

# TORTUGAS HARBOR LIGHT

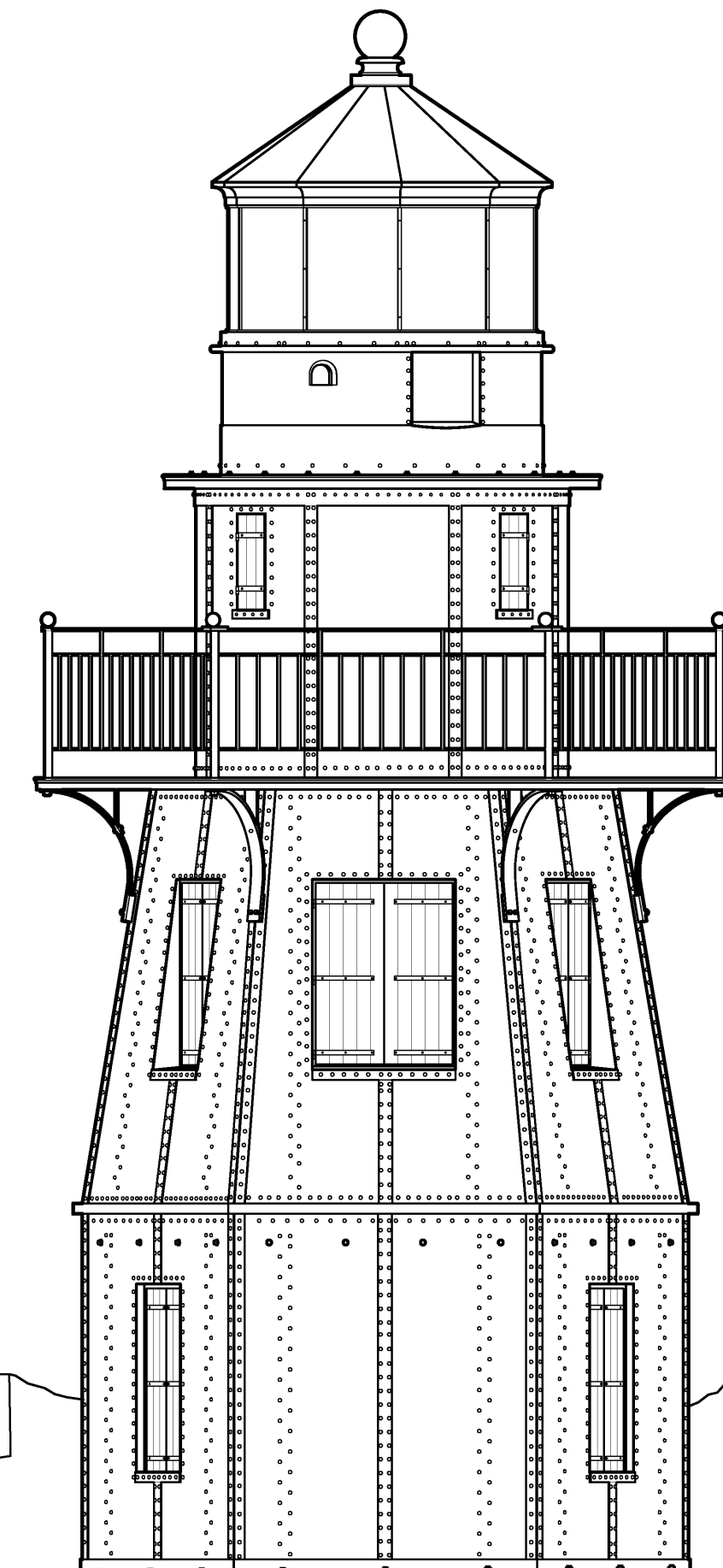
The Tortugas Harbor Lighthouse was constructed of boiler-plate iron and erected February-April 1876 as an aid to navigation for local harbor traffic. The design was created under the direction of the Light House Board by Major Jared A. Smith, then Superintending Engineer at Fort Jefferson; his approved drawings are dated January 10, 1876. Iron was second to brick in popularity for use in lighthouse construction, beginning with the first in the U.S. in 1844, due to its durability and ease of construction. Iron lighthouse sections and their component parts could be easily cast and assembled on site (and disassembled and moved if needed). Tortugas Harbor Lighthouse is comprised of four tiers of precast iron construction. The first two levels of the structure are hexagonal, while the third and fourth levels are cylindrical and encompass the Watch Room and Lantern Room, respectively. With a range of only 13 miles, the Tortugas Harbor Lighthouse was used mainly as a beacon; the principle aid to the navigation in area being the Loggerhead Key Lighthouse, located 2-1/2 nautical miles west of the fort. Both lighthouses were built to help ships traveling to and from the Gulf of Mexico negotiate the treacherous reefs that surround the area.

The Tortugas Harbor Lighthouse was built to replace the original brick lighthouse built in 1825 and located on what is now the Fort Jefferson Parade Ground (prior to the fort's construction). The erection of the new lighthouse in iron was prompted by a severe hurricane that came through the area in September 1875, damaging both brick lighthouses, here and at Loggerhead Key. Rather than repair the original brick structure, a stronger iron lighthouse was erected atop the bastion, also raising visibility. The Tortugas Harbor Lighthouse rises 37' above the terreplein, or about 82' above ground level. The boiler-plate iron is 1/4" thick and is reinforced by a framework of channels and T-irons, with riveted and bolted connections. The hexagonal first tier is accessed from below through the bastion stair tower or from the fort's terreplein. The walls of the hexagon are pierced by a double-leaf door and two windows. The second tier, also hexagonal, includes four windows; it tapers inward to meet the smaller, circular tiers above. The circular third tier or Watch Room section includes an outer gallery supported by iron brackets. The uppermost level comprises the circular Lantern Room and originally contained the fourth-order lens manufactured by Augustin Michel Henry-LePaute of Paris, France for the 1825 lighthouse.

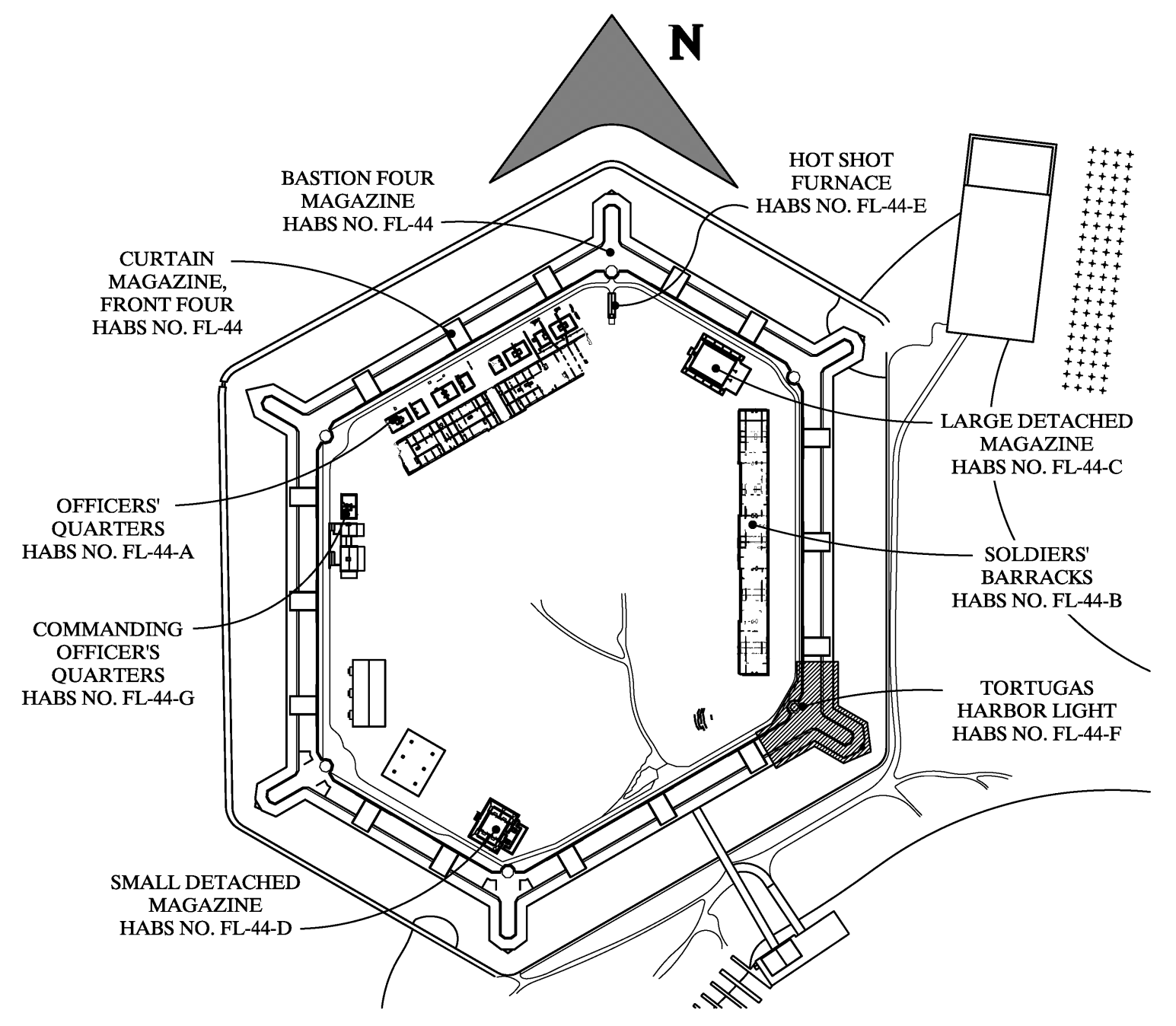
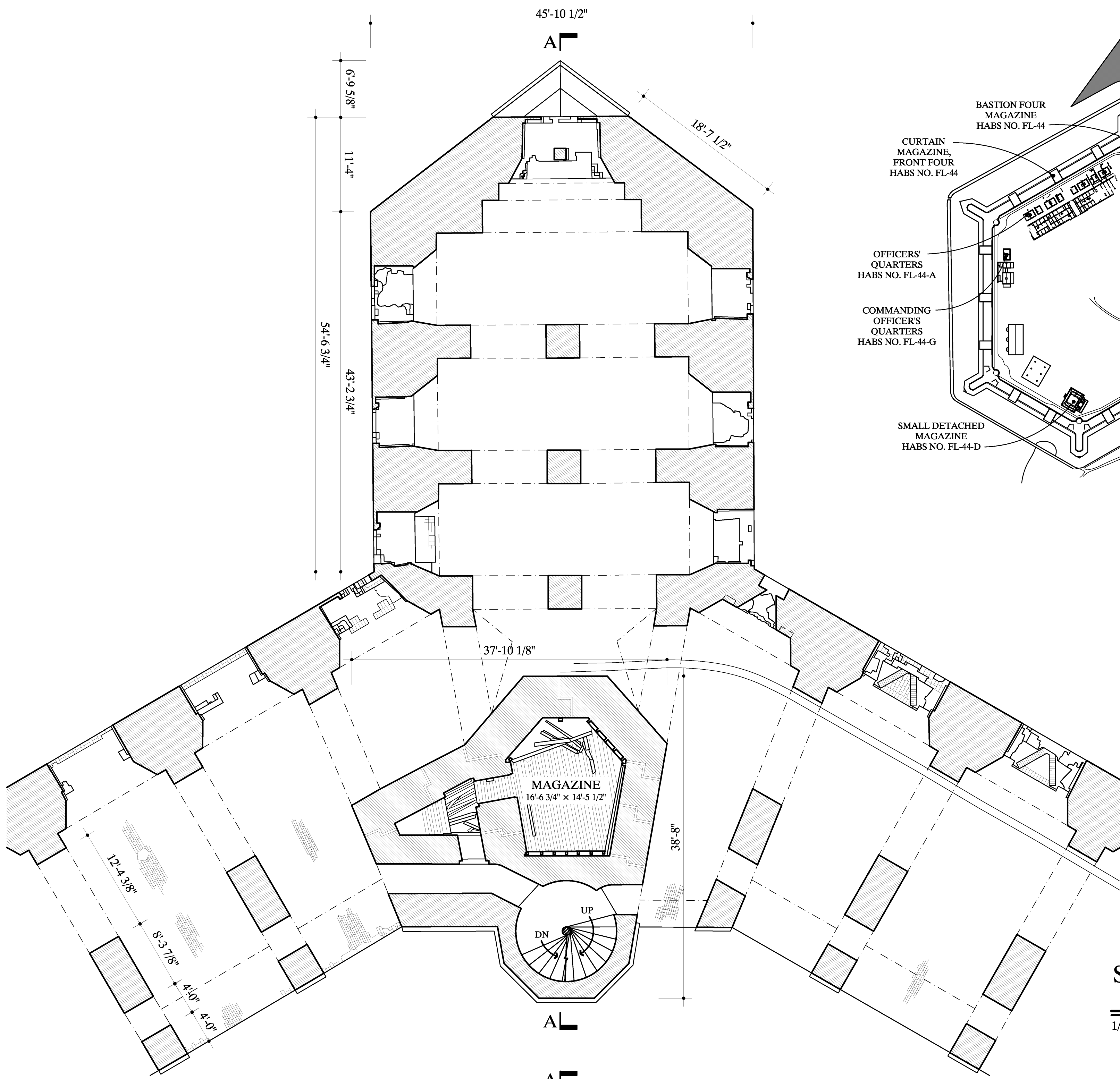
The Tortugas Harbor Lighthouse was automated in 1912. Automation eliminated the need for a light keeper and corresponded with the accidental burning of the keeper's house. The lighthouse was finally decommissioned in 1921, at which point the lighthouse at Loggerhead Key became the sole aid to navigation in this area. Although dark, the Tortugas Harbor Lighthouse remained in situ. Suffering from deterioration, major repairs were first undertaken in 1939, including the recoating of the corroded sections of steel, and likely much of the steel plate reinforcement that was later reported, in 1969. Deterioration continued, however, and the lighthouse remained closed to visitors. Finally in 1971, the lighthouse underwent a more substantial rehabilitation, including repair of the entire upper tiers, replacement of deteriorated structural parts, additional braces and plates, and the repair of interior carpentry and millwork. The metal handrail was also replaced with like materials.

In 1976, Tortugas Harbor Lighthouse was placed in the National Register of Historic Places as a contributing resource to the Fort Jefferson National Monument Historic District. The site was transferred to the National Park Service in 1992 and remains in its stewardship. The Tortugas Harbor Lighthouse is currently undergoing restoration, prompting the HABS documentation.

Documentation of the Tortugas Harbor Light and Bastion 6 was undertaken by the Historic American Buildings Survey (HABS), Heritage Documentation Programs (HDP) of the National Park Service (Catherine C. Lavoie, Chief, HABS; Paul Dolinsky, Acting Chief, HDP) in Winter 2016. The project was undertaken by HABS in cooperation with Dry Tortugas National Park (Glenn Simpson, Park Manager; Kelly Clark, Cultural Resources Specialist) and Lord Aeck Sargent (Rob Yallop, Senior Associate; Kelly Gawinek, Project Architect. Field recording and measured drawings were completed by Paul Davidson and Daniel De Sousa, HABS Architects. The large-format photography was undertaken by Jarob Ortiz, HDP Photographer.

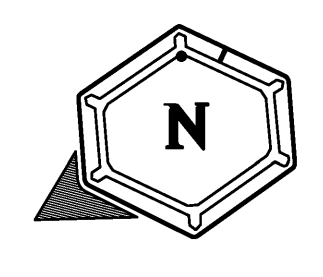
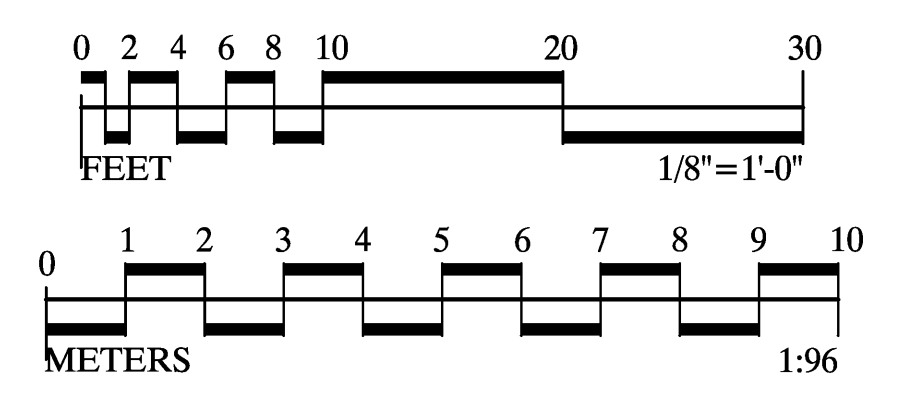
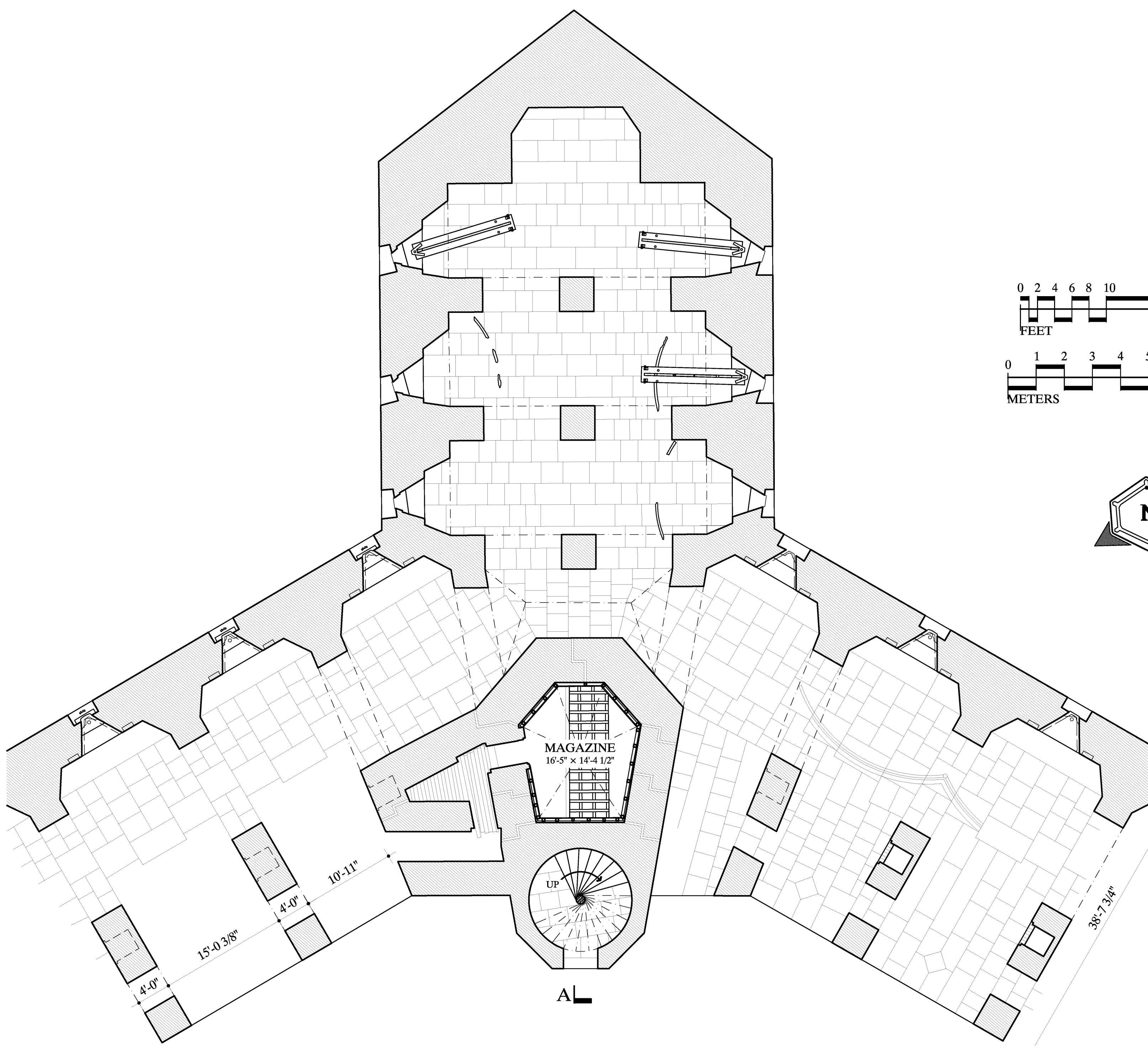






**LOCATION MAP  
FORT JEFFERSON**  
NO SCALE

**SECOND TIER PLAN  
BASTION 6**  
1/8" = 1'-0" 1:96



**FIRST TIER PLAN  
BASTION 6**  
1/8" = 1'-0" 1:96

DRAWN BY: RYAN PIERCE

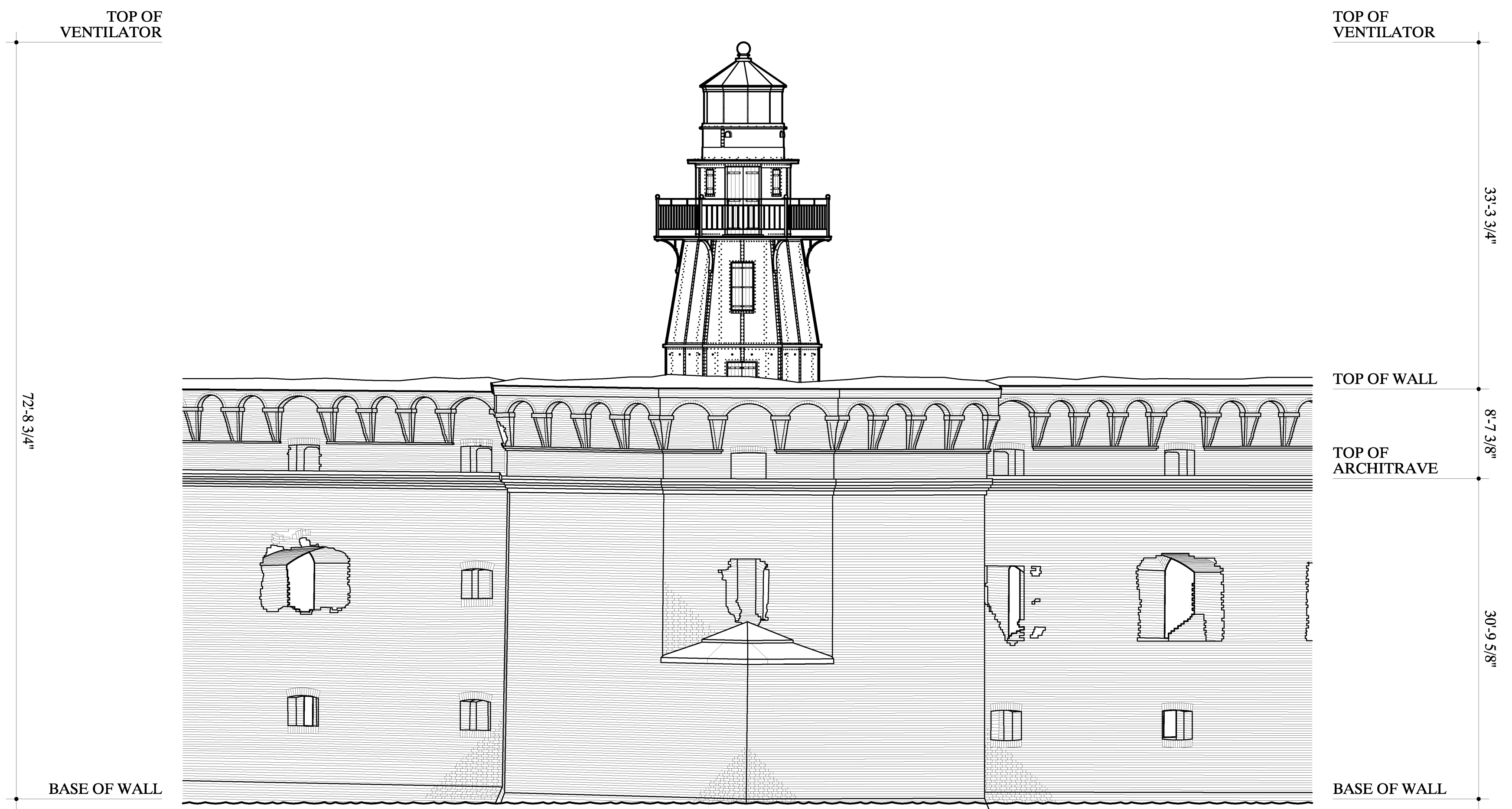
FORT JEFFERSON DOCUMENTATION PROJECT, 2017  
NATIONAL PARK SERVICE  
UNITED STATES DEPARTMENT OF THE INTERIOR

**FORT JEFFERSON, TORTUGAS HARBOR LIGHT**  
DRY TORTUGAS NATIONAL PARK KEY WEST MONROE COUNTY FLORIDA

SURVEY NO.  
FL-44-F

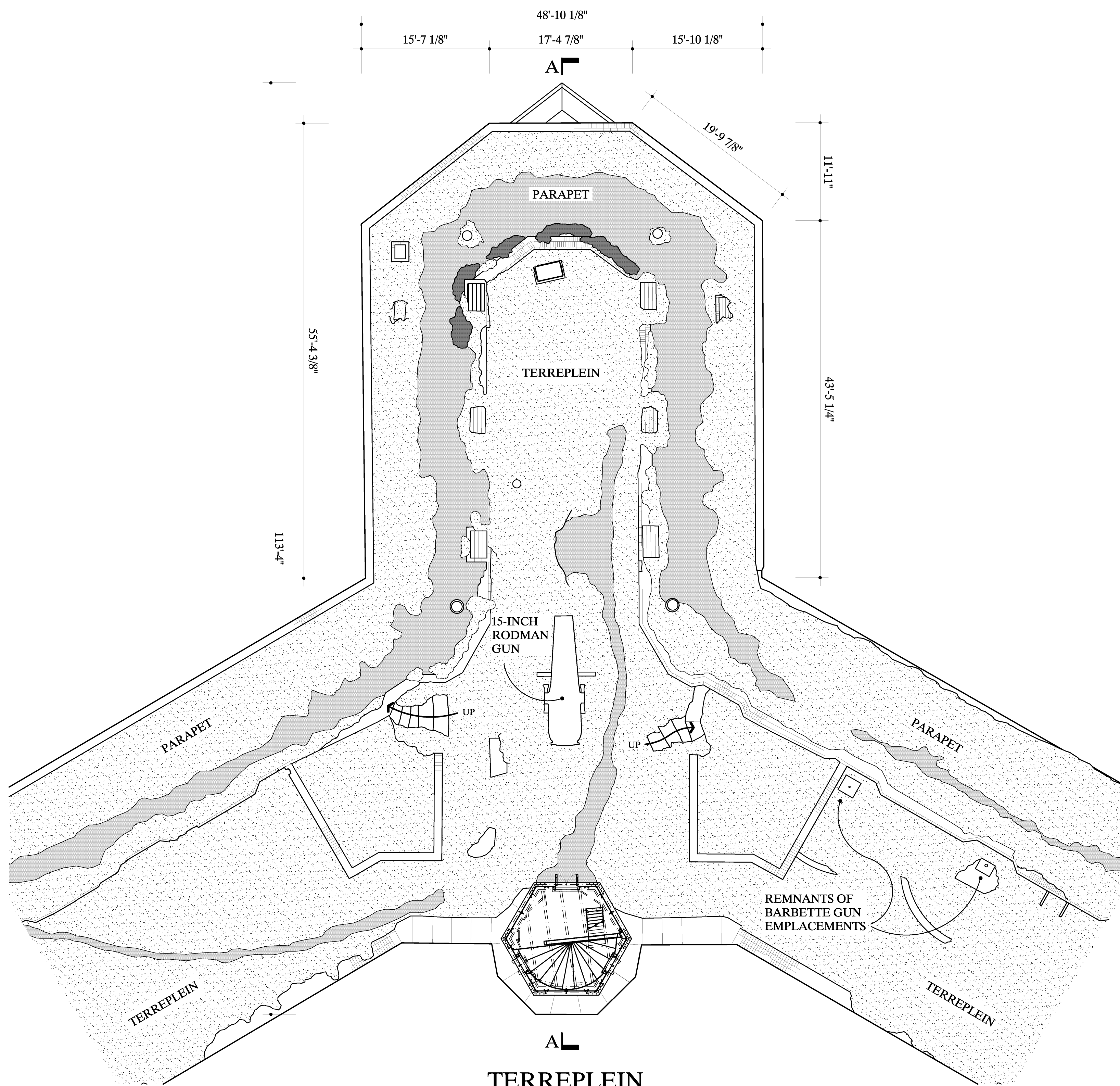
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BUILDINGS SURVEY  
SHEET 2 OF 6 SHEETS

LIBRARY OF CONGRESS  
INDEX NUMBER



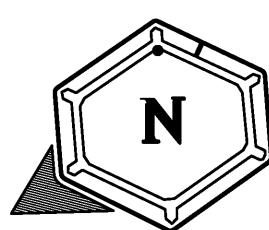
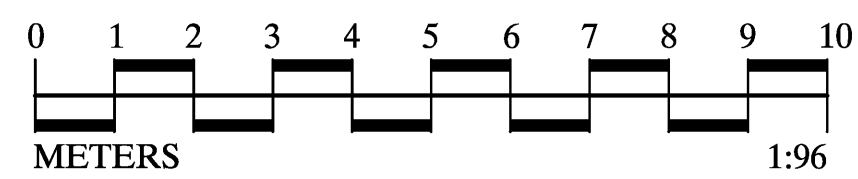
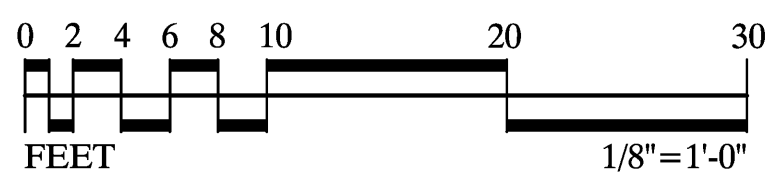
**EAST ELEVATION**

1/8" = 1'-0" 1:96



**TERREPLEIN  
BASTION 6**

1/8" = 1'-0" 1:96



DRAWN BY: DANIEL DE SOUSA, RYAN PIERCE

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NATIONAL PARK SERVICE  
UNITED STATES DEPARTMENT OF THE INTERIOR

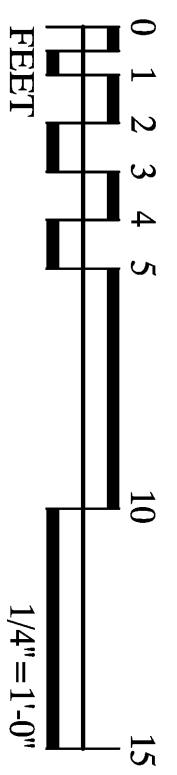
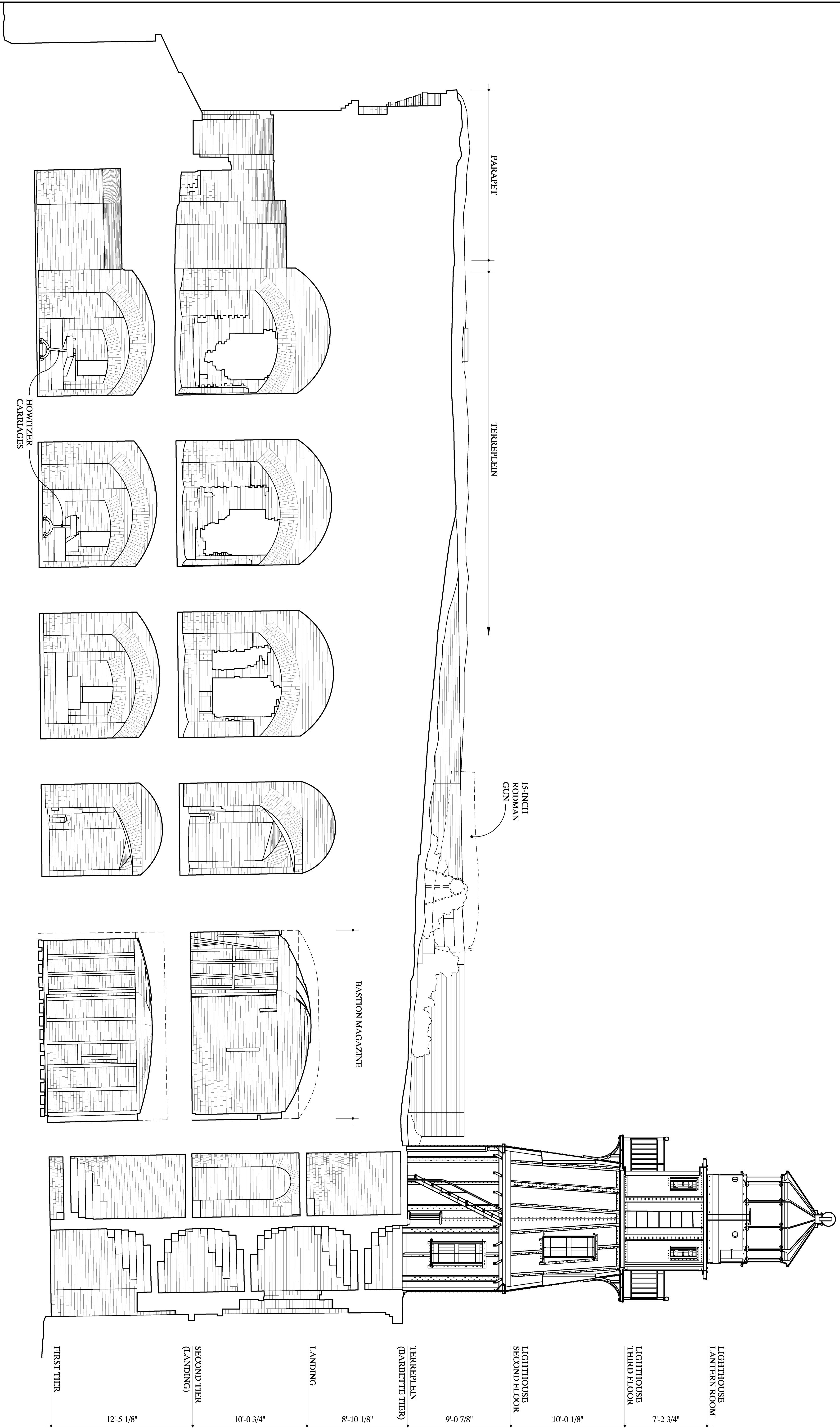
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DRY TORTUGAS NATIONAL PARK KEY WEST MONROE COUNTY FLORIDA

SURVEY NO.  
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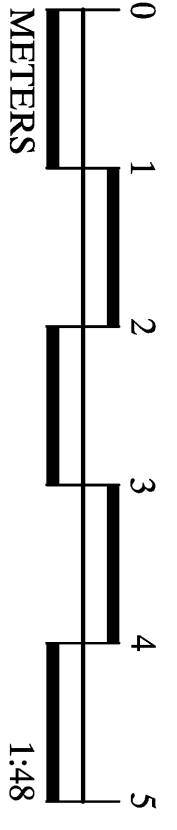
HISTORIC AMERICAN  
BUILDINGS SURVEY  
SHEET 3 OF 6 SHEETS

LIBRARY OF CONGRESS  
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SECTION A-A  
1/4" = 1'-0"  
1-48



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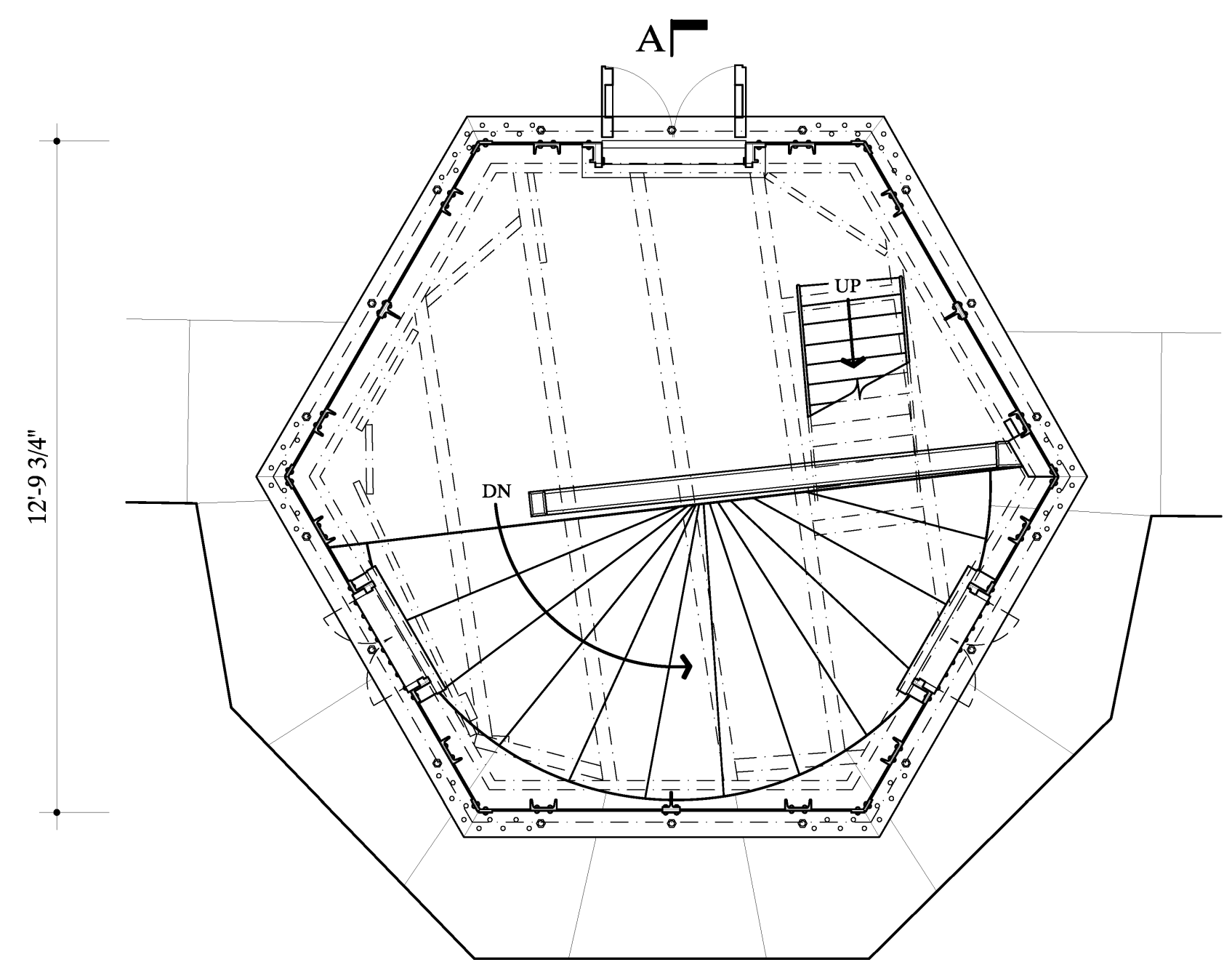
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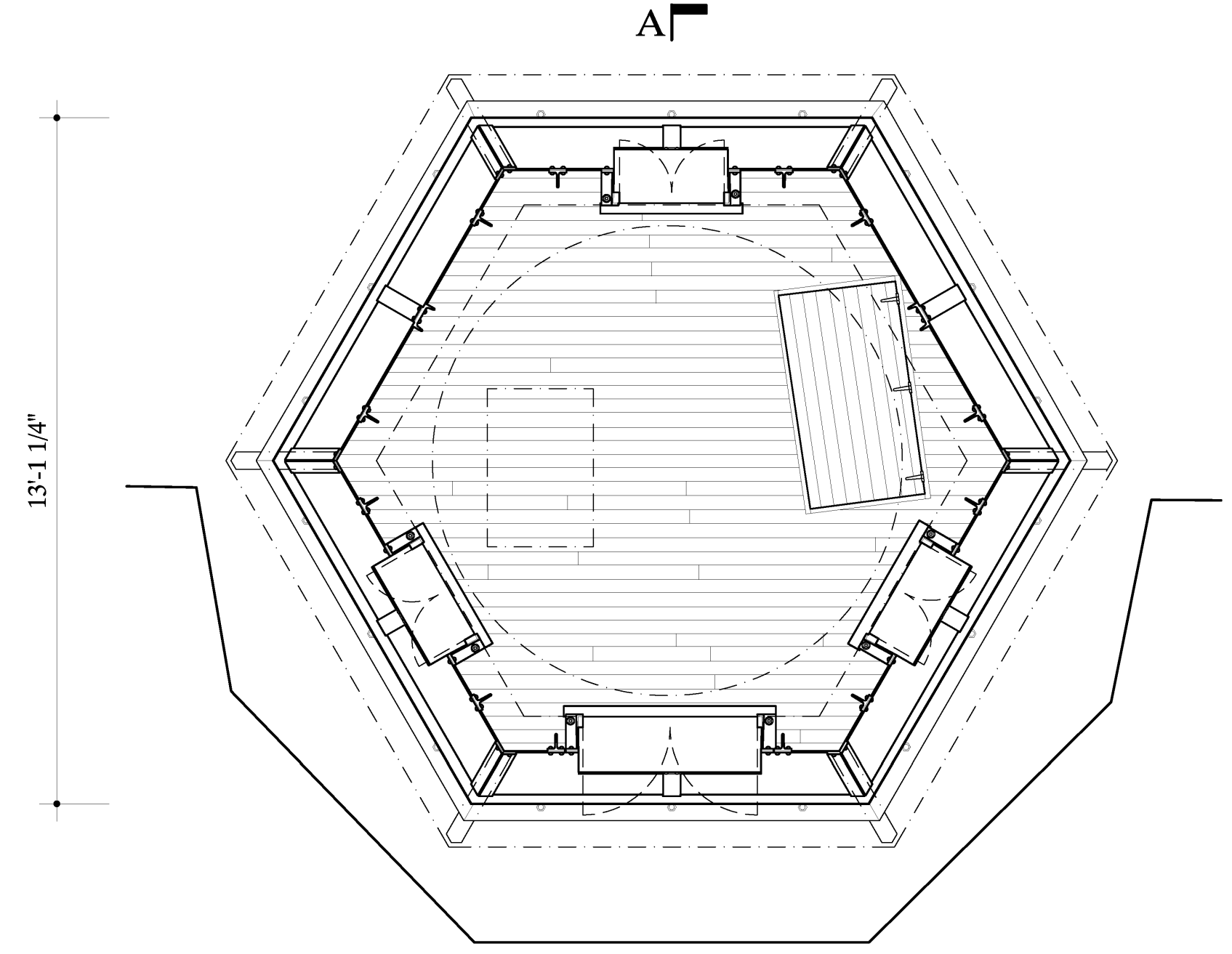
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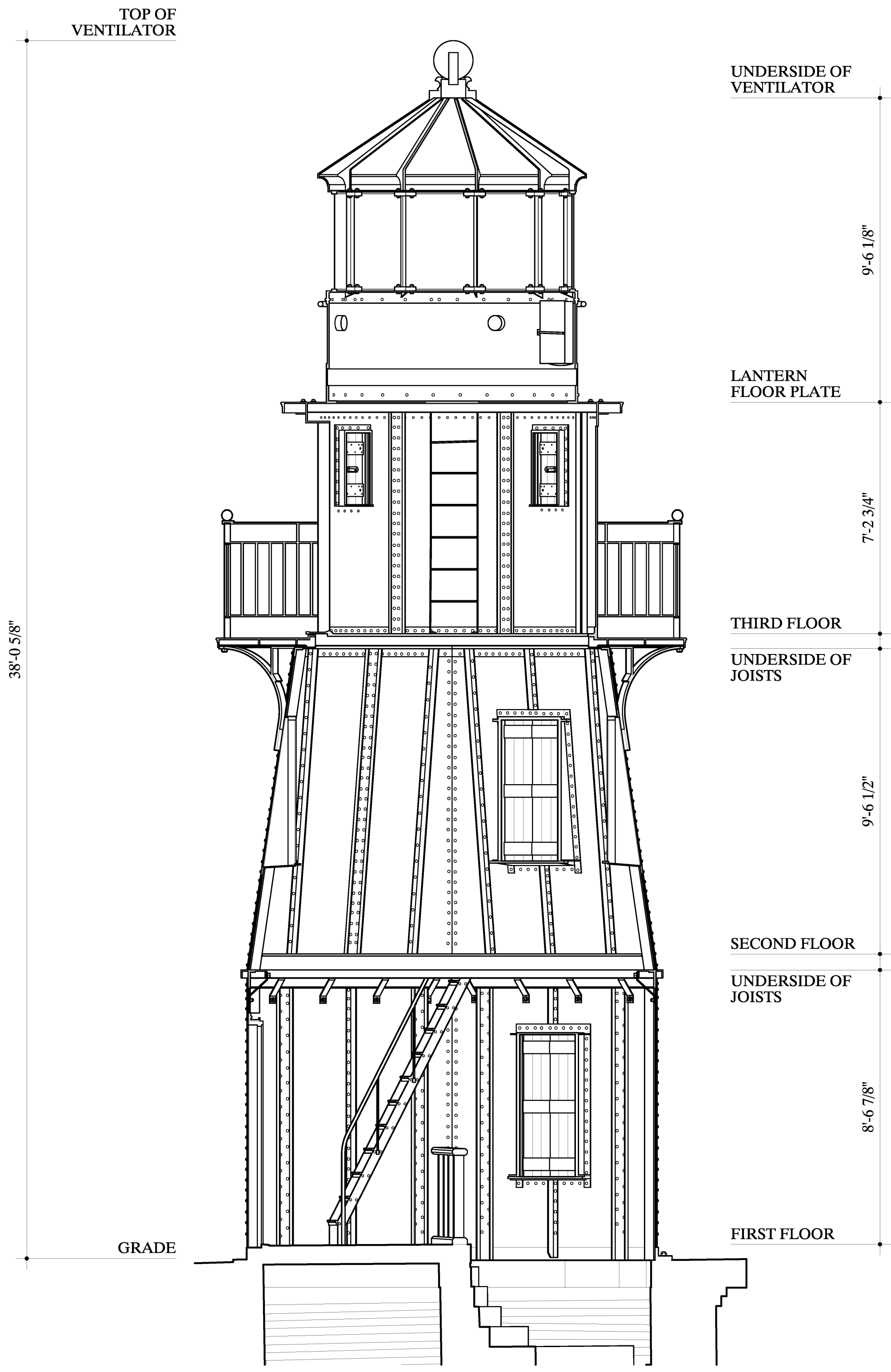
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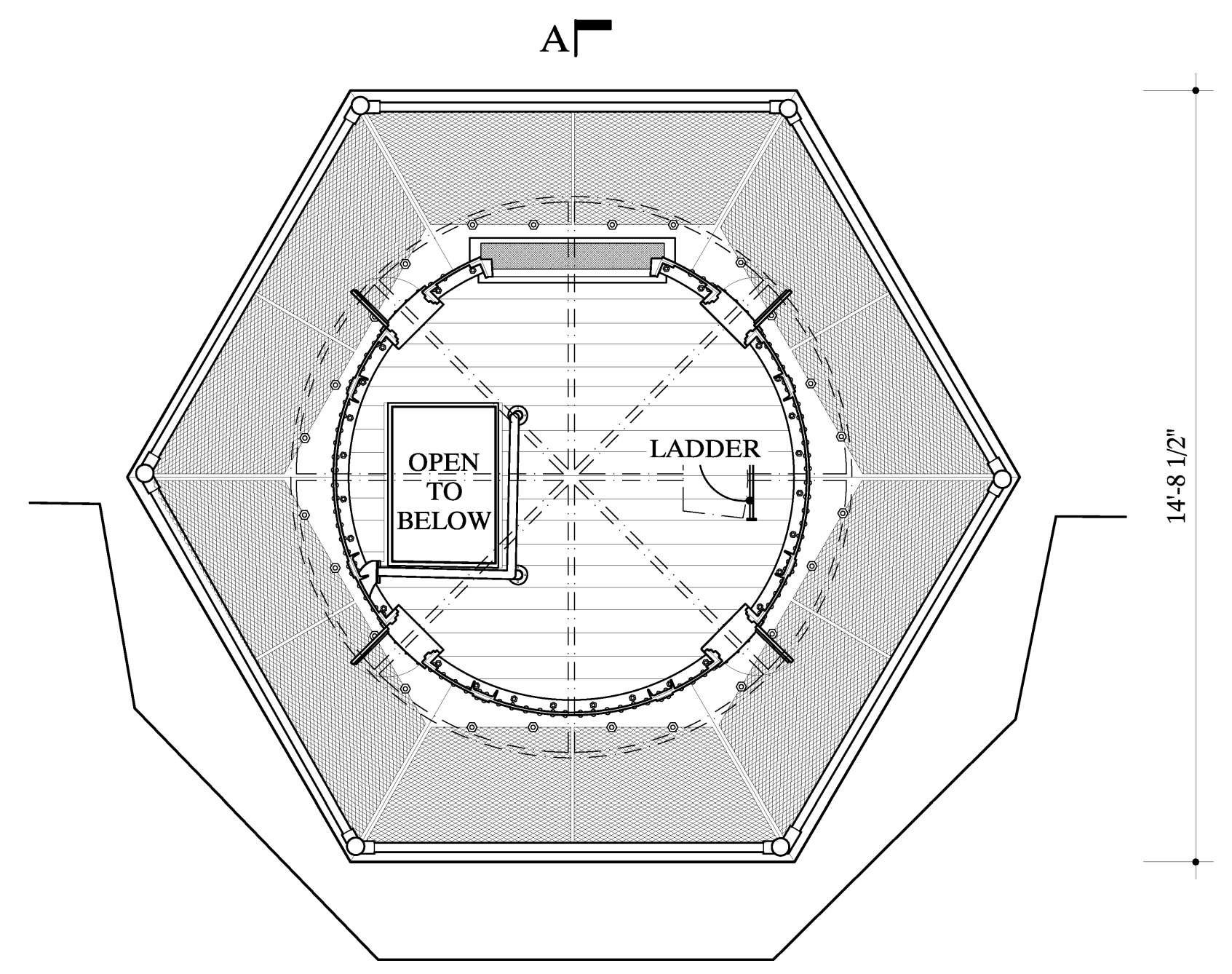
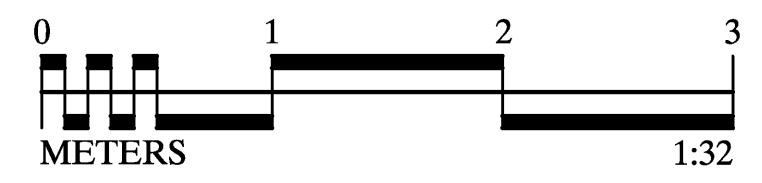
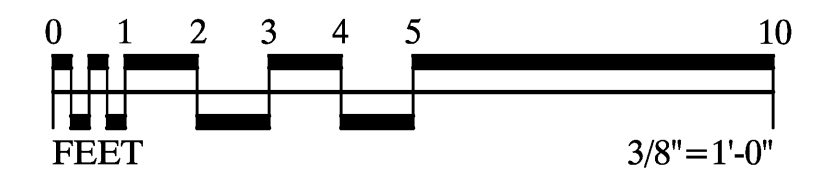
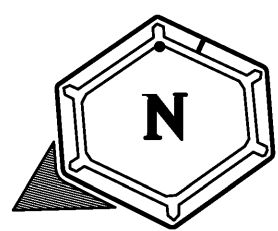
**FIRST FLOOR PLAN**  
 3/8"=1'-0" 1:32



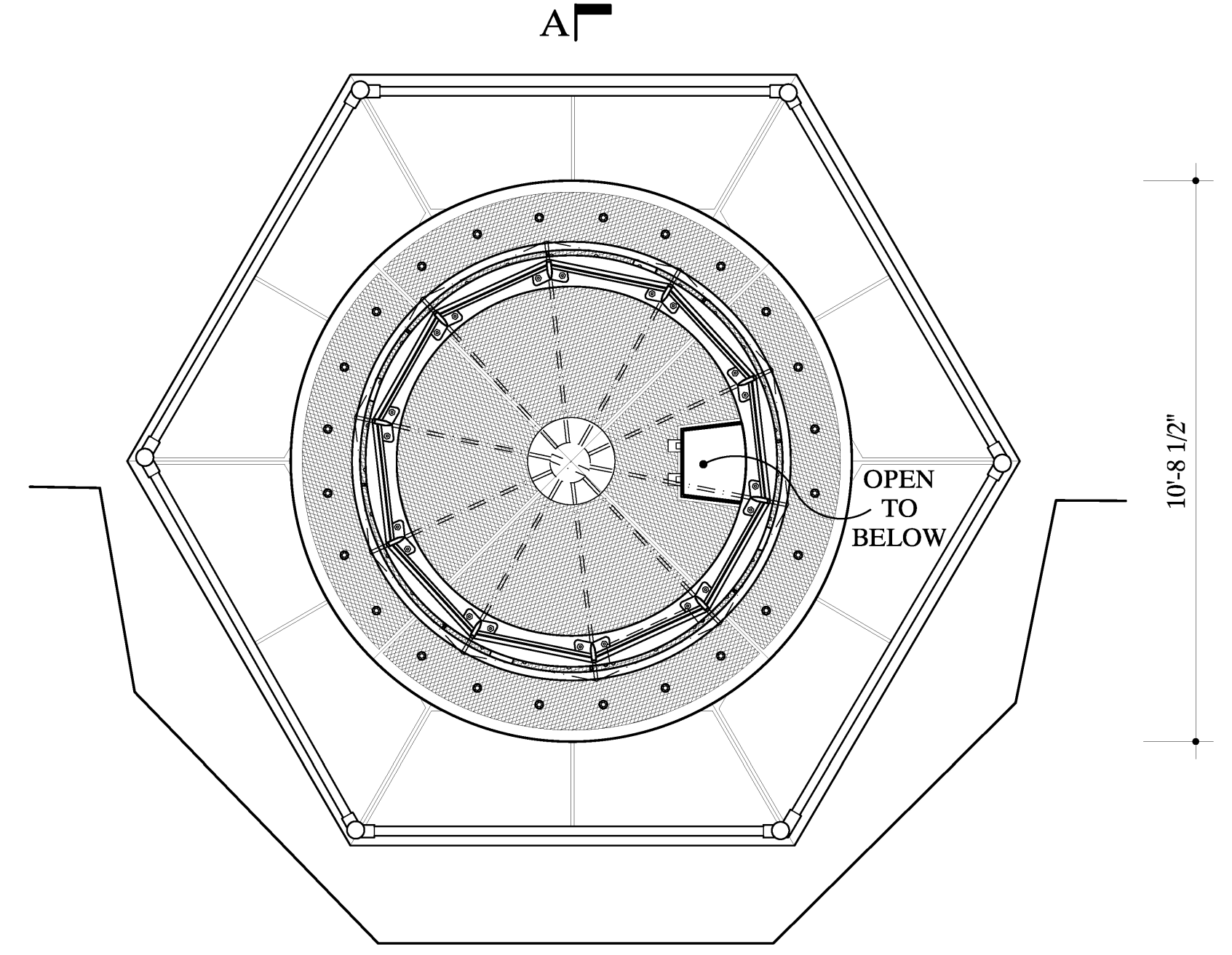
**SECOND FLOOR PLAN**  
 3/8"=1'-0" 1:32



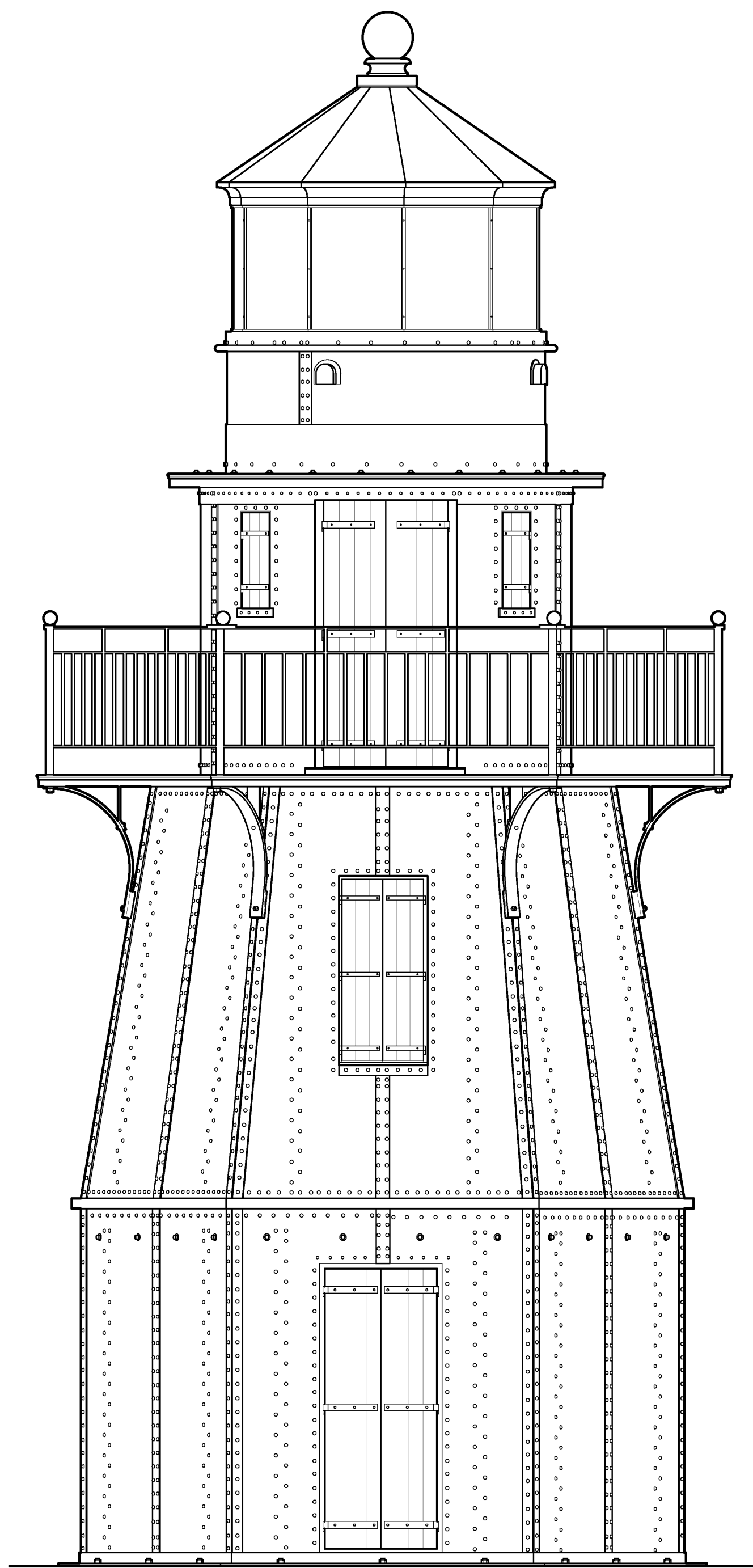
**SECTION A-A**  
 3/8"=1'-0" 1:32



**THIRD FLOOR PLAN**  
 3/8"=1'-0" 1:32

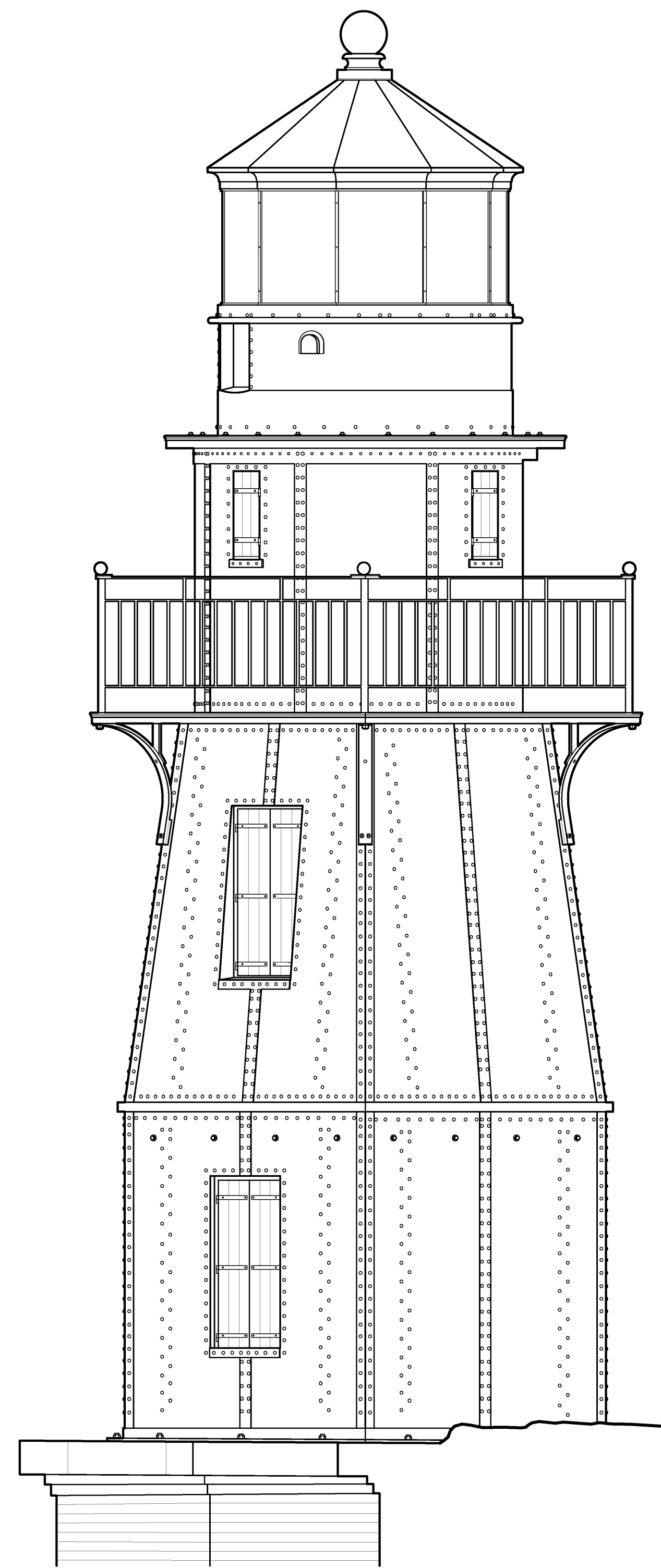


**LANERN ROOM PLAN**  
 3/8"=1'-0" 1:32



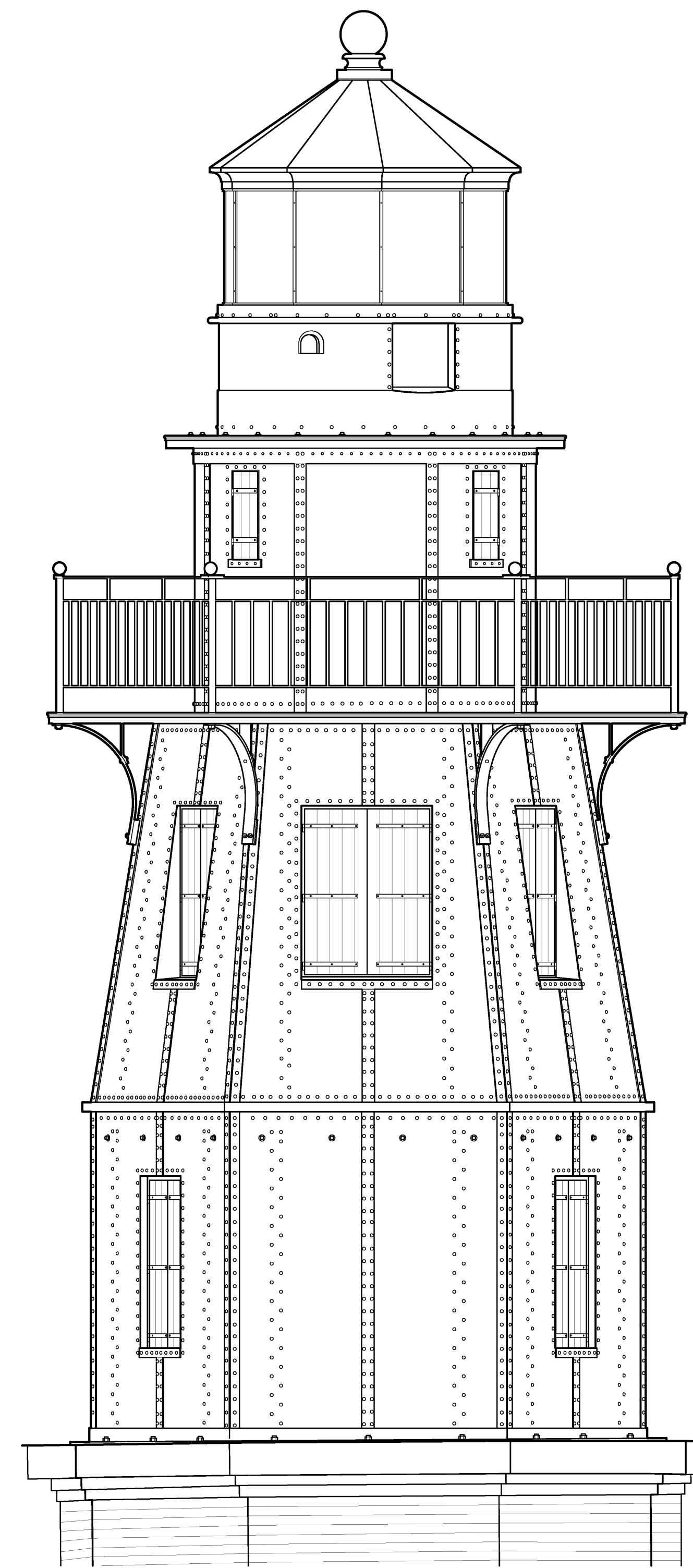
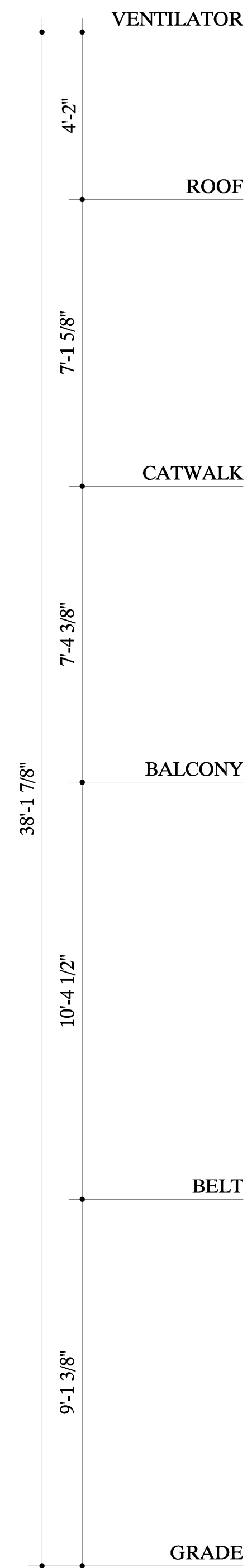
**EAST ELEVATION**

3/8" = 1'-0" 1:32



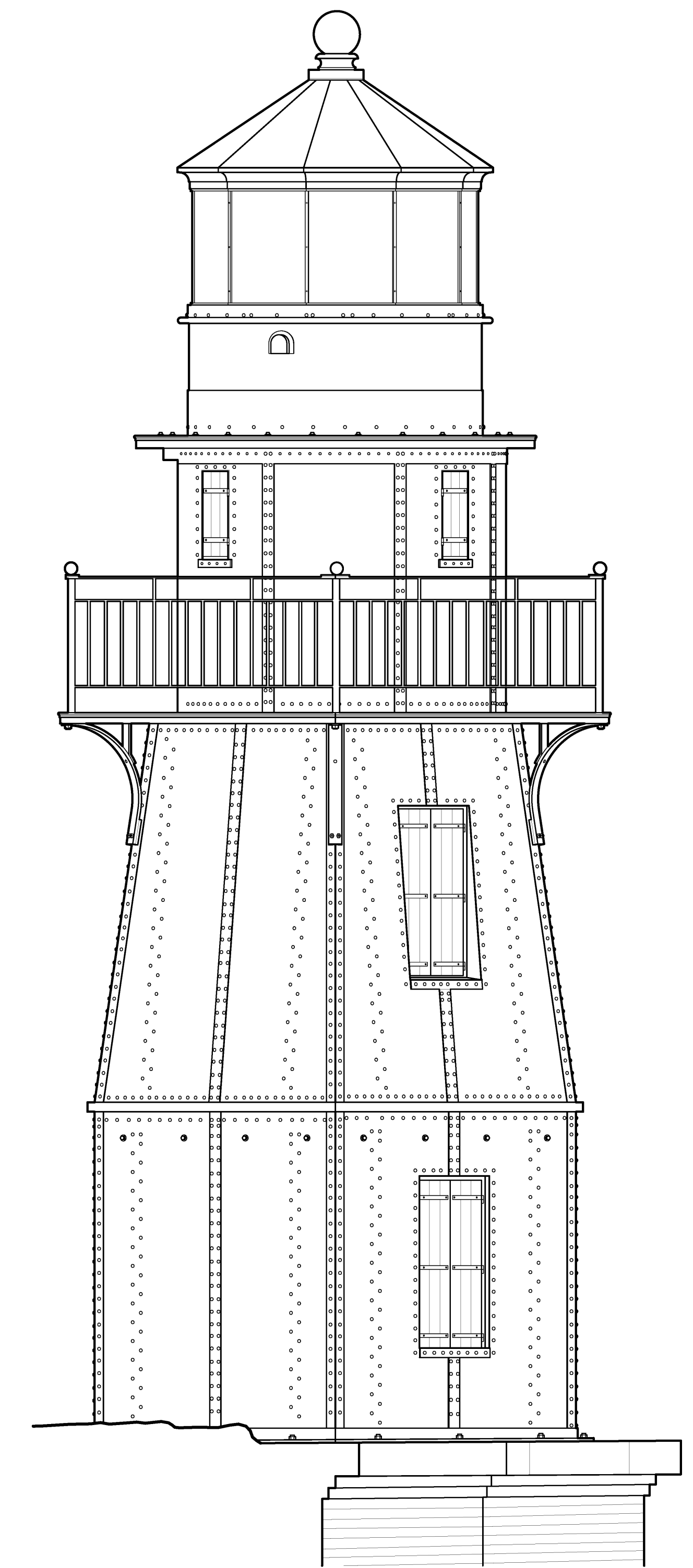
**SOUTH ELEVATION**

3/8" = 1'-0" 1:32



**WEST ELEVATION**

3/8" = 1'-0" 1:32



**NORTH ELEVATION**

3/8" = 1'-0" 1:32

