RESEARCH REPORT,

HISTORY OF THE

LARGE AND SMALL ARSENALS,

1796-1869,

BLOCK A, LOTS 2, 3, 4, 5, 6, AND 7

SHENANDOAH STREET

Harpers Ferry National Monument

Prepared by:

Philip R. Smith, Jr.
Historian
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INTRODUCTION

It is the purpose of this report to bring together documentary evidence, maps, plans, prints and photographs from all available sources in a study of the two arsenals and buildings of the Harpers Ferry Armory. The construction and use of the arsenals will be considered in detail, and an 1859 Historical Base Map, with narrative, describing the physical appearance of the arsenals at the time of the John Brown Raid will be presented at the conclusion of this report.

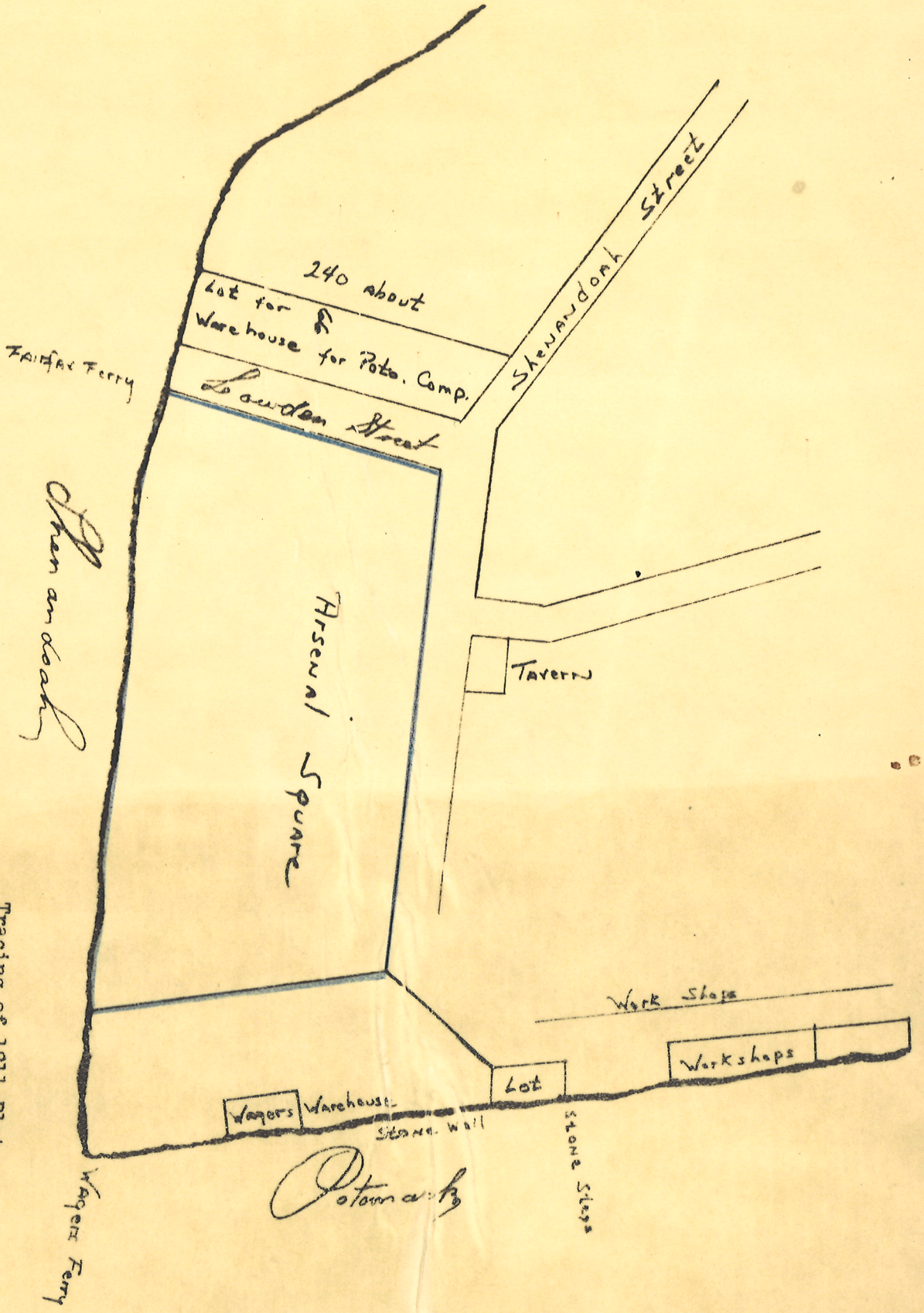
Before proceeding with the study it may be wise to define the meaning of the terms "arsenal" and "armory" as they were used prior to 1865. The term "arsenal," 1796 to 1865, was used to describe the place or building where the finished arms were stored, and the term "armory" was then applied to the place or buildings in which arms were manufactured; just the reverse of modern usage. In this report the term "Arsenal" is used in the historical sense, meaning a place where the finished arms were stored.

The "arsenal tract" at Harpers Ferry was geographically defined from 1796 to 1869 by the following boundaries. The lot was bounded on the south by the Shenandoah River and on the north by Shenandoah Street. The eastern end of the tract abutted on the Wager Ferry Lot and Potomac Street and the western side was bounded by the street known at various times as "Loudoun Street," "Globe Inn Alley" and finally, 1847-1958, as "Market Street." Two early maps are herewith presented to assist in visualizing the size and location of the tract under consideration. The first map was drawn by Josias Thompson in 1811 and submitted by Samuel Annin, Paymaster of the Harpers Ferry Armory, to the Secretary of War, Mr. William Eustus, on September 4,

1811.[1] The second map was drawn by James M. Brown in 1835, and clearly shows the relationship of the arsenal tract to the Wager Six Acre Reservation and Wager Ferry Lot at that date.[2]

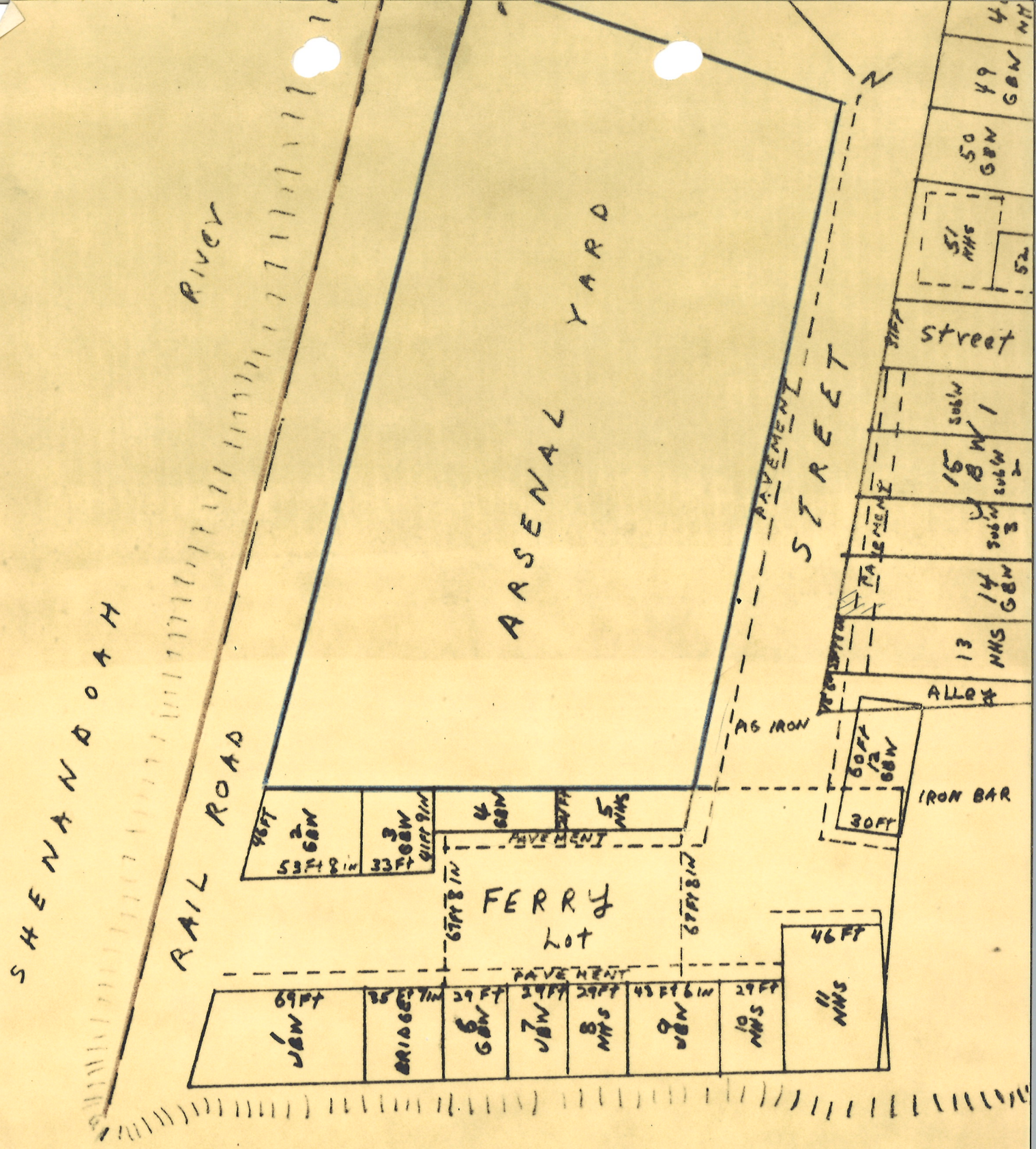
1. National Archives Material, Harpers Ferry Microfilm Collection, Reel 18, V.6, p.566.

2. "The Wager Six Acre Reservation and Ferry Lot," in Deed Book 29, p.140, Jefferson County Court House, Charles Town, West Virginia.



Tracing of 1811 Plat

Map No. 50
Drawer No. 7



1835 Nager Plat

Scale 1" = 60 Ft.

CHAPTER I - ARSENAL TRACT

1796-1805

A. THE CONSTRUCTION OF THE LARGE ARSENAL

On June 15, 1796, John Wager, Senior, sold for $7,016.66 the necessary land at Harpers Ferry to establish a Federal Armory at that place.[1]

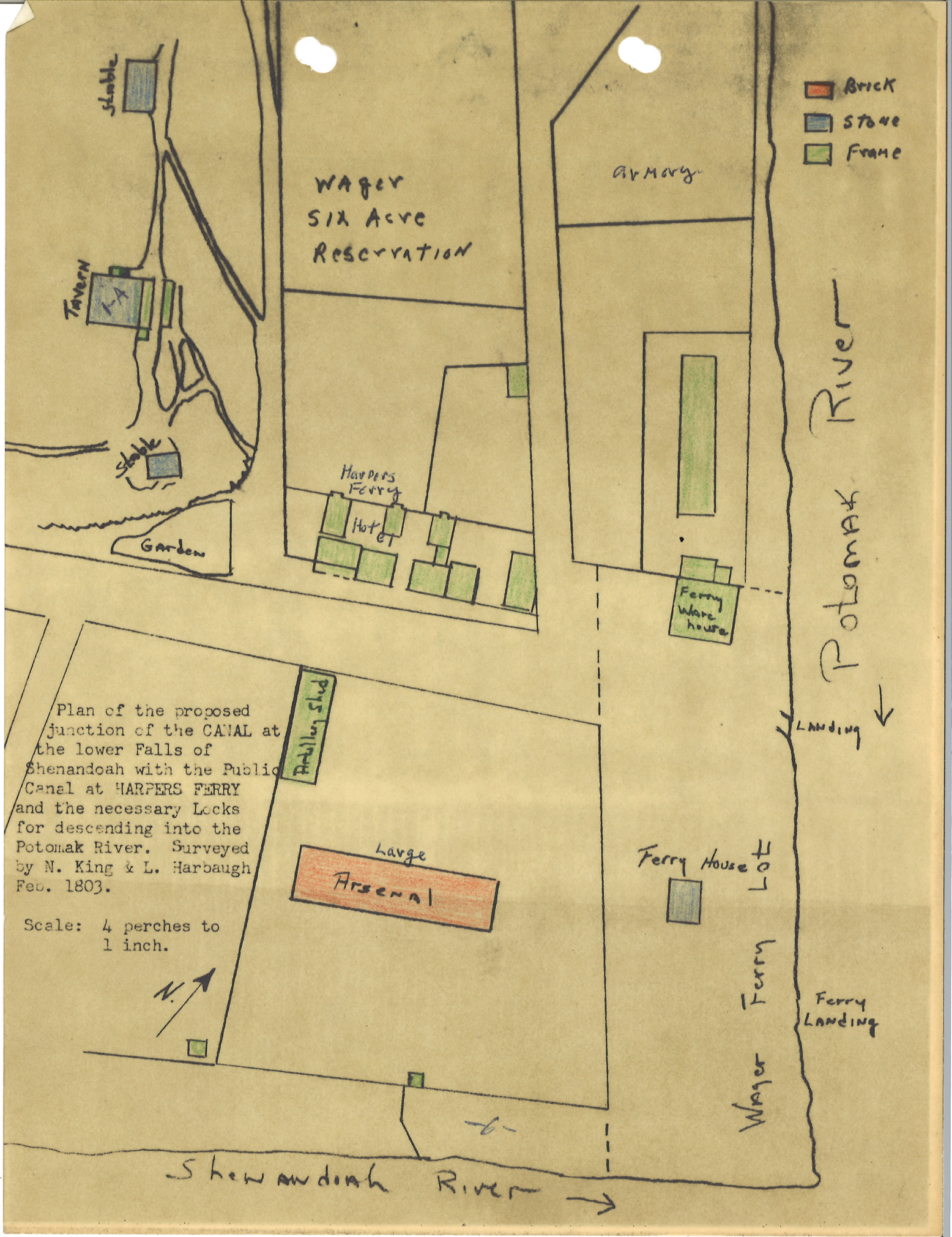
Most of the documents relating to the development of the Armory at Harpers Ferry during the period 1796 to 1801 were destroyed by fire in the War Department early in the 19th Century, hence information on this era of the Armory is very limited.

A glance at the "Plan of the proposed junction of the Canal, at the lower Falls of the Shenandoah, with the Pubic Canal at HARPERS FERRY, and the necessary locks for descending into the Potomac River, surveyed & Level'd by N. King & L. Harbaugh, Feby. 1803," on the next page, reveals that there were approximately 17 buildings standing in Harpers Ferry in 1803.[2] In 1796 when the Government first purchased the land, Harpers Ferry must have been practically a wilderness. The Government was therefore compelled through necessity to give priority to the construction of buildings both for the shelter of the workers and for the production of arms.

It was not until 1798 that the first money, $3,028.53, was expended for the construction of buildings. This was probably spent for the erection of temporary dwelling houses for the accomodation of the workmen. In 1799, expenditures for the construction of buildings were increased to $14,566.00 and

1. Deed, June 15, 1796, Wager to U.S., National Archives Material, Harpers Ferry Microfilm Reel 21, V.7, pp.704-708.

2. National Archives Record Group No. 77, Office of the Chief of Engineers, Fortifications Map File, Part of Map, Dr. 150-2 Sheets; See next page.


Brick
Stone
Frame
Stable
Tavern
Stable
Garden
Wager
Six Acre
Reservation
Armory
Harpers Ferry
Hotel
Ferry Ware house
Potomak River
Landing
Plan of the proposed junction of the CANAL at the lower Falls of Shenandoah with the Public Canal at HARPERS FERRY and the necessary Locks for descending into the Potomak River. Surveyed by N. King & L. Harbaugh Feb. 1803.
Scale: 4 perches to 1 inch.
N.
Large
Arsenal
Ferry House
Ferry Landing
Wager
Shenandoah River

in 1800 to $19,552.33 for the same purpose.[3]

It is therefore evident that the major construction occured in 1799 and 1800, and it is most probable that the large arsenal was erected in those years.

The building which we shall call the "large arsenal," in any event, was standing in 1803, and may be seen on the 1803 map. The large arsenal was described in 1810 as a two story brick building, with dimensions of 125 by 31½ feet, and used for the deposit of arms.[4] The arsenal was roofed with oak shingles.[5]

B. CONSTRUCTION OF THE SMALL ARSENAL

The small arsenal was built between April, 1806, and April, 1807. The orders for construction and specifications for the building are contained in a letter from Secretary of War Henry Dearborn to Paymaster Samuel Annin, dated April 7, 1806. Dearborn wrote:

> "As an additional building appears necessary for storing arms and other military stores, at Harpers Ferry Arsenal, you will please to take the required measures for erecting a well constructed edifice with brick Walls of the following dimensions, viz: Sixty four feet in length, and thirty two feet in breadth, exclusive of the thickness of the outerwalls, the heighth of the stories to correspond with the present building.
>
> The foundation is to be laid with Stones, two and a half feet below the surface of the ground, the top of the lower floor of the building to be, at least, three feet above the earth, and substantially supported by stone columns; the foundation above the ground should have two air holes on each side, and one at each end, grated, with perpendicular bars of iron.
>
> There should be no chimneys.
>
> The upper story should be supported by two tiers of wooden columns set over the stone abutments which support the under floor.

3. Statement of the expenditures at the United States Armory at Harpers Ferry Va., and of the arms made and repaired therein, from its establishment to the close of the year 1821, November 30, 1822, Reel 17, V.3, p.203.

4. "Public Buildings at Harpers Ferry in Virginia, 1st January 1810," War Department, Secretary of War, Ltrs. Rec'd A-29 (5) Enc, Samuel Annin, March 17, 1810, NA Record Group 107. Map Case, Drawer No. 9.

5. Paymaster Samuel Annin to Secretary of War Henry Dearborn, April 16, 1807, Reel 18, V.3, p.219.

The roof should not be heavy; this pitch will be seen in the sketch of the building which I will send you.

The principal timbers for supporting the floors should not be less than twelve inches square, and not more than six feet three inches from each other. The scantling for the floors should be six inches square, and placed not more than two feet from each other..." [6]

Proof that the small arsenal had been completed by 1807 is to be found in a letter dated April 16, 1807, of Superintendent James Stubblefield to the Secretary of War. Mr. Stubblefield wrote:

"In my letter of yesterday I ommited mentioning the necessity of a new covering to the Arsenal, the present one being made of oak shingles every heavy storm the water runs down upon the arms and injures them exceedingly. Could we have such a roof as is on the new Arsenal..." (which was probably made of cypress shingles.) [7]

The small arsenal was described in 1810 as a two story brick building with cellar, with dimensions of 68 by 36 feet, and used for deposit of arms. [8]

The interior dimensions of the small arsenal, as given in the 1806 specifications, were sixty four feet in length by thirty two feet in width, exclusive of the width of the outer walls. The exterior dimensions, as given in 1810, were 68 by 36 feet, thus indicating that the brick walls of the small arsenal were two feet thick.

It is possible that the original plans for the small arsenal envisioned its eventual expansion by adding wings; in any event Paymaster Annin wrote to Secretary of War Eustis in 1809:

"Mr. Wager the present proprietor of the reserved lots & Ferry intends removing his ware-house and other buildings that are situate at the head of the

6. Dearborn to Annin, April 7, 1806, Reel 16, V.1, p.37.

7. Samuel Annin to Secretary of War Dearborn, April 16, 1807, Reel 18, V.3, p.219.

8. Public buildings at Harpers ferry in Virginia 1st January 1810. National Archives R.G. 107, War Department, Secretary of War, Ltrs. Rec'd A-29 (5) Enc. Samuel Annin, March 17, 1800, Harpers Ferry Map Case, Drawer No. 9.

JUNCTION OF THE POTOMAC AND SHENANDOAH, VIRGINIA
Harpers Ferry Negative No. HF-21
Drawn by W. Roberts, Esqr.
Engraved by J. Jeakes.

Library of Congress Prints and Photograph Division, 765.

Engraving made about 1806 of the large arsenal. In this engraving the large arsenal is pictured as a large building with arched windows. In the center is a large pediment with dormers on each side of it. The paymaster's house is probably the two-storied building pictured to the right of the photograph, next to the river. A small building in the rear corner of the arsenal yard, to the left of the large arsenal, is probably the artillery shed. The Harper House stands on the hill to the left of the arsenal. A group of armory buildingsmay be seen to the left of the photograph. A wall may be seen enclosingthe arsenal tract and a row of trees may be seen in back of it lining the river.



Armory Street: which will be a great accomodation, as it will make a complete opening when the other wing of the Arsenal is to be built, it will be necessary to obtain of Mr. Wager, a few feet off of his ferry lot, in order that the wings may be uniform." [9]

C. ALTERATIONS OF THE ARSENALS

The two arsenals were painted for the first time in 1820.[10]

A visitor to Harpers Ferry in 1821 wrote:

"Two of the brick buildings one with dimensions of 125 x 32 feet, with arched windows, the other 68 x 36 are arsenals for the deposit of arms manufactured, consisting of rifles, muskets and some pistols which are handsomely arranged and make a fine show..." [11]

The arsenals were described in Government lists in 1821 as "Bldg. No. 1: how occupied, Arsenal; Dimensions in feet, 125 by 32; Number of Stories, 2 & a cellar (sic, the cellar was located under the small arsenal) Of what built, Brick; Estimated value, $12,000."

"Bldg. No. 2; how occupied, Arsenal; Dimensions in feet, 68 by 36; Number of stories, 2; of what built, Brick; Estimated Value, $8,000." [12]

In 1825 the roofs of the two arsenals were slated for the first time. The total cost of slating the two arsenals and one workshop was $1,407.[13]

D. USE OF THE ARSENALS, 1806-1834

The overcrowding of the arsenals with stored arms became a serious problem

9. Paymaster Annin to Secretary of War Eustis, July 22, 1809, Reel 18, V.4, p.390.

10. Annin to Secretary of War, February 18, 1820, Reel 21, V.4, p.341.

11. Description of Harpers Ferry, From a manuscript owned by Mrs. E. Bruce Allen, Moorefield, West Va., written Saturday, June 23, 1821.

12. Statement of the number and dimensions of the buildings at the United States Armory at Harpers Ferry, Virginia, together with the materials of which they are built, and their estimated value, November 30, 1821, Reel 17, V.3, p.204.

13. Reel 12, V.1, p.84, Entry 935 War Department Ordnance, National Armory Accounts, for 1825, 1795-1831, National Archives R.G. 156.

at the armory as early as 1811 and by 1827 it had become critical.[14] Colonel George Bomford of the Ordnance Office, wrote in March of 1827 to Acting Superintendent Rosewell Lee, directing him to remove twenty thousand stand of arms from the arsenal.[15]

The inspection report of November, 1827, however, stated that the arsenals still contained nearly 100,000 stand of arms, and was liable to be destroyed by fire at any time.[16]

The situation had not been corrected by the following year, because Superintendent James Stubblefield wrote in March, 1828:

"The Arsenals here, have become too crowded- that it is necessary to store some of the arms in small shed buildings etc- ... Under these circumstances I submit the propriety of issuing proposals for a new contract for transporting some 20 or 25,000 of some other post- Other wise it will be necessary to erect additional buildings." [17]

The situation was still unimproved in 1829, for Colonel Rosewell Lee, Superintendent of the Springfield Armory and then also acting Superintendent of the Harpers Ferry Armory, informed the Chief of Ordnance in May that so many arms were crowded into the arsenals that they were endangering the floors and also that the stores could not be kept in good order because of the number crowded into every corner.

He also recommended that some 15 or 20,000 be sent off to other depots.[18]

14. Samuel Annin to Secretary of War William Eustis, May 4, 1811, Reel 8, V.6, p.552.

15. Bomford to Lee, March 21, 1827, Reel 14, V.6, p.503.

16. Inspector General Wool to Major General Jacob Brown, November 16, 1827, Reel 18, V.13, p.1302.

17. Stubblefield to Bomford, March 28, 1828, Reel 22, V.4, p.385.

18. Lee to Bomford, May 18, 1829, Reel 22, V.6, p.573.

The floors of the arsenals were repaired in 1829 at a cost of $808.54.[19]

The Inspector of National Armories and Arsenals, in his report of 1832, stated:

"The finished arms at Harpers Ferry are deposited in the two brick Arsenals, which are covered with slate and favorably situated as regards security from damage by fires. The floor of the smallest had failed and requires repairs which cannot be effected until deliveries of arms are made to a large amount. Both of these Arsenals are much crowded. The large one is literally crammed in all the alleys and passages between the piles of boxes. In the present state of arms it is utterly impossible to examine any portion except a few near the entrance. Large masses are stored in bulk, for want of boxes, and no inspection could be made to any reasonable extent..." [20]

This situation, as we shall see, was still uncorrected in 1835. The overcrowding of the arsenals was probably due in large part to the difficulty and high cost of transporting heavy crates of arms from Harpers Ferry. All arms had to be carried out by wagon until the C&O Canal and the B&O RR reached Harpers Ferry in 1833 and 1834; and it was 1842 before the B&O proceeded westward beyond Harpers Ferry.

Fire Protection

Fire was always a constant threat at the armory and great precautions were taken to prevent them. The two arsenals were without fireplaces or chimneys to eliminate the danger of fire from that source. Samuel Annin wrote in 1810 of other precautions taken against fire at the arsenal tract, stating:

"water is conveyed from the forebay of the armory by pipes to the yard in front of the arsenals into a large cistern..." [21]

He also asked for a new fire engine.

19. National Armory Accounts for 1829, Entry 935.

20. Inspection Report, dated December 15, 1832, Photostats, V.1, p.10.

21. Annin to Secretary of War Dearborn, October 10, 1810, Reel 18, V.6, p.530.

In 1829, $201.78 was spent for "Boring and laying pipes to convey water to the arsenal and to supply the fire engine."[22]

Captain John H. Hall informed Colonel Bomford in April, 1832, that all of the principal workshops and arsenals were within fifty feet of a supply of water. He also stated:

"All of those buildings have water on both sides of them - and all, excepting the arsenal, have the water, on one side higher, by about five feet than their lower floors- the Arsenal has it on one side about three feet below its lower floor, abundance about twelve feet below its lower floor..." [23]

Arsenal Yard, Walls and Fences

In 1822 a stone wall and stone and frame house for gun stocks at a cost of $1,000 was erected along the eastern boundary of the arsenal tract, where it abutted on the Wager Ferry Lot.[24] See House No. 8 on the 1835 map, on page 15. A lumber shed was built on the same line and the sum of $1,261.92 was spent in the construction of a wall around the lumber yard in 1825 and 1826.[25] See Building No. 9 on the 1835 map.

The engineer's report of October 23, 1834, stated that:

"At the eastern termination of the government land a high stone wall is erected, immediately on the line between the United States and Wager's."[26]

22. Entry 935, National Archives RG. 156, National Armory Accounts, 1795-1831 for 1829.

23. Hall to Bomford, April 4, 1832, Reel 22, V.12, p.1175.

24. Statement of the expenditures at the U.S. Armory, Harpers Ferry, Va., and of the arms etc. made therein during the year 1822; Stubblefield to Bomford, May 8, 1822, Reel 21, V.6, p.536.

25. Statement of the Expenditures at the U.S. Armory, Harpers Ferry, Va., and of the arms made therein during the year 1825; Ibid., 1826; Report of Lieutenant Colonel Kearney and Captain Turnbull of the Corps of Topographical Engineers, in Reference to a Resolution of Congress passed during its Last Session, Authorizing the President to Grant under Certain Conditions a Right of Way to the Winchester and Potomac Railroad Company over the Public Ground at Harpers Ferry, October 23, 1834, Reel 17, V.4, p.272; Stubblefield to Bomford, May 8, 1822, Reel 21, V.6, p.536; John Bruce, President of Winchester and Potomac Railroad Company, April 14, 1834, Reel 17, V.4, p.270.

26. Report of Lieutenant Colonel Kearney and Captain Turnbull, October 23, 1834, Reel 17, V.4, p.272.

It is likely that the stock house and the lumber shed were on the stone wall that separated the Arsenal lot from the Wager Ferry Lot.

The front of the arsenal lot facing on Shenandoah Street was enclosed with a fence constructed of condemned musket barrels and bayonets.[27]

Roads

In 1834, Shenandoah Street was Macadamized, and the sidewalks and gutters altered. The water from the hill near the Harpers Ferry Hotel, (which was located on Wager Lot No. 15, Subdivisions 1, 2 and 3) was carried through the Arsenal Square to the river in a new stone culvert. The particulars concerning this work are contained in the contract between Superintendent George Rust and William McDonald, the contractor. The contract reads in part:

"The said McDonald agrees to grade that portion of the street extending from the termination of the present pavement near the pay office to the pump on Potomac Street, and to McAdamize the same with twelve inches of good materials...

The said McDonald further agrees to insert good and substantial curbstone wherever, the same may be required by the superintendent and to construct such culverts as may be necessary (under the direction of the Supert.) to convey the water to the river.

The said McDonald further agrees to excavate the ground through the Pay Master's garden sufficient for a waterway from the street to the river, and pave the same and also to erect side walls one and a half feet high on each side of the waste- The whole to be completed by the first day of October next."[28]

The newspaper reported in August, 1834, of this work that :

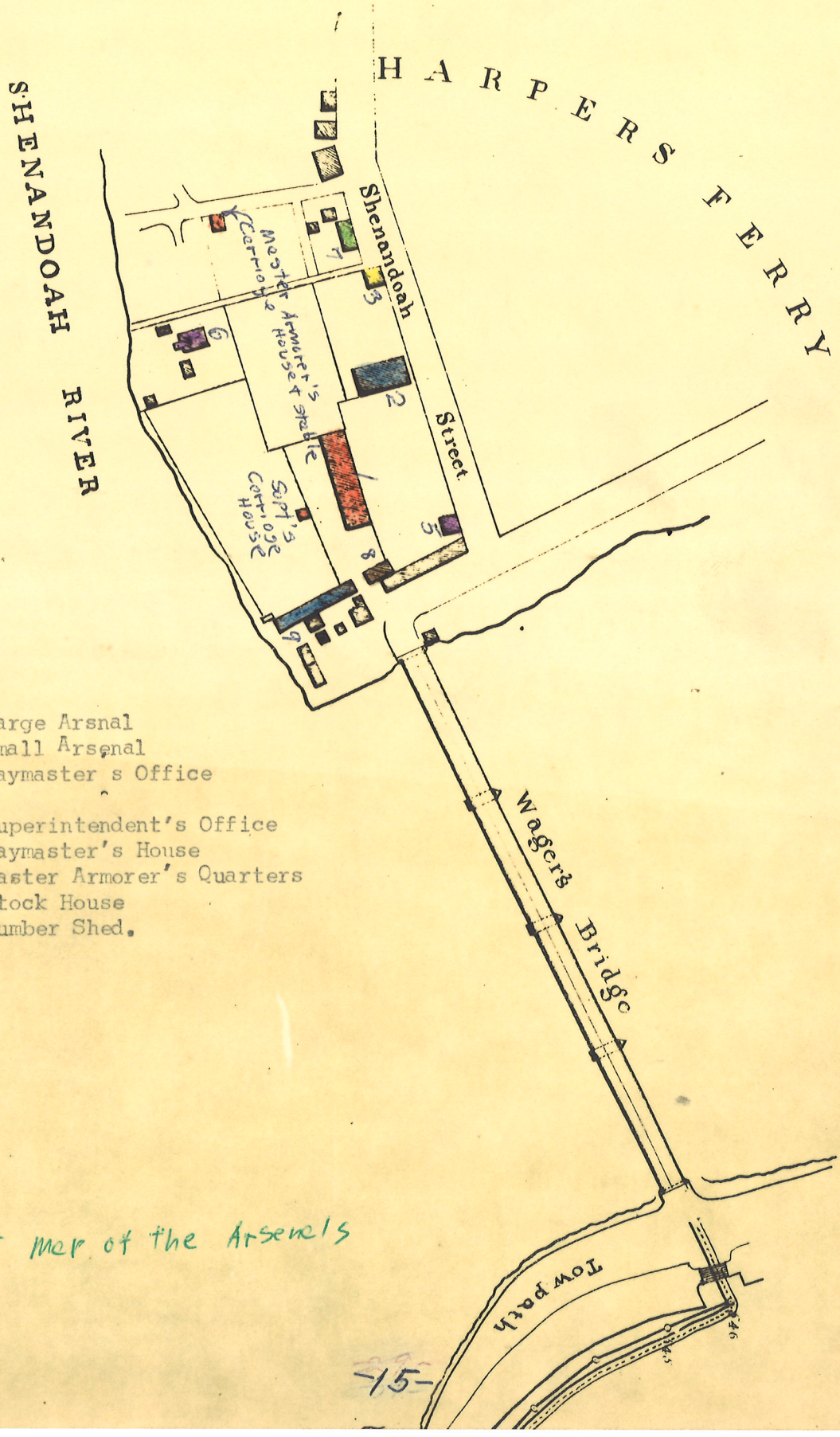
"Gen. Rust, Supt. of Armory has had main street MacAdamized, and the side walks and gutters undergoing a very judixious alteration. The water from the hill near the Harpers Ferry Hotel is to be carried through the Arsenal Lot to the river..."[29]

The physical layout of the buildings on the arsenal lot will be seen on the 1835 map on the following page.

27. Estimates 1856-1857, Photostats, V.3, p.63.

28. R.G. 156, OCO Contract Book No. 13, p.233, July 7, 1834, Harpers Ferry Photostatic Collection, V.1, pp.30-31.

29. Virginia Free Press, August 28, 1834, p.3, c.1.



1. Large Arsnal
2. Small Arsenal
3. Paymaster s Office
4.
5. Superintendent's Office
6. Paymaster's House
7. Master Armorer's Quarters
8. Stock House
9. Lumber Shed.

1855 Map of the Arsenals

CHAPTER II - THE ARSENALS AND THE WINCHESTER AND POTOMAC RAILROAD, 1834-1861.

The Winchester and Potomac Railroad Company was organized in 1831.[1] President Andrew Jackson granted the company a right of way through the arsenal square on January 27, 1835.[2] Construction of the railroad through the arsenal yard began in 1835 and the railroad was opened full length from Winchester to Harpers Ferry on March 31, 1836.[3] The location of the new railroad in relation to Arsenal Square may be seen by glancing at the 1835 map which appears on the following page.

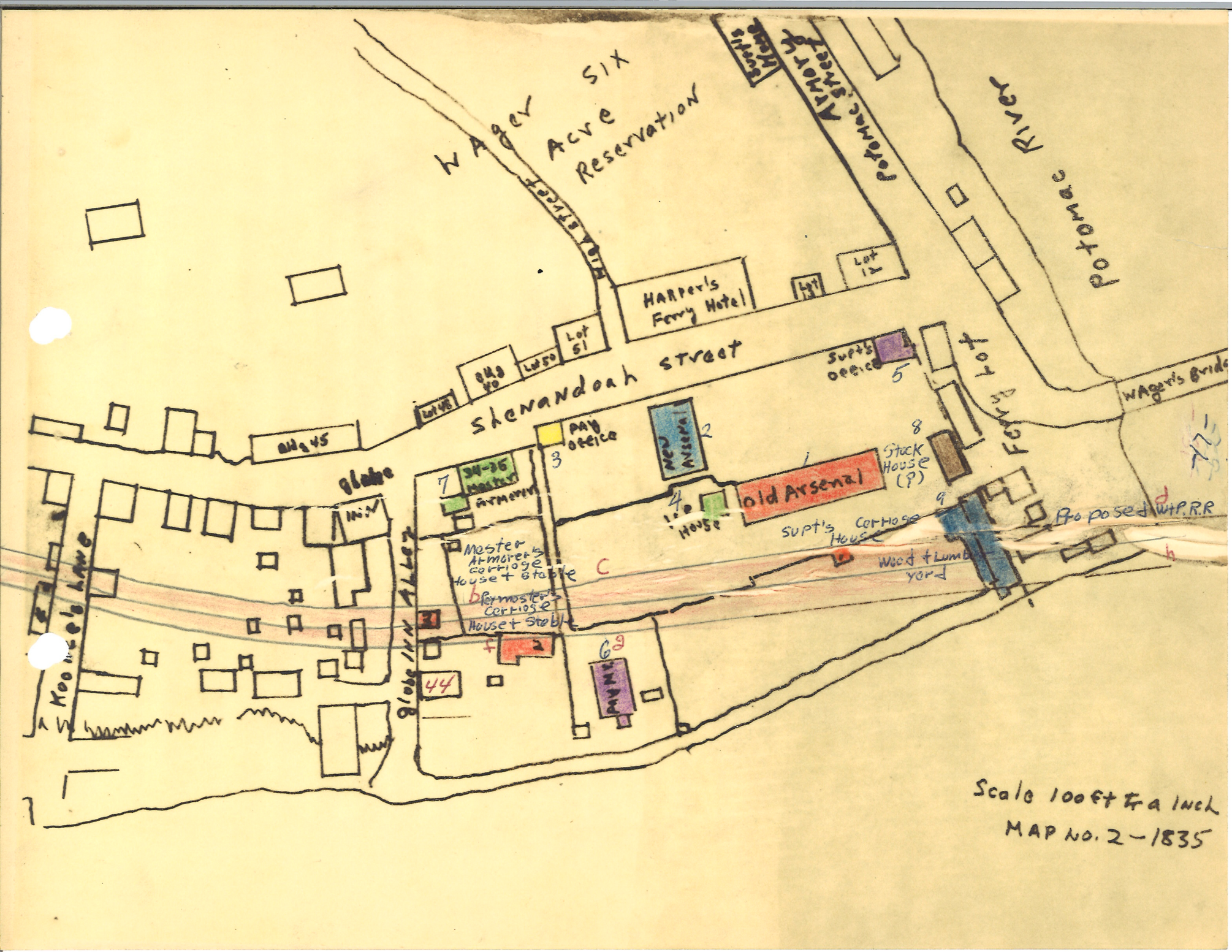
The railroad was erected on a wooden trestle fourteen feet above the ground, so as to leave sufficient room under the trestle for access to the rear lots. The company received a right of way, thirty feet wide for the railroad in its passage over the U. S. Hall's Islands and up to the Globe Inn Alley. From a point thirty four feet east of that street, it was given a right of way fifty feet wide across the Arsenal Square to enable them to lay four tracks; in actual construction, only two tracks were laid.[4] For the full 1834 report of

1. Virginia Free Press, April 14, 1831, p.3, c.2.

2. Map No. 2, Map of Harpers Ferry Showing the Location of the Winchester and Potomac Railroad.

3. Inspection of 1835, July 25, 1835, Photostats, V.1, p.50; Virginia Free Press, March 31, 1836, p.3, c.1; Map of Harpers Perry, Shewing the Location of the Winchester and Potomac Rail Road, Drawn by Lieuts. White, Allen, and R. S. Smith, U. S. Army, under the Direction of James Kearney, Lt. Col. and T.E., Map No. 2-1835, National Archives R.G. 77, Records of the Office of the Chief of Engineers, Fortification Map File, Part of Map, Dr. 150, Sheet 82-2.

4. Report of Lt. Col. Kearney and Captain Turnbull, of the corps of topographical engineers, in reference to a resolution of Congress passed during its last session, authorizing the President to grant, under certain conditions, a right of way to the Winchester and Harpers Ferry Railroad Company over the public land at Harpers Ferry, October 23, 1834.


Wager Six Acre Reservation
Potomac Street
Armory Yd
Potomac River
Harper's Ferry Hotel
Lot 61
Lot 50
Lot 49
Lot 48
Lot 47
Lot 46
Lot 45
Shenandoah Street
Supt's Office
5
Lot
Ferry Yd
Wager's Bridge
Pay Office
3
New Arsenal
2
Old Arsenal
1
Stock House (P)
8
9
Proposed W.P.R.R
d
h
Supt's Carriage House
Wood & Lumber yard
34-36 Master Armorers
7
Armorers
4
House
Master Armorer's carriage House & Stable
C
b
Armorer's Carriage House & Stable
f
2
6
9
44
Pay Mr.
Globe Inn
Globe Inn Alley
Mechanic's Lane
Scale 100 ft to a Inch
MAP No. 2 – 1835

the engineers, see Appendix I of this report.

Following the great flood of 1852, the wooden piers of the railroad trestling were replaced by stone piers.[5]

Winchester and Potomac Railroad and Fire Hazards, 1835-1848

The passage of the wood burning locomotives of the Winchester and Potomac Railroad through the arsenal yard created a problem because of the proximity of the Arsenal buildings to the railroad tracks.

The inspection report of 1835 stated:

"The construction of the Railroad through the public land at this time is a prominent cause of the accumulation of filth and rubbish & more than ordinary care should be bestowed on matters on internal police."

The inspector recommended that twenty or thirty thousand muskets be sent to the Frankford Arsenal or other arsenals because of the danger from fire and the lack of storage space.[6]

The situation was still unimproved in 1836.[7] For the next ten years the armory and town were plagued by a number of fires caused by sparks from the wood burning locomotives of the railroad.[8]

In 1842 a special board of officers inspecting the Harpers Ferry arms reported to the Secretary of War that a very large number of fires had been

5. Virginia Free Press, December 23, 1852, p.2, c.5.

6. Inspection of 1835, Photostats, V.1, p.50. July 25, 1835

7. Inspection of 1836, November 3, 1836, Photostats, V.1, p.62.

8. Virginia Free Press, March 16, 1837, p.2, c.2; Proceedings of a Board of Officers. Ibid., p.68; Proceedings of a Board of Officers.

set by sparks from the wood burning engines of the Winchester & Potomac railroad.[9]

As a result of the findings of the board, the Superintendent of the Armory was directed to confer with officials of the railroad for the purpose of inducing them to draw their cars by horses over the armory lands or else to use coal instead of wood as fuel in their locomotives.[10]

Superintendent Henry K. Craig began negotiations with the Company on this question in March, 1842.[11]

This appeal apparently had very little effect for there were additional fires in 1844 and 1845.[12] After more fires and four years of unsuccessful negotiations with the company, the War Department finally instituted legal action in 1846 to prevent the railroad from passing through the Armory.[13]

In April, 1846, the Solicitor of the Treasury, informed the Secretary of War that the President of the Winchester and Potomac Railroad has agreed to take proper precautions against the outbreak of fires in the future by the use of spark arrestors and coal in his company's locomotives.[14]

After this date the troubles between the Armory and the railroad appear to

9. Photostats, V.2, pp.8081, February 25, 1842.

10. Talcott to the Secretary of War, March 18, 1842, Reel 23, V.2, p.134.

11. Superintendent Craig to William L. Clark, President of the W&P RR, March 18, 1842, Reel 23, V.4, p.376.

12. Symington to Talcott, December 24, 1844, Reel 23, V.4, p.372; Symington to Talcott, January 4, 1845, Reel 23, V.4, p.366.

13. Pres. William Clark, W&P RR, to Secretary of War Marcy, March 23, 1846, Reel 23, V.8, p.741.

14. Seth Barton, Solicitor of the Treasury to Secretary of War, April 23, 1846, Reel 23, V.8, p.750.

have been settled and there was no further mention of fires caused by the locomotives of that railroad.

W&P Railroad Depot

The depot of the Winchester and Potomac Railroad was located on the Island of Virginius from 1836 to 1847.[15] When the land upon which the depot was located was sold in 1847,[16] the depot was apparently rebuilt on the Arsenal Tract on the railroad's right of way, and was located between the railroad tracks and the river, just behind the Large Arsenal.[17]

15. Deed of B. & S., May 13, 1835, Deed Book 20, pp.338-339.

16. Deed of B. & S., August 28, 1847, Deed Book 29, p.439.

17. HF-46, Appendix III, page 46.

CHAPTER III, NEW ARSENAL, 1849-1852

For many years the two arsenals at Harpers Ferry had been plagued with overcrowding, the threat of fires and in the 1840's floods began to become a serious problem. In 1849, Colonel H. K. Craig, of the Ordnance Office, recommended that a new arsenal should be constructed. He also stated that the new building should be located in the center of the Arsenal yard.[1]

It was the destructive flood of 1852, however, that hastened plans for a new arsenal. Superintendent Benjamin Huger reported that over 20,000 stand of arms were damaged by that flood and had to be cleaned and repaired.[2]

In July, 1852, Colonel Huger recommended that all the finished arms in store should be shipped to the Washington Arsenal for safe storage.[3]

With the memory of the 1852 flood fresh in their minds it was now proposed to build a new arsenal on Camp Hill well above the flood level. It was also decided that after the new arsenal had been built, the old arsenal square would no longer be required. The old arsenal square was thus laid out into lots in 1852 to be sold at some future date.[4] The Arsenal Square was described in 1852 as follows:

1. Capt. Wm. Maynadier, Ordnance Office, to Superintendent John Symington, May 8, 1849, Reel 19, V.4, p.383.

2. Colonel Huger to Colonel Craig, April 23, 1852, Reel 26, V.3, p.271.

3. Huger to Craig, July 1, 1852, Reel 26, V.4, p.307.

4. Report of a Board of Offices, September 24, 1851. Approved by Secretary of War, June 10, 1852, Reel 24, V.8, pp.802-806.

"BLOCK A, ON SHENANDOAH

No. of Lots

1. N. East end of Arsenal Lot, having on it the old Superintendent's Office; fronts 33 10-12 feet on Shenandoah St., with Steven's line, East 184 feet to the River Shenandoah; extending across Winchester & Potomac Railroad, binding 73 feet thereon, running with the N.E. line of Lot No. 2, to the front 179 feet.

2 3 4 5 6 Old Arsenal, intersected by these 5 lots-each 30 feet front on Shenandoah St., same width through to Shenandoah River, intersected by an Alley near Railroad embankment- 179 feet deep for No. 2, 145 deep for No. 6- other intermediate depth to the rest, and extend same width across Railroad to River.

7 24 feet front on Shenandoah St., extending same width through to the River Shenandoah, parallel to the previous numbered Lots- having on it, and Washington St. prolonged, the Old Small Arsenal, part on the lot and part on the street." [5]

See 1852 map on the next page.

Thus the estimates for the 1852-1853 fiscal year included a request for the sum of $16,450 to erect an arsenal on the hill above the armory. The justification for this amount stated:

"The old arsenal is in a dilipitated condition and is insufficient and unfit for the storage of arms, the lower floor being subject to be flooded at high water. Its location is also bad: being in the business part of the town with private buildings in its immediate vicinity and the Winchester and Potomac rail road passing within 30 feet of its walls. The proposed building is to store finished arms and will conveniently hold 80,000 stand. The proposed location for it is convenient to the other armory buildings and removed from private property." [6]

Colonel Huger received this appropriation to erect a new arsenal on the hill in August, 1852.[7] It was then decided to enlarge the proposed building

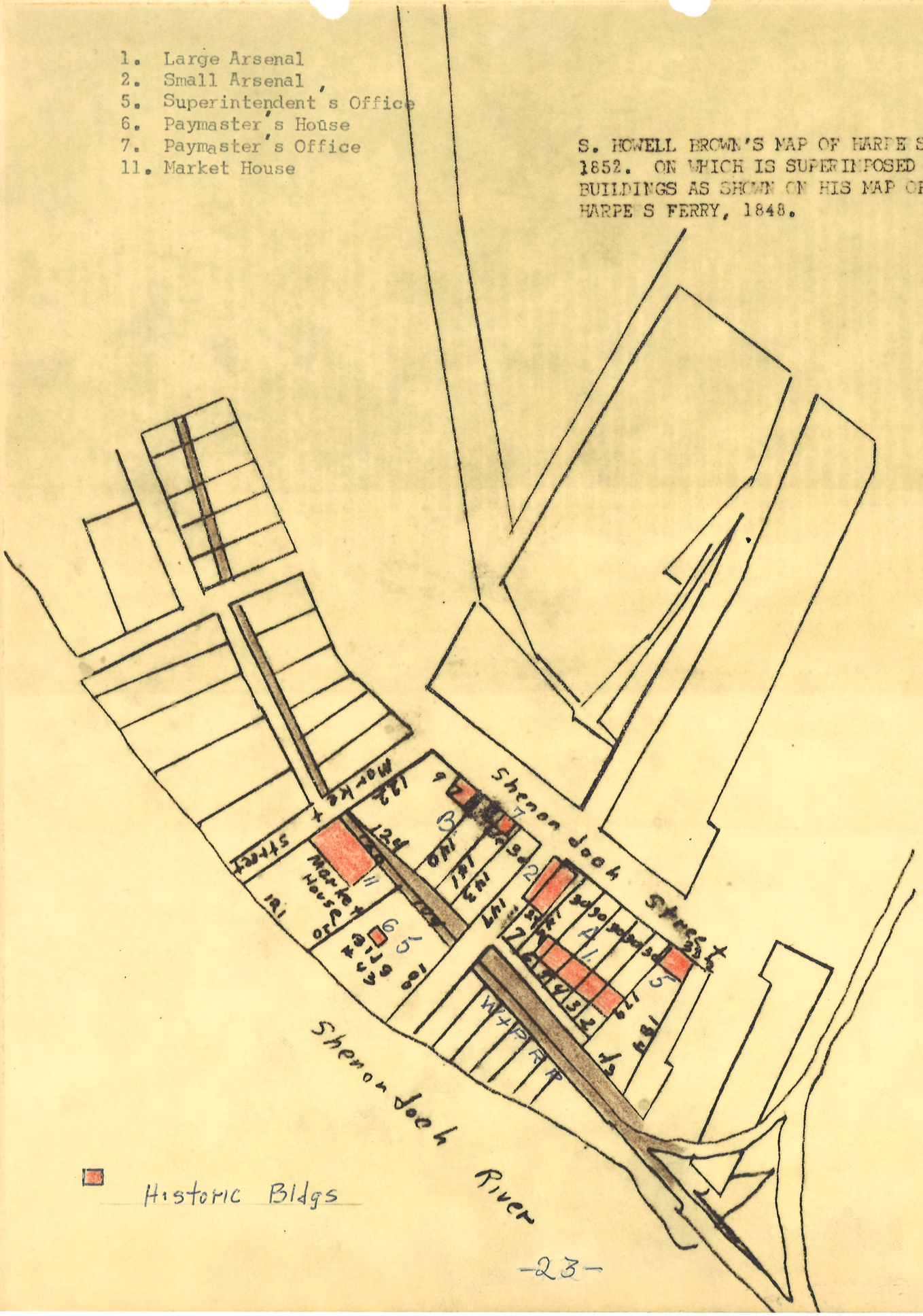
5. Legend Exhibiting the Corresponding Numbers of the Houses, Inventory of the 30th June, 1852, with the Lots of Land as per Brown's Map of the same, Where Correspondence Exists, and in Other Cases, an Approximation, National Archives R.G., War Department Ordnance, LR, H-330-1852. August 28, 1852, Box 133, OCO DOC File, 1797-1844.

6. Estimates for 1852-1853 fiscal year, Reel 20, V.7, p.700-701.

7. Ibid., p.702.

1. Large Arsenal
2. Small Arsenal
5. Superintendent's Office
6. Paymaster's House
7. Paymaster's Office
11. Market House

S. HOWELL BROWN'S MAP OF HARPE S FERRY 1852. ON WHICH IS SUPERIMPOSED THE BUILDINGS AS SHOWN ON HIS MAP OF HARPE S FERRY, 1848.



and to tear down the old arsenal. Thus an additional $13,700 was requested to accomplish these purposes in 1853-54 fiscal year and was received in March, 1853.[8]

Grading of the hillside for the site of the new arsenal, Bldg. No. 11, was started in 1853.[9] The foundations for the building were being excavated by June 30, 1854.[10] In July, 1854, however, the new Superintendent, Major William H. Bell, decided that the hill would not be a suitable place for the construction of the new arsenal and recommended that it should be erected on the old Arsenal Square, Block A. In his inspection report dated July 19, 1854, Lieutenant Colonel R. S. Baker of the Ordnance Department, concurred in this recommendation and further stated in regard to the old Arsenal Square as a site for the proposed building:

"The old Arsenal yard is from 1½ to 4 feet lower than the road on its front. By filling the lot to the road level, and raising the floor of the basement room three or four feet above the yard, it is probable that no flood would ever wash it, the high water marks on the old Arsenal floor being under six feet..." [11]

Colonel Baker concluded by saying:

"Should this change be adopted, I would recommend sending the arms contained in the two old stores to the Arsenl, taking both of these stores down, and using their Materials, which appear very good, in the construction of the new buildings, indeed, they would furnish a good part of the bricks required..." [12]

A stock house, Bldg. No. 11, was constructed on the hill on what was to

8. Estimates for 1853-1854, Reel 20, V.7, p.705-706.

9. Report of Operations, 1852-1853, Reel 20, V.2, p.148.

10. Report of Operations, 1853-1854, Reel 20, V.2, p.184-185.

11. Inspection Report, July 19, 1854, Photostatic Collection, V.3, p.54.

12. Inspection Report, July 19, 1854, Photostatic Collection, V.3, p.54-55, 58-60.

have been the site of the new arsenal.[13] The plan to erect a new arsenal on Camp Hill ~~level~~ was therefore discarded because of the unsuitability of the site and by 1855 it was planned to erect the new arsenal on the old Arsenal Square.

In the 1858-59 fiscal year, $27,325 was received for filling the ground of the Arsenal Square to the level of Shenandoah Street, so as to keep it above the highest rise of water.[14] Nothing further was done, however, towards the actual construction of the arsenal and in May, 1860, Secretary of War John B. Floyd, in a letter to the Chairman of the Finance Committee of the Senate, stated:

"The building at Harpers Ferry Armory called the 'Arsenal', which is the only place there for the storage of finished arms after they leave the workshops, was erected many years since, and is now unfit and insufficient for the purpose from its condition, its want of capacity and its position on low ground subject to overflow..."

He also stated that $27,375 was available for constructing a new arsenal, but that an additional sum of $108,125 was required to erect the iron arsenal building that was needed.[15] The high cost of a new arsenal, about $135,000, brought to a halt the plans to construct a new arsenal and no further funds were requested for this purpose in the 1859-60, 1860-61 and 1861-62 fiscal years.[16] The two old arsenal buildings were thus still standing in 1859-61.

13. Estimates for 1854-55, Reel 20, V.7, pp.709-711.

14. Estimates for 1858-59, Photostats, V.4, p.25; Appropriations, 1858-59, Reel 20, V.7, p.731.

15. Secretary of War, John B. Floyd, to Chairman of the Finance Committee of the Senate, May 7, 1860, Photostats, V.4, p.27.

16. Estimates for 1859-60, Photostats, V.4, p.28; Estimates for 1860-61, Photostats, V.4, p.42; Estimates for 1861-62, Photostats, V.4, p.43; Col. Craig, Ordnance Office, to Secretary of War Floyd, October 12, 1860, Reel 20, V.4, pp.334-335.

Old Arsenals, 1859-1861

On May 29, 1860, an application by the ladies of Harpers Ferry to Secretary of War Floyd, illustrates the fact that the first floor of the large arsenal was no longer used for the storage of arms. The ladies wrote:

"Having a purpose of originating a Fair for the benefit of the Floyd Rifle Company (a new militia company composed of armorers) at this place: We the undersigned a committee of Ladies would ask the privilege of using the 1st floor of the Old Arsenal; as it is the only room of sufficient capacity in Town; you may recollect the room is the one you designed as Quarters for the U. S. Troops, it is not in use now and is free from incumbrances of any kind, we would further state that a night watchman is assigned to the Arsenal yard for its protection against injury..." 17

Colonel Craig wrote to Superintendent Barbour on May 31, conveying the Secretary of War's permission for the ladies to hold their fair.[18]

Troops were stationed in the Arsenal after the John Brown Raid in October, 1859. It is also known that they were stationed there just before the outbreak of the Civil War.[19]

Arsenal Square Walls and Fences

In 1853 efforts were made to improve the appearance of the Armory and it is presumed the arsenal tract may have been improved also. It was reported that:

"The roads in the armory yard were graded and McAdamized, grass plots filled up, graded and sown with grass seed. Six cast iron lamp posts put up and furnished with lamps complete." 20

In the 1856-1857 fiscal year, $5,761 was asked and received for enclosing the Arsenal Square: The reasons given were:

17. Mrs. James S. Welsh and others to Secretary of War Floyd, May 29, 1860, Reel 27, V.10, p.968.

18. Craig to Barbour, May 31, 1860, Reel 19, V.12, p.1118.

19. Craig to Barbour, February 23, 1861, Reel 20, V.4, p.391.

20. Report of the Principal Operations of the Ordnance Department during the year ending June 30, 1853, Reel 20, V.2, p.148.

"The present enclosure of the old Arsenal Square requires to be entirely renewed, in consequence of its dilipitated condition, having been constructed in front on Shenandoah Street of Condemned musket barrels and bayonets many years ago." 21

A fine brick and iron fence was erected around the Arsenal Square in 1856-1857 as may be seen in the 1859 photograph, HF-90.

Destruction of the Two Arsenals During the Civil War

On April 18, 1861, Lieutenant Roger Jones, upon learning of the approach of southern forces who planned to seize the armory, lit the powder trains that had been laid in the Armory buildings with the intention of destroying them. 22 Only the two arsenals were destroyed however.

George Mauzy, a civil engineer and a resident of the Island of Virginius, was an eye witness to the events that took place. He wrote on April 19, 1861, to James H. Burton, former master armorer and then superintendent of the Enfield Rifle Works in England, describing the events that had taken place:

"On yesterday morning a Capt. Kingsbury (the new Superintendent) made his appearance here who took charge after Mr. Barbour's resignation. Considerable excitement prevailed here during the day, several cos. approaching, and had got as far as Hall Town, when they halted for want of proper authority to take charge of the public property, and also owing to the resistance offered by our Volunteer Cos., who you know are made up mostly of armorers who were afraid that the armory would stop.

Well sir, What should Mr. Supt. and Lieut. Jones do but get a large quantity of Powder from the Magazine during the day, and after night had it distributed through the shops and the two arsenals, and at about ten o'clock at night they set fire to the carpenter shop and grinding mill, stocking shop, and the 2 arsenals, which were both burned down together with some 15,000 guns of various kinds...

21. Estimates for 1856-1857, Photostats, V.3, p.63; Virginia Free Press, January 17, 1856, p.2, c.2.

22. R. Jones, First Lt., Mounted Rifle Men Commanding to Assistant Adjutant General, Headquarters of the Army, Washington, D.C., War of the Rebellion, Official Records of the Union and Confederate Armies, Series I, Volume II, Washington, Government Printing Office, 1880, p.5.

23. Mrs. Kenneth Gromberg, 1834, Rolling Road, St. Dennis 27, Md., has loaned us approximately 50 original letters of M. A. Burton of the 1859 period; also deeds and several photographs taken 1914-1917.

The first named shops are also a perfect heap of ruins fortunately the stock shop was saved with but little damage. Well after these buildings were set on fire Lieut. Jones and his men walked across the Bridge and it is said went up to the Canal, in the direction of Hagarstown, it is presumed they are making their way across to Penn. Mr. Supt is said to be still here, and it is rumored is under guard but of this I am not positive..." 23

The Federal Government acknowledged loss of the Armory when Lt. Col. James W. Ripley, of the Ordnance Office, notified Paymaster Dennis Murphy on April 25, 1861, that:

"The armory at Harpers Ferry having been forceably taken possession of on the night of 18th April, by the Militia of Virginia, the United States will not be responsible for the services of the operatives after that date." 24

With the destruction of the Arsenals and the occupation of the Armory by Confederate forces, Federal control over the Harpers Ferry Armory came to an end 66 years after the establishment of the Armory.

With the buildings destroyed, the usefulness of the Armory had come to an end and it was decided to sell the land and buildings at public sale. The Arsenal Lot was described as follows in 1869:

"Block A, on Shenandoah.

1 Northest end of arsenal lot, having on it the old Superintendent's office. Fronts 33 feet 10 inches on Shenandoah Street, with Wager line, east 184 feet to the Shenandoah River, extending across the Winchester and Potomac railroad, binding 73 feet thereon, and running with northeast line of Lot no. 2, 179 feet.

2 Old arsenal intersected by these five lots, each 30 feet front on Shenan-
3 doah street; same width through to Shenandoah River, intersected by an
4 alley at railroad embankment 10 feet in width; 179 feet deep for No. 2,
5 145 deep for No. 6; other intermediate depths to the rest. Vacant.
6

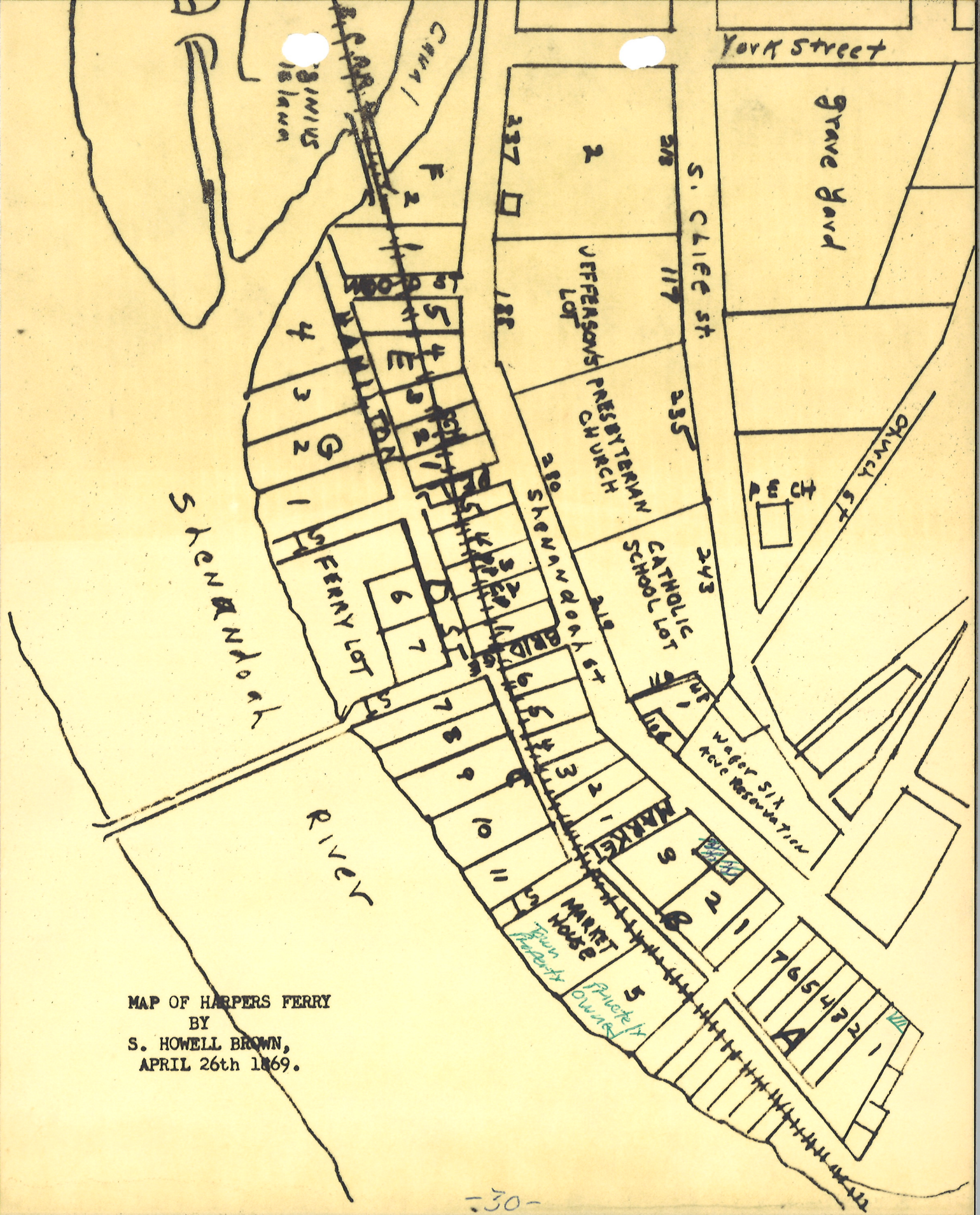
7 24 feet front on Shenandoah Street, extending same width through to the river Shenandoah, parallel to the last mentioned lots, and fronting whole length on Washington Street. Vacant." 25

24. Ripley to Murphy, April 25, 1861, Reel 20, V.4, p.405.

25. Catalog of the Harpers Ferry Armory Property to be Sold by the United States on the 30th November, 1869, at the Town of Harper's Ferry, Va., p.1-2.

We here present the 1869 Map of Harpers Ferry prepared by S. Howell Brown to accompany the 1869 catalogue and to be used in the sale of Government lots.[26] Thus with the 1869 sale, Government control over Block A, Shenandoah Street came to an end.

26. Plat of the Harpers Ferry Armory Property laid off into lots for sale in pursuance of the Act of December 15th 1868, Approved November 16, 1869.



MAP OF HARPERS FERRY
BY
S. HOWELL BROWN,
APRIL 26th 1869.

CHAPTER IV - SUMMARY OF HISTORICAL DATA, 1796 - 1869.

1. Large Arsenal

The land upon which the arsenal tract is located was purchased by the United States Government in 1796. Construction of the major buildings of the Armory-Arsenal occurred in 1799 and 1800 and among those erected was the Large Arsenal. This was a two story brick building, 32 ft. by 125 ft. in size, with no cellar, and was erected and used for the storage of arms. The roof, originally covered with oak shingles, was slated in 1825. The building, in 1806, had a central pediment with six dormers on either side that apparently was removed by 1859, and arched windows. It was painted for the first time in 1819. The building was unheated in order to lessen the danger of fire. From 1859 to 1861, only the second floor of the building was used for the storage of arms. As a result of the John Brown Raid in 1859, troops were quartered on the first floor. In 1860 the ladies of Harper's Ferry held a fair on the first floor. Federal troops were again quartered in the building from 1860 to 1861, while stationed at Harpers Ferry to protect Armory property. The Arsenal was burned by the Feceral troops on April 18, 1861, on the approach of Confederate troops, to prevent the stored arms from falling into the hands of the South.

2. Small Arsenal

The small arsenal was constructed in 1806-1807. This was a two story brick building with a cellar. The exterior dimensions were 68 by 36 feet, and the brick walls were two feet thick. The original roof of wooden shakes, probably cypress, was slated in 1825. The windows were not arched

as were those of the large arsenal. The building was painted for the first time in 1819. The structure was also unheated to lessen the danger of fire.

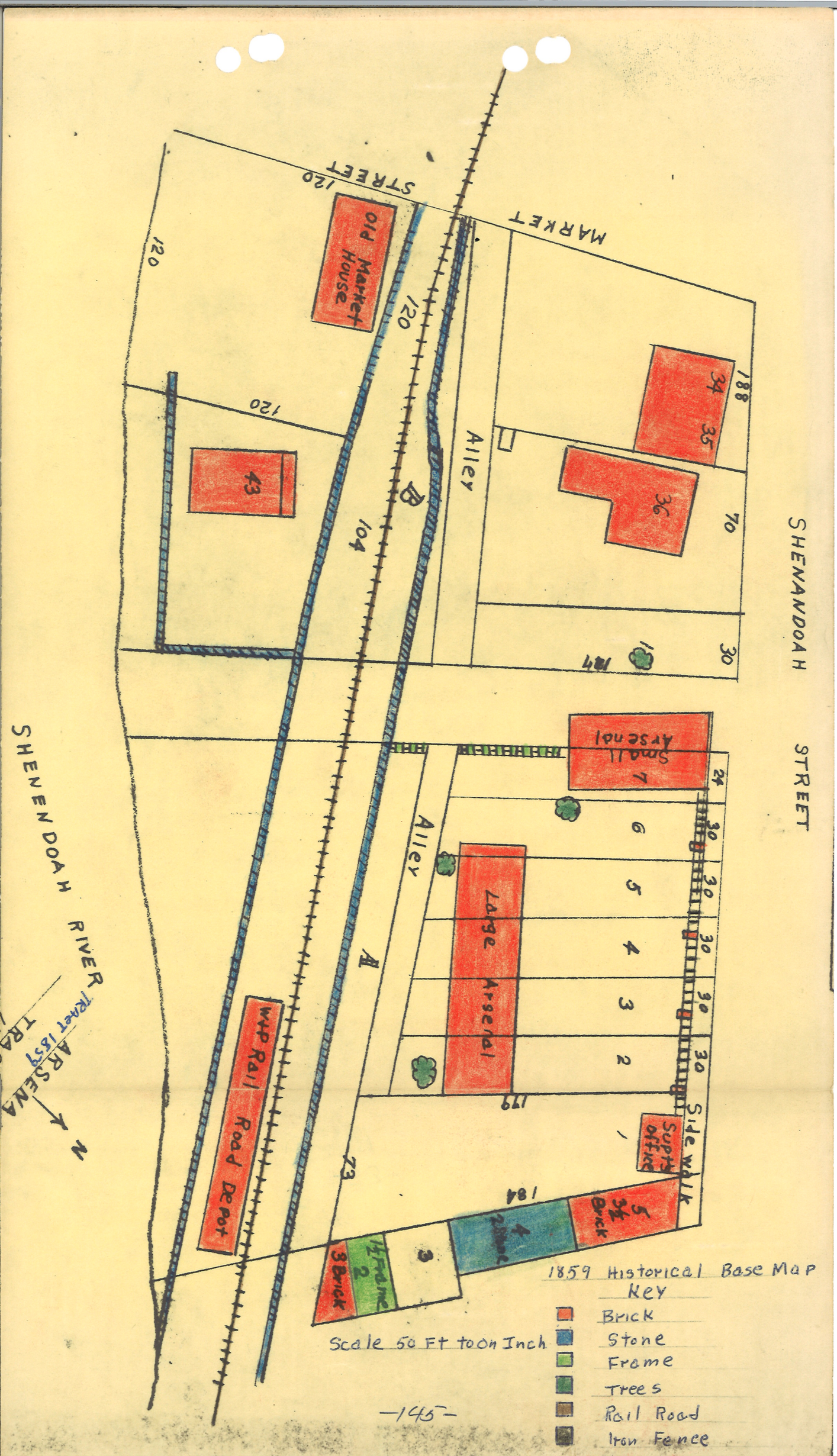
The small arsenal was used from 1807 to 1861 for the storage of arms. It was destroyed on April 18, 1861, by Federal Troops stationed them, upon learning of the approach of Southern forces.

3, Winchester and Potomac Railroad

The Winchester and Potomac Railroad Company in 1835 received a right of way of thirty feet wide to a point thirty four feet east of Globe Inn Alley; from there to the Potomac River the right of way was increased to fifty feet in width.

The railroad company was required to construct a wooden trestle that was to be not less than fourteen feet above the ground through the Arsenal Tract, so as to permit free access to the rear lots. Following the 1852 flood, which destroyed the railroad's trestlework, the wooden trestle was rebuilt on top of stone piers. Fire caused by sparks from the wood-burning engines of the railroad plagued the armory from 1836 until the threat of court action in 1846 prompted the railroad to use spark arrestors and coal in the engines. With this the fires ceased to be a major problem.

From 1836 to 1847 the depot of the Winchester and Potomac Railroad was located on the Island of Virginius. When the land upon which the depot was located was sold in 1847, the depot was apparently rebuilt on the Arsenal Tract on the railroad's right of way, and was located between the railroad tracks and the river, just behind the Large Arsenal. The railroad had originally been given a fifty foot right of way on which to build four tracks but only two tracks were actually built. The remaining space, about 30 feet wide, was thus apparently utilized to construct the depot building on.


MARKET
STREET
120
120
Old Market House
120
Alley
188
34
35
36
70
43
104
30
187
SHENANDOAH
STREET
Small Arsenal
1
24
30
6
5
4
3
2
Large Arsenal
Alley
179
Side walk
Supts office
1
73
184
5 3½ Brick
4 2 Frame
3
1½ Frame 2
3 Brick
W&P Rail Road Depot
SHENENDOAH RIVER
ARSENAL
TRACT 1859
N
1859 Historical Base Map
Key
Brick
Stone
Frame
Trees
Rail Road
Iron Fence
Scale 50 Ft to an Inch

4. Arsenal Walls and Fences

Pipes were laid in 1810 to convey water from the forebay of the armory to a cistern in the yard of the Arsenal Tract to furnish water for fire fighting purposes. In 1829, pipes were bored and laid to convey water for the fire engines.

In 1825 and 1826 a high stone wall was erected along the eastern boundary of the arsenal tract bordering on the Wager Ferry tract.

The Shenandoah Street was macadamized in 1834, the sidewalks paved and gutters altered. Drains were constructed to convey the water through the Arsenal Tract to the river. A drain was also constructed through the Paymaster's garden to the river.

In 1853 roads in the armory yard were graded and macadamized, grass plots filled up, graded and sown with grass seed. Six cast iron street lamps were put up for lighting purposes. Presumably similar improvements were made in the Arsenal Tract.

The Arsenal Square was enclosed in 1857 along the Shenandoah Street front with a new brick and iron picket fence replacing the old fence made of discarded gun barrels.

CONCLUSIONS AND RECOMMENDATIONS

The Arsenal Lot Today

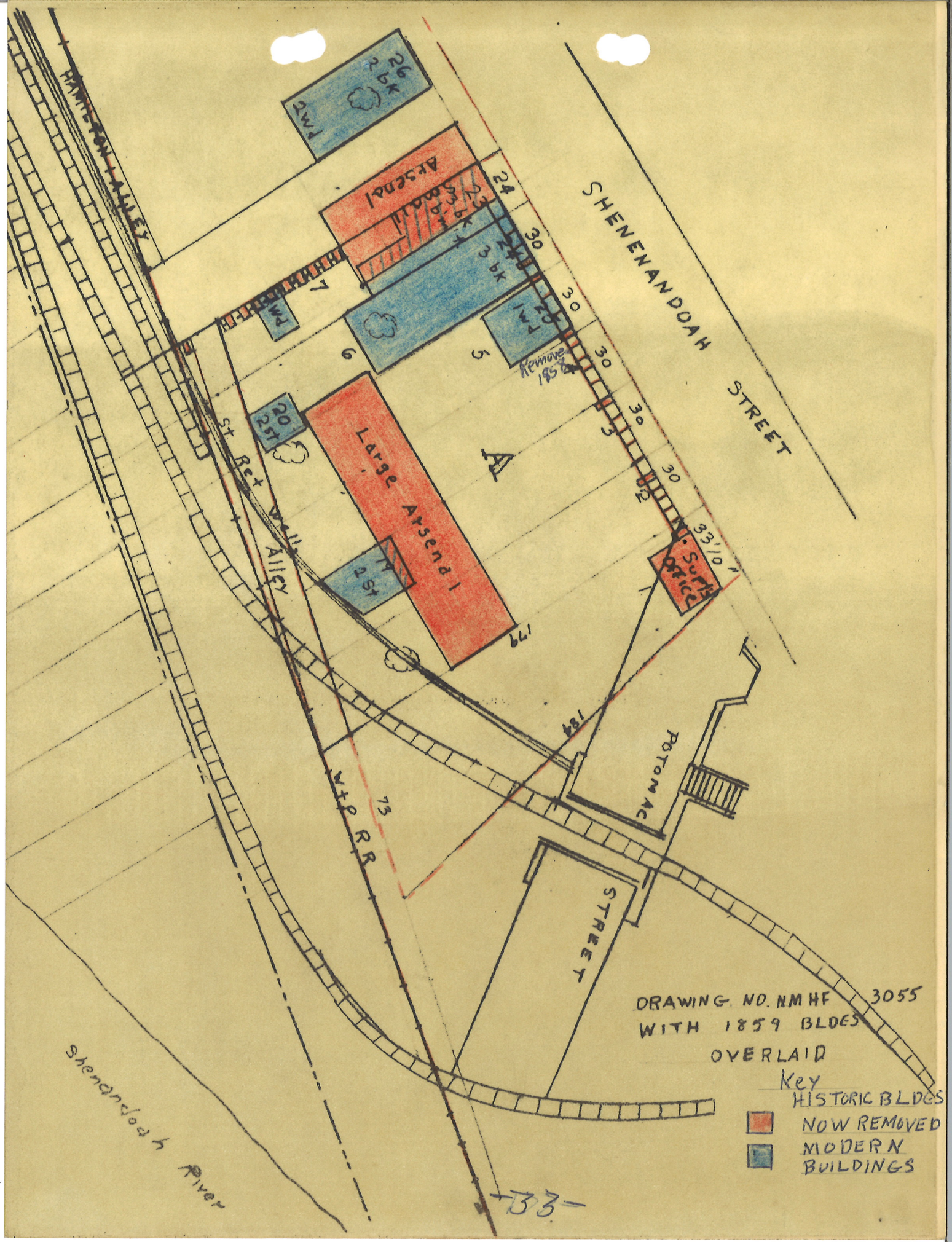
Neither of the Arsenals are standing today. Block A, the old Arsenal Square, in 1955, was a densely built up area that was covered with 11 non-historic structures; namely, Bldgs. No. 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 and 27. This great congestion of buildings in a relatively limited amount of space rendered it practically impossible for visitors to visualize this area as it was in the 1859-65 period. As a step towards remedying this situation, the National Park Service, between 1955 and 1958, has demolished Bldg. No. 17, 18, 21, 22, 25 and 27.

On the next page of this report will be found a tracing made from Drawing No. NM-HF-3055, which shows the location of the non-historic structures, Bldg. No. 19, 20, 23, 24 and 26, that are still standing on the Arsenal Tract .

Over this same map we have also plotted in the approximate location of the large and small arsenals in order to assist the reader in visualizing how the surviving non-historic structures interfere with the proper interpretation of the 1859-65 scene.

Recommendations

It is recommended that the remaining non-historic structures, Bldgs. No. 19, 20, 23, 24 and 26 be removed to assist in interpreting the arsenal tract as it appeared in the 1859-61 period. To further assist in interpreting this area, it is recommended that an archeological program be carried out to locate, if possible, the original foundations of the large and small arsenals. These foundations, or the approximate site of the, should be marked out on the


HAMILTON ALLEY
SHENENANDOAH STREET
Arsenal
Large Arsenal
Remove 1858
St Ret Wall
ALLEY
Surg Office
POTOMAC
STREET
W&P R.R.
Shenandoah River
A
DRAWING NO. NMHF 3055
WITH 1859 BLDGS
OVERLAID
Key
HISTORIC BLDGS NOW REMOVED
MODERN BUILDINGS

ground. It is also suggested that a portion of the 1859 fence be reconstructed along Shenandoah Street and the square be seeded, landscaped, and trees planted, following the 1859 photographs of the area. Street lights, designed after the one to be seen in Photograph HF-90, should also be installed in this area for reasons of protection. A trailside exhibit, composed of a map of the arsenal tract and Photographs HF-66 and HF-90, in conjunction with the marked foundations of the two arsenals and fence, should give visitors an excellent idea of the appearance of this area in 1859 and should eliminate any need to reconstruct the two arsenal buildings. The total cost of exploration in the arsenal tract area has been estimated at $3,000.

SIGNED

Philip R. Smith, Jr.
Historian
April 29, 1959

APPENDIX I

REPORT OF LIEUTENANT COLONEL KEARNEY AND CAPTAIN TURNBULL, of the Corps of Topographical Engineers, in Reference to a Resolution of Congress Passed During its Last Session, Authorizing the President to Grant Under Certain Conditions a Right of Way to the Winchester and Potomac Railroad Company Over the Public Ground at Harpers Ferry. October 23, 1834. Microfilm Reel 17, V.4, pp.272-273.

"...SIR: Agreeably to your orders we have examined the ground on which the Winchester and Potomac Railroad Company propose to locate their road and depots at and near Harper's Ferry, as well as the effect of that location upon the property and interests of the United States, and we have the honor to report:

That the company intend, on leaving the main land near Strider's island, that the road shall traverse the islands which border the northern shore of the Shenandoah river, viz: Strider's, Throop's, Hall's and Virginius islands, whence it will reach the narrow plains at Harper's Ferry, about forty-three yards above the foot-bridge at the lower end of the island. Upon one of these islands are the works erected by the United States for the manufacture of rifles; and on the main land, near the ferry, are the arsenals for the storage of arms, and many of the houses, offices, and other buildings, intended for the accommodation of the officers and workmen in the employ of the government.

Covered as the ground at the ferry is with houses, gardens, and fences, and crossed by streets and lanes, it would be difficult, if not impracticable, to construct a road of double tracks without interfering with some interest or convenience, and it would be equally difficult to avoid all improved property. The route which the company has traced is, in fact, almost altogether on improved property, on which are several houses, as the maps accompanying this repot, and the statement market F, will show. (Maps A, B, C. Maps A and B reproduced in Harpers Ferry Master Plan as Drawing No. HHFP 3002)

We are of opinion, nevertheless, that it is liable to fewer objections on the part of the United States than any other route that the company could have selected on the public lands.

The company call for a breadth of thirty feet for their road in its passage over the islands and to the eastward of the street or alley on which the Globe inn is situated. From this point (say thirty-four feet east of that street) to the eastern boundary of the United States property the company propose to increase the width of the ground on which their roads is to be constructed to fifty feet, to enable them to lay four tracks.

The parallel lines (traced and shaded in red lake) upon the maps hereto annexed, and marked A, B, and C, exhibit the location of the road, which covers about 7,000 square yards of public land.

We are of opinion that a breadth of thirty feet is not more than will be necessary for a double track elevated above the natural surface of the ground; and the connexion of the road with that of the Baltimore and Ohio Company, which has a peculiar width between the rails, renders four tracks indispensable at the place where they unite with each other.

As a place of deposit, and for the general accommodation of the trade, the company ask for the ground lying south of their road and east of the paymaster's dwelling. This is also colored

"in red lake upon the maps, (marked A and B,) and contains about 2,900 square yards. It includes part of the paymaster's garden and a small house of little value, and it extends to the river shore.

This ground will probably be scarcely sufficient for the purposes for which the company intend it. The privilege of wharfing in front of it would enable the company to communicate directly with the river trade and enlarge their limits. Should the United States be disposed to grant more space than is here indicated, the grant ought to be confined to the ground lying between the railroad and the Shenandoah river, and east of the lane on which the Globe inn is situated.

Between the railroad and Shenandoah street, and to the east of the Globe inn, the United States has no more ground than is required for the establishments which it has formed there. It is through this ground, nevertheless, that the company wish to open a communication between the railroad and Shenandoah street, and they propose to erect a warehouse immediately north of and in connexion with the road, for the benefit of the trade of Harper's Ferry and its neighborhood, and for the general accommodation of passengers.

The company have chosen two modes, by either of which it would be willing to effect this object; that is, directly by the space lying between the arsenal and the master armorer's, and colored in red lake on map A, or otherwise through the Globe Inn lane, and thence between the northern rails and the red dotted lines shown upon the same map.

As it is intended to lay the rails along this part of the line at such a height that their surface will be nowhere less than ten feet above the natural surface of the ground, and as the ground can be easily graded to forteen feet below the rails, they can be established on trestles or frames, or upon piers, so as to leave sufficient room under them for all purposes of transportation or intercourse between the depots south of the road and the Globe Inn alley, and thence to Shenandoah street.

Inasmuch as the ground which the company require for a depot on the southern side of their road necessarily approaches the paymaster's dwelling rather nearer than is supposed to be consistent with his comfort and convenience, or the safety of his property, and as the buildings which the United States have upon that lot are very conveniently situated for the purpose, and would be useful to the company for the accommodation of their officers and attendants at the depot, it is suggested whether it would not be to the mutual advantage of the parties to yield this lot and its improvements to the company for a fair price. We learn that there is an unexpended appropriation for enlarging the paymaster's establishment. Should it be considered advisable to locate him elsewhere, (on the hill, for example,) there could not be a fairer opportunity, nor one more in accordance

"with the interests of all parties, than the one now presented.

Should the President of the United States resolve to convey to the company the right of way over the public land, we conceive it to be our duty respectfully to suggest that, among others, the following conditions and restrictions ought to be embraced in the act of conveyance, viz:

Restraining the company from diminishing the watercourses by which the works on the Shenandoah are supplied with water; from impeding the free passage of the water through them; from diminishing the height, length, breadth, or strength of the embankments which now are or may be hereafter erected to protect the works or property against freshets or backwater; the like restrictions as to waste-weirs, sluices, dams, &c.; from interrupting or reducing the water communication between these channels and the river; from impeding or injuring the navigation of the rivers near the United States property; from preventing or impeding the erection of any dam or other work that the United States may propose to erect upon the Shenandoah, reserving to the United States to add to, enlarge, diminish, or otherwise alter or change such channels, sluices, waste-weirs, dams, embankments, or other works, as now are or hereafter may be deemed neccessary or convenient.

Further, we think that the company ought to be restrained from embanking any part of the ground over which their road is to be constructed near the public land without the express permission hereafter of the United States. The rails ought, therefore, to be supported, wherever they are elevated above the natural surface, upon frames or trestles, or upon piers or viaducts, so as to leave free and unimpeded, as far as practicable, the communication between the ground lying north of the road and that which lies next to the river, so that the passage across or under the road may always be free and open to the United States and to the public, so far, at least, as may consist with the safety of the property of the company; and, for this purpose, the surface of the rails ought not to be less than ten feet above the ground anywhere at Harper's Ferry, nor less than forteen feet above the ground at and east of the Globe Inn alley.

This freedom of communication, so far as it relates to the ground on which the company's depot is to be situated, might be limited to the property of the United States, and to the officers and persons in their employment; and with that limitation might be connected a right to land stores and other property at the wharves and upon the grounds of the company at Harper's Ferry, and to transport them over the said grounds by the most direct and convenient routes, free of charge for wharfage, damage, or use of grounds. The company should be also restrained from obstructing the streets across which their road may be carried, and from interrupting the drainage of the ground north of it. It ought to be held to erect and maintain sufficient fences between its property and that of the United States wherever and

whenever required. It ought to remove, at its proper cost, such houses, sheds, &c., as may fall within the limits conveyed to it, to such places as they may be reasonably required to remove them to, and to restore them in as good condition to their owners as they were in immediately before their removal; or (at the option of the owners) it should pay for them at a fair valuation. It ought also to be obligatory upon the company to use every precaution against fire, and to repair any damage or loss that the United States property may sustain in consequence of the proximity of the company's works to the same.

Whether there exists sufficient authority to make arrangements and conditions such as we have suggested, or whether any conveyance of the right of way over the property of the United States at Harper's Ferry at or near the line of location laid down on the accompanying maps, or on any other practicable line, can be made consistently with the provisions of the joint resolution, a copy of which accompanies this report, and especially whether such conveyance may be made consistently with the clause which requires that the ground to be conveyed shall be 'at present not improved,' we do not conceive to be within the sphere of our duty to inquire. It is for others to determine whether the authority to do so be sufficient or not. Our duty is confined to the simple statement of the facts which we have collected, and the restrictions and conditions which occur to us as being worthy of the President's consideration. If there are any other than those we have stated, they have escaped our attention, or have not appeared sufficiently important to be noted.

Very respectfully, we are, sir, your obedient servants,

JAMES KEARNEY, Lieut. Col., and Top. Eng.
WM. TURNBULL, Captain and Ass't Top. Eng.

Lieut. Col. J. J. Abert, Topographical Bureau.

F.

Explanation of maps accompanying the foregoing report.

At the eastern termination of the government land a high stone wall is erected, immediately on the line between the United States and Wager's.

No. 1, carriage-house of superintendent, value $40; can be removed.

No. 2, carriage-house and stable of paymaster, value $50; can be removed.

No. 3, carriage-house and stable of master armorer, value $150; can be removed.

No. 4, dwelling, belonging in part to the United States, and the balance to George S. Butler—say, United States $100, Butler

"$140, as acertained by appraisers. This building cannot be removed.

The other buildings laid down on the map in the line of the railroad are frame smoke-house, privies, and sheds, of but little value, and can be removed with but little expense. The ground occupied by a kitchen attached to the paymaster's quarters is required for a part of the depot. This buildings is of frame, of little value, and also easily removed.

It may not be improper to remark that the fencing of the lots will be much increased by the opening of the contemplated railroad. It will also be necessary to secure a free passage along the streets extending from Shenandoah street to the river; that is, that the rails should be sufficiently elevated for the passage of wagons under them.

August 12, 1834."

APPENDIX II

PHOTOGRAPHS

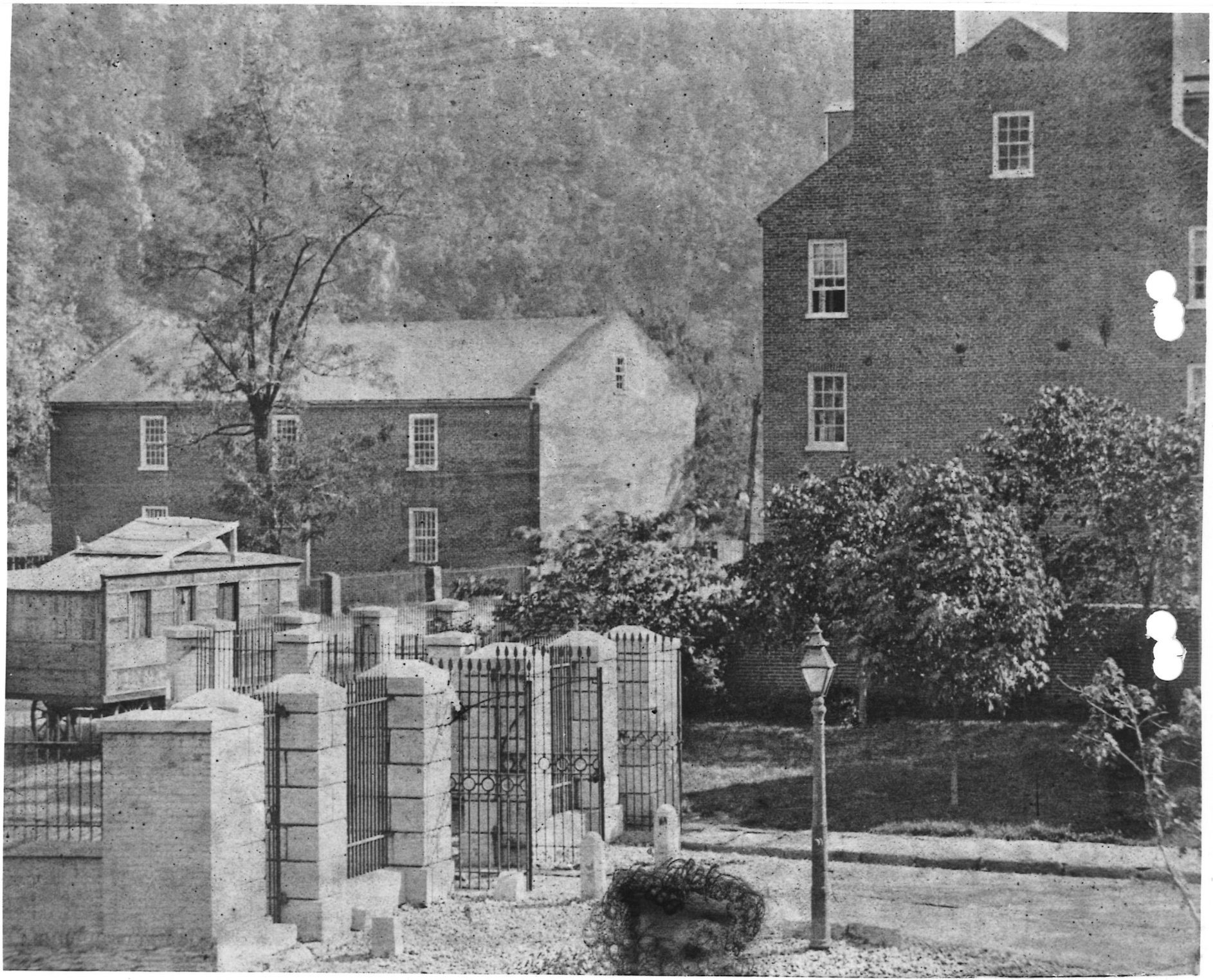
(Five)

GATE TO THE ARMORY YARD

Taken before April, 1861, when the Arsenals were destroyed, and probably in 1859.
Original contributed by John Perry, Bolivar Heights and Pittsburgh.
National Geographic File No. 140320-A.
Harpers Ferry Negative No. HF-90.

This view is taken from within the armory yard looking through the armory entrance gate into the arsenal yard. The large 3½ story brick building to the right is present Building Number Nine. The two story brick building with slate roof across the street from Bldg. No. 9 is the small arsenal. The street lamp, grass, and shrubbery shown with the entrance to the armory is the result of measures taken to improve the appearance of the armory tract. Similar landscaping was probably done in the arsenal tract as well.

The arsenal is depicted as a large two story brick building without a chimney. Unlike the large arsenal, the small arsenal does not have arched windows.



HARPERS FERRY FROM CHURCH STREET

Original contributed by John Perry,
Bolivar Heights and Pittsburgh.
National Geographic File No. 140325-A.
Harpers Ferry Negative No. HF-66.

Photograph taken before 1861 when the Arsenals were destroyed and probably in 1859.

In this view, the large arsenal stands to the left of the wooden building in the right hand corner of the photograph. The large arsenal is shown as a two story brick building with arched windows and slate roof. Note the absence of chimnies. The building behind the large arsenal is believed to be the Winchester and Potomac Railroad depot. To the left of the large arsenal are the Ferry Lot buildings.



HARPERS FERRY, BEFORE JUNE, 1861
IN POSSESSION OF THE CONFEDERATE FORCES.

Engraving made from Harper's Cemetary on
Camp Hill, looking towards the Railroad
Bridge.
National Archives Still Picture Section;
Order No. BA-1812.
Harpers Ferry Negative No. HF-4.

This engraving was made after April, 1861, when the arsenal was destroyed, and before June, 1861, when the bridge was destroyed.

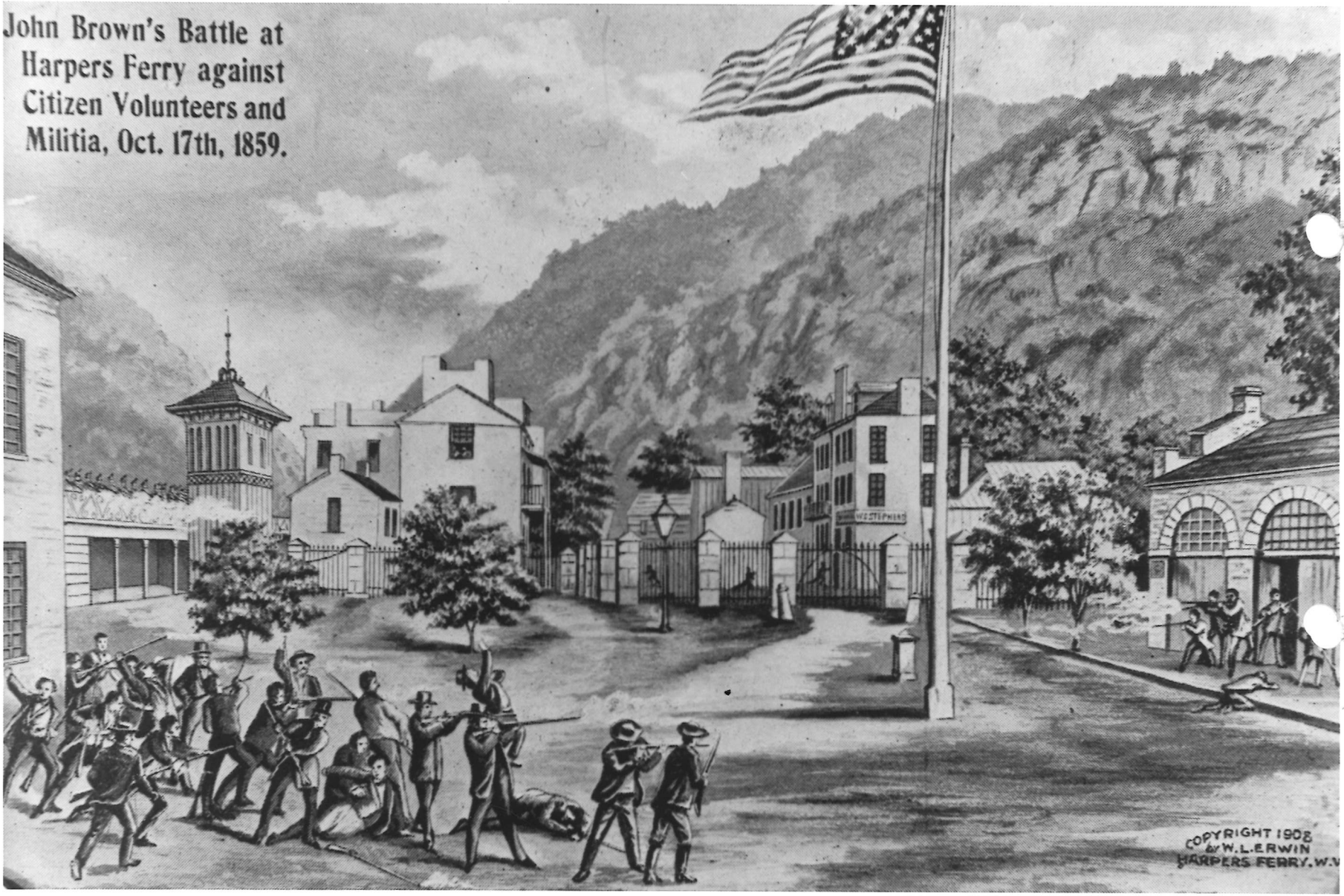
Just over the second cannon from the left may be seen the remains of the large arsenal burned out just a short time previously. to the left of the arsenal towards the river are the Ferry Lot buildings. The engraving was made while the Confederates were still in possession of Harpers Ferry.



JOHN BROWN'S BATTLE AT HARPERS FERRY
AGAINST CITIZEN VOLUNTEERS AND MILITIA, OCT. 17th, 1859

Post card based on an old print.
Donated by Mr. Henry McDonald, Storer College.
Harpers Ferry Negative No. HF-363.

The three and one-half story brick house on Wager Lot No. 5 stands beyond the flag pole to the right. Next, stands the two story stone house located on Lot No. 4; beyond, the 1½ story frame house on Lot 2, then the large three story brick building also located on Lot 2. Moving to the left, a portion of the Gault House Saloon is visible. To the right is the engine house; between it and the flag pole is the slate roof of the superintendent's old office. It is supposed that the gap between the buildings on Wager lots four and two was the opening into the arsenal tract entrance located behind the buildings.


John Brown's Battle at
Harpers Ferry against
Citizen Volunteers and
Militia, Oct. 17th, 1859.
COPYRIGHT 1908
by W. L. ERWIN
HARPERS FERRY, W. V.

HARPERS FERRY AND POTOMAC BRIDGE FROM BASE OF MARYLAND HEIGHTS BELOW (EAST) THE BRIDGE.

This is a blow-up made from Negative No. HF-40.
Harpers Ferry Negative No. HF-377.

Just in back of the railroad car on the end of the bridge is the old arsenal with a temporary roof. A chimney has been added and the building is probably being used for the quartering of troops or as a depot.

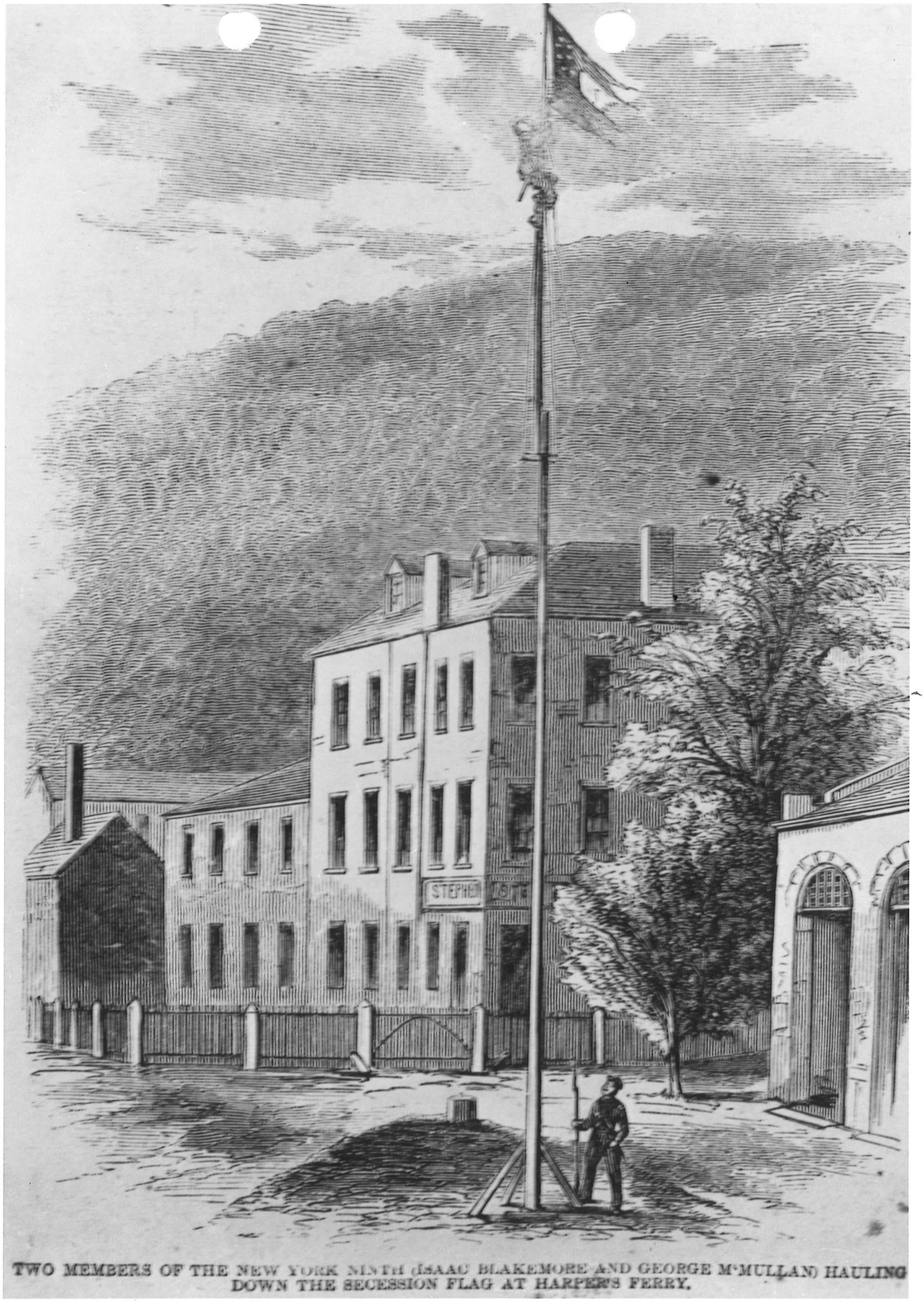
Also appearing in the photograph are Bldgs. No. 38, Bldg. No. 40 - burned out - and Bldg. No. 43, right to left.



TWO MEMBERS OF THE NEW YORK NINTH (ISSAC BLAKEMORE AND GEORGE M'MULLAN) HAULING DOWN THE SECESSION FLAG AT HARPERS FERRY

From Harpers Weekly, Vol. 5, (1861), p.490.
Library of Congress.
Harpers Ferry Negative No. HF-229.

In the background of this photograph may be seen the Ferry Lot Buildings. The large three and a half story building stands on Wager Lot No. Five. The two story building to the left of it stands on Wager Lot No. Four. The space between the buildings on Wager Lots Four and Two, the last building to the left of the photograph, is the entrance to the Arsenal Tract hidden behind the buildings. See also Photograph HF-363, Page 180



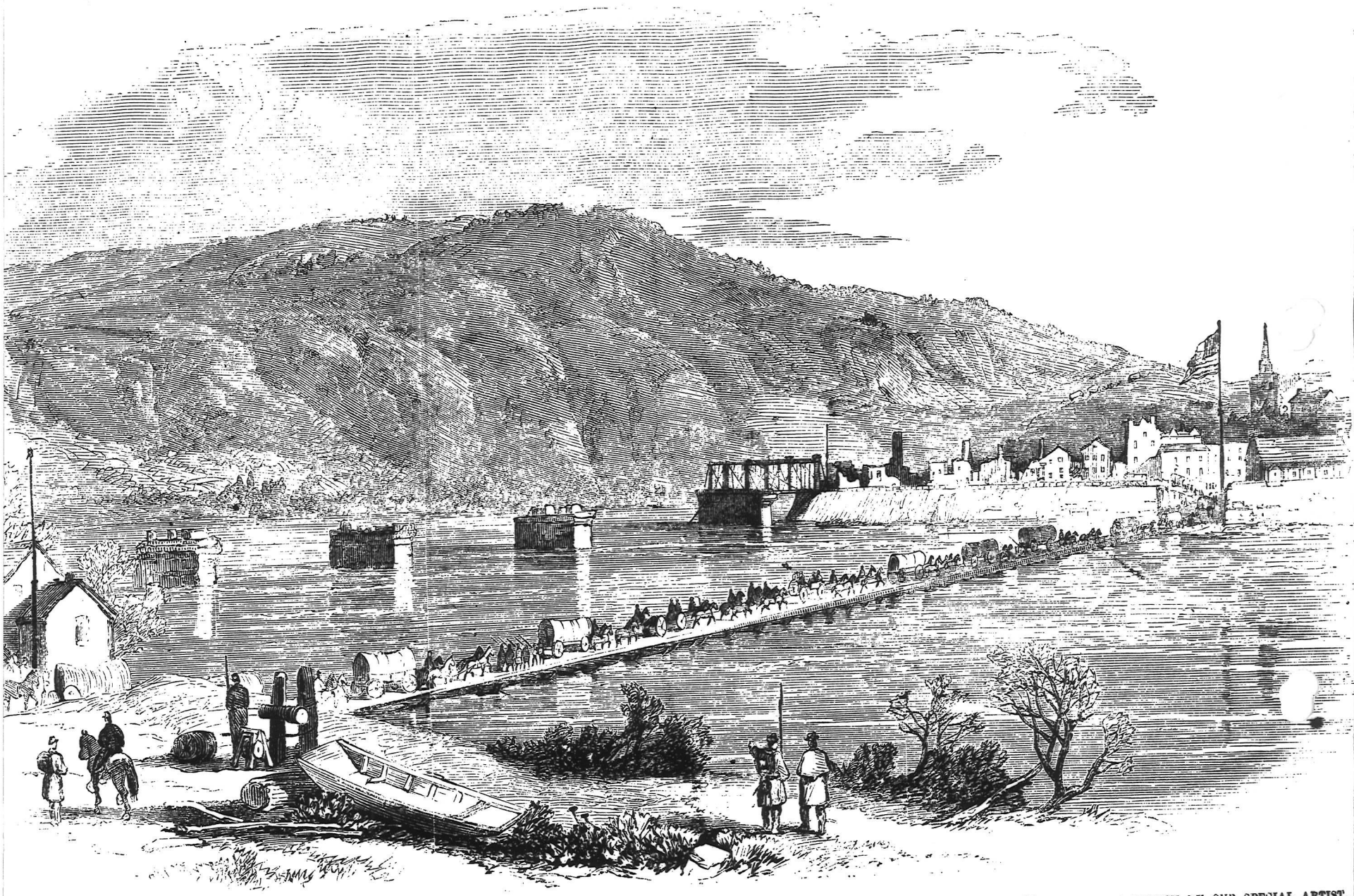
TWO MEMBERS OF THE NEW YORK NINTH (ISAAC BLAKEMORE AND GEORGE M'MULLAN) HAULING DOWN THE SECESSION FLAG AT HARPER'S FERRY.

THE WAR IN VIRGINIA--GENERAL BANK'S DIVISION OF THE ARMY OF THE POTOMAC CROSSING THE POTOMAC RIVER, AT HARPERS FERRY, FEBRUARY 26th--FROM A SKETCH BY OUR SPECIAL ARTIST, MR. C. S. HALL

From Harpers Magazine.
Harpers Ferry Negative No. HF-457.
Made February 26, 1862.

To the right of the destroyed railroad bridge are the ruins of the arsenal tract. The Ferry Lot buildings were destroyed on February 7, 1862, thus allowing a view of the buildings on Shenandoah Street.

ırsaw Island, with shady trees in the

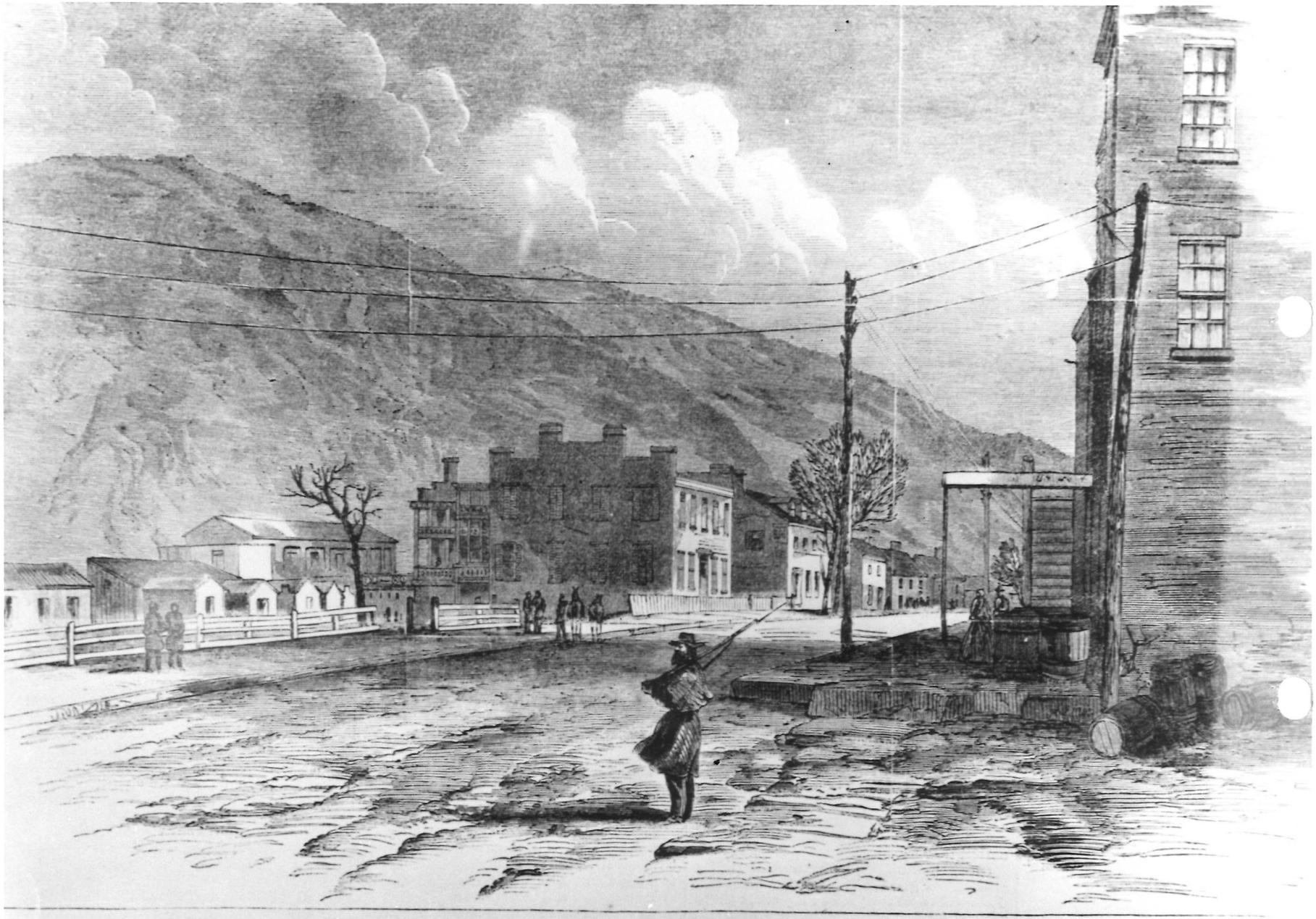


THE WAR IN VIRGINIA—GENERAL BANKS'S DIVISION OF THE ARMY OF THE POTOMAC CROSSING THE POTOMAC RIVER, AT HARPER'S FERRY, FEBRUARY 26TH.—FROM A SKETCH BY OUR SPECIAL ARTIST, MR. C. S. HALL.

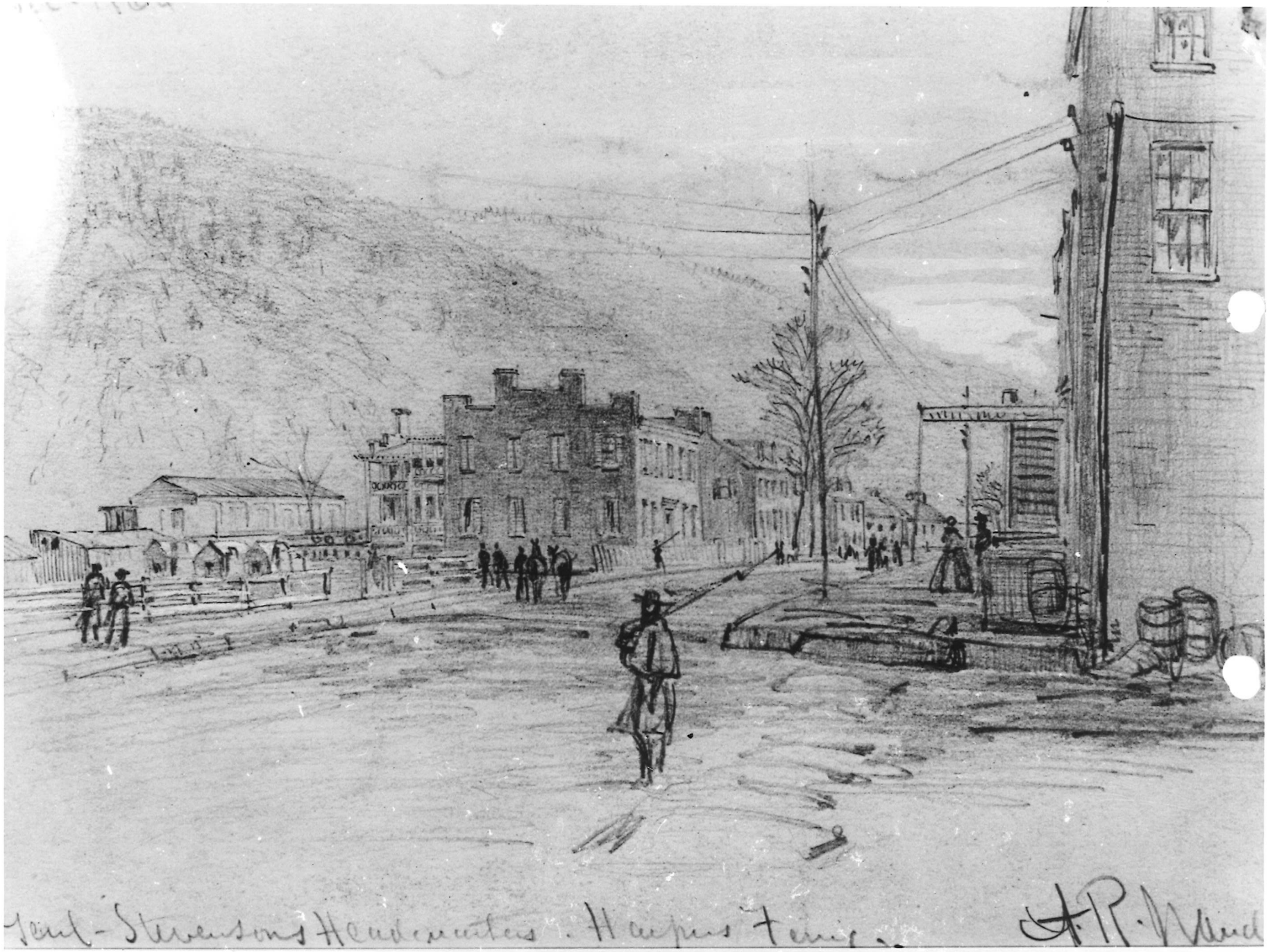
STEVENSONS HEADQUARTERS, HARPERS FERRY
(1865)

Original drawing by Alfred R. Waud.
Reproduced from Library of Congress,
(13344-9).
Harpers Ferry Negative No. HF-224.

The large two story building in the center of the photograph is building number 36; to the left of it appear temporary wooden buildings erected after the destruction of the arsenals. The two story building to the ~~left~~ right. of 36 is building number 34-35. The large building to the right of the photograph is building number 9.



VIEW IN HARPERS FERRY.—GENERAL STEVENSON'S HEAD-QUARTERS, LOUDON HEIGHTS IN THE DISTANCE.—[SKETCHED BY A. R. WARD.]


Genl - Stevensons Headquarters. Harpers Ferry.
A. R. Waud