NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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 Captain Meriwether Lewis
other names/site number Dredge Captain Meriwether Lewis

2. Location

street & number SE of Brownville ☐ not for publication
city, town Brownville ☒ vicinity
state Nebraska code 31 county Nemaha code 127 zip code

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)		buildings
☐ public-local	☐ district		sites
☒ public-State	☐ site	1	structures
☐ public-Federal	☒ structure		objects
	☐ object		Total

Name of related multiple property listing:

Number of contributing resources previously listed in the National Register 1

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.

Signature of certifying official — Date

State or Federal agency and bureau

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

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:) _____

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
Transportation-Water Related	Museum

7. Description

Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)
N/A	foundation N/A walls N/A roof N/A other N/A

Describe present and historic physical appearance.

The 1931 former U.S. Army Corps of Engineers dredge Captain Meriwether Lewis is a dry-berthed historic museum vessel displayed in an excavated and diked boat basin on the banks of the Missouri River on the outskirts of Brownville, Nebraska. Captain Meriwether Lewis was listed in the National Register of Historic Places on October 29, 1977. Owned and operated by the Meriwether Lewis Foundation, Inc., the vessel has also housed the Museum of Missouri River History since June 1981.

Captain Meriwether Lewis as Built and Maintained

As built in 1931, Captain Meriwether Lewis is a steel-hulled sidewheel dredge with a steel and wood superstructure. Originally riveted, the hull underwent some later repair and replacement; the bottom was replaced with continuous-weld steel plate in 1962. Captain Meriwether Lewis is 268.11 feet in length with a 50.0-foot beam, and 8.6-foot depth of hold, a 4.6 to 5.0-foot draft, and displaces 1,456 tons. The height of the vessel from bottom to superstructure is 48 feet; with the stacks up, the vessel's height is 62.6 feet. [1] The hull is of typical dredge design--a shallow oblong hull with longitudinal and transverse bulkheads that strengthen the vessel and reinforce the bottom in the event the dredge grounds on a shoal or sandbar. [2]

The riveted steel decks and lower portions of the superstructure support a large wooden house that covers much of the hull. The superstructure is a two-level structure. The lower level, on the main deck, is divided into four major areas: 1) the open dredge intake and derrick area; 2) the engineroom; 3) the boiler flat; and 4) the machine shop. The upper level, on the Texas deck, is also divided into four major areas: 1) an open central engineroom well surrounded by fourteen staterooms and heads; 2) the galley, with separate wardroom and mess; 3) "bunkhouse" style crew

[X] 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 NHL CRITERIA 1, 4

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

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Maritime	1931-1965	
Commerce	1931-1965	
Architecture (Naval)	1931	
Technology		
NHL: XII L		
Business: Shipping & Transportation		

Cultural Affiliation

Significant Person

Architect/Builder
Marietta Manufacturing Co.

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

The 1931 U.S. Army Corps of Engineers dredge Captain Meriwether Lewis is one of only a handful of surviving U.S. Army Corps of Engineers vessels built to control the Nation's inland waters. None of these vessels dates to earlier than the 1920s. One of the largest and oldest of these vessels, and possessing a high degree of integrity, Captain Meriwether Lewis is of national significance as one of the best preserved examples of an inland waters dredge and as the best preserved pipe-line suction cutter dredge in the United States. Part of a comprehensive plan by the federal government for flood control and to improve navigation on the upper reaches of the Missouri River--particularly between Kansas City, Missouri, and Omaha, Nebraska--Captain Meriwether Lewis is a unique structure significant to the 20th century development of the Missouri River. Lewis did dredging and flood control work on the river, an important part of America's inland waterway since the Civil War, at a time of serious federal efforts to improve the river's navigation. The importance of the river and this work to the Nation was reflected in a series of Congressional appropriations from the late 19th through the early 20th centuries to provide better navigation and flood control for the Missouri River basin. This work, in large part accomplished by Captain Meriwether Lewis, not only had an impact not only on the physical, economic, industrial, and commercial environment of the region but on the entire Nation. For her significant role in this program and her alteration of an important part of the Nation's system of internal waterways and riverine navigation, Captain Meriwether Lewis is of national significance.

The preceding statement of significance is based on the more detailed statements which follow.

☒ See continuation sheet

9. Major Bibliographical References

SEE FOOTNOTES IN TEXT

☐ See continuation sheet

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 # _____

Primary location of additional data:

- ☐ State historic preservation office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☒ Other

Specify repository: Meriwether Lewis Foundation

10. Geographical Data

Acreage of property Less than one acre

UTM References

	Zone	Easting	Northing
A	15	275030	4474740
B			
C			
D			

☐ See continuation sheet

Verbal Boundary Description

All that area encompassed by the extreme length and beam of the vessel.

☐ See continuation sheet

Boundary Justification

The boundary encompasses the entire area of the vessel as she rests in her dry berth.

☐ See continuation sheet

11. Form Prepared By

name/title James P. Delgado, Maritime Historian
organization National Park Service (418) date July 9, 1988
street & number P.O. Box 37127 telephone (202) 343-4104
city or town Washington state D.C. zip code 20013

quarters; and 4) the chartroom, flanked by the captain and chief engineer's cabins. Atop the superstructure, on the hurricane deck, are the twin stacks and the pilothouse with flying bridges forward. Captain Meriwether Lewis was built to accommodate 58 people, usually operating with a crew of 52 aboard, with 11 crew members required for one shift.

The dredge was propelled by two 800-h.p. horizontal compound condensing engines 20 x 40 inches with a 7-foot stroke built by the vessel's builders, the Marietta Manufacturing Co. of Mount Pleasant, West Virginia. The engines drove Lewis' two steel and white oak sidewheels, each 25 feet in diameter and 13.6 feet wide. Steam was provided through the dredge's two diesel-fired water-tube boilers built by the Foster-Wheeler Corporation of New York. The pumping engine, located on the keelson, is a single 1,300-h.p. triple-expansion marine steam engine manufactured as engine no. 1507 by the American Shipbuilding Co. of Lorain, Ohio. Drawing river water from the Missouri, the pumping engine directed water into a 250-h.p. steam turbine once it was filtered. From the turbine the water was jetted into the river bottom or bank through 38 nozzles. As the face of the cut collapsed or the bottom was cut up, the large 36-inch diameter intake pumped the nearly liquid mud at 40,000-g.p.m. out into the 34-inch diameter discharge pipe, which attached aft and ran out on floating pontoons for a distance of 500 to 1,000 feet. The pipe was set on a center-pivoting mount on each pontoon to make a snaking line. The last section of pipe on its pontoon was steered by a member of the crew in a small "dog house." The snaking pontoon line was steered by directing the force of the discharged water and mud into a baffle plate. [3]

To dredge, Captain Meriwether Lewis would set two hollow steel piles by jetting water through them. Once the piles were set, the vessel would back up along the line of the channel to be dredged until the full 3,600-foot length of 1-1/8-inch steel cable was reached. Using two massive winches at the port and starboard sides of the bow, Lewis would slowly move forward, cutting a 50-foot wide, 20-foot deep channel. The vessel was capable of dredging, on an average, 80,000 cubic yards of spoil. A large derrick, manufactured by the American Hoist and Derrick Co. of St. Paul, Minnesota, was located at the bow and was used to set and pull the piles; to anchor, two 20-inch square steel spuds, 38 and 42 feet long, were dropped into the bottom to hold the vessel fast in the swift river current. [4]

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Present Appearance of Captain Meriwether Lewis

Other than the periodic repair of her machinery and the replacement of some portions, such as two generators, bottom hull plates, and the discharge pipe, which has the date 12-12-60 etched into its surface, Captain Meriwether Lewis remained basically unaltered through 37 years of operation. The only post-career change to the vessel was the removal of 28 bunks and lockers from the crew quarters aft and the installation of display cases and panels to create the Museum of Missouri River History in 1981. The vessel was removed from the water in 1977 to avoid sinking or flood damage in a constantly fluctuating Missouri River. Placed in a specially excavated and diked basin on the bank, Captain Meriwether Lewis rests atop concrete capped pilings and steel I-beams. The level of the basin is equivalent to the dredge's waterline, and at a distance Lewis appears much as she did when afloat. Displayed as if in operation, Captain Meriwether Lewis is tethered by her cables to the two steel piles used when dredging. Two sections of the pontoon-supported discharge line are displayed off the aft port quarter, one being the last section with the dog house and baffle plate for steering the line. The vessel is maintained in excellent condition, is clean and exhibits no major signs of rust or deterioration.

Touring the interior of Captain Meriwether Lewis offers a view of the vessel as a largely unchanged artifact of the 1930s through the early 1960s. All original equipment, including engineroom gauges, builder's plaques, and a machine shop aft filled with spare parts, drills, presses, lathes, a shaper, and an anvil are indicative of Lewis's self-sufficiency on the river. A spare rudder is fitted aft on the deck. The crew quarters are in good condition, with furnishings, and the charthouse, when turned over, contained the blueprints for the vessel, now in museum storage. The galley contains the diesel fired "Traditional Webb Perfection Galley Range," manufactured by Elisha Webb & Son of Philadelphia, and the wardroom table and chairs serve as a meeting location for the Meriwether Lewis Foundation. The pilothouse contains original equipment and is unaltered except for the switch during the vessel's career from wheel to tiller, the installation of picture windows, and the absence of the dredge's bell, which was retained by the U.S. Army Corps of Engineers at their Gasconade, Missouri, boatyard.

SEE CONTINUATION SHEET

NOTES

1
Penelope Chatfield, "National Register of Historic Places Inventory/Nomination Form, `Captain Meriwether Lewis,' Brownville, Nebraska," (1977) Manuscript on file at the National Register of Historic Places, National Park Service, Washington, D.C.

2
A.C. Hardy, American Ship Types: A Review of the Work, Characteristics, and Construction of Ship Types Peculiar to the Waters of the North American Continent (New York: D. Van Nostrand Co., Inc., 1927) pp. 241-242.

3
Chatfield, op. cit., and interview with Clay Kennedy, Curator, Captain Meriwether Lewis on board the vessel, April 19, 1988.

4
Ibid.

Developing the Missouri River Basin for Safe Navigation

The Missouri River, known colloquially to many of its neighbors as the "Nebraska seashore," has been an important link in the Nation's internal system of navigation since the mid-19th century. Significant in the advance of settlement, riverboats and steamers on the Missouri helped build up the midwest and pave the way for westward migration. Later, a decline in river travel was caused by the rise of railroads as well as difficulties caused by snags, shoals and uncontrolled flooding which hampered navigation on the river. Realizing the importance of the river as a major link to the Nation's agricultural heartland as well as its part of the western river system's tie to the Gulf of Mexico and intercoastal shipping, Congress responded to regional requests for assistance by funding a variety of projects and supporting the important activities of the regional district United States Army Corps of Engineers headquartered on the river at Kansas City, Missouri, and Omaha, Nebraska.

The Corps of Engineers had been responsible for improving the Missouri since 1832, when Congress first appropriated funds for snag removal on the river. The first annual Congressional appropriations for the river began in 1878 and continued through an economic boom on the Great Plains in the 1880s as agricultural interests lobbied for river improvement to facilitate easier and less expensive grain-hauling downriver. Under the auspices of the Missouri River Commission, the U.S. Army Corps of Engineers planned the first comprehensive work on the river. Revetments to control flooding and bank erosion and to encourage the currents to dig wider, deeper channels were constructed, but Congressional interest and funding declined after the 1880s. In 1902 the Missouri River Commission was abolished, and in the next decade 33 to 50 percent of the improvements installed in the 1880s were destroyed by the river. [1]

Increased interest by Congress in navigation between St. Louis and Kansas City resulted in appropriations for that stretch of the river in 1912 and 1923, but it was not until 1926 that federal funds were again allocated for improvements upriver from Kansas City. An instrumental figure in the change of heart was Secretary of Commerce and soon-to-be President Herbert C. Hoover. At the Missouri River Improvement Conference at Kansas City, on October 19, 1925, Hoover proposed a 9,900-mile national system of interconnected waterways stretching from Chicago to New Orleans and Pittsburgh to Kansas City. Hoover's plan was accepted by

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Congress, and in 1927 the River and Harbor Bill was passed to implement it. Specifically included were improvements to the Missouri River from Kansas City north past Omaha to Sioux City, Iowa. Funding to continue this work was regular and consistent (except for 1944 and 1945).

The need for improvements on the Missouri was underscored by the disastrous Mississippi River flood of 1927 and the resultant public outcry for flood control on the Mississippi and its tributaries. The passage of the Flood Control Act in 1928 appropriated funds to build reservoirs for flood control and to stockpile water for irrigation during low water on the Missouri and also specifically called for a 200-foot wide, 6-foot deep channel with shaped and stabilized banks from the river mouth to Sioux City. To undertake this work, the Army Corps of Engineers built two sister dredges, Captain Meriwether Lewis and Captain William Clark, in 1931 and 1932, respectively. The work of these vessels and other Corps activities on the river were supported by the River and Harbor Acts of 1935 and 1938 and the Flood Control Acts of 1936, 1944, and 1946. As a result of these appropriations and the work of the Corps and its dredges, today an intricate system of dams on the Missouri and its tributaries provide flood control, irrigation, hydroelectric power, and safe navigation within a 9-foot deep channel for the entire river basin. A 732-mile stretch of the river from the mouth to Sioux City is open for the 8-month navigation season. Tonnage operating on the river steadily increased as a result, rising from 300,000 tons in 1954 to 2,600,000 tons in 1972, with grain, the principal downriver freight, comprising 40 percent of the traffic. [2]

Construction and Career of Captain Meriwether Lewis

To meet the requirements to dredge and control the Missouri River north of Kansas City, the Kansas City District of the US Army Corps of Engineers drafted plans and specifications for two large "dustpan" pipe-line suction dredges in 1930. A successful bid of $843,670 per vessel was accepted from the Marietta Manufacturing Co. of Mount Pleasant, West Virginia, and on August 22, 1931, construction of Captain Meriwether Lewis began. The contract and the work at the yard was a boon to Depression-ravaged Mount Pleasant as a work force of 180 to 210 men labored six days a week. Completed in just 232 days, Captain Meriwether Lewis was launched on December 12, 1931, and on April 11, 1932, made her trial trip.

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Assigned to the Kansas City District, the new dredge's first job was at Cambridge Bend, near Glasgow, Missouri, on May 21, 1932. From that time Captain Meriwether Lewis worked without interruption from 1932 to 1965 during the period of major development on the river. The typical work schedule for the dredge was 24 hours a day from April to November, 5 to 7 days a week. Three crews totalling 50 to 65 men were required to maintain the work schedule. [3] During the winter months, when the flooding river was filled with deadheads and floating debris, Lewis wintered at the Florence Boat Basin in Omaha. Reassigned to the Omaha District in 1941, Lewis then worked from Rulo, Nebraska to Sioux City, Iowa. The largest dredge assigned to the Nebraska section of the river, Captain Meriwether Lewis also served as operational center for rescue work during a Mississippi River flood and was also open on three occasions for public tours in Brownville, Nebraska, during the town's river festival.

With her job basically done and the cost of fuel making her diesel-fired steam engines too expensive to operate (Lewis burned 4,000 to 6,000 gallons of fuel per 24 hours of operation) the dredge was retired after 1965. Her last jobs were maintenance dredging of the Florence Boat Basin in November 1965 and again in May 1969. Moved to the Corps' Gasconade, Missouri Boatyard on May 19, 1969, Captain Meriwether Lewis was laid-up until June 1976, when she was declared surplus and sold for consideration of $1 to the Nebraska State Historical Society. Lewis was towed upriver to Brownville in April 1977. Placed in a temporary lock basin on May 29, 1977, the dredge was shifted on to her dry berth cradle on June 14, 1979. Open to the public since then, the vessel became the home of the Museum of Missouri River History on June 7, 1981. Recently acquired and now operated by the Meriwether Lewis Foundation, Meriwether Lewis is an important part of historic Brownville, a significant river community and historic district.

NOTES

1
See Henry C. Hart, The Dark Missouri (Madison: University of Wisconsin Press, 1957). A significant early steamboat loss on the Missouri just north of Omaha was the 1865 wreck of Bertrand, whose rediscovery and excavation in 1969 has provided one of the best archeological insights into the frontier process on the inland rivers and the Montana mining frontier reached by these

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vessels. Also see "The Missouri River: Its Discovery, Its Region and Resources, Its Navigation, Its Future," Nebraska History VIII (1), January-March 1925, pp. 16-63.

2
See U.S. Congress, House Committee on Rivers and Harbors, Missouri River, H. Ex. Doc. 238, 1935; U.S. Army Corps of Engineers, Missouri River Division, The Development and Control of the Missouri River. (Omaha: U.S. Army Corps of Engineers, 1947); and U.S. Army Corps of Engineers, Missouri River Division, Reservoir Control Center: Main Stem Reservoir System (Omaha: U.S. Army Corps of Engineers, 1973).

3
U.S. Army Corps of Engineers, Omaha District, "Standard Operating Procedure for Towboats and Dredges," February 1, 1957. Mimeographed manuscript on file at the Nebraska State Historical Society, Lincoln.