United States Department of the Interior

NATIONAL PARK SERVICE
Midwest Region
1709 Jackson Street
Omaha, Nebraska 68102-2571

#22260 (H4017) NC360

IN REPLY REFER TO:

SEP 27 1995

H4217(MWR-PC)
SLBE

Memorandum

To: Associate Director, Cultural Resources, WASO (400)

From: Acting Associate Regional Director, Planning and Resource Preservation, Midwest Region

Subject: Historic structure report, 1854 Volunteer Rescue Station, Sleeping Bear Dunes

Park staff at Sleeping Bear Dunes have produced a draft historic structure report (HSR) for the 1854 Volunteer Rescue Station on North Manitou Island, Sleeping Bear Dunes National Lakeshore, Leelanau County, Michigan. The structure is being nominated through the Maritime Heritage of the United States National Historic Landmark (NHL) Theme Study for NHL designation because research has determined that the structure is the only existing 1854 Volunteer Rescue Station in the nation.

Enclosed for your review is a copy of the draft HSR and the NHL nomination. The latter document will be presented to the History Areas Committee of the National Park System Advisory Board in early 1996 for consideration; we provide a copy with the HSR at this time so reviewers of the report can gain a fuller understanding of the resources.

The HSR was prepared by Sleeping Bear Dunes park Historical Architect Kimberly Mann and Park Ranger Bill Heard. Through comparative analysis of the building to historic specifications for this structure type and to historic written descriptions and photographs of other no longer extant rescue stations, they have demonstrated that the subject resource is indeed a volunteer rescue station, and as such, retains a significantly high degree of integrity. Ms. Mann has also developed the park's preferred treatment alternative for restoring the structure to its 1854 appearance. Because the exterior has not been significantly altered, the focus of the restoration effort will be the rescue

station's interior and on the construction of a new boat ramp. Please review section III of the draft report for specific details on the preferred proposal.

Please review the enclosed report to better understand the analysis and research the park undertook, and the subsequent design recommendations made for proposed treatments to the rescue station. We believe these treatments to be in conformance with the "Secretary of the Interior's Standards for the Treatment of Historic Properties," especially the standards for restoration and rehabilitation. We also believe that implementation of the proposed treatments will have a no adverse effect on the qualities for which the 1854 Volunteer Rescue Station as well as the North Manitou Island Life-Saving Service Complex are potentially eligible for NHL designation.

We have also provided copies of this draft report to the Michigan State Historic Preservation Officer and the Advisory Council on Historic Preservation for their review pursuant to section 106 of the National Historic Preservation Act. If they have concerns or comments we will consult with you. Should you have questions, please contact Regional Historical Architect Craig Kenkel at 402-221-3426.

Alan M. Hutchings

Enclosure

cc:
Superintendent, Sleeping Bear Dunes
  Attention: Historical Architect
MWR-Cultural Resources Management
  Attention: Regional Historian
  Attention: Regional Historical Architect

NPS Form 10-900
(Rev. 10-90)

OMB No. 1024-0018
Page 1

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

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1. Name of Property

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historic name NORTH MANITOU ISLAND LIFE-SAVING STATION

other names/site number NORTH MANITOU COAST GUARD STATION

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2. Location

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street & number NORTH MANITOU ISLAND, not for publication ___
city or town SLEEPING BEAR DUNES NATIONAL LAKESHORE vicinity ___
state MICHIGAN code MI county LEELANAU code 089
zip code 49630

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ____ 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 ____ meets ____ does not meet the National Register Criteria. I recommend that this property be considered significant ___ nationally ___ statewide ___ locally. (___ See continuation sheet for additional comments.)

_____ _____
Signature of certifying official Date

_____
State or Federal agency and bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria. (___ See continuation sheet for additional comments.)

_____ _____
Signature of commenting or other official Date

_____
State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

____ entered in the National Register _____ _____
___ See continuation sheet.
____ 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

5. Classification

Ownership of Property (Check as many boxes as apply)

___ private
___ public-local
___ public-State
X public-Federal

Category of Property (Check only one box)

X building(s)
___ district
___ site
___ structure
___ object

Number of Resources within Property

Contributing	Noncontributing	
8	____	buildings
____	____	sites
4	____	structures
1	1	objects
13	1	Total

Number of contributing resources previously listed in the National Register 0

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)
N/A

6. Function or Use

Historic Functions (Enter categories from instructions)
Cat: TRANSPORTATION Sub: WATER-RELATED
DEFENSE COAST GUARD FACILITY

Current Functions (Enter categories from instructions)
Cat: RECREATION AND CULTURE Sub: OUTDOOR RECREATION
GOVERNMENT GOVERNMENT OFFICE

7. Description

Architectural Classification (Enter categories from instructions)

GOTHIC
QUEEN ANNE
STICK/EASTLAKE

Materials (Enter categories from instructions)

foundation POST AND BEAM/CONCRETE
roof WOOD SHINGLES
walls WOOD FRAMING COVERED WITH WOOD SIDING
other _____

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

North Manitou Island Life-Saving Service Complex
Sleeping Bear Dunes National Lakeshore
Leelanau County, Michigan

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8. Statement of Significance

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Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

_X_ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

___ B Property is associated with the lives of persons significant in our past.

_X_ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

___ D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

___ A owned by a religious institution or used for religious purposes.

___ B removed from its original location.

___ C a birthplace or a grave.

___ D a cemetery.

___ E a reconstructed building, object,or structure.

___ F a commemorative property.

___ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)
MARITIME HISTORY
TRANSPORTATION

Period of Significant 1854-1932

Significant Dates 1854
1877
1887

Significant Person (Complete if Criterion B is marked above)

_____

Cultural Affiliation N/A

_____

Architect/Builder CHANDLER, FRANCIS W.
BIBB, ALBERT B.

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

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9. Major Bibliographical References

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(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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
X recorded by Historic American Buildings Survey #MI-338A & B
___ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data
___ State Historic Preservation Office
___ Other State agency
X Federal agency
___ Local government
___ University
___ Other

Name of repository: SLEEPING BEAR DUNES NATIONAL LAKESHORE

North Manitou Island Life-Saving Service Complex
Sleeping Bear Dunes National Lakeshore
Leelanau County, Michigan

10. Geographical Data

Acreage of Property APPROXIMATELY 3 ACRES

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing		Zone	Easting	Northing
1	16	580420	4996700	3			
2				4			

___ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title WILLIAM HERD, PARK RANGER AND KIMBERLY MANN, HISTORIC ARCHITECT

organization NATIONAL PARK SERVICE date JANUARY 26, 1994

street & number 9922 FRONT ST. telephone 616-326-5134

city or town EMPIRE state MI zip code 49630

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

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Property Owner

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(Complete this item at the request of the SHPO or FPO.)
name NATIONAL PARK SERVICE

street & number 9922 FRONT STREET telephone 616-326-5143

city or town EMPIRE state MI zip code 49630

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Sleeping Bear Dunes National Lakeshore is located in the northwest portion of lower Michigan. Within the Park boundaries are three Life-Saving Service Stations that overlook the Manitou Passage. The close proximity of these stations was because the Manitou Passage carried heavy vessel traffic. The Manitou Passage was also among the most treacherous areas on the Great Lakes at that time. Terminology used by Shipmasters when referring to the Manitou Passage included "fearful" and "dangerous". (Weeks 1990:127)

Keepers of the South Manitou Light logged ninety-six wrecks that included those salvaged and sailed again. A marker outside of the Sleeping Bear Point Life-Saving Station puts the number of shipwrecks in the Manitou Passage at 80. The December 1988 report, by The Maritime Heritage Alliance of Northern Lake Michigan, referred to "70 known shipwrecks in the vicinity of the Manitou Islands". (Weeks 1990:127)

Two of the three stations overlooking the Manitou Passage were constructed in 1901-2 under the same contract and used the same plans. Both stations are under the National Park Service jurisdiction and have been listed on the National Register of Historic Places. These stations are Sleeping Bear Point Life-Saving Station #79000285 and South Manitou Island Lighthouse and Life-Saving Station Historic District #83003782.

The third station is the oldest among the three and spans approximately 90 years of history representing the earliest beginnings of the Life-Saving Service on the Great Lakes. The buildings illustrate the beginnings of the volunteer era, and continue through the expansion of the Life-Saving Service into the Coast Guard era.

The Life-Saving Service complex is located in approximately 3 acres on the northeast side of North Manitou Island. The northern boundary runs from Lake Michigan along the south edge of the new dock road and intersects with the access road that runs into the village. From this intersection the boundary turns south and runs east along the access road to an area just south of the Generator Building. The boundary then turns east and runs to Lake Michigan.

The district is located on a generally level site with a broad sandy beach from which the buildings sit behind. The area is relatively open with several lombardy poplars situated around the

structures, as indicated on the accompanying site plans. The structures are removed from the additional structures located in the North Manitou Island village. The district is separated from these structures by level grassy meadows immediately on three sides. Neighboring structures are additionally separated by their situation on the rising terrain above the meadows.

Two roads create the boundaries of the district and are located on the accompanying site plans. The access road creates the western boundary, while the new dock road creates the northern boundary. Each of these roads leads to the other village structures located across the meadow expanses.

Additional remaining manmade landscaping is evident on the site. These items include two apple trees, black locust, several sugar maples, lilacs, spirea, and poppies. This vegetation is not associated with the U.S. Life Saving Service, but with the Manitou Island Association that purchased the property around 1938.

The structures within the complex are situated in a linear arrangement from north to south. A description of these resources, proceeding from north to south, is as follows:

Hans Halseth House (1890s) and Shed (1910)

The Hans Halseth House stands a few feet south of the new dock road and is the only dwelling left from a complex of six houses. These dwellings were off the Life-Saving Service reservation and belonged primarily to married surfmen who had their wives and families living on the island. Hans Halseth was the longest resident of this house and started as a Life-Saving Service surfman in the mid 1890s. Hans Halseth continued working there into the late 1920s, after the Life-Saving Service, and the Revenue Cutter Service combined to form the U.S. Coast Guard in 1915.

The Hans Halseth house was originally located a short distance north of the complex at Pickard's Dock and was moved to its present location around 1910. The Halseth house resembles the Folk Victorian style in design and has been modified throughout its past. It is a story-and-a-half, side-gabled dwelling with a gabled dormer centered in the east roof.

The house has been added to several times, including the front porch with its sloping hipped roof. The porch is also supported by four simple columns on a wooden framed porch on concrete post foundations. The original roof on the house is steeply graded, and has two continuous pitched additions on the west side. The first addition at the rear is the same width as the house, while the final addition is only partially as wide. There is a central brick chimney for the historic stove heating system.

Sleeping Bear Dunes National Lakeshore adapted this building in 1990 to include housing for park employees. The work included removing aluminum siding and restoring the original wood siding. The asphalt shingles were removed and the house was reroofed with historically accurate wood shingles. A recent shed addition, added to the south side of the house, was removed to return the building to its historical time period. The interior of the house was redesigned to create a more modern living space for the Park employees. The integrity of the structure is 50% intact and contributes to the character of the complex.

The shed, constructed around 1910, stands directly behind the house on the west, and has an ell wood shingle roof and wood siding that matches the house. This structure was stabilized and restored to its historic appearance, by the park in 1993. The integrity of the structure is 100% intact and contributes to the character of the complex.

Volunteer Rescue Station (1854)

This building sits 50 feet southeast of the Hans Halseth House. This structure has been identified as a Volunteer Rescue Station from the 1854 federal appropriation that began to place surfboats on the Great Lakes. This appropriation, which provided the first expenditure affecting lifesaving efforts on the Great Lakes, provided $12,500 to purchase forty-seven lifeboats, nearly half of which was stationed on Lake Michigan. (O'Brien 1976:33) Two letters dated September 15, 1854 were found in the National Archives that "acknowledges the receipt of $475 in bond signed by Nicholas Pickard, and others, for a Life Boat to be constructed and located at North Manitou Island". (Correspondence, Record Group 26)

The Volunteer Rescue Station is a one-and-a-half story frame boat house, measuring approximately 17' wide by 36' long. The walls are covered in cedar boards rather than the cedar shingles used on the 1848 federal appropriation for the east coast. The single room on the first floor housed the surfboat and other rescue equipment, while the small loft above was used for storage.

Different boat house designs and specifications were generated from each appropriation, and the boathouse closely matches the written government specifications for the 1854 appropriation. Other items that closely match the 1854 specifications are the general size, numbers and size of existing windows, pedestrian door, boat door, and the use of whitewash on the interior of the building. (Bennett 1976:36-37)

An act passed June 20, 1874 that provided funds for an additional fifty-one stations to be built on the Atlantic Coast and the Great Lakes. (O'Brien 1976:35) Three months after this act was passed, a 40' x 20' tract of land was leased on North Manitou Island from Nicholas Pickard. This tract was leased for one dollar a year for the establishment of a life-saving station. (National Archives: Record Group 26) The lot size corresponds with the size of the 1854 Volunteer Rescue Station. It is believed that the 1874 act generated the accumulation of private volunteer stations for inclusion in the U.S. Life-Saving Service.

The 1854 Volunteer Rescue Station is believed to be the only one left in the country from the 1854 appropriation. This theory is supported by maritime writers and experts throughout the country. Packets, which included photographs and floor plans, were sent to four recognized maritime historians who agreed this building appears to be an 1854 Volunteer Rescue Station. (Letters from Bennett, Foster, Nobel, and York, 1993)

The historic integrity of the building is approximately 90 percent intact, and greatly contributes to the character and the importance of this complex. This building was moved one full length toward the water and placed on a permanent concrete foundation during the early years of the U.S. Coast Guard.

Sleeping Bear Dunes National Lakeshore will be restoring the final 10 percent of this structure in the summer of 1995 or 1996. The work will include removing nonhistoric partitions and worksurfaces

from the interior, reinstalling the historic floor, and the boat ramp on the front of the building to include an 1854 Francis Surfboat as part of an exhibit.

Storm Tower and Flag Locker (circa 1905)

Directly south, of the Volunteer Rescue Station, is the Storm Tower and Flag Locker. The exact date of construction of the storm tower and flag locker is unknown. An April 19, 1905 Site Plan drawn by the U.S.L.S.S. shows that the storm tower was in place by that date. The original metal-framed structure of the flag tower appears much the same as it did in historic photographs, except that a horizontal yardarm beneath the national ensign is missing. This was the mast for displaying storm signal flags.

The original eight-foot high flag locker was retrieved from the north side of the island. This locker was repositioned under the storm tower during the summer of 1994. The storm tower and flag locker stand between the U.S. Life Boat Station and the Volunteer Rescue Station. The storm tower and flag locker are 95% intact and contribute to the significance of the complex.

U.S. Life Boat Station (1877)

The U.S. Life Boat Station is located twenty-five feet southwest of the Storm Tower and Flag Locker. This large open one story boat house is the second oldest building in the Life-Saving Service complex. The building was built using a modified floor plan designed by Francis W. Chandler in 1876. This plan was used mostly at stations on Lakes Erie and Michigan during 1876-1877. (York 1983:19)

Slightly wider and shorter, the most visible differences between the two designs focused on the gable treatment. Absent from the modified plan was the roof observation deck and the stickwork found at the peak of the 1875 prototype. Instead, a clipped gable terminated the front end, providing protection from the weather to an open balcony below, from where the lookout could stand when on duty. Also missing from the 1875 prototype, are the exterior diagonal corner braces. Otherwise much of the detailing was similar, with two hooded doors, the same vertical siding including

battened on the second floor level, and bracketing beneath the eaves. (York 1983:19)

Francis W. Chandler did not sign the plans for the Lakes stations. A bill he submitted confirms his completion of the drawings during the winter of 1875. Mr. Chandler completed these drawings shortly after leaving the office of Alfred B. Mullett, Supervising Architect of the Treasury Department. It appears that Chandler's work consisted of two nearly identical plans. (York 1983:18)

After leaving Mullett's office, Francis W. Chandler returned to Boston and joined in partnership with Edward C. Cabot. The firm of Cabot and Chandler designed numerous Queen Anne Style residences in and around Boston from the late 1870s through the 1880s. (York 1983:20)

In 1888 he went back to M.I.T. for a third time as chairman of its Department of Architecture, staying until 1911. Chandler was also distinguished by his appointment as a fellow of the American Institute of Architects in 1889. (York 1983:20)

The North Manitou crew built a roof observation deck on the top of the building for a more unobstructed view across Lake Michigan. The date of this addition is not known, but pictures from around 1900 show this structure already in place on top of the building. This addition was later removed when the complex was sold to the Manitou Island Association around 1938. The Life Boat Station remained intact during the Coast Guard era. The Life Boat Station went through some minor changes when the complex was closed and purchased by this private corporation.

The changes that came about during the Manitou Island Association/Angell Foundation era are that the Life Boat Station was converted into quarters and a storehouse. The changes included removing the boat door and installing a picture window in its place, installing a pedestrian door next to the new picture window, installing two windows at ground level on the west side of the building, removing the north and south hooded door entrance, and removing the lookout tower constructed on the top of the building. A capstan was originally included inside the 1877 Life Boat Station, but was later removed by the Manitou Island Association.

All character defining details, including the brackets and clipped

gable treatments, windows, interior paneling, and decorative interior braces were retained and exist today.

Sleeping Bear Dunes National Lakeshore adapted this boat house into a dormitory in 1990. The work provided a kitchen, bathroom, and upper dormitory sleeping area with bath as a separate structure that is free standing on the former boat house floor plan. This design can be reversed, if the original boat house function is required. The Life Boat Station is 75 percent intact and greatly contributes to the historic integrity of the complex.

Capstan (1877)

This capstan that once was used for hoisting surfboats seawards or shorewards stands 35 feet to the southeast, between the U.S. Life Boat Station and the Lake Michigan shore. Originally it sat along the south side of a long wooden boat-launching ramp with metal tracks, but this feature is no longer existing.

The use of this capstan became important when the distance between Lake Michigan and the Life Boat Station became distant due to rising and falling lake levels. Life boats would be drawn to the first capstan during low water years and then drawn the remaining distance into the Life Boat Station using the second capstan located inside the building. This element is missing the name plate on the top and is in a rusted condition. The item is 90% intact and contributes to the historic scene of the complex.

U.S. Life-Saving Service Dwelling (1887)

Twenty feet south of the U.S. Life Boat Station stand the U.S. Life-Saving Service Dwelling. This building plan is believed to be the only one constructed of its type in the country. No record of another station with this floor plan is known. The original design for this building is believed to have been developed by another architect for the Life-Saving Service, Albert B. Bibb, who is known for the Marquette style of station.

The original floor plan for this two-story building separated the captain's living quarters, on the first floor, from that of the crew's on the second floor. The initial floor plan had an open

square porch at each of the four corners, tucked under the roof overhangs. The stairway to the second story crew's room was through the door on the northeast corner porch.

In 1932, the Coast Guard redesigned, and raised the building by placing it on a full basement. A porch was also added to the east side that partially concealed the cross gable. The stairs were also moved to the center of the building to provide access to both the second story crews room and the basement.

This two-story building is situated with its longest axis running north to south. The roof line is a steeply gabled roof with a smaller, centered cross gable on the east side.

The second floor was a large unobstructed room for the crew's bunks. In 1992, the Park placed partitions in this space to create separate sleeping areas for staff. The original crew's lockers still run along the west wall, with the brick chimney sitting directly in front. These eight lockers are numbered "1 thru 8", and stowed the gear for each of the seven crew members and the captain.

Part of the 1932 alteration included the conversion of the east elevation under the gable into a crew's bathroom, with indoor plumbing. The new facilities consisted of a shower, commode, and two wash basins. (U.S. Coast Guard, Microfilm File #259)

On the first floor, part of the 1932 alterations consisted of expanding onto the original southeast corner porch. This expansion made an office for the keeper that included a desk, file, and chart case. A wall separating the office from the adjacent sitting room was removed by the Angell Foundation after 1953. (U.S. Coast Guard, Microfilm File #259)

On the south side of the first floor are the kitchen and sitting rooms. Next to the kitchen is the southwest corner porch that is original to the 1887 first floor plan. A pantry was also next to the kitchen, but its walls were removed by the Angell Foundation after 1953, to expand the kitchen operation.

The northwest corner porch was eliminated to create an enclosed stair into the basement of the 1932 alteration. The new facilities on the first floor at this corner consisted of a bathtub, commode,

and wash basin. The bedroom for the captain is situated next to this bath, with an adjoining door into a spare bedroom on the northeast corner. (U.S. Coast Guard, Microfilm File #259)

A stairway in the center of the building leads to the upper crew's area, and to the basement. In the basement, there is a boiler room and furnace in the south central room, a coal bin in the southwest corner, and a pump in the southeast corner. The basement has many small windows, each with a single row of three lights. There are five such windows on the south face, four on the north face, two on the west, and none on the east. A coal chute door panel is located on the west wall.

The porch, added in 1932, is about 8 feet wide and extends the full 30 feet across the east elevation. Five simple square columns support the roof made continuous with the gable, but at a lesser angled slope. The porch has a simple railing across the front, about three feet high. The porch has a lattice work grill beneath it to prevent pets or other animals from crawling beneath. (U.S. Coast Guard, Microfilm File #259)

Two large windows, each with eight-by-eight lights, were added to the east and one on the south facade, during the 1932 addition. The building's original windows include two eight-by-eight lights on the second floor at the north and south face. Two original windows with eight-by-eight lights are located on the first floor at the north and south face. Two additional original windows, with six-by-six lights, are located on the west face of the first floor.

Sleeping Bear Dunes National Lakeshore adapted this building in 1992. This work included repairing and repainting the original interior plaster and exterior siding, restoring the 1932 front porch and original southwest corner porch, and installing a partition in the open crew room to meet a current need for additional bedrooms. A partition was also added in the first floor captain's bedroom to create a hallway from the living room to the bathroom. This building is 80 percent intact from the 1932 alterations, and 65 percent intact from its original design and contributes greatly to the significance and integrity of the complex.

Crew Ready Room (1895)

The Crew Ready Room is located approximately 10 feet southeast of the U.S. Life-Saving Service Dwelling. This pyramidal hipped roof building was the place where the on-duty surfmen awaited summons from the lookout for an emergency. Since they were allowed to read or play cards here, some surfmen called it the loafing room.

The exit door was originally on the east facade. The earliest photographs show two double boat doors here to reach supplies, and store the beach cart in the earliest years.

The Manitou Island Association redesigned the interior for quarters in the 1940s and created the pedestrian doors on the north and south facades. The placement of the windows has been changed as well. A large picture window is located where the double boat doors originally were located.

Sleeping Bear Dunes National Lakeshore adapted this building in 1990 for park quarters, removing the aluminum siding and asphalt shingles. The building is currently sided with horizontal wooden clapboard siding, and wood roof shingles that are historically accurate. This building is approximately 35 percent intact from its original design and contributes to the historic scene of the complex.

Generator Building(1914-16)

The Generator Building is located 10 feet southeast of the Crew Ready Room. This is the only building in the complex believed to have been built just prior to the 1915 reorganization into the U.S. Coast Guard.

This building is a single story shed with gabled ends. Windows on the structure include one small square 4-light window on the east side, and two double hung 6-by-6 light windows on the north side. The single door entrance is located on the west elevation.

Sleeping Bear Dunes National Lakeshore adapted this building in 1994 by restoring and repainting the historical horizontal clapboard siding and stabilizing the structure. This structure is 80 percent intact from its original design and contributes to the

historic scene of the complex.

Flammable Materials Storage (1914-16)

This structure is located 5 feet northeast of the Generator Building, and all that remains are the poured concrete walls. This structure is approximately 4 foot tall with evidence that it had a gable roof. The end walls are shaped to indicate this fact, and historic photographs also show this as a fact. An opening, in the concrete wall on the west side, shows that a small door existed for entering the interiors. It appears that oil drums and other flammable materials, associated with the Life-Saving Service, were stored in this structure. This structure appears to have been built when the generator building was constructed. This structure is 60 percent intact from its original design and contributes to the historic scene of the complex.

Root Cellar (1899)

This structure is located twenty-five feet west of the Generator Building. A date of 1899 has been etched into a stone above the entrance into the cellar. The construction is predominantly field stone and mortar with a wood shingled gable roof on top.

The access into the cellar is through two sets of doors. The first is an inclined double wooden cellar door at the surface. The second door, at the bottom of the stairs, is a single wooden plank door into the underground area.

The structure has a round air vent on the west side above the wooden cellar doors, and a square screened hole on the east side. Both vents provide air movement into the cellar. The square vent is connected to a square wooden duct that delivers cool air to the floor of the cellar, thus keeping perishable goods fresh. The ceiling is provided by finishing the 2 x 6 framing members with planking. The cavity that this construction provides may have been filled with sawdust to provide further insulating capabilities. No evidence of sawdust is present in the structure or within the cavity. This building is 95 percent intact from its original design and contributes greatly to the historic scene of the complex.

Sea Wall (1890s)

Directly in front of the complex to the east are the remains of a seawall built by the Life-Saving Service in the 1890s that is still intact. The outline is shown on a 1905 site plan of the station and is still evident, as shown on that plan. An area in front of the Volunteer Rescue Station was removed when this structure was moved one length toward the water and placed on a concrete foundation wall. The approximate length of the seawall is 200 feet and was built using fieldstone. This structure is 90 percent intact from its original design and greatly contributes to the historic scene of the complex.

Lookout Tower Abutments (1930)

Twenty-five feet east of the Storm Tower and Flag Locker sit five large concrete squares with steel shafts protruding from the middle of each unit. The four corner foundations for a tower, built by the Coast Guard, which stood about thirty feet tall in this location. The fifth piece was the anchorage for the ladder stair used to climb to the lookout.

Photographs of this structure show that it was made from metal. A metal staircase was anchored upon the central concrete pier and ascended to a platform with one switchback stair halfway up. The tower was about ten feet square at the base and perhaps eight feet square at the top. A wooden guardhouse sat atop the tower that had a walk-around balcony surrounding a sentry box. A pyramidal hipped roof covered the box and overlapped the platform. This structure was dismantled and moved to the South Manitou Island station in 1939, as identified in the South Manitou Island log book entry for October 10, 1939. This feature is 10 percent intact and contributes to the historic scene of the complex.

Sidewalks (1905)

The sidewalks are shown on a 1905 site plan of the U.S. Life Saving Service Complex. Most of the walks are etched with "USLSS" and a printed date of their last reconstruction ("1908").

Two portions of walk are missing from the complex today, as shown

on the site plan. One section is a forked walk in the northwest corner of the complex. This site is where a blacksmith shop sat before it was also removed during the Complex's early history. The other portion of walk, that is no longer present, is a portion on the east side of the Volunteer Rescue Station. This section was removed when the building was moved toward Lake Michigan in the early years of the Coast Guard.

The walks are all 3 feet wide except for the 4 feet wide walk between the Crew Ready Room and the U.S. Life Boat Station. This walk is not visible, but is believed to be buried under the sand and sod now in this location. This element is 90 percent intact from the original design and greatly contributes to the historic scene of the complex.

Fire Pump Well (ca. 1900)

Fifteen feet southeast of the Life Boat Station and 5 feet west of the capstan is the concrete foundation of the fire pump well. The foundation measures 5'-0" x 5'-0" and the concrete walls are approximately 6" thick. Historic photographs show the pump situated on a wooden deck over the foundation walls. The exact date for the removal of this equipment is not known, but the pump was in place and is shown in photographs from the Coast Guard era. The Fire Pump Well is 10 percent intact and contributes to the historic scene of the complex.

Lombardy Poplars (ca. 1900s)

The exact time and individuals responsible for planting the Lombardy poplars next to the station vary with each historical source. The Life-Saving Service was directed to landscape the areas surrounding their structures and both stations at North and South Manitou chose to plant Lombardy Poplars around these stations.

The Life-Saving Service also understood the value of these trees for navigational purposes. Many historical accounts admit that the ship captains would spot these trees along the horizon and know the Life-Saving Stations were at those locations. Even today in foggy weather, the first landmarks that are noticeable are these tall

poplars.

The age of the Lombardy Poplars is believed to be between 70 - 90 years old, with the oldest being planted around the turn-of-the-century. This element is 90 percent in tact and contributes to the historic scene of the complex.

Historic Elements Missing From the Scene

Some historic elements from the U.S.L.S.S. era are visible in historic photographs, within the park files, and is no longer present in the existing complex. These items contributed to the appearance and daily activities of the operations of the Life-Saving Station. These items were removed, circa 1938, before the purchase of the station by the Manitou Island Association.

These items include buildings, structures, and features shown on the April 19, 1905 site plan by E.P.B. Asst. titled, "North Manitou Island, L-S.S., 12th District, Plot Plan of Station Property".

The removed buildings, include a 16' x 12' Blacksmith Shop located in the northwest corner of the complex behind the Volunteer Rescue Station; two water closets, one 6'-2" x 5'-6" located west along the fence line between the Life Boat Station and the Storm Signal Tower, and the other is 5'-0" x 5'-0" and located west along the fence line behind the Crew Ready Room.

Another missing feature is the removed fence line. Missing fenceline includes a portion that tied the Volunteer Rescue Station and the former Blacksmith Shop site, on the north boundary, with the Crew Ready Room on the south boundary. The site plan shows that there were single gates behind the Volunteer Rescue Station, and by the removed water closet behind the Crew Ready Room. One double gated access was placed behind the Storm Signal Tower, next to the removed Blacksmith Shop.

Other removed structures include the Well directly behind the U.S. Life-Saving Service Dwelling, the 4'-0" wide walk from the Volunteer Rescue Station to the Dock, the Dock 6'-5" wide x 140'-0" long on stone crib leading from the Volunteer Rescue Station, and the 9'-0" wide x 185'-0" long boat ramp and tracks from the Life Boat Station into Lake Michigan.

There are additional elements labeled as proposed on the site plan, and built, as seen in later historic photographs. One elements included the windmill, located to the west along the fence line and between the U.S. Life-Saving Service Dwelling and the Life Boat Station. Another element included the Water Tower west of the Crew Ready Room. The date these elements were removed is not known, but they were missing before the purchase of the station, circa 1938, by the Manitou Island Association.

The North Manitou Island U.S. Life-Saving Service Station is eligible for listing on the National Register of Historic Places. It is eligible under Criteria A because of its association with events that have made a significant contribution to the broad pattern of our history. For approximately 90 years the North Manitou Island station was a key element in the network of rescue stations developed by the federal government. This network provided humanitarian aid to shipwreck victims. The North Manitou Station is also eligible under criterion C. The Station embodies the distinctive characteristics of the type and style of buildings associated with the federal system of coastal rescue stations. The North Manitou Island Life-Saving Station is nationally significant. The site completely exhibits the buildings and structures associated with the creation and development of the federal life saving system.

The federal government became involved in shipwreck rescues in 1848 when funds were provided for volunteer stations on the New Jersey shore. In 1854, the system was extended to the Great Lakes. The 1854 Volunteer Rescue Station on North Manitou Island is the only remaining station from this era on the Great Lakes. This structure is also the only remaining rescue station of its design in the country. It is also one of the two remaining stations in the country from the volunteer period.

The U.S. Life-Saving Service was created in 1871 and introduced stations on the Great Lakes in 1876. The 1877 Life Boat Station on North Manitou Island is typical of the stations built at that time and retains a high level of integrity of material and design. As the Life-Saving Service continued to develop and gain the support of the American people, the system added more stations and improve existing stations. The 1887 Dwelling represents the upgrading of existing stations during that period.

Especially significant to the complex are several auxiliary buildings and structures. These structures helped the crew perform its life saving duties and live comfortably in an isolated island location. These structures are still existing in their original locations and retain a high level of integrity, of material and design, from the Life-Saving Service era. These structures were suited so well for their functions the structures were still being used when the station became part of the U.S. Coast Guard in 1915. The buildings remained active with only modest changes made for

daily duties.

The United States grew proportionately to the development of its maritime transportation system. Ship transportation was a key element for the development of commerce, exploration, immigration and settlement. The federal government was well aware of the importance of the nation's maritime resources, and took an early interest in promoting the water transportation system. As early as 1789, funds were provided for the operation and construction of lighthouses. The Coast Survey was established in 1806 to develop navigational charts. The Revenue Marine was authorized in 1837 to sail along the coast to assist ships in distress, and the Steam Boat Inspection Service was created the following year. (Lamb 1882:358)

Despite all these federal efforts, shipwrecks continued to be frequent occurrences and a system to manage them had to be developed. As early as 1787, counties along the ocean shore, appointed an official to take charge of cargo and bodies cast-up on the beach. The official was typically the local sheriff, coroner, or another individual called a "coast officer", "coast master", "venue master", or "wreck master". (Bennett 1976:6)

Since most of the ships were insured and became the property of the insurance underwriter when salvaged, insurance companies were especially interested in being represented at the wreck scene. Because of the slow communication and transportation systems at the time, it was impossible for the insurance company officials to be at the site in person. Groups of insurance companies formed associations called committees or boards and appointed "agents" to represent their interests along the shoreline.

The most important part of the system was the surfman who lived and worked along the ocean shores. Unlike sailors, whose training taught them to keep away from the breakers, surfmen were masters of the domain where water and land came together. Using special boats, these men passed through the surf daily as they went out to fish, travel, or to salvage cargo from wrecked ships. Their expertise was essential to the saving of cargo and lives. These men were ordinary fishermen, who engaged in salvaging or "wrecking" when the occasion arose. Admiralty law provided that the shipwrecked cargo belonged to the owner, but that the salvor was entitled to a fair price for their labor in saving the property.

The system that evolved was a localized team that could respond quickly and effectively to save and protect property from shipwrecks. While this system was designed to save property, saving human lives was an important by-product. Surfmen regularly risked their lives to rescue victims from the wrecks. Frequently, insurance underwriters supported these humanitarian efforts by rewarding the crews with the contracts to salvage the vessel and cargo.

Wrecking and rescues required larger crews and boats than those used by the local fishermen. Along the New Jersey shore, surfboats 23 to 26 feet in length were jointly owned by several men to use in shipwreck operations. These boats were simply larger versions of the beach skiffs used by two-man fishing teams. The owners jointly shared expenses and the responsibility for selecting the captain and crew. (Guthorn 1982:80)

Other surfboats were recognized as community property and were said to "belong to the beach". The first men to respond to a wreck were permitted to use the community surfboats. Wrecking and rescues were hard on the boats, and surfboats might be damaged or destroyed during a wrecking operation.

The effectiveness of shore rescue stations is based on the nature of the shipwrecks. The largest shipwreck numbers are located close to shore, with only a small percentage out at sea. Shipwrecks occur when they strike rocks or sandbars, because of imprecise navigation or because they are driven off course by storms. Generally, these obstacles are near islands or the mainland. If witnessed by people on shore with the proper equipment, many victims can be assisted to safety.

Two factors made the time right for the American people to take a greater interest in shipwreck disasters. First, beginning in the 1840s many of these ships were American owned and therefore insured by American underwriters. Thus, there was a growing economic interest in responding effectively to shipwreck disasters. Second, passengers were the major cargo of the time. This was the time of the great influx of immigrants to the United States, with many passengers moving between the coastal cities. The loss of life, when one of these vessels was involved in a wreck, was often staggering and aroused the humanitarian interests in the normally uninterested public.

Several humanitarian organizations were created to assist shipwreck victims. These included The Merrimac Humane Society, The Humane Society of the Commonwealth of Massachusetts, and The New York Shipwreck Society. The Massachusetts Humane Society established the first boathouse with rescue equipment in 1807 at Cohasset, Massachusetts. By 1845, the Massachusetts Humane Society had built eighteen rescue stations equipped with boats, boat wagons, line throwing mortars and rockets. These stations, called Houses of Refuge, could also provide shelter for survivors on the desolate shores. (Lamb 1882:358)

In 1847, Representative McClelland of Michigan, Chairman of the House Committee on Commerce, made an amendment to the lighthouse bill. This amendment provided $5000 for lighthouses on the Atlantic with the "means of rendering assistance to shipwrecked mariners". This was the first federal appropriation to provide shore rescue assistance. The action was based on a report concerning lighthouses in Great Britain, France and Belgium prepared for the U.S. Secretary of the Treasury. The report identified the rescue equipment provided to lightkeepers in England and the work accomplished by a volunteer rescue system called the Royal National Life-Boat Institution. (Bennett 1976:11 and O'Brien 1976:33)

In 1848, Representative William Newell introduced an amendment to the lighthouse bill that added $10,000 for the establishment of rescue stations on the New Jersey shore. The amendment passed and Captain David Ottinger of the U.S. Revenue Marine was assigned the task of locating, constructing and equipping the stations. This was all done in cooperation with the New York Board of Underwriters. The $5000 from the 1847 appropriation was finally issued to the Massachusetts Humane Society at this same time. (Lamb 1882:358)

Captain Ottinger identified eight sites for these stations and gave considerable attention to selecting the best equipment for these stations. Seeking out the best experts on the subject he consulted with the Board of Underwriters and their agents, the Massachusetts Humane Society. Captain Ottinger also consulted with the surfmen who made the rescues. Working with an experienced producer of metal lifeboats, Joseph Francis of the Francis Metallic Life-Boat Company, Brooklyn, New York, Ottinger presented two innovations for inclusion in the stations. (Bennett 1976:21)

One of these new pieces of equipment was the lifecar. The lifecar was a small enclosed metal boat that could be drawn out to the wreck and back to shore by ropes. Using the line throwing mortar and the lifecar, victims could be rescued in storms when launching a surfboat was impossible.

Ottinger also introduced a unique surfboat for these stations. Since this was to be a volunteer system, there would not be a regular crew at the stations to maintain a wooden surfboat. Because the boats would be stored out of the water for long periods between rescues, they would dry out and not be watertight when needed. To correct this situation, Ottinger had the surfboat incorporate the latest boat building technology, and had them constructed out of metal. The Francis Metallic Life Boats were patterned after the best models of wooden surfboats used on the New Jersey coast.

The metallic surfboats were 26 feet in length and 6 1/2 feet in beam. Unlike the Jersey surfboat, they were double ended and had ten air chambers. They were constructed from sheet iron coated with a thin layer of tin and an outer coating of zinc to prevent corrosion. The metal was corrugated to add strength to the hull. In addition to not drying out, the metallic surfboats were much stronger and required no regular maintenance. (Francis 1852:10)

To house this equipment, a boat house 28 feet by 16 feet, with cedar shingles on its roof and sides, was constructed. The building had a loft and an eight-by-eight double door opening. (York 1983:6)

These New Jersey stations with federal equipment and volunteer crews soon became more successful than anyone imagined. During the first season of operation, the Francis Lifecar was put into operation for the first time. The crew of the Squan Beach Station, under the direction of Captain John Maxon, saved 201 of the 202 passengers and crew of the British bark ALSHIRE. Even before this rescue, the Ludlams Beach crew had saved 400 people from the wreck of the EUDORA using the new metallic surfboat. Another 90 people were saved from the ORION later that season. The crews participated in eight additional rescues that year. The number of people saved is not known because no official reports were required. (Bennett 1976:70 & 81)

Congress provided funds in 1849 to provide additional stations on the New Jersey shore and to add stations on the Long Island shore, creating a network of 24 stations. Later appropriations allowed the construction of additional stations.

Beginning in 1850, the Treasury Department began to make the metallic surfboats available to many other locations. The Treasury Department provided these boats to Collectors of Customs along the Atlantic and Gulf coast. (Bennett 1976:28)

In 1854, an appropriation of $12,500 was authorized to provide metallic surfboats to 25 locations on Lake Michigan and other points as the Secretary of Treasury deemed appropriate. Also that year, funds were provided for 28 additional stations on Long Island and New Jersey, and for the first time, money to hire paid keepers for each station. (O'Brien 1976:33)

Federal life saving equipment, which had been so successful on the coasts, was now on its way to the Great Lakes. With the opening of the Erie Canal in 1825, the Great Lakes had become an important transportation network into the northwest territory of the United States. The Great Lakes system was an important method for transporting immigrants, and the supplies and materials needed to develop communities throughout the Great Lakes region. While some agricultural produce was shipped to the east, the trade was predominantly from the eastern cities to the wilderness frontier. Business leaders and politicians knew that this transportation route was essential for the development of the region.

While the Great Lakes may not have had storm waves as large as those on the ocean, the waves came closer together and could disable a vessel just as easily. Most importantly the lakes lacked sea room. A ship could run before a storm for only a short time until it was forced to turn or maneuver around a point or island. Groundings were common because of the infrequency of natural bays on the Great Lakes, especially Lake Michigan. Harbors were dredged at river mouths and protected by a set of narrow breakwalls, and entering these harbors in bad weather was especially difficult. As a result, on the Great Lakes and Lake Michigan in particular, most of the wrecks took place near the entrances of these harbors. As occurrences increased, community leaders also began to want the assistance provided by the government surfboats used on the ocean shores.

The surfboats were assigned to a government official, a lighthouse keeper or collector of customs, wherever possible. When a government official was not present at the location, two or more responsible persons could post a $475 bond and receive a boat. The parties were also to show that there were enough people in the area willing to operate the vessel during an emergency. (Stonehouse 1994:11) Forty-seven boats were shipped to the Great Lakes: 16 for Lake Erie, nine for Lake Ontario, 25 for Lake Michigan and one to Lake Superior. (Stonehouse 1994:12)

These sites received only the Francis Metallic Life-Boats and not the lifecar, mortar and other gear provided to the New Jersey and Long Island stations. Care of the boats, including storage, maintenance, and repairs, was the responsibility of the local community. Lighthouses frequently had a boat house which might also hold the surfboat. Other communities built their own buildings for storing the boats. Some communities requested and received additional funds to construct boathouses, including St. Augustine, Florida, Buffalo, New York, and Saugatuck, Michigan. (Stonehouse 1994:11)

By August 16, 1854, a Treasury official selected 17 lighthouse keepers and one Collector of Customs on Lake Michigan to send 19 boats (the keeper at Chicago got two). (Stonehouse 1994:12) Included in this list was keeper Alonzo Slyfield of South Manitou Island, Michigan, with six other sites still needing to be selected. On September 15, 1854 Secretary of the Treasury Guthrie received a bond from Nicholas Pickard and others of North Manitou Island. Secretary Guthrie ordered a boat to be delivered to the island from the Francis Metallic Life-Boat Company of Brooklyn, New York. (National Archives: Record Group 26)

Apparently Pickard, who owned the cordwood station on North Manitou Island, requested and received plans for building a boat house for the surfboat. Whether he also received any money to construct the station is unknown. The twenty-eight stations built under authority of the 1854 appropriation, including the Long Island and New Jersey coast, used a slightly different design than the 1848 stations.

The 1854 stations were larger, 36 feet by 17 feet, and used cedar board and battens in place of shingles for siding. The boat house on North Manitou Island closely matches the official written

description of these boathouses. It is well documented that the Treasury Department shared these specifications with communities wishing to build boathouses. The federal officials knew the design was serviceable and inexpensive to build. (Bennett 1976:36)

While the success of the surfboats in stations on the east coast continued to be recorded, the use of the government surfboats on the Great Lakes remains unknown. The number of wrecks at these locations, the success of the surfboats on the lakes, and the fact that the metallic boats were being used in fresh not salt water, suggests that the boats would have been put to good use. Unfortunately, since no reports were required, no records of rescues made with the government boat have been found.

The 1854 Volunteer Rescue Station on North Manitou Island is the only boat house built from these specifications still in existence. The structure also retains a high level of integrity of materials and design. It is also the only existing building on the Great Lakes used by the volunteer rescue system. The 1848 Spermaceti Cove Station, New Jersey has been moved to Navesink Twin Lights, and is the only other structure associated with the volunteer system in the United States. (Letters from York, Foster, Bennett 1993)

Except for paying the salaries of the superintendents and keepers, little of the appropriations between 1855 and 1870 were spent. There were no federal expenses incurred at the stations because there were no regular drills, no regulations, no operating funds, no paid crews, no regular maintenance of the buildings and equipment, and recommendations to the Treasury Department were routinely ignored.

Through all this and the disruption of the Civil War, the system of local volunteers worked amazingly well. It is known that at least 4,163 lives were saved by the stations between 1848 and 1870, and it is believed the number is much greater than reported. (Bennett 1976:75)

In 1869, the Division of Revenue Marine was created in the Treasury Department. This division had responsibility for the Revenue Cutters, Life-Saving Stations, Steamboat Inspection Service and the Marine Hospitals.

Following the loss of many lives in the winter of 1870, the New York Herald called for reforms and improvements of the life saving system. It stated that many of the stations and their equipment were in poor condition, and keepers lived many miles from their stations. Since there were no paid crews, no one was on the beach to locate wrecks or to be summoned in case of an emergency. (Nobel 1994:24)

In 1871 Sumner I. Kimball was appointed to head the Revenue Marine Department. Kimball dispatched Captain John Faunce of the Revenue Marine to inspect the stations. Faunce's report substantiated the charges made by the press. Kimball began at once to reorganize the system. He replaced politically appointed keepers who lacked the skills for surf rescue, and he developed regulations for the keepers to follow. An appropriation of $200,000 permitted the hiring of six man crews at all twenty-eight of the stations around New York harbor. This provided for the daily patrol of the shore and regular drills with the equipment. (Nobel 1994:28)

The following year the system expanded to the coast of Rhode Island and Massachusetts. These new stations were almost twice as large as the older stations, and were designed to provide living space for the full time crews. Resembling the 1848 buildings, the new stations were one-and-one-half stories with shingled sides and roofs stained red. These so called "redhouses" were 18 feet by 48 feet. (York 1983:13)

In 1873, the system again expanded to the shores of Maine, New Hampshire, Virginia, and North Carolina as other states wanted to protect the shipping along their shores. Again these new stations used a single design, but for the first time consideration was given to an architectural style. The stations used a combination of two design styles that included Carpenter Gothic and Stick Style. Built in 1874, they were one-and-one-half stories, and 19 feet by 43 feet. (York 1983:15)

An act passed June 20, 1874 that provided funds for an additional fifty-one stations to be built on the Atlantic Coast and the Great Lakes. (O'Brien 1976:35) Three months after this act was passed, a 40' x 20' tract of land was leased on North Manitou Island from Nicholas Pickard. This tract was leased for one dollar a year for the establishment of a life-saving station. (National Archives: Record Group 26) The lot size corresponds with the size of the

1854 Volunteer Rescue Station. It is believed that the 1874 act generated the accumulation of private volunteer stations for inclusion in the U.S. Life-Saving Service.

The June 20, 1874 act provided the need to construct additional stations. Kimball requested the services of an architect from the Treasury Department. Frank Chandler, assistant supervising architect, was assigned the project. Chandler's design for the 1875 stations closely resembles the 1874 stations. This suggests that Chandler may have also been responsible for the former design of the previous year's station, with only some exterior detailing being different.

The ocean stations were usually located on the sparsely populated barrier dunes along the shore. The ocean ports were usually protected by natural bays, inlets and large river mouths. Most of the wrecks were located along these deserted exposed stretches of the shore and not near populated port cities. It was therefore necessary to have a paid crew on hand to watch for wrecks and to be nearby to man the life saving equipment. Stations along the ocean provided storage space for all the rescue equipment and living quarters for the crews, and were called Life-Saving Stations.

The situation on the Great Lakes was different, since they do not have the irregular shoreline with natural bays and inlets. Harbors were dredged from the mouths of the rivers that flowed into the lakes. The harbors were then protected by a set of breakwalls. Reaching the safety of the harbor through the narrow opening of the breakwalls was a difficult task in all but the best weather.

As a result, most of the shipwrecks on the Great Lakes were near the entrance of port cities and therefore near population centers. At these locations it would be possible to quickly muster a crew of volunteers. The station's needs, for areas with local volunteers, included all the equipment but no living quarters for the crew. The name "Life Boat Station" was used for the stations that housed equipment with no live-in crews. (O'Brien 1976:34)

The modifications Chandler made to his 1875 design, for the Life Boat Stations, included a wider and shorter floor plan and clipped gable ends. Because there were no crews to accommodate, a loft or sleeping room was not needed, just one large equipment room for the

boats and gear. There was also no need for the lookout platform on the roof, but the design did provide for a balcony. This balcony was placed under the clipped gable end on the seaward side where the keeper or a volunteer could stand watch in bad weather. (York 1983:17)

Some of these stations were built on the beach, similar to the Life-Saving Stations, but many were built within a bay or harbor. At these protected locations the station could be provided with a sloping ramp to run the boats into the water. This meant that the stations could use the standard surfboat or the much heavier lifeboat that was self righting and self bailing.

Of the twelve stations built on Lake Michigan in 1876, nine were Life Boat Stations. The Life Boat Station on North Manitou Island was constructed in 1877 and went into operation the following year. (Annual Report 1877) Daniel L. Buss was selected as keeper of the station. (Rusco 1991:19) The Life Boat Station was located near Pickard's wharf next to the 1854 rescue station. (National Archives: Record Group 26) While the station may have had a life boat, it would have been difficult for the crew to launch in many storms. The station was located on the beach and not within a harbor, and therefore had no launch ramp into protected water.

Because the Life Boat Station did not provide a lookout platform, a suitable lookout had to be built once a crew was added. It appears that a simple functional enclosed lookout was added to the boat house from historic photographs available at Sleeping Bear Dunes National Lakeshore. The addition lacks any stylistic design, and was probably constructed by the crew. The exact date the lookout was removed is not known, but it was gone by the time the station was purchased in the 1940s by a private corporation, the Manitou Island Association.

The continued success and expansion of the service permitted the Life-Saving Service to become a separate agency within the Treasury Department, in 1878, with Kimball in charge. Apparently the reliance on volunteer crews was not entirely satisfactory. Soon after the creation of the life boat stations, one or two surfmen were hired to assist the keepers at some of the Great Lakes Stations.

Beginning in 1878, the North Manitou Island station was manned by

a paid six man crew, as were the other stations on Lake Michigan. (Annual Report 1878) Life saving was a twenty-four-hour occupation and it was essential that the crew live near the station. They needed to be nearby so they could take their rotation on watch, beach patrol, and if necessary, be quickly assembled for a rescue.

No records have been found to indicate this, but it is assumed there were no established crews' quarters on North Manitou Island at this time. It is believed the crew purchased or boarded in houses existing nearby for the cordwood operation. It was common practice at this time that the crew took their meals at the keeper's house. Several of the men may also have boarded with Keeper Buss, since he owned a large home behind the station.

As the Service became better established, it was necessary to enlarge many of the stations. This was required, in part, to house additional life saving equipment, but the primary reason was to provide additional space for the keeper and crew. During the early years of establishment, as a means to save money, the stations had been designed to provide only the minimum amount of space for the staff. Larger crews, and the need to provide some private space for the keeper and his family, compelled the Service to modify many of the stations. This was especially true for the early Life Boat Stations that had not been designed to house a paid crew.

Providing crew accommodations at the Great Lakes Life Boat Stations was a concern for the service in the mid 1880s. In some cases, additions were added to the Life Boat Stations, but at other sites a separate building away from the original boat house was constructed. The first separate dwelling to be apart from the boat room was designed, in 1885, for a Life Boat Station at Golden Gate Park, California.

Albert B. Bibb was working as an architect for the service by 1885, although he probably began his employment as an Inspector of Stations, as early as 1881. Bibb's initial involvement was in the enlargement of several stations throughout the system, by extending the roof line and adding ell additions. (York 1983:42)

In the mid 1880s, Bibb designed a new station for Marquette, Michigan that was the first station to be originally constructed with the dwelling and boat room separated. The Marquette style of station is believed to be Bibb's final work for the Service.

Although the original drawings are unsigned, the use of numerous details associated with Bibb's successor suggests his hand. At least thirteen stations were built using this Marquette design. (York 1983:218)

The Marquette type may have been the first station to be designed from the beginning without an integral boat room. Instead, functions of housing the crew and rescue boats became divided into two separate buildings. The Marquette plan permitted a greater flexibility by allowing each building to be located in the most advantageous spot. The boathouse could be placed at the water's edge, while the dwelling was usually set back on land less susceptible to coastal erosion.

A separate dwelling was built in 1887 for North Manitou Island, and again for nearby Beaver Island when its Station was constructed. The selection of this type of Station was an asset. Both the Beaver Island Station and the North Manitou Station were on exposed beaches and not on protected water. The separation of the two functions allowed each building to be placed in its best location. It is believed that Bibb was responsible for the design of the North Manitou Island Station. Its massing and the use of different types of shingles or siding at each floor level are synonymous with buildings designed by Bibb.

Similar in all stations, a drill pole and a 60-foot flagpole were included in the complex. The drill pole sat to the south of the station, but is no longer present. The original flagpole was replaced in circa 1905 with a 70-foot prefabricated steel structure that exists today. The four sides of the storm signal tower are triangulated trusses that taper to a point 50 feet above the ground. From this point a mast ascends an additional 20 feet and yardarms extend seven feet to each side. An American flag flew from the top while storm warning flags were flown from the yards. The international code flags were also flown when needed to communicate with a ship. Inside the base of the tower was a small metal flag locker where all the flags were stored. Towers of this type were installed at all the stations in 1914.

A wood framed supply building, with a hip roof, was at the station by 1895. The building first had two sets of large boat house doors, which suggest that it was built to house some of the rescue equipment. As the service evolved, it was common to add extra

buildings to accommodate additional boats and rescue gear, or to provide living space for the crew. These buildings were simple, lacking both the architectural detail and the substantial construction of the main buildings. Many of these buildings were built by the crews. By 1902 this building had been converted into a ready room for the crew. This loafing or "ready room" was simply a place where the men could relax and still be near the station.

Just west of the ready room, the crew built a root cellar in 1899. The stone building was well designed with a vestibule, and vents to the floor for cool air. The root cellar allowed the crew to store the many fresh fruits grown on the island in addition to potatoes, carrots and cabbage.

Buildings were constructed or reassigned functions as needed to complete the task assigned to the station. A blacksmith shop once existed behind the 1854 Volunteer Rescue Station. The Volunteer Rescue Station was used to hold the station's supply boat in the early 1900s, and then to store the beach apparatus after 1920.

From an early date, if not from the very start of the station, there were two boats stored in the Life Boat Station. The building had one boat door opening, and required an interior cross over track to get the boats out of the building. The beach carts would have been in the way of launching the boats in this arrangement, so the gear was stored in a separate building. This allowed the rescue boats to be launched and retrieved at a much faster and easier speed. Around 1920 the supply boat became motorized, and because it was heavier, it was stored in the water or on the beach during the winter months.

The Life Boat Station came with a capstan for launching and retrieving the heavy boats from the lake. Another capstan, which exists today, was added along the launch ramp as the distance to the lake increased. Also near the ramp was a well and a two-man pump for fire protection.

Between 1914 and 1916, a building to house a generator and a flammable storage building were constructed on the grounds. Sidewalks connecting the various buildings were added as shown on a 1905 site plan. A windmill and a water tower were added soon after 1905.

The station maintained a sloped wooden launch ramp from the Life Boat Station to the water. The ramp had a light metal track for moving the boats stored on wheeled carriages. The ramp was routinely damaged by the storm waves and ice so yearly maintenance was required to keep it operational. A crude ramp, built with a log track and wooden rollers, also connected the 1854 Volunteer Rescue Station with the water for launching the supply boat. Where this track entered the water, the crew had built a small dock out into the lake.

After the addition of the 1887 Dwelling, the crew slept at the station. Since it was difficult for the married men to see their families, the service permitted the men to build cottages for their families on the government property. It was common, at the Great Lakes stations, to see two to six simple vernacular homes for the families of crew members. While these buildings were frequently on government property, they were privately owned. When men moved to another station, they sold their home to another crew member. Commonly, the homes were moved by barge, or on the ice, to a new station in the vicinity.

One of these, the Hans Halseth house, still exists on North Manitou Island. The cottage originally sat to the north of the complex at Pickard's Dock. Halseth became a surfman as a young man in the mid 1890s and worked at the North Manitou Island station at least until the late 1920s. Around 1910 the building was moved to its present location on the north end of the complex.

Boats were an important part of the North Manitou Island station. The Life Boat Station first received a Merryman self-bailing, self-righting lifeboat patterned after the 30-foot English lifeboat of the Royal National Life Boat Institution. The Merryman lifeboat was 26 feet 8 inches by 7 feet 3 inches and had a draft of 1 foot 9 inches. Most likely the station was also provided with a Jersey style surfboat at this time.

As boats became older they were replaced with newer models provided for the station's use. In 1884 another Long Branch Jersey style surfboat arrived, and the following year they received a 30-foot Mackinaw boat to use for general transportation. Records indicate that in 1892, a 22-foot Dobbins lifeboat was listed in poor condition, which means it probably had been at the station five to ten years. Another Long Branch surfboat came in 1894 and a 26-foot

self bailing, water ballast Beebe-McLellan surfboat arrived in 1895. A new lifeboat was received in 1896, similar to the one the station began with 19 years earlier.

Records for new boats after 1900 have not been located. It is known that at least one newer Beebe-McLellan surfboat and a motor surfboat were used on the island after that date. The station never had a 34- foot lifeboat or a 36-foot motor lifeboat because the water was too shallow for launching these vessels.

During the years of the Life-Saving Service, the station saved 772 individuals from shipwrecks and no shipwreck victim lost their life. (Muhn 1984:66) Most of the ships assisted were schooners and sloops with crews of eight or less. The station crew also provided general fire, rescue and police services for the island population. The station's fire equipment included a hose cart, two man pump, hand drawn fire engine, buckets, extinguishers and ladders. This was the island's only fire fighting equipment for the island community. The crew also provided first aid and evacuated islanders to the mainland to receive medical care. The keeper settled disputes and restrained disorderly citizens, when it was necessary.

The station became part of the U.S. Coast Guard in 1915. There were few changes to the buildings or to the daily routine because of these changes. In the late 1920s, Lt. Willard Smith evaluated the need for the area stations. Lt. Smith's father had worked at the North and South Manitou Island Stations and was currently in charge of the Sleeping Bear Point Station across the Manitou Passage. Lt. Smith's report indicated that his father's old station at North Manitou and his current station at Sleeping Bear Point, were no longer needed by the Coast Guard.

Both stations lacked a protected harbor and could not operate the larger motor lifeboats, which had become the standard of the day. The crew was reduced to a skeleton force in 1933, and at least two surfmen remained to watch the station and man the motor surfboat if needed. The station operated until around 1938 when it was closed and sold to a private corporation, the Manitou Island Association.

The North Manitou Island Life-Saving Station is representative of the nearly two hundred stations that made up the United States

Life-Saving Service. The North Manitou Island Station is the only remaining station that encompasses the entire Life-Saving Service history from volunteer era through the Coast Guard era. Because this station saw no interruption in service, the station buildings retain a high degree of integrity of design, material and workmanship.

The setting has remained relatively unchanged from the years of operation. The setting conveys a strong feeling of the historic sense of the past and associated sights and sounds identified with a maritime landscape. No other location in the United States retains so fully the historic scene. A scene that includes the buildings, structures and maritime landscape associated with the creation and development of federal life saving efforts in the United States.

The period of significance for the North Manitou Life-Saving Service Station Complex is 1854 through 1932. This includes the construction of the 1854 Volunteer Rescue Station through the 1932 reconstruction of the U.S. Life-Saving Dwelling. The year 1932 is also the last full season the Station was operational with a full time crew.

The operation of this complex remained relatively unchanged, even with the reorganization into the U.S. Coast Guard. The work in 1932 illustrated how confident the Coast Guard was in their continued operation on the island. No changes in numbers of personnel or operation occurred until 1933 when the station was determined obsolete, by the Coast Guard. The Coast Guard left a skeleton crew of two to man the station. The station was operated in this manner until around 1938 when the station was closed and sold to the Manitou Island Association. The Manitou Island Association, and then transferred to the Angell Foundation in 1950, used the buildings for employee housing and general operation of their island hunting preserve. This continued until the National Park Service purchased the island, from the Angell Foundation, in 1984. (Rusco 1991:19)

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United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

NORTH MANITOU ISLAND LIFE-SAVING SERVICE STATION COMPLEX
LEELANAU COUNTY, MICHIGAN

PHOTOGRAPHS **PAGE** 1

HISTORIC PHOTOGRAPHS

PHOTO #: H1 View looking south to the Life-Saving Station from the dock.

NAME OF PHOTOGRAPHER: BEEBE
DATE OF PHOTOGRAPH: ca. 1916
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

PHOTO #: H2 View of Life-Saving Crew with Beach Cart on south side of the 1854 Volunteer Rescue Station.

NAME OF PHOTOGRAPHER: UNKNOWN
DATE OF PHOTOGRAPH: 1893
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

PHOTO #: H3 View of Life-Saving Crew on south side of Life Boat Station.

NAME OF PHOTOGRAPHER: ANDERSON
DATE OF PHOTOGRAPH: 1897
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

PHOTO #: H4 View inside of the Life Boat Station.

NAME OF PHOTOGRAPHER: FURST
DATE OF PHOTOGRAPH: ca. 1916
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

PHOTO #: H5 View of west side of Hans Halseth House in its original location before being moved into the Life-Saving Service Complex circa 1906.

NAME OF PHOTOGRAPHER: UNKNOWN
DATE OF PHOTOGRAPH: ca. 1890s
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

PHOTO #: H6 View from top of Life Boat Station of boat launch ramp/rail, fire pump, and capstan.

NAME OF PHOTOGRAPHER: GILES MERRITT
DATE OF PHOTOGRAPH: 1926-28
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

NORTH MANITOU ISLAND LIFE-SAVING SERVICE STATION COMPLEX
LEELANAU COUNTY, MICHIGAN

PHOTOGRAPHS **PAGE** 2

PHOTO #: **H7** View from the south of the Life-Saving Station during the U.S. Coast Guard period.

NAME OF PHOTOGRAPHER: OIEN
DATE OF PHOTOGRAPH: 1935
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

CURRENT PHOTOGRAPHS

NAME OF PHOTOGRAPHER #1: **ELIZABETH BUMPAS**
DATE OF PHOTOGRAPHS: **JULY 1992**
PHOTO #s TAKEN: **1, 3 THRU 7, 14**
NAME OF PHOTOGRAPHER #2: **KIMBERLY MANN**
PHOTO #s TAKEN: **2, 8 THRU 13, 15 thru 19**
LOCATION OF ORIGINAL NEGATIVE: **SLEEPING BEAR DUNES N.L.**

PHOTO #: **C1** View from northeast of the south end of the complex.

PHOTO #: **C2** View from the northwest of the north end of the complex.

PHOTO #: **C3** View of the root cellar and generator building from the west.

PHOTO #: **C4** View of the Lookout Tower Abutments, Seawall, Storm Tower, and Volunteer Rescue Station from the southeast.

PHOTO #: **C5** View of the Volunteer Rescue Station and Storm Tower from the south.

PHOTO #: **C6** View of the Life Boat Station from the west.

PHOTO #: **C7** View of the Capstan, Storm Tower, and Volunteer Rescue Station from the southeast.

PHOTO #: **C8** Interior view of 1854 Volunteer Rescue Station showing wooden peg construction.

PHOTO #: **C9** Interior view of 1854 Volunteer Rescue Station showing wooden built-in bench.

PHOTO #: **C10** Interior view of Life Boat Station showing cross bracing and three sided angle iron.

PHOTO #: **C11** Interior view of Life Boat Station showing cross bracing, angle iron, and one of two remaining cleats for hanging the life car and gear.

PHOTO #: **C12** U.S. Life-Saving Dwelling showing second floor crew room with crew lockers numbered 1 thru 3, and partition installed in 1992.

PHOTO #: **C13** U.S. Life-Saving Dwelling showing second floor crew room with lockers numbered 4 thru 8, and partition installed in 1992.

PHOTO #: **C14** Decorative detail on 1877 U.S. Life Boat Station.

PHOTO #: **C15** U.S.L.S.S. Complex from National Park Service Dock.

PHOTO #: **C16** U.S.L.S.S. Complex from the access road to the village.

PHOTO #: **C17** U.S.L.S.S. Complex from north side of complex.

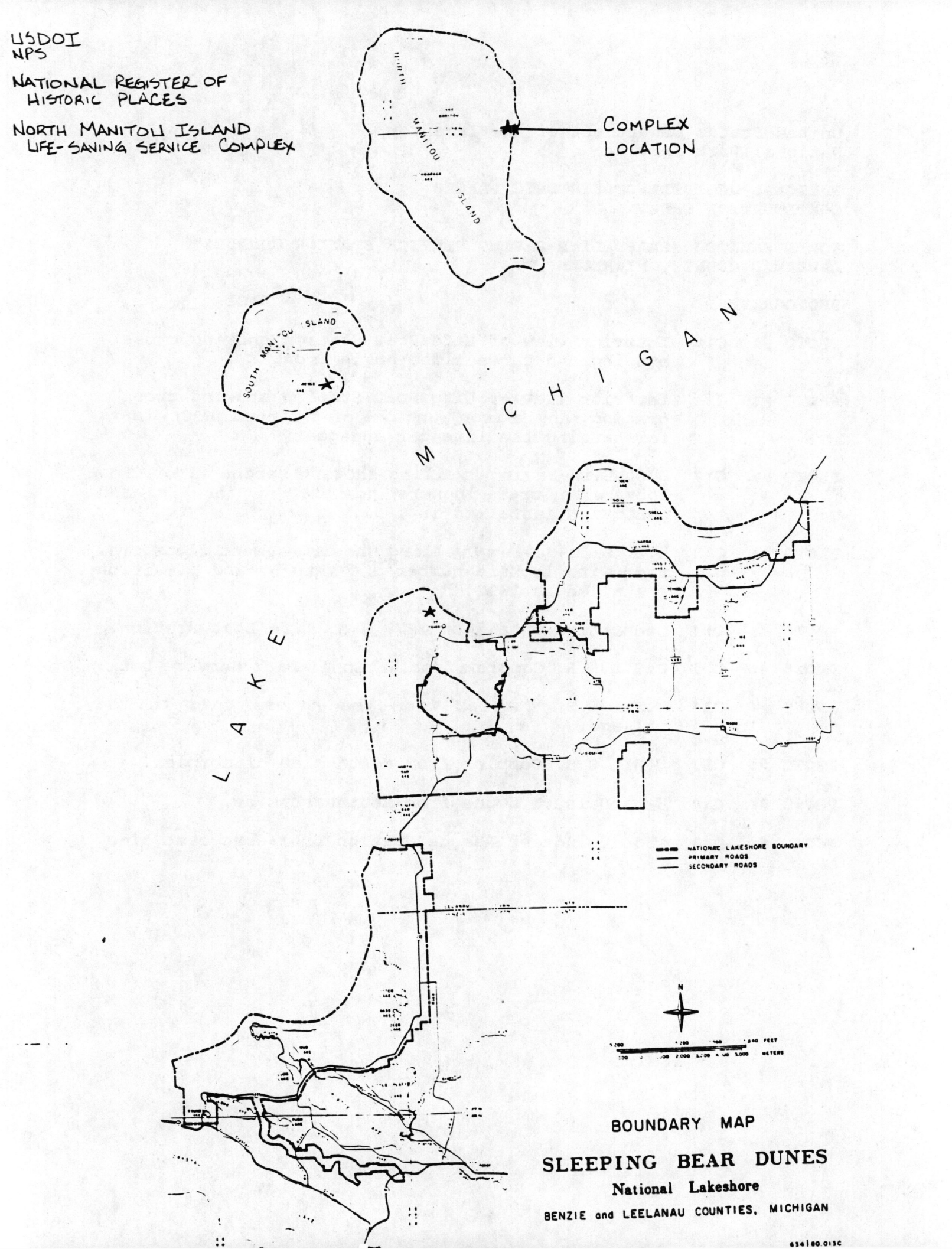
PHOTO #: **C18** Hans Halseth house from southeast side.

PHOTO #: **C19** 1854 Volunteer Rescue Station from northeast side.

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LIFE-SAVING SERVICE COMPLEX



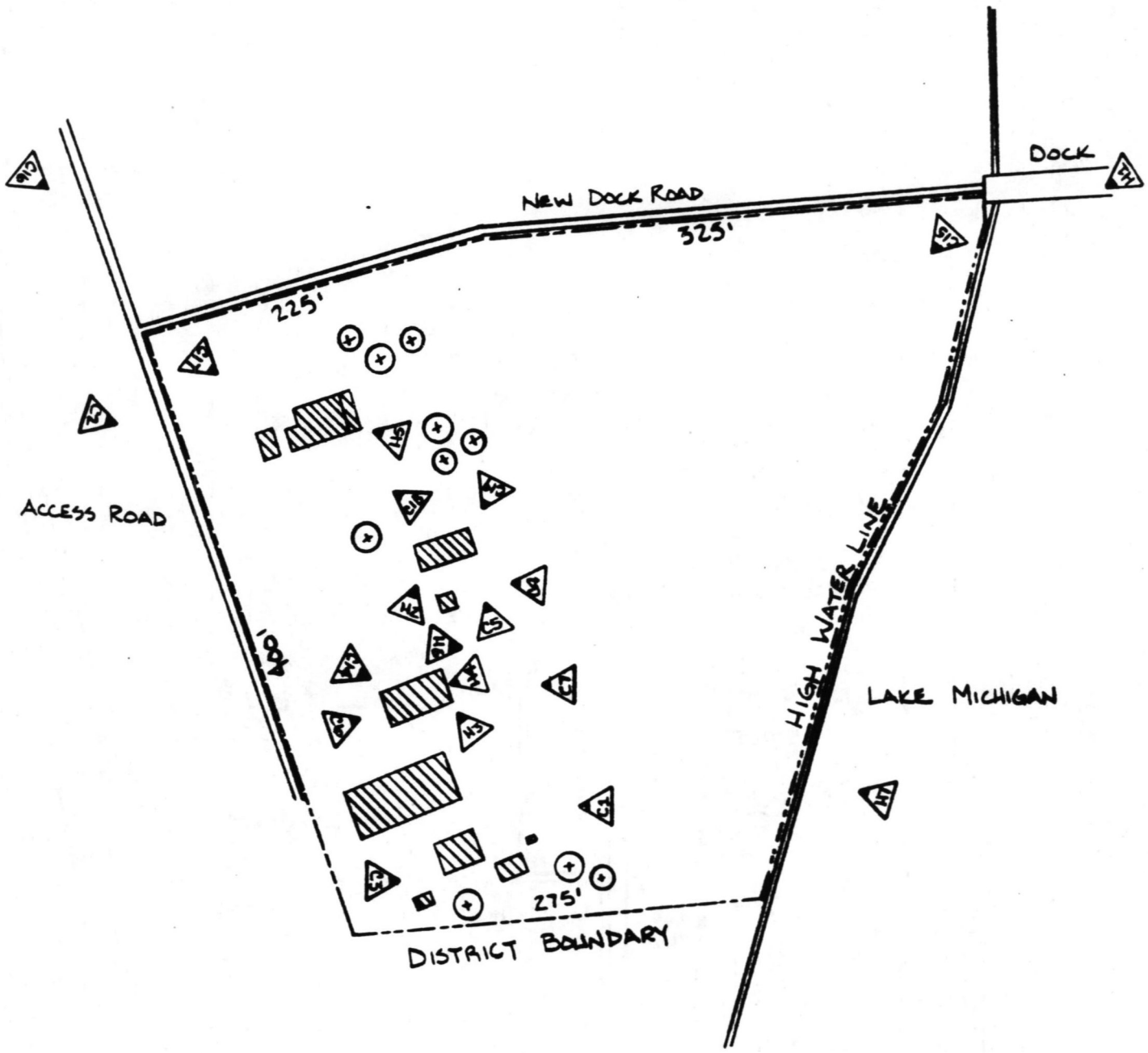
BOUNDARY MAP

SLEEPING BEAR DUNES

National Lakeshore

BENZIE and LEELANAU COUNTIES, MICHIGAN

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⊕ LOMBARDY POPLARS

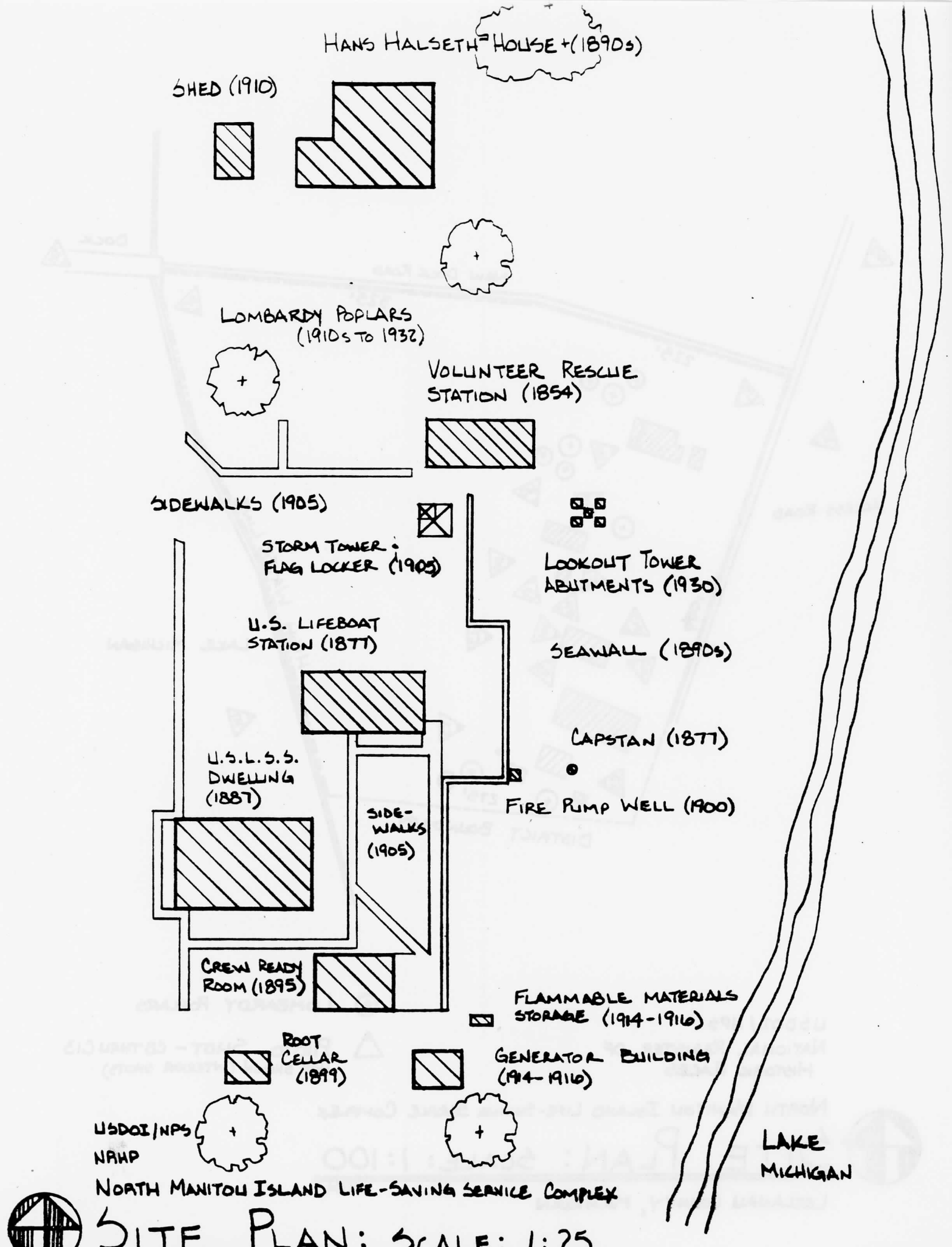
△ PHOTO SHOT - C8 THRU C13 NOT SHOWN (INTERIOR SHOTS)

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NORTH MANITOU ISLAND LIFE-SAVING SERVICE COMPLEX

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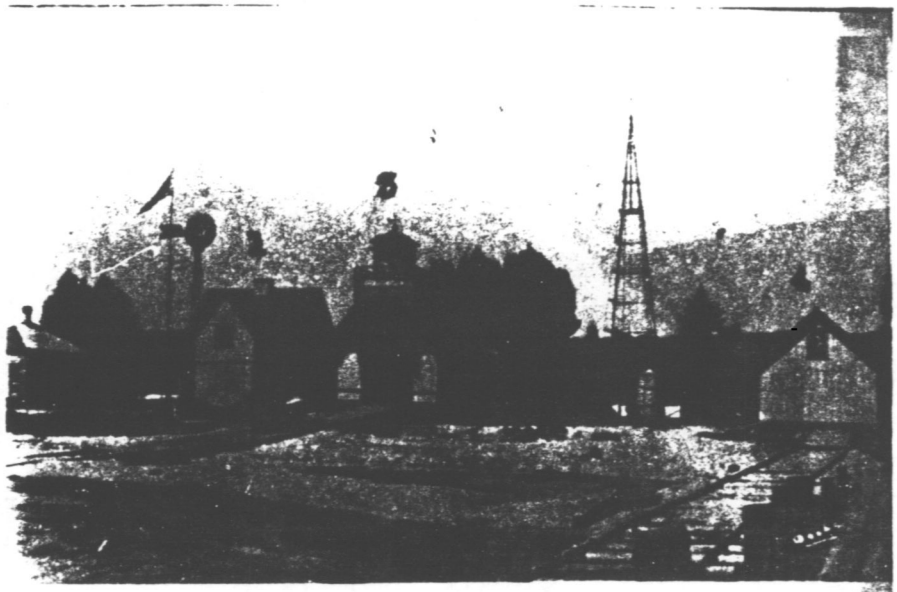
LEELANAU COUNTY, MICHIGAN



NORTH MANITOU ISLAND LIFE-SAVING SERVICE COMPLEX

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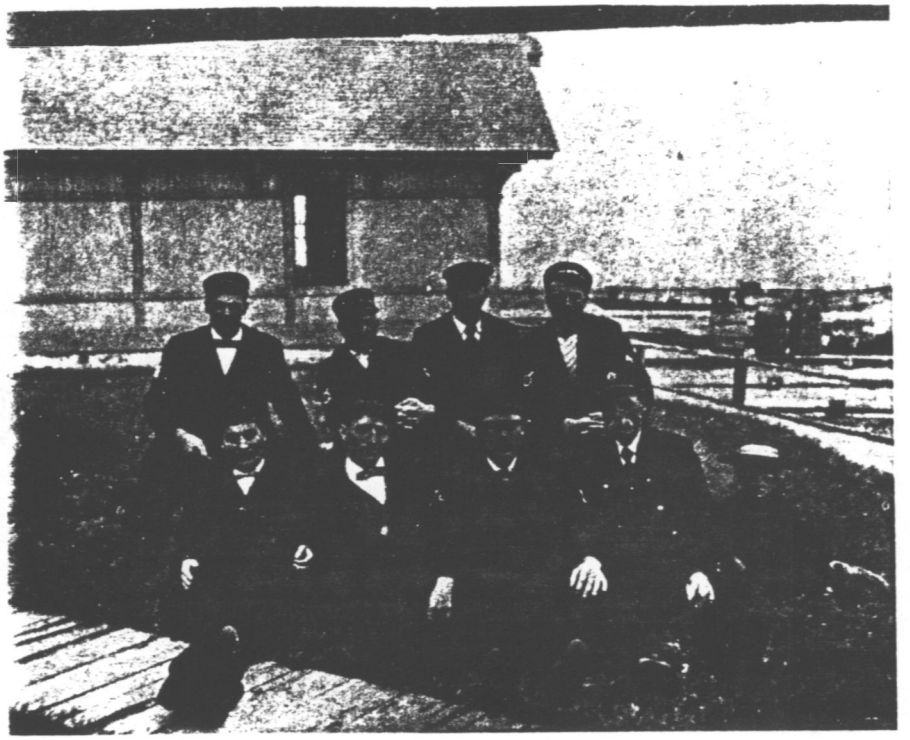
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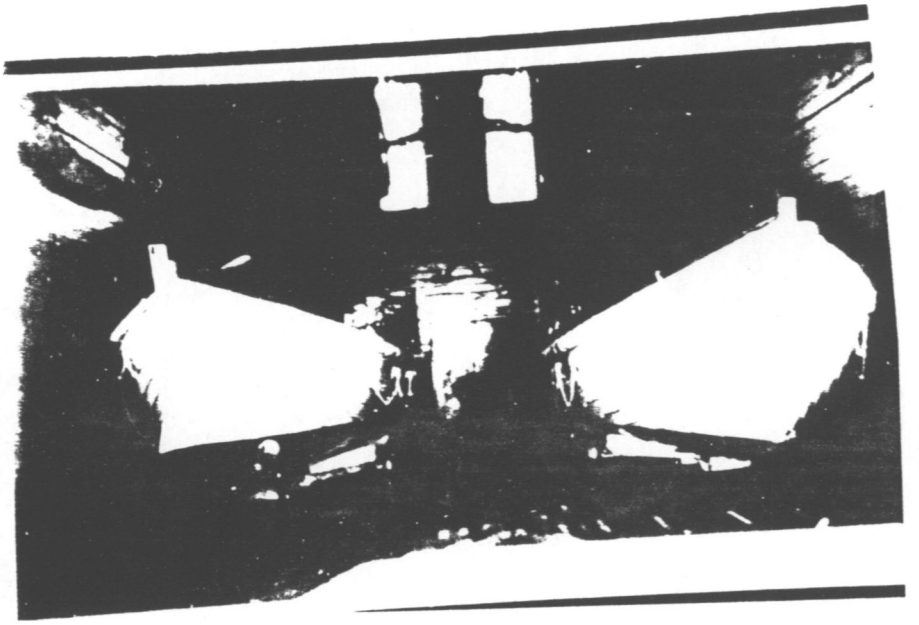
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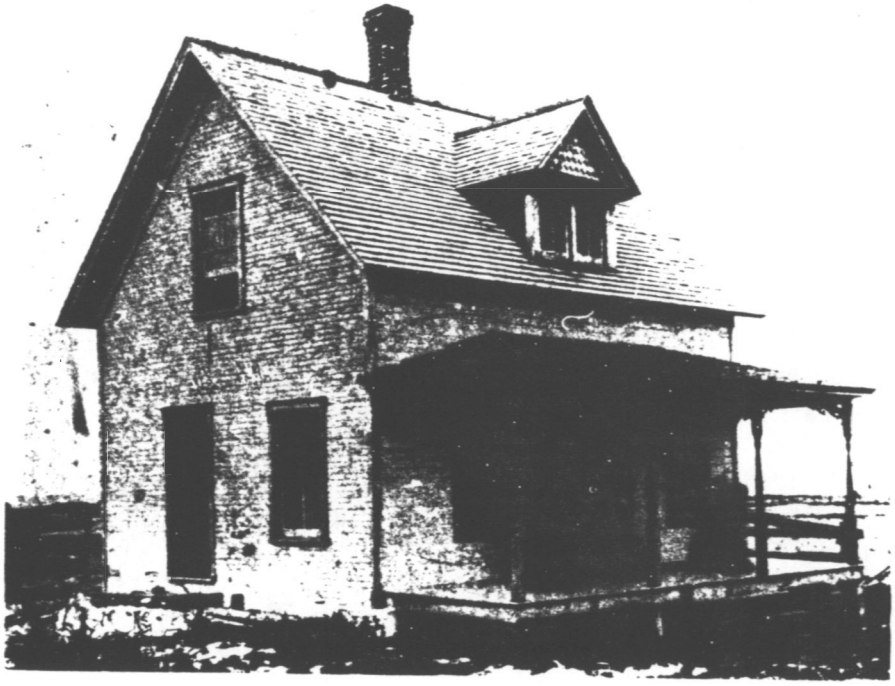
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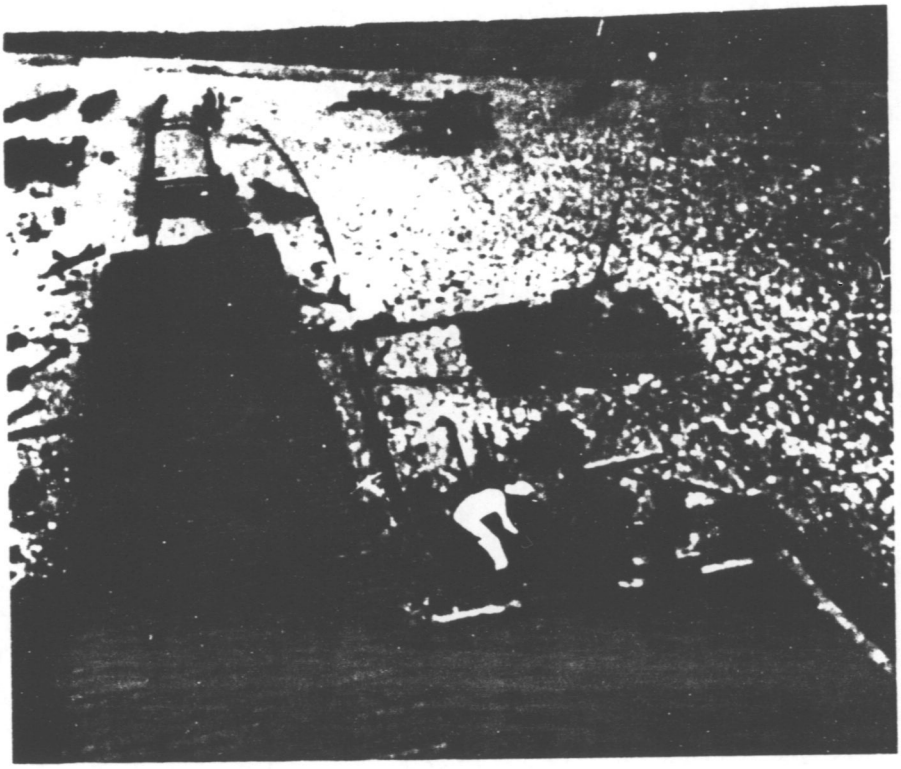
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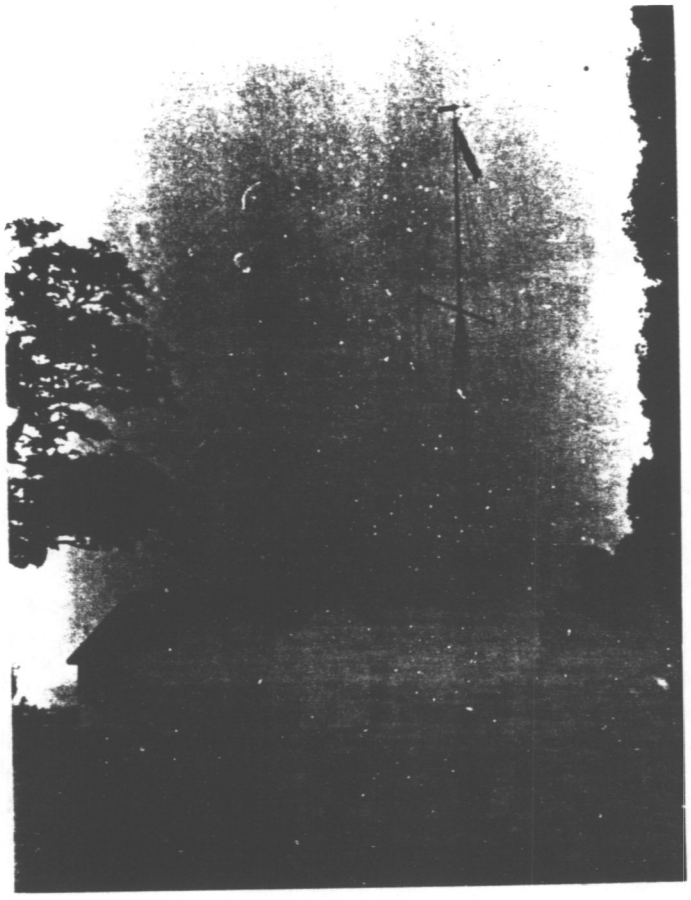
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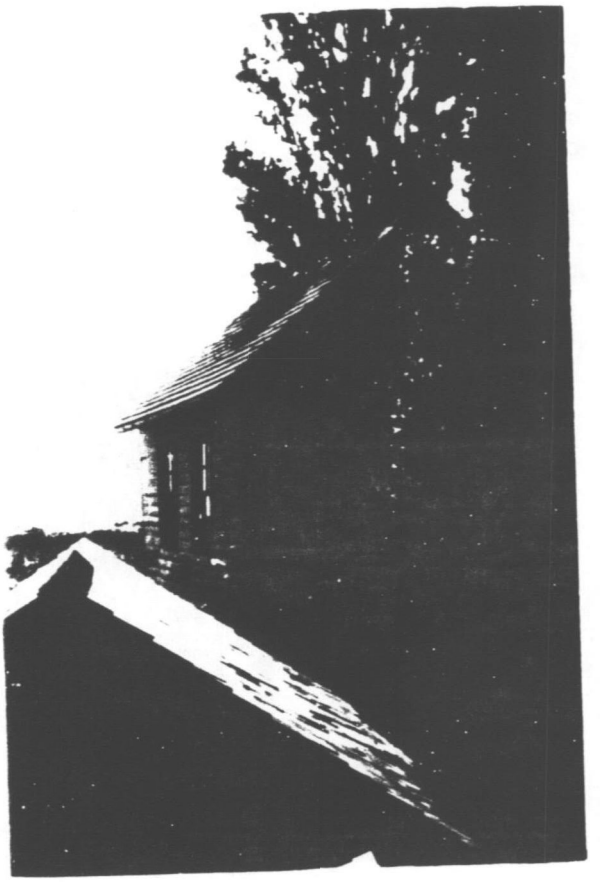
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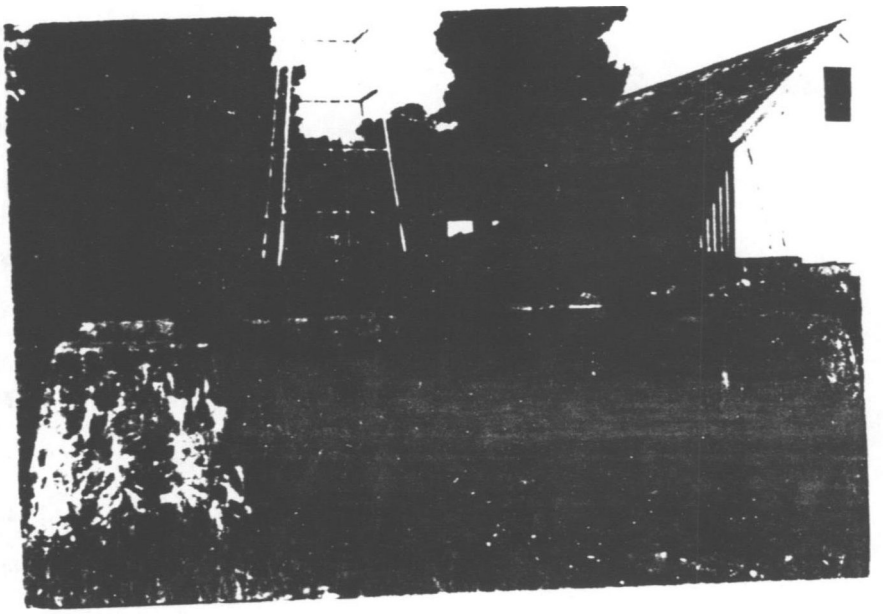
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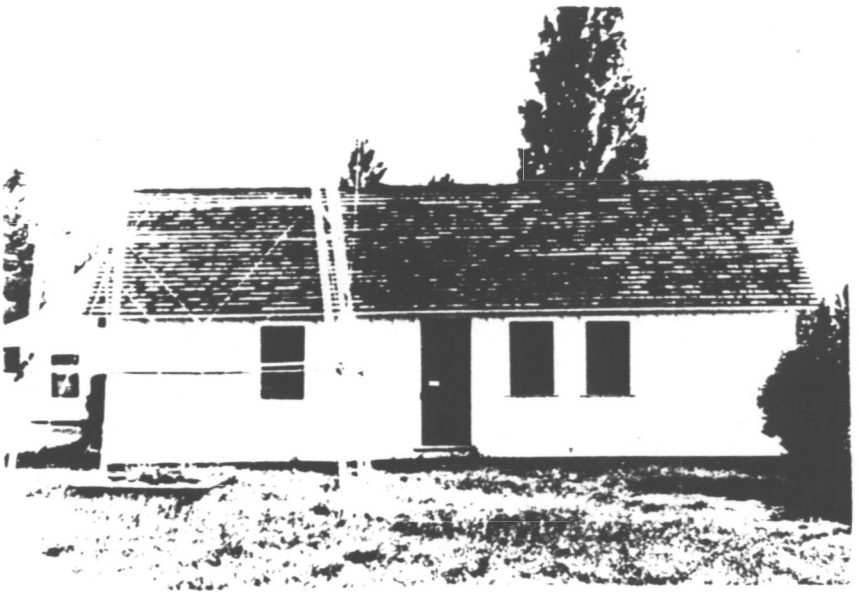
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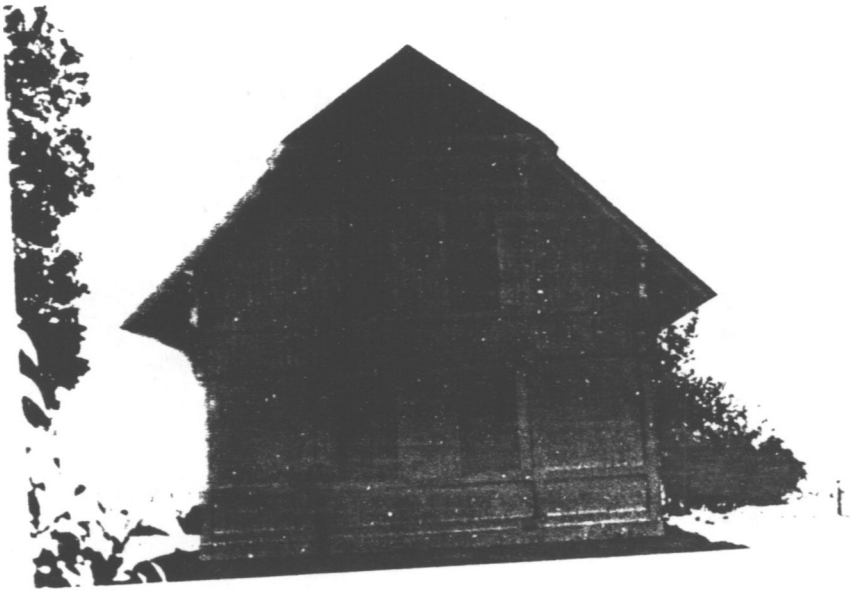
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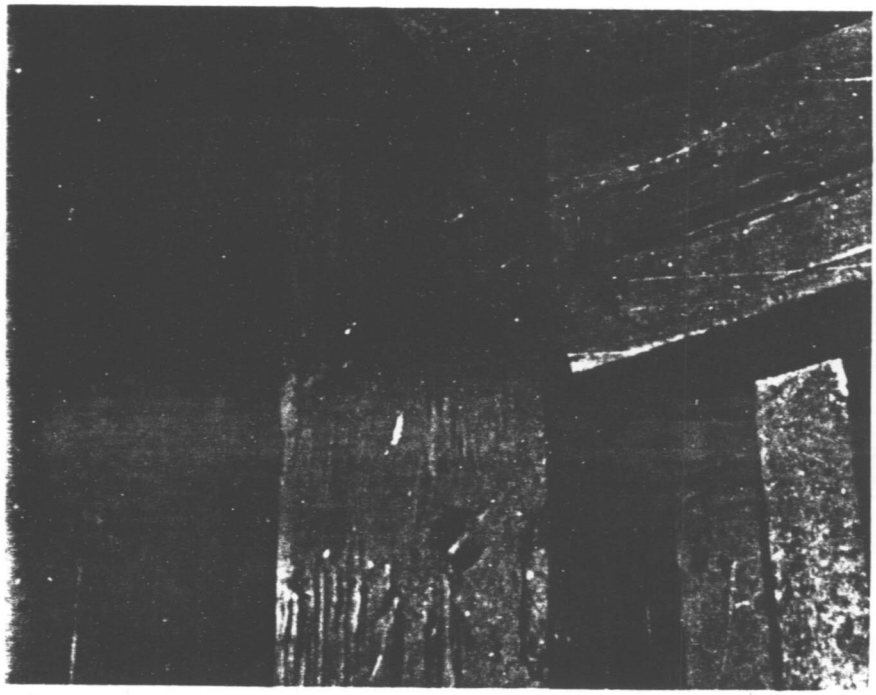
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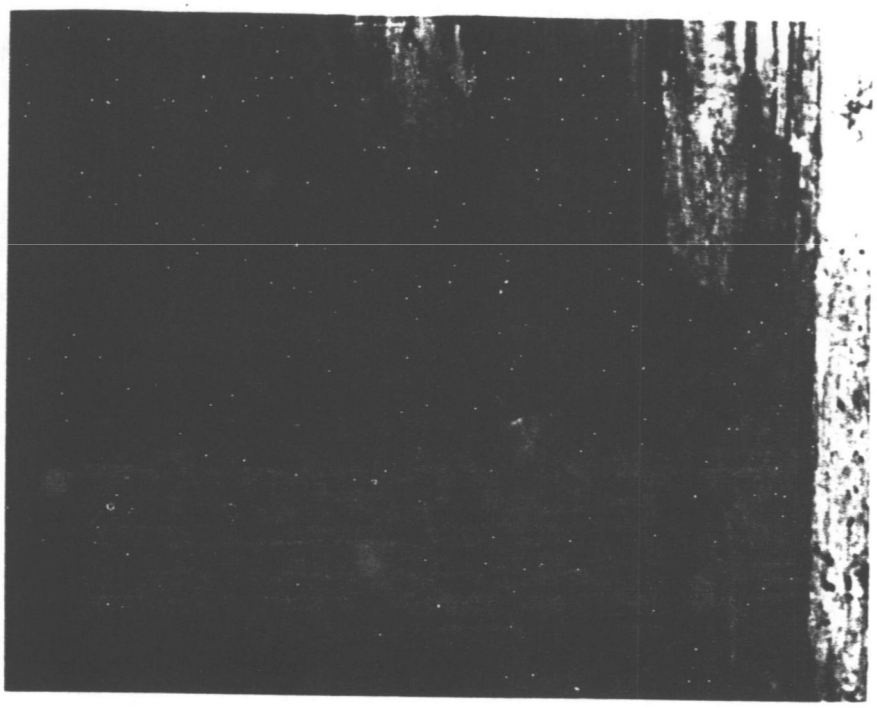
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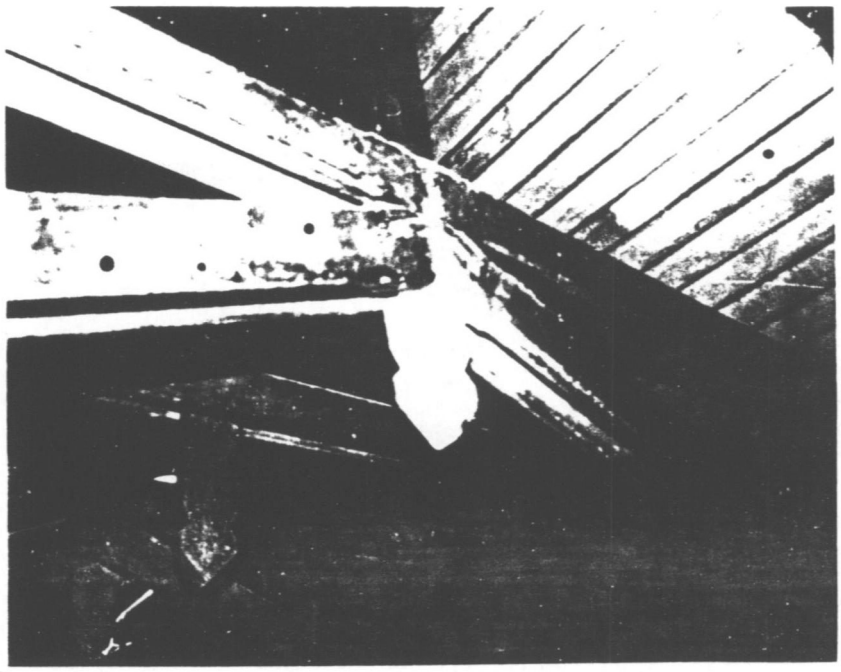
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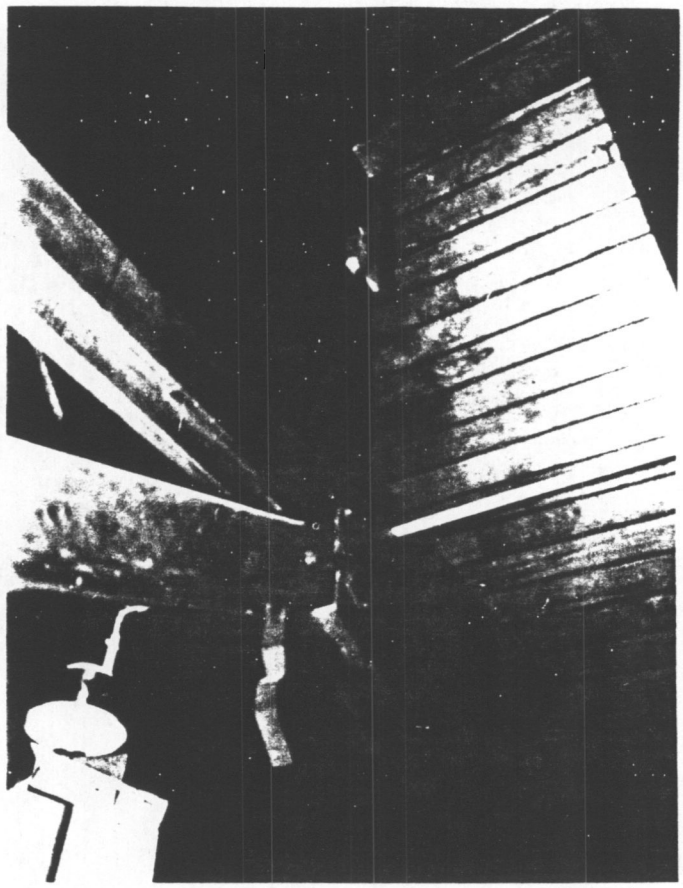
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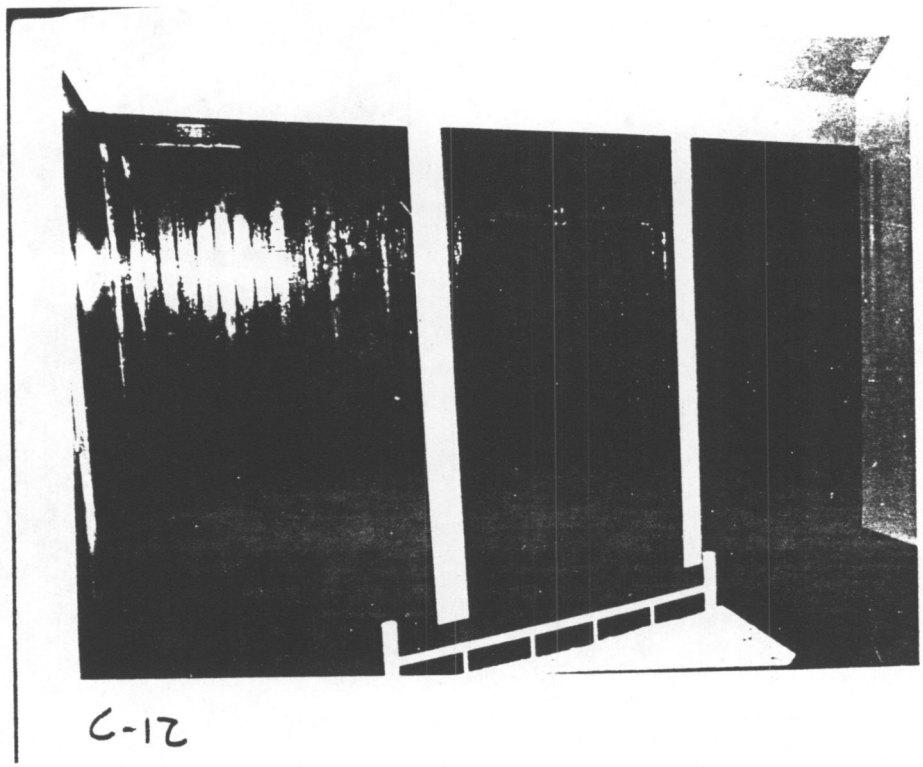
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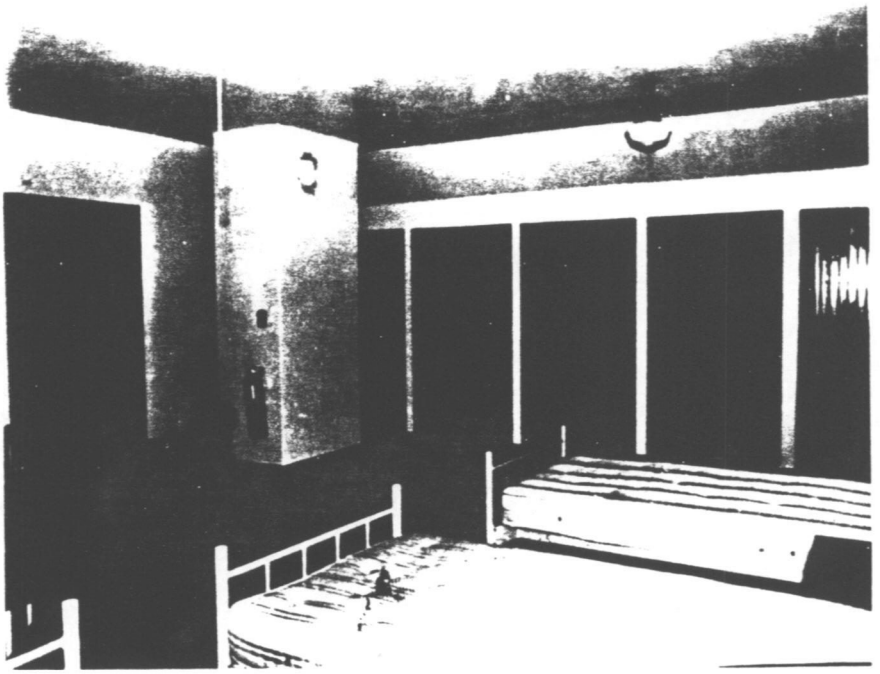
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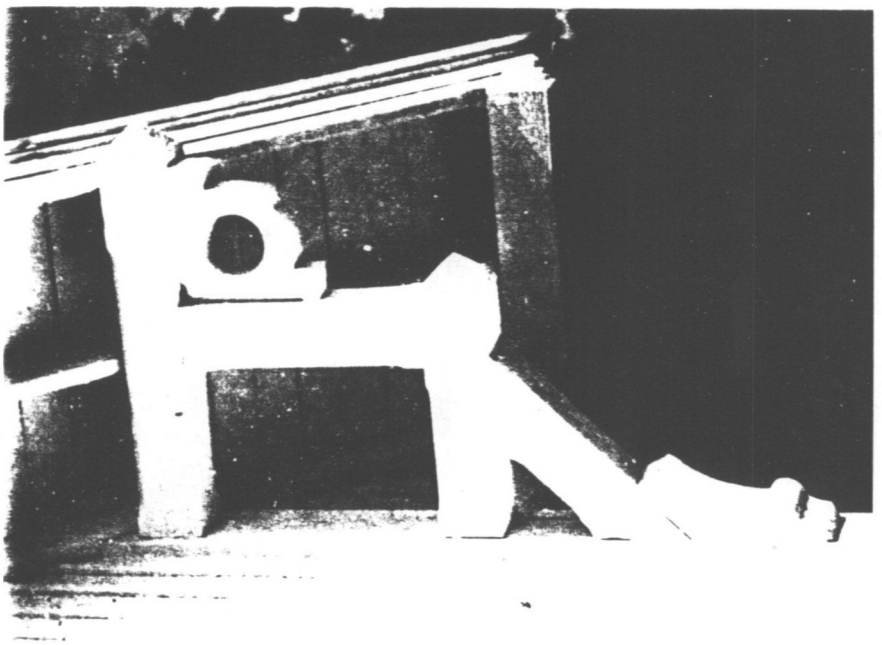
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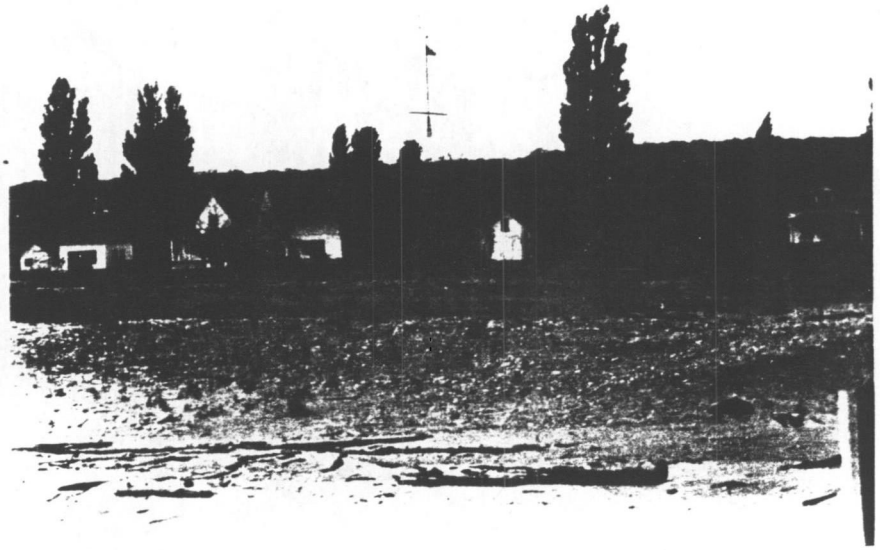
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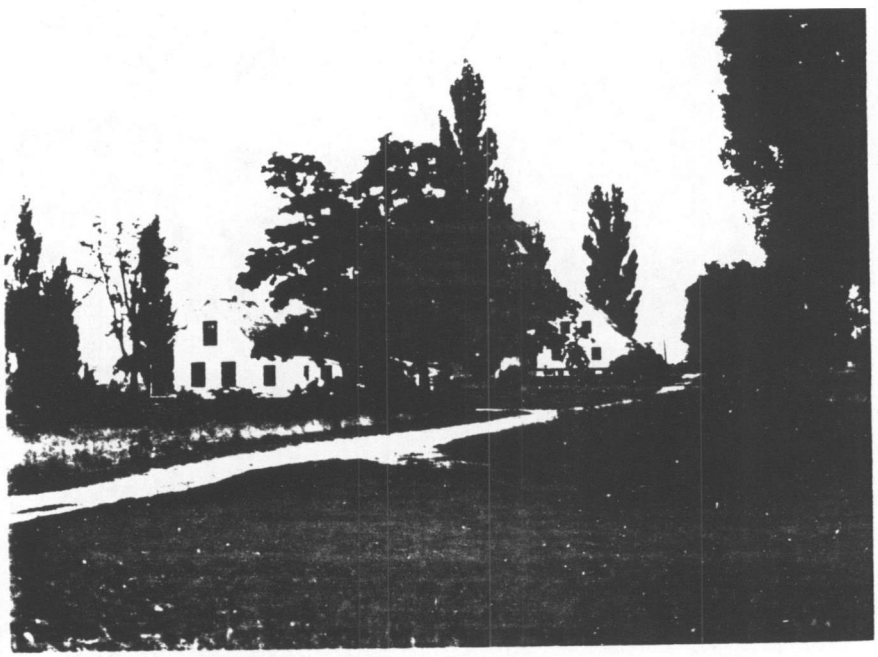
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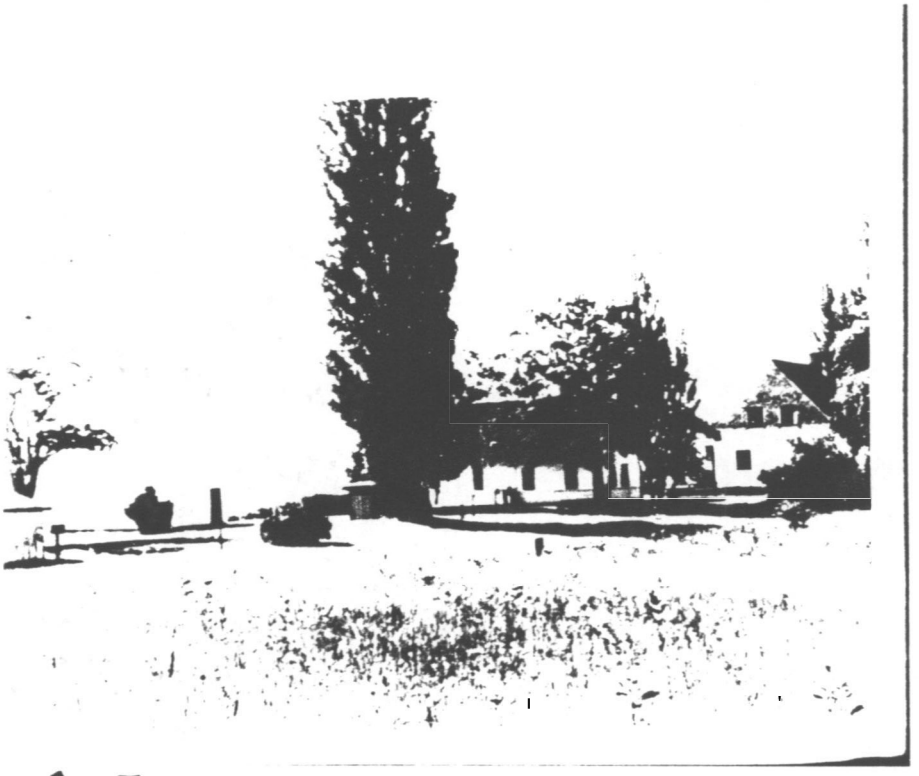
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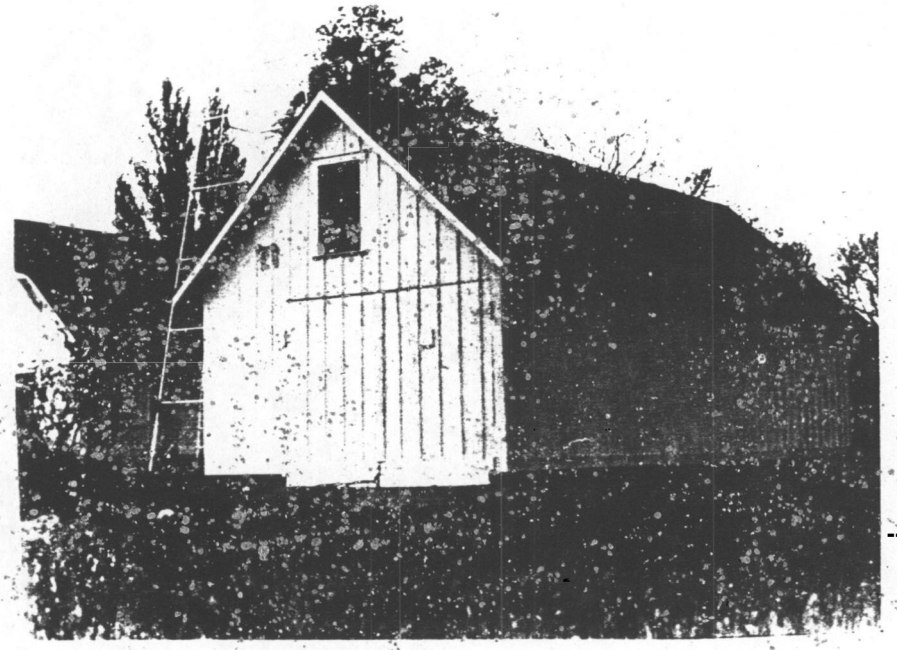
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C-17



C-18



C-19

HISTORIC STRUCTURE REPORT

1854 VOLUNTEER RESCUE STATION

NORTH MANITOU ISLAND

SLEEPING BEAR DUNES NATIONAL LAKESHORE

EMPIRE, MICHIGAN

by
KIMBERLY MANN
BILL HERD

FEBRUARY 1995

SLEEPING BEAR DUNES NATIONAL LAKESHORE
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR
EMPIRE, MICHIGAN

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A. EXECUTIVE SUMMARY

The development of this Historic Structure Report will outline the path taken to identify and prepare restoration drawings for the structure known as the Beach Cart House on North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan. The building has since been identified as a Volunteer Rescue Station from the 1854 Federal Appropriation that began to place surfboats on the Great Lakes.

Research included books and manuscripts written by a number of nationally recognized maritime experts who were also consulted to help identify the structure, determine the significance of the structure, and to comment on the existence of other Volunteer Rescue Stations in the nation. The current findings show that the structure on North Manitou Island is believed to be the only existing 1854 Volunteer Rescue Station in the nation.

The major task directive of this report is to develop the historical context of the volunteer rescue era and U.S. Life-Saving Service on the Great Lakes. The next step is to evaluate the North Manitou Island structure within that context to determine national significance. This report also researched the construction of these structures, so that restoration drawings could be developed for the building.

This report will assist the Park to expand on stabilization work

for the beach cart house accomplished in 1990. This work was initiated through the report Condition Survey and Treatment Recommendations, dated December 8, 1988, prepared by then Midwest Regional Historic Architect Al O'Bright. This report identified the condition of the structure and developed a proposal for treatment. This work was completed as recommended and the Park continues to do routine maintenance on the structure. Most of the modern intrusions identified in Mr.O'Bright's report were removed or modified based on recommendations provided in his report.

The Historic Structure Report provides the historical research not undertaken when Mr. O'Bright's report was written. This report will provide that background information, and will build on the observations noted by Mr. O'Bright and develop plans for the restoration of the 1854 Volunteer Rescue Station.

The North Manitou Island, Development Concept Plan, November 1987, identifies the beach cart house as the most appropriate place to locate a visitor contact station with restrooms. This option has since been modified with the structure being identified as the only remaining 1854 Volunteer Rescue Station in the nation.

The Park Cultural Resource Management Plan has been developed identifying the significance of this structure. This Plan further suggests that the building be utilized as an exhibit to house a number of artifacts relating to the volunteer era and the earliest

years of the U.S. Life-Saving Service.

B. ADMINISTRATIVE DATA

This project is identified as the 1854 Volunteer Rescue Station, North Manitou Island, List of Classified Structures number 53105806. This structure will be utilized as an exhibit to interpret and illustrate the time span between the volunteer era and the earliest years (1854-1876) of the U.S. Life-Saving Service on North Manitou Island. This plan has been identified and approved in the Cultural Resource Management Plan, Project Number: SLBR-C-012.000.

The entire U.S. Life-Saving Service complex located on North Manitou Island has been nominated for inclusion into the National Register as a National Historic Landmark District. The period of significance is identified as 1854-1932. This time frame begins the year the Federal Appropriation for the Great Lakes was enacted, requiring the development of specifications for the volunteer rescue stations, to the last year that the Coast Guard actively utilized the complex as an active station. This nomination, which includes the 1854 Volunteer Rescue Station, will be reviewed by the Advisory Board in 1995.

The complex was added to the List of Classified Structures in 1994, and together with National Historic Landmark designation, projects affecting this complex must therefore comply with regulations for

the "Protection of Historic and Cultural Properties" (36 CFR 800), established by the Advisory Council on Historic Preservation in accordance with section 106 of the National Historic Preservation Act of 1966 and sections 1(3) and 2(b) of Executive Order 11593.

Most of the research materials used in this report are included in the report or are listed in the bibliography. All books and manuscripts listed have been acquired and are available in the park library or archival files. This material has been added to the large quantities of documents, maps, photographs, and artifacts already on hand at the park, and will serve future research and management goals to inform and educate visitors about the earliest history of the U.S. Life-Saving Service on the Great Lakes.

C. CHRONOLOGY OF SIGNIFICANT EVENTS

1843 Nicholas Pickard establishes a cordwood station on the southeast side of North Manitou Island.

1847 Federal government passes first appropriation for life saving equipment. The money is not spent.

1848 Federal government provides money for first volunteer station and rescue equipment. The Francis Lifecars and Metallic Surfboats are placed into service.

1850 ca. Pickard moves his cordwood station to the northeast side of North Manitou Island and builds a dock.

1854 Federal funds are appropriated to provide metallic surfboats to 23 locations on Lake Michigan including the lighthouse on South Manitou Island. Pickard and others post bond and receive a metallic surfboat for North Manitou Island.

1854 ca. Plans developed for volunteer stations on the east coast are followed, and a volunteer rescue station is built on North Manitou Island.

1871 The U.S. Life-Saving Service is established with six man crews at all 26 stations around New York Harbor.

1874 The U.S. Life-Saving Service is officially established on the Great Lakes.

The U.S. Life-Saving Service leases a 40'-0" x 20'-0" lot from Nicholas Pickard for $1.00 a year "for the establishment of life-saving stations". The size of the lot corresponds with the size of the 1854 Volunteer Rescue Station.

1875 Congressional Act of March 3, 1875, authorized the Secretary of the Treasury to "acquire by donation or purchase, in behalf of the United States Government the right to use and occupy sites for life-saving stations or life boat stations, houses of refuge, and sites for Pierhead Beacons".

1876 The Life-Saving Service begins operations on the Great Lakes.

1877 A Life Boat Station is built on North Manitou Island and managed by a paid keeper and a volunteer crew.

1887 The U.S. Life-Saving Service Dwelling is constructed on North Manitou Island and the station is fully operational as a life-saving station and includes a paid crew.

1900 The 1854 Volunteer Rescue Station is being used as a boathouse for the stations supply boat.

1910 ca. The 1854 Volunteer Rescue Station is moved forward one full length and placed on a foundation.

1915 The U.S. Coast Guard is established through the combination of the Revenue Cutter Service and the U.S. Life-Saving Service and the Station becomes part of the U.S. Coast Guard operations.

1920 The 1854 Rescue Station is being used to store the beach cart and is referred to by the crew as the Beach Cart House.

1932 The Coast Guard updates the facilities on North Manitou by expanding the 1887 U.S. Life-Saving Service Dwelling. Last year that the Coast Guard actively operates the station.

1933 The North Manitou Island Station is determined to be obsolete and the station is reduced to a two man crew who manage the station as caretakers.

1938 ca. The North Manitou Island Station is sold to the Manitou Island Association, and the 1854 Volunteer Rescue Station is utilized as a workshop.

1952 The Manitou Island Association is renamed the Angell Foundation, after the 1950 death of co-owner William R. Angell.

1984 The North Manitou Island Station becomes part of Sleeping Bear Dunes National Lakeshore after the island is purchased from the W.R. Angell Foundation.

1990 The park stabilizes and repairs the 1854 Volunteer Rescue Station after a field survey identifying deficiencies and recommended repairs is provided by the Midwest Regional Office the previous year.

SECTION II

SECTION II: DEVELOPMENTAL HISTORY

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A. HISTORICAL BACKGROUND AND CONTEXT

1. National Register Information

The North Manitou Island Life-Saving Station is nationally significant because no other site exhibits the buildings and structures associated with the creation and development of the federal life saving system. For approximately 90 years the North Manitou Island station was a key element in the network developed by the federal government to provide humanitarian aid to shipwreck victims.

The federal government became involved in shipwreck rescues in 1848 when funds were provided for volunteer stations on the New Jersey shore. In 1854, the system was extended to the Great Lakes. The 1854 Volunteer Rescue Station on North Manitou Island is the only remaining station from this era on the Great Lakes, and in the country. It is also one of the two remaining stations in the country from the volunteer period. The other station is located at Navesink, New Jersey and is an 1848 Volunteer Rescue Station.

The U.S. Life-Saving Service was established in 1871 and introduced stations on the Great Lakes in 1876. The 1877 Life Boat Station on North Manitou Island is typical of the stations built, and retains a high level of integrity of material and design. As the Life-Saving Service continued to develop and gain the support of the American people, the system added more stations and improved existing stations. The 1887 Life-Saving Service Dwelling on North

Manitou Island is representative of the change from Life Boat Station to Life-saving Station during that period.

Especially significant to the complex are several of the auxiliary buildings and structures that helped the crew perform its duties and live comfortably in an isolated island location. These structures still exist in their original locations and retain a high level of integrity, in materials and design, from the Life-Saving Service era. These structures were suited so well for their functions, they remained active when the station became part of the U.S. Coast Guard in 1915.

2. The Early History

The United States grew proportionately to the development of its maritime transportation system. Ship transportation was a key element for the development of commerce, exploration, immigration and settlement. The federal government was well aware of the importance of the nation's maritime resources, and took an early interest in promoting the water transportation system.

As early as 1789, funds were provided for the operation and construction of lighthouses. The Coast Survey was established in 1806 to develop navigational charts. The Revenue Marine was authorized in 1837 to sail along the coast to assist ships in distress, and the Steam Boat Inspection Service was established the following year. (Lamb 1882:358)

Despite all these federal efforts, shipwrecks continued to be frequent occurrences and a system to manage them had to be developed. The most important part of the system was the surfman who lived and worked along the ocean shores. Unlike sailors, whose training taught them to keep away from the breakers, surfmen were masters of the domain where water and land came together. Using special boats, these men passed through the surf daily as they went out to fish, travel, or to salvage cargo from wrecked ships. Their expertise was essential to the saving of cargo and lives. These men were ordinary fishermen, who engaged in salvaging or "wrecking" when the occasion arose. Admiralty law stated that the shipwrecked cargo belonged to the owner, but that the salvor was entitled to a fair price for their labor in saving the property. (Bennett 1976:6)

The system that evolved was a localized team that could respond quickly and effectively to save and protect property from shipwrecks. While this system was designed to save property, saving human lives was an important by-product. Surfmen regularly risked their lives to rescue victims from the wrecks. Frequently, insurance underwriters supported these humanitarian efforts by rewarding the crews with the contracts to salvage the vessel and cargo. (Bennett 1976:7)

Two factors made the time right for the American people to take a greater interest in shipwreck disasters. First, beginning in the

1840s, many of these ships were American owned and therefore insured by American underwriters. Thus, there was a growing economic interest in responding effectively to shipwreck disasters. Second, major cargos of the time were passengers. This was the time of the great influx of immigrants to the United States, with many passengers moving between the coastal cities. The loss of life, when one of these vessels was involved in a wreck, was often staggering and aroused the humanitarian interests in the normally uninterested public. (Bennett 1976:14)

Several humanitarian organizations were established to assist shipwreck victims. These included The Merrimac Humane Society, The Humane Society of the Commonwealth of Massachusetts, and The New York Shipwreck Society. The Massachusetts Humane Society established the first boathouse with rescue equipment in 1807 at Cohasset, Massachusetts. By 1845, the Massachusetts Humane Society had built eighteen Houses of Refuge equipped with boats, boat wagons, and line throwing mortars and rockets. These boathouses could provide shelter for survivors on the desolate shores. (Lamb 1882:358)

3. Volunteer Rescue Stations and Their Equipment

In 1847, Representative McClelland of Michigan, Chairman of the House Committee on Commerce, made an amendment to the lighthouse bill which added $5000 to provide lighthouses on the Atlantic with the "means of rendering assistance to shipwrecked mariners." This

was the first federal appropriation to provide shore rescue assistance. This action was based on a report concerning lighthouses in Great Britain, France and Belgium prepared for the U.S. Secretary of the Treasury. The report identified the rescue equipment provided to lightkeepers in England and the work accomplished by a volunteer rescue system called the Royal National Life-Boat Institution. (Bennett 1976:11 and O'Brien 1976:33)

In 1848, Representative William Newell introduced an amendment to the lighthouse bill that added $10,000 for the establishment of rescue stations on the New Jersey shore. Captain David Ottinger of the U.S. Revenue Marine was assigned the task of locating, constructing and equipping the stations, in cooperation with the New York Board of Underwriters. The $5000 from the 1847 appropriation was finally issued to the Massachusetts Humane Society at this time. (Lamb 1882:358)

Captain Ottinger identified eight sites for these stations and gave considerable attention to selecting the best equipment for these stations. Seeking out the best experts on the subject he consulted with the Board of Underwriters and their agents, the Massachusetts Humane Society, and the surfmen making the rescues. Working with an experienced producer of metal lifeboats, Joseph Francis of the Francis Metallic Life-Boat Company, Brooklyn, New York, Ottinger presented two innovations for inclusion in the stations. (Bennett 1976:21)

One of these new pieces of equipment was the lifecar. The lifecar was a small enclosed metal boat that could be drawn out to the wreck and back to shore by ropes. Using the line throwing mortar and the lifecar, victims could be rescued in storms when launching a surfboat was impossible. (Francis Metallic Life-Boat Company 1852:10)

Ottinger also introduced a unique surfboat for these stations. Since this was to be a volunteer system, there would not be a regular crew at the stations to maintain a wooden surfboat. Because the boats would be stored out of the water for long periods between rescues, they would dry out and not be watertight when needed. To correct this situation, Ottinger had the surfboat incorporate the latest boat building technology, and had them constructed out of metal. The Francis Metallic Life Boats were patterned after the best models of wooden surfboats used on the New Jersey coast. (Stonehouse 1994:8)

The metallic surfboats were 26 feet in length and 6 1/2 feet in beam. Unlike the Jersey surfboat, they were double ended and had ten air chambers. They were constructed from sheet iron coated with a thin layer of tin. The outer coating was made of zinc to prevent corrosion, and the metal was corrugated to add strength to the hull. In addition to not drying out, the metallic surfboats were much stronger and required no regular maintenance. (Francis

1852:10)

To house this equipment, a boathouse 28 feet by 16 feet, with cedar shingles on its roof and sides, was constructed. The building had a loft and an eight-by-eight double door opening. (York 1983:6)

These New Jersey stations with federal equipment and volunteer crews soon became more successful than anyone imagined. During the first season of operation, the Francis Lifecar was put into operation for the first time. The number of people saved is not known because no official reports were required. (Bennett 1976:70 & 81)

4. The Great Lakes System

Federal life saving equipment, which had been so successful on the coasts, was now on its way to the Great Lakes. With the opening of the Erie Canal in 1825, the Great Lakes had become an important transportation network into the northwest territory of the United States. The Great Lakes system was an important method for transporting immigrants, and the supplies and materials needed to develop communities throughout the Great Lakes region. While some agricultural produce was shipped to the east, the trade was predominantly from the eastern cities to the wilderness frontier. Business leaders and politicians knew that this transportation route was essential for the development of the region.

While the Lakes may not have had storm waves as large as those on the ocean, the waves came closer together and could disable a vessel just as easily. Most importantly the lakes lacked sea room. A ship could run before a storm for only a short time until it was forced to turn or maneuver around a point or island. Groundings were common because of the infrequency of natural bays on the Great Lakes, and especially Lake Michigan. Harbors were dredged at river mouths and protected by a set of narrow breakwalls, and entering these harbors in bad weather was especially difficult. As a result, on the Great Lakes and Lake Michigan in particular, most of the wrecks took place near the entrances of these harbors. As occurrences increased, community leaders also began to want the assistance provided by the government surfboats used on the ocean shores.

The surfboats were assigned to a government official, a lighthouse keeper or collector of customs. When a government official was not present, two or more responsible persons could post a $475 bond and receive a boat. In addition, they were to show that there were enough people in the area willing to operate the vessel during an emergency. (Stonehouse 1994:11)

These sites received only the Francis Metallic Life-Boats and not the lifecar, mortar and other gear provided to the New Jersey and Long Island stations. Care of the boats, including storage, maintenance, and repairs, was the responsibility of the local

community. Lighthouses frequently had a boathouse which might also hold the surfboat. Other communities built their own buildings for storing the boats. Some communities requested and received additional funds to construct boathouses, including St. Augustine, Florida, Buffalo, New York, and Saugatuck, Michigan. (Stonehouse 1994:11)

In 1854, an appropriation of $12,500 was authorized to provide metallic surfboats to the Great Lakes. Forty-seven boats were shipped to the Great Lakes: 14 for Lake Erie, nine for Lake Ontario, 23 for Lake Michigan, and one to Lake Superior. By August 16, 1854, a Treasury official had selected sites for 19 boats. Included on this list was lighthouse keeper Alonzo Slyfield of South Manitou Island, Michigan. The additional sites were selected by the end of 1854. (Stonehouse 1994:12)

On September 15, 1854 Secretary of the Treasury Guthrie received a bond from Nicholas Pickard and others of North Manitou Island. A boat was ordered and delivered to the island from the Francis Metallic Life-Boat Company of Brooklyn, New York. (National Archives: Record Group 26) Apparently Pickard, who owned the cordwood station on North Manitou Island, requested and received plans for building a boathouse for the surfboat, and whether he also received any money to construct the station is unknown.

The twenty-eight stations built under authority of the 1854

appropriation, used a similar design to the 1848 stations. The 1854 stations were larger, 36 feet by 17 feet, and used cedar board and battens instead of shingles for siding. The boathouse on North Manitou Island closely matches the official written description of these boathouses. It is well documented that the Treasury Department shared these specifications with communities wishing to build boathouses. The federal officials knew the design was serviceable and inexpensive to build. (Bennett 1976:36)

While the success of the surfboats in stations on the east coast continued to be recorded, the use of the government surfboats on the Great Lakes remains unknown. The number of wrecks at these locations, the success of the surfboats on the lakes, and the fact that the metallic boats were being used in fresh not salt water, suggests that the boats were put to good use. Unfortunately, since no reports were required, no records of rescues made with the government boats have been found.

The 1854 Volunteer Rescue Station on North Manitou Island is the only boathouse built from these specifications still in existence. This structure retains a high level of integrity in design and materials, and is the only building on the Great Lakes known to survive from the volunteer rescue system. The 1848 Spermaceti Cove Station, New Jersey was moved to Navesink Twin Lights, and is the only other structure associated with the volunteer system in the United States. (Letters from York, Foster, Bennett 1993)

5. The Years Proceeding the U.S. Life-Saving Service (1854-1870)

Small portions of the appropriations between 1854 and 1870 were spent to pay the salaries of the superintendents and keepers. There were no federal expenses incurred at the stations since there were no regular drills. Additionally there were no regulations, operating funds, paid crews, or regular maintenance operations for the buildings and equipment. Furthermore recommendations from the Treasury Department were routinely ignored. (Bennett 1976:32)

Through all this and the disruption of the Civil War, the system of local volunteers worked amazingly well. It is known that at least 4,163 lives were saved by the stations between 1848 and 1870, and it is believed the number is much greater than reported. (Bennett 1976:75)

In 1869, the Division of Revenue Marine was established in the Treasury Department. This division had responsibility for the Revenue Cutters, Life-Saving Stations, Steamboat Inspection Service and the Marine Hospitals. (Lamp 1882:358)

The New York Herald called for reforms and improvements of the life saving system, after many lives were lost during the winter of 1870. It claimed that the stations and their equipment were in poor condition, and keepers lived many miles from their stations. Since there were no paid crews, no one was on the beach to locate

wrecks or to be summoned in case of an emergency. (Nobel 1994:24)

6. The U.S. Life-Saving Service and North Manitou Island

In 1871 Sumner I. Kimball was appointed to head the Revenue Marine Department. Kimball dispatched Captain John Faunce of the Revenue Marine to inspect the stations. Faunce's report substantiated the charges made by the press. Kimball began at once to reorganize the system. He replaced politically appointed keepers who lacked the skills for surf rescue. He developed regulations for the keepers to follow, which included daily patrols of the shore and regular drills with the equipment. (Nobel 1994:28)

An act passed on June 24, 1874 provided an additional fifty-one stations to be located along the Atlantic and the Great Lakes Coasts. With the need to construct these additional stations, Kimball requested the services of an architect from the Treasury Department. Frank Chandler, assistant supervising architect, was assigned the project, which provided similar designs for the 1874-75 Life Boat Stations, with only differences in exterior detail.

Three months after this act was passed in 1874, a 40' x 20' tract of land was leased on North Manitou Island from Nicholas Pickard. This tract was leased for one dollar a year for the establishment of a life-saving station. (National Archives: Record Group 26) It has been suggested in previous reports that this lease was for the future Life Boat Station, but the size of the plot is too small

for this structure and Chandler's design had been completed showing the size required. The lot size does however correspond with the size of the 1854 Volunteer Rescue Station. It is believed that the 1874 act generated the accumulation of private volunteer stations for inclusion in the U.S. Life-Saving Service.

The requirements for stations were different between the Great Lakes stations and those on the oceans. The ocean stations were routinely located on sparsely populated barrier dunes along the shore. The ocean ports were protected by natural bays, inlets and large river mouths. Most of the wrecks were located along these deserted exposed stretches of the shore and not near populated port cities. It was therefore necessary to have a paid crew on hand to watch for wrecks and to be nearby to man the life saving equipment. Stations along the ocean provided storage space for all the rescue equipment and living quarters for the crews, and were called Life-Saving Stations. (York 1983:21)

The situation on the Great Lakes was different since they did not have the irregular shoreline with natural bays and inlets. The areas around the Great Lakes had dredged harbors at the mouths of the rivers that flowed into the lakes. The harbors were also protected by a set of breakwalls. Reaching the safety of the harbor through the narrow opening of the breakwalls was a difficult task in all but the best weather. (York 1983:21)

As a result, most of the shipwrecks on the Great Lakes were near the entrance of port cities and therefore near population centers. At these locations, it would be possible to quickly muster a crew of volunteers. The station's needs, for areas with local volunteers, included all the equipment but no living quarters for the crew. The name "Life Boat Station" was used for the stations that housed equipment with no live-in crews. (O'Brien 1976:34)

Of the twelve stations built on Lake Michigan in 1876, nine were Life Boat Stations. The Life Boat Station on North Manitou Island was constructed in 1877 near Pickard's wharf. This structure was placed next to the 1854 Volunteer Rescue Station, and went into operation the following year. (Annual Report 1877) Daniel L. Buss was selected as keeper of the station. (Rusco 1991:19)

The continued success and expansion of the service allowed the Life-Saving Service to become a separate agency within the Treasury Department, in 1878, with Kimball in charge. Apparently the reliance on volunteer crews was not entirely satisfactory. Soon after the creation of the life boat stations, one or two surfmen were hired to assist the keepers at a few Great Lakes Stations.

Beginning in 1878, the North Manitou Island station was manned by a paid six man crew, as were the other stations on Lake Michigan. (Annual Report 1878) Life saving was a twenty-four-hour occupation and it was essential that the crew live near the station. They

needed to be nearby so they could take their rotation on watch, beach patrol, and if necessary, be quickly assembled for a rescue.

No records have been found to indicate this, but it is assumed there were no established crews' quarters for the North Manitou Island Station at this time. It is believed the crew purchased or boarded in houses existing nearby for the cordwood operation. It was common practice at this time that the crew took their meals at the keeper's house. Some of the men may also have boarded with Keeper Buss, since he owned a large home behind the station.

After the addition of the 1887 Dwelling, the crew slept at the station. Since it was difficult for the married men to see their families, the service permitted the men to build cottages for their families on the government property. It was common, at the Great Lakes stations, to see two to six simple vernacular homes for the families of crew members. While these buildings were frequently on government property, they were privately owned. When men moved to another station, they sold their home to another crew member. In some cases, the homes were moved by barge, or on the ice to a new station in the vicinity.

Buildings were constructed or reassigned functions as needed to complete the task assigned to the station. The Volunteer Rescue Station was used to hold the station's supply boat in the early

1900s, and then to store the beach apparatus after 1920.

The station maintained a sloped wooden launch ramp from the Life Boat Station to the water. The ramp had a light metal track for moving the boats that were stored on wheeled carriages. The ramp was routinely damaged by the storm waves and ice so yearly maintenance was required to keep it operational. A crude ramp, built with a log track and wooden rollers, also connected the 1854 Volunteer Rescue Station with the water for launching the supply boat. Where this track entered the water, the crew had built a small dock out into the lake.

During the years of the Life-Saving Service, the North Manitou Island Station saved 772 individuals from shipwrecks and no shipwreck victim lost their life. (Muhn 1984:66) Most of the ships assisted were schooners and sloops with crews of eight or less. The station crew also provided general fire, rescue and police services for the island population. The station's fire equipment included a hose cart, a two-man pump, hand drawn fire engine, buckets, extinguishers and ladders. This was the island's only fire fighting equipment for the island community. The crew also provided first aid and evacuated islanders to the mainland to receive medical care. When necessary, the keeper settled disputes and restrained disorderly citizens.

The station became part of the U.S. Coast Guard in 1915, which

resulted in few changes to the buildings or the daily routine. In the late 1920s, Lt. Willard Smith evaluated the need for the area stations. Lt. Smith's father had worked at the North and South Manitou Island Stations, and was currently stationed at the Sleeping Bear Point Station across the Manitou Passage. Lt. Smith's report indicated that his father's old station at North Manitou and his current station at Sleeping Bear Point, were no longer needed by the Coast Guard.

These stations lacked a protected harbor and could not operate the larger motor lifeboats, which had become the standard of the day. The crew on North Manitou Island was reduced to a skeleton force in 1933, and at least two surfmen remained to watch the station and man the motor surfboat if needed. The station operated until 1938 when it was closed and sold to a private corporation, the Manitou Island Association. (Rusco 1991:19)

The North Manitou Island Life-Saving Station is representative of the nearly two hundred stations that made up the U.S. Life-Saving Service. It is the only Station remaining that encompasses the entire U.S. Life-Saving Service history from volunteer era into the Coast Guard period. Because this station saw no interruption in service, the station buildings retain a high degree of integrity of design, material and workmanship.

The setting has remained unchanged from the years of operation and

conveys a strong historic feeling associated with past sights and sounds identified with a maritime landscape. The land, beach, and Lake Michigan were the only elements associated with a volunteer era setting. These elements are still in existence relatively unaltered from the 1854 period. Even the addition of the early U.S. Life-Saving Service structures blend into the setting next to the Volunteer Rescue Station.

The 1848 Government Land Survey map for North Manitou Island shows cordwood activity in the area of the complex and village. (Trygg 1948: Michigan Map #9) These operations would have required sheds and shanties to house equipment and workers. Since these structures no longer exist, they are comparable with the structures the Manitou Island Association built in the late 1920s to house their operations and employees. These structures next to the U.S. Life-Saving Service Complex create the same types of views and vistas that would have been present in the early life saving years. No known location retains so fully the historic buildings, structures and maritime landscape associated with the creation and development of federal life saving efforts in the United States.

The period of significance for the North Manitou Life-Saving Service Station Complex is 1854 through 1932. This includes the history from the 1854 Volunteer Rescue Station period to the last season the station was operated with a full time crew.

The operation of this complex remained unchanged, even with the reorganization into the U.S. Coast Guard. The 1932 construction, on the Life-Saving Dwelling, illustrated the Coast Guard's confidence for their continued operation on the island. No changes in numbers of personnel or operation occurred until 1933. At this time, the station was determined obsolete, by the Coast Guard, and a skeleton crew of two were left to man the station. The station was operated in this manner until 1938 when the station was closed and sold to the Manitou Island Association. The Manitou Island Association, and then renamed Angell Foundation in 1952, used the buildings for employee housing and general operation of their island hunting preserve. This continued until the National Park Service purchased the island, from the Angell Foundation, in 1984. (Rusco 1991:19)

B. CHRONOLOGY OF DEVELOPMENT AND USE

The following will outline the path taken to identify and prepare restoration drawings for the 1854 Volunteer Rescue Station on North Manitou Island. The building has since been identified as a Volunteer Rescue Station from the 1854 Federal Appropriation that began placing surfboats on the Great Lakes for rescue purposes.

1. Early Investigation and Initial Contacts

Early investigation of this structure began by consulting with recognized maritime experts around the Great Lakes, and the country. The Great Lakes contacts included Captain Ted Richardson, U.S. Coast Guard (Ret), Port Huron Lightship Museum, Port Huron, Michigan, and Dr. Dennis Noble, U.S. Coast Guard (Ret), Lewistown, Montana. Captain Richardson spent his career at most of the Great Lakes stations and has collected photographs of each station and their structures. Dr. Noble has written two books on the U.S. Life-Saving Service, and the latest between the years of 1878-1915. Dr. Noble has also written articles on the Great Lakes U.S. Life-Saving Service.

Another contact was Eugene (Wick) York at Mystic Seaport Museum, Mystic, Connecticut. Mr. York had written a Master's Thesis, in 1983, for Boston University titled, The Architecture of the United States Life-Saving Service. Mr. York is very knowledgeable about events occurring during the U.S. Life-Saving Service years from 1871-1915.

The last contact was Captain Robert Bennett, U.S. Coast Guard (Ret), Mount Pleasant, South Carolina. Captain Bennett's book, Surfboats, Rockets, and Carronades, provided the most information concerning the formation of the U.S. Life-Saving Service, starting from the volunteer era. Information in Chapter III, provided information on the station houses, boats, mortars, beach apparatus and its use, and the lifecar used during each appropriation era.

The information on the 1854 Volunteer Rescue Stations, found in Chapter III, stated the building is 36 feet in length, 17 feet wide, and had 10-foot posts. The sills were specified to be oak on heart pine, the frame to be of pine or white hemlock, and the enclosure to be of cedar. Since shingles were not specified, cedar boards were used. One large folding door (8 feet square) was placed in the front of the house, and a door (7- by 2 feet 9 inches) was placed at the rear. Three windows, with twelve 8- by 10-inches glass panes each, were distributed along the sides of the building. On each side, four ventilating openings were provided near the eaves. Each window was fitted with shutters. The floor materials were 1 1/4 inch pine boards. The buildings were to be white-washed inside and out. (Bennett 1976:36-37)

Mr. Bennett stated that these were general descriptions provided to build the 1854 Volunteer Rescue Stations. Frequently, the actual buildings were built by modifying these directions to match the site and location. He felt a station in Michigan, being so far

removed from the government inspectors, probably took more liberties with the modifications.

The building conforms to the general description and fits the measurements, within an acceptable range of deviation. The items where the beach cart house conforms to the general descriptions are in the size, the frame materials, the cedar board enclosure, the pedestrian doors, window sizes and configurations, the presence of whitewash on the interior of the building, the loft description, and the interior access into the loft area.

The items that are different from the general description include no evidence of shutters or ventilating openings on the building, and an extra pedestrian door exists on the south side. This door matches the end door in size, material, and hardware, and this side door also appears in an 1893 photograph in the Park's file. This photograph also does not show evidence of shutters or ventilating openings. Field survey shows no physical evidence, and it appears the structure was not constructed with these.

One other item that is different from the general description, is a hatch door, into the loft from the outside, on the west. This access door has been blended in with the cedar battens and is barely seen from outside. The door also ties in with the loft design, which also has not been modified, and therefore is original to the construction of the building. It is believed that

the use of this door was for storage of long and cumbersome items within the loft. Today a U.S. Life-Saving Service surfboat bumper, filled with chipped cork, hangs from the loft rafters.

Comparisons of the structure were undertaken utilizing photographs of Volunteer Rescue Stations from the east coast. These pictures were provided by the maritime experts consulted and through several books written on maritime history. Photographs that included pictures of 1854 Volunteer Rescue Stations included the Cold Spring Station No. 136, New Jersey, dated 1922; Long Branch Station No. 4, New York, dated 1868; and Massachusetts Humane Society, Life Boat Station No. 43, the date is unknown. None of these structures are still standing and the Massachusetts site shows the Volunteer Stations associated with both the 1848 and 1854 Appropriations.

These photographs show that the North Manitou Island 1854 Volunteer Rescue Station is similar in design, materials, and construction. These photographs also illustrate the differences in the structures between the 1848 and 1854 Appropriations. The most obvious difference is the exterior siding. The 1848 stations were specified to have cedar shingles and the 1854 station had cedar board and battens. Further comparisons can be made with the 1926 photograph of the Spermaceti Cove Station, New Jersey, or by personally visiting the site in Navesink, New Jersey. (York - Personal Photograph, Guthorn 1971:92, Kaplan 1972:256, Nobel 1976:3)

2. National Historic Landmark Designation

Kevin Foster, Chief Maritime Historian, National Park Service, was contacted for his opinion on the information collected on the 1854 Volunteer Rescue Station. Mr. Foster has been working on a program called the Maritime Heritage of the United States National Historic Landmark Theme Study. This program has been identifying Lighthouse Complexes and Historic Vessels eligible as National Historic Landmarks (NHL).

The next phase of this national program is to survey Lifesaving Stations for NHL designation. Mr. Foster suggested that the entire North Manitou Island Complex be nominated now, instead of waiting for the completion of the survey. The reasoning stated is that the station appears to have a high level of integrity and may be the second oldest Federal Life-Saving station surviving today.

A National Historic Landmark Nomination was completed for the North Manitou Island Complex, by the park in November 1994. This nomination will be reviewed for National Historic Landmark listing in 1995, by the Advisory Board. The period of significance identified for this nomination is 1854-1932. This time frame begins at the 1854 Federal Appropriation and ends at the last year that the station was actively engaged in lifesaving and operational with a full crew.

3. National Archive Information

An important key to identifying the beach cart house was provided by Lieutenant Colonel Frederick Stonehouse, Executive Officer, ARNG. Mr. Stonehouse visited the Park looking for information concerning a book he was writing on Great Lakes Maritime History. Mr. Stonehouse had been to the National Archives and through files concerning Great Lakes Life-Saving Stations. Mr. Stonehouse found letters from James Guthrie, Secretary of the Treasury Department, to a Mr. Nicholas Pickard, North Manitou Island, and to a Joseph Francis, Brooklyn, New York.

These letters dated September 15, 1854 acknowledged the receipt of a bond ($475) signed by N. Pickard and others for the safe keeping and proper use of a Life Boat to be located at North Manitou Island, Lake Michigan and "to inform you that the boat has this day been ordered and will be forwarded to Mr. Pickard at that place as soon as completed." (National Archives: Record Group 26)

The second letter, also from the Treasury Department and dated September 15, 1854, was to Joseph Francis, Esq. This letter requested that a "Francis metal life boat" be constructed and sent to Mr. Nicholas Pickard, at North Manitou Island, Lake Michigan. (National Archives: Record Group 26)

Mr. Stonehouse did not have evidence concerning the construction

of one boathouse for every life boat occurring on the Great Lakes. This was an occurrence that happened on the East Coast, but the Great Lakes was rarely treated equal. Mr. Stonehouse states that "some (boathouses) were built, but not at every site that received a life boat. I suspect that those built did not strictly adhere to the design of the east coast stations." This last statement may explain why there are some differences in the existing boathouse on North Manitou Island.

The key may hold with Nicholas Pickard who owned the lumber operation and the dock on North Manitou Island. Mr. Pickard not only proved there were enough men to staff the boat when needed, but put up the required bond of $475 to receive the life boat. He also owned a lumber operation, and a mill with a staffed crew. It would have been no hardship to Mr. Pickard to fund and build his own boathouse after written specifications were received from the Treasury Department.

Mr. Stonehouse did have records of other Lake Michigan stations receiving a copy of the boathouse specifications. The specifications were sent, with some funding reluctantly released from the Treasury Department to complete these projects. It is not an impossibility to think specifications were also sent to North Manitou or shared between stations in the same area.

This question may never be answered but the facts show that a boat-

house exists on North Manitou Island. The structure's construction predates any of the buildings presently existing within the island's U.S. Life-Saving Service Complex. It's design, construction, and appearance conforms to the descriptions provided for stations under the 1854 Federal Appropriation to the Great Lakes.

The 1854 Volunteer Rescue Station saw very few modifications and changes in its day to day use. The earliest known change was identified on a 1905 site plan of the North Manitou Island Complex. This detailed site plan identifies that the 1854 Volunteer Rescue Station was used to house the U.S. Life-Saving Service supply boat. The supply boat would have been similar in size to the Francis Surfboat and the detailed site plan shows that the structure was not modified for this use.

The next change came after the 1915 merging of the U.S. Life-Saving Service with the Cutter Marine Service to become the U.S. Coast Guard. The letters and stories provided by the crew in 1920 identify this structure as the Beach Cart House. This structure is also identified as the location where the beach cart apparatus and accompanying equipment were stored when not in use. No modifications were made at this time, since the interior of the structure would have needed to be open to provide easy access to all items.

The 1887 Life-Saving Service Dwelling was remodeled in 1932 by the Coast Guard, and then in 1933 the entire complex was determined obsolete and reduced to a two-man crew. This two-man crew was assigned to the island as caretakers of the complex, but did not actively participate in actual rescues. The complex remained under this operation until 1938 when it was sold to the Manitou Island Association. It was at this time that the structures were more actively utilized as housing, storage space, and workshops that supported the corporate activities on the island. The 1854 Volunteer Rescue Station was used as a workshop until the National Park Service purchased North Manitou Island in 1984.

Historic photographs show that the 1854 Volunteer Rescue Station was altered sometime in the early 1930s. These photographs show the inclusion of a fixed window on the north side of the building. This correlates with the interior location of a built-in workbench along the west wall. The workbench was supported by a vestibule partition at the west door. Obviously these items are all interrelated and were constructed simultaneously. The materials included 2" x 4" framing and beaded board partitions and were identical to those incorporated within the loft stair and closet storage in the southeast corner. It is also suggested that these items were constructed simultaneously, since the materials and craftsmanship were identical to the workbench and partition along the west wall.

4. Earliest Available Documentation by the National Park Service

Stabilization work was completed, on the 1854 Volunteer Rescue Station, in 1990 by park maintenance. Prior to this work, a Condition Survey and Treatment Recommendations report and plans, dated December 8, 1988, were prepared by Alan W. O'Bright. Mr. O'Bright was the Regional Historic Architect for the Midwest Regional Office, National Park Service, at that time. This report and accompanying plans are not included in this document but are available from Sleeping Bear Dunes National Lakeshore or the Midwest Regional Office, Cultural Resource Management Office. The decision, not to include this document, is based on the amount of outdated information within the report. Identified deficiencies were corrected by the park in 1990. The next segment of the Historic Structure Report will reiterate the items that are still valid from Mr. O'Bright's report. Additional information is provided to describe the present condition and identify historic elements still associated within the structure.

The overall structural and fabric condition of the structure is good, considering the building's age and absence of periodic maintenance before its acquisition by the National Park Service. The virgin lumber, craftsmanship, and periodic maintenance provided by the U.S. Life-Saving Service, U.S. Coast Guard, and the Manitou Island Association occupation extended the life of this structure. The historic integrity of the structure is approximately 90-95% intact, and most of the historic fabric remains except the floor

and the original foundation.

C. PHYSICAL DESCRIPTION

1. CONDITION SURVEY

General Description

The 1854 Volunteer Rescue Station is a shed-like, rectangular structure measuring 16'-3" x 36'-2" with the long axis oriented east to west. Building features include a cedar shingled, moderately sloped, gabled roof over exterior walls sheathed in board and batten. Double doors open on the east elevation toward Lake Michigan, and the interior is completely open. There is a loft space the entire length of the building reached by a steep stair at the southeast corner. The internal structure is a combination of wood post and beam construction at the external bearing walls and light wood framing at the roof and loft floor. There is no floor, at this time, but the park removed the two-tier "L" shaped concrete floor in 1990 that appeared to have been added in the 1930s. The placement of this concrete caused the deterioration of the perimeter sill and the floor was removed to replace this sill.

SITE

The topography of the site is level except at the north elevation where the grade slopes east toward Lake Michigan. During the 1988 field survey of the structure by Mr. O'Bright, the concrete

foundation at the north elevation was exposed two feet. The grades at the south and west side of the structure were sloping into the building causing the bearing wall to decay. This has since been corrected by pouring a new foundation wall and redirecting the grading away from the structure. The grade has been lowered and swaled around the south and west elevations. The area is level except at the east side that gradually declines to the beach and water's edge.

Near the northwest corner of the structure there is the remainder of a huge Lombardy poplar. The Park cut down the tree in 1987, to prevent it from blowing down onto the structure. There is no evidence of root damage to the building. (O'Bright 1988:1)

FOUNDATION

The existing foundation was poured in 1990, per recommendations provided by Mr. O'Bright's report and plans. It was poured in place around the entire perimeter of the structure. The foundation wall is capped with 16 oz. copper flashing and a new 9" x 7 3/4" wood sill. Mr. O'Bright discovered a bolted lap or "scarf" joint at the midpoint of the north sill. An identical joint was also discovered at the south sill by park staff during stabilization work. These joint details were recreated when the new wood sills were put in place.

STRUCTURAL FRAMING SYSTEM

The structural system consists of a pine post and beam exterior bearing walls set over a 9" x 7 3/4" foundation sill. The corner posts are 6" x 6" and the wall is framed with 4" x 4" stud posts at 48" on center. The studs are mortised into the foundation sill. At the vertical center of the bearing walls is a continuous 4" by 4" horizontal girt. The north and south bearing walls are capped off with a double 2" x 6" plate laid flat. The east and west walls are capped by a 6" x 6" beam spanning the width of the building. Beams are mortised into the corner posts and fastened with tree nails. The 2" x 5 1/2" loft floor joists are half lapped and nailed into the west face of the stud posts and span north to south. The roof framing is 2" x 6" rafters at 36" on center bearing on the double 2" x 6" plate. (O'Bright 1988:2)

The scarf joint was recreated at the midpoint of the north and south foundation sills, during the 1990 stabilization work. The joint was historically reserved for beams since foundation sills were normally half lapped or simply butted together. This joint construction is indicative of the craftsmanship that went into the initial construction of this building. (O'Bright 1988:2-3)

Although the structure has no cross bracing, there is no perceived lean to the building even with the high velocity winds that sweep across the island periodically. The offset placement of the roof rafters at 36" o.c. over the stud posts at 48" o.c. would normally cause concern for deflection of the double plate where the rafters

bear at midspan of the plate. However, no evidence of plate deflection is detected and there is no indication of rafter deterioration or excessive deflection. The loft floor framing system is spongy due to the span and spacing of the joists, so future storage should be limited in the loft. (O'Bright 1988:3)

SIDING AND TRIM

The siding is in good condition and consists of 1" x 12" vertical boards with 1" x 2 1/2" battens with beveled sides. A 1" x 6" baseboard conceals the irregular base ends of the siding boards, and the battens butt into the top surface of the baseboards. All siding, battens, and baseboards were repaired during the 1990 stabilization work conducted by the park.

All soffits, fascia and trim are in good condition and were repaired during the 1990 stabilization work conducted by the park. Exterior surfaces on the structure were painted during this stabilization with one coat of high grade primer and two finish coats.

ROOFING

The roof is sheathed in 1" thick random boards with 18" No. 1 Blue Label Shingles with 4" exposure. The cedar roofing replaced the previous existing asphalt shingles, as recommended by Mr. O'Bright in his report. Historic photographs of the structure show that there were 37 courses of wood shingles on the roof, including the

ridge cap, or about 4 inches of exposure per course. The photographs also show that historically there were no gutters and downspouts.

WINDOWS

There are five existing windows on the structure: three double hung windows at the south elevation, one double hung at the loft on the east elevation, and a fixed window at the north elevation. All of the double hung windows are six over six and have no hardware or sash weights. The fixed north window was added in the early 1930s when the structure was converted for use as a workshop. Most of the window glass appears to be original and care should be taken when repairing to avoid breakage. The windows are in good condition and were repaired, repainted, and reglazed in 1990, as recommended by Mr. O'Bright in his report.

EXTERIOR DOORS

The 10'-0" x 8'-0" double doors at the east elevation are of board and batten construction. The interior of the door is secured by a 6" x 6" beam, cut at the ends to fit into notches in the corner posts. A wrought iron hook and eye are attached to the beam and door respectively to secure when closed. Existing hinges are modern zinc strap hinges. Holes on the doors and frames, and notches under the batten indicate that narrow cast iron strap hinges were located on the doors and under the battens.

Additional interior features include three wooden bar holders that probably held a wood bar to brace the door closed. The north door has a sheet metal flue attached to the interior indicating that a stove was added to the building at some time. Considering the building was used predominantly for boats and beach cart apparatus, it probably occurred when the structure was converted and used as a workshop in the 1930s. The doors are in good condition and were repaired when work was conducted in 1990.

In comparison with historic photographs, the four panel door at the south elevation is original. The original hinges have been replaced during an earlier time in the structure's history. The door leaf and sill were repaired and repainted during the 1990 stabilization work. The glazed door and sill at the west elevation were also repaired and repainted during the 1990 work.

The loft has an inconspicuous door on the west end that blends into the board and batten layout. This door is so well constructed, it is barely noticeable from either the interior or exterior. The door appears to have been used to store long items within the loft by using a ladder on the outside to lift the items into place. To further prove this point, there is an historic surfboat bumper, filled with chipped cork, hanging from the rafters dating from the U.S. Life-Saving era. The only way to remove the bumper is through the hatch door. This door is in good condition and appears to be original to the building since the construction blends well into

the structure.

INTERIOR PARTITIONS AND MISCELLANEOUS

The southeast corner of the structure has a stair to the loft. It appears the stairs were integrally added at the time a small storage closet was built into the corner of this structure. The storage closet was removed in anticipation of the historic floor reinstallation.

Additional partitions included an alcove by the west door, framed by 2" x 4"s and sheathed beaded board to help support the workbench in the northwest corner. This structure was also removed in anticipation of the historic floor installation.

Throughout the structure are wooden and cast iron brackets nailed to the walls. A simply made bench is attached to the wall by the south door. The bench is simple in design, and includes scrolled brackets to support the bench seat. The interior walls of the structure are whitewashed at the lower level, and exposed wood in the loft area. These areas are in good condition.

ELECTRICAL SYSTEM

There is no active electrical service or system in the structure. All remains of wire, conduit, and boxes scattered throughout the building were removed during the 1990 stabilization work undertaken by the park.

ARCHEOLOGICAL RESOURCES

No artifacts were discovered on the surface and in the area when stabilization work was undertaken for this project. No known archeological excavations have been conducted around the structure to date.

SECTION III: TREATMENT AND USE

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B: REQUIREMENTS FOR TREATMENT

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A. ULTIMATE TREATMENT AND USE

The North Manitou Island Development Concept Plan and Interpretive Prospectus (DCP/IP) were completed by the Central Team, Denver Service Center on May 15, 1987. Sleeping Bear Dunes National Lakeshore reviewed and later signed this document on October 20, 1987, which was followed by the Midwest Regional Director signature on November 5, 1987.

The Village Area Development, proposed on page 21 of the DCP/IP, identifies that the beach cart house [1854 Volunteer Rescue Station] will be adapted to accommodate visitor orientation and to provide public restrooms. The document identified the beach cart house [1854 Volunteer Rescue Station] as the closest building to the new dock and therefore the most appropriate place to provide visitor information. A trail was also identified to provide access from the dock to the contact station.

The Midwest Regional Historic Architect, Al O'Bright, prepared a Condition Survey and Treatment Recommendations report in 1988, for the 1854 Volunteer Rescue Station. This report and its recommendations were used by the park to stabilize the structure in 1990. This report identifies, under section Treatment Recommendations, that the structure's historic integrity is 90-95%. Mr. O'Bright further identified that the building is National Register eligible and no doubt greatly contributes to the character of the U.S. Life Saving Complex.

Mr. O'Bright also makes a comment on the proposed use outlined in the DCP/IP and states; "Although it is admirable to propose this building for such functions, a reminder should be made that the structure's limitations should dictate how best to use the structure. Prior to any future contemporary development, a historic structure report should be prepared to ensure that design is sympathetic to the historic character and integrity."

The Cultural Resource Management Plan for Sleeping Bear Dunes was prepared and signed by the park in 1992. The Midwest Regional Office also reviewed and signed the document in 1992. Project Number SLBE-C-012.000, Adapt North Manitou Island Beach Cart House for Visitor Contact Station, recognized that the building was not of a style used by the U.S. Life-Saving Service, but predates this organization. It further stated that a Historic Structure Report would be conducted, a National Register of Historic Places nomination completed, and the nomination submitted to the National Maritime Initiative Office for consideration as a National Historic Landmark (NHL) before restoration work would be initiated.

The Michigan State Historic Preservation Office (SHPO) stated that the entire North Manitou Island Complex should be submitted for NHL status. If this nomination is rejected, then the 1854 Volunteer Rescue Station should then be nominated individually for NHL designation. The National Register of Historic Places nomination

was completed for the complex and submitted to the National Maritime Initiative Office in November 1994. The Advisory Board will meet in 1995 to evaluate the complex for National Historic Landmark status.

The national significance of this structure limits its use for adaptive reuse, especially when that use proposes a design not sympathetic to the historic character or integrity. The proposal to place restrooms within this structure would adversely effect a character defining element of the structure. This action would not be consistent with the Secretary of the Interior's Standards for Rehabilitation. The park is now proposing using the structure for interpretive purposes. This proposed action would provide exhibit space to distribute information and interpret the early years of the U.S. Life-Saving Service, with interpretive panels and maritime artifacts.

The park is attempting to obtain an 1854 Francis Surfboat similar to the one sent to North Manitou Island in 1854. If it becomes available, the boat could be placed within the structure along with other objects associated with the early years of the U.S. Life-Saving Service. The surfboat would utilize one-half of the available floor space and the additional area will hold reproduction ropes, oars, and some period equipment pieces associated with that period. Interpretive panels would be incorporated to educate and inform the public on the early history

of the U.S. Life-Saving Service and its association with North Manitou Island.

B. REQUIREMENTS FOR TREATMENT

1.Archeological Information

A 1905 site plan was discovered during research on this project. This site plan showed that the 1854 Volunteer Rescue Station was moved one-full-building's length to the east toward Lake Michigan. It is not clear exactly when this event took place, but it occurred sometime after the delineation of the plan. The exact reasons are not known, but it is apparent from historic and current photographs that the distance between the building and the water's edge has increased. This condition is predominantly from sand being shifted by currents in Lake Michigan, from the north end of the island and collecting at the U.S. Life-Saving Service launch ramps.

Archeological work will not be necessary for the work proposed within this document, since work will be predominantly interior restoration of the structure. Future archeological work should be undertaken, at the 1905 building location, to gather additional information about the complex.

2.NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures (Life Safety Code) and NFPA 913 - Protection of Historic Structures and Sites

The restored structure is being proposed for interpretive purposes.

If the 1854 Francis Surfboat becomes available, it could be placed in this structure. If it does not become available, exhibits and interpretive panels can still be provided within the structure. Use of the interior of the structure will be limited, since the installation of the floor at the historic level would provide only 6'-4" of clear head room. The structure includes two pedestrian doors and one boat door. Exhibits will be designed and installed following recommended paths and widths of egress.

3. Utilities

Only an electrical box is being proposed for the structure, at this time. Additional services such as mechanical ductwork, heating, cooling, stoves, chimneys, plumbing, septic, or automatic sprinkler systems will not be added. Any utilities added at a future date would support requirements for the interpretive activities.

4. Handicap Accessibility

Handicap accessibility is limited on North Manitou Island. The island is managed as a wilderness, and the DCP/IP states that the visitor experience will be primitive. Accessibility will be provided as appropriate for the structure, the island, and the visitor. The island does not have sidewalks or hardened surfaces that meet accessibility requirements. A small moveable ramp could be built to provide access into the structure.

Transportation to the island is by concessionaire boat that is not

accessible without assistance. A visitor who was willing to travel to the island would find the dock and wide gravel trails acceptable in visiting the village during noninclement weather.

Access to the 1854 Volunteer Rescue Station would be via the gravel trails to the U.S. Life-Saving Service Complex. The complex has historic concrete sidewalks, stamped U.S.L.S.S. 1908, but none is the width required under accessibility standards. The ground around the structures is firm and access to the structures would be possible during noninclement weather.

C. ALTERNATIVES FOR TREATMENT

The 1854 Volunteer Rescue Station on North Manitou Island presents itself to three alternatives for restoration as follows:

Alternative 1 - Stabilize the interior of the 1854 Volunteer Rescue Station in its present state. Develop a visitor contact station with restrooms as identified in the Development Concept Plan/Interpretive Prospectus (DCP/IP).

This alternative would replace the missing wood plank floor below the historic floor level to create a 6'-8" headroom. Interior room partitions would section off the open boat bay to create areas for the restrooms. A septic system will be installed within the National Historic Landmark District to facilitate this requirement. A small information kiosk will be built into one corner providing

information of North Manitou Island to the visitor. This alternative would not be sympathetic to a structure nominated as a National Historic Landmark. The historic integrity of the structure would be lost with the inclusion of the partitions.

This alternative could also provide an impact to the pitchers thistle population that is now inhabiting the area between the dock and the U.S.L.S.S. Complex. The DCP/IP identifies adding a trail to connect the dock area to the 1854 Volunteer Rescue Station through the federally endangered Pitcher's thistle. Social trails have already developed creating a shortcut to the complex. Island Rangers actively instruct visitors to stay on the established roads, but many visitors opt for the shorter distance. Creating a formal visitor contact station in this area may continue to place a strain on the federally endangered Pitcher's thistle.

The park will continue to instruct visitors on the appropriate path of travel and monitor the population of plants. A noticeable decline in the population will result in informal consultation with the U.S. Fish and Wildlife Service to undertake any additional Section 106 and NEPA compliance determined necessary.

Alternative 2 - Restore the interior of the 1854 Volunteer Rescue Station to an era when the structure was used for storage of surfboats and the supply boat.

This alternative would restore the structure to its historic and original purpose as a boathouse. This proposal would reinstall the historic pine floors as specified in the government specifications. The whitewash interior finish would be maintained where determined appropriate, and areas to be restored will be per Treasury Department Specifications published in 1907. Additional work would rebuild the missing boat ramp on the east side, and remove minor nonhistoric elements added when the structure was converted into a workshop.

The proposed use for this structure is an interpretive shelter that could house an 1854 Francis Surfboat, if it became available. Interpretive displays and panels will be provided with limited visitor contact services provided within the structure. Placement of lanterns, ropes, oars and additional equipment associated with the earliest years of the U.S. Life-Saving Service will also be a part of the interior exhibit. Interpretive panels will be developed to inform the public on the history of the volunteer stations on the Great Lakes, and its National Historic Landmark context.

This alternative could also provide an impact to the pitchers thistle population that is now inhabiting the area between the dock and the U.S.L.S.S. The park will continue to instruct visitors on the appropriate path of travel and monitor the population of plants. A noticeable decline in the population will result in

informal consultation with the U.S. Fish and Wildlife Service to undertake any additional Section 106 and NEPA compliance determined necessary.

Alternative 3 - No Action

This alternative will leave the structure as it exists today. No floor, ramp, exhibits or interpretive panels will be provided. Modern features such as the zinc hardware will be left on the structure.

This alternative could also provide an impact to the pitchers thistle population that is now inhabiting the area between the dock and the U.S.L.S.S. The park will continue to instruct visitors on the appropriate path of travel and monitor the population of plants. A noticeable decline in the population will result in informal consultation with the U.S. Fish and Wildlife Service to undertake any additional Section 106 and NEPA compliance determined necessary.

D. CONCLUSION

The consideration used during the formulation of preferred alternative #2 was determining the time frame for restoration and what materials represented that period. The structure is unique because it is a survivor from its time. Historically these structures were torn down with the establishment of the U.S. Life-Saving Service, when the new Life Boat Stations were constructed.

Often the volunteer stations provided the initial materials to construct these buildings. This volunteer station is unique because of its utilitarian nature and rarity, and the fact that it is situated next to the 1877 Life Boat Station. The fact that it still exists today not only illustrates the quality of construction, but its recognized operational value to the U.S. Life-Saving Service.

The integrity of the setting and general feeling for the site was a consideration in this report. Much of North Manitou Island and Lake Michigan is very similar to the 1850-1871 time period. Very little development occurred on the island, because the Manitou Island Association ran it as a private hunting preserve. Lake Michigan is still a major transportation corridor used by today's "schooners", the cargo ships, bound for Chicago and New York.

Exterior stabilization work was completed by park maintenance staff in 1990 and included the repainting, reroofing, and replacing the deteriorated concrete foundation wall. The park photo-documented this work and has an album illustrating the condition of the structure before work began. Photographs also are included of the work taking place and illustrating the structure after completion of the work.

The 1854 Volunteer Rescue Station will remain in its present location. Interior walls and rafters on the lower level will be

whitewashed, as needed, using the formula developed by the Treasury Department for lighthouses and other public buildings. This formula is provided in the appendix and is reprinted from the 1907 book Henley's Formulas for Home and Workshop.

The loft area has no trace of whitewash or paint on either the floors or the rafters, and will remain as existing. Miscellaneous boards and frames attached to the structural members by the Manitou Island Association will be photographed, documented, and then removed.

The floor on the lower level will be replaced with 1 1/4" pine boards butted together per the written specifications provided in Surfboats, Rockets, and Carronades. The specifications do not mention the support for the floor boards and no physical evidence exists today. Instead of making assumptions, these members will be modern 2" x 8"s spaced at 16" o.c. and attached to the previously installed sill with joist hangars. All modern elements will be hidden from view under the historically replaced floor boards.

Added trim will be removed from the bottom of the boat door, returning it to its original size. The painted zinc hinges will be removed and wrought/forged iron hinges will be replaced under the battens, per available photographs and written specifications in Surfboats, Rockets, and Carronades.

The boat ramp will be reconstructed from drawings published in the January 27, 1877 Harper's Weekly. The slopes of these ramps differed at each location. Some were very short with little elevation changes, and others like the 1854 Volunteer Rescue Station had a steeper slope to the water's edge. The structural system for the ramp again uses a concrete foundation and steel angles and will be buried from view by the shifting sand.

The 1854 Appropriation sent equipment to areas that had a history of disastrous shipwrecks that took many lives. This appropriation allotted $12,500 to establish 47 stations on the Great Lakes, with 23 going to Lake Michigan. These stations predominantly received surfboats and were assigned to Lighthouse Keepers or Customs officials.

The first government boats were the Francis Surfboats. These surfboats were built by Joseph Francis of the Francis Metallic Life-Boat Company of Brooklyn, New York. They were constructed of corrugated galvanized iron, except the partially flat bottom made of wood to withstand the continual abrasiveness of the beach sand. The boat was equipped with ten integral metal air chambers, and India rubber fenders placed outboard of their gunwales to protect the boats when alongside a wreck. The overall dimensions of the Francis surfboat are as follows:

Length overall..... 26 1/2 feet
Length of keel..... 22 feet

Beam	6 1/2 feet
Depth amidships	30 inches
Sheer (gunwale)	23 inches
Sheer (keel)	9 inches
Weight	1500 lbs.
Air tanks	Yes

Frederick Stonehouse developed a list of 1854 Francis surfboat placements on the Great Lakes, by searching the U.S. Life-Saving Service files at the National Archives. He discovered a Francis Surfboat was provided, in 1854, to Alonzo Slyfield, the Lighthouse Keeper on South Manitou Island. Mr. Stonehouse also discovered a Francis Surfboat was provided, in 1854, to Nicholas Pickard, the dock and lumber mill owner on North Manitou Island.

The significance of the 1854 appropriation is very important to the maritime history associated with Sleeping Bear Dunes. A few local maritime newsletters have printed reports concerning the location and identification of metal surfboats on islands and along the shores of the Great Lakes. The Park has located an 1854 Francis Surfboat that could be placed in the 1854 Volunteer Rescue Station, if it were made available. This structure, with accompanying surfboat, would be a great addition to the maritime collection at the Park. The building will be ready to hold such a boat if the opportunity arises.

The Park has completed the National Historic Landmark nomination for the U.S. Life-Saving Service Complex on North Manitou Island. Assistance was provided by National Park Service personnel Kevin Foster, Chief Maritime Historian, WASO. This nomination has been

reviewed by the National Park Service, Midwest and Washington Regional Offices, and the Michigan State Historic Preservation Officer. Presentation to the Advisory Board for National Historic Landmark designation will be made in 1995.

SECTION IV

SECTION IV: APPENDIX

A: BIBLIOGRAPHY

B: TREASURY DEPARTMENT LETTERS
1. TO S.G. HAVEN, BUFFALO, NEW YORK, SEPTEMBER 15, 1854
2. TO JOSEPH FRANCIS, BROOKLYN, NEW YORK, SEPTEMBER 15, 1854
3. LEASE OF NORTH MANITOU ISLAND SITE FROM NICHOLAS PICKARD BY U.S. LIFE-SAVING SERVICE, SEPTEMBER 10, 1874

C: U.S. LIFE-SAVING SERVICE SITE PLAN OF NORTH MANITOU STATION PROPERTY, APRIL 19, 1905

D: LETTERS OF IDENTIFICATION
1. CAPTAIN TED RICHARDSON, U.S.C.G. (RET.)
2. WICK YORK, MYSTIC SEAPORT MUSEUM
3. KEVIN FOSTER, NPS CHIEF MARITIME HISTORIAN
4. CAPTAIN ROBERT F. BENNETT, U.S.C.G. (RET.)
5. DENNIS NOBLE, PH.D., LEWISTOWN PUBLIC LIBRARY

E: HISTORIC PRESERVATION ACT, SECTION 106 LETTERS

1: MIDWEST REGIONAL OFFICE TO MICHIGAN STATE HISTORIC PRESERVATION OFFICER
2: MICHIGAN STATE HISTORIC PRESERVATION OFFICER TO MIDWEST REGIONAL OFFICE
3: MIDWEST REGIONAL OFFICE TO SLEEPING BEAR DUNES NATIONAL LAKESHORE

F: RESTORATION PLAN

G: HENLEY'S FORMULAS FOR HOME AND WORKSHOP

H: LITHOGRAPH-HARPER'S WEEKLY, JANUARY 27, 1877

I: J. FRANCIS SURFBOAT DRAWING AND SPECIFICATIONS

J: HISTORIC PHOTOGRAPHS OF VOLUNTEER STATIONS ON THE EAST COAST

K: PHOTOGRAPHS
1. HISTORIC AND CURRENT PHOTOGRAPHS
2. PHOTOGRAPH LIST

A

A: BIBLIOGRAPHY

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Letter from Captain Robert F. Bennett, USCG (Ret.), Mount Pleasant, North Carolina, April 6, 1994.

Letter from Kevin Foster, Chief Maritime Historian, National Maritime Initiative, National Park Service, Washington D.C., April 6, 1993.

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Treasury Department, Sept. 15, 1854.

Hon. S. G. Haven,
Buffalo, N.Y.

Sir. I have the honor to acknowledge the receipt of your letter of the 12th inst. with a Bond signed by N. Pickard and others for the safe keeping and proper use of a Life Boat to be located at North Manitou island, Lake Michigan and to inform you that the boat has this day been ordered and will be forwarded to Mr. Pickard, at that place as soon as completed. When communicating this intelligence to Mr P. I will thank you likewise to state, that it is distinctly understood, that the Department will not be held liable for any expense that may be incurred on account of the Boat after its delivery at the place designated.

I am Very Respectfully, Your
James Guthrie,
Secretary of the Treasury.

Vol. 13 p. 373.

Treasury Department Sept 15, 1854.

Joseph Francis Esq.
New York.

Sir; You will please upon the receipt of this letter, cause to be constructed and foriwarded with all practicable despatch to Mr Nicholas Pickard, at North Manitou Island, Lake Michigan, a Life Boat and appurtenances, to be located at that point similar in all respects to those hertofore furnished this Department. So soon as a certificate of delivery of the Boat shall have been

received at this Department you will be allowed the sum of Four Hundred and seventy five dollars together with any reasonable extra expense you may appear to have incurred in consequence of the difficulty of transportation.

I am Very Respectfully
James Guthrie
Secretary of the Treasury

Vol. 13 p 373.

And the said party of the second part hereby covenants and agrees to and with the said party of the first part his heirs and assigns, that the United States shall and will pay the said rent as hereinbefore stipulated.

In witness whereof, *the parties hereto have set their hands and seals the day and year first hereinbefore written.*

Signed, sealed, and delivered in presence of—

J. H. Murphy

Nicholas Pickard

R. H. Burton

Secretary of the Treasury.

W.O.A.

State of Michigan }
County of Leelanau } ss.

On this third day of October one thousand eight hundred and seventy four before me a Notary Public in and for said County personally came the above named Nicholas Pickard known to me to be the same person who executed the foregoing instrument and acknowledged the same to be his free act and deed.

GVERFURTH NOTARY PUBLIC LEELANAW CO MICH

G. Verfurth
Notary Public
Leelanau County
Michigan

STATE OF MICHIGAN SECRETARY'S OFFICE OCT 29 1874 RECEIVED.

State of Michigan } Office of Secretary of State } ss.
I hereby certify that the annexed is a true copy of a lease dated October 3rd A.D. 1874 from Nicholas Pickard to the United States of a site for a Life Saving Station at Leelanau Point in the County of Leelanau and recorded in this office in Liber 10 of Deeds on page 283 and 284.
In testimony whereof I have hereunto set my hand and affixed the seal of said office this 29th day of October A.D. 1874.
John Bundy
Secretary of State

Rent from Mich. 4 Oct 2. 1874.

Form No. 16.

United States Life-Saving Service,

Dist. No. 11, Station No. 2

Sept 10, 1874

LEASE OF SITE.

Leelanau Point Mich.

U.S. LIFE SAVING SERVICE 1871 - 1878

Examined Dec 1874
Approved
Dec 1874
Inspector U.S.L.S.S.

U.S. LIFE SAVING SERVICE INSPECTOR'S SEAL

NOTE.—This lease must be acknowledged and recorded. Seals of wax or wafer must be used. All the blanks must be carefully filled.

Whereas, *The Secretary of the Treasury has been authorized by law to establish Life-Saving Stations as therein specified;*

And whereas *it is necessary that the possession of the sites whereon the same are established should be secured to the United States;*

Now, This Indenture, made this tenth day of September A. D., eighteen hundred and seventy four, between Nicholas Peterson, of North Manitou Island, County of Leelanau and State of Michigan party of the first part, and Benjamin H. Bristow Secretary of the Treasury, acting for the United States, party of the second part, WITNESSETH: That the said party of the first part, in consideration of the rents and covenants hereinafter named, by these presents grants, demises, and lets unto the said United States all that certain lot of land situate on North Manitou Island in the County of Leelanau, and State of Michigan

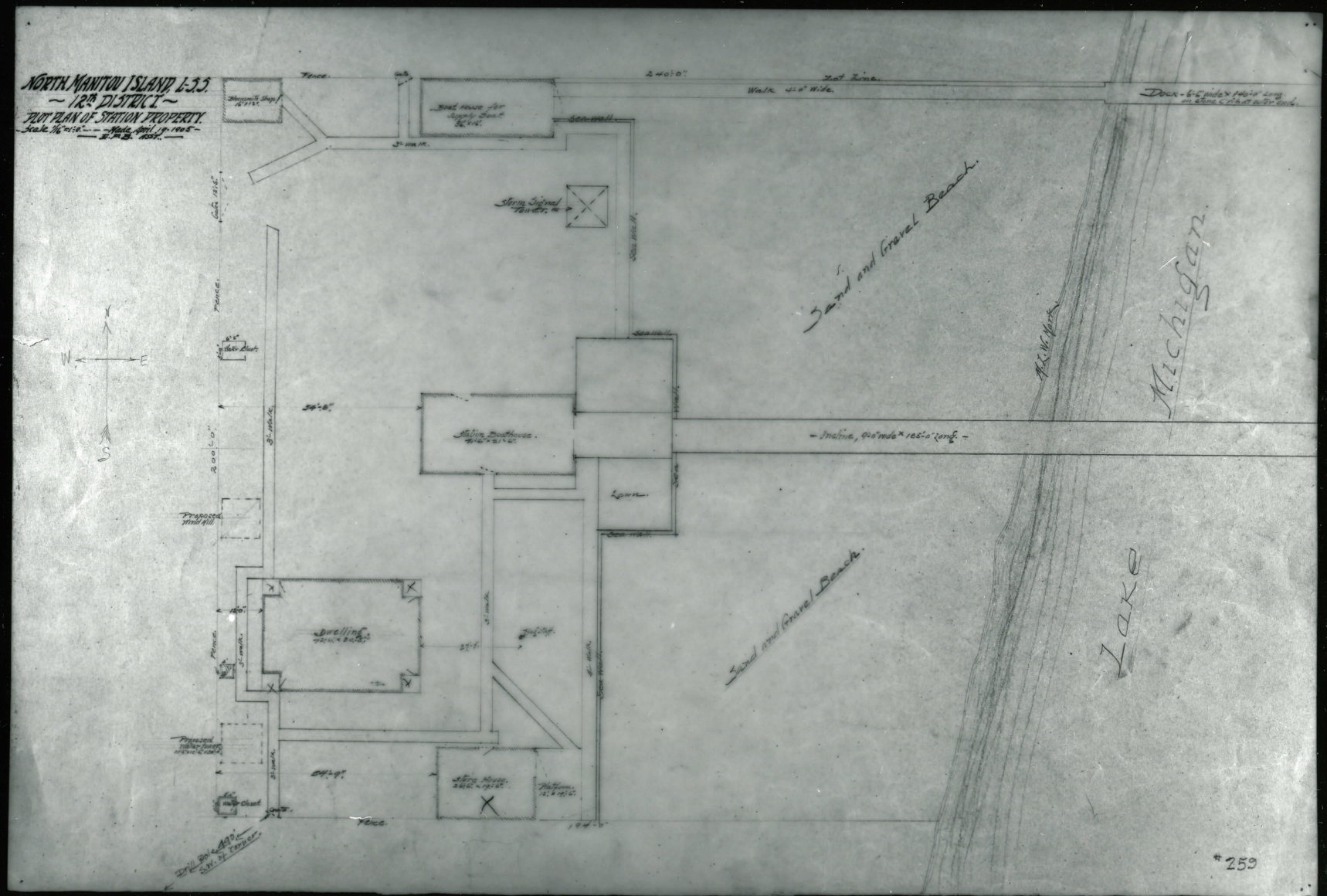
and thus described and bounded: Beginning at a point one hundred and eighty five and one half feet (185½ ft) from the South Easterly, corner of the Dock mills and running thence Easterly towards the Lake forty feet (40 ft) thence Southerly at right angles with last described course twenty feet (20 ft) thence Westerly parallel with the first course forty feet (40 ft) and thence Northerly twenty feet (20 ft). to the place of beginning

be the contents what they may; with full right of egress and ingress thereto in any direction, over other lands of the lessor, by those in the employ of the United States, on foot, or with vehicles of any kind, with boats or any articles used for the purpose of carrying out the intentions of Congress in providing for the establishment of life-saving stations, and the right to pass over any lands of the lessor in any manner in the prosecution of said purpose, and also the right to erect such structures upon the said land as the United States may see fit, and to remove any and all such structures and appliances at any time, either before or after the expiration of the term of this lease.

To have and to hold *the said lot of land and privileges unto the United States from the tenth day of September, 1874, for and during the term of ninety nine years, to be computed and ended, yielding and paying for the same yearly during said term unto the said party of the first part, or assigns, the sum of one dollar ($1) at the end of each year, or if the United States shall see fit it shall have the right to pay the whole rent for the whole period at any time during the continuance of this lease.*

And it is further stipulated, *That the United States shall be allowed to remove said building and appurtenances whenever it shall think proper, and shall have the right of using other lands of the lessor for passage over the same in effecting such removal.*

And it is further stipulated, *That the United States shall have the right of a renewal of this lease for a like term, and for the same rental, at or before the expiration of the time for which this lease is given, and also such other and further renewals of the same as it may desire.*


NORTH MANITOU ISLAND L-55.
~ 12TH DISTRICT ~
PLOT PLAN OF STATION PROPERTY.
Scale 1/16"=1'0" — Made April 19, 1905
— R.F.D. 1897. —
Fence.
Boat house for Lifesaving Boat
Sea Wall.
Walk 4'-0" Wide.
Dock - 6'-6" wide x 140'-0" Long
Storm Signal Tower, &c.
Sand and Gravel Beach.
Lake Michigan
Station Boathouse
Incline, 9'-0" wide x 165'-0" long.
Lawn.
Proposed Windmill
Dwelling
Proposed Water Tower
Privy Vault
Store House
Platform
Fence.
#259

U. S. LIFE SAVING SERVICE
History and Research in the Great Lakes

Capt. Ted C. Richardson (Ret.)
613 S. 12th Street
St. Clair, MI 48079
(313) 329-3946



January 22, 1993

Dear Kimberly:

Sorry it has taken so long to answer your letter. I have been waiting for all my life-saving photos, 145 of them, to come back from South Haven Maritime Museum. They have negatives now so if these get lost at least there is a copy.

Just got them back and so far no building like you have on North Manitou, so we will just have to keep looking.

Sure hope to get over your way in '93 to spend some time there. I am still busy restoring the HURON Lightship Museum. Enclosed is a postcard showing it.

Sincerely,

Capt. Ted Richardson

Capt. Ted Richardson

TCR:cr
Encl.

MYSTIC SEAPORT MUSEUM
MYSTIC, CONNECTICUT 06355-0990 · TELEPHONE 203 572-0711

April 5, 1993

Ivan Miller, Superintendent
Sleeping Bear Dunes National Lakeshore
P.O. Box 277, 9922 Front Street
Empire, Michigan 49630

Dear Mr. Miller:

I'm writing you at the request of Kim Mann concerning a building on the grounds of the U.S. Lifesaving Station on North Manitou Island referred to as the "Beach Cart House." Based on information she has given me, and on research I've done, it seems likely that this structure may be one of the boathouses built in 1855 by the Lifesaving Service under an 1854 congressional appropriation for the Great Lakes.

I understand the Park is considering converting the Beach Cart House into a restroom for visitors. I urge you to undertake a more through historical study of this building before making any decision on its future use. If your research shows that this was built as a boathouse by the Lifesaving Service, it would be, to my knowledge, the only one of the over forty Great Lakes boathouses constructed during this period (twenty three of which were placed on Lake Michigan) that is still standing. Of the more than one hundred such boathouses built by the Service on the East Coast and Great Lakes before 1871, none are owned by the Park Service, and I know of only one other that survives. This is the 1848 Spermaceti Cove Station in Sandy Hook, New Jersey (now at Twin Lights State Historic Site in Highlands), which was the first U.S. lifesaving station in this country.

If it is an 1855 boathouse, it would probably be eligible for National Historic Landmark status because of its historic significance. In fact, the entire station will probably be considered for NHL listing as part of an upcoming survey of surviving lifesaving stations that the National Park Service's National Maritime Initiative will soon be undertaking.

I have been researching the history of the U.S. Life-Saving Service since I began working at Mystic Seaport Museum in 1977 as an Architectural Restoration Specialist. In 1983, I received a master's degree in Historic Preservation Studies and wrote my thesis (which Kim has a copy of) on the architecture of U.S. Lifesaving Stations. I've studied a number of surviving stations, and in 1985 completed a state-wide National Register thematic survey for the Maine Historic Preservation Commission.

Sincerely,

Wick York

Wick York
Collections Department

United States Department of the Interior

NATIONAL PARK SERVICE
P.O. Box 37127
Washington, D.C. 20013-7127

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

APR

Kimberly Mann
Sleeping Bear Dunes National Lakeshore
P.O. Box 277
Empire, Michigan 49630

Dear Kim,

Thank you for the packet of information you sent following our earlier conversations concerning lighthouses. The information on the lifesaving station on North Manitou Island was particularly interesting.

From a quick survey of the material you sent, I believe that the lifesaving station, particularly the boat house, should be studied for nomination as a National Historic Landmark. My program in the History Office plans to examine the surviving structures of the National Lifesaving Service, as well as private and state lifesaving predecessors, as part of the Maritime Heritage of the United States National Historic Landmark Theme Study.

We plan to start preparing studies of lifesaving stations in the next two years as we finish the study of historic vessels. The station at North Manitou will be first on our list because of the apparent high state of preservation of the site, and because of the significance of the early boat house. From what specialists in the history of the lifesaving service tell me, it is possibly the second oldest Federal lifesaving station surviving today.

Thanks again for the fine historical material you sent on the station. Please let me know if there is anything that I can do to help support your efforts to preserve and study the maritime resources in your park.

Sincerely,

Kevin J. Foster

Kevin J. Foster
Chief Maritime Historian,
National Maritime Initiative

Captain Robert F. Bennett, USCG (Ret.)
835 Law Lane
Mount Pleasant, S.C. 29464

fm 4/12/93

April 6, 1993

Mr. Ivan Miller, Superintendent
Sleeping Bear Dunes National Lakeshore
P. O. Box 277
Empire, Michigan 49630

Dear Mr. Miller:

I recently mailed several documents to Kimberly Mann of your staff pertaining to the origins of early U. S. Life-Saving Service buildings and equipment. Depending upon the dimensions of the building in question matching, or nearly matching, the original specifications for the 1854-authorized boat houses, there is every reason for me to believe that one of those buildings is now in your care.

The U. S. Life-Saving Service (USLSS) was created in 1848. As an organization, there are two distinct periods of its existence. The first was between 1848 and 1870; the second between 1871 and 1915. The first period has been almost totally ignored by Coast Guard historians, the second hasn't fared much better. The first period was primarily a volunteer organization functioning with a smattering of federal equipment funded by Congress and a bit of supervision by the office of the Secretary of Treasury. The second period was much better organized, employed paid surfmen; the agency USLSS was then directed for its entire organized lifespan of 44 years by its General Superintendent, Sumner I. Kimball.

While assigned to USCG Headquarters in Washington, DC, in the mid-1960's, I had occasion to spend my lunch hours researching the USLSS files contained in Record Group 26 at the National Archives. I was able to have many pertinent documents copied, including all the file material on the first period of the USLSS. I later had those early hand-written documents transcribed. They were to have been an appendix to my book, Surfboats, Rockets and Carronades. Unfortunately, money was short and the appendix was dropped. I then organized it into an unpublished manuscript entitled, "An Appropriation of a Very Unusual Kind". It was from that source that I selected some of the documents I sent to

Kimberly. Because of my extensive research in to the USLSS during the period of 1848 thru 1870, I have the dubious distinction of being regarded as the leading historical expert on the USLSS of that period.

The geographic focal point of the first USLSS period was the New Jersey and Long Island, N. Y. seacoasts. They comprised the scenario for the worst shipwrecks of the early to mid-1800's. Thus, the establishment of rescue stations on those coasts was supervised by officers of the U. S. Revenue Marine, and those stations were closely involved with marine underwriting interests. Volunteer, state-supervised salvage operations preexisted the federal establishment on those coasts as well. In 1854, the federal government authorized paid coastal district superintendents and station keepers. Some attempt at inspections and equipment testing was also undertaken.

But other parts of the nation also received federal equipment during that first period of the USLSS. The National Archives documents reveal that, apparently, whenever Francis metal surfboats were assigned to Collectors of Customs and Lighthouse keepers, some arrangement was made for the construction of houses to shelter the Francis boats. No station keepers and no coastal district superintendents were assigned to any coastal districts other than New Jersey and Long Island, N. Y. Moreover, no inspectors made reports, and no government records exist regarding cases of assistance at any of the non-New Jersey/Long Island coastal sites.

The USLSS of the early period bought iron surfboats (Francis), lifecar/surfcars (Francis), boat wagons, beach carts, mortars, line, rockets, gun powder, and buildings built to the USLSS specifications. The buildings followed two styles, the 1848 style with cedar shingles, and the 1854 style with plain board siding. The dates signify the dates that construction of the various stations were authorized, not the actual dates that the buildings were constructed. After 1871, when the New Jersey/Long Island stations were manned, the original boat houses had to be either enlarged or rebuilt. Most were rebuilt, but it was noted in the files in 1872-73 that the 1854 station houses were in worse shape than the 1848 stations.

The need for boat houses was driven by the need for shelter for the Francis boats, and the other assorted equipment

provided. It is reasonable, on the basis of the spotty correspondence as early as 1852 between the Secretary of the Treasury and an individual in St. Augustine, Florida, that boat houses were apparently authorized to be built for every Francis boat delivered. Since a Francis boat was delivered to your facility sometime after its 1854 authorization, a boat house complying with the 1854 Treasury Department specifications was undoubtedly constructed.

The 1854 specifications were general and intended to be cost efficient. The fact that the 1848 Spermacetti Cove (Sandy Hook, NJ) station has been moved from its original site several miles to the Navesink Twin Lights, attests to the fact that the stations were built so that they could be moved. The reason that the Spermacetti Cove building survived was that when the 1872 alterations/rebuildings were authorized, the Spermacetti Cove station was embedded in a cedar thicket and couldn't easily be accessed. Hence, it survived intact. To the best of my knowledge, no 1854 station was ever altered on the New Jersey coast, and probably none on the Long Island coast. The files indicate that they were torn down and salvaged.

I suggest that if the building in your care somewhat matches the 1854 specifications, you may have the only existing structure that was built to the 1854 specifications. Should the iron surfboat reported to be elsewhere in Michigan be a Francis surfboat, it will be the only one of its genre that I know of that has survived.

If I can provide any additional information, please feel free to call me at home (803) 884-1009 or at work (803) 577-7014.

Sincerely,

Robert F. Bennett

LEWISTOWN CITY LIBRARY
701 WEST MAIN
LEWISTOWN, MONTANA 59457
Phone: (406) 538-5212

7 April 1993

Superintendent
Sleeping Bear Dunes National Lakeshore
Post Office Box 277
9922 Front Street (Highway M-72)
Empire, MI 49630

Dear Superintendent:

I have researched and written on the U.S. Life-Saving Service (USLSS) for the past nineteen years. My latest work, which will be published by the U.S. Naval Institute Press, is the first book to treat the USLSS as a national entity. I have helped advise the first Chief of Interpretation at Sleeping Bear Dunes on the USLSS and on U.S. Coast Guard history. In fact, in my book I mention that Sleeping Bear Dunes has the best display of the USLSS in the United States.

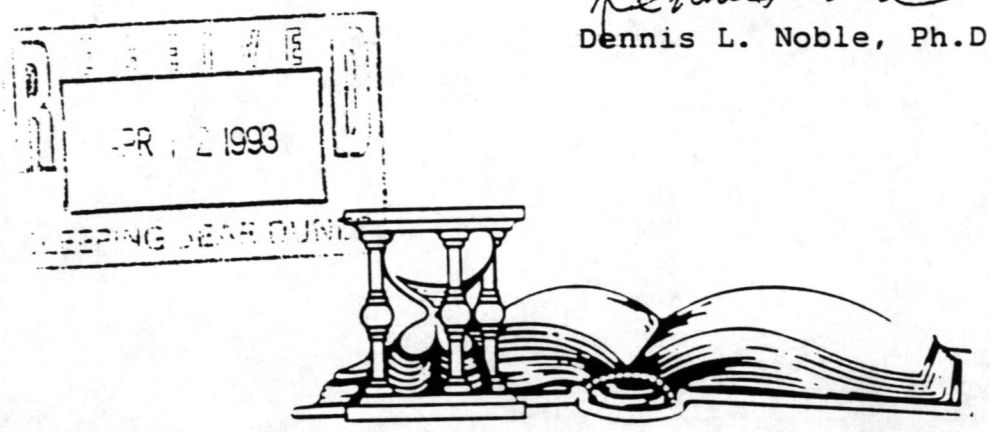
Recently, I, among others, have been asked about the old boathouse building on North Manitou Island. It appears to me that you have a very valuable structure dating from the volunteer era of the USLSS. If further research proves me correct, then I believe you should try to preserve this as a boathouse, with proper interpretation of its use. I recommend this because I know of very few, if any, of these structures that are still intact. It is, I think, important to keep this portion of our maritime heritage intact.

Thank you for your consideration on this matter. I look forward to the time when I can once again visit Sleeping Bear Dunes.

Sincerely yours,

Dennis L. Noble

Dennis L. Noble, Ph.D.



H34(MWR-PC)

MAY 2 7 1993

Dr. Kathryn Eckert
State Historic Preservation Officer
Michigan Library and Historical Center
717 W. Allegan Street
Lansing, Michigan 48918

Dear Dr. Eckert:

The National Park Service (NPS) has conducted additional research concerning the beach cart house on North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan. The information suggests not only is the building eligible for the National Register of Historic Places, but it may possess significance which qualifies it as a national historic landmark (NHL).

A 1988 analysis by Historical Architect Alan W. O'Bright of this Office first indicated the structure contributes to the character of the larger Coast Guard complex. The observation was based on the building's apparent age and the high degree of integrity of the historic fabric. Further investigation by Sleeping Bear Dunes Historical Architect Kimberly Mann revealed the structure may date from the all-volunteer service, predating establishment of the U.S. Life Saving Service (USLSS) in 1871. In conferring with Captain Ted Richardson of Port Huron, Michigan, who is considered to be one of the leading consultants of U.S. Coast Guard history in the Great Lakes region, there apparently is no other building of its kind present on the Great Lakes. Richardson affirms its construction predates the USLSS/U.S. Coast Guard Service, and appears to originate from the all-volunteer service of the 1850s.

Captain Richardson recommended consulting Eugene Wick York's "The Architecture of the United States Life-Saving Stations" (Boston University, 1983). In 1854, Congress first appropriated funds to assist lifesaving efforts on the Great Lakes. Forty-seven life boats were purchased, almost half of which were stationed on Lake Michigan. Surfboat, or beach cart, houses were constructed per Treasury Department drawings to accommodate the surfboats. Maintenance and use of the surfboats was directed by those individuals at the locations which received the boats. Treasury did not provide staff or additional funding, thus the appellation of "all-volunteer service." Treasury's construction requirements included a building measuring 17 feet by 36 feet, covered with cedar boards. The crude interior one-and-one-half-story frame structure housed the boat and other rescue equipment on the first floor while the small loft was used for storage. The beach cart house on North Manitou Island is identical to the boathouse specifications constructed following the 1854 appropriation.

Historical Architect Mann next contacted Mr. York at Mystic Seaport Museum in Connecticut to identify the building (see enclosed April 5 letter). York, who subsequently conducted additional research on North Manitou Island at the U.S. Coast Guard Academy archives in New London, Connecticut, believes there is substantiating evidence that this boat cart house originates from the 1854 appropriation period. York recommended that Robert Bennett, a noted USLSS historian in Mt. Pleasant, South Carolina, be contacted.

Bennett's letter of April 6 is also enclosed. Bennett points to 1854 Treasury reports which identify the placement of 19 of the 23 lifeboats for Lake Michigan. Placements were made with individuals considered trustworthy and usually employed by the U.S. Government. Once received, these boats were placed where they were most needed. The South Manitou Island lighthouse keeper is identified as receiving one of these lifeboats. Construction documentation supplied by Bennett provides enough detail to confirm the North Manitou Island beach cart house is one of the 1854 appropriation boathouses. It would appear that this is the only extant structure of its kind in the Nation.

National Park Service Maritime Historian Kevin Foster also affirms that the beach cart house derives from the 1854 appropriation (see enclosed April 6 letter). In 1995, Foster is scheduled to commence a national historic landmark theme study of USLSS stations and the beach cart house, as well as other Sleeping Bear Dunes structures. However, Foster stated the beach cart house could stand alone as a NHL because of its historical significance, age, and high degree of integrity. Ms. Mann may be drafting such a nomination in the near future.

We are also enclosing an April 7 letter from Dr. Dennis L. Noble of the Lewistown City Library, Lewistown, Montana, concerning the boat cart house. In addition, please find a photocopy of several recent photographs of the building's exterior and interior.

At this time we are interested in receiving your informal comments concerning this matter. Should you have any questions, please contact Acting Regional Historian Ron Cockrell of this Office at 402-221-3426 or Ms. Mann at Sleeping Bear Dunes at 616-326-5134.

Sincerely,

Don H. Castleberry

Don H. Castleberry
Regional Director

Enclosures 5

bcc:
Superintendent, Sleeping Bear Dunes
  Attention: Historical Architect Mann
Chief, Midwest Archeological Center
  Attention: Regional Archeologist Lynott
MWR-Cultural Resources Management
  Attention: Regional Historical Architect

RICHARD H. AUSTIN • SECRETARY OF STATE

LANSING
MICHIGAN 48918

Bureau of History
State Historic Preservation Office
Michigan Library and Historical Center
717 West Allegan Street
Lansing, Michigan 48918-1800

July 12, 1993

Mr. Don H. Castleberry, Regional Director
National Park Service -- Midwest Region
1709 Jackson Street
Omaha, NE 68102-2571

Dear Mr. Castleberry:

In response to your letter concerning the beach cart house at North Manitou Island in Sleeping Bear Dunes National Lakeshore, we have no information about this structure beyond the information you provided. We would concur with the opinions of the authorities on the history of the Life Saving Service whose letters you included with your own that, if this building does prove to be one of those built under the 1854 federal appropriation, it possesses great importance in illustrating the early, volunteer period of the service on the Great Lakes. In that event, the building would appear to us to meet the National Historic Landmark criteria.

The letter from Kevin J. Foster, Chief Maritime Historian, National Maritime Initiative, to Kimberly Mann which you enclosed with your letter notes that the forthcoming lifesaving station National Historic Landmark study will begin with the North Manitou Island station. In our view, the beach cart house should only be nominated as a NHL on its own if the entire station is not selected for NHL designation.

Sincerely,

Kathryn B. Eckert

Kathryn B. Eckert
State Historic Preservation Officer

KBE:roc

MIDWEST REGIONAL OFFICE	
Regional Director	
Secretary	
Deputy Reg. Director	
Administration	
Operations	
Plng. & Resource Pres	7/16
Rec Asst.	
Public Affairs	
EEO Office	
Public Health Services	
[illegible]	RC 7/16
Action taken & date	
Response to SLBE RCastleberry 7-19-93	

United States Department of the Interior

NATIONAL PARK SERVICE

MIDWEST REGION
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

JUL 22 1993

H34/MWR-PC

Memorandum

To: Superintendent, Sleeping Bear Dunes

From: Regional Director, Midwest Region

Subject: North Manitou Island beach cart house

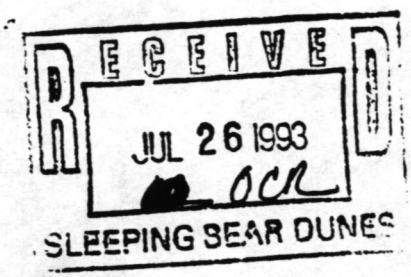
The Michigan State Historic Preservation Officer's (SHPO) response to our May letter on the subject property is enclosed. The SHPO concurs with subject matter experts that the structure is potentially nationally significant in illustrating the early, volunteer period of service on the Great Lakes and, therefore, appears to meet National Historic Landmark (NHL) criteria.

We call your attention to the last sentence which states, "In our view, the beach cart house should only be nominated as a NHL on its own if the entire station is not selected for NHL designation." A copy of the SHPO's letter is being sent to the Washington Office via this memorandum.

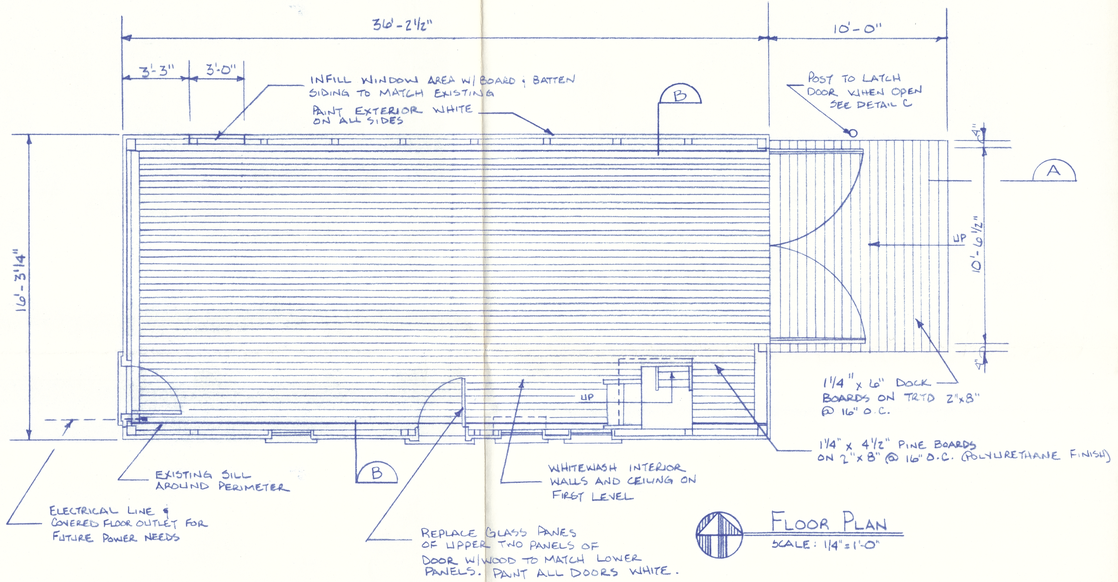
If you should have any questions, please call Acting Regional Historian Ron Cockrell at 402-221-3426.

Enclosure

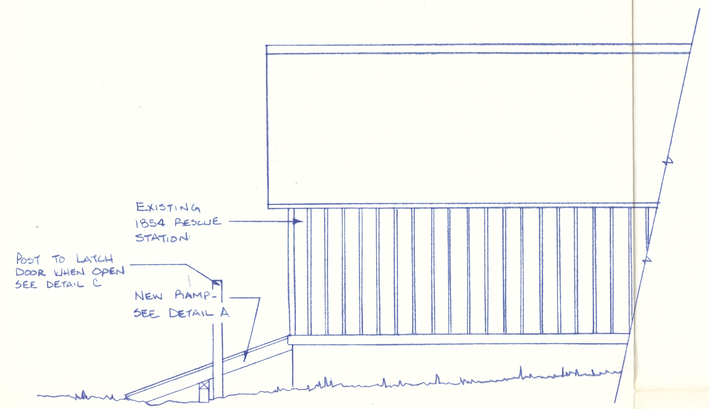
cc:
WASO-418 (all w. enc.)
Attention: Chief Maritime Historian Foster
Chief, Midwest Archeological Center
Attention: Regional Archeologist Lynott
MWR-PC Regional Historical Architect



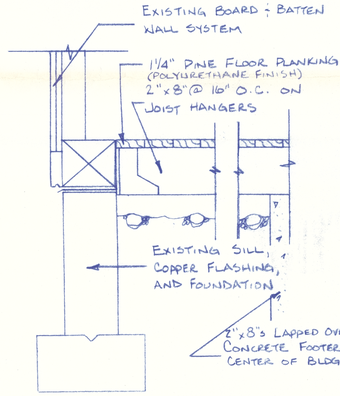
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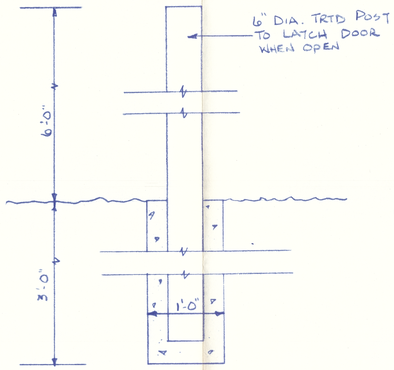


FLOOR PLAN
SCALE: 1/4" = 1'-0"



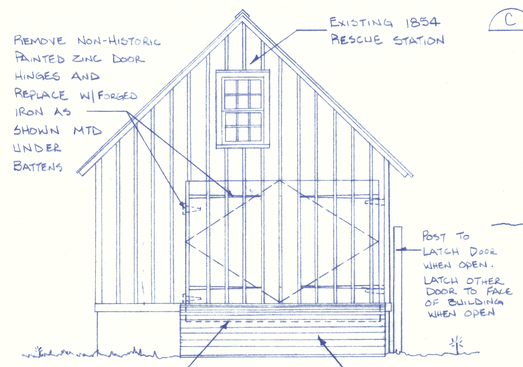
PARTIAL NORTH ELEVATION
SCALE: 1/4" = 1'-0"



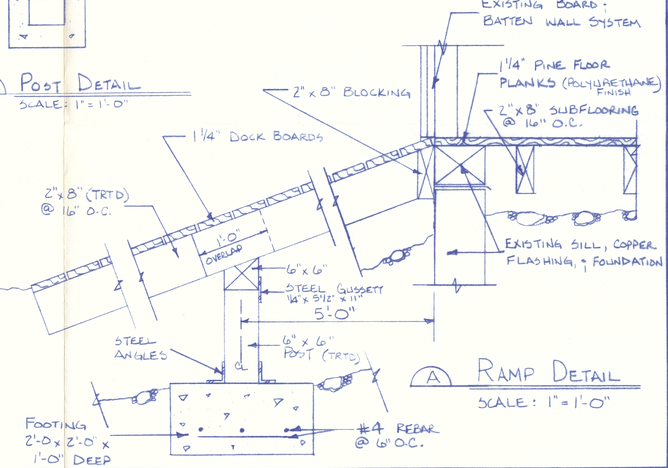


C POST DETAIL
SCALE: 1" = 1'-0"

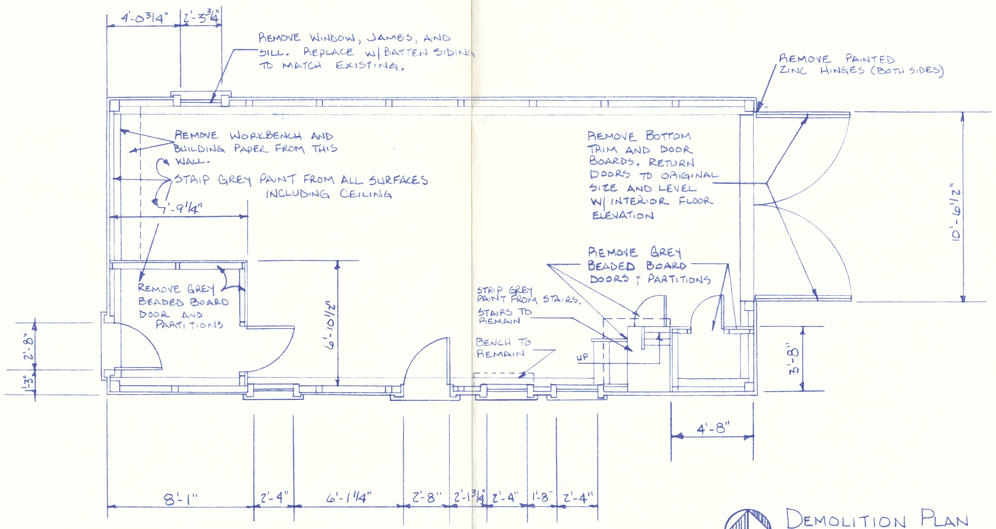
B TYPICAL FLOOR DETAIL
SCALE: 1" = 1'-0"



EAST ELEVATION
SCALE: 1/4" = 1'-0"



A RAMP DETAIL
SCALE: 1" = 1'-0"



DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

DESIGNED: K.S. MANN	SUB SHEET NO.	TITLE OF SHEET: 1854 RESCUE STATION PLANS, ELEVATIONS, DETAILS SLEEPING BEAR DUNES N.L., MICH. NORTH MANITOU ISLAND	DRAWING NO. —
DRAWN: K.S. MANN			PKG. NO. —
TECH. REVIEW:			SHEET 1 OF 1
DATE: 11/93			

G

1907

HENLEY'S FORMULAS FOR HOME AND WORKSHOP

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A VALUABLE REFERENCE BOOK FOR THE HOME, THE FACTORY, THE OFFICE, AND THE WORKSHOP

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NEW FOREWORD BY
ANNE HESSEY

ENLARGED EDITION
INCLUDING USEFUL WORKSHOP AND LABORATORY METHODS

AVENEL BOOKS
NEW YORK

WELDING POWDERS.

See also Steel.

Powder to Weld Wrought Iron at Pale-red Heat with Wrought Iron.—I.—Borax, 1 part (by weight); sal ammoniac, ½ part; water, ½ part. These ingredients are boiled with constant stirring until the mass is stiff; then it is allowed to harden over the fire. Upon cooling, the mass is rubbed up into a powder and mixed with one-third wrought-iron filings free from rust. When the iron has reached red heat, this powder is sprinkled on the parts to be welded, and after it has liquefied, a few blows are sufficient to unite the pieces.

II.—Borax, 2 parts; wrought-iron filings, free from rust, 2 parts; sal ammoniac, 1 part. These pulverized parts are moistened with copaiba balsam and made into a paste, then slowly dried over a fire and again powdered. The application is the same as for Formula I.

Welding Powder to Weld Steel on Wrought Iron at Pale-red Heat.—Borax, 3 parts; potassium cyanide, 2 parts; Berlin blue, 1-100 part. These substances are powdered well, moistened with water; next they are boiled with constant stirring until stiff; then dry over a fire. Upon cooling, the mass is finely pulverized and mixed with 1 part of wrought-iron filings, free from rust. This powder is sprinkled repeatedly upon the hot pieces, and after it has burned in the welding is taken in hand.

WHEEL GREASE:

See Lubricants.

WHETSTONES.

To make artificial whetstones, take gelatin of good quality, dissolve it in equal weight of water, operating in almost complete darkness, and add 1½ per cent of bichromate of potash, previously dissolved. Next take about 9 times the weight of the gelatin employed of very fine emery or fine powdered gun stone, which is mixed intimately with the gelatinized solution. The paste thus obtained is molded into the desired shape, taking care to exercise an energetic pressure in order to consolidate the mass. Finally dry by exposure to the sun.

WHITING:

To Form Masses of Whiting.—Mix the whiting into a stiff paste with water, and the mass will retain its coherence when dry.

Whitewash.

(See also Paint.)

Wash the ceiling by wetting it twice with water, laying on as much as can well be floated on, then rub the old color up with a stumpy brush and wipe off with a large sponge. Stop all cracks with whiting and plaster of Paris. When dry, claricole with size and a little of the whitewash when this is dry. If very much stained, paint those parts with turps, color, and, if necessary, claricole again. To make the whitewash, take a dozen pounds of whiting (in large balls), break them up in a pail, and cover with water to soak. During this time melt over a slow fire ¼ pounds common size, and at the same time, with a palette knife or small trowel, rub up fine about a dessertspoonful of blue-black with water to a fine paste; then pour the water off the top of the whiting and with a stick stir in the black; when well mixed, stir in the melted size and strain. When cold, it is fit for use. If the jelly is too stiff for use, beat it up well and add a little cold water. Commence whitewashing over the window and so work from the light. Distemper color of any tint may be made by using any other color instead of the blue-black—as ocher, chrome, Dutch pink, raw sienna for yellows and buff; Venetian red, burnt sienna, Indian red or purple brown for reds; celestial blue, ultramarine, indigo for blues; red and blue for purple, gray or lavender; red lead and chrome for orange; Brunswick green for greens.

Ox blood in lime paint is an excellent binding agent for the lime, as it is chiefly composed of albumin, which, like casein or milk, is capable of transforming the lime into casein paint. But the ox blood must be mixed in the lime paint; to use it separately is useless, if not harmful. Whitewashing rough mortar-plastering to saturation is very practical, as it closes all the pores and small holes.

A formula used by the United States Government in making whitewash for light-houses and other public buildings is as follows:

Unslaked lime.....	2	pecks
Common salt.....	1	peck
Rice flour.....	3	pounds
Spanish whiting.....	½	pound
Glue (clean and white).....	1	pound
Water, a sufficient quantity.		

Slake the lime in a vessel of about 10 gallons capacity; cover it, strain, and add

the salt previously dissolved in warm water. Boil the rice flour in water; soak the glue in water and dissolve on a water bath, and add both, together with the whiting and 5 gallons of hot water to the mixture, stirring all well together. Cover to protect from dirt, and let it stand for a few days, when it will be ready for use. It is to be applied hot, and for that reason should be used from a kettle over a portable furnace.

To Soften Old Whitewash.—Wet the whitewash thoroughly with a wash made of 1 pound of potash dissolved in 10 quarts of water.

WHITEWASH, TO REMOVE:
See Cleaning Preparations and Methods.

WHITE METAL:
See Alloys.

WINDOW-CLEANING COMPOUND:
See Cleaning Compounds.

WINDOW DISPLAY:
See also Sponges.

An attractive window display for stores can be prepared as follows:

In a wide-mouth jar put some sand, say, about 6 inches in depth. Make a mixture of equal parts of aluminum sulphate, copper sulphate, and iron sulphate, coarsely powdered, and strew it over the surface of the sand. Over this layer gently pour a solution of sodium silicate, dissolved in 3 parts of hot water, taking care not to disturb the layer of sulphates. In about a week or 10 days the surface will be covered with crystals of different colors, being silicates of different metals employed. Now take some pure water and let it run into the vessel by a small tube, using a little more of it than you used of the water-glass solution. This will displace the water-glass solution, and a fresh crop of crystals will come in the silicates, and makes, when properly done, a pretty scene. Take care in pouring in the water to let the point of the tube be so arranged as not to disturb the crop of silicates.

WINDOW PERFUME.

In Paris an apparatus has been introduced consisting of a small tube which is attached lengthwise on the exterior of the shop windows. Through numerous little holes a warm, lightly perfumed current of air is passed, which pleasantly tickles the olfactory nerves of the looker-on and at the same time keeps the panes clear and clean, so that the goods exhibited present the best possible appearance.

WINDOW POLISHES:
See Polishes.

WINDOWS, FROSTED:
See Glass.

WINDOWS, TO PREVENT DIMMING OF:
See Glass.

Wines and Liquors

BITTERS.

Bitters, as the name indicates, are merely tinctures of bitter roots and barks, with the addition of spices to flavor, and depend for their effect upon their tonic action on the stomach. Taken too frequently, however, they may do harm, by overstimulating the digestive organs.

The recipes for some of these preparations run to great lengths, one for Angostura bitters containing no fewer than 28 ingredients. A very good article, however, may be made without all this elaboration. The following, for instance, make a very good preparation:

Gentian root (sliced)..	12 ounces
Cinnamon bark.....	10 ounces
Caraway seeds.....	10 ounces
Juniper berries.....	2 ounces
Cloves.....	1 ounce
Alcohol, 90 per cent..	7 pints

Macerate for a week; strain, press out, and filter, then add

Capillaire.....	1½ pints
Water to make up...	2½ gallons

Strength about 45 u. p.

Still another formula calls for Angostura bark, 2½ ounces; gentian root, 1 ounce; cardamom seeds, ½ ounce; Turkey rhubarb, ½ ounce; orange peel, 4 ounces; caraways, ½ ounce; cinnamon bark, ½ ounce; cloves, ½ ounce.

Brandy Bitters.—

Sliced gentian root...	3 pounds
Dried orange peel.....	2 pounds
Cardamom seed.....	1 pound
Bruised cinnamon....	½ pound
Cochineal.....	2 ounces
Brandy.....	10 pints

Macerate for 14 days and strain.

Hostetter's Bitters.—

Calamus root.....	1 pound
Orange peel.....	1 pound
Peruvian bark.....	1 pound
Gentian root.. . .	1 pound



The Life-saving Service in action at Sandy Hook.

Harper's Weekly. January 27. 1877.

ESTABLISHED 1856.
INCORPORATED BY ROYAL CHARTER 1867.

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YOUR REFERENCE
OUR REFERENCE GLHS - 01

3rd January, 1979

"J. FRANCIS ANTIQUE SURFBOAT"

said to have been constructed circa 1854

surveyed at the premises of the Great Lakes Historical Society Museum

Vermilion, Ohio on 22nd December, 1978

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in accordance with instructions received from

THE BOARD OF TRUSTEES OF THE GREAT LAKES HISTORICAL SOCIETY

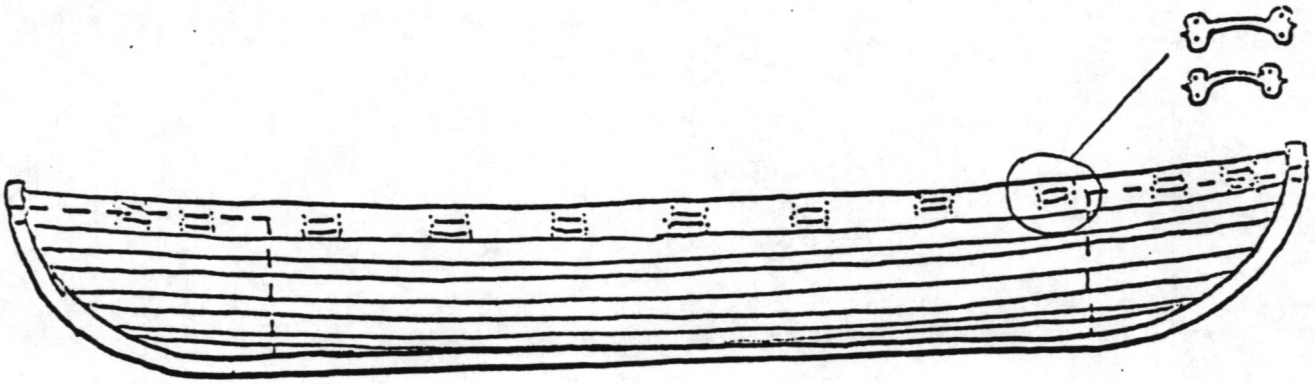
AND ON BEHALF OF WHOM IT MAY CONCERN

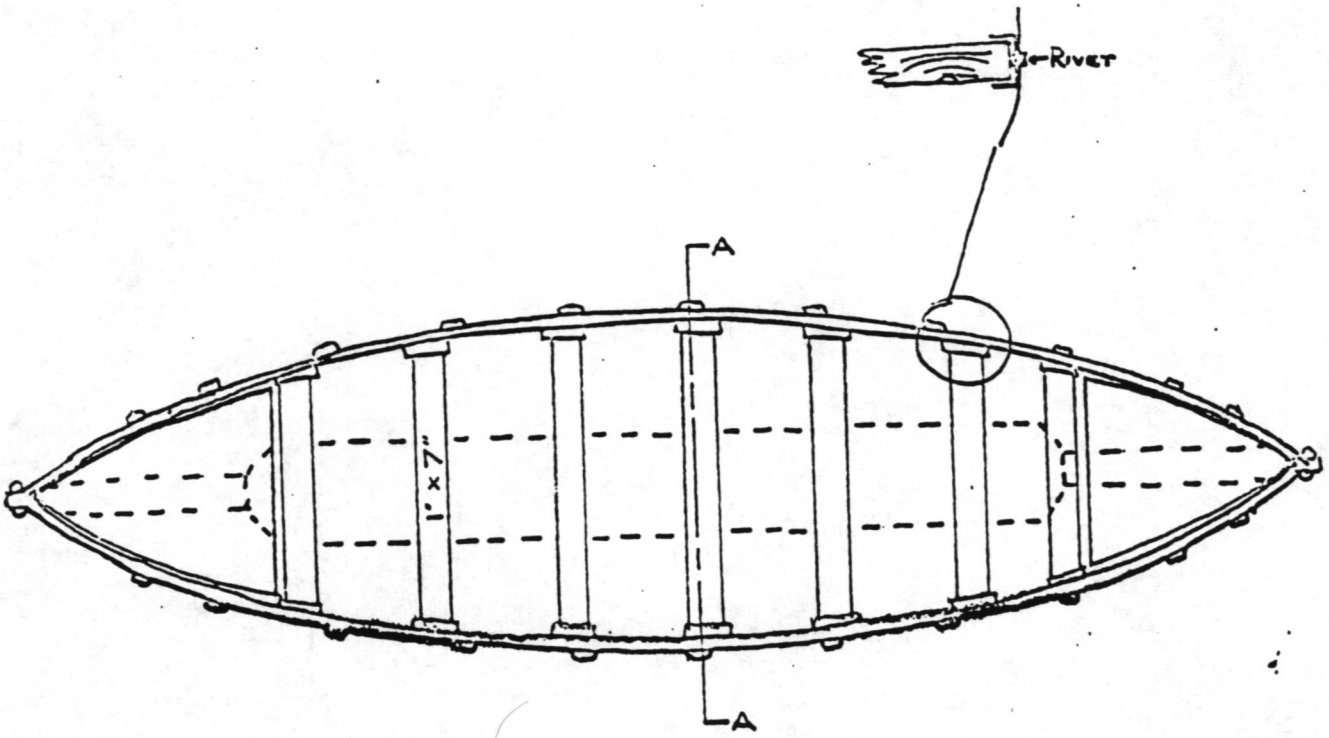
the undersigned attended at the premises of the Great Lakes Historical Society Museum, 480 Main Street, Vermilion, Ohio on 22nd December, 1978 to examine and report on the available dimensions and condition of the above noted Antique Surfboat.

Details of this examination are set forth on the attached sheets and are accurate to the best of our ability to measure the boat as it now lies.

David R. Lawler
THE SALVAGE ASSOCIATION

J. Francis Surfboat
Circa 1854





General Specifications

L.O.A. – 26'

Beam – 6'-8"

Hull Corrugations 4 1/4" @ Gunwale to 3 3/4" @ Keel

Seats – 1" x 7" x Length

Surge Boards – 1" x 6" x Length

Hull Thickness – .065" – .072"

Watertight Compartments – 2

Riveted, Corrugated Iron Sheet Const. w/ 11" x 14" Hole Noted on One Side Appx. Midship. Brackets @ Gunwale on Both Sides Appear to Have Secured A Fender Bar of Unknown Type & Size; 4 Brackets Missing & 1 Broken on "Holed" Side. Most Wooden Portions of Hull Missing or Badly Deteriorated.




MASS HUMANE SOCIETY
LIFE BOAT STATION
NE 43



APPENDIX J

HISTORIC PHOTOGRAPHS OF VOLUNTEER STATIONS ON THE EAST COAST

PHOTO #: J1 Spermaceti Cove Life-Saving Station, New Jersey.

NAME OF PHOTOGRAPHER: UNKNOWN
DATE OF PHOTOGRAPH: 1926
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

This shingled garage-like structure built in 1849 is the preserved remains of a volunteer station built under the 1848 Federal Appropriation to place stations along the New Jersey coast. This structure was moved from Sandy Hook, New Jersey, and is now located at Navesink Twin Lights, New Jersey.

Photograph made from view in A Legacy: The United States Life-Saving Service by Dennis Nobel, 1976.

PHOTO #: J2 Massachusetts Humane Society Volunteer Station

NAME OF PHOTOGRAPHER: UNKNOWN
DATE OF PHOTOGRAPH: ca. 1860
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

Photograph shows 1848 appropriation station sitting next to the 1854 appropriation station.

Photograph made from view in This is the Coast Guard by H.R. Kaplan and Lcdr. James F. Hunt, USCG, 1972.

PHOTO #: J3 Life-Saving Station No. 4, Long Branch, New York.

NAME OF PHOTOGRAPHER: UNKNOWN
DATE OF PHOTOGRAPH: 1868
LOCATION OF ORIGINAL NEGATIVE: SLEEPING BEAR DUNES N.L.

Photograph taken from view in The Sea Bright Skiff and other Shore Boats by Peter J. Guthorn, 1982.

K

APPENDIX K

HISTORIC PHOTOGRAPHS

PHOTO #: K1 View of Life-Saving crew with beach cart on south side of the 1854 Volunteer Rescue Station.

NAME OF PHOTOGRAPHER:	UNKNOWN
DATE OF PHOTOGRAPH:	1893
LOCATION OF ORIGINAL NEGATIVE:	SLEEPING BEAR DUNES N.L.

PHOTO #: K2 View looking south from Pickard's Dock to the Life-Saving Station.

NAME OF PHOTOGRAPHER:	UNKNOWN
DATE OF PHOTOGRAPH:	1900
LOCATION OF ORIGINAL NEGATIVE:	SLEEPING BEAR DUNES N.L.

PHOTO #: K3 View from supply boat dock towards Life-Saving Station.

NAME OF PHOTOGRAPHER:	BEEBE
DATE OF PHOTOGRAPH:	1909-1910
LOCATION OF ORIGINAL NEGATIVE:	SLEEPING BEAR DUNES N.L.

PHOTO #: K4 View of 1854 Volunteer Station when operated as the beach cart house by the Coast Guard.

NAME OF PHOTOGRAPHER:	GILES MERRITT
DATE OF PHOTOGRAPH:	1926-28
LOCATION OF ORIGINAL NEGATIVE:	SLEEPING BEAR DUNES N.L.



K1



K2



K3



K4

APPENDIX K

CURRENT PHOTOGRAPHS

NAME OF PHOTOGRAPHER: KIMBERLY MANN
DATE OF PHOTOGRAPHS JULY 1993
LOCATION OF ORIGINAL NEGATIVES: SLEEPING BEAR DUNES N.L.

PHOTO #: K5 View of U.S. Life-Saving Complex from modern dock.

PHOTO #: K6 View of 1854 Volunteer Rescue Station.

PHOTO #: K7 View of construction details from the interior of the building.

PHOTO #: K8 View of the interior bench construction built into the structure.

K5



K6



K7



K8

