

Final nomination
Bollman Bridge

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 for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. 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. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word process, or computer, to complete all items.

1. Name of Property

historic name Bollman Bridge, Wernwag or Latrobe Bridge

other names B & O Railroad Potomac River Bridge

2. Location

street & number At the confluence of the Potomac and Shenandoah Rivers not for publication

city or town Harpers Ferry, WV vicinity

state WV code WV county Jefferson code 037 zip code _____

3. 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. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments).

Signature of certifying office/Title _____ Date _____

State or Federal agency and bureau _____

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments).

Signature of certifying office/Title _____ Date _____

State or Federal agency and bureau _____

4. State/Federal Agency 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

Bollman Bridge
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5. Classification

Ownership of Property
(Check as many boxes as apply)

Category of Property
(Check only one box)

Number of Resources within Property
(Do not include previously listed resources in the count)

- private
- public-local
- public-State
- public-Federal

- building(s)
- district
- site
- structure
- Object

Contributing	Noncontributing	
		Buildings
		Sites
1		Structures
		Objects
		Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

Number of contributing resource previously Listed in the National Register

Historic Properties of the Harpers Ferry National Historical Park

1

6. Function of Use

Historic Functions
(Enter categories from instructions)

Current Functions
(Enter categories from instructions)

Transportation/rail-related

Ruin

7. Description

Architectural Classification
(Enter categories from instructions)

Materials
(Enter categories from instructions)

N/A

Foundation N/A

Walls

Roof

Other

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

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Physical Description:

At the Junction of the Shenandoah and Potomac Rivers are ruins of the abutments and piers of two early railroad bridges which shared the same alignment. The more recent of these two bridges was the famous Bollman Metallic Truss developed by Wendall Bollman, engineer, who served for some years as Master of the Road for the B & O Railroad. Completed in 1870, the Bollman Bridge was used by rail and highway traffic until it was destroyed by floods in 1936. The westernmost span of this bridge carrying the Valley or Winchester Branch was built in 1851 and was one of the earliest examples of Bollman's truss system. This original Bollman section was a single suspension truss of wrought iron, 124 feet in the clear span. At that time the remainder of the bridge was timber construction.

The original railroad bridge was a covered timber structure. Built in 1836-37 this bridge presumably consisted of sheathed wooden trusses. Designed by Benjamin Latrobe, then Chief Engineer in Bridge Design for the B & O, it was constructed by Lewis Wernwag. After 1839, this bridge had a unique Y form to accommodate two branches of the railroad.

The current remaining structures include the ruins of the six stone piers and two stone abutments. In extremely low water, pieces of the iron superstructure from the Bollman Bridge are visible on the Potomac River bottom. The piers and abutments are constructed of finely cut stone masonry, the westernmost pier, near the Harpers Ferry abutment is double the length of the other piers, indicating the location of the "Y" built for the B&O extension to Cumberland in 1841-42.¹

Several of the piers exhibit extensive new damage resulting from the back-to-back floods of 1996.

¹Charles W. Snell and Barry Mackintosh, National Register Nomination Form, Harpers Ferry National Historical Park, 1980, continuation sheet, Item 7, page 22.

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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 pattern of our history.
- B Property 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 as yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply)

Property is:

- 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 of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets)

Area of Significance

(Enter categories from instructions)

Transportation

Period of Significance

1836-1936

Significant Dates

1851, 1861

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)

Previous documentation on files (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

Name of repository: _____

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Statement of Significance:

The Wernwag/Bollman Bridge Piers were extensively researched and recorded for a National Register Nomination entitled "Baltimore and Ohio Railroad Crossing of the Potomac River between Maryland Heights, Maryland and Harpers Ferry, West Virginia" submitted by Paula Stoner Dickey (now Reed) and Robert M. Vogel in 1979. The following statement is a summarization of the history of the Wernwag/Bollman Bridge in the significance section in their report with a few details added from a report written by D.E. Stinson. The Bollman Bridge remnants are being included in the multiple property documentation submission for Harpers Ferry National Park entitled "Historic properties of Harpers Ferry National Park." In 1992, the piers for the Bollman truss bridge included in the Maryland nomination were acquired by the Harpers Ferry National Historical Park and are therefore being added to the Park's nominated area. They are part of the contexts, "Development of Harpers Ferry as a Transportation/Communications Link" and "Harpers Ferry in the Civil War." The property type is "Rail-related Resource."

The Wernwag/Bollman Bridge Piers stand as ruined monuments to the determination of the railroad men to keep the B&O Railroad link between Maryland and West Virginia/Virginia open despite repeated destruction by war and floods. Notwithstanding their ruined state the piers represent the engineering ingenuity of the mid 19th century and the destructive force of the river.

The B&O Railroad first crossed the Potomac River at Harpers Ferry in 1836, connecting the B&O line from Baltimore with the Winchester and Potomac line on the point at Harpers Ferry, and, with the addition of the "Y" at the western end of the bridge, continued the main line on to Cumberland, Maryland.¹ This first structure was a covered bridge, constructed of timber, designed by Benjamin H. Latrobe, Chief Engineer for the B&O Railroad. Local bridge builder Lewis Wernwag oversaw construction.

The Wernwag Bridge, as it became known, operated both as a railroad bridge, and as a toll bridge for wagons and foot traffic. An 1836 Deed of Agreement between the B&O Railroad Co. and the Wager family, allowed the Wagers to continue collecting tolls on the new bridge, as they had on their earlier bridge, but ensured that no tolls would be collected on the railroad.² An 1840 Deed conveys the complete ownership of the Wernwag Bridge, including the right to collect tolls, the railroad company.³

¹D.E. Stinson, "The First Railroad Bridge at Harpers Ferry," manuscript, Harpers Ferry National Park Library, Harpers Ferry, WV, 1970, page 1 of insert.

²Washington Co. Land Records, Liber RR, Folios 148 and 374, Washington County Court House, Hagerstown, Maryland.

³Washington Co. Land Records, Liber UU, Folios 862, 864, 866.

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The timber Wernwag Bridge remained unchanged until 1851, when the span passing from the Harpers Ferry abutment to the first pier was replaced with an iron span. The B&O company twice replaced wooden spans which had collapsed in 1844 and again in 1845. The new 1851 iron span was of a new design, by Wendel Bollman. Perhaps only one span was replaced as an experiment with this new system of construction, described as "a single suspension truss of wrought iron, 124 feet in clear span."⁴ At the beginning of the Civil War the bridge remained in this configuration, one iron truss span, the rest covered timber. In June, 1861, Confederate troops burned the wooden section of the Wernwag Bridge and blew up the iron span as they left Harpers Ferry, leaving only the stone piers behind. Throughout the war years temporary bridge replacements were set up, and destroyed by troop action or by floods, no less than six times.⁵

With the close of the Civil War, the B&O Railroad Company set about replacing the Potomac River bridge. The extreme curvature of the tracks, both on the Maryland shore, due to the protuberance of the Maryland Heights, and on the Harpers Ferry side, because of the sharp turn north toward Cumberland, had been a problem of the old Wernwag Bridge. Even the slow trains of the 1830s to 50s, were forced to reduce speeds to navigate the curves. Despite the fact that slowing the trains cost the B&O company money, when the time came to replace the bridge, the higher cost of realigning the bridge, reducing the curves, outweighed the loss of time and money, even with the faster, longer, and heavier trains used following the war. Therefore, the new Bollman Iron Truss Bridge used the same piers and followed the same alignment as the old Wernwag Bridge.

The engineering marvel known as the Bollman Bridge, operated for 30 years as a railroad bridge and toll bridge for wagon and foot traffic, just as the earlier bridge had. But by the 1890s the railroad company could no longer tolerate the expense of operating trains on the extreme curves on either end of the bridge. In 1894 a new steel truss bridge was constructed for the railroad, following a new alignment north of the point at Harpers Ferry, and through a new tunnel at Maryland Heights. The Bollman Bridge was sold to the Harpers Ferry and Potomac Bridge Co., along with the right to collect tolls, for the purpose of carrying wagon and foot traffic only.

The Bollman Bridge continued in operation, eventually carrying the automobile traffic of State Route 340, and known as the Harpers Ferry Bridge, until the great flood of 1936. Higher than any previous recorded flood, the raging waters of the Potomac rose at an unimaginable rate. In a letter written by Dr. Henry McDonald, then President of Storer College, on March 18, 1936, "sometime about 7:30 the famous Bullman [Bollman] bridge over the Potomac went down..."⁶

⁴Stinson, p. 2 of insert.

⁵Ibid., p. 2 of insert.

⁶Dr. Henry McDonald, "The Flood of '36," General Correspondence, Storer College Collection, Harpers Ferry National Park Library, Harpers Ferry, WV.

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Property Chain of Title

(located in Washington Co. Maryland Land Records Office)

Liber 731, Folio 360

9 September 1992

Quitclaim Deed and Easement

“Grantor does hereby donate, grant, convey, release, assign and quitclaim”

To: USA

From: State of Maryland, Board of Public Works

“All those six(6) stone piers lying and being in Washington County, Maryland, designed between 1834 and 1837 by Benjamin Latrobe, which supported the original B&O Railroad Bridge that spanned the Potomac River between Harpers Ferry, WV and Washington Co., MD...”

Liber E.O. 201, Folio 667

22 August 1936

\$7,500.00

“...a certain bridge and bridge site, known as the Harpers Ferry Bridge...the abutments and piers thereof and the land upon which the same rest, and all the structure of said bridge as now standing...”

To: State of Maryland and State of West Virginia

From: Harpers Ferry and Potomac Bridge Co., WV

Liber 102, Folio 343

9 July 1894

\$25,000.00

To: Harpers Ferry and Potomac Bridge Co.

From: Daniel & Lena Lucas; A.W. & Mary McDonald; George & Lalie Baylor; E.B. & Julia Chambers; Forrest & Emma Brown [owners of Harpers Ferry and Potomac Bridge Co.]

Liber 101, Folio 663

24 May 1894

To: Lucas, Brown, McDonald, Chambers, and Baylor

From: Baltimore and Ohio Railroad Co.; Mercantile Trust and Deposit Co. of Baltimore, trustee in a Mortgage by B&O Railroad, 1887

Liber UU, Folio 862, 20 March 1840, Gerard Wager to B&O Railroad

Liber UU, Folio 864, 20 March 1840, Noah Swayne to B&O Railroad

Liber UU, Folio 866, 20 March 1840, Peter Wager to B&O Railroad

These three deeds conveyed ownership of the new Latrobe/Wernwag Bridge (viaduct) to the railroad company, including the right to collect tolls.

Liber RR, Folio 374, 23 March 1836, Peter Wager, James Wager to B&O Railroad

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Liber RR, Folio 148, 28 August 1825, Gerard Wager to B&O Railroad

These two deeds of Agreement allowed for the future building of a new bridge(viaduct), and to ensure that no tolls would be collected on the railroad by the Wagers.

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Major Bibliographical References:

Dickey, Paula Stoner, and Robert M. Vogel, "Baltimore and Ohio Railroad Crossing of the Potomac River between Maryland Heights, Maryland and Harpers Ferry, West Virginia," National Register Nomination Form, 1979.

McDonald, Dr. Henry T., "The Flood of '36," General Correspondence, Storer College Collection, Harpers Ferry National Park Library, Harpers Ferry, WV.

Snell, Charles W., and Barry Mackintosh, "Harpers Ferry National Historical Park," National Register Nomination Form, 1980.

Stinson, D.E., "The First Railroad Bridge at Harpers Ferry," manuscript, Harpers Ferry National Park Library, Harpers Ferry, WV, 1970.

Washington County Land Records.

Bollman Bridge
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10. Geographical Data

Acreage of Property Approximately 1

UTM References

(Place additional UTM references on a continuation sheet)

1	<input type="text"/>	<input type="text"/>	<input type="text"/>	3	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing		Zone	Easting	Northing
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	4	<input type="text"/>	<input type="text"/>	<input type="text"/>

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title Paula S. Reed, PhD, Architectural Historian and Edith B. Wallace, Research Associate
organization Paula S. Reed and Associates, Inc. date 2/99
street & number 105 N. Potomac Street telephone 301-739-2070
city or town Hagerstown state Maryland zip code 21740

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO)

name Harpers Ferry National Historical Park
street & number PO Box 65 telephone 304-535-6298
city or town Harpers Ferry state WV zip code 25425

Paperwork Reduction 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. 470 *et. seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the 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 Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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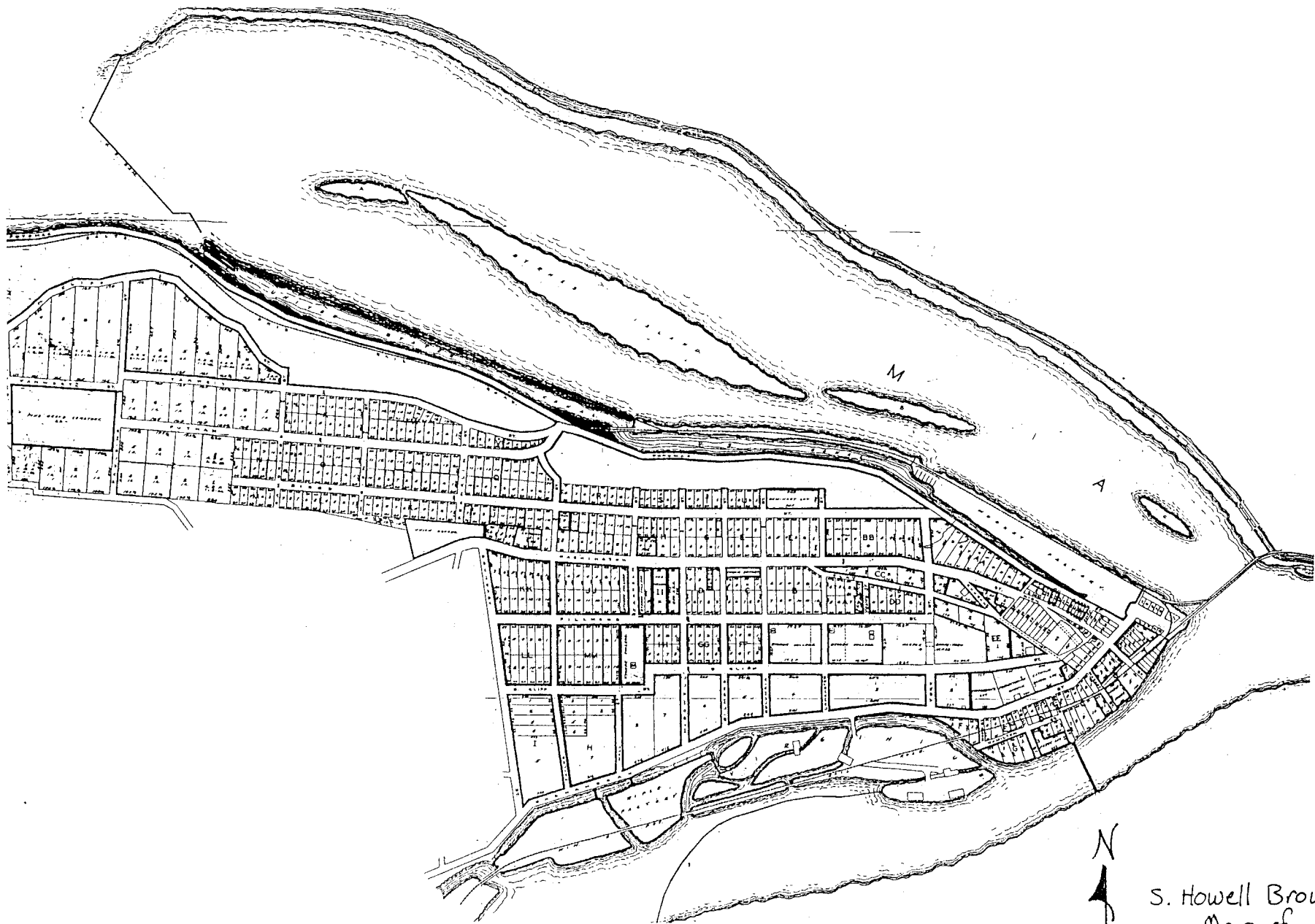
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Verbal Boundary Description:

The boundaries for the Bollman bridge piers encompass the property which was acquired by the Harpers Ferry NHP in 1992, and are included within the larger boundaries of the Harpers Ferry NHP.

Boundary Justification:

Already listed in the National Register in Washington County, the remnants of the Bollman Bridge are now being included with the Historic Properties of the Harpers Ferry National Historical Park because of the 1992 acquisition.



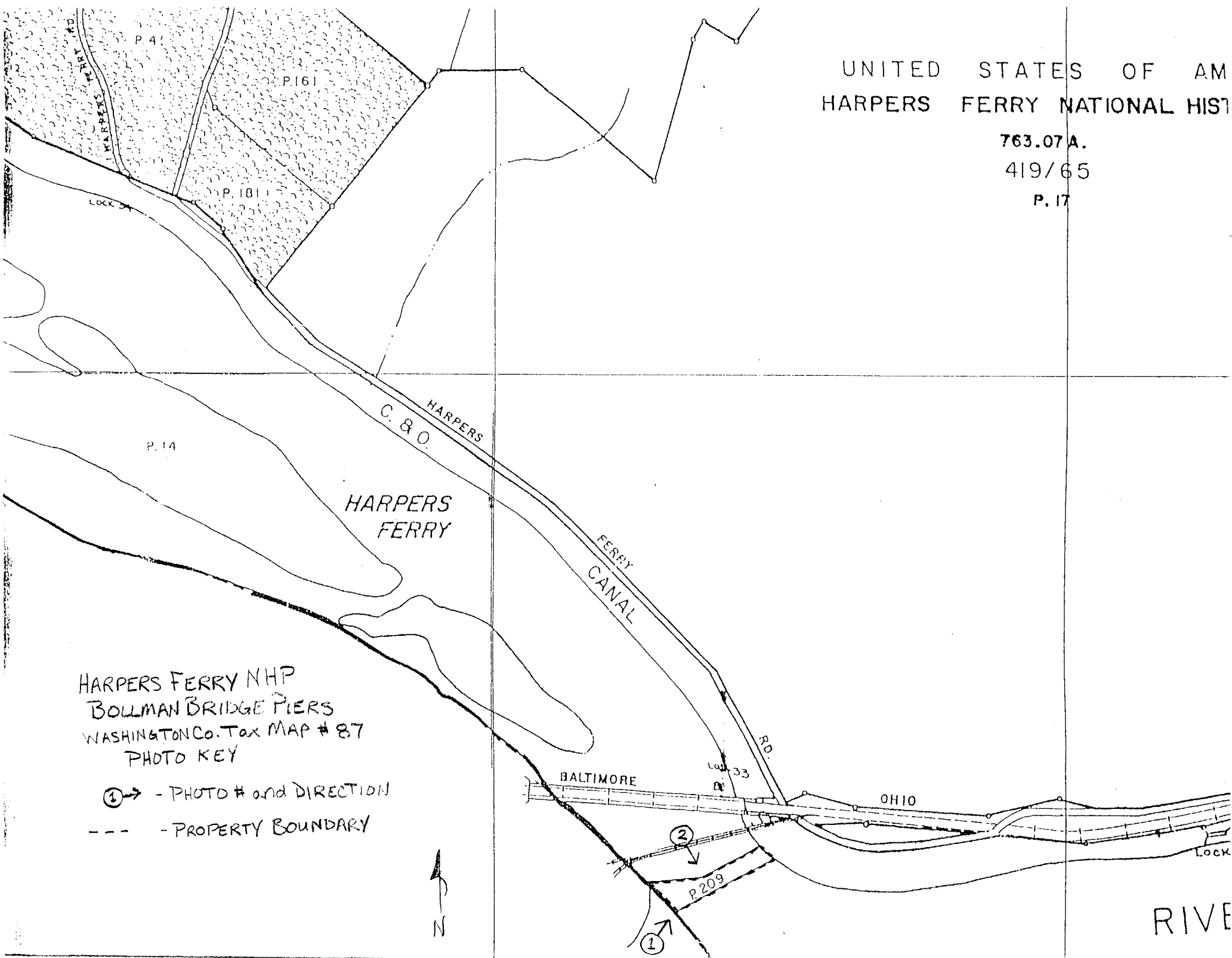
S. Howell Brown
Map of
Harpers Ferry
1869

UNITED STATES OF AMERICA
HARPERS FERRY NATIONAL HISTORIC SITE

763.07A.

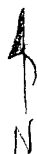
419/65

P. 17

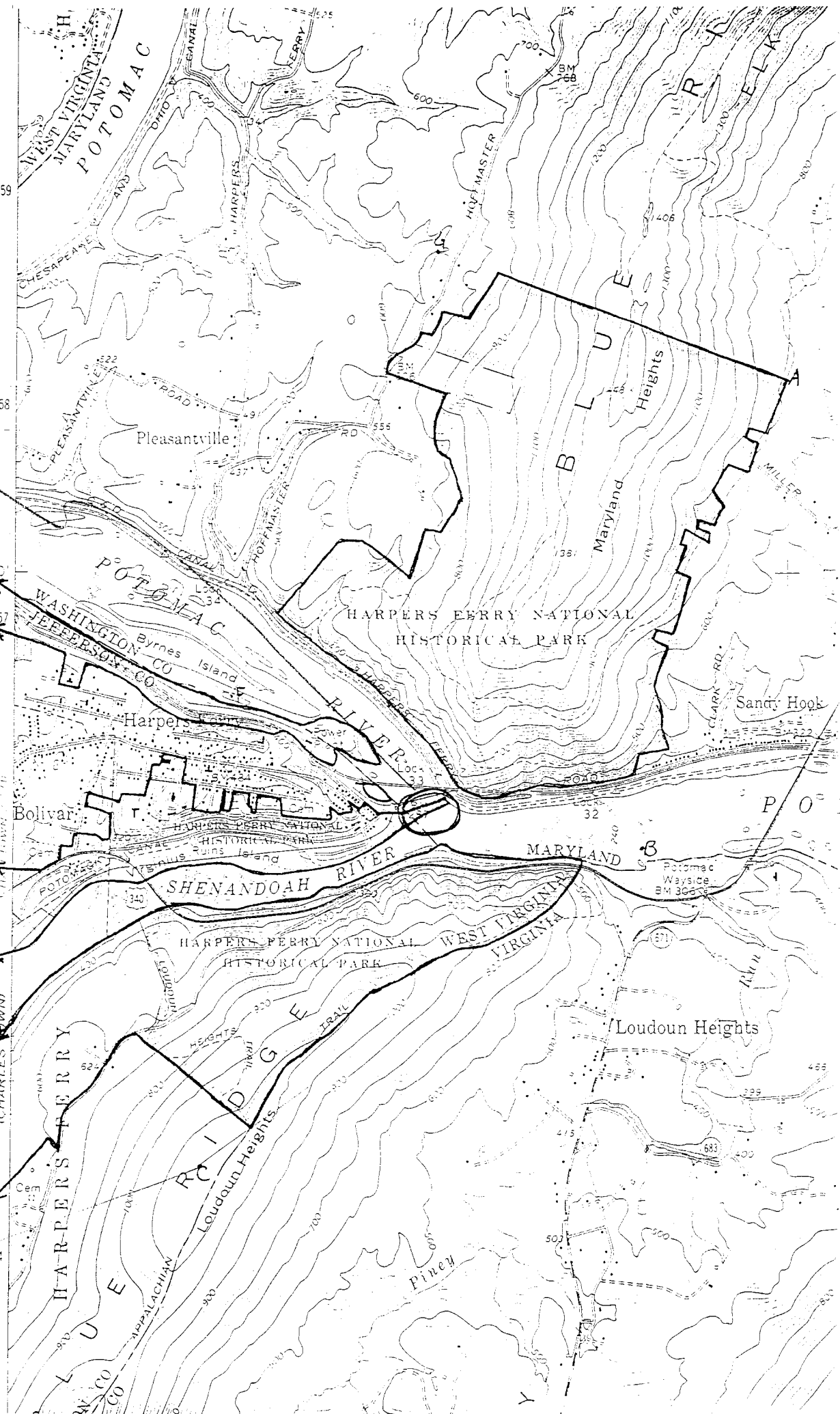


HARPERS FERRY NHP
BOLLMAN BRIDGE PIERS
WASHINGTON Co. Tax MAP # 87
PHOTO KEY

- ① → - PHOTO # and DIRECTION
- - PROPERTY BOUNDARY



RIVER

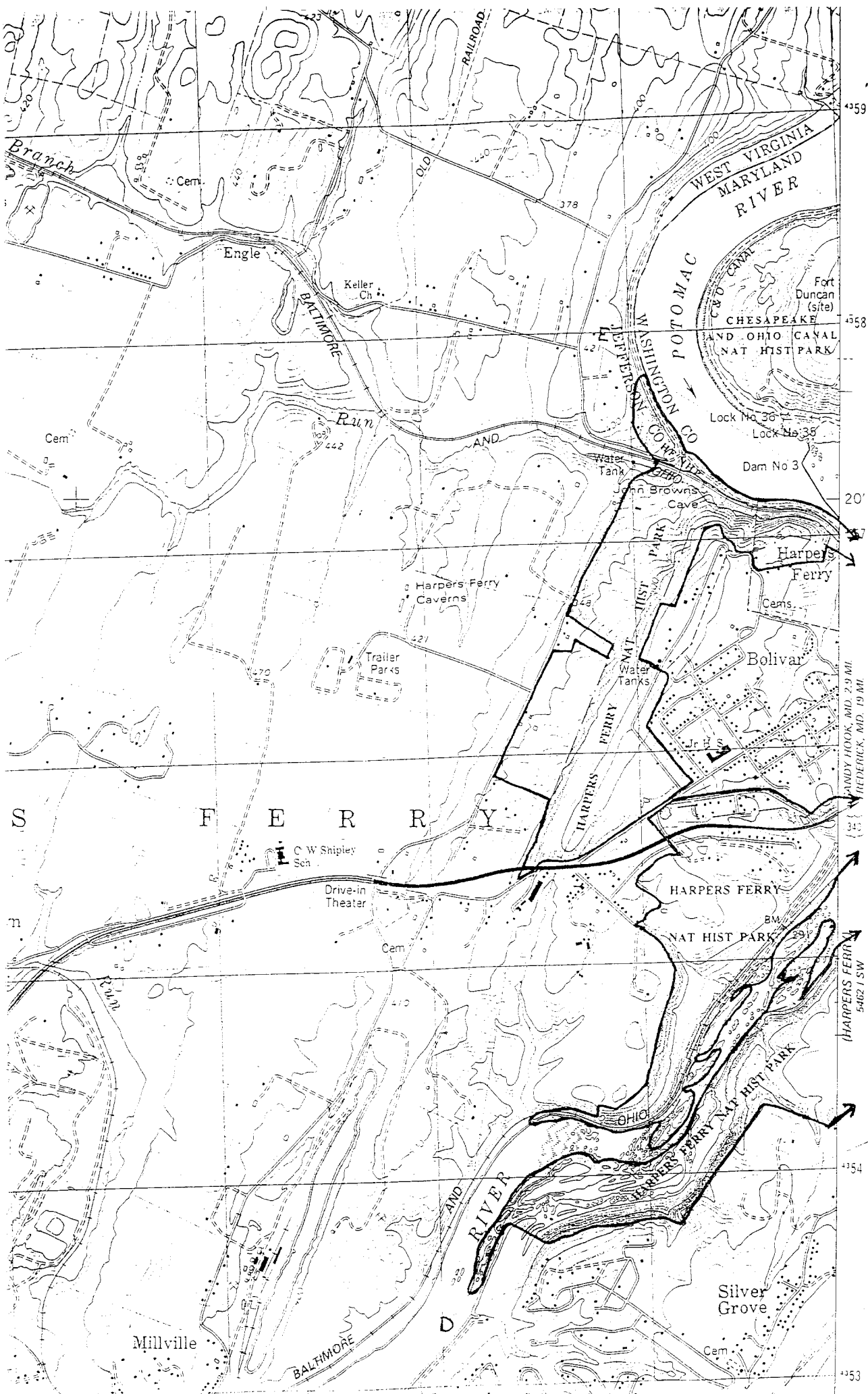


BOLLMAN
BRIDGE
PIERS

HARPERS FERRY NHP
UTM REFERENCES:

- A 18/266590/4357980
- B 18/265840/4355790
- C 18/263800/4354380
- F 18/263960/4356560
- G 18/264980/4358600
- H 18/269780/4355600
- I 18/266890/4353110
- J 18/266670/4353600
- K 18/267610/4355360
- L 18/269180/4356100

5962 IV SE
(CHARLES TOWN)



HARPERS FERRY NH
 UTM REFERENCES
 D 18/261030/4353380
 E 18/261880/4357920

WANDY HOOK, MD, 2.9 MI.
 FREDERICK, MD, 19 MI.
 (HARPERS FERRY) 54621 SW