

Kewaunee Pierhead Lighthouse Physical Description

As best described in the National Register nomination documents, the Kewaunee Pierhead Lighthouse consists of a rectangular two-story building approximately 40 feet long by 15 feet wide with an integral light tower and lantern. This building was originally constructed in 1909 as a building to house fog signal machinery and living quarters for keepers. A light tower was added in 1931, converting it into a lighthouse. This aid to navigation sits atop the offshore end of the south pier at the mouth of the Kewaunee River. The south pier extends eastward approximately 0.25 mile from shore into Lake Michigan. It is owned by the U.S. Army Corps of Engineers (USACE) and is part of the Kewaunee harbor navigation structures. The south pier is a 26 feet wide concrete pier which the USACE improved upon in the early 1900's to protect, strengthen and replace the late nineteenth century wooden crib structures.

The lighthouse's concrete foundation sits atop the south pier's offshore end. It is rectangular and built of reinforced concrete. The foundation is approximately 40 feet long by 15 feet wide by 4 feet tall. The lighthouse superstructure sits flush atop the foundation. It includes the original two-story fog signal building and an integral light tower and lantern. The superstructure is painted white.

The first story is sheathed with metal plates except for a wooden double door entrance on the western side and window openings on the north and south sides. These metal plates are a structural component of the Lighthouse and would have been added during the conversion to a Lighthouse in 1931. The entrance is accessed from a 6-step metal stairway on the south pier's deck next to the lighthouse's western side. This stairway leads up to a metal landing in front of the doorway. The first story includes two windows on the north side and one on the south side. These are rectangular and approximately 2 feet by 2 feet in dimension. There is a former rectangular window opening on the south side fitted with a vent. This side of the lighthouse is also pierced with a doorway fitted with a metal door approximately 5 feet tall by 3 feet wide.

The second story exterior is clad with shingles painted white. Its massing is divided into three bays oriented north--south. A north-south cross gable occupies the western one-third. This has a tripartite window under the north gable and another under the south gable. For both, the left and right casements are covered. Only the center casement holds sash and glazing. This cross gable is pierced on the west side with a centered doorway beneath a gablet. The doorway is now covered with shingles. It formerly provided access to an elevated walkway that has been demolished. A similar cross gable occupies the second story's eastern one-third. Its north and south gables have tripartite windows identical to the western cross gable. A rectangular window pierces the cross gable's eastern side, but its opening is covered. A pitch roof oriented east-west connects the second story's eastern and western cross gables. It is pierced with a gablet on both the north and south sides. These gablets hold a single rectangular window each. The fog signal building's roof is comprised of red three tab asphalt shingles. A rectangular cover at the northwest corner shields an opening where a brick chimney stood in the past.

The lighthouse's rectangular light tower rises from the eastern cross gable. It is one story tall and painted white. The eastern side is clad with corrugated sheet metal. The north, south and west sides are pierced with a single rectangular window each that is approximately 2 feet wide by 2 feet tall. The east side has two, side-by-side similar rectangular openings of which one is covered. The lighthouse's lantern atop the tower is surrounded by a rectangular open--air gallery 12 feet long by 12 feet wide. A two-tier railing approximately 3

feet tall made of steel pipe surrounds the gallery. A modern automated fog signal and a fog detector are attached to the gallery deck on the east side.

The lighthouse's octagonal lantern was originally mounted atop a light tower built in 1891 at the head of the south pier. It was relocated to its present position atop the Kewaunee Pierhead Lighthouse in 1931. This lantern has a cast iron octagonal parapet wall approximately 3 feet tall. Its glazing consists of eight rectangular lexan panes approximately 3 feet tall held by vertical mullions. The lantern roof springs from a soffit above the glazing. It is made with eight triangular cast iron plates that rise to an apex surmounted by a vent ball and lightning rod. The lantern roof is painted red.

The lighthouse is entered through a double-door at the first story's western end. The first story is occupied by a single room 12 feet, 8 inches wide by 38 feet long. The floor is the flat top of the concrete foundation. There are two access openings to two fuel oil storage tanks beneath the floor inside the foundation. These tanks have been emptied and decommissioned from any further use. The white painted concrete ceiling is approximately 13 feet above the floor. The room's walls are lined with brick between exposed steel beams supporting the ceiling. It appears that at one time there may have been a white painted plaster on these walls. Electrical panels are affixed to the walls. They control the commercial power brought to the lighthouse by cable from shore along the south pier. The north and south walls are each pierced with five wood-framed single-light windows hinged at the side. Three of these on both the north and south walls are covered on the outer side by the metal plates cladding the first story's exterior. One window opening on the south wall holds a vent. The first story room was formerly equipped with machinery that operated the fog signal. There is a metal stairway in the first story room's southwest corner leading up to the second story.

The metal stairway leads to a short hallway on the second story. This hallway has doorways on the north, east, south and west. Both the stairway and hallway have concrete yellow painted walls and white painted ceiling. The floor is covered with square linoleum tiles. The hallway's western doorway is covered. It formerly provided access to an elevated walkway that extended along the south pier to shore. The walkway no longer exists.

The northern doorway leads to a bedroom beneath the western cross gable's northern end. The doorway on the hallway's southern side leads to a bedroom under the southern end of the western cross gable. The southern bedroom is smaller than the northern bedroom due to space taken for the stairway. Both bedrooms have tiled floors and concrete walls covered with plaster. An 8-inch tall band of molding extends along the base of each bedroom wall. There is molding around the doorways, also. Both bedrooms are lighted with a wood-framed tripartite window that pierces the room's gable end. The middle window is taller than the ones on left and right. Each of the three windows in the tripartite unit is hung with wood-frame double-hung sash. Lexan sheets cover the inner side. Only the middle window is not covered on the outside. Floor vents are centered under each set of windows.

The eastern doorway leads to the second story's middle room. It is beneath the pitch roof connecting the cross gables on either end of the second story. The room's sides slope inward because it is below the pitch roof. The walls are paneled and there is a modern drop ceiling. The room's concrete floor is tiled. The north and south walls are each pierced with a rectangular wood-framed window with double-hung sash. Heating vents are located in the floor along the north and south walls. A doorway in the east wall leads to the second story's eastern room which is beneath the lighthouse's eastern cross gable. Both the bedrooms and middle

room (underneath the paneling) on the second floor have green painted walls and white painted ceilings. All of the painted walls or ceilings are of a semi-gloss or gloss paint.

The eastern room has concrete floors, walls, and ceiling. The ceiling's center part has been removed to accommodate the lower part of the light tower, above. This lower portion of the tower is approximately 6 feet tall and is paneled with wooden tongue and groove wainscoting painted white. The eastern room is occupied by two 3-foot diameter steel air tanks. They are centered in the middle of the room. These were formerly used to hold compressed air for the lighthouse's duophone fog signal, which was removed when the existing electrical fog signal was installed. Concrete pads on the floor in the room's southeast and southwest corners support vertical 10-inch steel beams extending from floor to ceiling. Two additional concrete pads supporting steel beams flank the doorway to the second story's middle room. The eastern room's east wall is pierced with a rectangular window opening covered with plywood. The room's north and south walls below the gables are each pierced with a tripartite window, identical to those in the second story's western cross gable. Floor vents are centered under each set of windows. A steel ship's ladder with pipe handrails leads up from the floor to a rectangular trapdoor opening in the ceiling below the light tower. This provides access to the room inside the tower, directly above.

The lighthouse's third story is a rectangular room inside the light tower. It measures 9 feet, 8 inches wide by 10 feet, 2 inches long. The walls, ceiling and floor are covered with plywood. A pipe handrail surrounds the floor's trapdoor opening. The room's north, south and west walls are each pierced with a single rectangular window approximately 2 feet wide by 2 feet tall. These windows have side hinges and wood frames. These are covered on the exterior with lexan. Two similar wood frame windows, one covered with plywood, are located in the east wall. A wooden step ladder leads up to a trapdoor opening in the ceiling. It provides access to the lantern room, directly above.

The room inside the octagonal lantern is 7 feet in diameter. The floor is wood and covered with a rubber mat. The lantern's parapet wall is made with eight cast iron panels painted white. Each second panel is pierced with a circular vent opening. A two-leaf metal door pierces one parapet panel. It is 2.5 feet tall and provides access to the lantern gallery, outside. The eight rectangular windows above the parapet are glazed with lexan.

A fifth order Fresnel lens lighted with an electric lamp is mounted on a metal pedestal which is affixed to the center of the lantern room floor. The USCG currently operates this optic as an aid to navigation, and will continue to do so after the transfer of the property.