NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

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NATIONAL REGISTER

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

1. Name of Property

historic name: GREAT CAPTAIN ISLAND LIGHTHOUSE

other name/site number: N/A

2. Location

street & number: Great Captain Island

not for publication: N/A

city/town: Greenwich vicinity: N/A

state: CT county: Fairfield code: 001 zip code: 06830

3. Classification

Ownership of Property: public-local, public-Federal

Category of Property: building

Number of Resources within Property:

Contributing	Noncontributing	
3	0	buildings
		sites
		structures
	1	objects
3	1	Total

Number of contributing resources previously listed in the National Register: 0

Name of related multiple property listing: N/A

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this __x__ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property __x__ meets ____ does not meet the National Register Criteria. ____ See cont. sheet.



Signature of certifying official — Date: 2/20/91

John W. Shannahan, State Historic Preservation Officer

State or Federal agency and bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria. ___ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby certify that this property is:

Entered in the National Register

✓ entered in the National Register ___ See continuation sheet.		4/3/91
____ determined eligible for the National Register ___ See continuation sheet.		
____ determined not eligible for the National Register		
____ removed from the National Register		
____ other (explain): _____		

Signature of Keeper — Date of Action

6. Function or Use

Historic:	TRANSPORTATION	Sub:	water-related
	DOMESTIC: single dwelling		
Current:	RECREATION AND CULTURE	Sub:	outdoor recreation
	TRANSPORTATION		water-related
	DOMESTIC: single dwelling		

7. Description

Architectural Classification:

LATE VICTORIAN

Other Description: integral tower and dwelling

Materials: foundation STONE roof not visible
walls STONE other BRICK
BRICK METAL: Cast-iron

Describe present and historic physical appearance. X See continuation sheet.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: state.

Applicable National Register Criteria: A,C

Criteria Considerations (Exceptions) : N/A

Areas of Significance: TRANSPORTATION
ENGINEERING

Period(s) of Significance: 1868-1905

Significant Dates: 1868, 1905

Significant Person(s): N/A

Cultural Affiliation: N/A

Architect/Builder: U.S. Light-House Board Engineers

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.
X See continuation sheet.

9. Major Bibliographical References

X See continuation sheet.

Previous documentation on file (NPS):

_ preliminary determination of individual listing (36 CFR 67) has been requested.
_ previously listed in the National Register
_ previously determined eligible by the National Register
_ designated a National Historic Landmark
_ recorded by Historic American Buildings Survey # _____
_ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data:

_ State historic preservation office
_ Other state agency
_ Federal agency
_ Local government
_ University
_ Other -- Specify Repository: _____

10. Geographical Data

Acreage of Property: approx. 1

UTM References:

	Zone	Easting	Northing		Zone	Easting	Northing
A	18	615760	4537500	B	__	_____	_____
C	__	_____	_____	D	__	_____	_____

___ See continuation sheet.

Verbal Boundary Description: ___ See continuation sheet.
The nominated property includes a 50' perimeter on the northwest, northeast, and southwest sides of the lighthouse. The boundary extends to the ocean on the southeast side, and also includes the fenced-in part of the Coast Guard-owned parcel to the east.

Boundary Justification: ___ See continuation sheet.
The boundary includes the lighthouse and all associated historic outbuildings.

11. Form Prepared By

Name/Title: Bruce Clouette and Matthew Roth, Reviewed by John Herzan, National Register Coordinator

Organization: Historic Resource Consultants Date: September 5, 1990

Street & Number: 55 Van Dyke Avenue Telephone: 203-547-0268

City or Town: Hartford State: CT ZIP: 06106

Great Captain Island Lighthouse is a combined dwelling and light tower built of stone in 1868. It is located on the southeast corner of Great Captain Island, two miles south of the mainland in Greenwich, Connecticut, where it faces the open waters of Long Island Sound to the south. The land surrounding the lighthouse is mostly open, with some dense low-lying vegetation near the steep slope to the rocky shoreline of the Sound some 30' below. The walls of the 2 1/2-story lighthouse are a random ashlar of rough-hewn gray granite blocks, with the corners finished with raised quoins (Photograph 1). Similar stone forms a water table above the high basement story and the raised sills, jambs, and heads of the segmental arched windows, which are fitted with six-over-six sash. The lighthouse's gable roof, which has a deep cornice of Classical moldings, flattens out at the eaves to accommodate an internal rain gutter. There is a small brick chimney toward the center rear. The lighthouse is rectangular in plan, measuring approximately 33' x 36', with a one-story gable-roofed stuccoed ell, 20' x 30', appended to the rear at the basement story (Photograph 2).

The lighthouse's main entrance is centered on the three-bay south elevation (Photograph 3), recessed within a shallow portico. The portico has square chamfered stone pillars framing the entranceway, above which is a lintel which repeats the shape of the main roof. The inside jambs of the portico are finished with wood paneling.

The white-painted light tower straddles the peak of the roof on the south end of the lighthouse. Built of cast-iron plates, it consists of a square base, with large consoles extending down over the stonework of the south elevation, framing a small attic-story window; a watchroom level of eight unequal sides, above which is a wide deck with an iron railing; an octagonal metal and glass lantern stage; and finally, a metal orb-shaped ventilator finial. Cast-iron decorative details on the light tower include the date in large numerals, just below the base's cornice, and projecting sills and hoodmolds on the segmental-arched watchroom windows, three of which are blind openings, with only the south-facing window glazed. The overall height of the lighthouse is 51'.

There are no longer any optics in the lighthouse itself, which has not been an operating light since 1970. Originally, Great Captain Island Light had a fourth-order Fresnel lens and a fixed white light. The focal plane was 74'feet above sea level, from which, according to 19th-century charts, it could be seen at sea 14 nautical miles away. In 1890, a steam-powered whistle was installed as a fog signal.

The modern navigational aid is located to the southeast of the lighthouse on a steel skeleton tower. This part of the site, a fenced-off parcel owned and operated by the United States Coast Guard, also includes two historic white-painted 1-story brick outbuildings. One is a hip-roofed building built prior to 1891, probably for oil storage; the other, a smaller gable-roofed building, is probably the 1905 building built in connection with a compressed-air fog siren installed that year. The outbuildings are contributing buildings, whereas the modern light tower is a noncontributing structure. The nominated property excludes a modern concrete dock to the south.

Great Captain Island is a municipally owned recreational beach and nature preserve. The lighthouse is occupied by a caretaker. Because of the difficulty in reaching the island, the interior was not inspected or photographed for this nomination.

Summary

Great Captain Island Lighthouse is significant as an example of the lighthouse construction techniques of the period immediately following the Civil War (Criterion C): among the distinctive characteristics which it embodies are a standardized design, combined tower and dwelling, cast-iron tower stage, and use of masonry as the primary material. The lighthouse is also significant because it recalls the historical development of commercial navigation on Long Island Sound and the maritime heritage of Connecticut's southwestern corner (Criterion A).

Significance in the Development of Lighthouse Technology

In the years just before and after the Civil War, the Light-House Board, the agency established in 1852 to oversee the nation's navigational aids, undertook a program to modernize the lighthouse system. Many of the existing lighthouses were in poor structural condition, with inadequate lights and poorly trained keepers. The Board replaced the mirrored lamps found in nearly all its lighthouses with modern Fresnel lenses, issued detailed standards for operating the lights, and began replacing the worst structures with substantial new buildings. The first light at Great Captain Island, which had been built in 1830, was plagued by deteriorating mortar and cracked walls almost from the start, so it was a priority for replacement by the late 1860s. Because several other lights were being rebuilt at the same time, the Board turned to a single standardized design for six lighthouses in the Long Island Sound area.[1] Such standardization itself became one of the central practices of the lighthouse service in the late 19th century. By designing nearly identical structures, the Board saved time and money at the design stage and achieved some economies of scale in the use of materials. Equally important, the Board's standardized design made it more likely that the new lights would perform better than the old.

This lighthouse design incorporated many significant new features. Like earlier lighthouses, it used substantial masonry construction to provide a bulwark against the ravages of wind and sea, but in combining the dwelling with the tower, it not only saved material but also made it easier for the keeper to attend the light. This had been a problem with earlier lighthouses, most of which had a separate keeper's house: it was hardest to reach the light in stormy weather, just when the light was needed the most. The new design also made use of iron-plate

construction for the tower. In this way it prefigured in a partial way the lights of the 1880s, which were entirely prefabricated from iron at a great savings in design, fabrication, and erection. The orb finial on the tower provided ventilation for moisture, combustion products from the lamp, and mercury vapors emitted by some rotation mechanisms. Ventilation was important not only for the keeper's health but also to avoid damage to the optics and structural deterioration caused by fumes and moisture. Finally, the architectural elaboration of the structure -- the quoins, cornice moldings, and portico -- while not of any particular architectural style, convey a well-built, carefully designed, substantial appearance intended to present a contrast to the deficient earlier lighthouse structures. Although it no longer has its original optics, Great Captain Island Light retains all of its historical form, materials, and architectural details and thus stands as a well-preserved example of the standard lighthouse construction of the 1860s.

Historical Significance

The 1868 replacement for the original lighthouse on Great Captain Island came about because the rapid deterioration of the 1830 tower endangered a vital navigational aid. Great Captain Island was one of seven major lights which marked the main ship channel through Long Island Sound. Vessels leaving New York would use these lights as a guide to their progress, navigating past each one in turn until reaching the eastern end of the Sound. Also, Great Captain Island is the outermost of several islands and shoals which lie off the coast of Connecticut. With smaller islands and numerous rocks to the east and Bluefish Shoal to the west, the lighthouse served to warn vessels away from certain ruin.

With the growth of New York City, the tremendous expansion of commerce which occurred as America industrialized, and the advent of steam-powered vessels, it became ever more important to establish reliable navigational aids. Throughout the 19th century, the tonnage of shipping in Long Island Sound increased. Not only were there more ships using this waterway, but steam-powered vessels (which as early as 1850 made up 15% of the shipping) were larger and faster, making them more endangered by the numerous hazards lying along the edges of the shipping lanes. Great Captain Island Lighthouse thus stands as a symbol of the historical development of maritime commerce in Long Island Sound. On a more local level, the lighthouse also recalls the days when the nearby harbors of Connecticut were busy with packet

ships, schooners carrying coal and other bulk materials for local industries, oyster boats, and pleasure craft. Great Captain Island Lighthouse was a major landmark for approaching Greenwich, Cos Cob, Greenwich Cove, and Stamford harbors.

NOTES

1. Other lighthouses of this design, all in this area and built in 1867 and 1868, include Norwalk Island and Morgan Point, Connecticut; Old Field Point and Plum Island, New York; and Block Island North, Rhode Island. The lighthouses differ only in minor details, such as the placement of the rear ell and the height of the basement story.

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CONTINUATION SHEET

Photograph captions — Great Captain Island Lighthouse, Greenwich, Fairfield County, CT — Photos-1

All photographs:

1. GREAT CAPTAIN ISLAND LIGHTHOUSE
2. Greenwich, Fairfield County, CT
3. Photo Credit: HRC, Hartford, CT
4. June, 1990
5. Negative filed with Connecticut Historical Commission, Hartford, CT

Captions:

South and east elevations, camera facing west
Photograph 1 of 4

North and west elevations, camera facing east
Photograph 2 of 4

Detail of entrance, south elevation, camera facing west
Photograph 3 of 4

Storage buildings and modern tower, camera facing east
Photograph 4 of 4

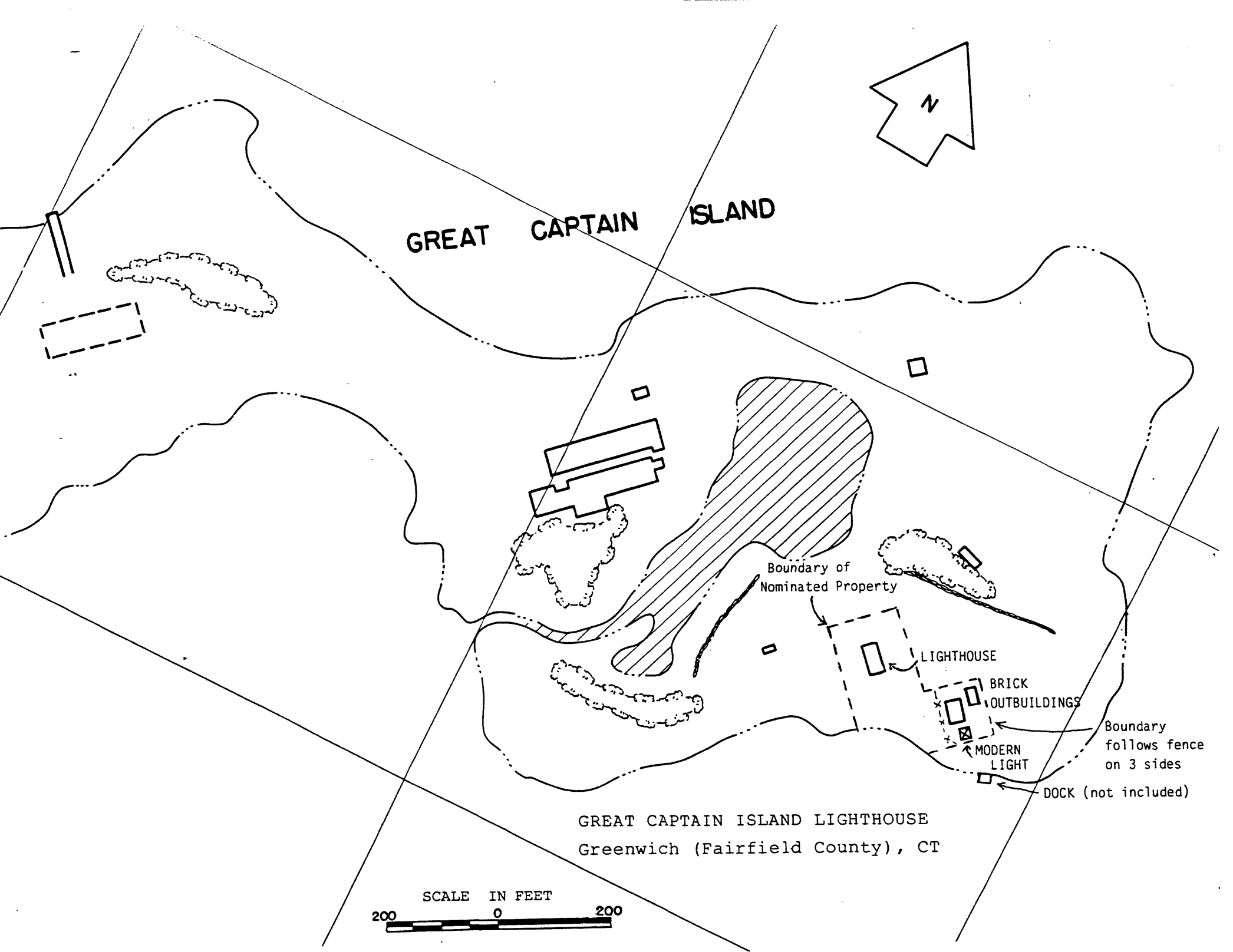
Bachand, Robert G. Northeast Lights: Lighthouses and Lightships, Rhode Island to Cape May, New Jersey. Norwalk: Sea Sports Publications, 1986.

Hamilton, Harlan. Lights and Legends: An Historical Guide to the Lighthouses of Long Island Sound, Fisher Island Sound, and Block Island Sound. Stamford: Wescott Cove Publishing Co., 1987.

The Illustrated Coast Pilot With Sailing Directions. The Coast of New England From New York to Eastport, Maine. Boston: N. L. Stebbins, 1891.

U.S. Lighthouse Board. Annual Report, 1867-1906.

U.S. Coast Survey. New York to Norwalk Islands. Long Island Sound. Published in Town and City Atlas of the State of Connecticut. Boston: D. H. Hurd, 1893.


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GREAT CAPTAIN ISLAND
Boundary of
Nominated Property
LIGHTHOUSE
BRICK
OUTBUILDINGS
MODERN
LIGHT
Boundary
follows fence
on 3 sides
DOCK (not included)
GREAT CAPTAIN ISLAND LIGHTHOUSE
Greenwich (Fairfield County), CT
SCALE IN FEET
200 0 200