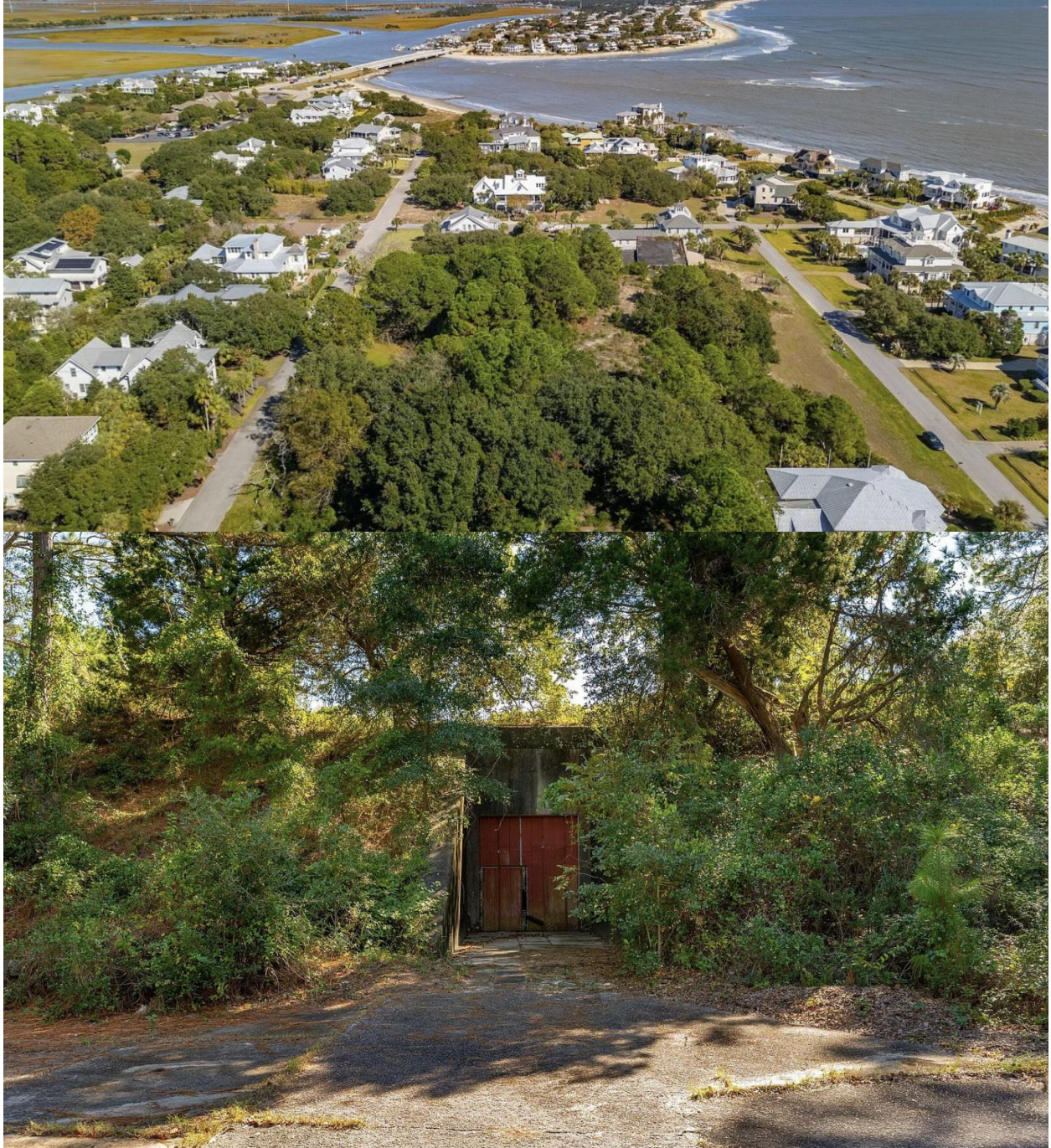


**The History of Battery 520/ the Curd Residence at 3019 Ion Avenue.
Marshall Reservation, Sullivan's Island.**



Butler Preservation L.C. for Loyal Architects

March 2026

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Introduction:

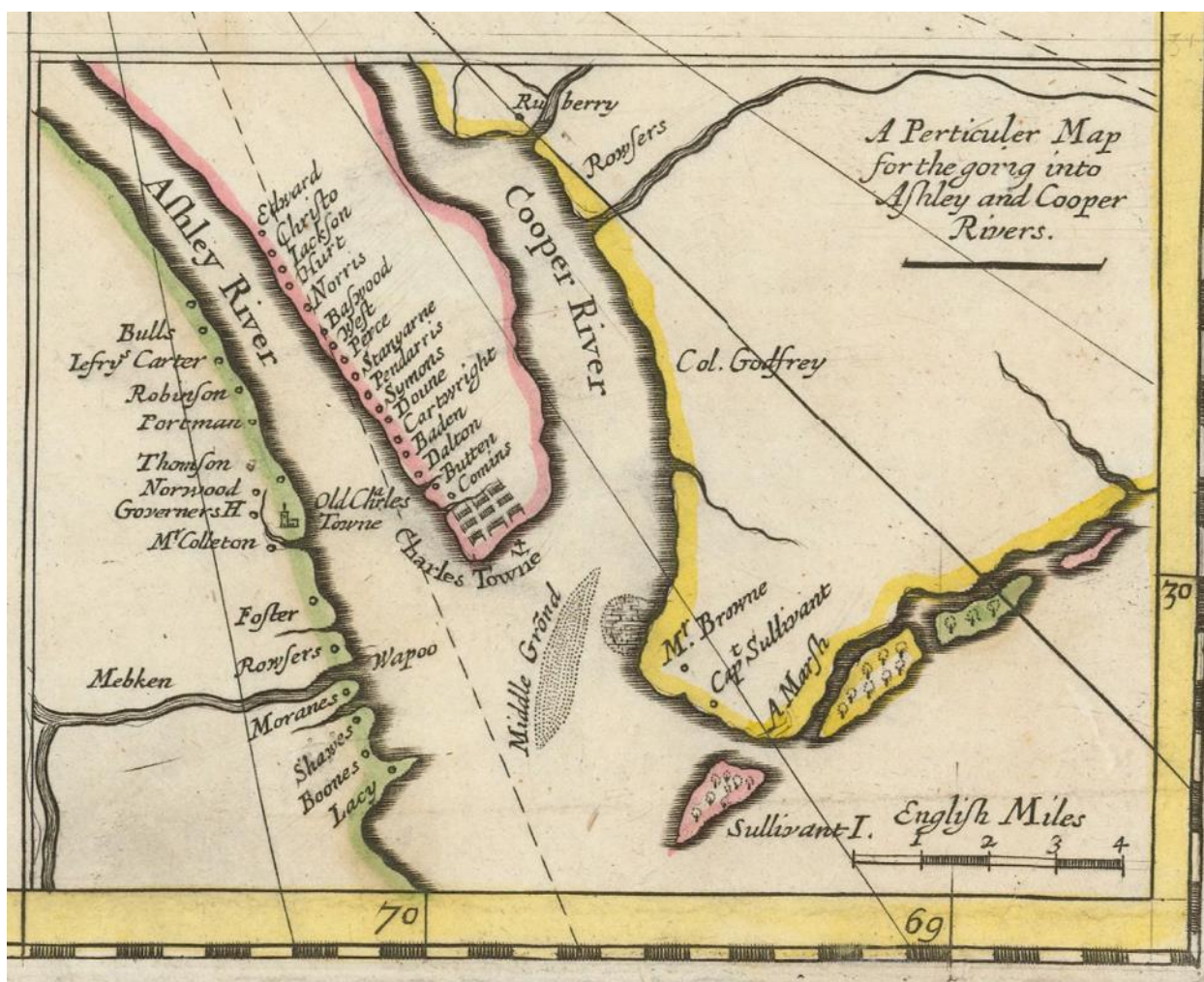
3019 Ion Avenue is located at the eastern end of Sullivan's Island, between Station 30 and Station 30 ½. It comprises three narrow lots that front Ion Avenue to the north and Brownell Avenue to the south. The property consists of three tax map parcels (TMS 5291200118, 5291200119, and 529200091), which are designated on historic plats as Block 11, lots 2A, 2B, and 2C of the Marshall Reservation subdivision. The one-hundred-acre Marshall Reservation was created in the 1910s, and the extant battery/bunker complex known as Battery 520 was constructed in 1943. The Town of Sullivan's Island acquired the property from the United States Government during the demilitarizing of the island following World War Two, dividing the Marshall Reservation into parcels for sale and residential development. Battery 520 consists of two concrete gun mounts at each end of the complex, joined by a concrete and earthwork ordinance storage compound that is now 3019 Ion. The gun mount parcels to the east and west have been turned into residences (one of which adaptively used the concrete fortification with little alteration, and the other which required heavily altering the gun mount and removing much of the earthworks).

E. Gordon Able, M.D. purchased lots 2A, 2B, and 2C from the town in 1954 but did not development them. Robert and Dorothy Curd bought the lots in 1965 and converted their portion of Battery 520, the casemented fire control bunker for ammunition storage constructed of ten-foot-thick concrete and covered in earth to conceal and protect it from enemy fire, into a residence. Mr. Curd blew a hole in one side of the bunker using dynamite to create a large window to illuminate the subterranean residence. The property is still in the Curd family but is currently vacant and for sale. The battery is listed by the Town of Sullivan's Island as an Island Landmark but has been deemed ineligible for the National Register by the State Historic Preservation Office because it has been altered. The property is currently listed for sale, with plans to build new residences and preserve the historic bunker spaces.



Area Context: General History of the Island

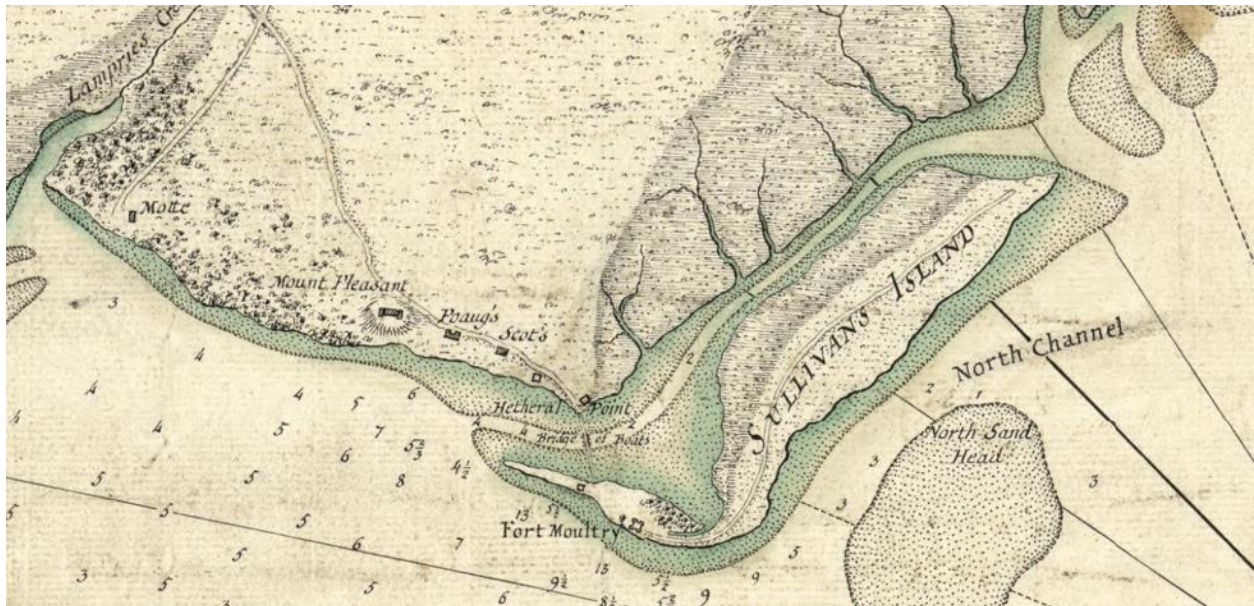
Sullivan's Island is named for Florence O'Sullivan, who arrived in South Carolina as one of the earliest settlers in the late seventeenth century. O'Sullivan was a ship captain but little else is known about his early life, including how the island passed from him to the colonial government of South Carolina. Nevertheless, following his death, the provincial government designated the island as the place of quarantine for ships suspected of carrying disease when arriving in Charleston. A series of short lived "pest houses" or lazarettos were erected, and Sullivan's Island became the first land contact for many enslaved Africans who arrived in South Carolina and were quarantined before being brought to Charleston for sale. A memorial "bench by the road" was dedicated by acclaimed author Toni Morrison in 2008, to commemorate the island's significance in the North American slave trade.



A 1685 map, one of the earliest depictions showing Sullivan's Island.

Traditionally, most of the houses on the island were seasonal residences for Charlestonians, although with the ease of modern transportation to and from the island by bridge, it has become more densely built and has many year-round residents today. As late as the 1960s, the Army Corps of Engineers noted that, "Sullivan's Island and Isle of Palms are summer beach resorts, and all

beach frontage is privately owned. Neither has any industry, and the majority of the working population of these communities commute to jobs in Charleston.” At that time, the population was just 1,358 residents.



A circa 1780 map showing “Fort Moultrie on Sullivan’s Island”, before Moultrieville was established and residents began to construct homes there. Library of Congress.

The island also has a longstanding role not only in coastal defenses but in maritime lifesaving, which is most visible today in the names of the Station streets across Sullivan’s. The United States Lifesaving Service, forerunner to the Coast Guard, was established on Sullivan’s Island in 1894 to protect beachgoers and residents from drowning, and boats and ships from other maritime disasters such as storms or getting caught by sandbars.

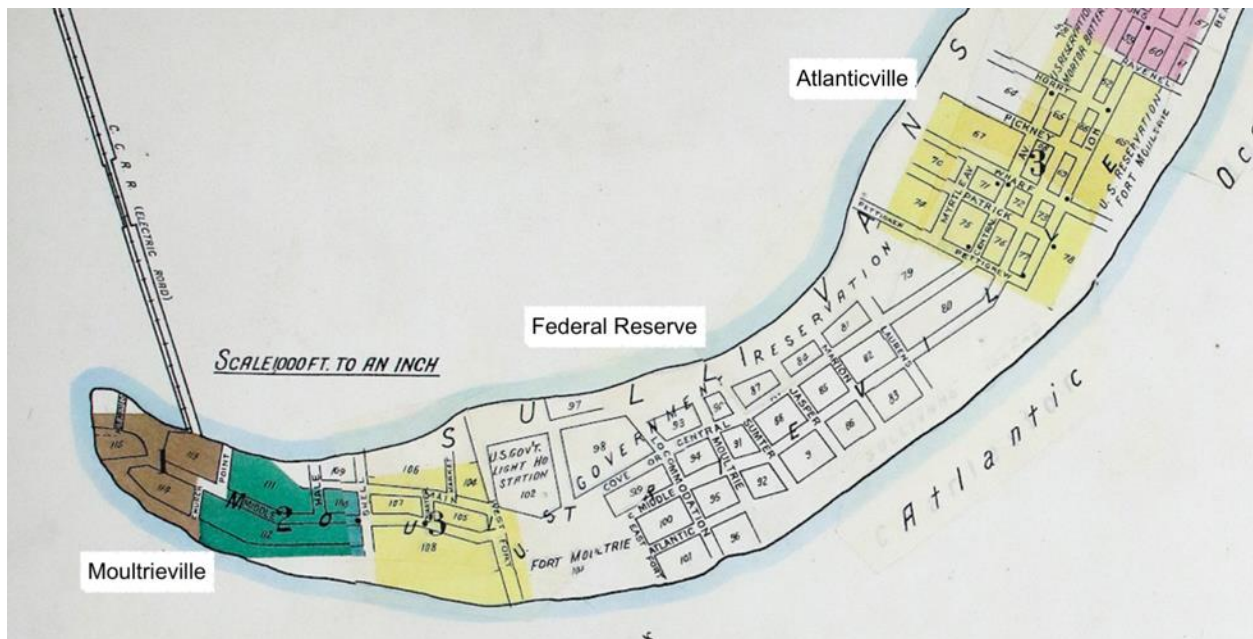
Resort Towns: Moultrieville and Atlanticville

After the American Revolution, residential development began on the island near the Fort Moultrie, on the western end of the island. The small village of Moultrieville was established on the island for summer residences. In 1802, John Drayton wrote that, “in 1791, the legislature passed a resolution permitting people to build there, on half acre lots; subject, however to the condition of their being removed whenever demanded. . . it contains at present near two hundred dwelling houses, besides kitchens and out officers. This place is little resorted to in during the winter and spring; but in the summer, and autumn, numbers of people reside there, for pleasure or health, and packet boats are playing at all hours, between it and Charleston. Though most of the buildings were destroyed during the Civil War because of their proximity to Fort Moultrie and the fighting, Moultrieville had a building boom in the 1870s and still holds some of the earliest architecture on the island.



A stereograph of a beach house in Moultrieville, 1870. Library of Congress.

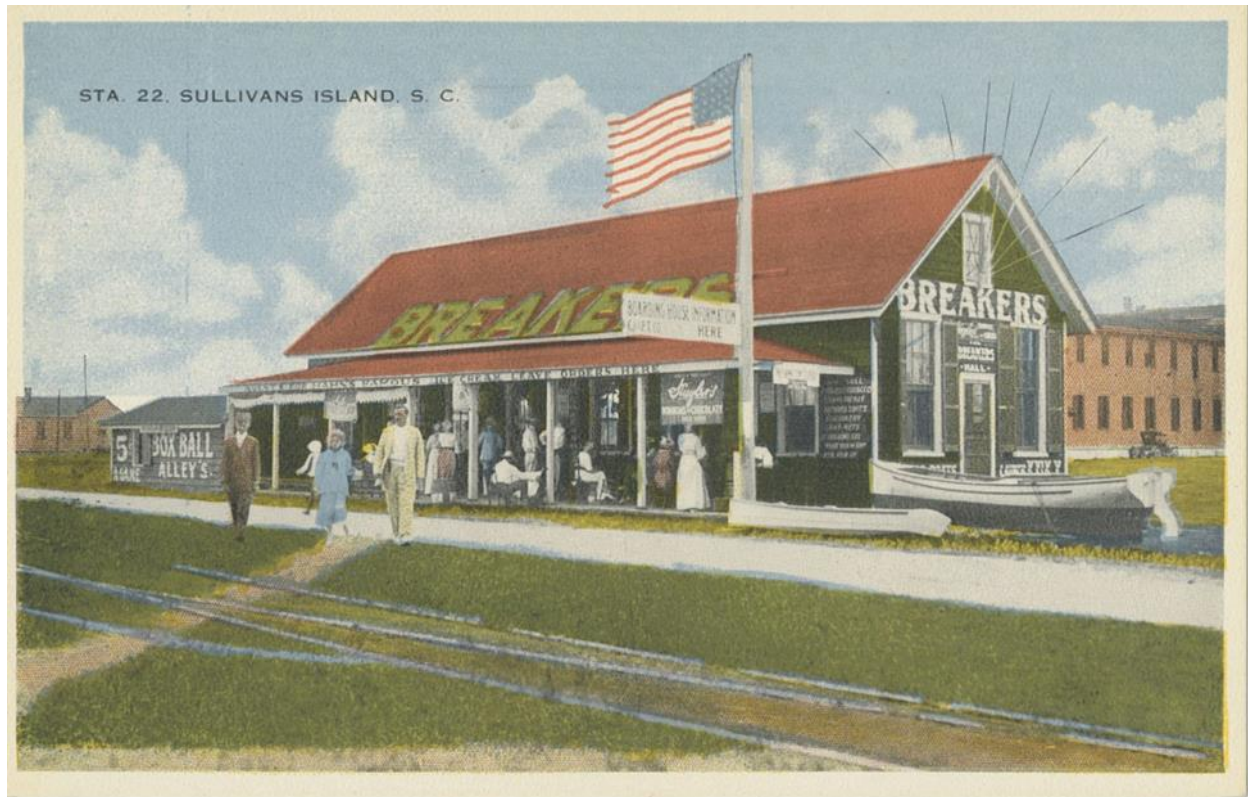
Atlanticville, another small resort development replete with residential lots surrounding the Victorian era Atlantic Hotel (previously called the New Brighton and relaunched in 1896 and which burned in 1925) was created in 1910 by investor James O'Hear. Atlanticville is located just east of present-day Ben Sawyer Boulevard and like Moultrieville, is a National Register historic district. The area was popular for surf bathing and beach visits.



Moultrieville, Atlanticville, and the Federal Reserve (including Fort Moultrie) on the 1938 Sanborn Map.

Another defining characteristic of the island are the station numbers for streets, which harkens back to Coast Guard designations. Christina Butler notes, "The island played a longstanding role not only in coastal defenses but in maritime lifesaving, which is most visible today in the names

of the Station streets across Sullivan's. The United States Lifesaving Service, forerunner to the Coast Guard, was established on Sullivan's Island in 1894 to protect beachgoers and residents from drowning, and boats and ships from other maritime disasters such as storms or getting caught by sandbars."



The Breakers beach-side restaurant at Station 22.

The Twentieth Century

Before the modern bridges were constructed, residents reached Sullivan's via boats, ferries from Mount Pleasant, and by trolley cars that once brought people from downtown Charleston all the way to the beach. Sullivan's experience a building boom in the 1930s as the Federal Reserve area expanded, and after World War Two, when Fort Moultrie was decommissioned and the surrounding lands were conveyed to Sullivan's Island Township Commission for sale and development. After nearly two centuries of public ownership, residents could hold title to their own properties in 1953, and many families who used their leased properties only seasonally prior to that time, decided to stay and build during the baby boom era.

The civic center on Middle Street has a state-of-the-art fire station and EMS, town hall, and Stith Park with tennis courts, playgrounds, and a soccer field. The island's sought-after housing stock includes historic beach cottages that are protected by a dedicated Design Review Board and sprawling, beautiful new beach houses and cottages that incorporate the island's traditional architectural character such as light colors, beadboard and shiplap interiors, houses sited for optimum breeze and views, and wide porches.

Architectural Description

3019 Ion comprises three lots that were one adaptive use residence within the ammunition storage bunker of Battery 520, Marshall Reservation (discussed further in the history section of this report). The property is bounded to the east and west by residences that are also on parts of Battery 520's gun batteries. The National Register nomination for the island notes of 520 that, "each of the batteries is a reinforced concrete structure set within an earthen mound, originally with an open face along their south side facing the ocean. Each battery housed a single 70-ton gun with a 55-foot-long barrel and 16-inch bore capable of firing 30 miles out to sea. The architectural integrity of each of the structures was compromised by the infilling of their open front walls. In recent years the settings of each of the resources has been further compromised by the construction of modern houses and the partial excavation of the side of one of them for a swimming pool."¹



The three parcels comprising 3019 Ion have street exposure facing Ion and Brownell Streets. A red door with concrete cheek walls provides the only entrance/exposure on the Ion Street side. The interior of bunker features a long hall and big storage rooms on the inside, with metal riveted doors typical of early twentieth century bomb-proof/bunker construction. New South Associates' 2024 Island Survey notes, "The three resources identified in the Town of Sullivan's Island database as Fort Marshall Gun Battery or Battery 520 are part of a single earthwork, which measures 175 meters long (575 ft.) and rises 10 meters (33 ft.) above the surrounding ground surface. The earthwork is now split among several parcels, with three separate residences occupying the subdivided military structure. They were all historically part of the Battery 520 system and was called the Battery 520 Sighting Station or Marshall Target Range Station."² The battery cost \$1.5

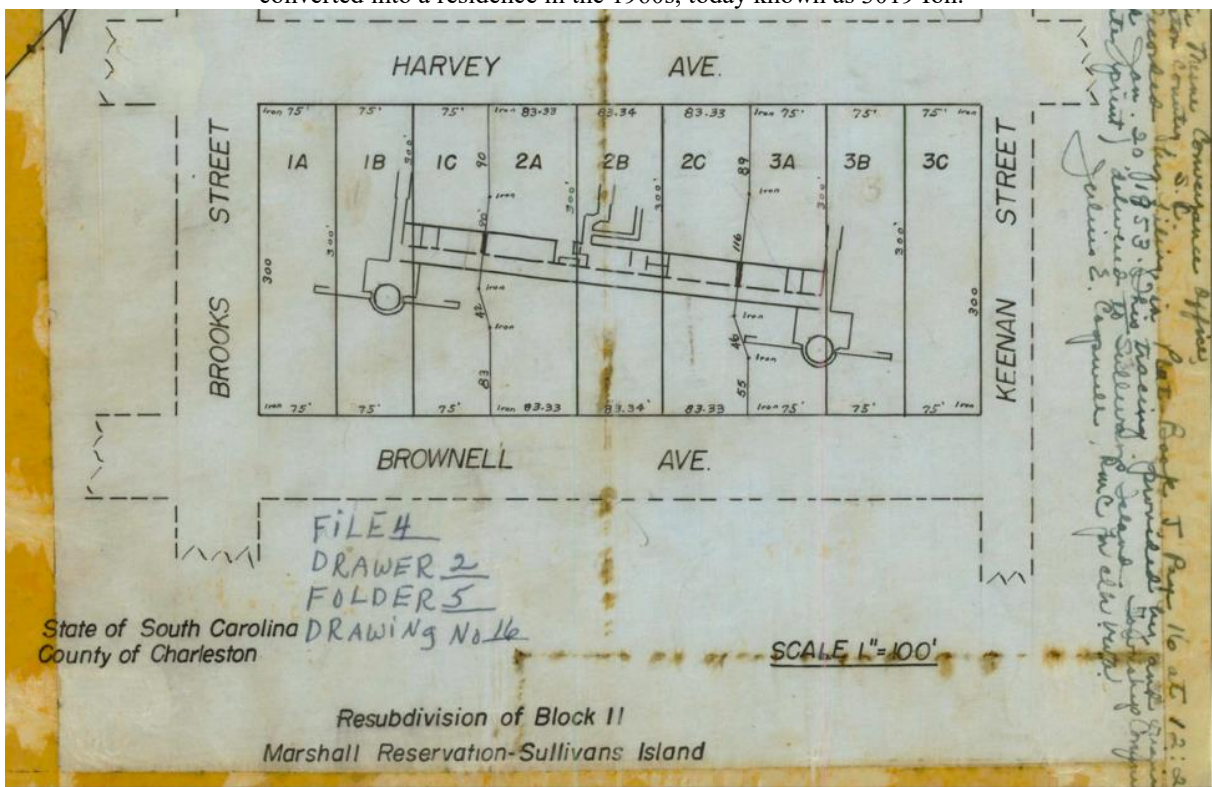
¹ National Register for Historic Places. Sullivan's Island Resources, continuation sheet.

² New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 85.

OWS FULL EXTENT OF BATTERY
IN & BROWNELL STATIONS 30 & 31 G



As-built drawings by architect Michael Curd in 2023 show the central portion of Battery 520 that his parents converted into a residence in the 1960s, today known as 3019 Ion.



³ New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 30.



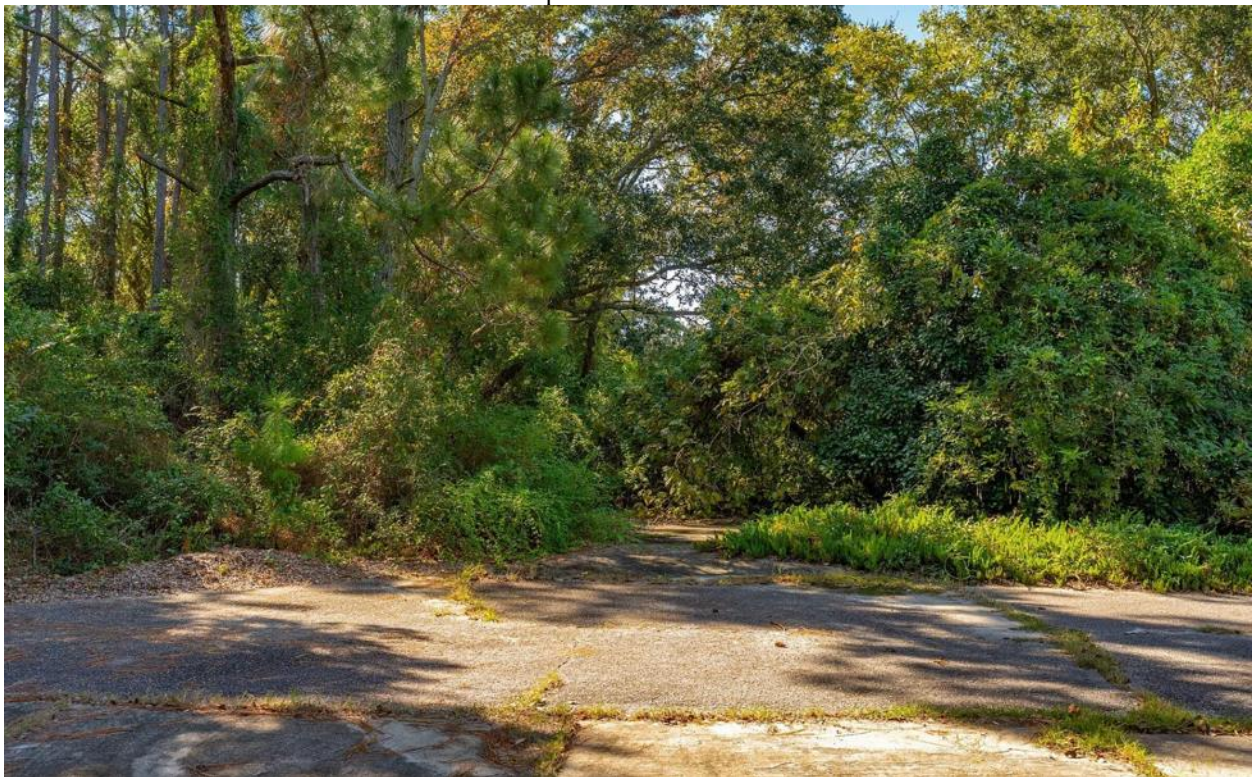
Listing photos showing proposed address for the three parcels. This view of the earth-covered facades was taken from Ion Avenue. Trees and vegetation have obscured the street views of the bunker.



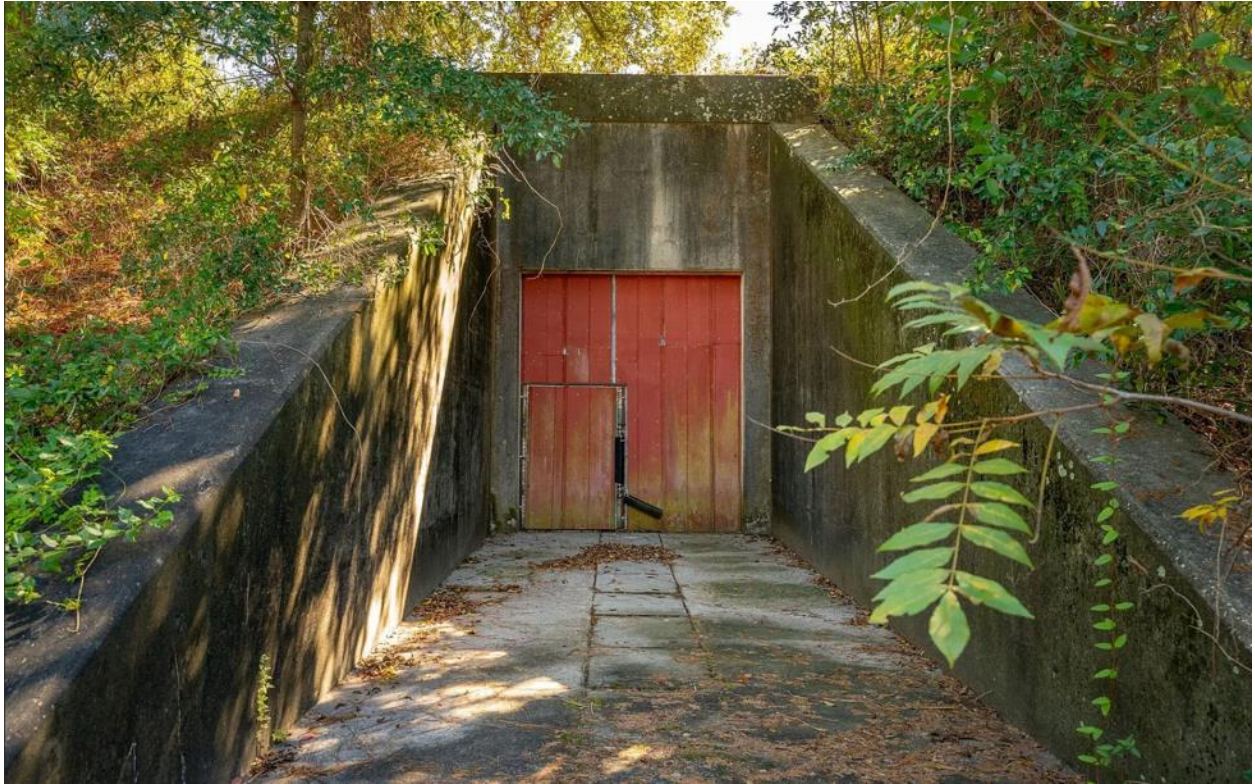
A non-historic entrance, viewed from the Brownell Avenue side of the property.



A bricked in open viewed from Ion Avenue.



A concrete driveway on the Ion Avenue side of the property.



The original Ion Avenue entrance to the bunker. The 5-v crimp metal clad doors are not historic. The concrete lintel and cheek walls are original.



Aerial view of the property show it covered with earth and vegetation, which hides it from view as was the intention when it was used as munitions storage for the gun mounts on either side.



Interior views from the property listing show concrete interior walls that are nearly two foot thick, with concrete ceilings lined with electrical conduit above. The steel doors show evidence of corrosion from exposure to moisture and salt air. Previous owners cut into the concrete slab floor to run systems, denoted by the osb plywood coverings.





Above: one of the long hallways with munitions storage rooms on either end. The concrete floor shows ghost marks from tiled flooring. 1960s and 1970s metal track windows are doors from the bunker's residential conversion lean against the walls. Below: a living room with a Charleston coastal map painted by Mr. Curd, who did all of the electrical, plumbing, and other work for the residential conversion himself in the 1960s. The ceilings are concrete that appears to be lined with insulation material (possibly asbestos given the age and initial military use of the building).





An entrance that Mr. Curd blew through the ten-foot-thick Brownell Avenue facing side of the bunker to create a window opening. It has been enclosed with plywood and dimensional framing and is partially backfilled with earth on the exterior. Note the rebar sticking through the concrete.



One of the bunker hallways, constructed of concrete for the walls, floor, and ceiling, and with riveted bombproof metal doors leading into storage rooms.



Another view of the hallway, showing the width of the interior concrete walls.

Neighboring portions of Battery Marshall 520.

New South Associates notes, “The dwelling in the easternmost portion of the battery (3031 I’On Ave.) has a concrete façade with an add-on concrete exterior stair [photographed and further described below]. Metal railings extend from the top of the stairs along the eastern edge of the original structure. Extensive rust was visible on the railings. Cracks and discolorations in the black paint applied to the original structure elevation were visible. The easternmost gunport of the battery has been enclosed with four sets of French doors. Cracks 30–45 centimeters in length, with white patches of saline efflorescence along them, were present to the east of the gunport. Vegetation along the northern earthwork elevation is overgrown. One of the two doors on this side was enclosed with an asphalt-shingle roof, vinyl siding, and a garage-style door. Dense vegetation is also present along the north side at the earthwork’s western end. The northwestern corner, which is associated with 3003 I’On Avenue, is terraced, with a pool and deck taking up most of the terrace. A fourth parcel, on which a circa-1958 ranch house is sited atop the earthwork, is located two blocks to the west at 2863 I’On Avenue.”⁴

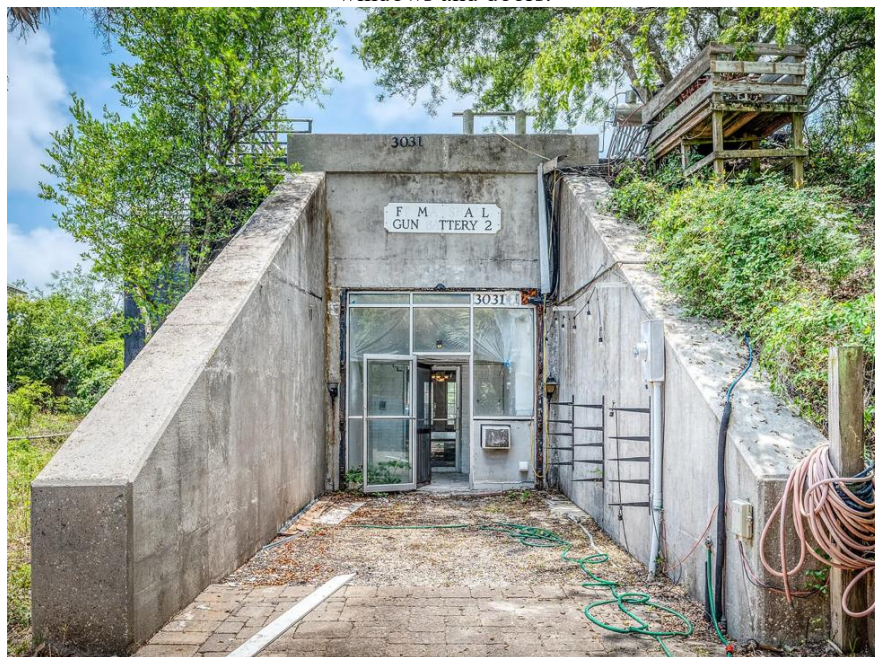
The “Bunker House” at 3031 Ion Street (TMS 5291200092) is owned by the Eden Family Living Trust. William Wilhauer purchased the property from the U.S. Government in 1951 for \$4,000. The parcel contains a 6,000 square foot northern gun battery that has been converted into a residence. Lou Edens bought the house in March 1998 and excavated the ocean side of the property to create a driveway, removing tons of earth and exposing and 16-foot-wide concrete “burster

⁴ New South Associates. *Sullivan’s Island Historic Resources Survey*. Submitted July 2024, pg. 85.

course” designed to withstand shelling.⁵ Deborah Curd Herbert noted that the family camped in one large room during the renovation. Her father blew a hole in the beach side of the battery with dynamite.⁶



Recent listing photos of 3031 Ion, showing the intact gun mount and cheek walled entrance, each fitted with modern windows and doors.



⁵ *Post and Courier*, 16 May 2007, pg. B3.

⁶ *Post and Courier*, 16 May 2007, pg. B3.

3012 Brownell Avenue (TMS 5291200117) was built in 1992. The new house required removing part of the earthworks around the gun mount. The mount itself is extant but was heavily altered to convert it into part of the residence.

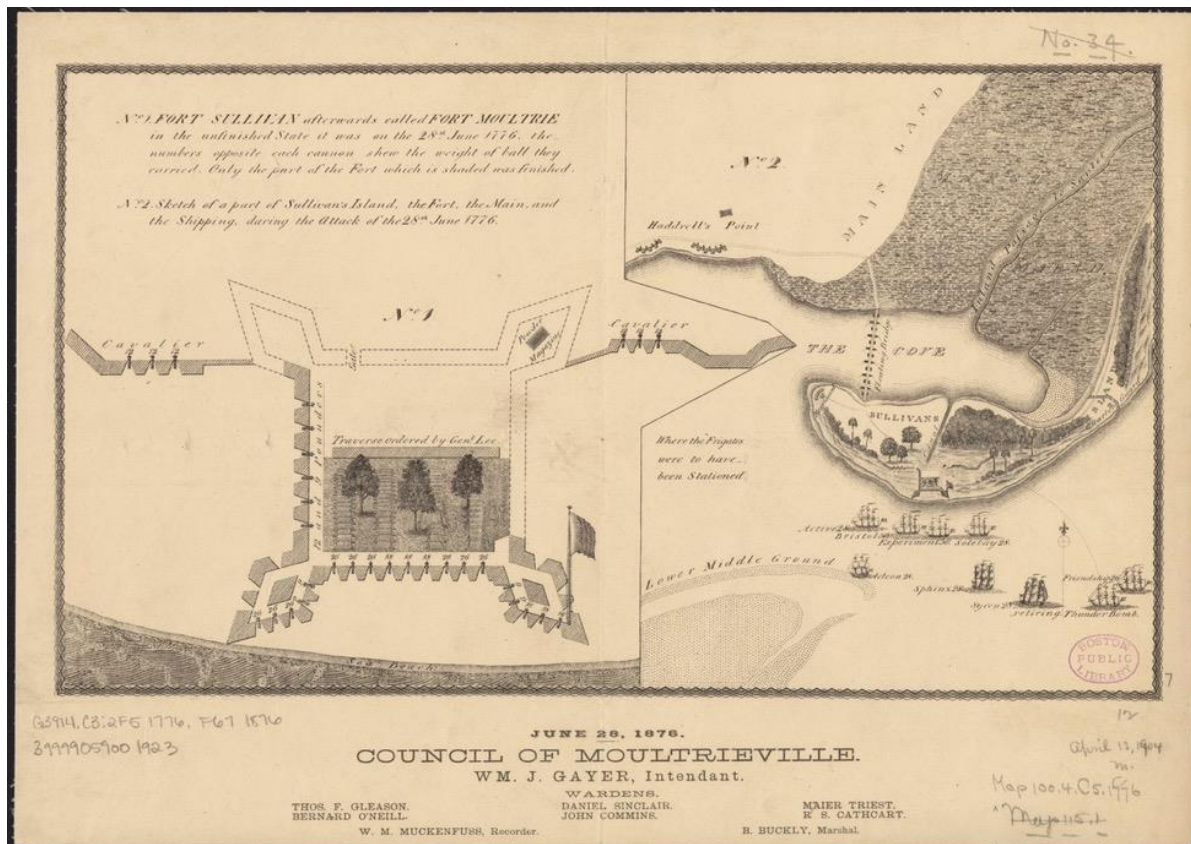


Above: Google Street view of the new house with the gun mount in the rear; below: the gun mount as viewed from the street. It was heavily altered with brick arcading and modern infill windows that are now clad with metal.



General History of Military Installations on Sullivan's Island

Sullivan's Island is a beach community with a long and important history as a first line of coastal defense from the American Revolution to World War Two. The island is most famous for the Battle of Sullivan's Island, June 28, 1776, which was the first decisive patriot victory of the Revolutionary War. General William Moultrie famously repelled the British Royal Navy with a simple palmetto log and earthen fortification, at the site of Fort Moultrie today. The National Park Service manages Fort Moultrie and Battery Jasper within Fort Moultrie National Historic Park.



“No. 1 Fort Sullivan afterwards called Fort Moultrie in the unfinished state it was on the 28th June 1776.” Surveyed in 1776. Leventhal Map Collection.

In December 1805, the State passed “An Act to cede to the United States various Forts and Fortifications, and Sites for the Erection of Forts” and laid claim to the “lands reserved for Fort Moultrie on Sullivan’s Island.”⁷

The island's fortified architecture evolved as technology and defensive strategy changed. The extant military landscape on Sullivan's Island represents three distinct phases of coastal defenses. The National Register nomination for the island notes, the older [portion of] Fort Moultrie having been constructed in 1809 to 1811; many of the resources being part of a larger national coastal defense network that was constructed between 1897 and the early 20th century as part of the

⁷ 19 December 1805, Act No. 1856. Thomas Cooper, ed., *The Statutes at Large of South Carolina*, volume 5 (Columbia, S.C.: A. S. Johnston, 1839), 501–2.

Endicott System; and additional resources representing the additional build-up that occurred during World War Two. Architecturally, they are typical of national trends and standardized planning that was occurring during their periods of construction.”⁸

Batteries Logan, Thomson, Jasper, and Pierce Butler/Capron were built for the nationwide Endicott System in the late nineteenth century. The Endicott system was conceived in 1885 by a board headed by the Secretary of War William C. Endicott. The plan called for the creation of a series of 29 coastal defense locations armed with mortars, artillery, and mines. Work on the Sullivan’s Island fortifications commenced in 1897.⁹

The local newspaper described the island’s military installations as follows in 1906:

“Sullivan’s Island Reservations. Their Metes and Bounds Described by the War Department. Washington, August 11.—Special: An order published by the War Department today for the information and guidance of all concerned, describes the metes and bounds of the several reservations on Sullivan’s Island, north of the main entrance to Charleston Harbor, comprising the post of Fort Moultrie. Main reservation, including old Fort Moultrie, Batteries Jasper and Logan[,] and the post proper has an area above high water of 147.2 acres; Batteries Thomson and Gadsden, 15.9 acres, and Battery Capron 14.6 acres . . .

Battery Capron was used as a target practice range and was later renamed and expanded as Marshall Reservation (where 3019 Ion now lies). The 1906 publication described the site at that time as comprising

“all land covered by water, including highlands, flats and marshes on the east end of Sullivan’s Island, south of the right of way of the Charleston Electric Railway Company, and east of the street, an extension thereof southward to low water mark, designated as 6th street on the plan of Moultrieville.

Grant of the lands comprised in the target range was made subject to the following reservations and exceptions: Such portion of the front beach of Sullivan’s Island as lies below a line drawn 20 feet above high water mark, and parallel thereto[,] shall be always open to the public as a foot and driveway. Free and unobstructed right of passage by foot and carriage across these same, subject to the right of the United States to close and exclusively occupy the reservations under the following circumstances: During hours of actual target practice when due and proper notice shall be given to the public; actual military drill[;] and during time of war. Area of the target range is given as 118.2 acres. R.M.L.”¹⁰

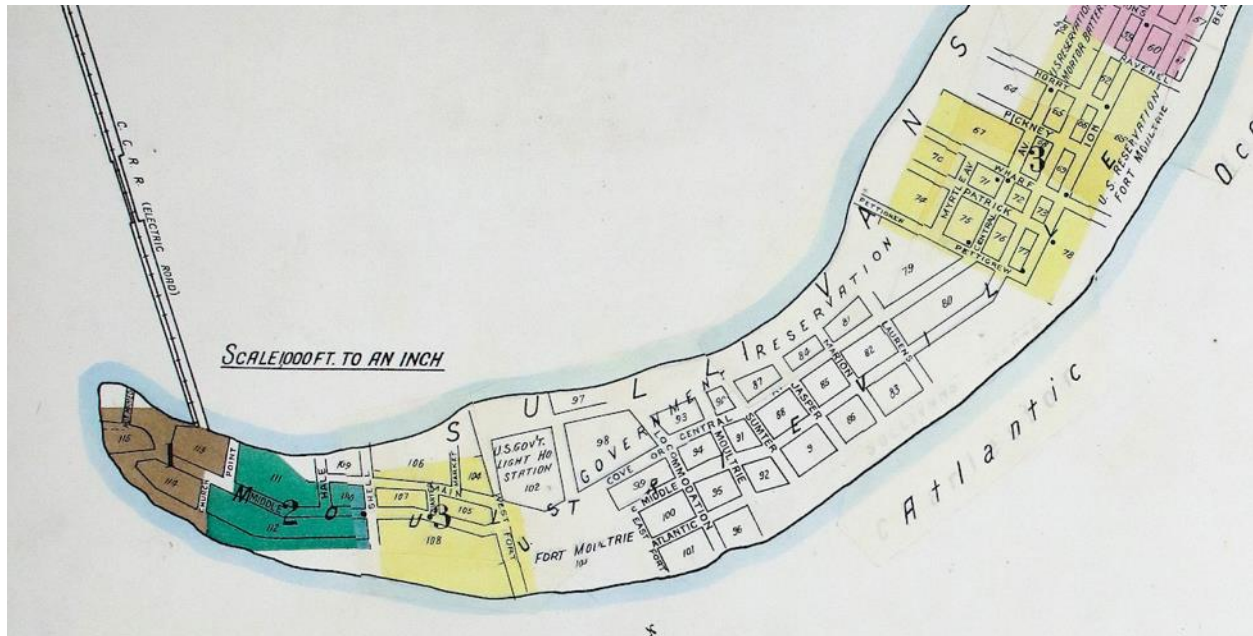
During World War One, Fort Moultrie was used for coastal defense and for training field artillery units. Marshall Reservation on the eastern end of the Island, a 100-acre site, was constructed at that time. It contained a portable searchlight. Fort Moultrie’s military population dropped to 100 enlisted men after the war, which was insufficient to conduct routine maintenance of the island’s military resources. For this reason, most of the buildings constructed during the WWI era were

⁸ National Register for Historic Places. Sullivan’s Island Resources, continuation sheet.

⁹ National Register for Historic Places. Sullivan’s Island Resources, continuation sheet.

¹⁰ *News and Courier*, 13 August 1906, pg. 5.

sold for salvage and most of the guns were removed from the Endicott-era batteries, leaving only six operational battery points on the island. National Guardsmen trained on the island in the interwar years. With the onset of World War Two, Fort Moultrie's enlisted population was again increased to capacity, and a personnel depot was constructed on the north side of the Marshall Reservation.¹¹



1938 Sanborn Fire Insurance Map showing the Government Reservation. The east end of the island was not surveyed.

The last era of fortification on the island occurred leading up to and during World War Two, when Charleston's coastal defenses were again updated and expanded. Fort Marshall Gun Battery 520 was built at this time. Gun mounts and batteries from this era were designed for coastal defense and featured armaments and retractable fixtures that could be hidden when not in firing position. Although these structures are classed as earthworks, concrete masonry with metal rebar was integral to their construction.¹²

Karl Sonderman explains that,

“When the Japanese bombed Pearl Harbor in December, 1941, Charleston's defenses consisted of Battery D, 13th CA and the nine batteries of the 263rd CA Regiment manning Batteries Thomson, Logan, Capron/Butler, Huger, the four 155mm guns at the Marshall Reservation, and numerous searchlight locations surrounding Charleston's harbor. Immediately after war was declared, all of these defenses were placed under full alert with gun crews serving in two shifts over the next ten months. Additionally, the entire barrier islands' beaches surrounding Charleston's harbor including Sullivan's Island, were guarded by patrols from the Charleston-based, 2nd Battalion Combat Team, of the 156th U.S. Infantry Regiment. As defensive measures were quickly enacted to defend

¹¹ New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 30.

¹² New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 78.

Charleston's harbor, the national mobilization to fight in two different theaters of war resulted in the rapid reduction of regular Coastal Artillery soldiers in Battery D, 13th CA. In January and February, 1942, large segments of FMMR's sole remaining regular army unit were reassigned to new Coastal Artillery units deploying overseas. By April 24, Battery D had been so reduced that it was inactivated and all of its remaining personnel were incorporated into the 263rd CA Regiment, which now had sole responsibility of defending Charleston's harbor throughout the remainder of the war."¹³

Sullivan's Island did not see action during the war, although German U-boats were observed in Charleston harbor. After World War Two, the island's military installations were deactivated. Fort Moultrie, "one of 57 military establishments to be abandoned" in the Charleston area, was shut down in the summer of 1947.¹⁴ Many of the buildings on Middle Street that were built were built by the military for the men serving at Ft. Moultrie and their families were sold by the U.S. Government to the Town of Sullivan's Island, who in turn sold them to private buyers.¹⁵ Starting in December 1949, the US War Assets Administration most of their real estate, including the Federal Reserve and Marshall Reservation, to the Sullivan's Island Township Commission.¹⁶

Residential development began slowly and gained momentum in the 1950s. Historian Nic Butler explains that "the fear of future over-development inspired a general reluctance among island residents to acquire fee simple titles to their respective properties. Sentiments began to change when those holding fifty-year licenses from the state discovered that the ephemeral nature of their tenure rendered them ineligible for post-war, low-interest building loans offered by the Federal Housing Authority (FHA). Charleston County's legislative delegation pursued a legal remedy to this conundrum in Columbia, and a state law ratified in 1951 empowered the Township Commission of Sullivan's Island henceforth to issue leases for seventy-five years."¹⁷ By 1953, the state granted permission to convert leaseholds to freeholds and record the deeds with Charleston County, should the owners wish to do so.¹⁸

¹³ Sonderman, *Remembering the Legacy of Coastal Defense: How an Understanding of the Development of Fort Moultrie Military Reservation, Sullivan's Island, South Carolina, Can Facilitate its Future Preservation*, pg. 190

¹⁴ *Charleston Evening Post*, 28 March 1947, pg. 1.

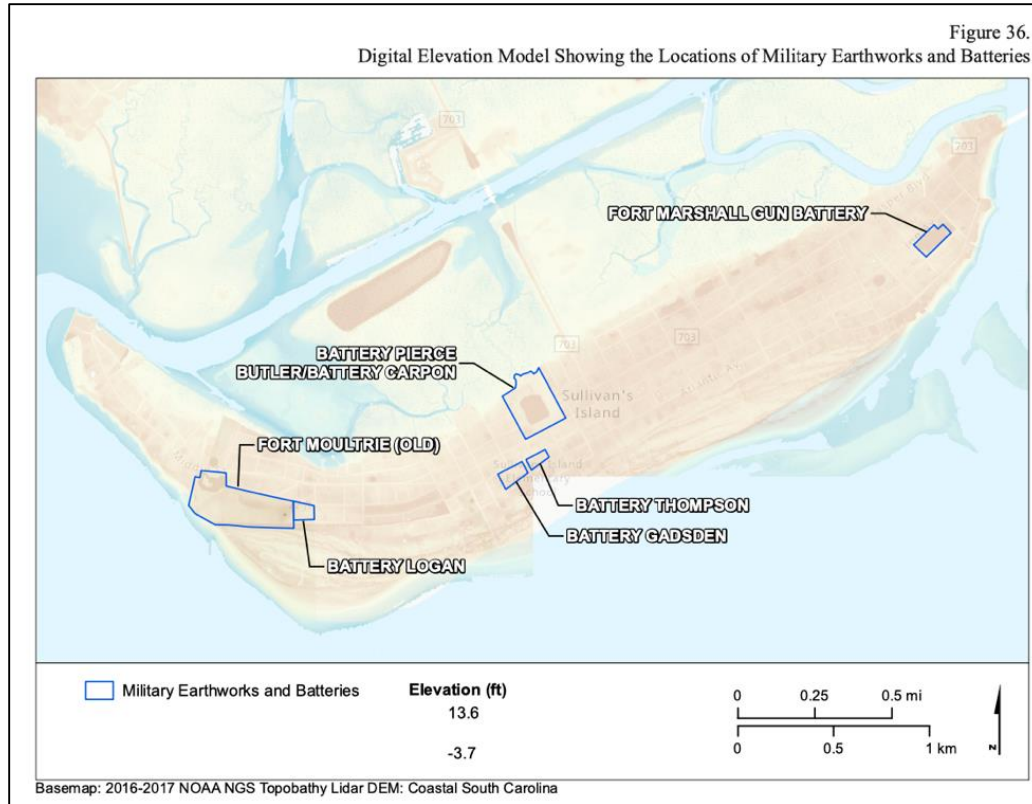
¹⁵ Millar, *A Study of Vernacular Beach Cottage Typologies*, pg. 19-20.

¹⁶ Charleston County Deed book K51, pg. 271. Quitclaim to the Military Reservation.

¹⁷ Nicholas Butler. "Sullivan's Island- property of crown and state." <https://www.ccpl.org/charleston-time-machine/sullivans-island-property-crown-and-state> (accessed 21 March 2026).

¹⁸ Nicholas Butler. "Sullivan's Island- property of crown and state." <https://www.ccpl.org/charleston-time-machine/sullivans-island-property-crown-and-state> (accessed 21 March 2026).

Descriptions and Current Uses of Military Installations on Sullivan's Island



Battery Pierce Butler/Battery Capron: 2114 Middle Street

Pierce Butler and Capron are contiguous batteries that were erected between 1896 and 1897. They mounted 16 12-inch mortars in total.¹⁹ The battery was infilled after 1987 to prevent injury or intrusion in the deep concrete shafts of the facility. The site today holds a cell phone tower, wastewater treatment facility, and J. Marshall Stith Park.

¹⁹ Sonderman, *Remembering the Legacy of Coastal Defense*, pg. 34.

by V. Chicco, 83 Market street.

BATTERY CAPRON

The Mortar Battery on Sullivan's Island Has Been Named.

The mortar battery on Sullivan's Island has been named **Battery Capron** after the distinguished Capt. Alwyn Capron, who died several weeks ago. Capt. Capron was in the First artillery, which has headquarters on Sullivan's Island, and the soldier boys on the island are proud of his record and that of his son who lost his life at Santiago. Capt. Capron had the honor of opening the artillery attack on San Juan Hill.

Charleston Evening Post, 27 September 1898



Recent aerial view of Pierce/Capron, with the Town Hall and Fire Station in the background.

Battery Jasper: Poe Avenue

Battery Jasper is located to the east of Fort Moultrie, within the Fort Moultrie National Park Service site. The current iteration of Jasper was completed in 1898 in the lead up to the Spanish-American War.



“Batteries Logan and Jasper, South Carolina, 1950.” Fort Sumter and Fort Moultrie National Park Service.



“Aerial view of Sullivan's Island from tower behind Battery Jasper, South Carolina, circa 1940.” Fort Sumter and Fort Moultrie National Park Service. The cistern picototed to the right is extant in a private residential yard.



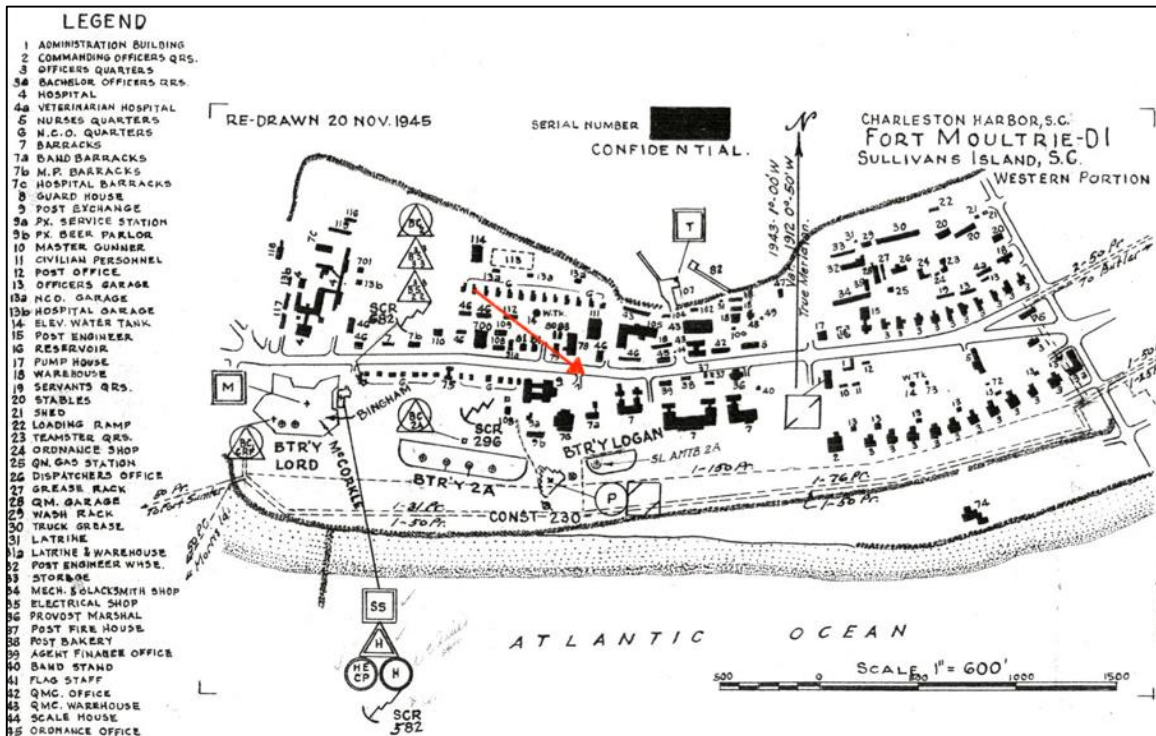
Battery Jasper in a recent photograph. National Park Service.

Battery Logan

Battery Logan was constructed in 1898 of similar concrete construction to Jasper and the other installations of the late nineteenth century on the island. Logan is located to the west of Jasper, just outside the Park Service site, and is owned by the Town of Sullivan's Island. It is currently abandoned and in a state of deferred maintenance.²⁰ The 2024 Island Resource Survey notes, "the inaccessible Battery Logan is surrounded by fencing lined with "US Government No Trespassing" warning signs. Thick vegetation obscures the view from the adjacent Poe Avenue, and vegetation was observed growing from wall cracks and along the roof edge. The presence of a separate concrete element was also observed, although it is unclear whether the structure is a remnant of a collapsed section of the battery or is a separate feature."²¹

²⁰ New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 78.

²¹ New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 82.



1945 Map of Fort Moultrie. The red arrow points at the vacant lot at 1501 Middle Street.



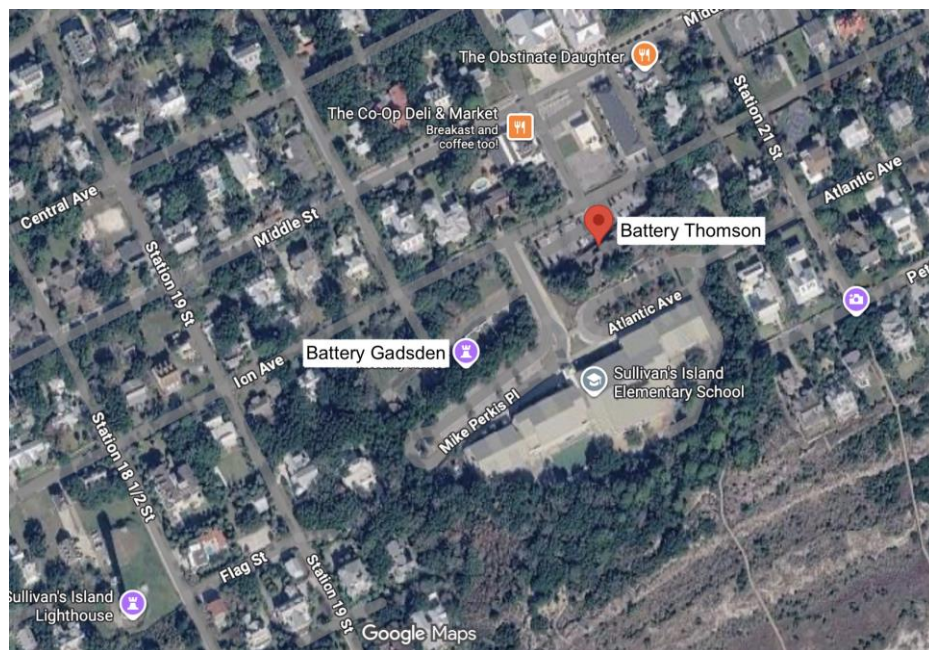
Interpretive map created by the Friends of Battery Logan.



Condition images taken from the Town of Sullivan's Island and LocationHub websites.

Battery Thomson

Battery Thomson is located south side of Ion Avenue east of Battery Gadsden. It “consists of an irregular-shaped concrete fortification with 2 gun emplacements, completed between 1901 and 1906 and named in honor of Col. William Thomson. The fortification was originally armed with two ten-inch disappearing rifles.²² It is now used for beach parking and a firefighter training center and is otherwise not accessible, though it is maintained by the town.²³



Google Map showing Batteries Gadsden and Thomson, which are located to the west of Fort Moultrie.

²² National Register for Historic Places. Sullivan's Island Resources, continuation sheet.

²³ Sonderman, 269; New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 78.



Battery Thomson circa 1980s, National Register listing photograph, South Carolina Department of Archives and History.



Recent photo of Battery Thomson, which is no longer accessible but which is often explored by island youths, by Brian Stansberry.

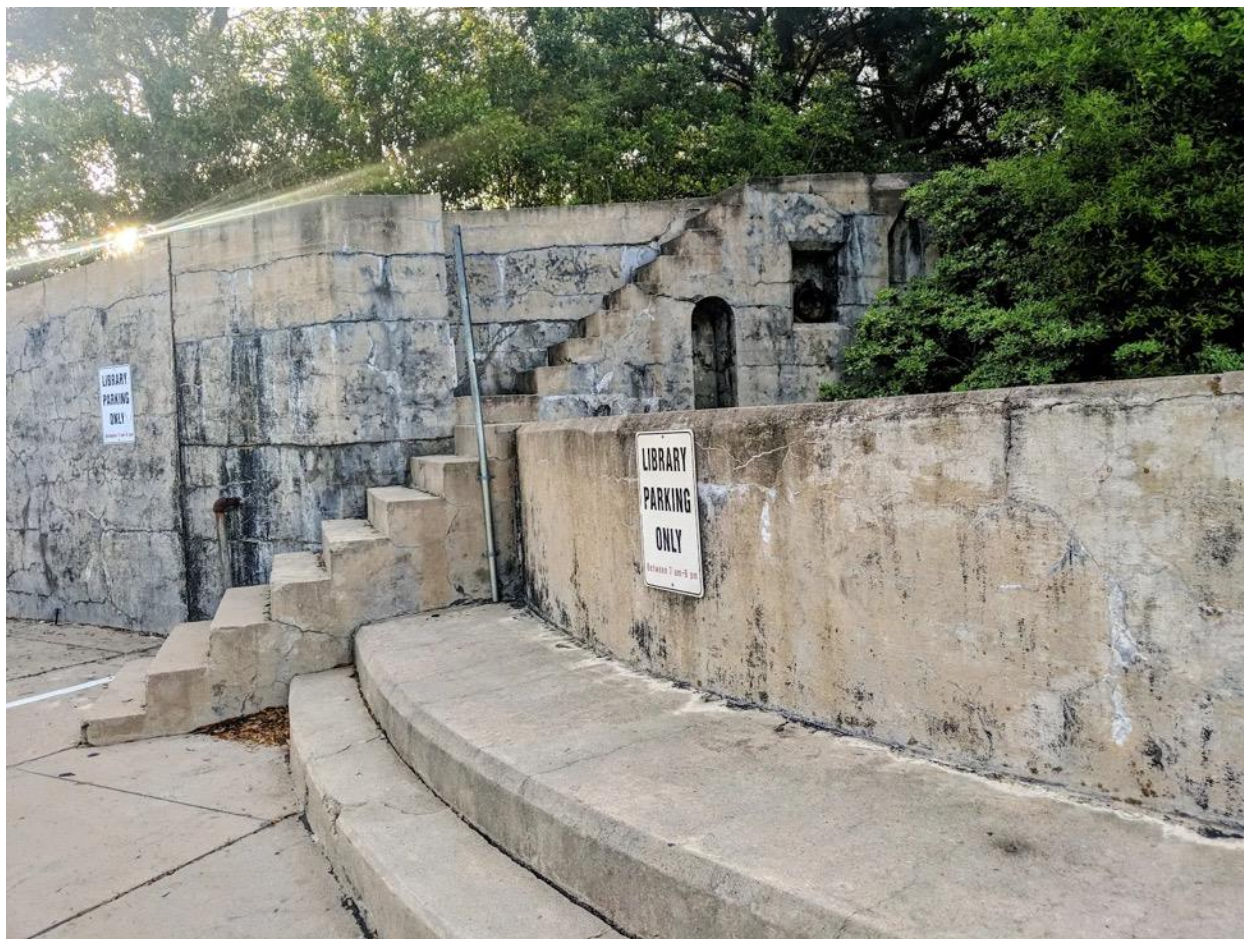
Battery Gadsden

Battery Gadsden was also complete in 1906 and today is adaptively used as the Poe Branch of the Charleston County Public Library (northern portion) and as the museum and archival space of Battery Gasdsden Cultural Center (southern portion). As of 2024, the Poe “section is climate controlled and has a cleanly painted exterior. The southern half of the battery superstructure is exposed, with ample cracks in the concrete and a large tree growing from a disappearing gun fixture. Ground-floor metal doors are pitted, and deep masonry cracks were observed at the top of the concrete-and-metal stairs (Figure 38). Hazard trees overhang the seaward outer wall, and the crack patterns along this elevation include long horizontal cracks indicative of poor bonding between the concrete pours used to construct the wall. Staining and efflorescence along the wall indicate chemical decomposition in the masonry due to water infiltration.”²⁴ The adaptive use of the battery as Poe Library entailed coring through the concrete to run modern systems (electricity, plumbing, internet/fiber optic, and HVAC returns) and building wood frame partition walls. This battery was constructed with window and door openings on two facades, facilitating its reuse.



Photograph of Poe Library, from CCPL’s website.

²⁴ New South Associates. *Sullivan’s Island Historic Resources Survey*. Submitted July 2024, pg. 82.



A recent photograph of the gun mount of Battery Gadsden, in the library parking lot.

Panama Mounts

Three of the four World War Two era Panama Gun Mounts erected in 1942 are extant on the island and are located near Station 29 beach access point. Two have been integrated into the foundation of new houses, while the third stands alone.²⁵

The History of 3019 Ion/ Battery 520

3019 Ion Street is three tax map parcels: 5291200118, 5291200119, and 529200091. The are designated on historic plats as Block 11, lots 2A, 2B, and 2C of the Marshall Reservation subdivision. The one-hundred-acre Marshall Reservation was created in the 1910s, and the extant battery/bunker complex was constructed in 1943.

The Fort Marshall gun batteries located on the approximate site of the Revolutionary War breastwork where Col. William Thomson and 780 men of the 3rd Regiment of Rangers fought off

²⁵ New South Associates. *Sullivan's Island Historic Resources Survey*. Submitted July 2024, pg. 85.

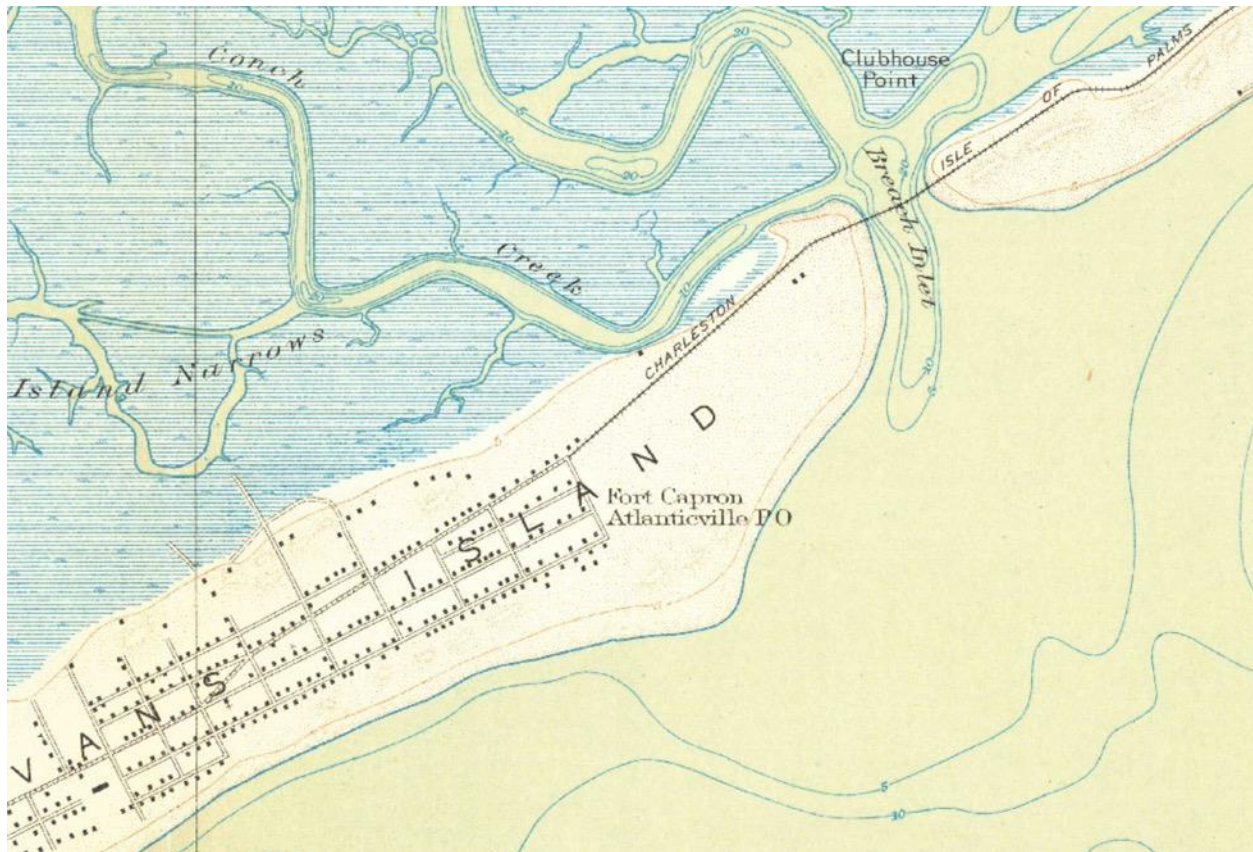
an attack by 2,200 British soldiers.²⁶ The eastern end of the island was also occupied during the American Civil War as Battery Marshall, though none of that era of construction is extant.



Charleston Harbor and its approached showing the positions of the Rebel Batteries. NY, J Bien, 1863. Battery Marshall is shown at the eastern end of the island.

The military installations at the eastern end of the island were known as Battery Marshall during the American Civil War, then as Battery Capron in the 1890s (and appeared as such on later maps even after Marshall Reservation was constructed). Battery Peirce Butler/Battery Capron is now associated with the earthwork at Stith Park, located at 2114 Middle Street.

²⁶ National Register for Historic Places. Sullivan's Island Resources, continuation sheet.



1919 USGS Topographic Map showing Fort Capron (now Marshal Reservation).

The U.S. Army acquired the roughly one hundred acres of wilderness near Breach Inlet at the northeastern end of the island in the early 1910s. The Marshall Reservation, named for the non-extant Civil War era fort near the site, “was added in order to meet the Taft’s board recommendations for additional searchlights and range-finding equipment in individual battery sighting stations to better triangulate enemy ship locations. As a result of the 1916 plan, a 60-inch searchlight was immediately installed on a rail truck that operated out of a concrete shelter.”²⁷

²⁷ Sonderman. *Remembering the Legacy of Coastal Defense*, pg. 105.



The eastern end of the island, depicted on *Map of Sullivan's Island* prepared under the direction of Lt. Col. L.C. Waldron, 1917. “Marshall Reservation” is shown, with an arrow pointing to 3019 Ion.

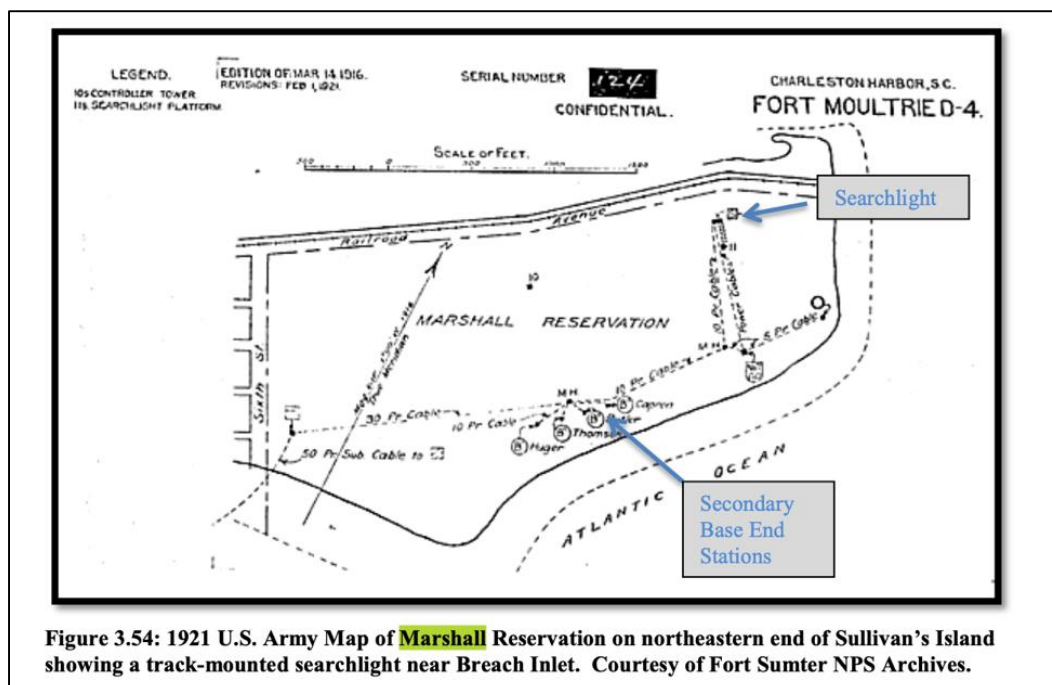
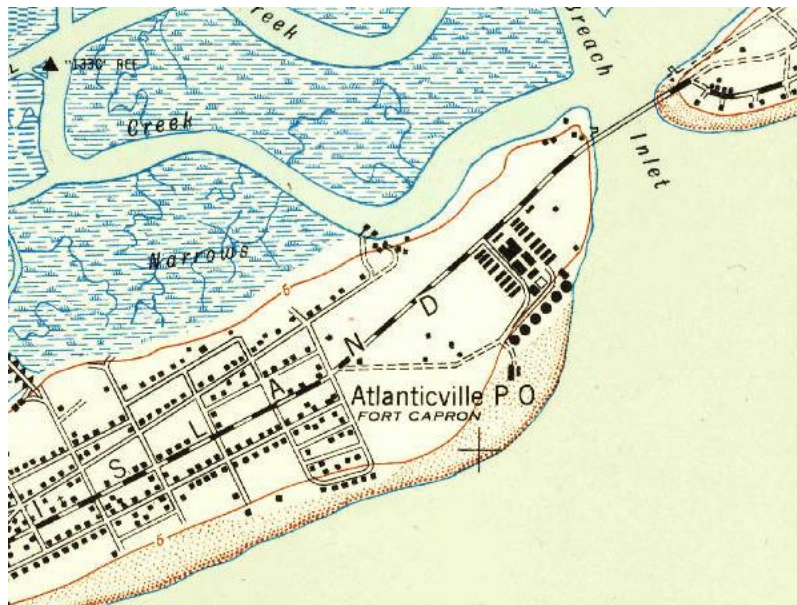


Figure 3.54: 1921 U.S. Army Map of **Marshall** Reservation on northeastern end of Sullivan's Island showing a track-mounted searchlight near Breach Inlet. Courtesy of Fort Sumter NPS Archives.

1921 annotated map of the Marshall Reservation from Karl Sonderman's thesis.

In the interwar period, the government began constructing training areas and created firing ranges at the Marshall Reservation and near Battery Gadsden.²⁸ In 1929, the U.S. Government contemplated selling the Marshall Reservation, which had been abandoned “some time ago as unsatisfactory” but ultimately decided to keep the property.²⁹ The Civilian Conservation Corps (CCC) “cleaned up” the reservation in 1935; “The board of township commissioners of Sullivan’s Island is endeavoring to secure a permanent ‘all-South Carolina’ Civilian Conservation Corps camp for the island. . . . As an instance of the work that they could do, it was cited Monday that the **Marshall Reservation, the myrtle-covered 34-acre section to the east end of the island,** is fast growing up again into its old wild state though the excellent ditching done by the CCC men last year continues to keep the area well drained and free therefore from becoming a mosquito breeding place. . . .”³⁰



1943 USGS Topographic Map with Marshall labeled as Capron.

During World War Two, the current iteration of the Marshall Battery 520 was constructed, comprising two concrete mounts at each end equipped with 12-inch casement guns (now Bunker house at 3031 Ion and a new residence on Brownell Street), connected by the Fort Marshall munitions storage complex (2A, 2B, and 2C- 3019 Ion).

Karl Sonderman notes that Fort Moultrie’s “leadership depended on Marshall Reservation’s natural beach dunes to shield the military structures while its soldiers’ presence would keep civilians from entering the area. But as the nation prepared to enter the war, the land defenses that would guard the boundaries of the Marshall Reservation and FMMR’s Endicott batteries from enemy amphibious landings needed to be reviewed.”³¹

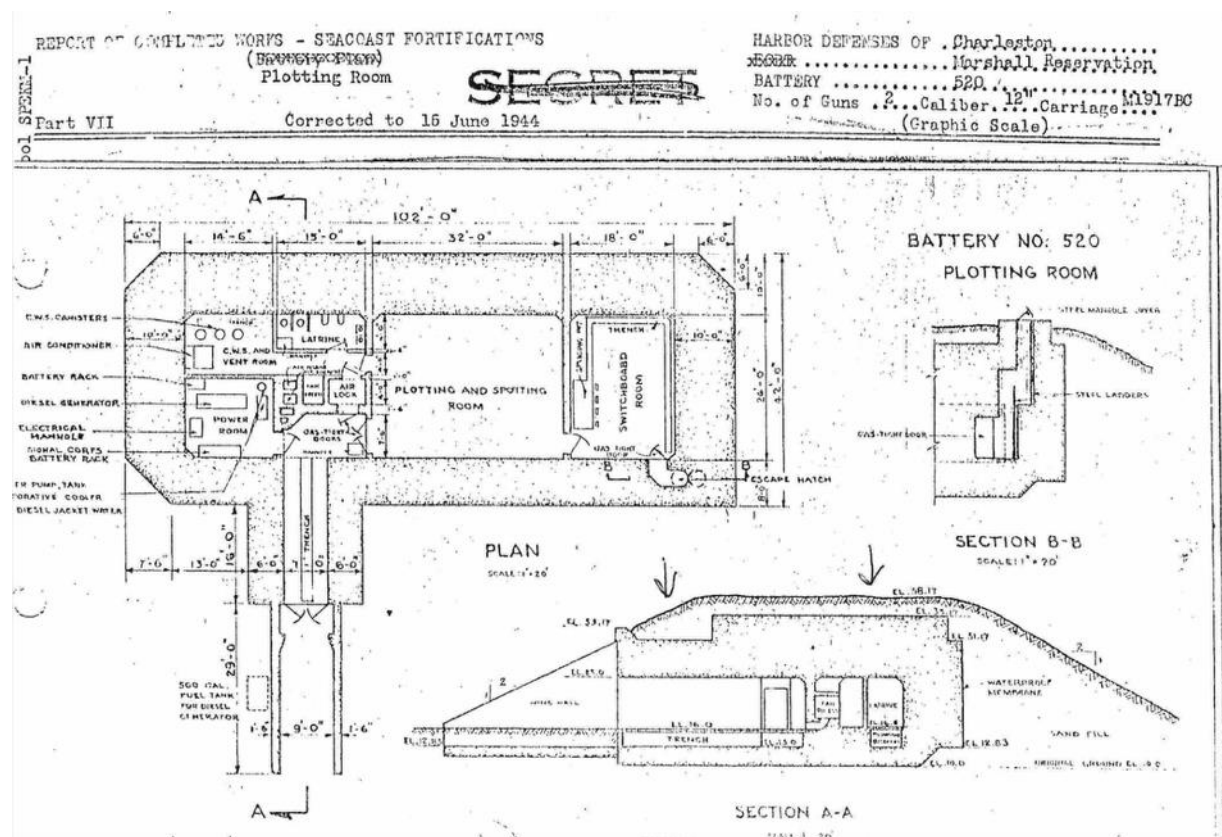
²⁸ Sonderman, *Remembering the Legacy of Coastal Defense*, pg. 154. *News and Courier*, 20 March 1928, pg. 3.

²⁹ *News and Courier*, 30 January 1929, pg. 4; *Charleston Evening Post*, 25 January 1929, pg. 1.

³⁰ *Charleston Evening Post*, 20 May 1935, pg. 11.

³¹ Sonderman. *Remembering the Legacy of Coastal Defense*, pg. 116.

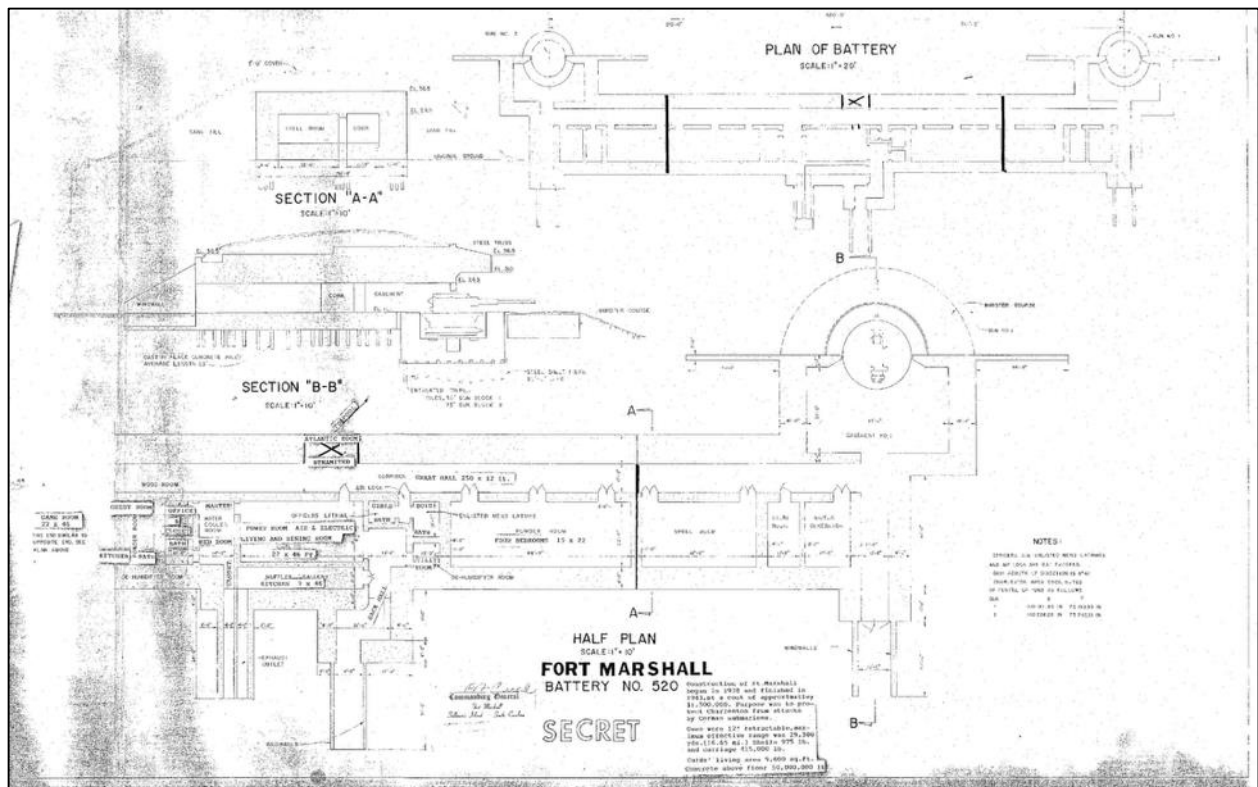
Construction began in early 1943 but was delayed by settling problems from the sheer weight of the enormous concrete and earth-covered fortification, and was completed in 1945 only months before the war ended.³² The battery never saw action; only two test shots were fired, “causing boats to capsize in the harbor and plaster to crack in downtown Charleston.” The blasts registered in Wilmington, North Carolina.³³



1944 “Report of Completed Works-Seacoast Fortifications”, stamped “Secret”, showing the construction of Battery 520, with its massively thick concrete walls creating a “plotting and spotting room”, switchboard room, vent rooms, latrine, power room, and halls.

³² Sonderman. *Remembering the Legacy of Coastal Defense*, pg. 193.

³³ *Post and Courier*, 16 May 2007, pg. B3.



Plan of Battery 520 showing the ammunitions bunker (3019 Ion) and one of the adjacent gun mounts. A section plan above shows the earthen covering.



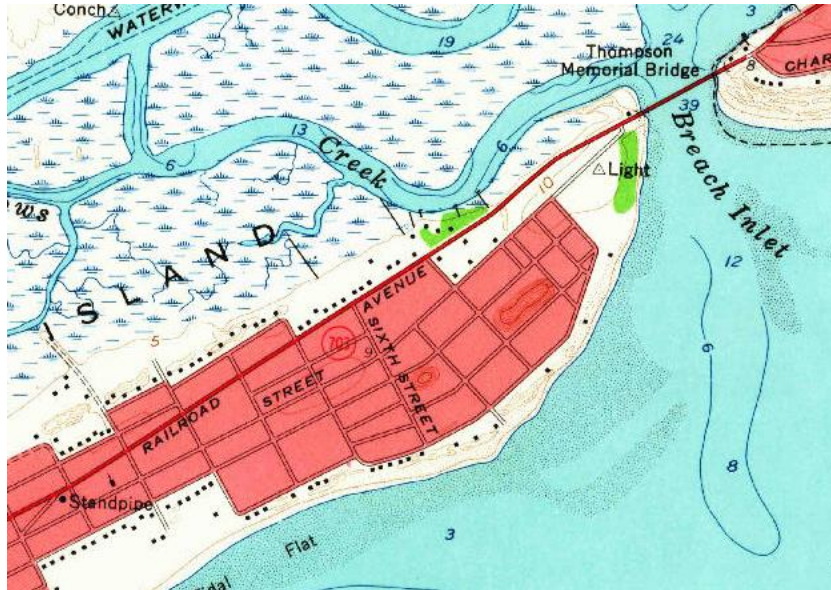
Figure 3.110: 1945 U.S. Army Photograph of Battery 520's two casemated gun opening with connecting magazines protected by the large concrete and earth mound between the two openings. Image also shows the Overseas Discharge and Replacement Depot barracks buildings in the background that had been converted for use by the soldiers manning the **Marshall Reservation's 155mm guns. Courtesy of the National Archives, Record Group 338, Box 139, *General Correspondence Relating to Places, compiled 1936 – 1945, Ft Moultrie, College Park, MA.***

Newly completed Battery 520, viewed from the oceanfront marshes, published in Sonderman's thesis.

“Marshall Reservation Lot Owners Decide To Build Soon. Since a recent Federal Housing Administration agreement to make loans on Sullivan’s Island property[,] five owners of lots at Marshall Reservation will start erecting homes shortly after the first of the year. Glenn Gibson, liquidator of the reservation and Fort Moultrie for the island Township Commission, said yesterday that numerous inquiries about purchasing lots were withdrawn when potential buyers learned that the FHA would not lend money for construction. The township commission recently was informed of FHA’s decision to finance the beach property. Early this year the General Assembly passed an act changing 50-year leases on island property to 75 years in order to qualify property for loans. Early in January[,] Marshall Boulevard and Atlantic Avenue will be paved. The liquidator said all of the large officers’ homes along the front beach at Moultrie have been sold, including the former commanding colonel’s residence, largest of the group. It was acquired by J. M. Ackerman. A total of 80 dwelling units are located at the fort.”³⁴



³⁴ *News and Courier*, 14 December 1951, pg. 3B.



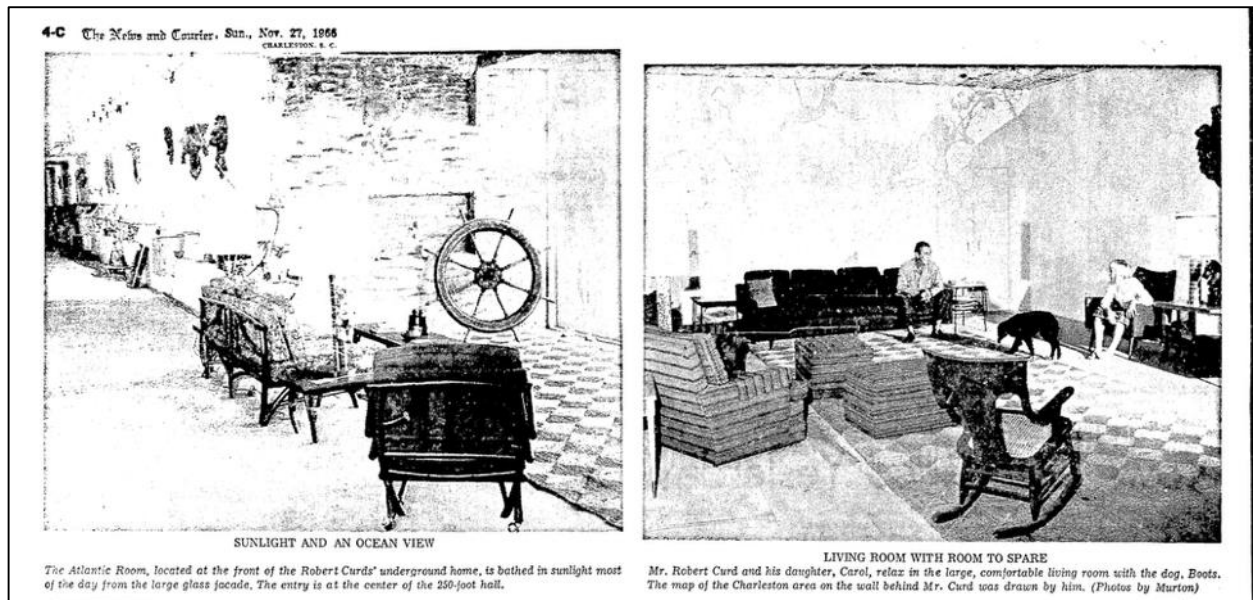
The 1959 USGS Topographic Map shows the eastern end of the island with new streets laid out to facilitate residential development.



Figure 4.7: 1963 United States Geological Survey Aerial Photograph of the Marshall Reservation showing the adaptive reuse of Battery 520 and the military's road network that ended at the site of the now vacant 1940 Overseas Discharge and Replacement Depot on the island's northern end. Image also shows the beginning of new residential construction as individuals purchased lots from the township commissioners over the past fifteen years since FMMR closing. Courtesy of the USGS Photograph Flat Files, Special Collections, College of Charleston Library, Charleston, SC scanned in Fall, 2012.

1963 Aerial showing development around Battery 520, in Sonderman's thesis.

E. Gordon Able, MD, purchased the lots from the Town of Sullivan's Island in November 1954 but did not develop the properties. He sold the 3 parcels known as 2A, 2B, and 2C to Robert and Deborah Curd in December 1965, who adapted the bunker into their residence. Mr. Curd was the founder of Curd Enterprises plastics company, which he opened in Chicago in 1952 and relocated to Mount Pleasant in 1965. He noted of the bunker, "I saw this place and fell in love with it. The government had sold it to my neighbor for \$5000 and he sold it to me for \$10,000. It was just a shell."³⁵ The *News and Courier* featured the Curd renovation in 1966, reporting that "he has worked since January to turn the military fortress into a home. The living area is all underground, and it originally appeared as just a large, grassy mound from outside. Inside the 10-foot-thick walls, the Curds and their six children have 9,000 square feet of living space. The main hall is 250 feet long. Mr. Curd decided that his family couldn't live entirely underground, so he arranged a bulldozer to level the mounted roof for a patio." He did the plumbing, electrical, and painting work himself, and painted a large map of the Charleston harbor on one of the interior concrete walls as a mural.³⁶



³⁵ *Charleston Evening Post*, 4 September 1993, 1B.

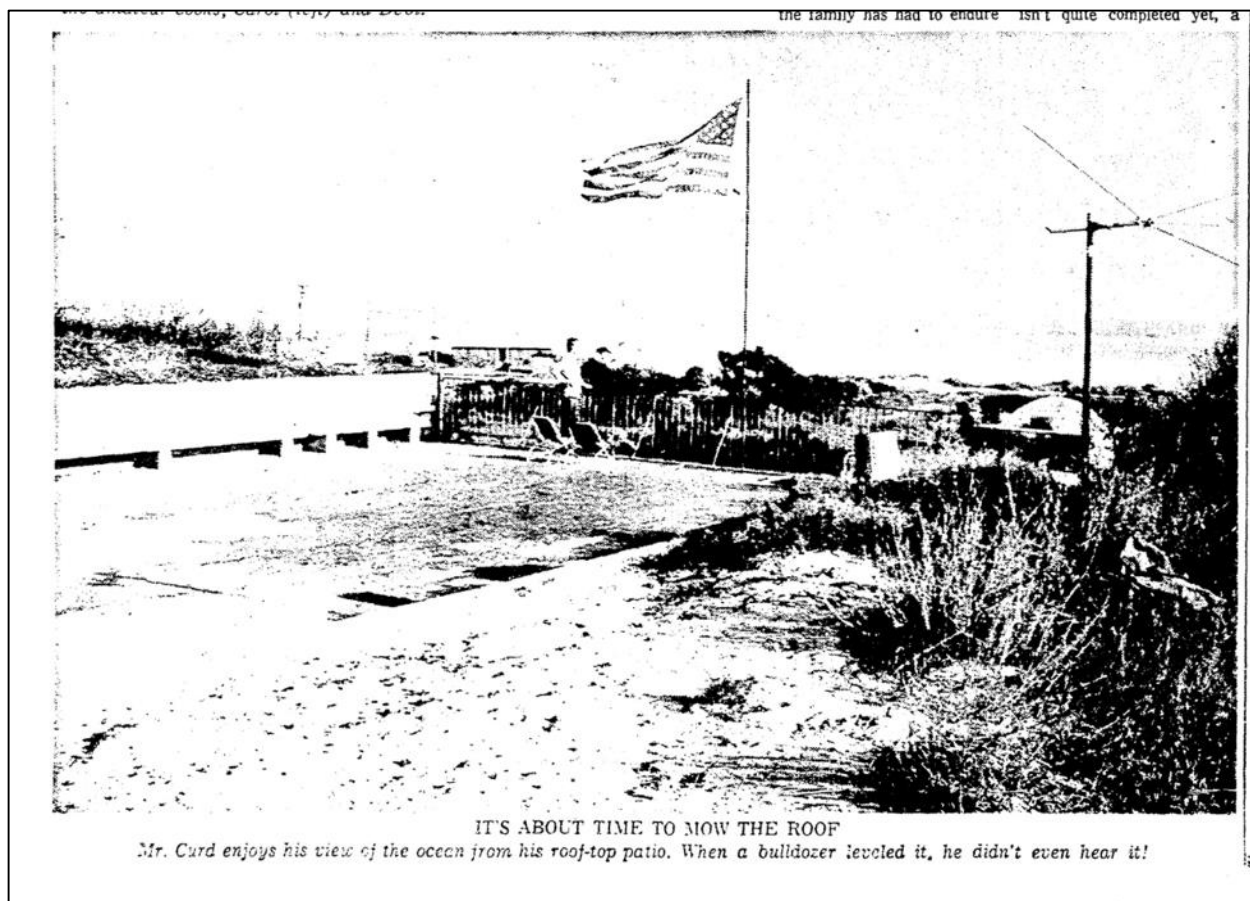
³⁶ *News and Courier*, 27 November 1966. "Design in a dug out- down to earth home."



KITCHEN WITH WORKING SPACE

The 46-foot kitchen in the Robert Curd home provides plenty of space for even the amateur cooks, Carol (left) and Debi.

News and Courier, 27 November 1966



News and Courier, 27 November 1966

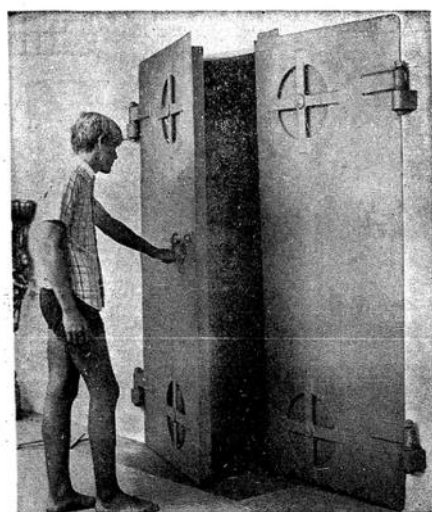
The *News and Courier* reported in 1971 that “the building, called “Fort Marshall” by the Curds, featured bedrooms created from a large ammunition supply room, a game room and workshop in the ammunition storage bunkers, and a kitchen and primary bedroom in former ventilation and exhaust system bays. The project took nearly a year to complete. Mr. Curd “blasted an opening through a front wall and created huge glass doors opening onto the Atlantic Ocean. Since there are no other windows, if this had not been done the temperature inside would have remained about 68 degrees year-round.”³⁷

³⁷ *News and Courier*, 21 August 1971, pg. 1B.



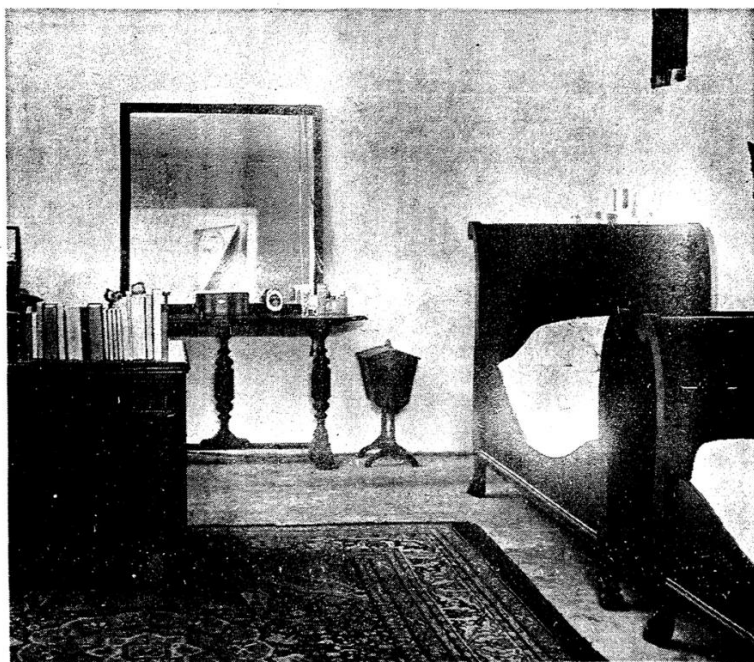
THE ATLANTIC ROOM—This room, (to the left), is halfway down the hall which measures a breathtaking 12 feet by 250 feet. Curd, who owns a local plastics advertising display company, has chosen the hall as a means to display his products. The overhead cables once carried a monorail which

moved ammunition to the gun area. The Atlantic Room, the front of which is glass, is decorated with a shrimp's net on which one can easily identify a horseshoe crab, a scorpion, a starfish, sea turtle shell and other creatures of the sea. (Staff Photos by Jordan.)



ENTRY—Jim Curd demonstrates the mechanics of the large iron doors in the R. F. Curd residence, Fort Marshall. The circular areas are air vents. These doors lead to sister Debi's bedroom which was formerly an ammunition storage area. The bedroom is 15 feet by 22 feet.

News and Courier, 21 August 1971



GIRL'S BEDROOM—19-year-old Debi has some very distinctive beds. They are antique Empire sleigh beds, made of Philippine mahogany. Mrs. Curd picked the beds up in a local shop and Debi refinished them. The ladies have since been offered more than six times what they paid for them, but these beds aren't for sale! The oak desk, mahogany sewing stand and walnut vanity table are striking complements for the beds. The Oriental rug was a gift from Debi's grandmother.

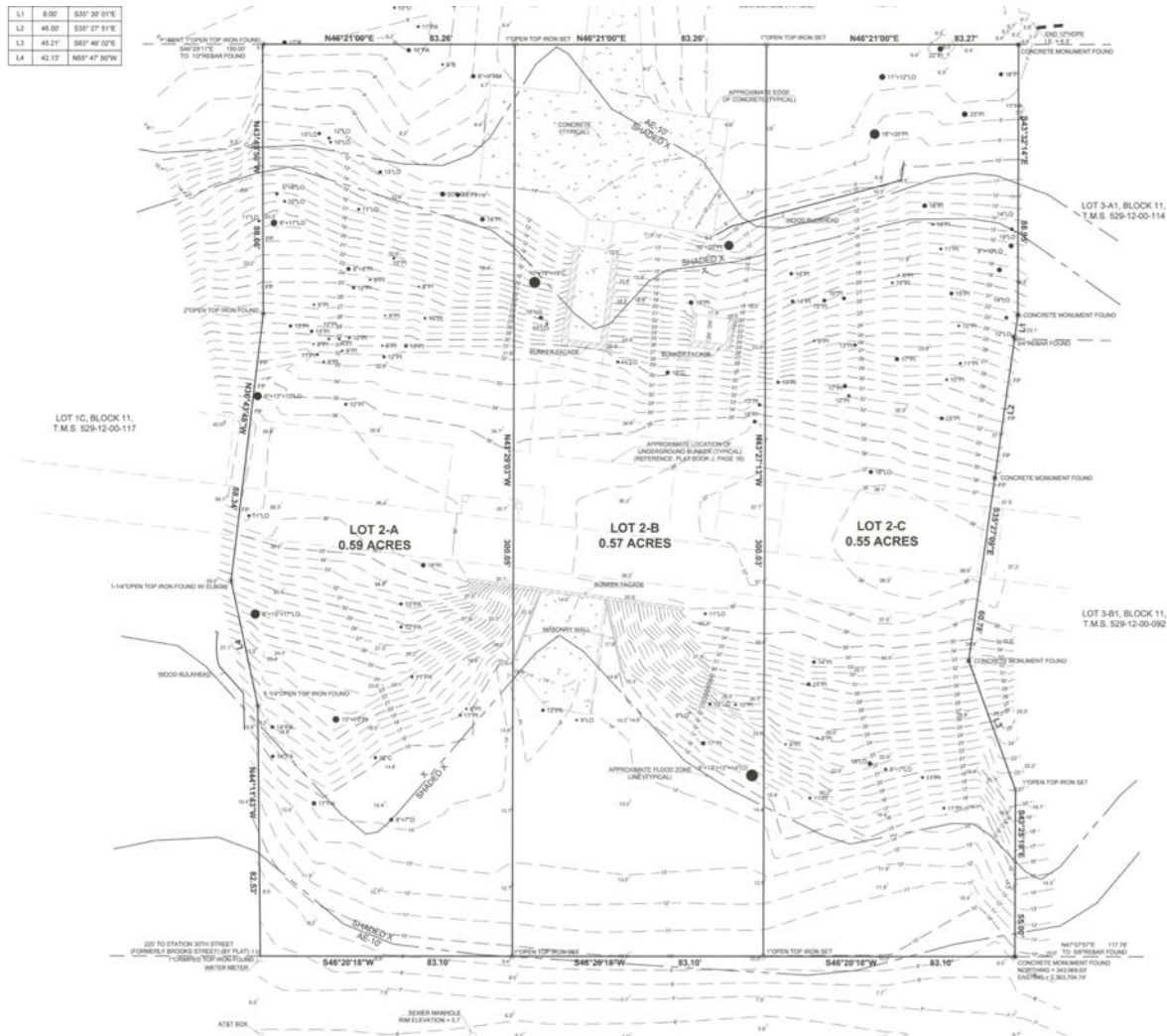
The curds conveyed the property to themselves and their children as a trust in January 1967. The couple divorced in 1989, and Mrs. Curd relocated to New York and remarried. Mr. Curd remained

in the house in his retirement. His daughter Debbie Curd Wadell was president of the plastics company in the 1990s.³⁸



Robert Curd and one of his goats, *Post and Courier*, 4 September 1993.

³⁸ *Charleston Evening Post*, 4 September 1993, 1B.

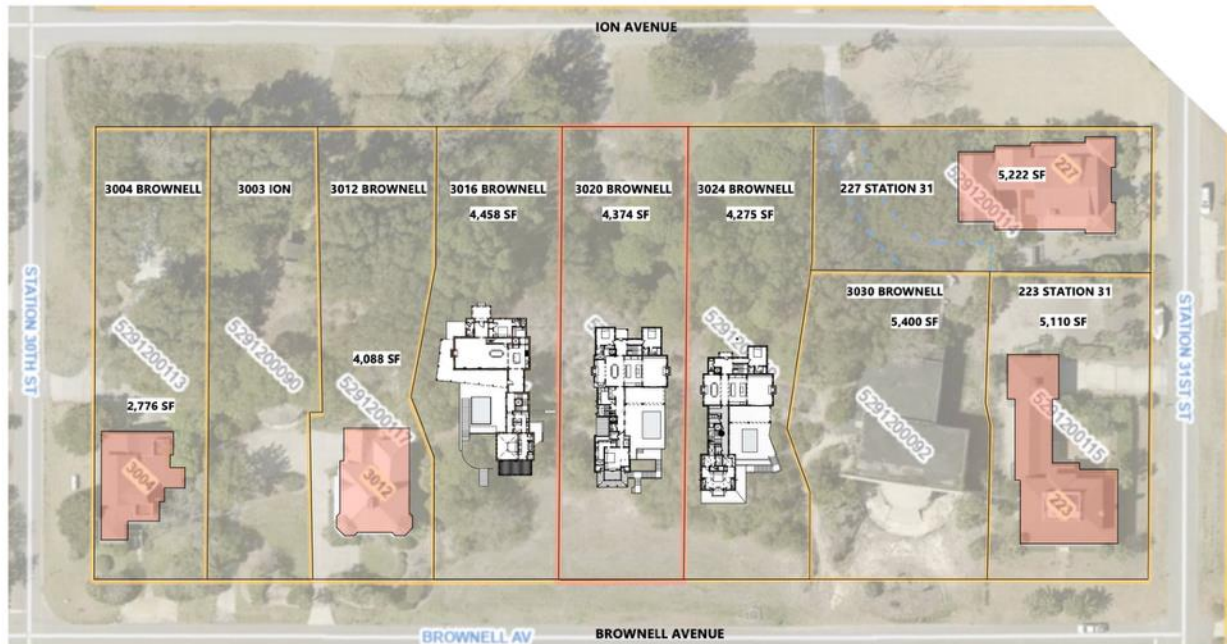


“Topographic Plat, Lot 2A, 2B, 2C, Block 11, Marshall Reservation.” Surveyed April 2025.

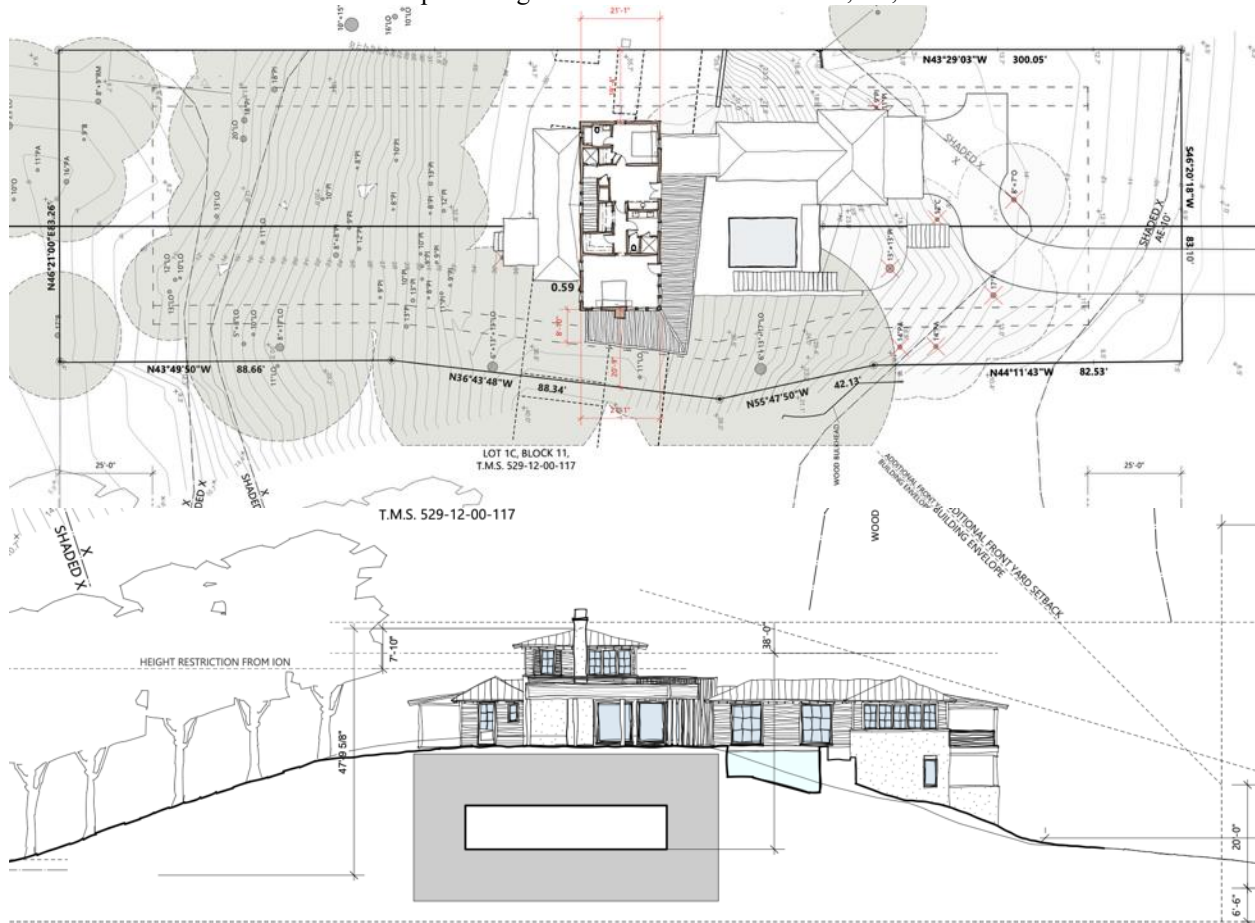
Current Plans and Preservation Considerations for 3019 Ion Avenue

Early submittals for one story buildings atop the batteries that cascaded down the elevated topography were rejected recently by the Sullivan’s Island Design Review Board. Plans currently call for three separate houses that will leave the historic bunkers intact and utilize them as storage or parking.³⁹ Utilizing the bunkers themselves as the primary, code compliant living space would require invasive alterations that could lead to a loss of integrity, including creating additional openings in the rebar-reinforced masonry walls or removing earth covering from the top of the bunkers to create light shafts.

³⁹ *Post and Courier*, 14 March 2026, pg. 1.



Previous site plan designs for 3 residences on lots 2A, 2B, and 2C.



PRINCIPAL BUILDING COVERAGE AREA:
(1) Principal Building Coverage Area. The Lot Area covered by the Principal Building measured vertically.

DRB MAX RELIEF	ZONING STANDARDS COMPLIANCE CHART	3019 LOT-2A (3016 BROWNELL) LOT SIZE: 25,618 SF
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Previous submittal for lot A, positioned atop the bunker and leaving the concrete sections below intact.



LOYAL
architects

3020 BROWNELL: SCHEMATIC RENDERING

A.1

03.13.2026
SCALE:
N/A

Above and below: updated renderings for lots B and C from the Brownell side, integrating the facades around the bunker earthworks instead of placed partially atop.



LOYAL
architects

BROWNELL 3024: SCHEMATIC RENDERING

A.2

03.13.2026
SCALE:
N/A

Updated design plans call for restoring the historic doors on the Ion Avenue side of the property, removing impermeable non-historic concrete and asphalt paving to replace with gravel, keeping the earthworks/hill as a forest area and entrance to better honor the history of the bunker, which had the intent was to be hidden because it was for munitions storage.

It is recommended to install historic interpretive signage on the Ion Avenue side of the property, similar to the example provided under the history of Battery Logan in this report. Signage should address the construction and purpose of Marshall Reservation and Battery 520, images of it when it was newly built in 1943, historic maps, and discussion of earlier adaptive uses.

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Sanborn Fire Insurance Maps.

USGS Topographic Maps.

Historic newspaper collections.

Appendix 1: Chain of Title

Y58, pg. 523

Town to Sullivan's Island to E. Gordon Able, M.D.

16 November 1954

- Lots and improvements thereon known as 2A, 2B, and 2C block 11 on a plat of the "Resubdivision of Block 11, Mashall Reservation, Sullivan's Island."

M84, pg. 360

E. Gordon Able, M.D. to Robert Curd

December 1965

E87, pg. 131

Robert and Dorothy Curd to Robert and Dorothy Curd, as trustee

1 January 1967

- Lots and improvements thereon known as 2A, 2B, and 2C block 11 on a plat of the "Resubdivision of Block 11, Mashall Reservation, Sullivan's Island" recorded in plat book J, pg. 16, on January 20, 1953.

