

United States Department of the Interior  
National Park Service

425



# 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 National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. 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.

## 1. Name of Property

Historic name: Keweenaw Waterway Upper Entrance Light

Other names/site number:   

Name of related multiple property listing:  
Light Stations of the United States

## 2. Location

Street & number: Lake Superior, E breakwater Keweenaw Waterway N end, 0.4 mi offshore

City or town: Hancock Township State: Michigan County: Houghton

Not For Publication:  Vicinity:

## 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this X nomination    request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property X meets    does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

   national    statewide X local

Applicable National Register Criteria:

X A    B X C    D

[Signature], FEDERAL PRESERVATION OFFICER, 18 Feb 14

Signature of certifying official/Title: \_\_\_\_\_ Date

United States Coast Guard

State or Federal agency/bureau or Tribal Government

In my opinion, the property X meets    does not meet the National Register criteria.

[Signature]

Signature of commenting official: \_\_\_\_\_ Date 5/04/14

STATE HISTORIC PRESERVATION OFFICER / SHPO

Title: \_\_\_\_\_ State or Federal agency/bureau or Tribal Government

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**4. National Park Service Certification**

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- other (explain:)

For Edison H. Beall  
Signature of the Keeper

7-18-14  
Date of Action

**5. Classification**

**Ownership of Property**

(Check as many boxes as apply.)

- Private:
- Public – Local
- Public – State
- Public – Federal

**Category of Property**

(Check only **one** box.)

- Building(s)
- District
- Site
- Structure
- Object

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**Number of Resources within Property**

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>                    </u>	<u>                    </u>	buildings
<u>                    </u>	<u>                    </u>	sites
<u>          1          </u>	<u>                    </u>	structures
<u>                    </u>	<u>                    </u>	objects
<u>          1          </u>	<u>          0          </u>	Total

Number of contributing resources previously listed in the National Register   0  

**6. Function or Use**

**Historic Functions**

(Enter categories from instructions.)

  Transportation    
  Water-related    
                    

**Current Functions**

(Enter categories from instructions.)

  Transportation    
  Water-related

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

---

## 7. Description

### Architectural Classification

(Enter categories from instructions.)

Modern Movement  
Moderne

**Materials:** (enter categories from instructions.)

Principal exterior materials of the property: Steel, concrete

### Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

---

### Summary Paragraph

The Keweenaw Waterway Upper Entrance Light is located in western Lake Superior, 0.4 mile from shore at Hancock Township in Houghton County, Michigan. Established as a Federal aid to navigation in 1950, it marks the offshore end of the eastern breakwater at the Keweenaw Waterway's northern entry. This property consists of one contributing resource, a lighthouse that stands approximately 110 feet tall above the lake bottom. It includes a rock-filled steel sheet piling caisson that supports a superstructure consisting of a one story, concrete, octagonal fog signal building that supports a steel, 50-foot tall light tower with Streamlined Moderne styling. The caisson's exterior is painted red. The superstructure is painted white except for a steel framework atop the tower and the tower's flat roof, which are painted red. This lighthouse is equipped with a modern beacon mounted in the open-air atop the tower that signals a white flash every 15 seconds. The property is also equipped with a modern fog signal and solar array mounted atop the fog signal building. The Keweenaw Waterway Upper Entrance Light is owned by the U.S. Coast Guard and operated as an automated aid to navigation identified as number 15120 on the regional light list. It remains structurally the same as when it was built. The limited modifications that have been made consist principally of changing out its original optic, fog signal, and power supply for updated equipment. These changes are largely superficial and reversible. The Keweenaw Waterway Upper Entrance Light is surrounded by water and accessible by boat. It is not open to public visitation.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

## Narrative Description

### Contributing Resource (Lighthouse):

The Keweenaw Waterway Upper Entrance Light was established as a Federal aid to navigation in 1950 to mark the northern entry to the Keweenaw Waterway, a navigable channel that traverses the southern Keweenaw Peninsula. It is located in western Lake Superior approximately 0.4 mile from the western shore of Hancock Township in Houghton County, Michigan. This lighthouse property sits upon submerged land owned by the State of Michigan and is surrounded by water approximately 30 feet deep. It is situated approximately 20 feet from the offshore end of the eastern breakwater at the Keweenaw Waterway's northern entrance. The breakwater is a Federal navigation structure owned by the U.S. Army Corps of Engineers.

The Keweenaw Waterway Upper Entrance Light is approximately 110 feet tall from its base to the top of its light tower. It includes a steel sheet pile caisson foundation with concrete deck, one-story concrete fog signal building, and steel 50-foot tall light tower with Streamlined Moderne styling, topped with an open-air beacon. This property is owned by the U.S. Coast Guard and operated as an automated aid to navigation. It identified as number 15120 on the Great Lakes regional light list. The Keweenaw Waterway Upper Entrance Light is accessible by boat and is not open to public visitation.

### Foundation

The structure's foundation is circular caisson approximately 50 feet in diameter and 45 feet tall. It is built of steel interlocking sheet piling, filled with rock, and capped with a concrete deck that supports the lighthouse's superstructure. The caisson rises to approximately 15 feet above water level. Its open-air deck is accessed by way of a steel ladder built into a vertical recessed channel on the caisson's southern side. This ladder includes 11 rungs with the lowest one approximately five feet above water level. There are three steel bollards affixed to the concrete deck for securing mooring lines, one each on the deck's northern, western, and southern sides. They are painted black. The steel caisson's exterior is painted red. The concrete deck is unpainted.

### Fog Signal Building

The lighthouse's first story is a one story fog signal building built of reinforced concrete. It measures approximately 34 feet long by 34 feet wide by 11 feet tall. It is configured as a rectangle with its corners clipped at a 45-degree angle, making it a non-equilateral octagon in plan. This clipped-corner configuration is consistent with and compliments the lower level of the light tower, which is the structure's second story and has clipped corners, also.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The fog signal building's exterior walls are painted white. There is a built-in steel rung ladder on its exterior eastern side and another on the western exterior side. These provide access from the caisson's deck to the fog signal building's roof where the entrance to the light tower is located. This flat roof serves as an open-air deck and is unpainted.

The entry to the first story's interior is centered in its southern wall. This doorway is six feet wide by seven feet tall and has a threshold approximately two feet above the outside deck. It is fitted with a double steel door that is painted black. The fog signal building's interior is a non-equilateral octagonal room that measures approximately 30 feet wide by 31 feet, 9 inches long. The ceiling is 9 feet, 9 inches above the floor. The floor, walls, and ceiling are unpainted concrete. The ceiling is supported by five steel I-beam columns. A 50-inch diameter opening in the floor's western side provides access to a fuel tank, below. Each of the interior room's walls, except for the southern one with doorway, includes a recessed alcove extending from floor to ceiling. These alcoves are 32 inches wide by 8 inches deep and covered with steel plates. Each alcove has a 6-inch tall by 32-inch wide rectangular opening to the outside near the ceiling. Some openings are covered with a steel plate and others include ventilation louvers. The interior room's ceiling includes four rectangular openings, one each in its northeast, southeast, southwest, and northwest corners. These are capped on the first story roof's open-air deck with steel, upside down J-shaped, ventilator ducts that are painted black. The first story's interior contains electrical panels for the lighthouse's beacon and fog signal. Some panels are mounted on a wall and others are inside a rectangular steel mesh cage near the center of the room. The first story's roof deck is surrounded by a two-tier steel pipe guardrail that is painted black. This guardrail has openings for the two steel ladders affixed to the fog signal building's exterior walls. A modern automated electrical fog signal is affixed to the roof deck near the northeastern corner. It sounds a 3-second blast every 30 seconds from May to October. A solar array mounted on a steel frame stands atop the roof deck on the southern side. It is used to recharge the lighthouse's battery power supply.

### Light Tower

The light tower sits centered atop the first story's concrete roof. It is five stories tall and built of structural steel members clad with steel plates and fastened with rivets, bolts, and nuts. The tower's appearance is representative of the Modern Movement in twentieth century American architecture. Its styling is Streamlined Moderne in character and reflects design concepts that flourished in the United States during the 1930s and 1940s. In elevation, the tower is widest at its lower story. The four sides on the next story above curve inward with a graceful upward sweep to form a tall, starkly vertical, and narrow upper part.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The structure's light tower was built using a standardized design developed for the U.S. Bureau of Lighthouses during the middle 1930s and subsequently adopted by U.S. Coast Guard. This design was employed by the Bureau of Lighthouses for the construction of the Indiana Harbor East Breakwater Light (1935) in Indiana, the Port Washington Breakwater Light (1935) in Wisconsin, the Huron Harbor Light (1936) and the Conneaut Harbor Light (1936) in Ohio. It was used by the U.S. Coast Guard in constructing the Gravelly Shoal Light (1942) in Michigan, as well as the Keweenaw Waterway Upper Entrance Light (1950).

The light tower's lower level is the lighthouse's second story. It is cube-like and configured as a rectangle with its corners slightly clipped at 45-degree angles. The second story's plan is thus octagonal, but very non-equilateral. This echoes the fog signal building's plan, though with smaller clipping. The lighthouse's second story measures approximately 18 feet long by 18 feet wide by 12 feet tall. Its interior is a single room that measures 17 feet by 17 feet with an 11-foot ceiling. The floor and ceiling are concrete. The walls are steel. A vertical steel I-beam column stands at each of the room interior's clipped corners, and in the room's center. The second story's northern, eastern, southern, and western walls include two 14-inch diameter port lights each. All are covered with a steel plate on the interior. The southern wall is pierced with a centered, 3-foot wide by 6-foot tall steel door, flanked on left and right by port lights. Its doorway threshold is 1.5 feet above the exterior deck. This doorway provides access from the first story's rooftop deck to the second story interior. The second story's interior floor is raised 8 inches above the level of the exterior deck. This room contains an electrical panel and batteries for powering the lighthouse's aids to navigation. A single-rung steel ladder rises from the floor near the doorway to a trapdoor in the ceiling. This provides access to the third story. The tower's southern exterior elevation includes a series of attached ladder rungs. These extend from the base of the second story to the third story's southern dormer port light.

The third story room is rectangular and located on the tower level where the four sides make a sweeping curve inward and upward. The room's walls are steel while its floor and ceiling are concrete. The ceiling is 8.5 feet above the floor. The rectangular floor measures 16.5 feet long on each side, while the ceiling measures 8.5 feet long on each side. The trapdoor opening in the floor is 2 feet wide by 2.5 feet long and has a steel hatch cover. Each of the room's four sides is pierced with a centered, 2-foot diameter port light positioned beneath an outward-extending arched dormer. The northern and southern port lights can be opened. The eastern and western port lights are fixed. A single-rung steel ladder near the room's southern side rises to a 2-foot by 2.5-foot trapdoor opening in the ceiling. This opening has a steel hatch cover and provides access to the fourth story.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The fourth story room is rectangular in plan with its walls curving inward and upward slightly. Each wall is 8 feet, 5 inches wide at floor level and 8 feet wide at the ceiling. The floor is concrete. The ceiling is made with steel plates and is 10 feet above the floor. There are no port lights in this room's steel walls. A single-rung steel ladder on the west side leads to a rectangular opening in the ceiling and provides access to the fifth story.

The fifth story room measures 8 feet wide on each side. Its floor is made with steel plates supported by horizontal I-beams. The floor plates measure approximately five feet long on each side and do not extend to the tower's walls except at the southwest corner where the opening for the ladder from the fourth story room is located. Each of the fifth story's four walls is pierced with a centered 13-inch diameter port light. The south wall port light can be opened; the other three are fixed. A single-rung steel ladder on the fifth story's eastern side rises to a rectangular opening in the ceiling that measures 3.5 feet by 3.5 feet. This provides access to the sixth story. Two vertical steel pipes rise from the fifth story's floor southern side. They extend upward through the ceiling opening to the ceiling above the sixth story.

The lighthouse's sixth story is 8 feet wide on each side. Its floor is a rectangular walkway made with steel plates that surrounds a 3.5-foot by 3.5-foot opening. This opening is surrounded by a 50-inch tall, two tier steel pipe guardrail. The sixth story's southern and eastern walls are pierced with one centered 13-inch diameter port light each. The northern wall contains a rectangular opening fitted with a steel plate that is pierced with a circular opening above a rectangular opening, which are covered with steel plates. A circular steel pedestal is affixed to the floor inside the northern wall next to these openings. It supports a fog signal housing that is made of steel and non-operating. The sixth story's western wall contains a rectangular opening approximately three feet wide by three feet tall that is fitted with a steel hatch cover latched on the inside. The sixth story's ceiling is made with steel I-beams that support steel plates. It is pierced by a 3.5-foot diameter circular opening in the center that is covered with a steel plate. A power cable for the lighthouse's beacon pierces this steel plate. There are four steel pulleys arranged in a rectangular pattern surrounding the circular opening's underside. The two vertical steel pipes that rise from the fifth story meet the sixth story's ceiling next to two of the pulleys. A single-rung steel ladder rises to a rectangular trapdoor opening in the ceiling. It is capped with a steel hatch cover and provides access to the roof.

The light tower's rectangular roof measures 8 feet, 4 inches long on each side. Each corner supports a 6-foot, 6-inch-tall pole made of steel pipe. These four poles are connected halfway-up and at the top by horizontal steel struts extending from one to another, and at the top by two crossing steel I-beams that form an X in the center. A steel platform 3.5 feet in diameter and 6 inches tall is centered on the roof. A second steel platform 8 inches tall and 2 feet in diameter sits centered on top of it and supports the property's open-air beacon.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The lighthouse's open-air signal light is a modern VRB-25 marine beacon. It has a focal plane 82 feet above water level, signals a 1-second white flash every 15 seconds, and can be seen for 18 miles in clear weather. An auxiliary light is mounted atop the steel pole at the roof's northwest corner. It is available for use if the main beacon fails. The light tower's roof and the steel framework assembly on top are both painted red.

### Changes through time

The Keweenaw Waterway Upper Entrance Light remains structurally the same today as when it was established as a Federal aid to navigation in 1950. Its exterior and interior are essentially unchanged. Physical modifications to the lighthouse have been minor and limited, and are reversible. They include changing out the lighthouse's original optic, fog signal, and supporting power supply and machinery. Newer replacements were installed when earlier equipment became outdated. Initially operated remotely from shore by U.S. Coast Guard personnel, the lighthouse's aids to navigation were automated during the 1970s. The existing modern equipment and solarized power system have not compromised the property's overall structural integrity. In addition, the lighthouse's original daymark coloration of a white square tower atop a cylindrical base remains unchanged.

## **8. Statement of Significance**

### **Applicable National Register Criteria**

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

- 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.
- 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.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**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 grave
- D. A cemetery
- E. A reconstructed building, object, or structure
- F. A commemorative property
- G. Less than 50 years old or achieving significance within the past 50 years

**Areas of Significance**

(Enter categories from instructions.)

Maritime History

Transportation

Architecture

Engineering

**Period of Significance**

1950 to 1964

**Significant Dates**

1950

**Significant Person**

N/A

**Cultural Affiliation**

N/A

**Architect/Builder**

U.S. Coast Guard Ninth District

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Keweenaw Waterway Upper Entrance Light was established in 1950 to guide vessels navigating the northern end of the Keweenaw Waterway, an important maritime thoroughfare in Houghton County, Michigan. It stands in western Lake Superior at the entry to the Keweenaw Waterway's Portage Lake Ship Canal. This lighthouse is significant in the local history of Houghton County. It qualifies for inclusion in the National Register under Criterion A. by exemplifying the long-term Federal government program to improve maritime safety on the Great Lakes through constructing aids to navigation. It also qualifies under Criterion C. for being a well-preserved example of middle twentieth century architectural design and engineering methods used in constructing offshore lighthouses in the Great Lakes. This property includes a steel caisson foundation, concrete fog signal building, and a steel light tower that exemplifies aspects of Streamlined Moderne design. Its period of historical significance begins in 1950 and ends in 1964, the most recent year of its operation 50 years before the present. The Keweenaw Waterway Upper Entrance Light possesses historic integrity in its design, setting, materials, workmanship, feeling, and association. It is widely recognized in Houghton County as a historical landmark.

---

### **Narrative Statement of Significance**

The Keweenaw Waterway Upper Entrance Light is significant in the local maritime and architectural history of Houghton County, Michigan. It is eligible for inclusion in the National Register of Historic Places (NRHP) under Criteria A. and C. Established in 1950, this property marks the northern end of the Keweenaw Waterway at the mouth of the Portage Lake Ship Canal. The Keweenaw Waterway has been an important navigation route for vessels operating on Lake Superior from the late nineteenth century to the present. The Keweenaw Waterway Upper Entrance Light's period of historical significance begins in 1950 and ends in 1964, the most recent year of its operation 50 years before the present. This property's character and appearance are largely unchanged from its period of significance. It continues to stand at its original location in a setting that remains the same as when it was constructed. The Keweenaw Waterway Upper Entrance Light also possesses historic integrity in qualities of design, materials, workmanship, feeling and association.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

This property is historically significant in terms of Criterion A. for its association with the Federal government's program of establishing and maintaining an integrated system of maritime aids to navigation throughout the United States. It exemplifies how this important long-term, nationwide program was manifested in Houghton County, Michigan. Today, the Keweenaw Waterway Upper Entrance Light is a prominent local landmark and maintains its historical association with maritime safety. It continues to function as an operating lighthouse and conveys feelings that recall the dedication to duty characteristic of lighthouse keepers through the course of American history.

The Keweenaw Waterway Upper Entrance Light is significant under Criterion C. as a representative of mid-twentieth century lighthouse architecture and engineering. It is a good example of the adaptation of Streamlined Modern styling to lighthouse design. This property possesses characteristics of the design, construction methods, and materials used in building concrete and steel superstructure lighthouses atop steel caisson foundations during the middle 1900s. These developments proved to be well suited for offshore locations in the Great Lakes. This property's existing structural integrity attests to the lasting value of its design, as well as the high quality of its materials and construction. The Keweenaw Waterway Upper Entrance Light remains essentially the same today as when it was built.

This NRHP registration form is submitted as an individual listing under the overarching *Light Stations of the United States* multiple property documentation form (MPDF). The specific historic context that applies is *Lighthouses under the U.S. Coast Guard (1939-present)*. The property type sections relating to this registration are *U.S. Lighthouse Construction Type – Non-cast-iron Tower*, and *Foundation Type – Caisson Foundation*. Information and historic contexts available in the overarching MPDF are not repeated here. This submission emphasizes the historical significance of the Keweenaw Waterway Upper Entrance Light as an individual property.

### **Regional Historical Context**

This property's Great Lakes regional setting includes Lakes Superior, Michigan, Huron, Erie, and Ontario, along with their connecting waters and the St. Lawrence River. This is one of the largest concentrations of fresh water on earth. It encompasses a waterway system having a total shore length of approximately 11,000 statute miles and a total water surface area of about 95,000 square miles.

The Keweenaw Waterway Upper Entrance Light is located in western Lake Superior near the western shore of the Keweenaw Peninsula in Michigan's Upper Peninsula (U.P.). It is situated at the offshore end of the eastern breakwater that shelters the northern end of the Keweenaw Waterway at the Portage Lake Ship Canal.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The Keweenaw Waterway includes the Portage River and Portage Lake, which were part of an important natural transportation route during prehistoric and early historic times. Native American groups discovered that waterborne travel along Lake Superior's southern shore could avoid a long and hazardous journey around the Keweenaw Peninsula's northern end by portaging their canoes and goods across a two-mile wide neck of land. That overland carrying place separated the peninsula's western shore on Lake Superior from the head of Portage Lake, which connected with the Portage River to provide a route to the peninsula's eastern shore. This was the origin of the area's Algonquian language name, *keweenaw*, which means a place where portage is made.

Explorers and fur traders from French colonial Canada came to Lake Superior during the first quarter of the seventeenth century. Fur trading in the region continued to grow in economic importance through the early nineteenth century. Like the region's Native American inhabitants, the French Canadians relied on waterborne travel using canoes to transport goods. Their east-west voyages along Lake Superior's southern shore brought them to the Portage River, Portage Lake, and the related crossing place. The French also gained knowledge of the Keweenaw region's deposits of pure native copper. An entrepreneur named De la Ronde attempted to exploit these copper resources between 1720 and 1740, but was unsuccessful. The French colonial presence in the upper Great Lakes included establishing Fort Michilimackinac during the early eighteenth century on the northern tip of Michigan's Lower Peninsula at the Straits of Mackinac. It soon became an important center for fur trading and other commerce.

French Roman Catholic missionaries followed the early explorers and fur traders. Jesuit priests who traveled along Lake Superior's southern shore during the second half of the seventeenth century included Claude Allouez and Jacques Marquette. Father Marquette operated missions during the 1660s at Sault St. Marie near Lake Superior's eastern end, and La Pointe, located in western Lake Superior near present-day Ashland, Wisconsin. His travels between them included navigating the Portage River and Lake and crossing the *keweenaw*.

Rivalry between France and Great Britain during the middle eighteenth century led to warfare in North America. A major development was British victory in the Seven Years' War which resulted in the loss of French control over Canada and the Great Lakes. This led to British forces occupying Fort Michilimackinac at the Straits of Mackinac in 1761. However, subsequent tensions between the British and the region's Native American Indians led to the 1763 outbreak of Chief Pontiac's rebellion, during which the fort was captured. The British regained control of the Upper Great Lakes a year later, after which fur trading and other colonial economic activity resumed. In 1766, an English fur trader named Alexander Henry visited the Keweenaw Peninsula region and inspected an enormous natural boulder of pure copper that lay next to a tributary of the Ontonagon River. He later attempted to establish a copper mine nearby, but was unsuccessful.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The 1783 Treaty of Paris that ended the American Revolutionary War formalized British recognition of the independence of the United States. It also included cession by Britain to the U.S. of sovereignty over a large portion of the upper Great Lakes region known as the Northwest Territory. This included the Upper and Lower Peninsulas of Michigan and other lands bordering Lake Superior, Lake Huron, Lake Michigan, and Lake Erie. The U.S. Federal government, however, did not finalize uncontested control over these parts of the Great Lakes until decades later. Even though the United States established the Michigan Territory in 1805, rivalry with Great Britain continued in the region until years after the War of 1812 was concluded with the 1814 Treaty of Ghent. Negotiations with the British concerning the Great Lakes border between Canada and the United States were finally concluded in 1818.

Lewis Cass was appointed Governor of the Michigan Territory in 1813. He undertook an expedition in 1820 to explore Michigan's Upper Peninsula and lands farther west. Among the people who participated was Henry Schoolcraft, a geologist and ethnologist. Governor Cass and Schoolcraft passed through the Keweenaw area during the expedition, during which they compiled information on the presence of pure copper and made a visit to the Ontonagon Boulder.

Schoolcraft subsequently represented the United States during interactions with Native American tribes in the Great Lakes region. This included negotiations, along with others, to secure ownership of lands for the Federal government through a series of treaties. The 1836 Treaty of Washington and 1842 Treaty of La Pointe involved the Chippewa (Ojibwe) and Ottawa tribes. These treaties resulted in transferring ownership of a vast area, including Michigan's Upper Peninsula (U.P.), to the Federal government. Following Michigan's 1837 admission into the U.S. as a state, its first state geologist, Douglass Houghton, conducted investigations in the Keweenaw Peninsula area. His work there from 1840 to 1841 confirmed that its copper resources had significant commercial potential.

As the Great Lakes region's vast lands were opened to settlement and development, economic and population growth increased. During the first half of the nineteenth century, most of this activity was distributed across Ohio, Indiana, the Lower Peninsula of Michigan, Illinois, and Wisconsin. The 1840s discovery in Michigan's Upper Peninsula of the Marquette Range's rich iron ore deposits, and the beginning of copper mining in the Keweenaw Peninsula, began a sustained period of settlement expansion and economic development along the U.P.'s Lake Superior shore. During those times, the only reliable means for mass transport of people and goods to the Keweenaw region from established commercial centers to the south was aboard vessels navigating between Sault Sainte Marie and other Lake Superior ports. This maritime traffic expanded through time, especially after the St. Mary's Falls Ship Canal (the Soo Locks) at Sault Ste. Marie opened in 1855, allowing vessels to navigate between Lake Huron and Lake Superior.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The Great Lakes region was characterized by substantial growth in commerce and population from the second half of the nineteenth century to the middle twentieth century. The lumber industry accounted for a major part of the early development and expansion of waterborne commercial traffic. In addition, the large-scale development of iron ore production in Michigan's Upper Peninsula, northern Wisconsin, and Minnesota, as well as grain from farms and flour from mills in the Midwest and northern Great Plains, furnished cargoes carried aboard vessels bound for the lower Great Lakes. These shipments corresponded with the heavy up-bound movement of coal and manufactured goods from ports in the lower lakes.

By 1910, the amount of goods shipped annually on the Great Lakes increased to 80 million tons. Most of this was bulk cargo such as iron ore and coal. Shipped freight tonnage reached a record of 217 million tons in 1948. The combined movement of lumber, grain, flour, iron ore and coal, together with limestone cargoes from the Lake Michigan area to centers of steel production, resulted in the greatest bulk freight marine commerce the world had ever seen. With the opening of the St. Lawrence Seaway in 1959, the industrial and agricultural heartland of North America became accessible to deep-draft oceangoing vessels navigating the Great Lakes. In addition, barge and small craft traffic reaches the Great Lakes from the Gulf of Mexico via the Mississippi River and the Illinois Waterway, as well as from the Hudson River by way of the New York State Barge Canal System.

The need for aids to navigation on the Great Lakes increased with the expansion of shipping. Seven lighthouses were built in the region between 1818 and 1822, and 32 more were completed during the 1830s. From 1841 to 1852, the U.S. Lighthouse Establishment added 33 new lights. Between 1852 and 1860, the total number of Great Lakes lighthouses increased from 76 to 102. The number of Federal aids to navigation in the Great Lakes continued to increase during the late nineteenth century. By the beginning of the twentieth century, there were 334 major lighted aids, 67 fog signals, and 563 buoys in the region.

Several distinct designs or types of lighthouses were constructed in the Great Lakes during the nineteenth century. Until 1870 or so, the most common design consisted of a wood, stone, or brick keeper's dwelling that exhibited the lighthouse's optic in a lantern on the roof or atop an attached square tower. Taller masonry towers connected to a keeper's dwelling by an enclosed passageway also became popular by the 1870s. From 1870 to around 1910, lighthouse engineers also practiced and perfected the construction of light stations built on isolated islands and atop submerged reefs and shoals.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The superstructures of lighthouses built on piers in the Great Lakes also went through an evolution in design and technology. The earlier ones were built of wood, but this material deteriorated over time. Cast iron came into widespread use for building U.S. lighthouses during the middle nineteenth century. These cast iron structures were commonly built from parts manufactured to specification at a foundry and sent to the designated site as a prefabricated kit for onsite assembly. Steel products for building lighthouse structures became available in the U.S. during the late nineteenth century. As the output of mass production mills increased through time, steel's cost as a building material declined. By the 1920s, the cost versus benefit ratio for building a structure using steel instead of cast iron led to its adoption as the preferred material for constructing both pier and offshore lighthouses in the Great Lakes.

Wooden crib foundations were widely used for the construction of lighthouses on submerged lands in the Great Lakes from the middle nineteenth century through the middle twentieth century. This method was employed for lights built on piers that extended from land into nearby waters, as well as for offshore lights. It involved constructing the crib (a massive wooden box) onshore using heavy timbers. Each was tall enough to reach to, or near to, the water's surface at its designated offshore location. A crib included several open-top compartments. When completed, it was towed to its selected site and sunk using ballast. Additional ballast and concrete were added to stabilize and strengthen the crib structure for serving as a foundation.

The steel industry's growth in the U.S. and abroad was an important precursor to a major advancement in marine construction, the development of interlocking sheet piling. It was invented circa 1902 by Tryggve Larssen in Germany and began being produced in the U.S. in 1908. This technological innovation uses pilings made of narrow sheets of rolled steel with interlock connections along the two long edges. Sheet piles are emplaced side-by-side vertically using a pile-driver so that their edges lock together. Interlocking sheet piling was a major innovation for the rapid construction of strong and effective steel structures in watery environmental settings, such as bulkhead walls and cofferdams. It provided for substantial flexibility concerning height, length, and configuration. This facilitated the construction of caisson foundations on submerged land. Previously, caissons were commonly assembled on land and brought to an offshore site to be sunk in place. The development of steel interlocking sheet piling allowed for assembling an offshore caisson onsite in less time and at reduced cost. Its use in the construction industry to build structures in shallow water increased through time, progressively replacing previous methods.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

## Local Historical Context

The historical context of the Keweenaw Waterway Upper Entrance Light is closely tied to earlier lighthouses in the vicinity. It also relates to the history of the Keweenaw Waterway and the region's copper industry from the mid-nineteenth century to the middle 1900s.

The opening of the Keweenaw Waterway was the result of extensive efforts that began in the 1860s to improve navigation along the Portage River and Portage Lake. Its main impetus was to facilitate maritime transport to and from settlements and commercial facilities associated with the region's copper mining industry. The Keweenaw region's importance to Lake Superior commercial shipping grew through time following the 1841 publication of Douglass Houghton's report on its copper resources and the 1842 Treaty of La Pointe, which transferred ownership of Michigan's western Upper Peninsula to the Federal government. A rush to claim and develop copper mining sites in the Keweenaw area occurred from 1843 to 1845. This was followed by economic and population growth over a number of decades as the mining industry matured and expanded.

The Houghton County cities of Houghton and Hancock stand opposite one another along the shores of upper Portage Lake. Their growth from small settlements to important local centers of commerce and population from the 1850s onward was largely dependent upon maritime communication with Lake Superior by way of the Portage River. This river's natural character included shallow waters and meandering channels which restricted its accessibility to shipping. The need to enhance the river's navigability led local businessmen in 1860 to organize the Portage Lake and River Improvement Company. The company's early efforts included dredging straight cuts across river meanders in order to open a shipping channel between Lake Superior and Portage Lake.

The U.S. Lighthouse Establishment constructed a number of lighted aids to navigation in the Keweenaw region from the middle nineteenth century onward. The first of these near to what became the Keweenaw Waterway was a lighthouse established in 1856 on the Keweenaw Peninsula's eastern shore approximately one mile east of the Portage River. Named the Portage River Light, it was situated there in order to be more visible to approaching vessels than it would have been if located at the river's mouth. This lighthouse served as the principal Federal aid to navigation in the Portage River and Portage Lake area from its initial establishment until the late 1860s. It was demolished in 1869 after a new, taller lighthouse was constructed at the same location. The replacement Portage River Light was eventually discontinued in 1920 after the Keweenaw Waterway Lower Entrance Light at the Portage River's mouth was completed and lighted. The 1869 lighthouse was later designated surplus property and sold to a private owner. It is known today as the Jacobsville Lighthouse and privately operated as a bed and breakfast.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The early 1860s work along the Portage River shipping channel was followed in 1864 by a group of local businessmen organizing the Portage Lake and Lake Superior Ship Canal Company. Its purpose was to excavate a canal across the two-mile-wide neck of land separating the Keweenaw Peninsula's western Lake Superior shore from upper Portage Lake. This project aimed to provide an alternative route for vessels going to and from the Portage Lake area's settlements and industrial facilities. Without such a canal, vessels bound to or arriving from ports farther west in Lake Superior were required to make a roundabout and potentially hazardous voyage past the Keweenaw Peninsula's northern end. Unfortunately for the Portage Lake and Lake Superior Ship Canal Company's owners, their efforts failed and the company went out of business. The Portage Lake Ship Canal connecting Portage Lake with Lake Superior was finally completed in 1873 by a successor group, the Lake Superior Ship Canal, Railway, and Iron Company.

The Portage Lake Ship Canal's opening completed a 25-mile long waterway and allowed maritime traffic to navigate from one side of the Keweenaw Peninsula to the other. This canal was privately owned and maintained, and vessels using it were required to pay tolls. The opening of the Keweenaw Waterway provided Lake Superior shipping with a shorter maritime route to and from the area's copper industry, as well as a stopover place for fuel and supplies. It also served as a safe harbor of refuge during periods of inclement weather. The Keweenaw Waterway's significance in the history of Lake Superior maritime commerce has been recognized by its inclusion in the National Register of Historic Places (Registration # 71001118).

The establishment of Federal aids to navigation along the Keweenaw Waterway during the late nineteenth century was largely related to construction projects such as the 1860s building of a breakwater on the eastern side of the Portage River's mouth. This structure provided an area of sheltered water that protected the river's entrance channel from rough waters on Keweenaw Bay. Its completion led the U.S. Lighthouse Establishment in 1868 to mark the breakwater's offshore end with the Portage Entry Light. A nearby pair of onshore range lights marking the entry channel's alignment was also established in 1868. By the early twentieth century, Federal aids to navigation for the Keweenaw Waterway included the Portage River Light, four other individual lighthouses, 21 range lights, and a number of buoys. These guided vessels from one end of the waterway to the other.

The U.S. Lighthouse Establishment also sought to mark the entry to the Portage Lake Ship Canal at Lake Superior. It obtained title in 1874 to a one-acre parcel atop a bluff on the canal's western side and constructed a brick lighthouse consisting of a square tower attached to the gable end of a 2-story keeper's dwelling. The Portage Lake Ship Canal Light was officially lighted in November 1874. It was equipped with a Fresnel lens having a focal plane 56 feet above water level.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The Portage Lake Ship Canal was improved through time, including construction of two piers extending into Lake Superior to shelter the canal's entry and alleviate shoaling. This led the U.S. Lighthouse Establishment to construct a lighthouse in 1879 to mark the western pier's offshore end. Designated the Portage Lake Ship Canal Pierhead Light, its position was exposed to adverse environmental conditions from time to time which made access difficult. In 1881, a 900-foot long elevated walkway was erected along the pier from shore to the lighthouse. The need for a fog signal at this location led to the 1887 construction of a wooden pyramidal bell tower next to the lighthouse. This tower supported a 1,500 pound fog bell and its striking apparatus. Another Federal government maritime safety initiative during this period was the establishment of the U.S. Life-Saving Service's (USLSS) Portage Ship Canal Life-Saving Station in 1884. It was located on the canal's western side approximately 0.75 mile from Lake Superior.

The Federal government purchased the Keweenaw Waterway from its private owners in August 1891. Responsibility for maintaining the waterway was assigned to the U.S. Army Corps of Engineers (USACE) which subsequently undertook projects to widen and deepen shipping channels, and build breakwaters, piers and bulkheads. Federal ownership also resulted in abolition of the system of charging tolls.

The Portage Lake Ship Canal Pierhead Light was extensively upgraded in 1895. Its fog bell tower was heightened and topped with a cast iron lantern to convert it into a lighthouse and the previous light tower was removed. A fog signal building was also built atop the pier next to the lighthouse's shoreward side. It was equipped with steam-power apparatus to operate a 10-inch siren. This mechanized fog signal required the services of an additional keeper and led in 1896 to new living quarters being built onshore at the nearby Portage Lake Ship Canal Light. The fog signal building continued to operate on the pierhead until 1920 when it was moved onshore. The brick tower at the Portage Lake Ship Canal Light was also heightened in 1896, giving its beacon a focal plane of 66 feet.

The USACE undertook a number of projects along the Keweenaw Waterway during the early 1900s. These included building two breakwaters in an arrowhead configuration offshore in Lake Superior at the Portage Lake Ship Canal's entrance. Completed in 1901, the onshore ends of these breakwaters are approximately 3,700 feet apart and they shelter a large area of water that had been previously unprotected. The breakwaters' offshore ends were marked with temporary lights until 1903 when pyramidal tower lighthouses were erected. The sheltered waters provided by these arrowhead breakwaters led the USLSS in 1902 to relocate its station to the eastern side of the ship canal's mouth at Lake Superior. This new facility was designated the Portage Life-Saving Station.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

The U.S. Lighthouse Establishment and its administrative parent, the Lighthouse Board, were reorganized by Congress in 1910 and became the U.S. Bureau of Lighthouses. This included transferring the Federal lighthouse program from the Department of the Treasury to the Department of Commerce and Labor (later, the Department of Commerce). In 1915, the U.S. Life-Saving Service was merged with the U.S. Revenue Cutter Service to form the U.S. Coast Guard, a component of the Department of the Treasury. This resulted in the Portage Life-Saving Station being renamed Coast Guard Station Portage.

The USACE undertook a major project in the 1930s to widen the Portage Lake Ship Canal. This required Coast Guard Station Portage to be relocated in 1934 to a new site on the canal's eastern side approximately 0.2 mile from Lake Superior. The station remained there until 1990 when it was relocated to the City of Hancock. In 1997, Coast Guard Station Portage moved to its present site at Dollar Bay on Portage Lake.

The 1930s canal widening project also required demolition of the 1874 Portage Lake Ship Canal Lighthouse. It was replaced with a 46-foot skeletal tower light, triplex keepers dwelling, and radiobeacon facility erected in 1937 to 1938. These new structures were located on the canal's western side at Lake Superior. The following year (1939), a governmental reorganization resulted in the Bureau of Lighthouses being subsumed by the U.S. Coast Guard. Since then, the operation and maintenance of Federal aids to navigation have been a Coast Guard responsibility.

In 1949, the USACE undertook a project to modify the Ship Canal entry's arrowhead breakwaters. This included widening the gap between them to 500 feet, which required removing the pyramidal tower lights established in 1903. Following completion of the widening, the existing Keweenaw Waterway Upper Entrance Light was built in 1950 to mark the eastern breakwater. A smaller light on a post was erected to mark the western breakwater. The Keweenaw Waterway Upper Entrance Light was operated remotely from shore by U.S. Coast Guard personnel from 1950 until its automation in the 1970s.

The Keweenaw Waterway's importance to commercial shipping declined during the second half of the twentieth century. This was due to a variety of factors including the 1960s closure of the Keweenaw region's last operating copper mine, and advancements in vessel design and maritime technology. Characteristics of present day Great Lakes commercial shipping make navigating the Keweenaw Waterway unnecessary or impracticable for many vessels. The waterway is largely used nowadays by recreational and excursion watercraft. Commercial traffic is limited and intermittent. Federal vessels that continue using the waterway include the U.S. National Park Service vessel *Ranger III* which operates between Houghton and Isle Royal National Park, and watercraft based at U.S. Coast Guard Station ANT (Aids to Navigation Team) Portage.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

---

Today, the Keweenaw Waterway Upper Entrance Light continues to operate as a Federal aid to navigation and is widely recognized as a prominent historic landmark in Houghton County. It serves as a lasting reminder of the important role that the Keweenaw Waterway has played in Great Lakes maritime commerce. This property continues to occupy its original location in a setting that remains essentially unchanged from its 1950 to 1964 period of historical significance. The Keweenaw Waterway Upper Entrance Light also retains substantial integrity in its design, materials, and workmanship. The continuing preservation of these aspects reflects their high quality and appropriateness for the property's designated purpose and environment. As an operating lighthouse, this structure maintains its association with the Federal government's long-term program for promoting maritime safety on the Great Lakes. It also evokes feelings that recall the dedication to duty characteristic of lighthouse keepers throughout the course of United States history, and illustrates the spirit of innovation that has characterized American lighthouse designers and engineers.

---

## 9. Bibliography

City of Houghton. 2014. Historic Houghton/sense of place. Internet:  
<http://history.cityofhoughton.com/history/sensoplace.html>

\_\_\_\_\_. 2014. Historic Houghton/waterfront. Internet:  
<http://history.cityofhoughton.com/history/waterfront.html>

Hatcher, Harlan, and Erich A. Walter. 1963. *A Pictorial History of the Great Lakes*. New York: Crown Publishers, Inc.

Holland, Francis Ross, Jr. 1972. *American's lighthouses: their illustrated history since 1716, revised edition*. Brattleboro, VT: The Stephen Greene Press.

Hunt, Donald E. 2011. Keweenaw Peninsula. In, *Hunt's Guide to Michigan's Upper Peninsula*. Internet: [www.hunts-upguide.com/keweenaw\\_peninsula.html](http://www.hunts-upguide.com/keweenaw_peninsula.html)

Hyde, Charles K. 1983. United States Coast Guard Light Houses and Light Stations on the Great Lakes, National Register of Historic Places registration form. On file at the Michigan State Historic Preservation Office. Lansing, MI.

\_\_\_\_\_. 1986. *The Northern Lights: Lighthouses of the Upper Great Lakes*. Lansing, MI: Two Peninsula Press.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

---

Koski, Barb. 2011. Portage Canal Life Saving Service Station, Houghton, MI, later Hancock, MI. Internet: [www.stantontownship.com/wp-content/uploads/2011/01/Portage-Life-Saving-Service-Coast-Guard-Stations.pdf](http://www.stantontownship.com/wp-content/uploads/2011/01/Portage-Life-Saving-Service-Coast-Guard-Stations.pdf)

Lighthouse Friends.com. 2014. Keweenaw Waterway Upper Entrance, MI. Internet: [www.lighthousefriends.com/light.asp?ID=221](http://www.lighthousefriends.com/light.asp?ID=221)

Michigan Lighthouse Conservancy. 2006. Portage Lake Ship Canal Life Saving Station. Hancock, MI. Internet: [www.michiganlights.com/PortagelakeshipcanalLSS.htm](http://www.michiganlights.com/PortagelakeshipcanalLSS.htm)

Monette, Clarence J. 1980. The Keweenaw Waterway. Lake Linden, MI: C. J. Monette.

Nelson, Donald L. n.d. Portage Lake Ship Canal Light Station 1874: a light existing only in memories. In, Copper Country Vertical File, Copper Country Historical Collections, J. Robert Van Pelt and John and Ruanne Opie Library, Michigan Technological University. Houghton, MI.

\_\_\_\_\_. 2001. "Lost lights" – Portage Lake Ship Canal Light Station 1874. Internet: [www.lighthousedigest.com/Digest/StoryPage.cfm?StoryKey=985](http://www.lighthousedigest.com/Digest/StoryPage.cfm?StoryKey=985)

Pepper, Terry. 2002. Seeing the light - Keweenaw Upper Entrance, Houghton, Michigan. Internet: [www.terrypepper.com/lights/superior/keewupper/keeupper.htm](http://www.terrypepper.com/lights/superior/keewupper/keeupper.htm)

U.S. Army Corps of Engineers. 1939. Keweenaw Waterway, Lake Superior, Michigan. U.S. Army Corps of Engineers, Duluth District. In, Copper Country Vertical File, Copper Country Historical Collections, J. Robert Van Pelt and John and Ruanne Opie Library, Michigan Technological University. Houghton, MI.

U.S. Coast Guard. 2011. *Light list volume VII, Great Lakes, Great Lakes and the St. Lawrence River above the St. Regis River*. Washington: Government Printing Office.

---

**Previous documentation on file (NPS):**

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

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**Primary location of additional data:**

State Historic Preservation Office

Other State agency

Federal agency

Local government

University

Other

Name of repository: U.S. National Archives

**Historic Resources Survey Number (if assigned):**

**10. Geographical Data**

**Acreeage of Property** Less than one acre.

Use either the UTM system or latitude/longitude coordinates

**Latitude/Longitude Coordinates**

Datum if other than WGS84: \_\_\_\_\_

(enter coordinates to 6 decimal places)

1. Latitude: 47 - 14 - 04.320000

Longitude: 088 - 37 - 49.210000

**Or**

**UTM References**

Datum (indicated on USGS map):

NAD 1927 or  NAD 1983

1. Zone:

Easting:

Northing:

**Verbal Boundary Description** (Describe the boundaries of the property.)

The property's boundary is the perimeter of the steel caisson which is the structure's foundation.

**Boundary Justification** (Explain why the boundaries were selected.)

This boundary encompasses the entirety of the Keweenaw Waterway Upper Entrance Light.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**11. Form Prepared By**

name/title: Daniel Koski-Karell, Ph.D., USCG Office of Environmental Management,  
and Jayne Aaron, engineering-environmental Management, Inc. (e2M)  
organization: Office of Environmental Management (COMDT CG-47), USCG Headquarters  
street & number: US Coast Guard Stop 7714, 2703 Martin Luther King Jr Avenue SE  
city or town: Washington state: DC zip code: 20593-7714  
e-mail Daniel.A.Koski-Karell@uscg.mil  
telephone: 202-475-5683  
date: 6 February 2014

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Keweenaw Waterway Upper Entrance Light  
Name of Property

Houghton County, MI  
County and State

**Additional Documentation**

- **Map:** Figure 1. **USGS map** (7.5 minute series) indicating the property's location.
- **Photographs:** Contemporary photographs (#1 to # 6).

Name of Property: Keweenaw Waterway Upper Entrance Light  
City or Vicinity: Hancock Township  
County: Houghton County  
State: MI  
Name of Photographer: Timothy McGrath  
Date of Photographs: August 2007  
Location of Original Digital Files: U.S. Coast Guard Historian's Office, U.S. Coast Guard  
Headquarters, 2703 Martin Luther King Jr. Ave. SE,  
Washington, DC 20593  
Number of Photographs: 8

Photo # 1.  
Southern elevation, camera facing north.

Photo # 2.  
Eastern and northern elevation, camera facing southwest.

Photo # 3.  
Fog signal building roof deck, camera facing west.

Photo # 4.  
Light tower exterior, looking up, camera facing northeast.

Photo # 5.  
Fog signal building, first story interior, camera facing southwest.

Photo # 6.  
Light tower, second story interior, camera facing north.

Photo # 7.  
Light tower, third story interior, camera facing northeast.

Photo # 8.  
Light tower, sixth story interior, camera facing southwest.

United States Department of the Interior  
National Park Service

### National Register of Historic Places Continuation Sheet

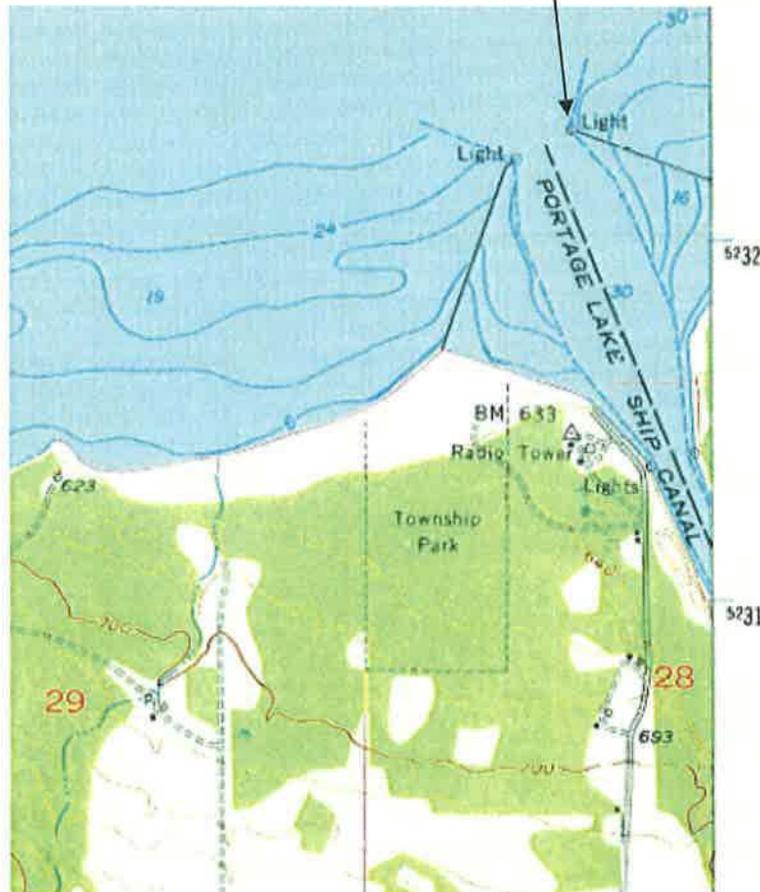
Section number 7 Page 1

Keweenaw Waterway Upper Entrance Light
Name of Property
Houghton County, Michigan
County and State
Light Stations of the United States
Name of multiple listing (if applicable)

**Figure 1. Location Map.** This is a portion of the "Oskar, Mich." 7.5 minute quadrangle topographic map, scale 1:24,000 (United States Geological Survey 1954, photorevised 1975).



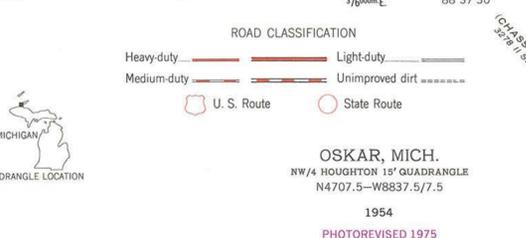
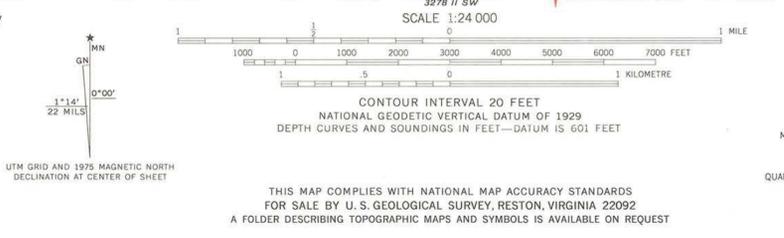
Keweenaw Waterway Upper Entrance Light



KEWEENAW WATERWAY  
UPPER ENTRANCE LIGHT  
HOUGHTON COUNTY, MICHIGAN  
LATITUDE: 47° 14' 04.320" N.  
LONGITUDE: 88° 37' 49.210" W.  
900 000  
FEET



GRAVEFALL RIVER (3278 III SE)  
Mapped, edited, and published by the Geological Survey  
Control by USGS, USC&GS, and USCE  
Topography from aerial photographs by Kelsh plotter  
Aerial photographs taken 1951. Field checked 1954  
Hydrography from U. S. Lake Survey Charts 944 (1:30 000)  
and 94 (1:120 000)  
Polyconic projection. 1927 North American datum  
10,000-foot grid based on Michigan coordinate system,  
north zone  
1000-metre Universal Transverse Mercator grid ticks,  
zone 16, shown in blue  
Revisions shown in purple compiled from aerial photographs  
taken 1975. This information not field checked



SCALE 1:24 000  
CONTOUR INTERVAL 20 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929  
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS 601 FEET  
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

OSKAR, MICH.  
NW/4 HOUGHTON 15' QUADRANGLE  
N4707.5—W8837.5/7.5  
1954  
PHOTOREVISED 1975  
AMS 3278 II NW—SERIES V882

View of the Keweenaw Waterway Upper Entrance Light, looking north



Keweenaw Waterway Upper entrance Light.

Houghton County MI

Photographer: Timothy Higgins

Date: August 9, 2007

Original Neg # 12. MI: US Coast Guard Historian's Office

US Coast Guard Headquarters, Washington, DC

SOUTHERN ELEVATION CAMERA FACING NORTH.

PHOTO # 1



Kennebecaw waterway upper entrance light.

Houghton County, ME

Preserved among others.

Date: August 9, 1957

Original negative at: US Coast Guard (Boston) office,  
US Coast Guard Headquarters, Washington, DC

Original negative: C. J. US Coast Guard, Houghton office,  
US Coast Guard (Boston) Station, DC

EASTERN AND NORTHERN ELEVATION, CAMERA  
FACING SOUTHWEST.

PHOTO # 2



Keweenaw Waterway Upper Entrance Light

Houghton County, MI

Photographer: Timothy McGrath

Date: August 9 2007

Original Negative at U.S. Coast Guard Historian's Office  
U.S. Coast Guard Headquarters, Washington, DC

FOG SIGNAL BUILDING: ROOF DECK, CAMERA: FACING WEST.

PHOTO # 3



Keweenaw Waterway Upper Entrance Light,

Houghton County, MI

Photographer is Timothy McGrath

Date: August 9, 2007

Original Negative At: US Coast Guard Historian's Office

US Coast Guard Headquarters Washington DC

LIGHT TOWER EXTERIOR, LOOKING UP, CAMERA  
FACING NORTHEAST.

PHOTO # 4



(Floor)

Keweenaw Waterway Upper Entrance Light

Houghton County, MI

Photographer: Timothy McGrath

Date August 9-2007

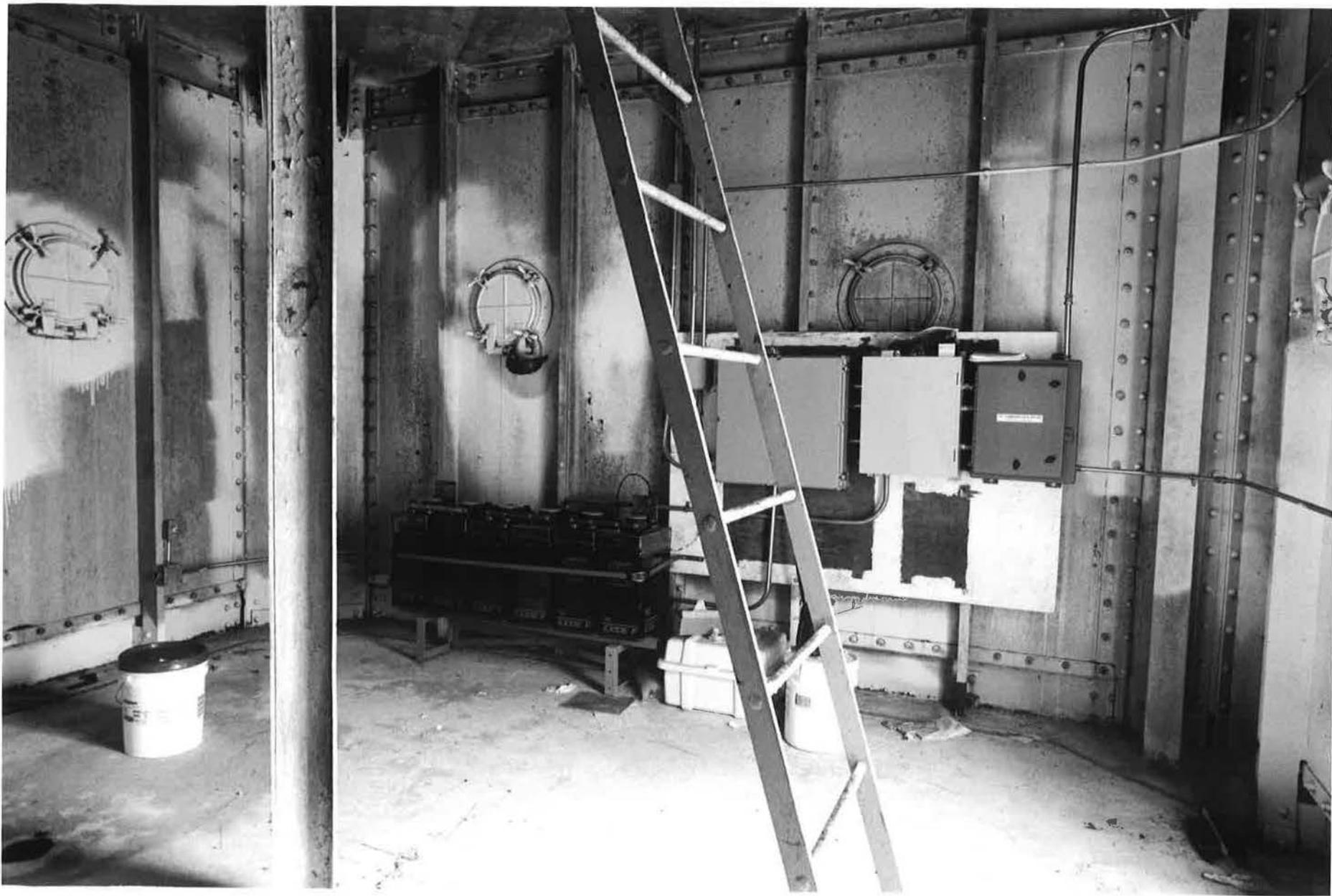
Original Negative At: US Coast Guard Historian's Office

US Coast Guard Headquarters, Washington, DC

FOG SIGNAL BUILDING, FIRST STORY INTERIOR, CAMERA  
FACING SOUTHWEST.

PHOTO # 5

(ceiling)



Keweenaw Waterway upper Entrance Light

Houghton County, MI

Photographer: Timothy M. Grett

Date: August 4, 2007

Original Negative at: U.S. Coast Guard Historian's Office  
U.S. Coast Guard Headquarters, Washington, DC

LIGHT TOWER, SECOND STORY INTERIOR, CAMERA FACING NORTH.

PHOTO # 6



Keweenaw Waterway Upper Entrance Light

Houghton County, MI

Photographer: Timothy McGrath

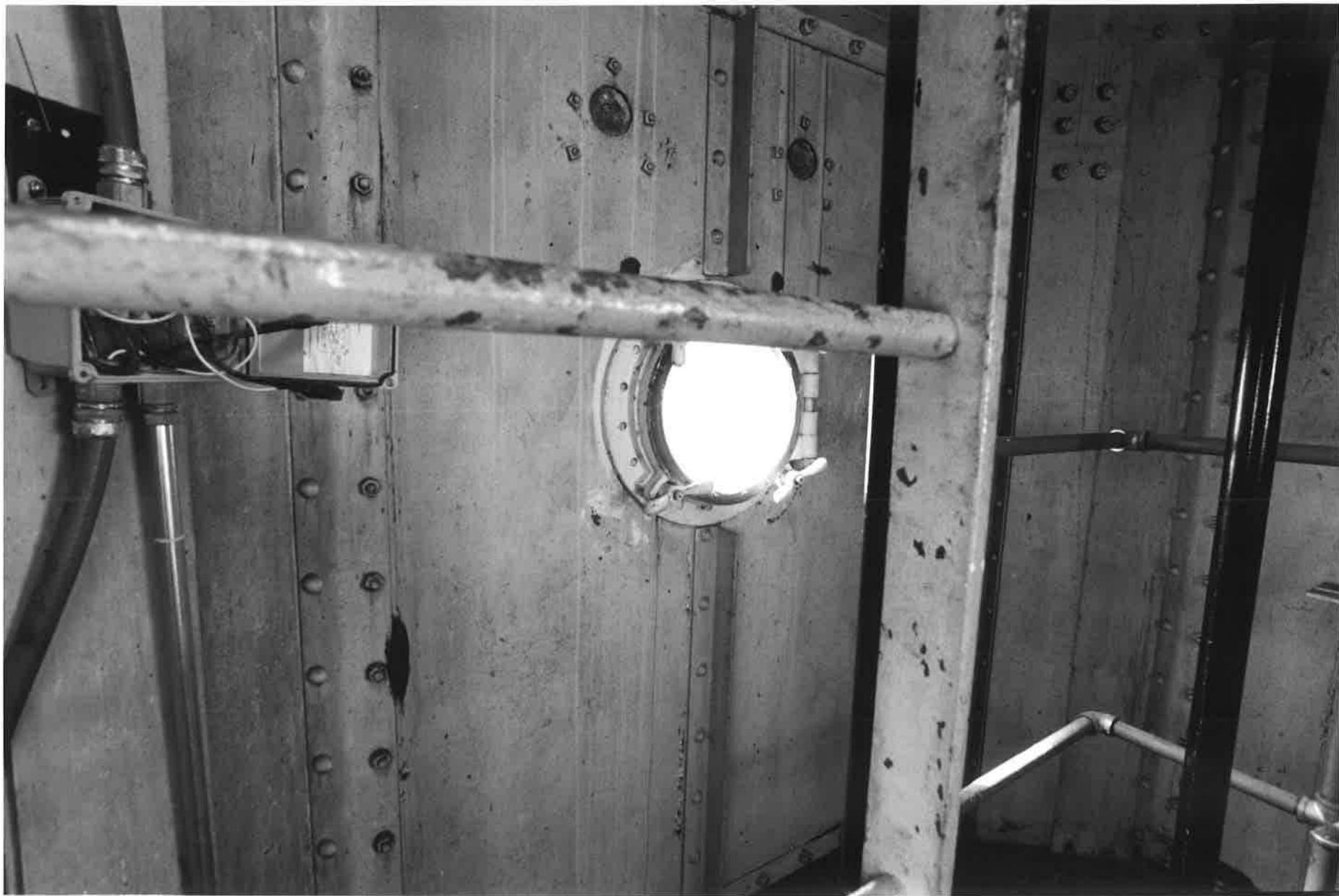
Date: August 9, 2007

Original Negative At: US Coast Guard Historian's Office

US Coast Guard Headquarters, Washington, DC

LIGHT TOWER, THIRD STORY INTERIOR, CAMERA FACING NORTHEAST.

PHOTO # 7



Keweenaw Underway Upper Entrance Light

Houghton, County, MI

Photographer Timothy Ince

Date: August 9 2007

Original Negative AT US COAST GUARD Historians Office

US COAST GUARD Headquarters, Washington, DC

LIGHT TOWER, SIXTH STORY INTERIOR, CAMERA FACING SOUTHWEST,

PHOTO # 8

National Register of Historic Places  
Memo to File

# Correspondence

The Correspondence consists of communications from (and possibly to) the nominating authority, notes from the staff of the National Register of Historic Places, and/or other material the National Register of Historic Places received associated with the property.

Correspondence may also include information from other sources, drafts of the nomination, letters of support or objection, memorandums, and ephemera which document the efforts to recognize the property.

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Keweenaw Waterway Upper Entrance Light

MULTIPLE NAME: Light Stations of the United States MPS

STATE & COUNTY: MICHIGAN, Houghton

DATE RECEIVED: 6/06/14      DATE OF PENDING LIST: 6/25/14  
DATE OF 16TH DAY: 7/10/14      DATE OF 45TH DAY: 7/23/14  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 14000425

REASONS FOR REVIEW:

APPEAL: N    DATA PROBLEM: N    LANDSCAPE: N    LESS THAN 50 YEARS: N  
OTHER: N    PDIL: N    PERIOD: N    PROGRAM UNAPPROVED: N  
REQUEST: N    SAMPLE: N    SLR DRAFT: N    NATIONAL: N

COMMENT WAIVER: N

ACCEPT     RETURN     REJECT    7.18.14 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered in  
The National Register  
of  
Historic Places

RECOM./CRITERIA \_\_\_\_\_

REVIEWER \_\_\_\_\_ DISCIPLINE \_\_\_\_\_

TELEPHONE \_\_\_\_\_ DATE \_\_\_\_\_

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2703 Martin Luther King Jr. Ave SE  
U.S. Coast Guard STOP 7714  
Washington DC 20593-7714  
Staff Symbol: CG-47  
Phone: (202) 475-5687  
Fax: (202) 372-8419  
Email: edward.f.wandelt@uscg.mil

16475

**FEB 18 2014**

Honorable Scott Ala, Chairman  
Houghton County Board of Commissioners  
Houghton County Courthouse, 2<sup>nd</sup> Floor  
401 E. Houghton Avenue  
Houghton, MI 49931

**SUBJECT: NATIONAL REGISTER NOMINATION FOR THE KEWEENAW WATERWAY  
UPPER ENTRANCE LIGHT**

Dear Mr. Ala:

The U. S. Coast Guard (USCG) has determined that the Keweenaw Waterway Upper Entrance Light in Houghton County, Michigan, is a historic property eligible for listing in the National Register of Historic Places (NRHP). We are proposing to nominate this lighthouse for official inclusion in the NRHP. A summary of the NRHP nomination is enclosed for your information (enclosure (1)). This action is being performed pursuant to the authorities contained in Section 110 of the National Historic Preservation Act, the National Historic Lighthouse Preservation Act, and the National Park Service regulations at 36 Code of Federal Regulations Part 60.9.

As part of the nomination process, the USCG is seeking your comments. Please provide any comments within 45 days from the date your office receives this letter. If we receive no response from your office within 45 days, we will assume you have no comments. We have also submitted the NRHP nomination form for the Keweenaw Waterway Upper Entrance Light to the Michigan State Historic Preservation Officer for review and comment. Thank you in advance for your assistance in this matter. If you have any questions or desire additional information, please feel free to contact Dr. Daniel Koski-Karell at (202) 475-5683.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward F. Wandelt".

E. F. WANDELT

Chief

Office of Environmental Management

U. S. Coast Guard

Enclosure: (1) Summary of NRHP nomination for Keweenaw Waterway Upper Entrance Light

Copy (w/o enclosure): J. Paul Loether, National Park Service  
COMDT (CG-0942)  
CG SILC  
CG CEU Cleveland  
CG D9 (dpw)

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2703 Martin Luther King Jr. Ave SE  
U.S. Coast Guard STOP 7714  
Washington DC 20593-7714  
Staff Symbol: CG-47  
Phone: (202) 475-5687  
Fax: (202) 372-8419  
Email: edward.f.wandelt@uscg.mil

16475

Honorable Tom Tikkanen, Vice Chairman  
Houghton County Board of Commissioners  
Houghton County Courthouse, 2<sup>nd</sup> Floor  
401 E. Houghton Avenue  
Houghton, MI 49931

FEB 18 2014

SUBJECT: NATIONAL REGISTER NOMINATION FOR THE KEWEENAW WATERWAY  
UPPER ENTRANCE LIGHT

Dear Mr. Tikkanen:

The U. S. Coast Guard (USCG) has determined that the Keweenaw Waterway Upper Entrance Light in Houghton County, Michigan, is a historic property eligible for listing in the National Register of Historic Places (NRHP). We are proposing to nominate this lighthouse for official inclusion in the NRHP. A summary of the NRHP nomination is enclosed for your information (enclosure (1)). This action is being performed pursuant to the authorities contained in Section 110 of the National Historic Preservation Act, the National Historic Lighthouse Preservation Act, and the National Park Service regulations at 36 Code of Federal Regulations Part 60.9.

As part of the nomination process, the USCG is seeking your comments. Please provide any comments within 45 days from the date your office receives this letter. If we receive no response from your office within 45 days, we will assume you have no comments. We have also submitted the NRHP nomination form for the Keweenaw Waterway Upper Entrance Light to the Michigan State Historic Preservation Officer for review and comment. Thank you in advance for your assistance in this matter. If you have any questions or desire additional information, please feel free to contact Dr. Daniel Koski-Karell at (202) 475-5683.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward F. Wandelt".

E. F. WANDELT

Chief

Office of Environmental Management

U. S. Coast Guard

Enclosure: (1) Summary of NRHP nomination for Keweenaw Waterway Upper Entrance Light

Copy (w/o enclosure): J. Paul Loether, National Park Service  
COMDT (CG-0942)  
CG SILC  
CG CEU Cleveland  
CG D9 (dpw)

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2703 Martin Luther King Jr. Ave SE  
U.S. Coast Guard STOP 7714  
Washington DC 20593-7714  
Staff Symbol: CG-47  
Phone: (202) 475-5687  
Fax: (202) 372-8419  
Email: edward.f.wandelt@uscg.mil

16475

Honorable Paul Kemppainen, Supervisor  
Hancock Township  
52825 Hwy. M-203  
Hancock, MI 49930-9706

FEB 18 2014

SUBJECT: NATIONAL REGISTER NOMINATION FOR THE KEWEENAW WATERWAY  
UPPER ENTRANCE LIGHT

Dear Mr. Kemppainen:

The U. S. Coast Guard (USCG) has determined that the Keweenaw Waterway Upper Entrance Light in Houghton County, Michigan, is a historic property eligible for listing in the National Register of Historic Places (NRHP). We are proposing to nominate this lighthouse for official inclusion in the NRHP. A summary of the NRHP nomination is enclosed for your information (enclosure (1)). This action is being performed pursuant to the authorities contained in Section 110 of the National Historic Preservation Act, the National Historic Lighthouse Preservation Act, and the National Park Service regulations at 36 Code of Federal Regulations Part 60.9.

As part of the nomination process, the USCG is seeking your comments. Please provide any comments within 45 days from the date your office receives this letter. If we receive no response from your office within 45 days, we will assume you have no comments. We have also submitted the NRHP nomination form for the Keweenaw Waterway Upper Entrance Light to the Michigan State Historic Preservation Officer for review and comment. Thank you in advance for your assistance in this matter. If you have any questions or desire additional information, please feel free to contact Dr. Daniel Koski-Karell at (202) 475-5683.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward F. Wandelt".

E. F. WANDELT

Chief

Office of Environmental Management

U. S. Coast Guard

Enclosure: (1) Summary of NRHP nomination for Keweenaw Waterway Upper Entrance Light

Copy (w/o enclosure): J. Paul Loether, National Park Service  
COMDT (CG-0942)  
CG SILC  
CG CEU Cleveland  
CG D9 (dpw)

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2703 Martin Luther King Jr. Ave SE  
U.S. Coast Guard STOP 7714  
Washington DC 20593-7714  
Staff Symbol: CG-47  
Phone: (202) 475-5687  
Fax: (202) 372-8419  
Email: edward.f.wandelt@uscg.mil

16475

FEB 18 2014

Honorable Warren C. Swartz, Jr., President  
Keweenaw Bay Indian Community  
16429 Beartown Road  
Baraga, MI 49908

SUBJECT: NATIONAL REGISTER NOMINATION FOR THE KEWEENAW WATERWAY  
UPPER ENTRANCE LIGHT

Dear Mr. Swartz:

The U. S. Coast Guard (USCG) has determined that the Keweenaw Waterway Upper Entrance Light in Houghton County, Michigan, is a historic property eligible for listing in the National Register of Historic Places (NRHP). We are proposing to nominate this lighthouse for official inclusion in the NRHP. A summary of the NRHP nomination is enclosed for your information (enclosure (1)). This action is being performed pursuant to the authorities contained in Section 110 of the National Historic Preservation Act, the National Historic Lighthouse Preservation Act, and the National Park Service regulations at 36 Code of Federal Regulations Part 60.9.

As part of the nomination process, the USCG is seeking your comments. Please provide any comments within 45 days from the date your office receives this letter. If we receive no response from your office within 45 days, we will assume you have no comments. We have also submitted the NRHP nomination form for the Keweenaw Waterway Upper Entrance Light to the Michigan State Historic Preservation Officer for review and comment. Thank you in advance for your assistance in this matter. If you have any questions or desire additional information, please feel free to contact Dr. Daniel Koski-Karell at (202) 475-5683.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward F. Wandelt".

E. F. WANDELT

Chief

Office of Environmental Management

U. S. Coast Guard

Enclosure: (1) Summary of NRHP nomination for Keweenaw Waterway Upper Entrance Light

Copy (w/o enclosure): J. Paul Loether, National Park Service  
COMDT (CG-0942)  
CG SILC  
CG CEU Cleveland  
CG D9 (dpw)

**NATIONAL REGISTER OF HISTORIC PLACES NOMINATION**  
**KEWEENAW WATERWAY UPPER ENTRANCE LIGHT**  
**HOUGHTON COUNTY, MICHIGAN**

The Keweenaw Waterway Upper Entrance Light is an offshore lighthouse located in Lake Superior approximately 0.4 mile from shore in Hancock Township, Houghton County, Michigan. It marks the offshore end of the eastern breakwater at the northern end of the Keweenaw Waterway, approximately eight miles north of the City of Houghton. This property is an operating aid to navigation owned by the U.S. Coast Guard (USCG) and is identified as number 15120 in the Great Lakes regional Light List. It is surrounded by water and accessible by boat. The Keweenaw Waterway Upper Entrance Light was officially established as a Federal aid to navigation in 1950. Based on its historic character, the USCG intends to nominate this property for listing in the National Register of Historic Places (NRHP).

The National Historic Preservation Act of 1966, as amended (NHPA) (16 United States Code 470 *et seq.*) authorizes the Secretary of the Interior to expand and maintain a national register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Federal agencies are charged with identifying, evaluating, and nominating such properties under their control to the NRHP. The National Historic Lighthouse Preservation Act of 2000 (Public Law 106-355) amended the NHPA for the purpose of establishing a National Historic Lighthouse Preservation Program.

The USCG has prepared a NRHP registration form for the Keweenaw Waterway Upper Entrance Light. It has been sent to the Michigan State Historic Preservation Officer for review and comment concerning the USCG position that the property is eligible for listing in the NRHP. Pursuant to implementing regulation 36 Code of Federal Regulations 60.9, we are notifying local elected officials who may have an interest in the property and inviting them to comment on the nomination during the 45-day comment period. The property is described below.

**Site Name and Location:**

- Keweenaw Waterway Upper Entrance Light
- Located offshore in Lake Superior, approximately 0.4 mile from the shoreline of Hancock Township in Houghton County, MI
- Light List Number 15120

**Owner:**

- U.S. Coast Guard COMDT (CG-47)  
ATTN: Dr. Daniel Koski-Karell  
US Coast Guard – STOP 7714  
2703 Martin Luther King Jr. Avenue SE  
Washington, DC 20593-7714

**Summary Description:**

The Keweenaw Waterway Upper Entrance Light includes a caisson foundation, fog signal building, and light tower topped with an open-air beacon. Surrounded by water, it is accessible by boat and climbing a steel ladder built into the caisson's southern side. This property is approximately 20 feet from the offshore end of the eastern breakwater at the northern end of the Keweenaw Waterway. This lighthouse is approximately 110 feet tall from the base of its foundation to the top of its lantern. Its foundation is a circular, steel interlocking sheet pile caisson that is filled with rock and topped with a

concrete deck. The caisson is approximately 50 feet in diameter and its deck is approximately 15 feet above water level. The caisson deck supports a one story tall, concrete fog signal building that is the lighthouse superstructure's first story. It is approximately 34 feet wide by 34 feet long by 11 feet tall. The fog signal building's flat roof supports the structure's light tower which is five stories tall, rectangular, and made of steel. The tower was designed with elements of Streamlined Moderne styling including an inward and upward curve at the structure's third story that narrows the tower's width from 18 feet to eight feet. The tower's flat roof supports a steel framework and a modern automated beacon, which is mounted atop a platform in the open air. The structure's concrete fog signal building and steel light tower are painted white. The caisson, light tower roof, and the steel framework atop the tower are painted red. The fog signal building's entrance door and the handrail surrounding its flat roof are painted black. The lighthouse's beacon has a focal plane 68 feet above water level, signals a white light that flashes once every 15 seconds, and is visible for 18 miles in clear weather. This property is also equipped with a modern automated fog signal and solar array mounted atop the fog signal building roof. These aids to navigation are powered by batteries recharged by the solar array.

The Keweenaw Waterway Upper Entrance Light is accessible from a boat by way of the steel ladder on the caisson's southern side. The fog signal building's doorway provides access to the first story interior, only. The light tower is accessible by way of outdoor steel ladders built into the exterior walls of the fog signal building. A steel door on the light tower's lower level provides access to its interior, which is the lighthouse's second story. Steel ladders inside the tower provide access from one story to the next, and to the tower's roof.

#### **Summary Statement of Historical Significance:**

This lighthouse was constructed in 1950. It marks the northern entrance to the Keweenaw Waterway which provides a navigable route between the Keweenaw Peninsula's eastern and western lakeshores. The Keweenaw Waterway is presently included in the National Register of Historic Places. It first opened in the 1870s and was improved through time. Its northern entry from Lake Superior was the mouth of the Portage Lake Ship Canal which connects with upper Portage Lake. The breakwaters north of the Portage Lake Ship Canal's mouth extend to approximately 0.4 mile from shore and shelter the Keweenaw Waterway's upper entrance.

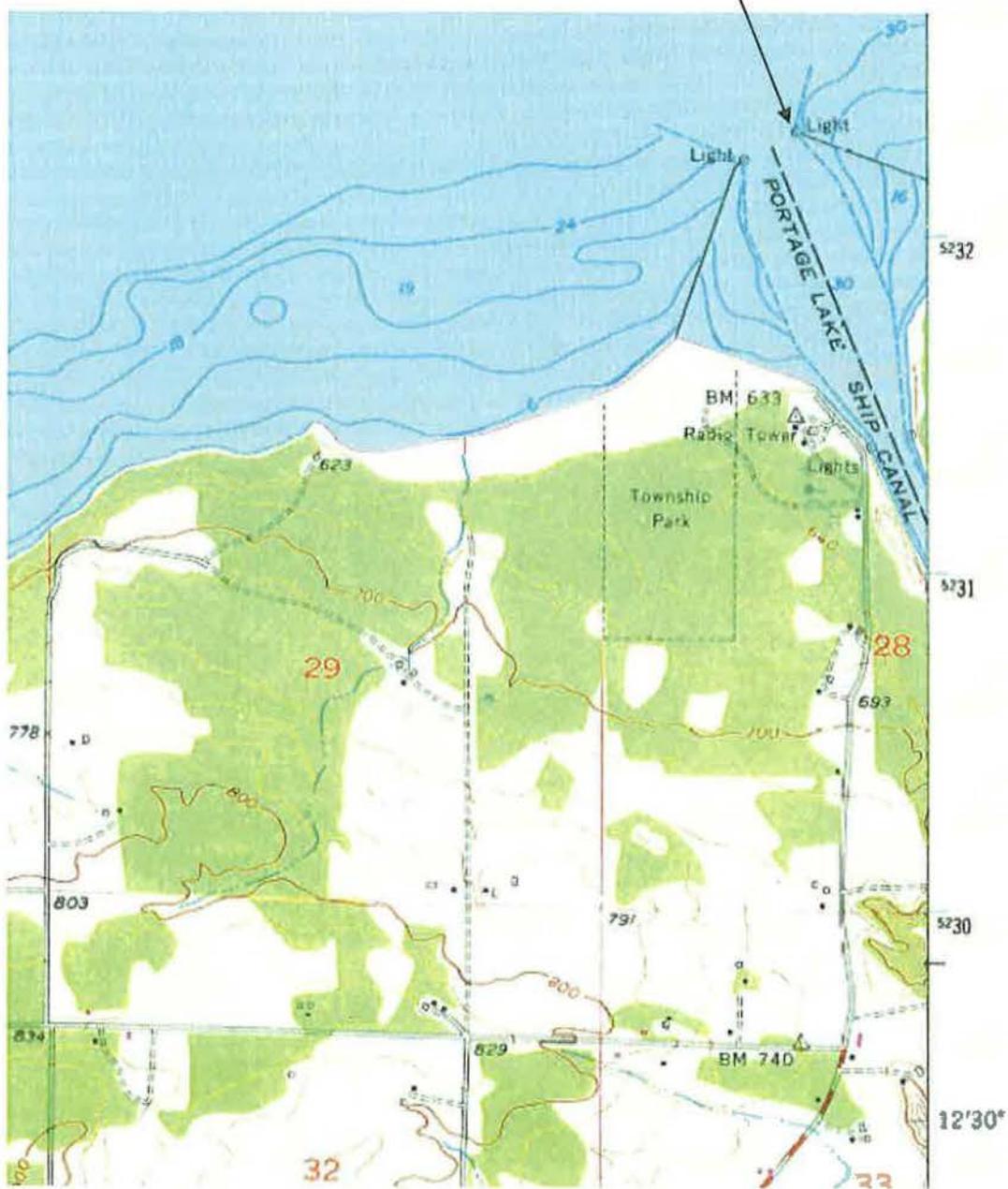
The Keweenaw Waterway Upper Entrance Light is significant in the history of Houghton County and the State of Michigan. It is eligible for National Register of Historic Places listing under Criterion A. for its association with the historic Federal government program to establish a nationwide system of aids to navigation in order to promote maritime safety and commerce. This property exemplifies how that program was manifested in the Houghton County area. It is also eligible for NRHP listing under Criterion C. for its architectural and engineering significance. It exemplifies how characteristics of middle twentieth century lighthouse architecture and engineering were applied to mark the entrance to an important waterway. The qualities of this structure's design, materials, and construction methods were applied to overcome difficulties relating to building an offshore lighthouse in a setting subject to harsh environmental conditions. The Keweenaw Waterway Upper Entrance Light retains substantial integrity in terms of its design, setting, materials, workmanship, feeling, and association.

#### **Map and Photograph:**

- Location map
- View of the Keweenaw Waterway Upper Entrance Light, looking north

## Location Map

Keweenaw Waterway Upper Entrance Light



Part of the "Oskar, Mich." 7.5-minute series topographic map, Scale 1:24,000  
(U.S. Geological Survey, 1954, photorevised 1975).

View of the Keweenaw Waterway Upper Entrance Light, looking north



U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2703 Martin Luther King Jr. Ave SE  
U.S. Coast Guard STOP 7714  
Washington DC 20593-7714  
Staff Symbol: CG-47  
Phone: (202) 475-5687  
Fax: (202) 372-8419  
Email: edward.f.wandelt@uscg.mil



16475

**JUN 03 2014**

## MEMORANDUM

*E. F. Wandelt*  
From: E. F. Wandelt, Chief  
COMDT (CG-47)

Reply to Dr. Daniel Koski-Karell  
Attn of: (202) 475-5683

To: Mr. J. Paul Loether, Chief  
National Register of Historic Places and National Historic Landmarks Program  
National Park Service  
1849 C Street NW (Stop 2280)  
Washington, DC 20240

Subj: KEWEENAW WATERWAY UPPER ENTRANCE LIGHT AND KEWEENAW  
WATERWAY LOWER ENTRANCE LIGHT, HOUGHTON COUNTY, MICHIGAN

Ref: (a) National Historic Preservation Act Section 110, 16 U.S.C. 470h-2  
(b) Programmatic Agreement Regarding Outgranting of Historic Lighthouse Properties

1. The Coast Guard nominates the Keweenaw Waterway Upper Entrance Light and the Keweenaw Waterway Lower Entrance Light in Houghton County, MI, for listing on the National Register of Historic Places (NRHP). The nomination packages are enclosed (Enclosures (1) and (2)).
2. The Michigan State Historic Preservation Officer's comments on these NRHP nominations were requested and received. They have been incorporated into the NRHP registration forms where deemed appropriate.
3. Comments from appropriate local officials were solicited and no responses were received. Copies of this correspondence are included in the enclosures.

#

Enclosure: (1) NRHP nomination package for the Keweenaw Waterway Upper Entrance Light  
(2) NRHP nomination package for the Keweenaw Waterway Lower Entrance Light

Copy: CG SILC (with encl)  
CG CEU Cleveland (with encl)  
CG D9(dpw) (with encl)