has a large central cupola and copper vents with porcelain lightning rods along the ridgelines. The building's original metal casement windows have been replaced with modern vinyl double-hung windows.

On the interior, the original barn room configuration has been modified to accommodate laboratory, office, library, circulation, and storage use. The original theater remains and is still in use as a meeting space. Dropped ceilings and interior partitions have been installed. However, a significant amount of historic fabric and finishes remain from the Reynolds Dairy Barn era, including tile work, masonry arches, stuccoed walls, and remnant mechanical and electrical fixtures.



Figure 557. Marine Institute Laboratory.

Interior fabric and fixtures that are part of the historic fabric remain. Interior laboratory alterations are typically non-historic. In many cases, the laboratory work was not of as high a quality level as that of the original barn. Contemporary changes include non-historic vinyl windows that diminish historic integrity.

The Marine Institute Laboratory is in good condition and retains integrity. It is assessed as Category 2.



Figure 558. South End Office Building.

South End Office Building – UGA 6076 (1934, Category 2). The South End Office Building is located along the north side of the Quadrangle. It was formerly known as Carriage House Two. It was built to provide carriage space, harness

storage, and staff laundry facilities. The building was adapted for use as a school for children of the Marine Institute faculty and staff and as a post office. It was later converted to its current use as administrative offices.⁶⁸³

The South End Office Building is a long, thin rectangular building constructed with concrete exterior walls that have been stuccoed. It has a pedimented central pavilion with an octagonal cupola at roof ridge and copper roofing. The building's original tile roof has been replaced with red tile-colored asphalt shingles. Original copper gutters remain.

Both the exterior and interior of the South End Office Building have been adapted to office use. Arched former carriage entrances have been infilled with glass windows, glass entrance doors, stucco and wood infill with windows and doors, and modern garage doors. The large glass windows and entrances of the office retain and express the character of the historic openings. The interior of the building has been modified with modern finishes.

The use of red tile-colored asphalt shingles reflects the color of the original roofing. The installation of vinyl double-hung windows diminishes the historic character of the original fenestration, which featured casement windows. The carriage entrance infill and modern interior modifications are not considered historic.

The South End Office Building is in good condition and although altered, retains integrity. It is assessed as Category 2.



Figure 559. South End Apartment Building.

South End Apartment Building – UGA 6077 (1934, Category 2). The South End Apartment Building is located along the east side of the Quadrangle was designed in 1936 by Augustus E. Constantine for use as a dormitory for Reynolds' staff. The building continues to be used for visitor housing today.⁶⁸⁴

683. Ibid.; Sullivan et al., 44.

684. Crawford et al., 3.



Figure 560. South End Apartment Building.



Figure 561. South End Apartment Building.

The South End Apartment Building is a long, thin, one-story rectangular building similar to the other two buildings bordering the north and south sides of the Quadrangle. The walls are concrete with stucco, the first floor and attic are framed with steel joists, and the roof is wood frame. The building was designed with two identical wings of eight bedrooms, a kitchen, dining room and living room in each, separated by a central pavilion with an open breezeway. Two additional kitchens have been added off the living rooms at the far ends of the building and bathrooms have been created in former closet spaces.⁶⁸⁵ The building has screened entrance pavilions at each end.

The 2002 preservation plan notes that the building's original metal casement windows had been replaced by vinyl double-hung windows, the tile roof had been replaced by asphalt shingles, and interior surface finishes had been replaced.⁶⁸⁶ However the building retains overall character and detailing on both the exterior and interior. The use of red tile-colored asphalt shingles reflects the color of the original roofing. The installation of vinyl double-hung windows diminishes the historic character of the original fenestration, which featured casement windows. Original copper gutters and octagonal cupolas at the ridgeline remain.

The South End Apartment Building is in good condition and retains integrity. It is assessed as Category 2.



Figure 562. Maintenance and Lab Complex.



Figure 563. Maintenance and Lab Complex.

Maintenance and Lab Complex – UGA 6078 (1934, Category 2). The Maintenance and Lab Complex located along the south side of the Quadrangle was designed in 1936 by Augustus E. Constantine for use as a garage for family vehicles. The building was formerly known as Carriage House One and was converted to staff offices, a staff lounge, and laboratory in the late 1980s.⁶⁸⁷

685. Surber.
686. Crawford et al., 12–13.
687. Ibid., 3.

The Maintenance and Lab Complex is a long, thin rectangular building constructed with concrete exterior walls that have been stuccoed. Like the building on the north side of the Quadrangle, the Maintenance and Lab Complex has a pedimented central pavilion with an octagonal cupola at roof ridge and two long wings to the sides. The building's original eleven carriage bays have been infilled with stuccoed and vertical board partitions with contemporary doors and windows. Original metal casement windows have been replaced with vinyl double-hung windows. The building's original tile roof has been replaced with red tile-colored asphalt shingles. Original copper gutters remain. The interior of the building has been adapted to its current office and laboratory use with modern finishes.



Figure 564. Maintenance and Lab Complex.

The Maintenance and Lab Complex is in good condition and despite alterations, retains sufficient integrity to convey its historic associations. It is assessed as Category 2.



Figure 565. South End Filling Station.

South End Filling Station – UGA 6079 (1934, Category 2). The South End Filling Station is a small building located behind the Maintenance and Lab Complex just south of the Quadrangle. It faces a paved road that parallels the back of the lab building. The Filling Station was built in 1936 for fueling vehicles. The building is currently used for storage.⁶⁸⁸

The Filling Station is rectangular in plan with one small interior space and a gabled overhang in front. The original gas pumps have been removed, the overhangs vertical posts are missing, and the original tile roofing has been replaced with asphalt shingles. The building's original metal casement windows remain.⁶⁸⁹

The Filling Station is generally in good condition and retains integrity, despite some missing elements and lack of use. It is assessed as Category 2.



Figure 566. South End Filling Station.

688. Ibid.

689. Ibid., 30.



Figure 567. Plumbing Shop.



Figure 568. Plumbing Shop.

Plumbing Shop – UGA 6092 (1953, Category 2). The Plumbing Shop is a small wood-framed structure located west of the Carpenter Shop and Laboratory. The building was reportedly constructed in 1953, although the date is not sourced. Its gabled ends face north and south, with a wide wood door on the north elevation. Two wood doors and several windows are along the east elevation.

The shop has vertical wood siding that is in need of paint and is detached and deteriorated in some places. The building sits low to the ground, and water falling from the roof and splashing has rotted the siding at ground level. The roof is metal but is rusted and badly deteriorating. Windows are in need of repair. A wood cupola is located at the center of the roof ridge.

The Plumbing Shop is in fair to poor condition but retains integrity and is assessed as Category 2.



Figure 569. Fuel Storage Building.

Fuel Storage Building – UGA 6095 (circa 1935, Category 2). The Fuel Storage Building is located southwest of the South End Filling Station and west of the Power House south of the Quadrangle. The building was constructed in 1936 to

house the gasoline for the filling station and diesel fuel for the Power House generators. In the 1980s, all of the Marine Institute's fueling services were moved to another location. The building's above-ground storage tanks were removed.⁶⁹⁰

The Fuel Storage Building is a small rectangular building with a projecting front and rear gable. The roof on the two ends are hipped. The front of the building faces north toward the Quadrangle. The Fuel Storage Building has concrete walls with stucco finish and its original tile roof has been replaced with red tile-colored asphalt shingles. It retains its copper roof vent, copper gutters, and metal hopper windows located high on the walls.

The Fuel Storage Building is in good condition and retains integrity. It is assessed as Category 2.



Figure 570. Fuel Storage Building.



Figure 571. Communications Building.

Communications Tower and Building – UGA 6084 (by 1963, Category 2).

Within the L created by the Wet Lab and Equipment Storage buildings is a metal Communications Tower and stuccoed concrete Communications Building. The date of construction of the two structures has not been confirmed, but the Communications Building design and construction is consistent with the Reynolds estate period. Histories of the estate report upgrading of the island's electrical and communications systems. The tower appears to have been constructed to support a structure on its top that no longer exists.

690. Ibid., 3.



Figure 572. Communications Tower.

The Communications Tower and Building are in good condition and are maintained for current communications use. They are assessed as Category 2.

Research Dormitory – (2007, Category 5)

Trailers – UGA 6002–6005, 6007–6013, 6020–6023, 6033–6037, 6048, 6102–6103 (1973–1996, Category 5)

Landscape Resources

Road Network in Quadrangle Area (date undetermined, Category 2). A system of asphalt-paved roads leads to, around, and through the quadrangle complex and connects it with the Mansion Landscape character area to the east. The entrance road to the estate complex parallels the Quadrangle to the north. Although its date of origin is not documented in archival materials reviewed for this study, the road network is assessed as Category 2.



Figure 573. Quadrangle Landscape.

Quadrangle landscape (date undetermined, Category 2). The Quadrangle landscape is a defined rectangular space enclosed by buildings on four sides and edged by paved roads. A fountain in the center of the quadrangle serves as a focal point. The fountain is set within open lawn. Mature live oak trees are located around the edges of the quadrangle, while large Palmetto trees are located to either side of the fountain. A wide, crushed shell pathway crosses the center of the Quadrangle from west to east. In front of the Marine Institute Laboratory on the west side there is a parking area separated from the lawn area by a hedge. Shrubs and foundation plantings are located along the building foundations. Although its date of origin is not documented in archival materials reviewed for this study, the landscape is assessed as Category 2.



Figure 574. Quadrangle fountain.

Quadrangle fountain (date undetermined, Category 2). The Quadrangle fountain is located near the center of the open space, slightly closer to the east. The fountain is surrounded by gravel landing edged in part by concrete bases and

globes. The fountain is located in the center of the gravel space. It features a turkey sculpture set atop a basin. Additional basins extend in the cardinal directions from the central tiered basin, terminating with sculptural turkey features. Water spouts from the central turkey sculpture. The fountain retains integrity and is assessed as Category 2.



Figure 575. Boat ramp.

Boat ramp (date undetermined, Category 2). To the south of the carpenter shop is a boat ramp that features a short marine railway formerly used to haul boats onshore for maintenance. The facility remains intact but is rusted, silted-in, overgrown, and in ruins. A concrete wall borders the boat ramp on its west side. Rail lines extend into the water. A deteriorated wood boat platform remains on the ramp. The platform was hauled on the rails from the water onto the ramp by a steel cable connected to a gear system located behind the carpenter shop. Its date of origin is not documented in archival materials reviewed for this study. Although its integrity is somewhat diminished due to deterioration, the boat ramp is assessed as Category 2.



Figure 576. White storage tank.

White storage tank (date undetermined, Category 2). A rusted, white metal storage tank is located just to the west of the boat ramp. The tank appears to be historic, but its purpose is not currently known. Although its integrity is somewhat diminished due to deterioration, the storage tank is assessed as Category 2.

Blue Tank (date undetermined, Category 5)

Plant Propagation shelters (date undetermined, Category 5)

Temporary residences (date undetermined, Category 5)

Shell Hammock

The Shell Hammock character area is an upland area that projects into the South End marsh southwest of the entrance road to the Marine Institute property. Historically, this area was a principal location of one of the African American communities on the island before R.J. Reynolds consolidated African American residences in the Hog Hammock area after his purchase of the island in 1934. Indian shell mounds have also been identified in the area and are the subject of archaeological investigation.

Today, the Shell Hammock landscape is largely wooded. A campground has been created in the woods along its northwest side. The southeast portion of the area is largely open turf and features five residences constructed in the early- to mid-1960s by Reynolds for staff of the Marine Institute.

Building Resources



Figure 577. Sapelo Island Trailer A.

Sapelo Island Trailer A – UGA 6002 (1973, Category 5). Trailer A has a corrugated metal exterior, metal door, and jalousie windows. The building is not considered historically significant.

Shell Hammock Residence No. 1 – UGA 6062 (1961–1966, Category 2).

Shell Hammock Residence No. 2 – UGA 6063 (1961–1966, Category 2).

Shell Hammock Residence No. 3 – UGA 6064 (1961–1966, Category 2).

Shell Hammock Residence No. 4 – UGA 6065 (1961–1966, Category 2).

Shell Hammock Residence No. 5 – UGA 6066 (1961–1966, Category 2).

The Shell Hammock residences are located along the south edge of the Shell Hammock peninsula with their primary elevations facing a large, shared, open lawn area and their rear facades facing the marsh. The residences were constructed by R.J. Reynolds in the early- to mid-1960s as staff housing for the Marine Institute. The five residences were designed by Benjamin A. White of Brunswick, Georgia, with the plans dated June 1, 1961. They were constructed between 1961 and 1966.⁶⁹¹

The Shell Hammock residences are one-story painted concrete block buildings with wood detailing and low-pitched asphalt shingle roofs. The designs of the buildings vary, but they are similar in layout and character. The residences are characteristic of contemporary residential design of the early 1960s. The buildings have low, horizontal elevations with wide overhanging eaves. Rows of operable two-light awning windows accentuate the horizontal and are set on concrete sills. Wood siding was used for the gables. Interior walls are painted concrete block. Overall, the interior designs are open, friendly, and full of light.

691. Crawford et al., 4.



Figure 578. Shell Hammock Residence No. 1.



Figure 579. Shell Hammock Residence No. 2.

The 2002 preservation plan notes that the buildings were in fair to good condition with a number of identified maintenance issues. Shell Hammock No. 4 was noted as having vinyl siding installed at its gable and eaves. Shell Hammock No. 5 was noted as having aluminum eaves.⁶⁹² Most of the residences are currently occupied, and only Shell Hammock No. 5 was surveyed in detail for this study. It was found to be in very good condition.

692. Ibid., 45.



Figure 580. Shell Hammock Residence No. 5.

The Shell Hammock residences have a high degree of historic integrity from their 1960s period of construction, and are assessed as Category 2.

Shell Hammock Utility Building – UGA 6067 (1960, Category 2). The Shell Hammock Utility Building is a small, rectangular concrete block structure probably constructed in association with the Shell Hammock residences. The building has a wood-framed gable roof with asphalt shingles. The window on the side appears to be similar to those in the residences and has a brick sill. The building was designed to support the Shell Hammock residences (UGA 6107 through 6109), and is assessed as Category 2.

Shell Hammock Trailers – UGA 6107–6109 (1997, Category 5). Several contemporary trailers are located in the Shell Hammock area and used as temporary residences.

Landscape Resources

Marine Institute residential landscape (1960s, Category 2). The narrow road, open lawn, large trees, and vegetation in the vicinity of the residences are part of the residential landscape associated with the 1960s Reynolds development.

Archaeological Resources

Evidence of Shell Hammock African American community (nineteenth and twentieth centuries, Category 1). The history of the community at Shell Hammock is the subject of study by historians of the island. The community's configuration and layout might be part of that study. A 1929 soils map suggests the siting of residences throughout the area and a road configuration that differs from that existing today. Archaeological evidence of the Shell Hammock African American community constitutes a sensitive and important historical resource that merits protection.

Shell Hammock Indian shell mounds (pre-European-American settlement, Category 1). The location of the Shell Hammock Indian shell mounds has not been reviewed in the field for this study. Archaeological evidence of the Shell

Hammock Indian shell mounds constitutes a sensitive and important historical resource that merits protection.

South End Marsh and Beach

The South End Marsh and Beach character area includes the southern portion of Sapelo Island extending from Marsh Landing Dock on the Duplin River on the west side of the island, around Doboy Sound on the south side of the island, to Nanny Goat Beach and the dunes and marsh behind it on the Atlantic Ocean. The marsh comprises the largest portion of the leased property.

Within the marsh area, South End Creek provides water access to the Marine Station dock near the Quadrangle. The marsh encompasses the Lighthouse Island, now linked to Sapelo Island by a causeway, and includes a small tidal tributary known as Dean Creek to the island's north and east.

The South End Marsh character area lies in the midst of an estuary where the currents of the Duplin River and Doboy Sound converge. The Duplin River estuary is a tidally flushed drainage system flowing into Doboy Sound from the north. When the water rises to 6 feet above mean low water, it begins to leave the banks and flow in a sheet across the marsh. Between one-third and two-thirds of the water pushed by a rising tide into the estuary flows into the marsh. Fairly small increases in tidal height impel significantly increased volumes of water into the estuary. The tidal flow of the Duplin is consequently turbulent, promoting a thorough mixing of fresh with salt water. Flushing is also incomplete, as there is little fresh water entering the system. Much water in the estuary merely oscillates back and forth, rather than draining away to be replaced.

Doboy Sound is a tidal embayment that forms the southern boundary of the Sapelo Island. The hydrography of Doboy Sound, into which the Duplin River ebbs and floods, is influenced by the Altamaha River. This major tributary brings fresh water into the estuary from the interior regions of Georgia. During ebb tide, fresh water from the Altamaha flows seaward into Doboy Sound. During mid-ebb this water flows out of the mouth of the Sound along the south shore. Because of the limited fresh water flow, Doboy Sound is a mixed estuary, particularly during the summer months.

The salt marsh-estuarine ecosystem is typically an area of high environmental stress. Tidal action is the most important factor influencing primary production in the marshes. Twice daily, tides of approximately seven feet carry essential nutrients into the marshes, export detritus and nutrients back into the estuary. The University of Georgia Marine Institute has conducted much of its scientific ecological research along the Duplin River and its associated salt marshes, and the river's nutrient flows and its microflora and fauna have been intensively studied since 1949.⁶⁹³

This character area does not contain any building resources.



Figure 581. South End Marsh.



Figure 582. South End Marsh.

693. Sullivan et al, 15–29



Figure 583. South End Marsh.

Landscape Resources

Structures relating to research (date undetermined, category undetermined).

The Marine Institute appears to have constructed a number of earthen, wood, and other structures within the marsh which may be related to research. The dates and purposes of these structures has not been determined. Among the earthen structures is a narrow causeway in a rectangular shape connecting Shell Hammock with the vicinity of the dock near the Quadrangle area. It appears that this structure might be intended to control tidal flooding within the area it encloses. Other structures include posts visible at intervals across the marsh area. The date of origin of these structures is not documented in archival material reviewed for this study.

Bulkhead (date undetermined, category undetermined). Near the Power House is a steel retaining wall/bulkhead associated with access to the area by boat. The bulkhead appears to be a contemporary installation, although the date of its origin is not documented in archival material reviewed for this study.



Figure 584. Dock.

Dock (date undetermined, category undetermined). The dock area near the Power House is composed of the bulkhead, wooden pilings, a dock, and covered open air shelter. This is a historic location for docking for the former estate and Marine Institute. The date of construction of the dock features is not documented in archival material reviewed for this study, although they appear contemporary.



Figure 585. Marsh shelter.

Marsh shelter (date undetermined, category undetermined). An open air wood shelter with a rusted standing seam metal roof is set within the marshland near the dock area. The shelter is associated with the Marine Institute, but its date of original and use are not documented in archival material reviewed for this study.

Archaeological Resources

The University of Georgia Marine Institute on Sapelo Island discussed here is limited to the southern portion of the island, but no part of the island can be divorced from the history of the whole. Occupation on the island dates as far back as 2700 BC, with a complex history involving everything from coastal resource procurement of small-scale societies to pirate battles. A query of the GNAHRGIS database produced five sites within the University of Georgia Marine Institute on Sapelo Island. Despite limited investigation through systematic survey, some of the deep history of the University of Georgia Marine Institute and the development of Sapelo Island can be summarized based on information from recorded sites. In addition to the known archaeological sites, there is a strong probability that several more undocumented sites exist. Beyond this property, much more is known about the history of the island. It is improbable that this extensive history would not have left an archaeological signature on the south end of the island. The five sites recorded within the University of Georgia Marine Institute are historic sites, with some showing minimal evidence for prehistoric occupation. As indicated by other archaeological investigations across the island, this assemblage is by no means representative of the human history of the island.

Small villages were established on the northwest end of the island as early as 2700 BC. The people of these villages constructed vast shell rings and

accumulated large accumulations of refuse across several areas. These shell rings represent earliest extant structural remains on the island. By 1150 BC these deposits were repurposed as ceremonial centers. Site 9MC496 contains the earliest evidence of human occupation in the vicinity of the Marine Institute. Some artifacts dating to around 2700 to 1800 BC have been documented. This site has also produced some material evidence of occupations between 1200 BC to AD 550 as well as AD 950 to 1350. The site has not been investigated to a level to refine these intervals of time.

Based on other sites across Sapelo Island and the cultural development along the Southern Atlantic coast, ceramic production developed from 1100 BC to AD 1000 (known as the Woodland period) as wild and domesticated plant foods were added to the diet. Following AD 1000, much of the U.S. Southeast was undergoing a political and social reorganization in favor of a hierarchical chiefdom organization based around nucleated settlements. Along the coast, populations remained small and estuarine resources remained the primary food source, but the social organization appears to have shifted to hierarchical matrilineal groups.

At the time of Spanish settlement in the region, the local inhabitants of the Georgia coast were known as the Guale. Originally a people who settled in small, matrilineal groups, the Spanish arrival and subsequent chaos that resulted from the constant battling between the Spanish, English and Indian groups caused dramatic social change. Raids by the English, Yamasee, and Westos resulted in consolidation of the Guale on Sapelo Island as they were forced out of their villages. The earliest colonial occupation of Sapelo Island began in 1610 with the establishment of a Spanish Mission known as San José de Sapala, the namesake of the island. In 1684, English pirates targeted many of the Spanish missions along the South Atlantic. With the abandonment of the mission, the Yamasee occupied the mission and village until it was raided and destroyed by the Spanish two years later. Until 2004, the whereabouts of San José de Sapala was unknown. Excavations by the University of Kentucky to explore the shell rings on the Northwest side of the island yielded a surprising number of early Spanish artifacts, such as Spanish olive jar and majolica. Archaeologists have only located the mission within the last few years and research continues to shed light on early Spanish colonial contact. As recent as this past summer (Summer 2016), archaeologists found a cannonball from a six-pounder cannon, likely associated with the early Spanish mission.

With the Spanish mission destroyed, the balance of power began to shift in favor of the English, but it was not until 1733, when Georgia was established as a British colony, that the English had strong foot-hold along the Georgia coast. In 1802, Thomas Spaulding bought 4,000 acres of land on the south end of Sapelo, a plot which gradually expanded until he owned nearly the whole island. Spaulding died in 1851 and the island fell into disrepair during the Civil War. From this agricultural tradition stems a history of slavery. Slaves that came from the west coast of Africa in the eighteenth and nineteenth century were brought to Sapelo Island. With the end of slavery, many chose to stay, forming the 464-acre community known as Hog Hammock. These West African slaves along the Georgia, South Carolina, and North Florida coast formed a unique cultural group known as the Gullah Geechee people. The residents of Sapelo Island (of which

there are less than 50) are among the last groups maintaining the Gullah Geechee cultural tradition.

Sites 9MC300, 9MC301, 9MC496, and 9MC497 all contain historic components that appear to date to the nineteenth and twentieth or just twentieth century. Cultural affiliation was determined at each of these sites based on scatters of historic ceramics, glass, and metal or structural remains. Sites 9MC300 and 9MC301 show a glimpse into the history of the area. These sites are associated with the now-deactivated lighthouse and oil house on the south end of the island.

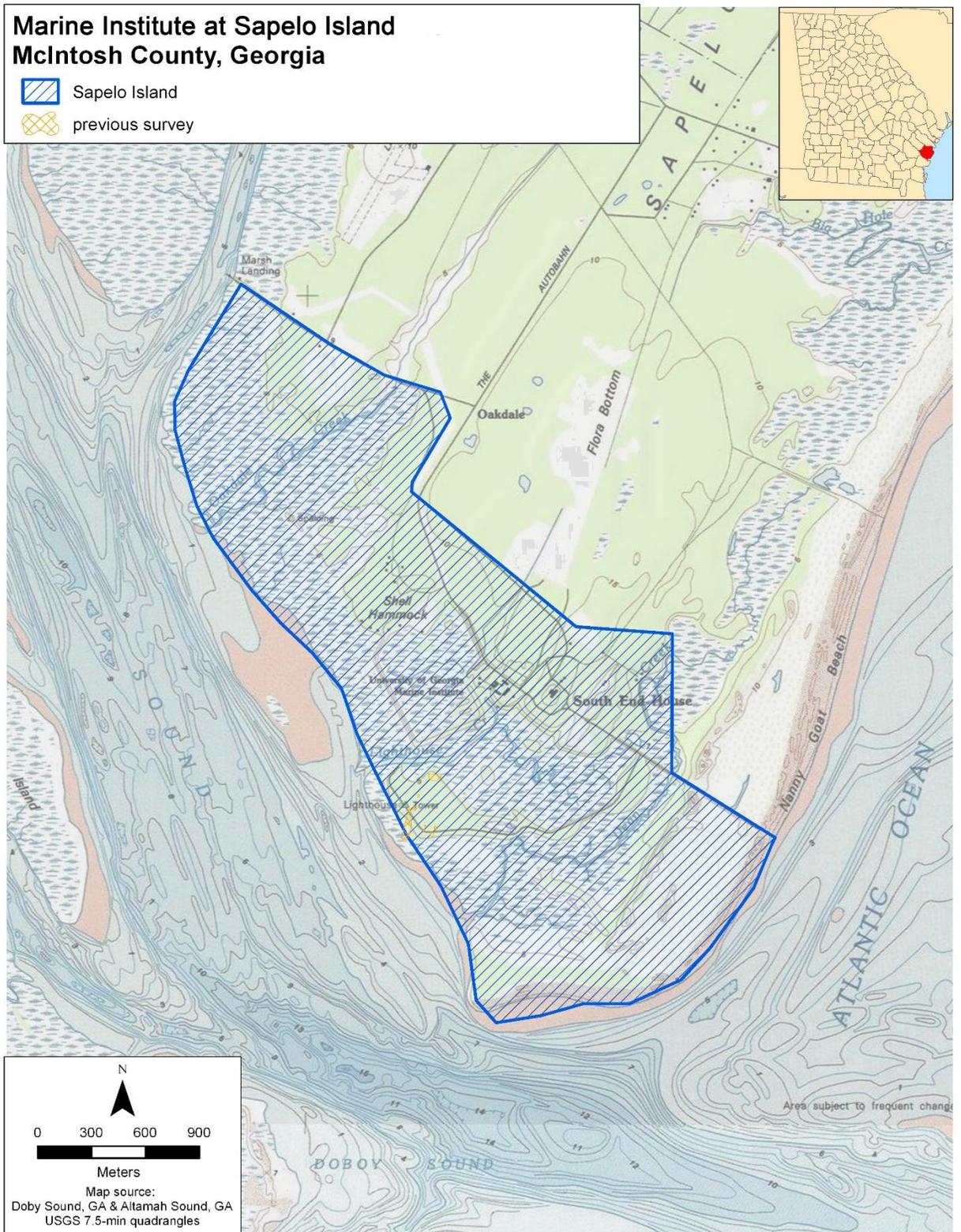


Figure 586. Sapelo Island Marine Institute property and area of previous archaeological survey.
(Source: USGS, annotated by the authors)

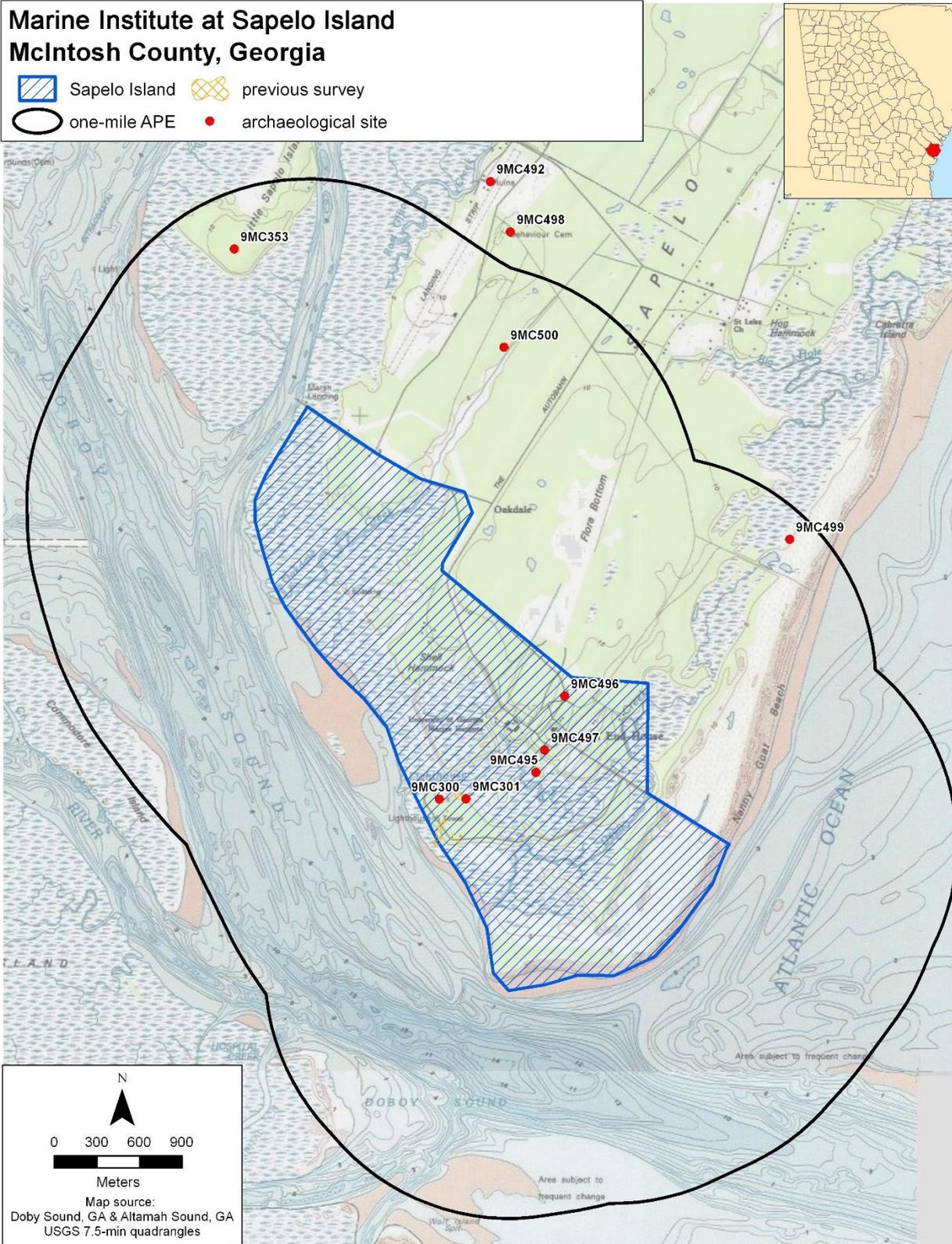


Figure 587. Sapelo Island Marine Institute property and area of previous archaeological survey, previously identified archaeological sites, and areas of potential effects (APE). (Source: USGS)

Summary Assessments

National Register-Eligible Properties

Sapelo Island Marine Institute

The Marine Institute property appears eligible for listing in the Georgia and National Register of Historic Places at the national and state levels under Criteria A, C, and D in the areas of Agriculture, Architecture, and Science for its association with plantation and estate development under Thomas Spalding, Howard Coffin, and Richard J. Reynolds between 1802 and 1953, and its subsequent role as a scientific research facility between 1953 and 1966, which constitutes the 50-year age consideration for listing. Notable features of the property include buildings, structures, roads, gardens, docks, field patterns, and land uses that continue to convey their historic associations with the period of significance.

The historic district is associated with several historic contexts, including early settlement, plantations, agriculture, African American coastal communities, early twentieth century estates, and marine research. The South End of Sapelo Island, including the Marine Institute where many estate resources are located, is a particular focus of the potential historic district. The island is also significant for its pre-historic resources.

Numerous physical resources of the island survive from the period of significance to convey the historic associations of the historic district. The patterns of spatial organization, land uses, views and vistas associated with the island and its plantation, estate, and African American community also survive from the historic period of significance and help to convey the significance of the historic district.

Overall, Sapelo Island, the Marine Institute, and its estate landscape retains integrity of location, setting, feeling, and association. The overall composition and layout of the landscape, and the scale and materials of the buildings, are consistent with the historic estate. Contemporary additions, such as docking facilities, maintenance sheds, and new residences, convey a different character, scale, and mass than most of the historic features of the estate landscape but can be introduced in a compatible manner. Such changes are consistent with the research mission of the property.

Several historic buildings within the Marine Institute property have been altered to accommodate new uses. Integrity of design and workmanship of several buildings is thus diminished, although as a living research center, some change is anticipated to continue, to allow for the accommodation of evolving needs.

Criterion A

Agriculture. Sapelo Island was first established as a plantation in 1802 and continued as a plantation and estate until 1953. Sapelo Island, including the South End, relates directly to the broader national context of nineteenth and early twentieth century plantations and estates, as well as the African American experience nationally and along the South Atlantic coastal barrier islands in particular.

Science. The early, foundational, research on Sapelo Island from the 1950s to the 1970s, which opened the window of understanding to the dynamics of the tidal salt marsh ecosystem in coastal Georgia, was conducted by biologists, chemists, and geologists utilizing the Marine Institute as their investigative platform. Many current theories about general ecology and the flow of energy in natural systems are based on research conducted here by the renowned ecologist Dr. Eugene P. Odum and others who have used the Marine Institute's facilities over the years. Important studies concerning the geological development of barrier islands and associated shoreline processes were also carried out at the Marine Institute. Scientists from the world over have since come to the University of Georgia Marine Institute, attracted by the opportunity to study estuarine and marine resources. Research at the Institute has generated over 1,000 scientific publications. Some of the early University of Georgia Marine Institute scientists and their fields of study were John Hoyt and Vernon Henry (geological studies and barrier island migration); Milton B. (Sam) Gray, the first to systematically investigate the natural limestone ocean reef formation off Sapelo that later became his namesake; Eugene Odum, John Teal, and Lawrence Pomeroy (marsh production and biological processes); Robert J. Reimold (vegetative changes documented through the use of high resolution aerial photography and imaging); Richard Wiegert (salt marshes and modeling systems); and Donald Kinsey (salt marsh outwelling produced by the tides from the ocean to the nearshore and inshore zones).⁶⁹⁴

Research programs were initiated on Sapelo Island in 1949 and have continued and expanded their cutting-edge activities to the present. As such, the Marine Institute property relates directly to broader national historic contexts relating to ecology, environmental sciences, research, and education.

Criterion C

Architecture. Several buildings and structures located within the Marine Institute property on Sapelo Island were commissioned by R.J. Reynolds for construction in the mid-1930s, while others survive from the Howard Coffin period of the 1920s. Many of these buildings were designed by well-known architects, are of good quality and possess interesting forms and detailing. Although altered for reuse, these buildings continue to convey historic integrity. As a collection, these buildings contribute to a historic district associated with the establishment of a self-sufficient estate and plantation.

Criterion D

Prehistoric. Refer to discussion of archeological resources, above.

Historic – Non-aboriginal Refer to discussion of archeological resources, above.

This small island contains thousands of years of human occupation along the south Atlantic coast, representing many critical moments in history. The five sites on the south end of Sapelo Island that are included within University of Georgia property boundaries are by no means representative of what should be

694. Ibid., 55–57.

archaeologically visible on every inch of Sapelo Island. The south end of Sapelo Island is part of a much larger cultural landscape that spans the island in its entirety. The archaeology that has been conducted on the north end of the island shows what could likely be recovered with proper care in testing and documenting the archaeological record on the Marine Institute property.

Resources potentially eligible for individual listing in the National Register of Historic Places

- Reynolds Mansion – UGA 6017 (1925)
- Evidence of Shell Hammock African American community (nineteenth and twentieth centuries)
- Shell Hammock Indian shell mounds (pre-European-American settlement)
- Sears house – UGA 6088 (1934)
- Sears garage – UGA 6089 (1934)

Note that individually eligible resources may also represent contributing resources with a historic district.

Resources potentially contributing to a National Register-eligible district

- Azalea Cottage – UGA 6085 (1934)
- Azalea Apartment – UGA 6086 (1934)
- Dormitory – UGA 6082 (1927)
- Greenhouse – UGA 6087 (1927)
- Greenhouse Cottage – UGA 6087 (1934)
- Gardener Cottage No. 1 – UGA 6090 (1934)
- Gardener Cottage No. 2 – UGA 6014 (1934)
- Gardener Cottage No. 1 Outbuilding – UGA 6091 (1934)
- Gardener Cottage No. 2 Outbuilding – UGA 6015 (1934)
- Slat House – UGA 6025 (1953)
- Marine Institute Laboratory – UGA 6074 (1936)
- South End Office Building – UGA 6076 (1934)
- South End Apartment Building – UGA 6077 (1934)
- Maintenance and Lab Complex – UGA 6078 (1934)
- Marine Institute Auto Shop – UGA 6071 (1934)
- South End Filling Station – UGA 6079 (1934)
- Fuel Storage Building – UGA 6095 (circa 1935)
- Power House – UGA 6016 (1934)
- Carpenter Shop – UGA 6072 (1960)
- Lumber Storage and Wet Lab – UGA 6069 (1966)

- South End Equipment Storage No. 2 – UGA 6070 (1966)
- Plumbing Shop – UGA 6092 (1953)
- Communications Tower and Building (mobile radio equipment) – UGA 6084 (by 1963)
- Shell Hammock Residence No. 1 – UGA 6062 (1961–1966)
- Shell Hammock Residence No. 2 – UGA 6063 (1961–1966)
- Shell Hammock Residence No. 3 – UGA 6064 (1961–1966)
- Shell Hammock Residence No. 4 – UGA 6065 (1961–1966)
- Shell Hammock Residence No. 5 – UGA 6066 (1961–1966)
- Shell Hammock Utility Building – UGA 6067 (1960)
- Marine Institute residential landscape (1960s)
- Landscape resources: mansion lawn and tree groves, tree-lined road network, water garden, tennis court, sundial, grill, birdbath, Orchard/allée, Palmetto tree plantings, Nanny Goat Beach Road, road and path traces, teal boardwalk, brick wall and stormwater management system, Quad Fountain, white storage tank, road network in quadrangle area, quadrangle landscape, boat ramp

