

United States Department of the Interior
National Park Service

FEB 02 1989

National Register of Historic Places
Registration Form

NATIONAL
REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Lehigh Valley Railroad Barge #79
other names/site number _____

2. Location

street & number 1263 River Road not for publication
city, town Edgewater Borough vicinity
state New Jersey code 034 county Bergen code 003 zip code 07020

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
<input checked="" type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input type="checkbox"/> public-local	<input type="checkbox"/> district	_____	_____ buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	_____	_____ sites
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	<u>1</u>	_____ structures
	<input type="checkbox"/> object	_____	_____ objects
		<u>1</u>	<u>0</u> Total

Name of related multiple property listing:
NA

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Debra C. Scurie 09/28/88
Signature of certifying official Date
Deputy State Historic Preservation Officer (New Jersey)
State or Federal agency and bureau

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

Signature of commenting or other official Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

entered in the National Register.
 See continuation sheet.

determined eligible for the National Register. See continuation sheet.

determined not eligible for the National Register.

removed from the National Register.

other, (explain:) _____

Linda McClelland 2/10/89

Signature of the Keeper Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

Transportation/water-related

Other: railroad lighterage

Current Functions (enter categories from instructions)

Work in Progress

7. Description

Architectural Classification

(enter categories from instructions)

Other: Hudson River Railroad Barge

Materials (enter categories from instructions)

foundation wood

walls

roof wood

other wooden hull

Describe present and historic physical appearance.

The Lehigh Valley Railroad Barge Number 79, is a typical unaltered example of the wooden barge construction used from the 1860's to the early 1980's in the Hudson River and the Port of New York for the railroad lighterage system. Aside from normal wear, weathering, and minor deterioration, she survives today, internally and externally, virtually as she was built in the Perth Amboy Dry Dock in 1914.

The Lehigh Valley Railroad Barge Number 79 is constructed of wood throughout, fastened with iron bolts and spikes. She has a flat-bottomed hull of wide horizontal planks over heavy timber frames, all of which are of long-leaf yellow pine. The sides of the hull are vertical and the bow and stern are inclined inward at an angle of 45 degrees. Superimposed on this hull is a single-story house with sides leaning slightly inward and a gently arched roof.

Cargo was stowed on the main deck, inside the house, which provided protection from the weather and from theft. The hull served only as a buoyant pontoon which was filled with a complex structure that provided for longitudinal and transverse strength in order to support the weight of the cargo. For longitudinal strength two systems were used in combination: the bulkhead system featuring a solid timber bulkhead running down the centerline and the stanchion system utilizing rows of timber posts that run the length of the hull one-quarter of the breadth in from either side. Crossed diagonal braces span the spaces between the posts (approx. 80 in.) and also between the posts and the center bulkhead. Other braces extend from the posts to the side frames. At every other frame a pair of timber knees, consisting of a hanging knee resting on top of a standard knee, extend from deck beam to bottom frame. This feature was particularly characteristic of Lehigh Valley Company boats, and was found in canal boats built for the company's fleet on the Lehigh Canal.

The total depth of the hull is ten feet. There are four ventilating trunks built into the four corners of the deckhouse to ventilate the interior of the hull, with wooden louvered vents in the forward and aft bulkheads. In barges of other companies these ventilators had vertical sides. In Lehigh Valley barges they tapered from the deck to a point on the forward or aft bulkhead. The only other openings in the hull are small hatches in the decks forward and aft of the house on the centerline. These were large enough to provide access to the hull for inspection, and were also fitted with wooden lattice gratings to provide further ventilation in good weather. Cast iron, lever-operated diaphragm bilge

 See continuation sheet

8. Statement of Significance

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

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G NA

Areas of Significance (enter categories from instructions)

Maritime History
Transportation
Engineering

Period of Significance

1914-1939
1914-1939
1914-1939

Significant Dates

1914
1914
1914

Cultural Affiliation

NA

Significant Person

NA

Architect/Builder

Lehigh Valley Railroad
Perth Amboy Dry Dock

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

"Historic Context"

Due to the shipping industry's shift to container operations outside of the Port of New York, the consequential abandonment of waterfront railroad systems brought about the obsolescence of the Hudson River Barge.

Less than a dozen covered railroad barges remain intact today. The majority of these have been renovated for boat club use, marina breakwaters, etc. The Lehigh Valley Railroad Barge Number 79 is an excellent representative type of the Hudson River Railroad Barge, and she survives today in original condition. She is a rarity based not only upon her historical significance and social impact, but also upon her pristine state of preservation.

"Historical Significance"

The Lehigh Valley Railroad Barge Number 79 is an almost intact artifact from the era of railroad lighterage in New York Harbor (1860-1984). In the year she was built, New York had been the largest seaport in America for almost a century, and was about to become the largest seaport in the world. It would hold the latter position for the next half century.

The importance of the railroad lighterage system to the successful operation of the Port during this period cannot be overemphasized. Thirteen railroads served the Port, representing an operating mileage of almost 40,000. All had terminal facilities on the shore of the harbor. And, almost all had terminal facilities on the Port's New Jersey shoreline. Because of the lack of railroad tunnels and bridges, goods to be consumed in New York City and cargo to be loaded upon vessels for shipment overseas, first had to be transported by water across the Hudson River. To perform this function various railroad companies maintained large fleets of barges and tugs to move them. Some of these railroad fleets numbered over five hundred vessels.

See continuation sheet

9. Major Bibliographical References

"Moving Goods Within the Port" by Norman J. Brouwer, in Seaport Magazine, Spring 1987.

"New York Harbor Employees" by Benjamin M. Squires, in Monthly Labor Review, July 1918.

"Home Sweet Home On The Hudson: by Ruth Woodward.

See continuation sheet

Previous documentation on file (NPS): NA
 preliminary determination of individual listing (36 CFR 67) has been requested
 previously listed in the National Register
 previously determined eligible by the National Register
 designated a National Historic Landmark
 recorded by Historic American Buildings Survey # _____
 recorded by Historic American Engineering Record # _____

Primary location of additional data: NA
 State historic preservation office
 Other State agency
 Federal agency
 Local government
 University
 Other
Specify repository: _____

10. Geographical Data

Acreeage of property Less than one acre. (Central Park NY-NJ Quad)

UTM References

A

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5	8	6	9	4	0
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4	5	2	1	0	6	0
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Zone Easting Northing

B

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Zone Easting Northing

C

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D

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See continuation sheet

Verbal Boundary Description

The Lehigh Valley Railroad Barge #79 is moored at the Knickerbocker Canoe Club in the Hudson River at 1263 River Road, Edgewater Borough, Bergen County, New Jersey. She is being re-floated in order to be moved to another location if this site becomes no longer available.

See continuation sheet

Boundary Justification

The nominated area encompasses the exterior limits of the hull.

See continuation sheet

11. Form Prepared By

name/title Norman J. Brouwer, Marine Historian & Curator of Ships
organization Southstreet Seaport Museum date April 15, 1987
street & number 207 Front Street telephone (212) 669-9438
city or town New York state New York zip code 10038

United States Department of the Interior
National Park Service

FEB 2 1989

National Register of Historic Places
Continuation SheetSection number 7 Page 2Lehigh Valley Railroad Barge #79, Edgewater
Borough, Bergen County, New Jersey

pumps are located outside the deckhouse at either end of the barge, with iron pipes extending down to the lowest point in the hull. Cast iron bits and cleats are fitted on the deck forward and aft for mooring the barge to a wharf or a towing vessel.

The deckhouse covers the main deck with exception of eight foot open decks at each end and a fifteen inch ledge at either side. The total height of the deckhouse is eleven feet seven inches at the center, and eleven feet one inch at the sides. The walls of the deckhouse are of relatively light construction, with five inch wide, three-quarter inch tongue and groove pine shiplap laid horizontally over four by four inch studs. Ten inch wide horizontal cargo battens laid across the inner surfaces of the studs kept the cargo isolated from the outer planking. Next to each opening in the side of the deckhouse, similar battens laid across vertical posts kept the cargo from blocking the sliding doors. A series of heavy posts along the centerline gave additional support for the roof.

Since cargo might be handled alongside oceangoing ships where it would need to be hoisted vertically, each side door had a corresponding hatch in the roof. The lids of these hatches lifted off as a single piece, except for a separate strongback at the roof edge.

The cabin provided as living quarters for the barge captain, and possibly his family, is located immediately inside the aft end of the deckhouse. Furnishings located inside the cabin which still exist, and are believed to be original, are a table and stool, a closet, a berth with mattress stenciled "L.V.R.R. 79", and a shelf. The cabin is entered from inside the deckhouse on the port side. There are two small windows in the aft bulkhead, opening to the outside, and one in the forward bulkhead opening into the cargo area. The inside of the cabin is finished in three-inch tongue and groove laid horizontally. There are light beams spanning the ceiling. Metal sheathing on the center of the forward bulkhead, and a fitting for a smokestack in the ceiling above, indicate the location of a stove which is the only major furnishing now missing.

The exterior color scheme is the dull red used by the Lehigh Valley Company for all its vessels. The white letters "L.V.R.R. 79" are still located on the bow and stern deckhouse while remains of "LEHIGH VALLEY RR 79" are faintly discernable on the port and starboard sides of the deckhouse. On interior bulkheads, cargo battens and roof supports, "NO SMOKING" and "THINK SAFETY FIRST" are stenciled in white letters.

United States Department of the Interior
National Park Service

FEB 2 1989

National Register of Historic Places
Continuation SheetSection number 8 Page 2Lehigh Valley Railroad Barge #79, Edgewater
Borough, Bergen County, New Jersey

The total number of craft working in New York Harbor when lighterage was at its peak is difficult to estimate since vessels that worked only within designated limits of the harbor did not have to be documented by the federal government. However, the Bureau of the Census of the United States Department of Commerce in 1916 (two years after L.V.R.R. No. 79 was built) provided the figure of 5,433 unrigged craft operating in New York Harbor. This figure represents over one-fourth of such vessels in the country.

A small fraction of these unrigged vessels were car floats which carried loaded railway freight cars across the harbor. The great majority were barges like the L.V.R.R. No. 79 which carried "less than carload lots" of goods transferred from the railway freight cars to a barge by stevedores on New Jersey piers.

Perishable goods were carried on covered barges like L.V.R.R. No. 79. Covered barges, as the name implies, had a permanent structure sheltering the main deck, inside which the cargo was stowed. The cargo was brought onboard by stevedores using hand-trucks through doors on the sides and tightly stowed in tiers. Often it was discharged on the other side of the harbor in the same manner. However, if it had to be hoisted up the side of a ship, cargo hatches were provided for this purpose in the roof of the shed structure directly above the sliding cargo doors.

If the goods had to be kept dry while they were on the barge, a stove was fitted in the center of the shed isolated from the cargo by iron bars. If the goods had to be kept cool, blocks of ice were stowed in large ice boxes at either end of the shed. Barges carrying large amounts of ice had windmills located on the roof which pumped out meltwater.

Covered barges in use by the railroads early in this century evolved from the number of barge types first developed in the harbor between 1820 and 1850 which carried passengers wary of the frequent steamboat boiler explosions. Other early barge types during this period included excursion barges, immigrant barges for people moved between incoming ships and Ellis Island, produce barges from upriver farms, ice barges carrying ice harvested on lakes in the Hudson Valley and the upper river, and livestock barges being moved between stockyards in Jersey City and markets on the west side of Manhattan.

Each railroad barge was the responsibility of a barge captain who was expected to live aboard. The captain's duties included handling lines when the barge was being moved around and the responsibility for its general upkeep. He

United States Department of the Interior
National Park Service

FEB 2 1989

National Register of Historic Places
Continuation Sheet

Section number 8 Page 3

Lehigh Valley Railroad Barge #79, Edgewater
Borough, Bergen County, New Jersey

also had to tally the cargo as it was being loaded and discharged, and he served as a watchman to prevent any of the cargo being stolen.

The Department of Labor survey of 208 barges made in 1918 found 89 barges with families onboard, 71 with a captain and wife, and only 48 with just a captain. Companies encouraged family boats because married captains were more responsible and the boats tended to be better maintained. Insurers required a captain aboard a loaded boat at all times. This was easier if there were family members to handle shopping and errands. This very large floating population is an almost forgotten chapter in the social history of the New York Harbor. Yet it existed recently enough that there are people living today who were raised as children on these barges.

Barge operation was particularly appealing to young immigrant families. There was no rent to pay, and the railroad provided coal for the stove and kerosene for the lamps. Cargo that spilled--rice, coffee, sugar, flour and spices, could be salvaged by the captains and bartered with other barges. Though not spacious, the living quarters were bigger and more airy than those of canal boats of the period. The L.V.R.R. No. 79 has a large single room almost intact including furnishings except for the stove. Some barges had two or three rooms although their overall area was usually not much greater than this single room.

Wooden barges like the L.V.R.R. No. 79 were standard equipment of the railroads from the 1860's to 1928. As far as can be determined from analysis of the Lehigh Valley Railroad's annual reports, the railroad acquired no new barges after 1928 and through the Depression. After this period, any barges it acquired would have been made of steel construction, as good long-leaf yellow pine had become prohibitive in price after this time and in fact was doing so during the 1920's. Steel covered barges were simply last generation wooden covered barges built from a different material.

The 1960's and the 1970's saw the demise of the lighterage system. Paved highways and road tunnels and bridges made possible delivery of goods from manufacturers to consumer without costly transfer costs. Competition from the trucking industry led to the decline of the railroad's freight services. The shipping industry's adoption of containerization after 1960 was the final blow. Goods now travel in standard containers usually forty feet in length which are quickly transferred from one mode of transportation to another and serve all the protective functions of a freight car, warehouse and/or covered barge. The barge shed is not only redundant, but a hindrance to this type of operation. The last use of a steel covered barge in the New York Harbor was the transfer of bagged

United States Department of the Interior
National Park Service

FEB 2 1989

**National Register of Historic Places
Continuation Sheet**

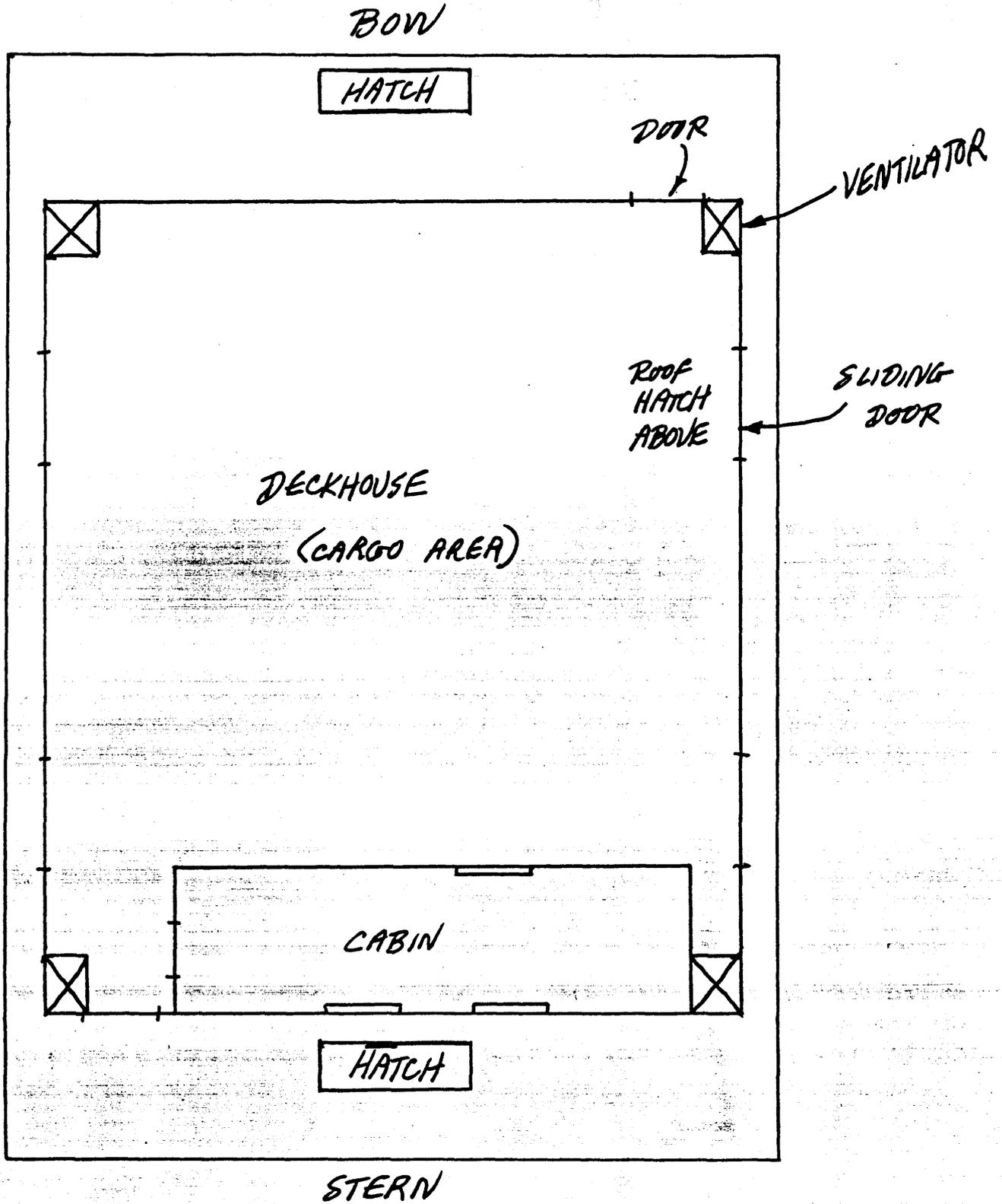
Section number 8 Page 4

Lehigh Valley Railroad Barge #79, Edgewater
Borough, Bergen County, New Jersey

coffee in Brooklyn to the Maxwell House Coffee Plant in Hoboken in 1984. This final trip marked the retirement of the covered barge. A shipping container was developed which provided the delicate environment required in coffee transport.

Wooden barges were abandoned in the 1960's and 1970's along the New Jersey side of the Hudson River in the convenient mud-flats and abandoned railroad properties. Their wooden construction made them worthless as scrap and also led them to deteriorate quickly once abandoned. A few covered barges were converted to clubhouses and storage for boating clubs and small marinas. Prior to its present owner, the L.V.R.R. No. 79 was acquired at a railroad auction and used for storage by a pile driver. As this purpose utilized only the interior of the deckhouse without conversion, her historic configuration remained unchanged. The Lehigh Valley Railroad Barge Number 79 appears to be the best remaining example of this type surviving today in the New York Harbor, both unaltered and in largely sound condition.

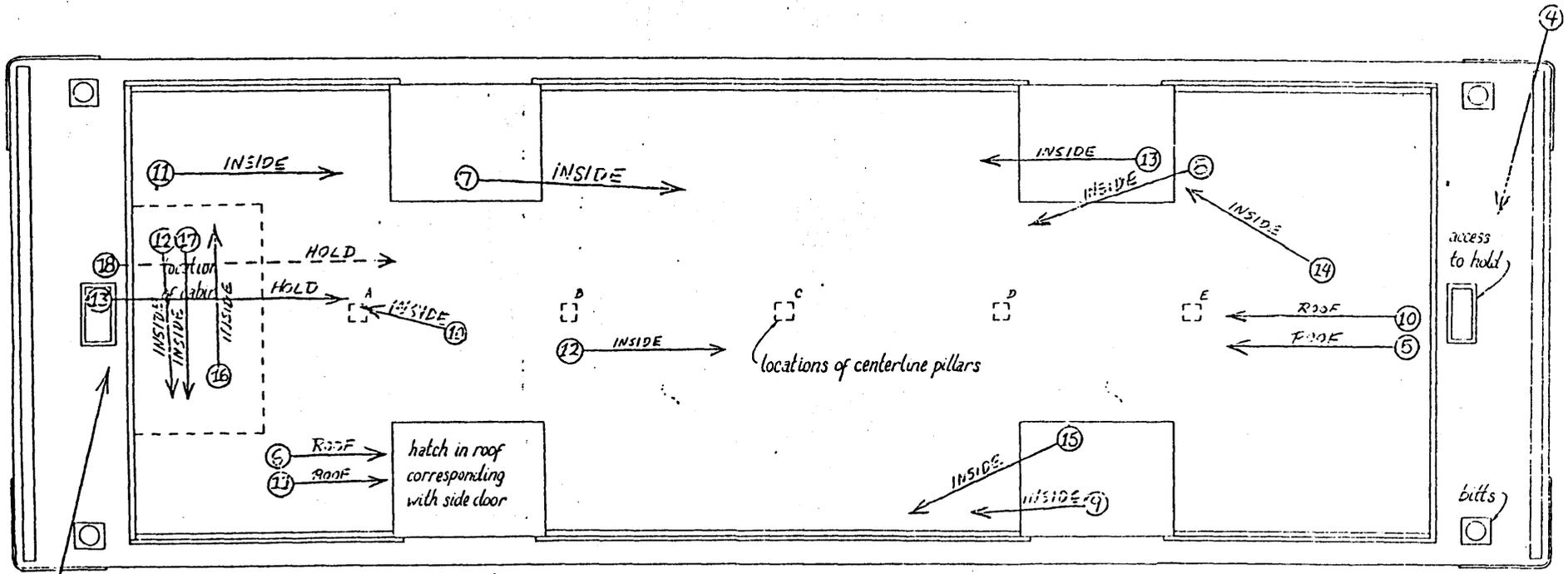
Lehigh Valley Railroad Barge #79
Edgewater Borough
Bergen County, New Jersey



PLAN OF L.V.R.R. NO. 79 - NOT TO SCALE

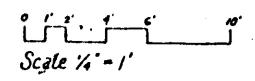
W. J. Bennett 4/87

Lehigh Valley Railroad Barge #79
 Edgewater Borough
 Bergen County, New Jersey



8 Overall plan view - stern to left

- Slides
- Photographs



9