

***The Orange & Alexandria
Railroad and
The Army of the Potomac***

1862 -1864

***Ron Beavers
31 May 2014
703-978-6820***

Part 1

BACKGROUND

1861

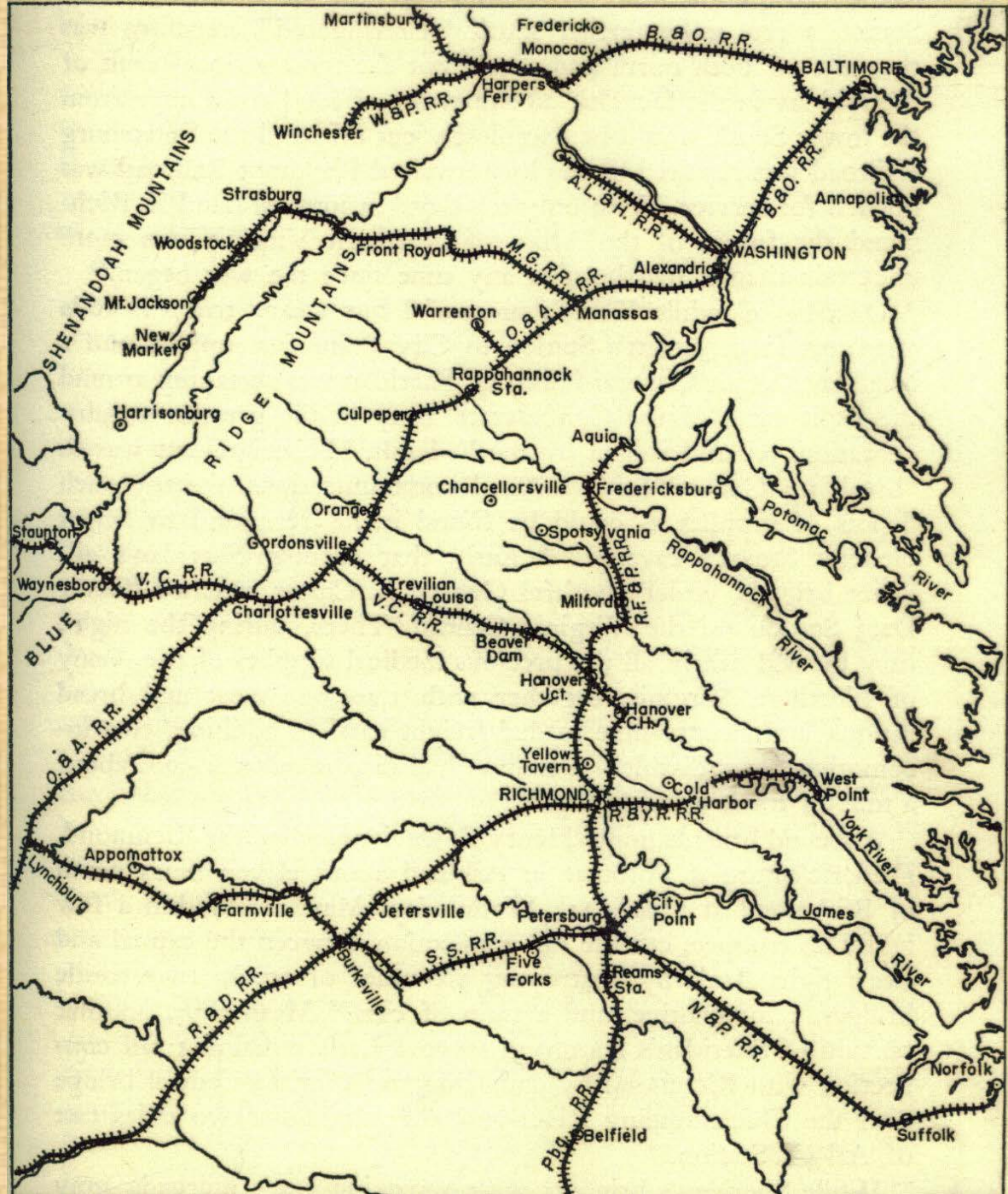
April 20

- RE Lee tenders resignation to Sec War Cameron
- Gov. Letcher offers command of VA forces to Lee

April 22

- RE Lee takes train to Richmond*

* Douglas Southall Freeman, "R E Lee", Vol. 1, pg. 448



1861

April 23

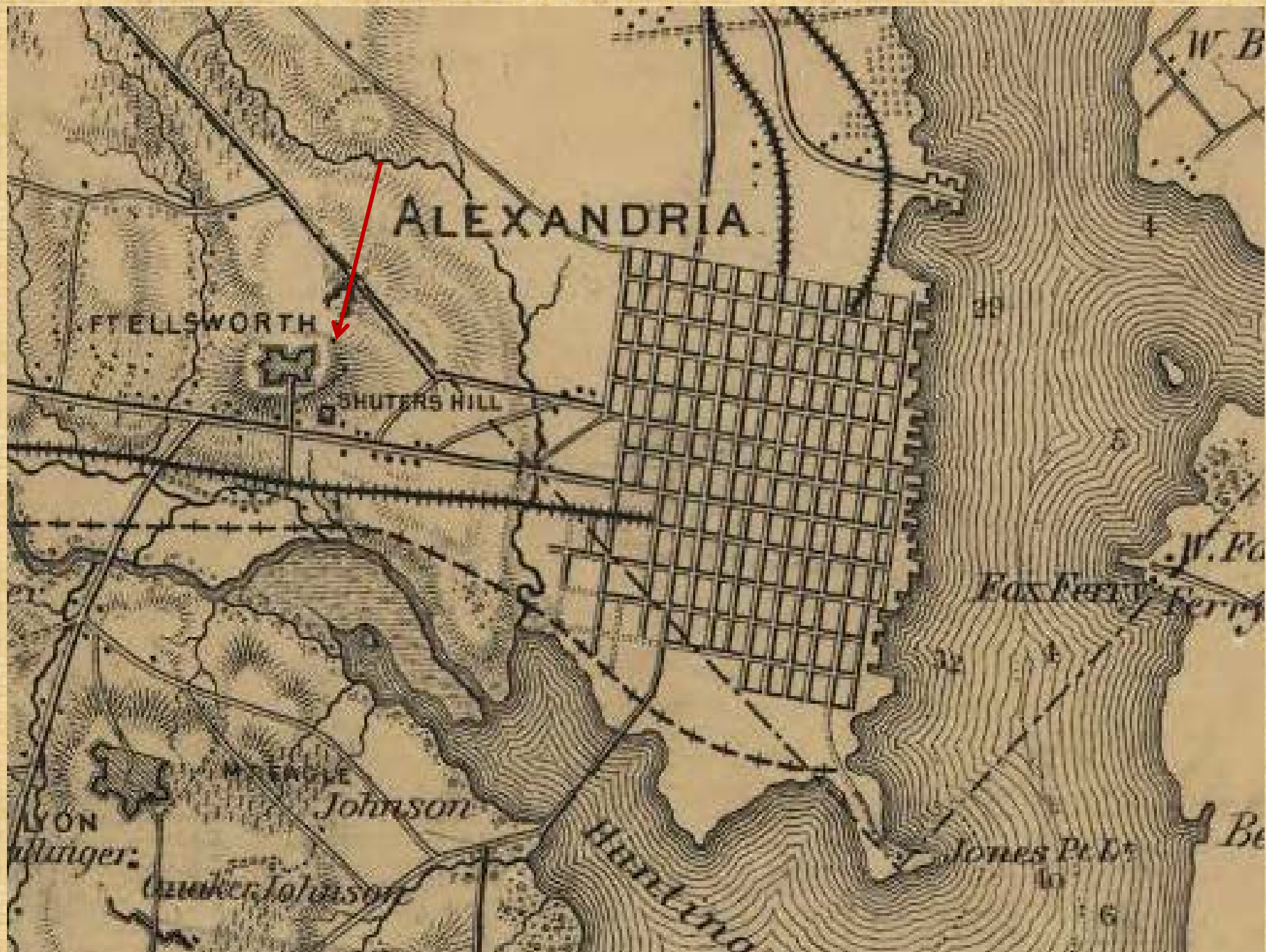
- RE Lee appointed MG of Virginia Military and Naval Forces in defense of Virginia¹

May 2-19

- RE Lee orders removal of railroad rolling stock in Alexandria railroads²
 - ❖ A&W RR
 - ❖ AL&H RR
 - ❖ O&A RR

¹ OR, Series 1, Vol. 2, p 1; & Freeman, "R E Lee", Vol. 1, pg.468

² Davis, The Virginia Magazine of History and Biography, pg. 557 & 674; Annual Company Reports; PRR Chronology 1856 & 1857, OR, Series 1, Vol. 2, Ch. 9, pg. 24 & 917; OR, Series 1, Vol. 2, Ch. 9, pg. 41



ALEXANDRIA

FT. ELLSWORTH

SHUTERS HILL

W. B.

W. F.

Fox Ferry Ferry

Johnson

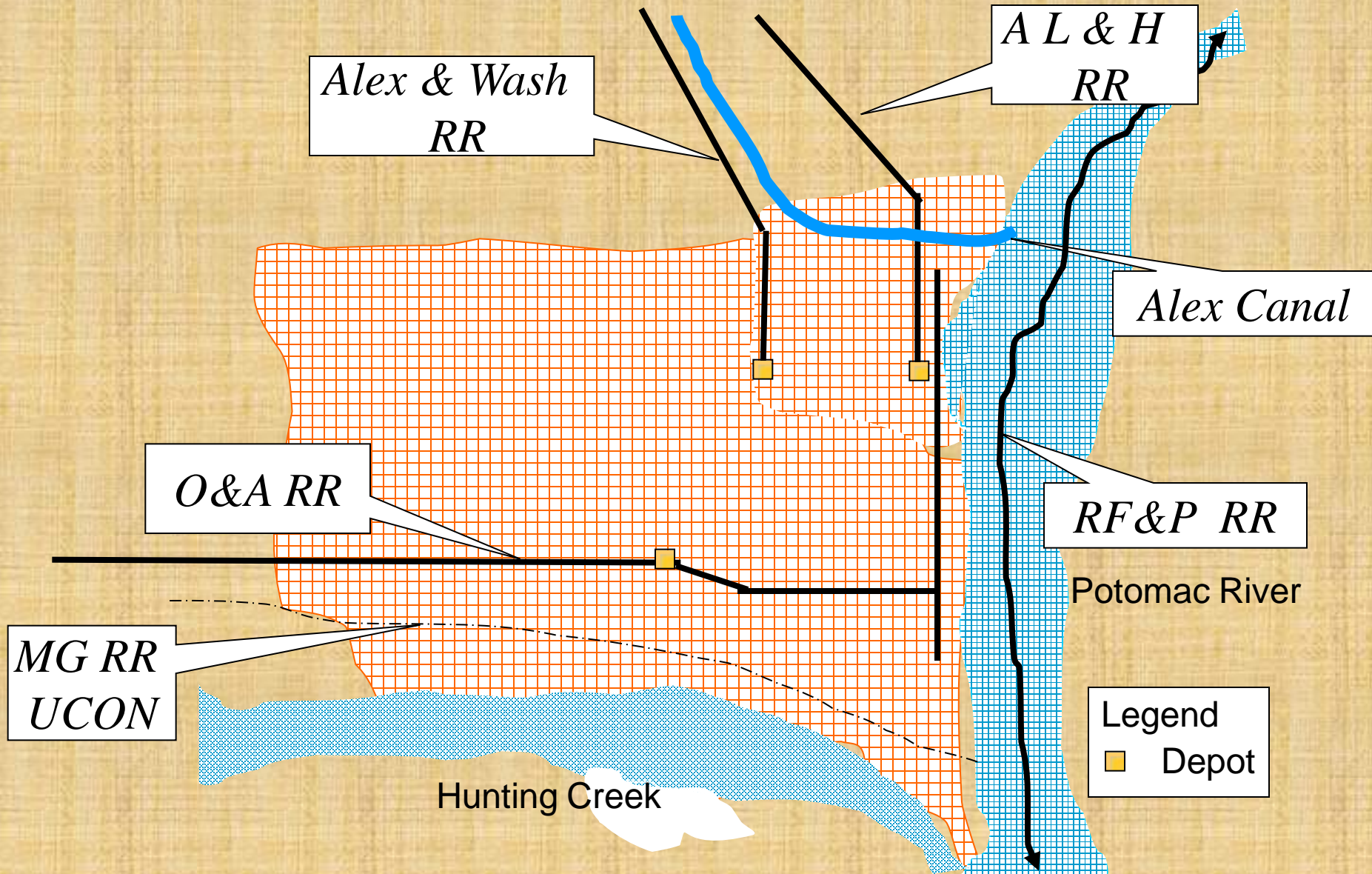
Huntling

Quaker Johnson

Jones Pt. Dr.

Be

Alexandria: No Interchange



1861

May

- Lee orders the O&A to be inoperable as a defensive position*
 - ❖ Orders destruction of bridges
 - ❖ Orders removal/destruction of tracks in many places

May 23

- Virginia secedes

May 24

- Federal Forces enter Alexandria

*Annual Company Reports and Freeman

1861

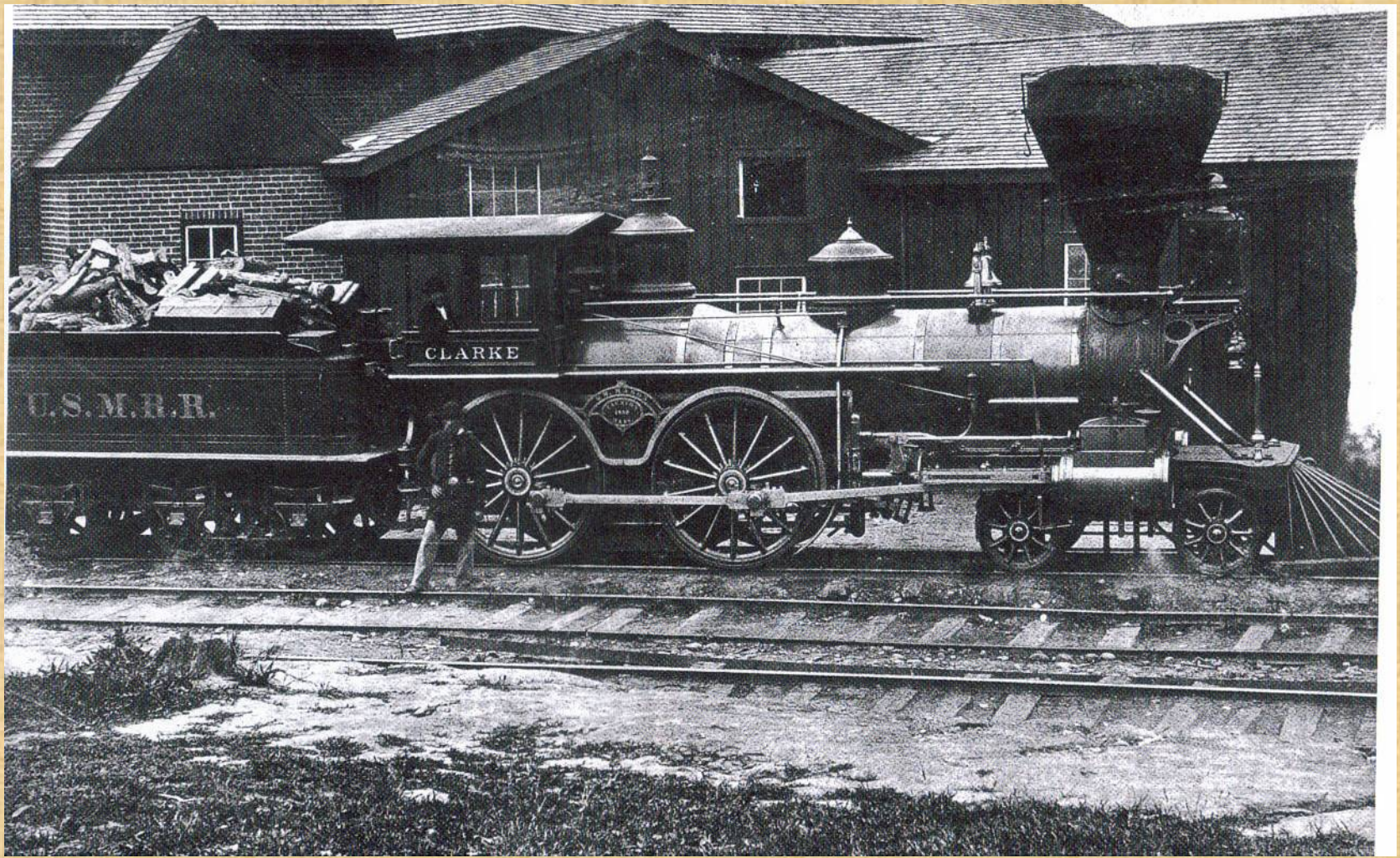
June

- Virginia forces transferred to Confederacy
 - ❖ Lee becomes BG in Confederate Army¹

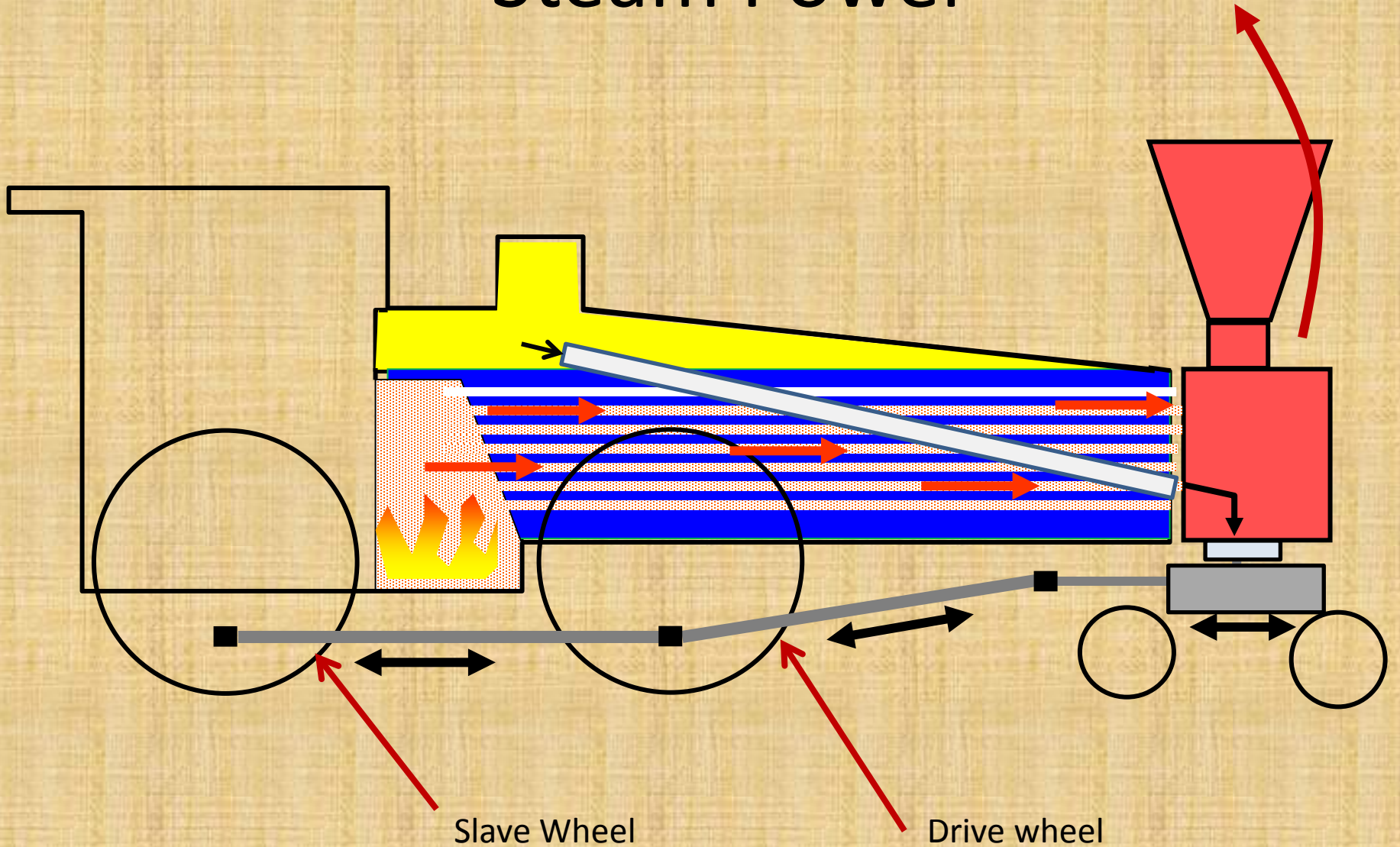
- All rolling stock has been removed in Alexandria²
 - ❖ Except
 - ✓ 3 Engines
 - ✓ 24 Platform cars
 - ❖ O&A RR destruction complete
 - ✓ Tracks torn up/removed in many places
 - ✓ 7 Bridges destroyed

¹ Freeman, "R E Lee", Vol. 1, pg. 527

² Annual Company Reports and Freeman



Steam Power



1861

➤ July 16

- ❖ Union Army leaves Alexandria
 - Objective – Manassas Junction

➤ July 21

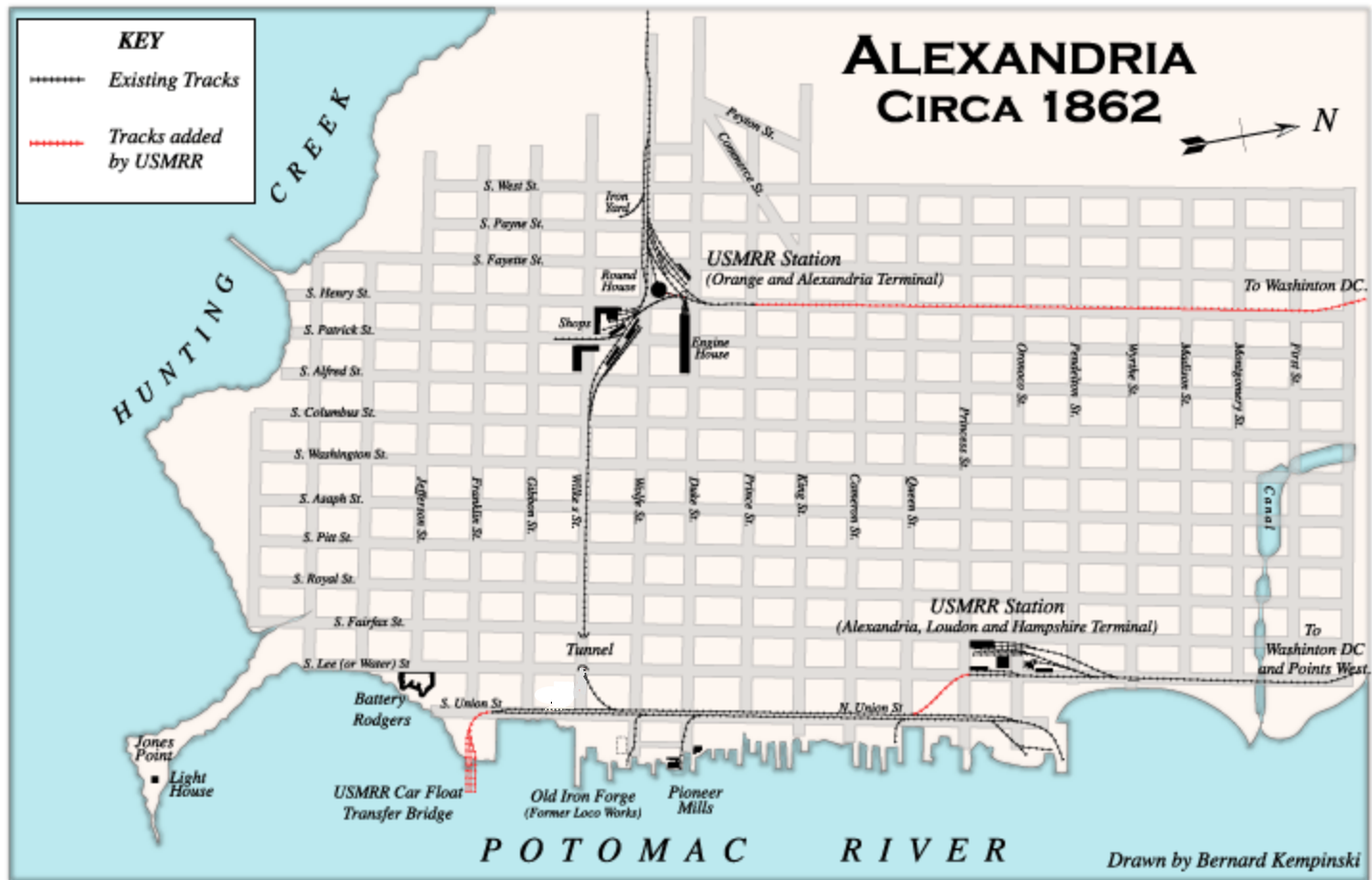
- ❖ First Manassas

1861

November*

- O&A and AL&H connected
- O&A and A&W connected
- O&A repaired
 - ❖ Bridges reconstructed and rails installed
 - ❖ 3 engines borrowed from Phil & Wilmington
 - ❖ 12 passenger and 1 baggage car borrowed from Penn RR
- Long Bridge mostly unsuitable for traffic

* OR, Series 3, Vol. 1, pg. 673-674; OR, Series 1, Vol. 2, Ch. 9, pg. 858



Map Showing Railroad Facilities in Alexandria during the American Civil War



ORANGE & ALEXANDRIA RAILROAD TUNNEL

THIS TUNNEL BUILT IN 1851, ONCE SERVED THE ORANGE & ALEXANDRIA RAILROAD COMPANY. IT NOW LIES ABANDONED IN THE HEART OF ALEXANDRIA.

THIS SINGLE TRACK TUNNEL IS FORMED BY AN ARCH OF BRICK WITH THE PORTAL FACING IN STONE. THE WEST PORTION OF THE TUNNEL CONSISTS OF A BLOCK LONG RAMP WITH SIDEWALLS CONSTRUCTED OF STONE LAID UP IN A RANDOM ASHLAR PATTERN TOPPED WITH RANDOM BOND BRICK WALLS ABOVE THE SURROUNDING ROAD LEVEL.

COMMONWEALTH OF VIRGINIA SURVEY

THE FIRST STATE-WIDE SURVEY TO BE CONDUCTED BY THE HISTORIC AMERICAN ENGINEERING RECORD DOCUMENTS A SELECTED GROUP OF HISTORICALLY SIGNIFICANT ENGINEERING STRUCTURES THROUGHOUT VIRGINIA. THE SURVEY WAS SPONSORED BY THE NATIONAL PARK SERVICE, OF WHICH H A E R IS A PART, THE COMMONWEALTH OF VIRGINIA, AND THE UNIVERSITY OF VIRGINIA.

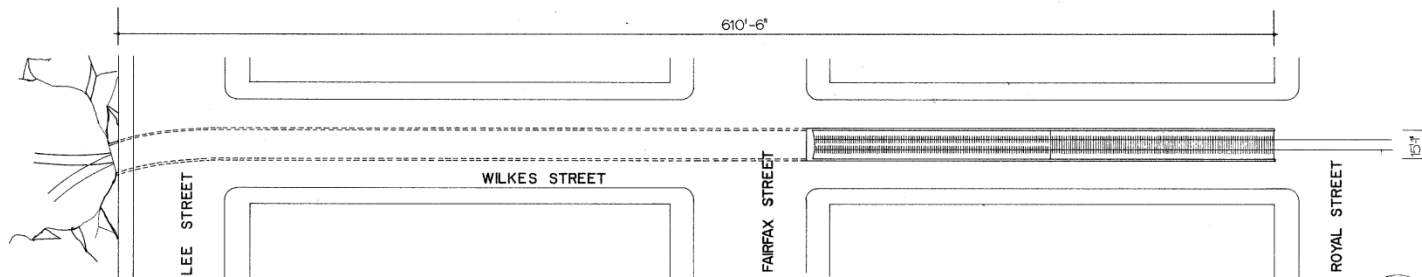
THE FIELD WORK AND HISTORICAL RESEARCH WERE CONDUCTED AND THE FINAL DRAWINGS PRODUCED DURING THE SUMMER OF 1970 UNDER THE GENERAL DIRECTION OF JAMES C. MASSEY, CHIEF, HISTORIC AMERICAN BUILDINGS SURVEY; JAMES MOODY, DIRECTOR, VIRGINIA HISTORIC LANDMARKS COMMISSION; AND ROBERT M. VOGEL, CURATOR, MECHANICAL AND CIVIL ENGINEERING, SMITHSONIAN INSTITUTION. THE PHOTOGRAPHY WAS DONE DURING THE SPRING OF 1971. RICHARD J. POLLAK, PROFESSOR, COLLEGE OF ARCHITECTURE AND PLANNING, BALL STATE UNIVERSITY WAS PROJECT SUPERVISOR.

SURVEY TEAM: DONALD G. PRYCE, ARCHITECT, (TEXAS A&M UNIVERSITY); JAMES J. DEPASQUALE, STUDENT ARCHITECT (UNIVERSITY OF VIRGINIA); AND CHARLES KING, STUDENT ARCHITECT (UNIVERSITY OF VIRGINIA). SURVEY HEADQUARTERS: SCHOOL OF ARCHITECTURE, UNIVERSITY OF VIRGINIA. PHOTOGRAPHER: JACK E. BOUCHER.



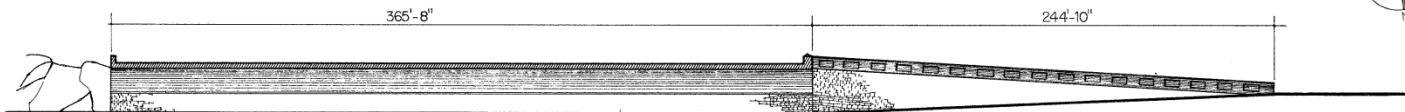
SITE MAP

0 1000 3000
SCALE IN FEET



PLAN

SCALE 1" = 40'-0"
0 50 100



CROSS SECTION

SCALE 1" = 40'-0"
0 50 100

DRAWN BY: DONALD G. PRYCE, 1970

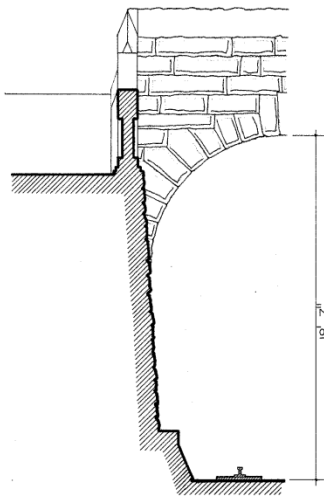
OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION
COMMONWEALTH OF VIRGINIA SURVEY
UNDER DIRECTION OF THE NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

NAME AND LOCATION OF STRUCTURE
ORANGE & ALEXANDRIA RAILROAD CO. - TUNNEL 1851
PASSES UNDER WILKES ST BETWEEN LEE & ROYAL STS.,
ALEXANDRIA,
VIRGINIA

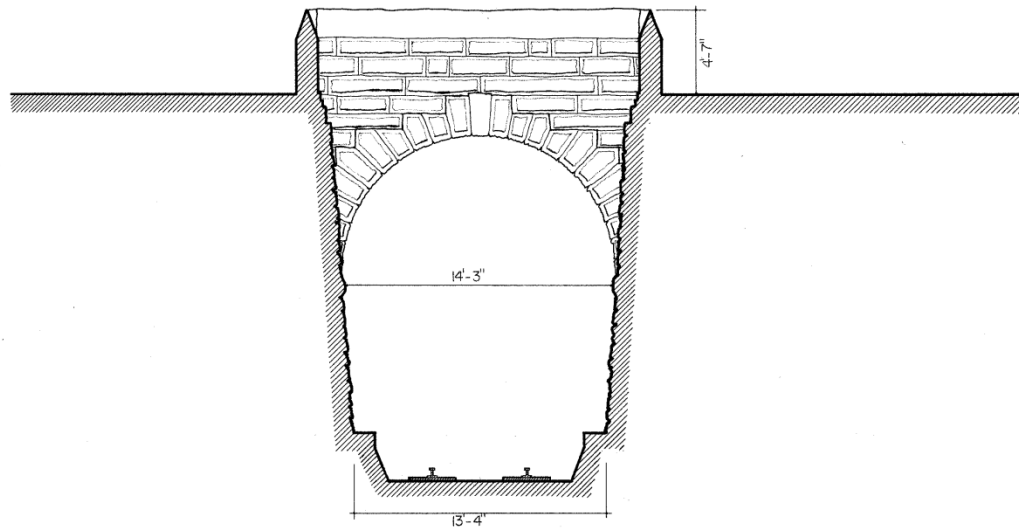
RECORD NO.
VA-18

HISTORIC AMERICAN
ENGINEERING RECORD
SHEET 1 OF 3 SHEETS

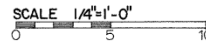
LIBRARY OF CONGRESS
SERIES NUMBER



SECTION THROUGH RETAINING WALL



WEST ELEVATION



DRAWN BY: *James J. DeAngelo*

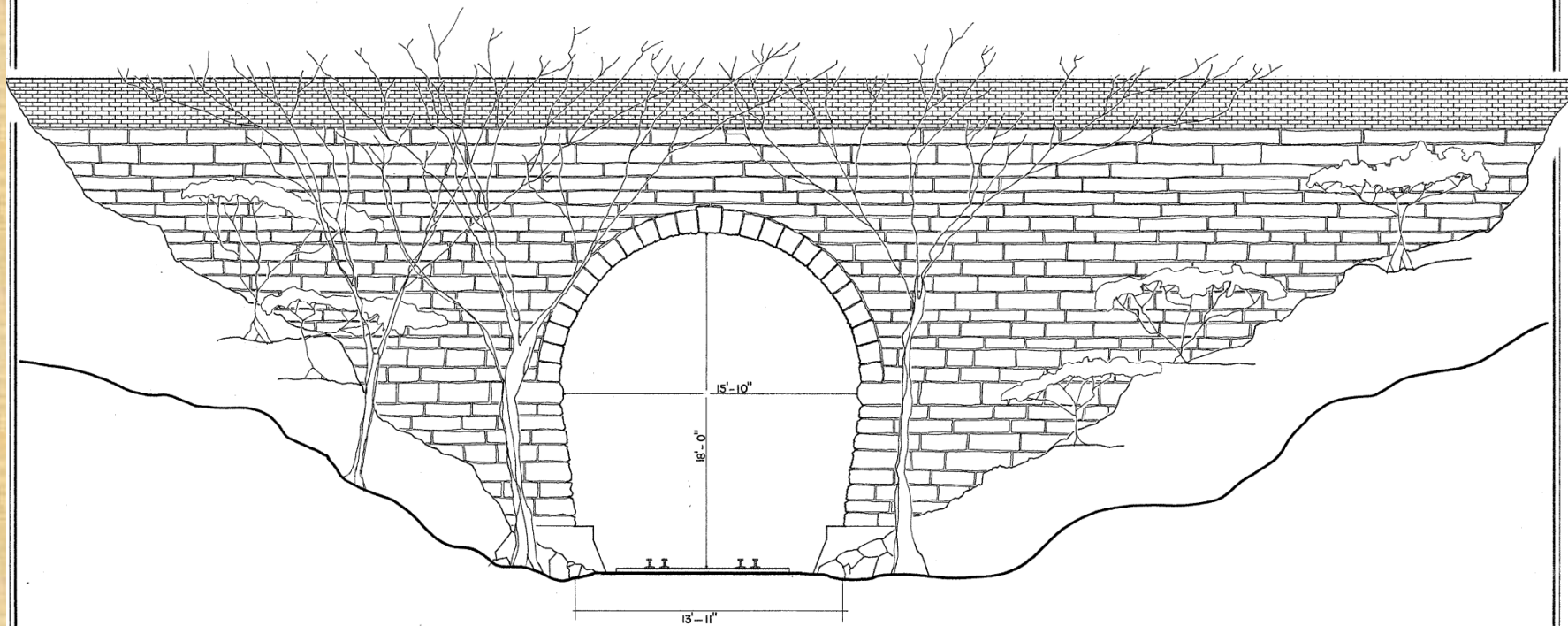
OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION
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RECORD NO.
VA-18

HISTORIC AMERICAN
ENGINEERING RECORD
SHEET 3 OF 3 SHEETS

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INDEX NUMBER



EAST ELEVATION

SCALE 1/4" = 1'-0"
 0 5 10

DRAWN BY: James J. Nobisqure 1970

OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION
 COMMONWEALTH OF VIRGINIA SURVEY
 UNDER DIRECTION OF THE NATIONAL PARK SERVICE,
 UNITED STATES DEPARTMENT OF THE INTERIOR

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 ALEXANDRIA, VIRGINIA

RECORD NO.
 VA-18

HISTORIC AMERICAN
 ENGINEERING RECORD
 SHEET 2 OF 3 SHEETS

LIBRARY OF CONGRESS
 INDEX NUMBER



D I S T A N C E S .

Miles

From Baltimore and Ohio R.R. Depot to

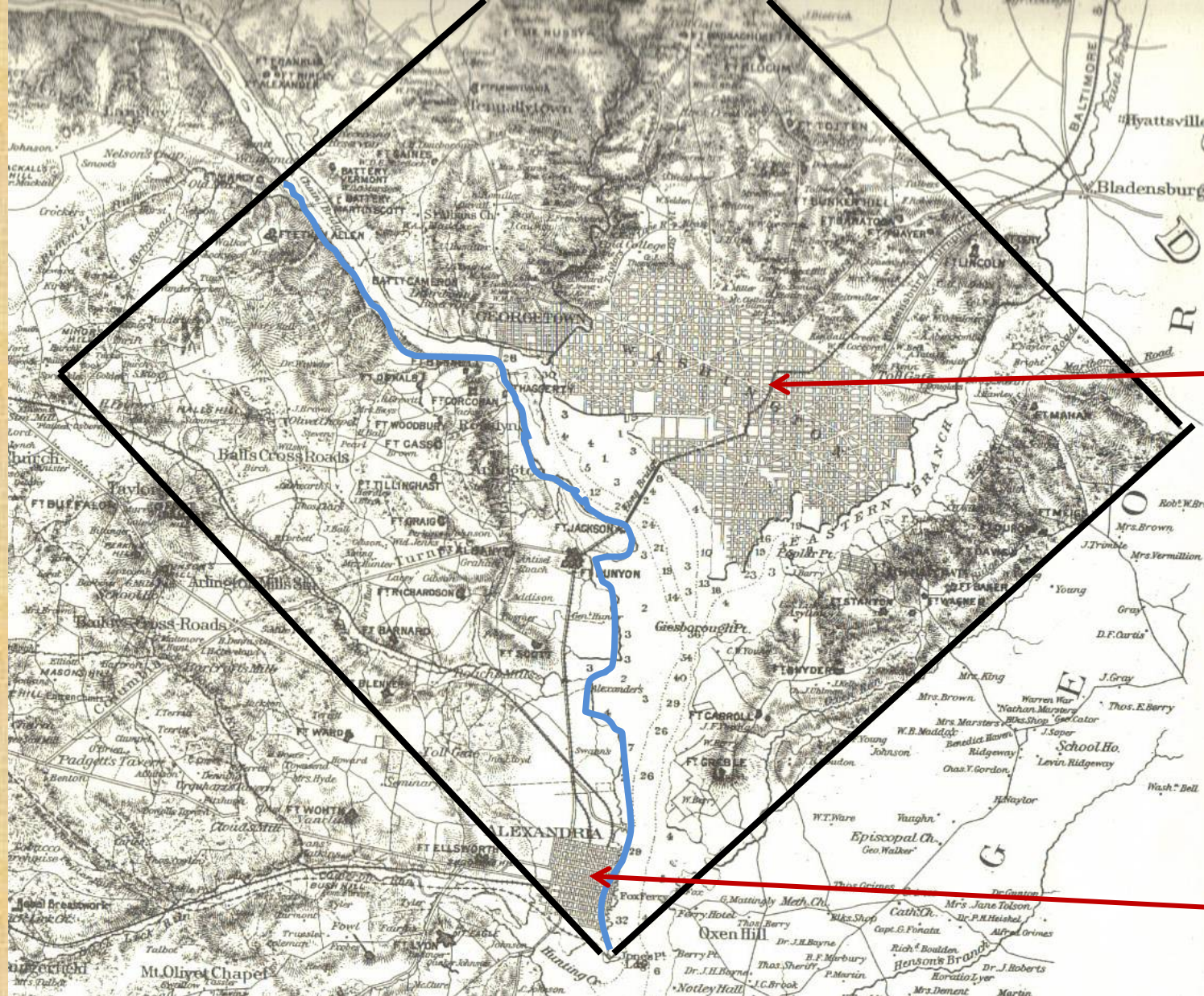
Orange and Alexandria R.R. Depot 7.5

From Baltimore and Ohio Depot to

North End of Long Bridge 1.5

Length of Long Bridge 4680 ft888+

Length of New R.R. Bridge 4986 1/2 ft944+



**B&O Depot
7th & C St.**

O&A Depot

Washington
61,118 (75%)

Georgetown
8,733 (11%)

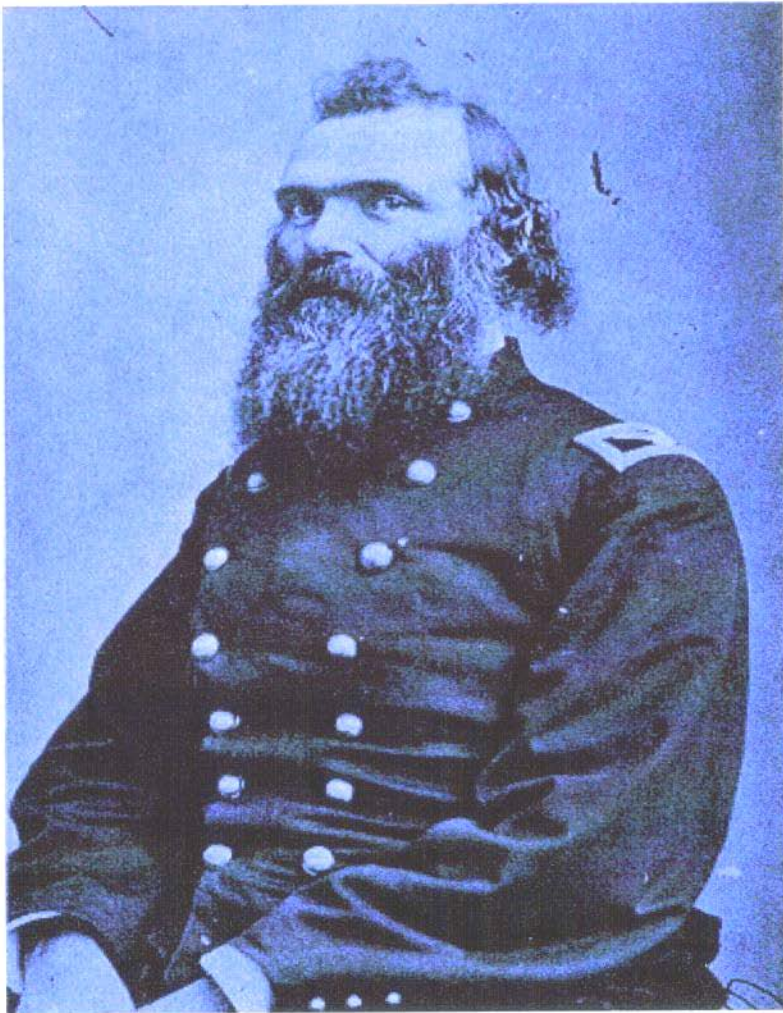
Alexandria
11,206 (14%)

Map of North Eastern Virginia and Washington, HQ. Gen Irvin McDowell, 1 January 1862

1862

January 31

- U. S. Congress creates USMRR and USMTC
- The War continues into its second year



Daniel C. McCallum
Director and Superintendent,
USMRR
(General Superintendent,
Erie RR)



Herman Haupt
Chief, Construction &
Transportation

Part 2

Army of the Potomac Operations 1862-1864

Second Bull Run Campaign



Federal Rail Management

August 1862*

- Pope orders large portion of the rolling stock to the front where it could be withdrawn as needed
 - ❖ After a break with the rear
- Drastically reduces the capability for reinforcements

*OR, Series 1, Vol.12, Pt. 3, pgs. 813-816, OR, Series 1, Vol. 12 Pt. 2, pgs. 43&78
Johnston, "Virginia Railroads in the Civil War", pg. 92-93 & 280

Federal Rail Management

Results of Pope's actions prior to Second Manassas

- Loses 18 engines
 - ❖ 11 eventually returned to Union
 - ❖ 277 freight cars destroyed
- Withdraws to Centreville, ultimately to Washington
- Reassigned to fight Indians in Minnesota



Federal Rail Management

Oct 12, 1862

- Haupt raises concerns
 - ❖ The Confederates taking up rails between Bristoe and Warrenton
 - ❖ Carrying them off in captured engines
- Haupt ordered to retake and rebuild that part of the line South of Manassas

Federal Rail Management

Nov 2, 1862

- Temporary depots established beyond Manassas and further south¹

Nov 12, 1862

- Haupt states “The capacity of the road, under ordinary management is not half equal to the requirement of transportation for the army. Without the immediate unloading and return of trains, whenever they arrive and wherever they may stand, the supply of the army will be impossible”.²

¹ OR, Series 1, Vol. 19, Ch. 31, Part 2, pg. 544

² OR, Series 1, Vol. 19, Ch. 31, Part 2, pg. 559

Haupt System: Rules Tactical “Railroad Generalship”

- **No military interference**
- **Supply only as needed**
- **Unload immediately**
- **Rigid schedule**

O&A RR

Late 1862

- Line from Culpeper to Alexandria very damaged
- Estimated to support only 40,000 troops
- Factor in Burnside's shifting to Fredericksburg¹

Dec 1862 – May 1863

- The Union advance shifts to the RF&P
 - ❖ Fredericksburg, Chancellorsville

June - July 1863

- The war shifts to Gettysburg
- The O&A depot in Alexandria supports Union campaign to Gettysburg²

¹ US Army Logistics 1775-1992, Vol. 1, pg. 226-227

² OR, Series 1, Vol. 27, Ch. 39, Part 1, pg. 103

Increased Scrutiny

Along the O&A Railroad

- “The different bridges on the railroad will be protected by blockhouses. Their erection was ordered at or about the 6th of June”.¹

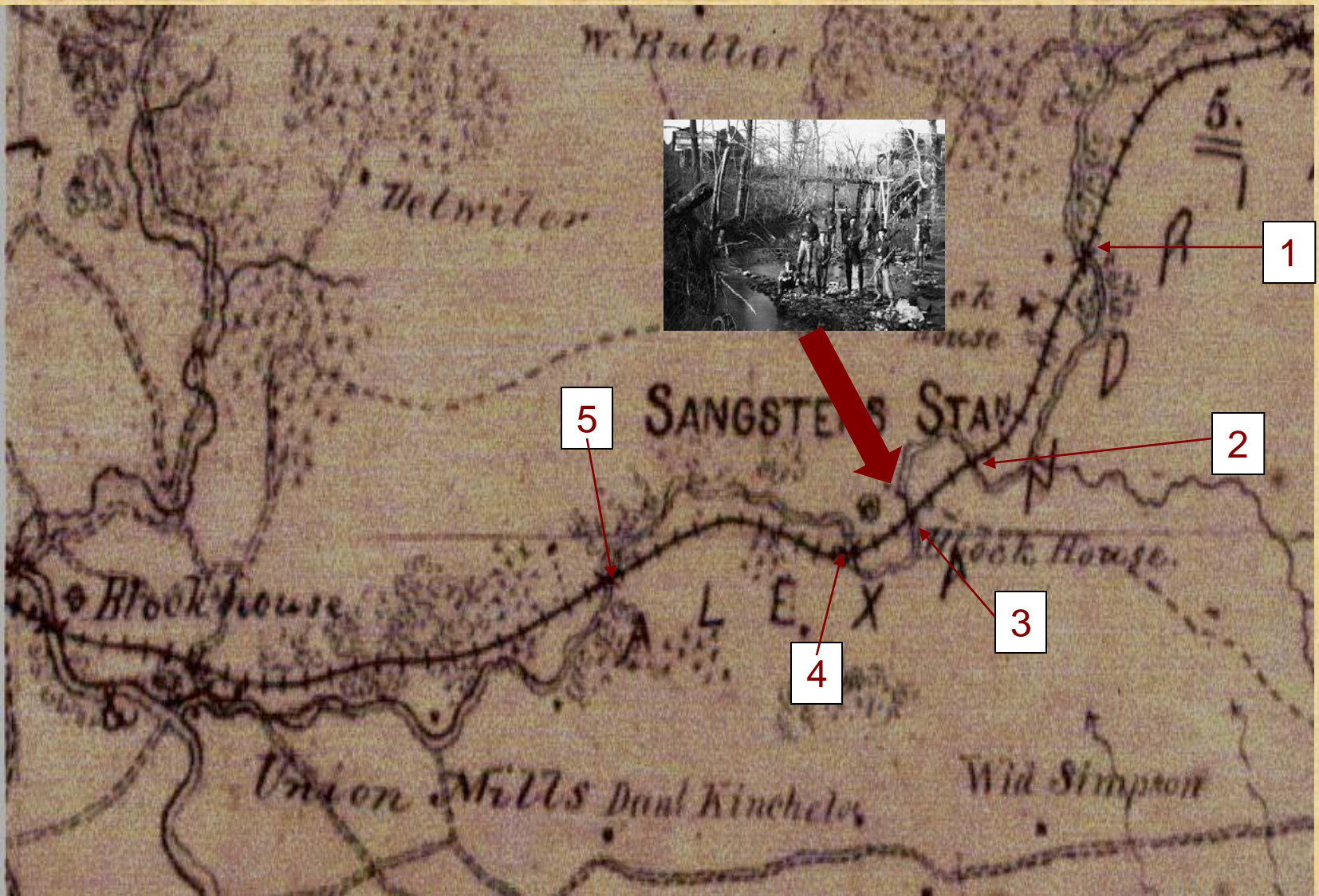
July 23, 1863

- Haupt reports “Our trains will be run as much as possible by daylight and with train guards, but with a heavy business we cannot avoid running at night and train guards afford but little protection.”²

¹ OR, Series, 1, Vol. 29, Ch. 41, Part 2, pg. 254

² OR, Series, 1, Vol. 27, Ch. 39, Part 3, pg. 755





The Five Bridges over Popes Head Creek

The O&A Comes to the Forefront

July 26, 1863

➤ O&A RR guarded by 168th NY and 73rd PA Volunteers¹

❖ 2 Companies at Cedar Run Bridge

❖ 4 Companies at Catlett's Station

❖ 4 Companies at Kettle Run Bridge

❖ 4 Companies at Bristoe Station

❖ 2 Companies at Broad Run Bridge

❖ 4 Companies at Manassas Junction

¹ OR, Series 1, Vol. 27, Ch. 39, Part 3, pg. 769





PROCLAMATION

Headquarters Army of the Potomac

July 30, 1863

The **numerous depredations** committed by citizens or rebel soldiers in disguise, harbored and concealed by citizens, **along the Orange and Alexandria Railroad** and within our lines, call for prompt and exemplary punishment. Under the instructions of the Government, therefore, every citizen against whom there is sufficient evidence of his having engaged in these practices will be **arrested and confined for punishment, or put beyond the lines**. The **people within 10 miles of the railroad** are notified that **they will be held responsible** in their person and property for any injury done to the road, trains, depots, or stations by citizens, guerrillas, or persons in disguise; and, in case of such injury, they will be **impressed as laborers to repair all damages**.

If **these measures should not stop such depredations** it will become the unpleasant duty of the undersigned, in the execution of his instructions, to direct that the **entire inhabitants of the district** of country along the railroad be **put across the lines**, and their **property taken for Government uses**.

Geo. G. Meade,
Major-General, Commanding.

Fall 1863

➤ By Sept 9

- ❖ Confederates retreat to Orange Court House
- ❖ O&A destroyed from Manassas to Rapidan

➤ Union pursues until

- ❖ XI and XII Corps of Meade's Army sent to TN

➤ Lee sees opportunity

- ❖ Orders counteroffensive late Sept
- ❖ Battle of Bristoe Station (Oct 14, 1863)

Fall 1863

October 4, 1863¹

- 23 miles between Alexandria and Bull Run include
 - ❖ 6 stations
 - ❖ 3 water tanks
 - ❖ 10 principle bridges
 - ❖ Guarded by 2,229 infantry

October 20, 1863²

- Union army confirms O&A destruction from Bristoe Station to Rappahannock

¹OR, Series 1, Vol.29, Ch. 41, Part 2, pg. 253

²OR, Series 1. Vol. 29, Ch. 41, Part 1, pg. 10

Upgrades the O&A

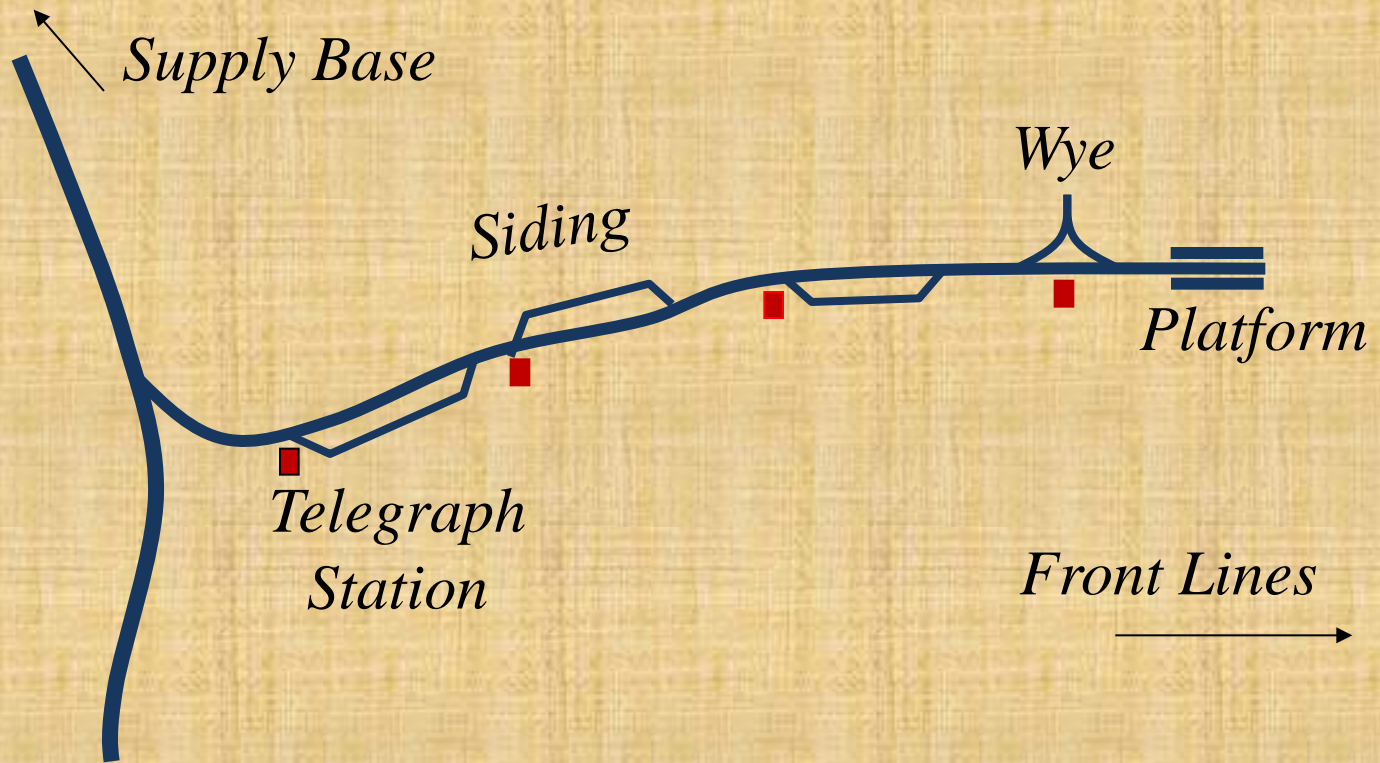
By Nov 19, 1863

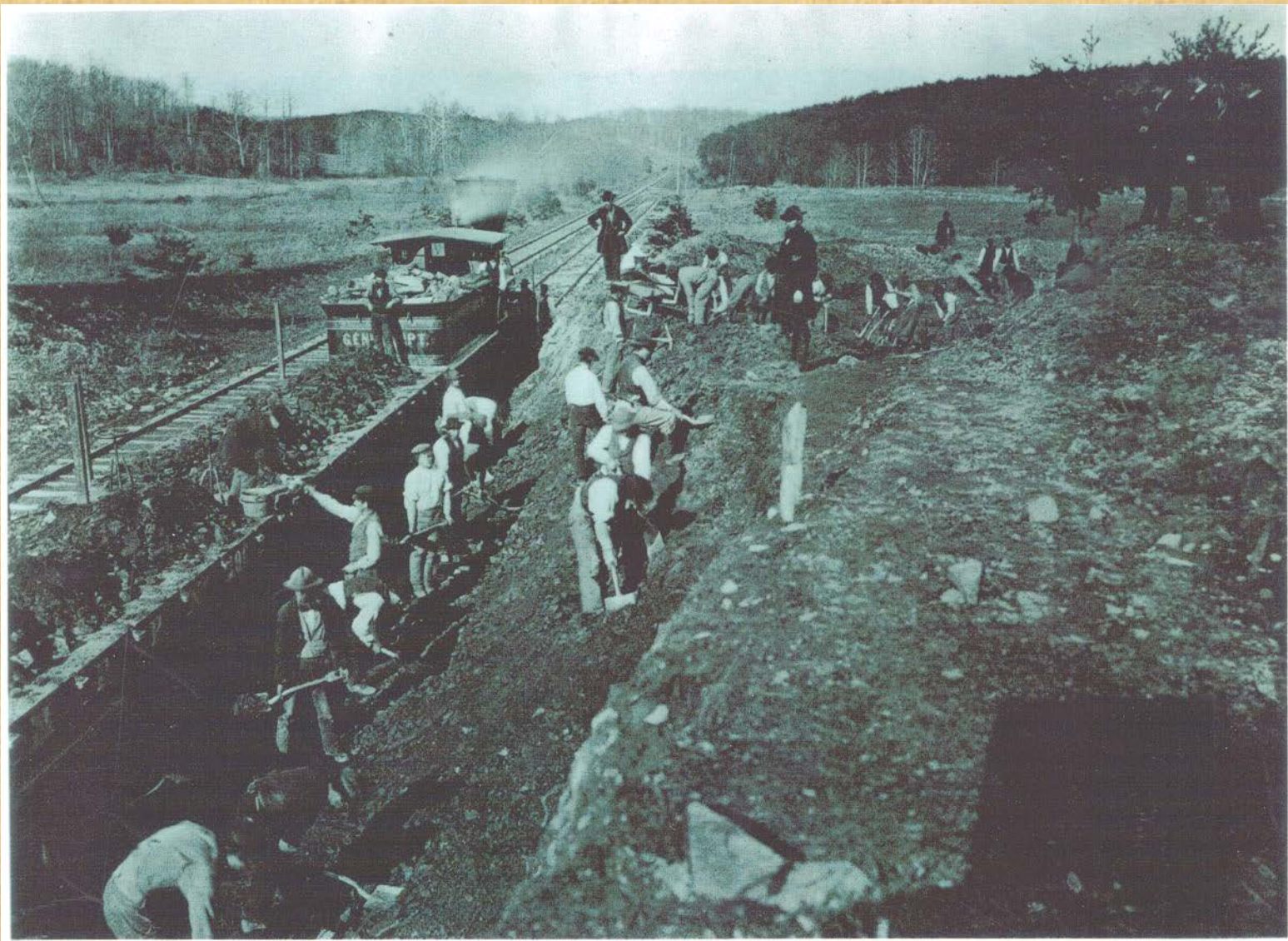
- USMRR rebuilds 20 miles of road bed and bridges in 26 days
- 14 stations improved/repared or built
- All telegraph connected
- New sidings installed for trains to pass each other
- Increased capacity²
 - ✓ Now capable of running 60 locomotives and 600 cars
 - Supplying a 300,000 man army¹

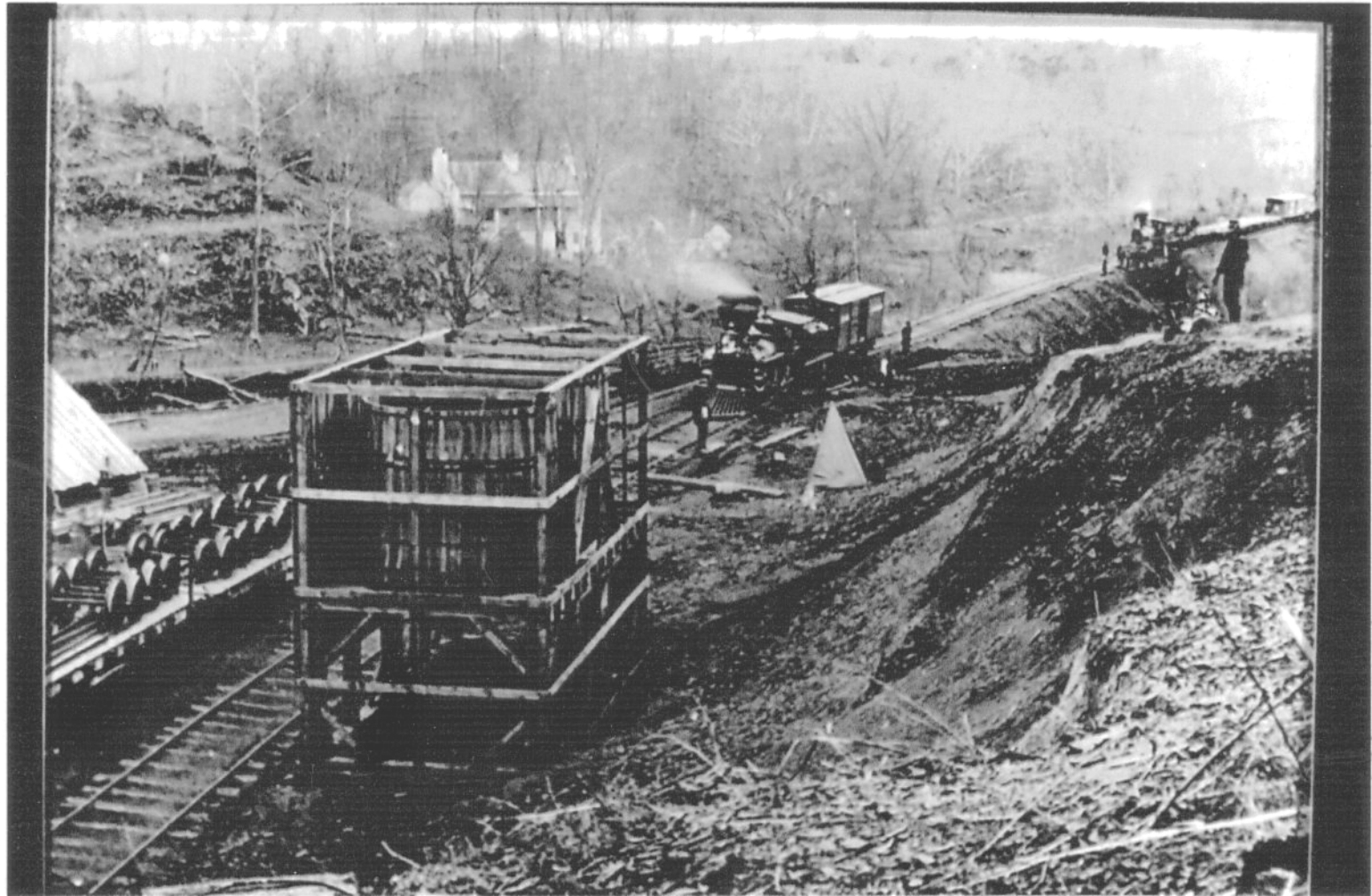
¹ OR, Series 1, Vol. 29, Part 1, pgs. 8-11

² OR, Series 1, Vol. 29, Part 1, pg. 227

Tactical Rail Line: Ideal









The Stage is Set

Jan 18, 1864

- Assistant Adj. Gen of 5th Corps
 - ❖ “The Orange and Alexandria Railroad is the means of supply for the Army of the Potomac”*
- 13 months prior
 - ❖ Union generals thought the O&A RR unsafe, not reliable and not capable of supplying 40,000 men in Warrenton*

* OR, Series 1, Vo. 33, Ch. 45, pg. 390

Grant Takes Command

March 9, 1863

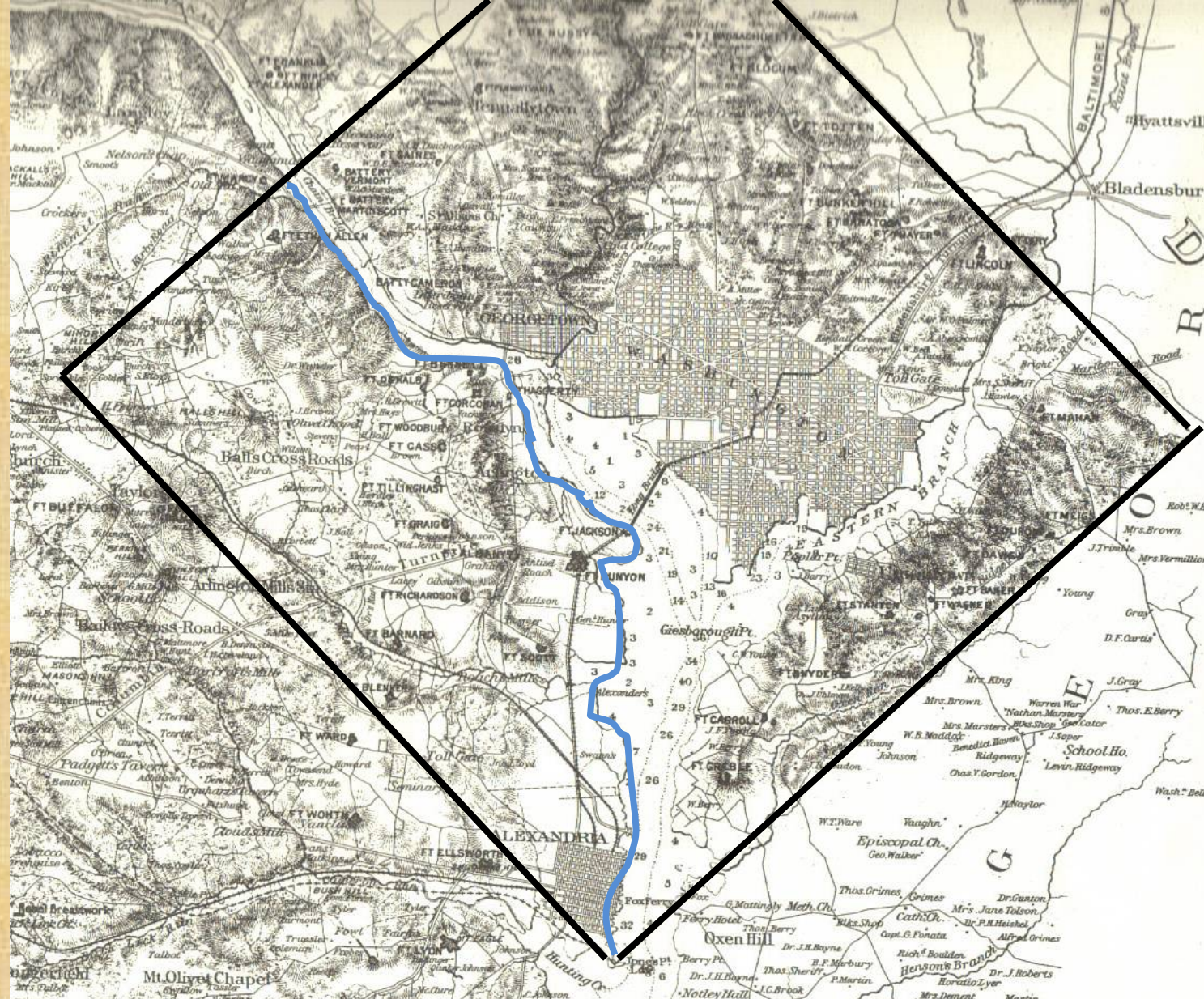
- Grant promoted to LTG

Moves HQ to Culpeper

- Starts army buildup
 - ❖ Takes soldiers from Defenses of Washington
 - ❖ Realigns another units¹
- Supply wagon train cumbersome
 - ❖ 3,500 wagons, 29,000 horses, 20,000 mules²

¹“Grant Takes Command, Catton, pg. 124-158

² Catton, pg. 169

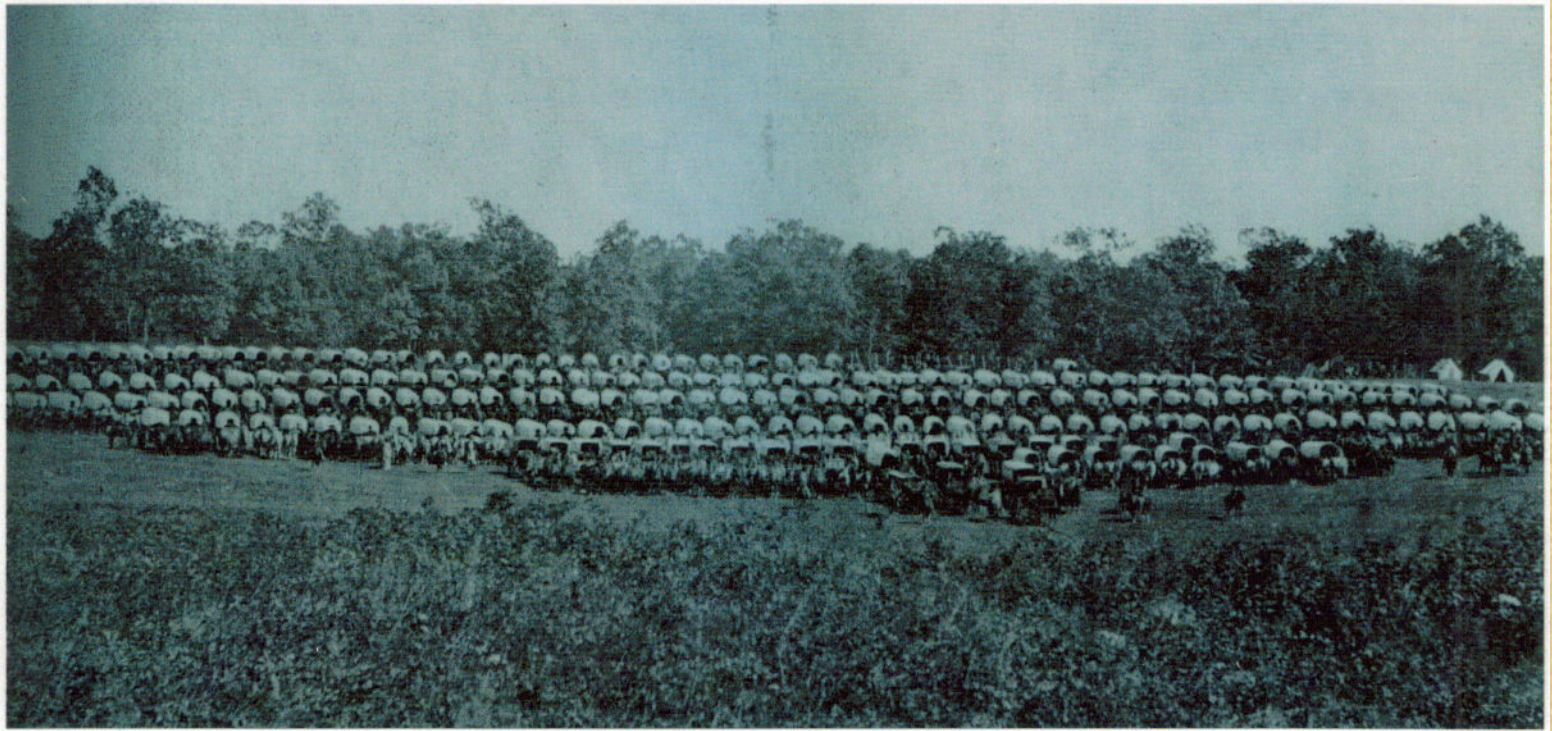


Washington
61,118 (75%)

Georgetown
8,733 (11%)

Alexandria
11,206 (14%)

Map of North Eastern Virginia and Washington, HQ. Gen Irvin McDowell, 1 January 1862



Wagon Park – Culpeper 1864

Approximately 240 wagons

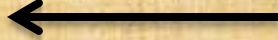
Union Rail & Logistics

O&A RR

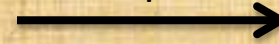
- Used to supply army in Culpeper
- IX Corps (Burnside) guards the rail line
- “When we get once established on the James River there will be no further necessity of occupying the road south of Bull Run”*

* Grant quote, Catton, pg. 169

Culpeper



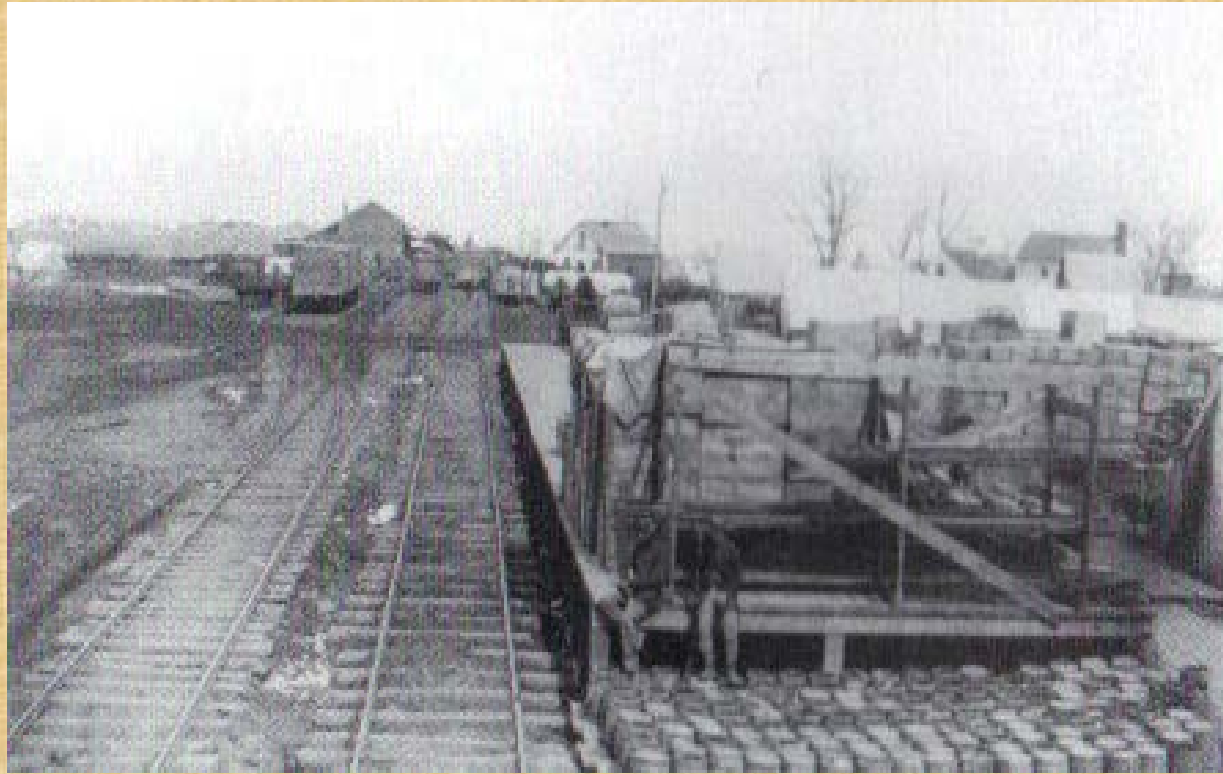
Fauquier



**Orange and Alexandria Railroad
Rappahannock River
near Rappahannock Station**



Near Brandy Station 1864



**Brandy Station
Union Supply Depot, Spring 1864**

Union Rail & Logistics

Before the start of the Overland Campaign*

- 6,000 head of cattle sent from Alexandria to Brandy Station
 - ❖ 1,200 head daily, Friday to Tuesday
- O&A RR only had 300 cattle cars
 - ❖ QMs seized all flat and freight cars in reach
 - ❖ 1800 head sent within first 24 hours
 - ❖ 300 men constantly employed unloading the cars

* "How to Feed an Army", Brig. Gen. Thomas Wilson, Colonel, Acting Commissary General of Subsistence, USA, in the US States Services Magazine for Feb 1880

Overland Campaign

Army leaves Culpeper on 4 May *

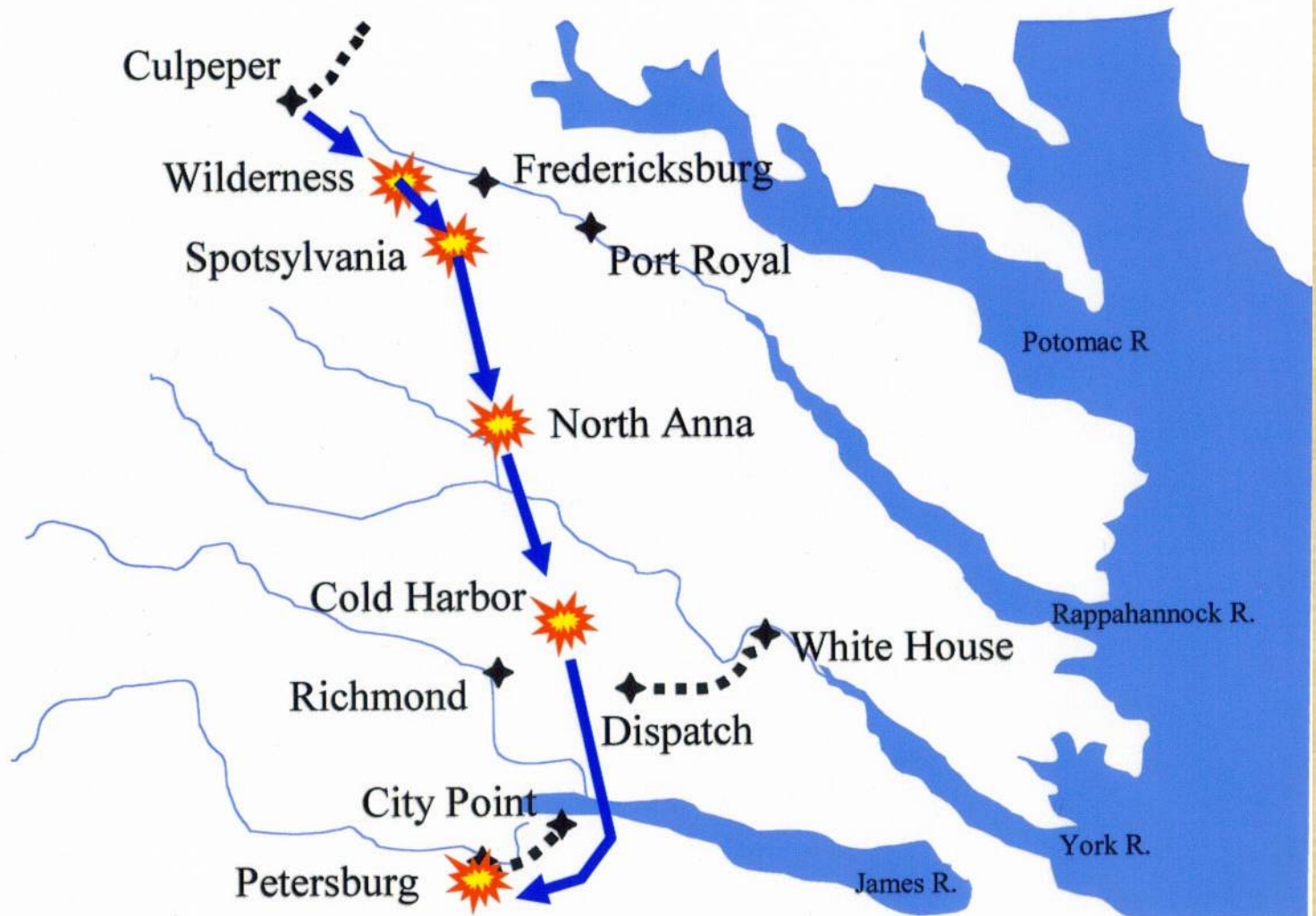
- Supply depot near Brandy Station
- Supply trains to follow
 - ❖ Each wagon carried 2,400 lbs. subsistence and 600 lbs. forage
 - ❖ Moved by divisions and division commissary in charge

* United States Army Logistics 1775 – 1992, Vol. 1

Overland Campaign

- All depots on the O&A disbanded
- Supplies returned to Alexandria
- New depots established
 - Aquia, Belle Plain, Fredericksburg, Port Royal, White House, and City Point
- As the Army marched the supply trains followed

Grant's Campaign, 1864



Union Logistics Management

Overland Campaign*

- 125,000 men
 - ❖ Ordered to take 50 rounds per man
 - ❖ 3 days full rations
 - ❖ 3 days marching rations
 - ❖ 3 days beef on the hoof
- Supply trains
 - ❖ 10 days forage
 - ❖ 10 days subsistence
 - ❖ 50% of the ammunition

Union Logistics Management

Overland Campaign*

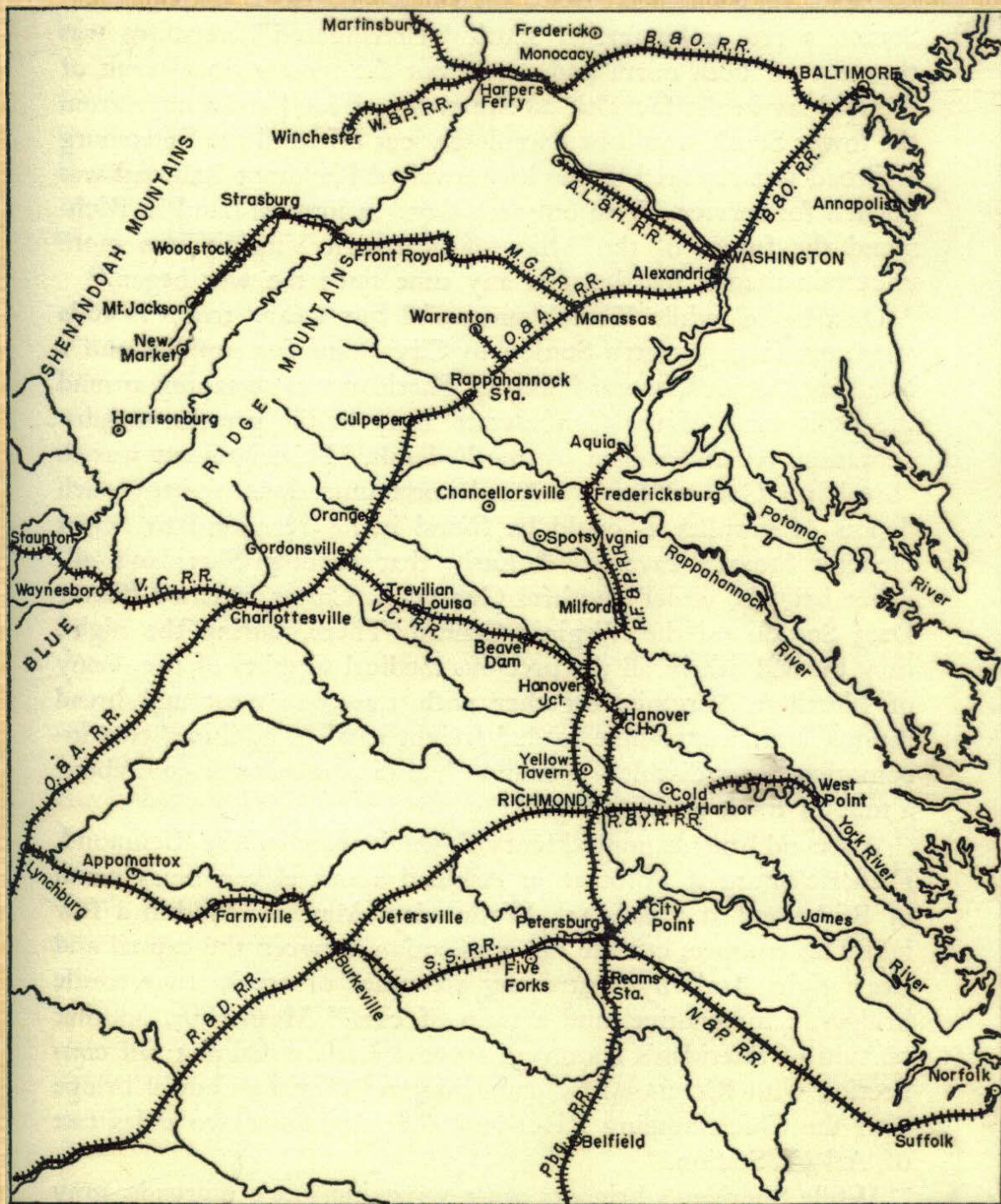
- To supply that army:
 - ❖ 4,300 wagons
 - ❖ 835 ambulances
 - ❖ 29,945 horses for artillery, cavalry, ambulance and wagon teams
 - ❖ 4,046 private horses
 - ❖ 22,528 mules

Overland Campaign

The wagon train to supply this army (subsistence, ammunition, forage, clothing)*

- “had it been placed in a right line when the first wagon was entering the city of Richmond the last one would have been just leaving the city of Washington – a distance of about 130 miles by rail”*

* “How to Feed an Army”

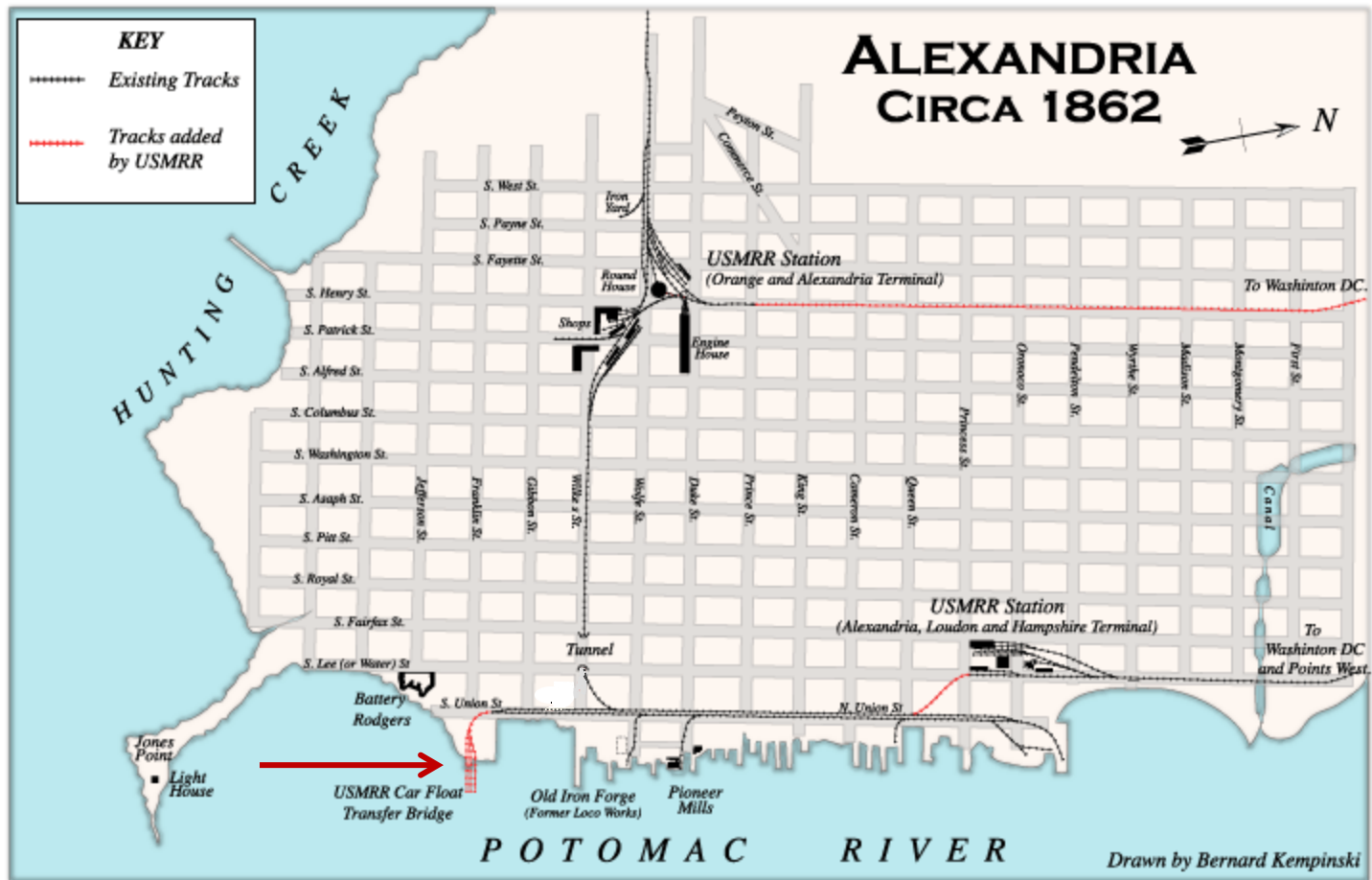


Conclusion

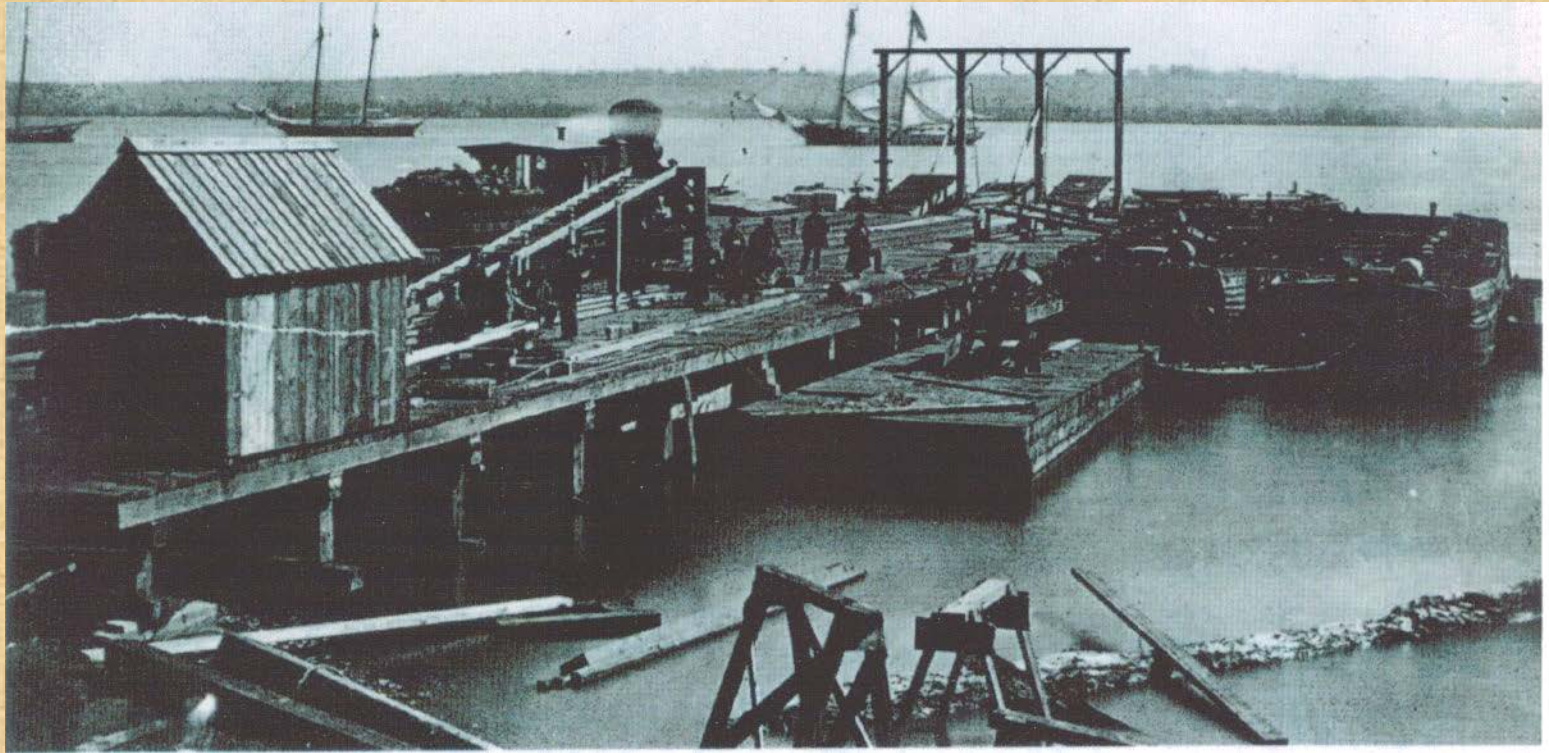
***The Overland Campaign could
not have Occurred without the
Orange and Alexandria
Railroad***

***War would carry on well
beyond 1865***

BACKUP

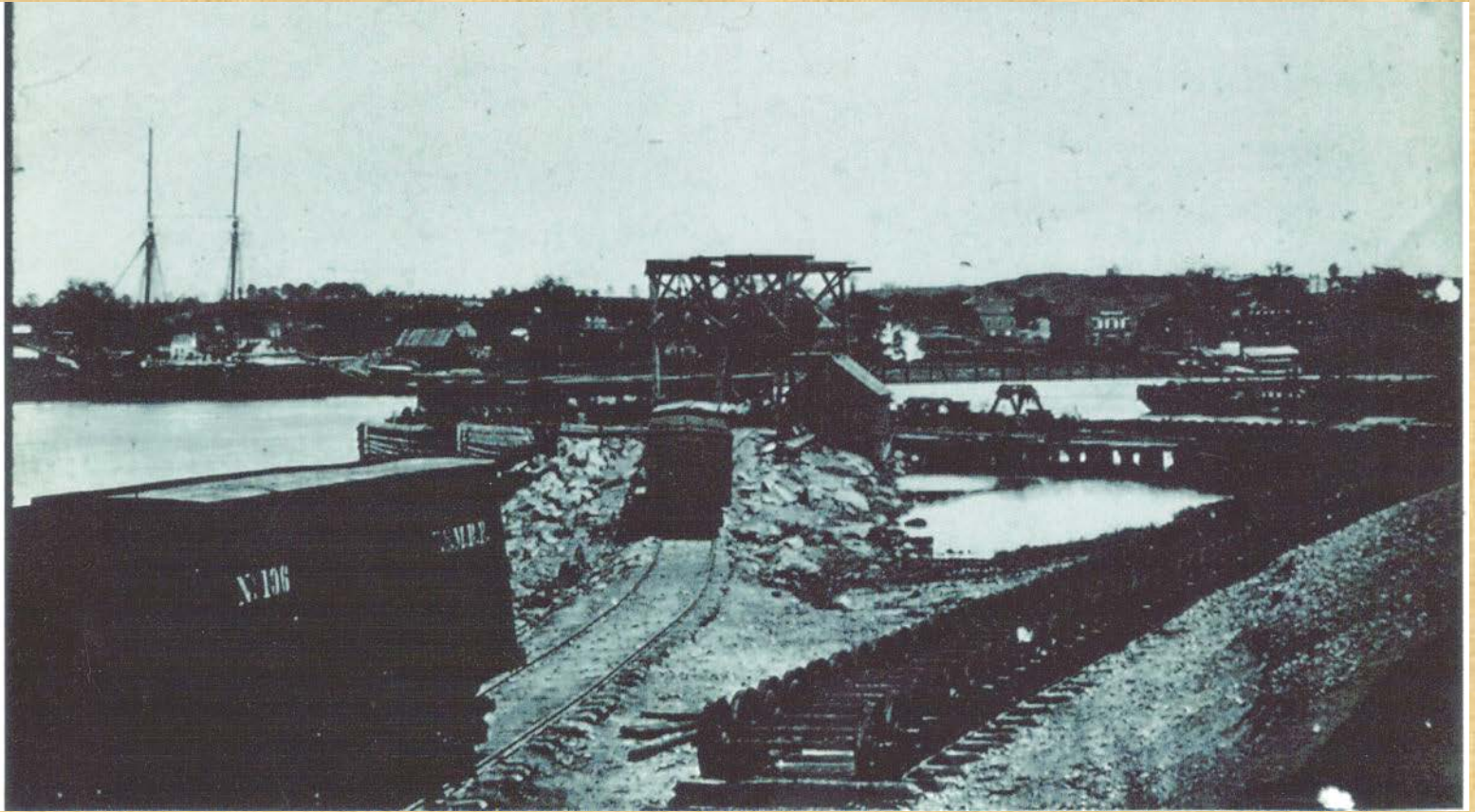


Map Showing Railroad Facilities in Alexandria during the American Civil War

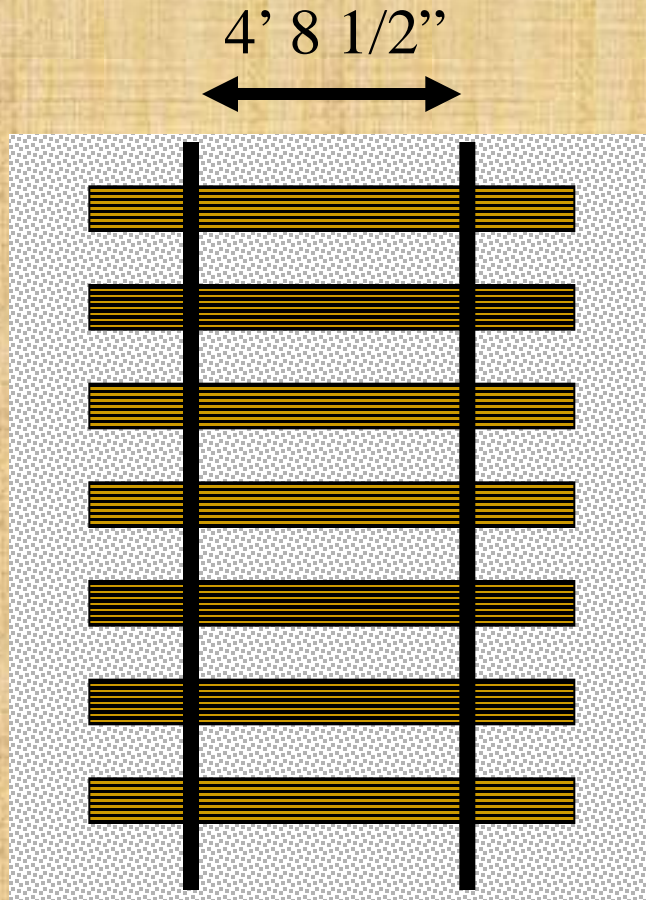




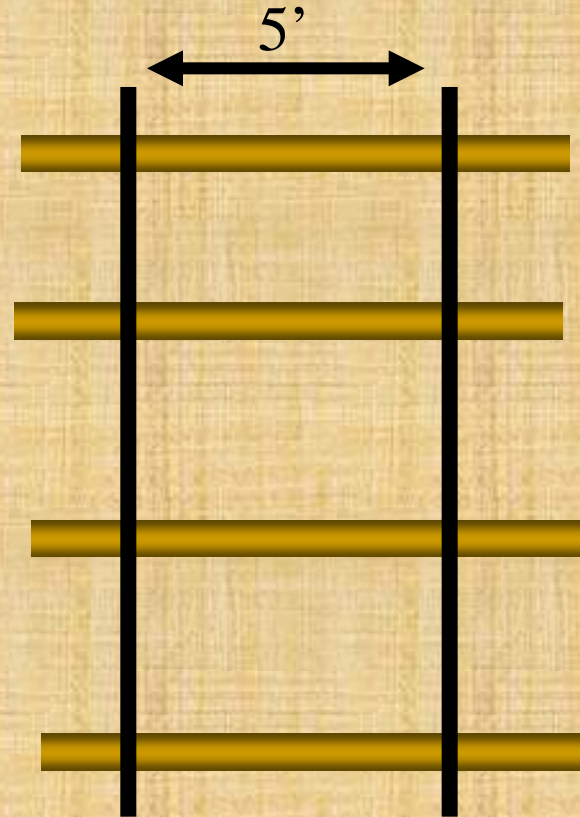




Track Gauge

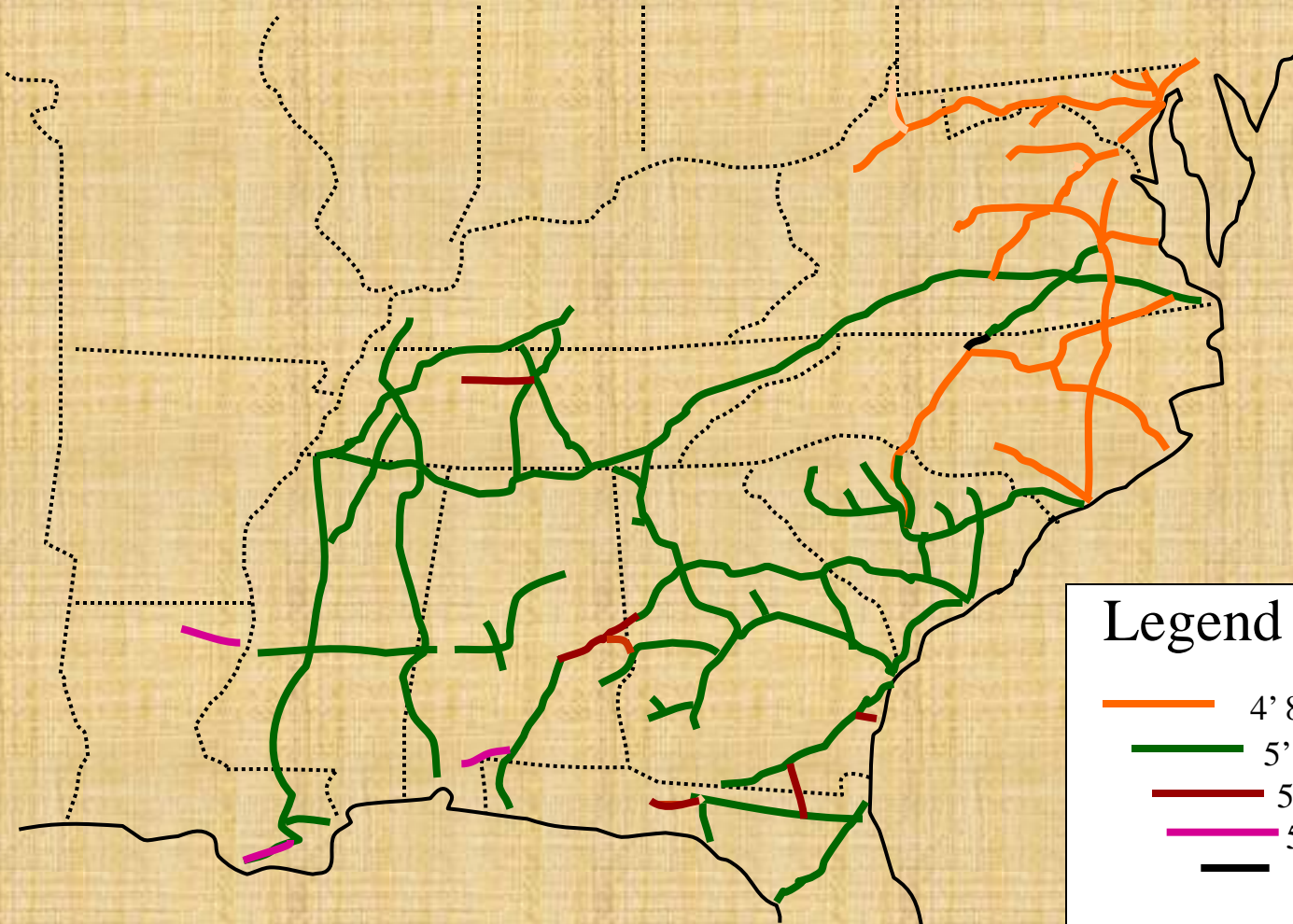


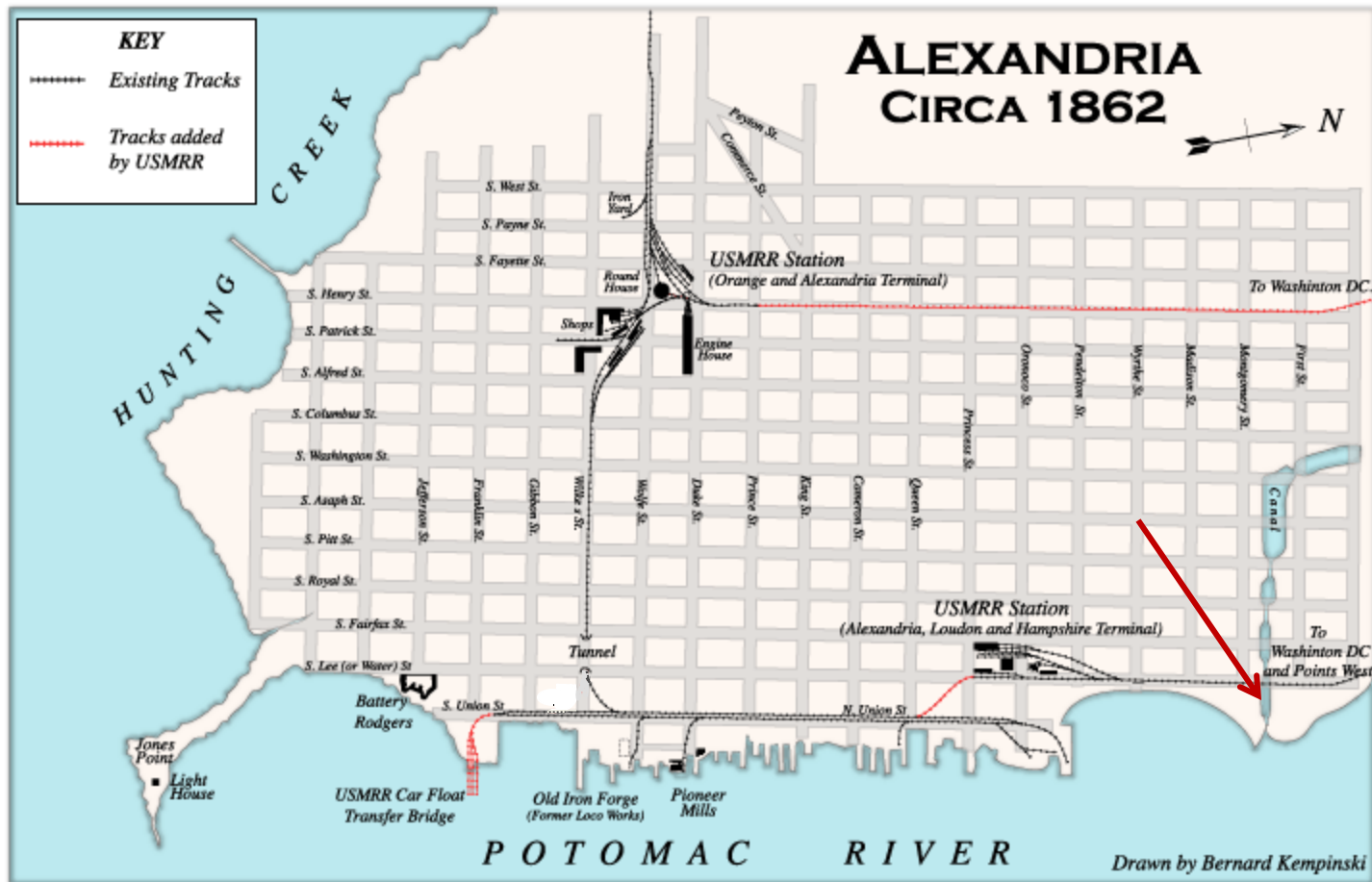
Northern "Standard"



Typical Southern

Confederate Railroads





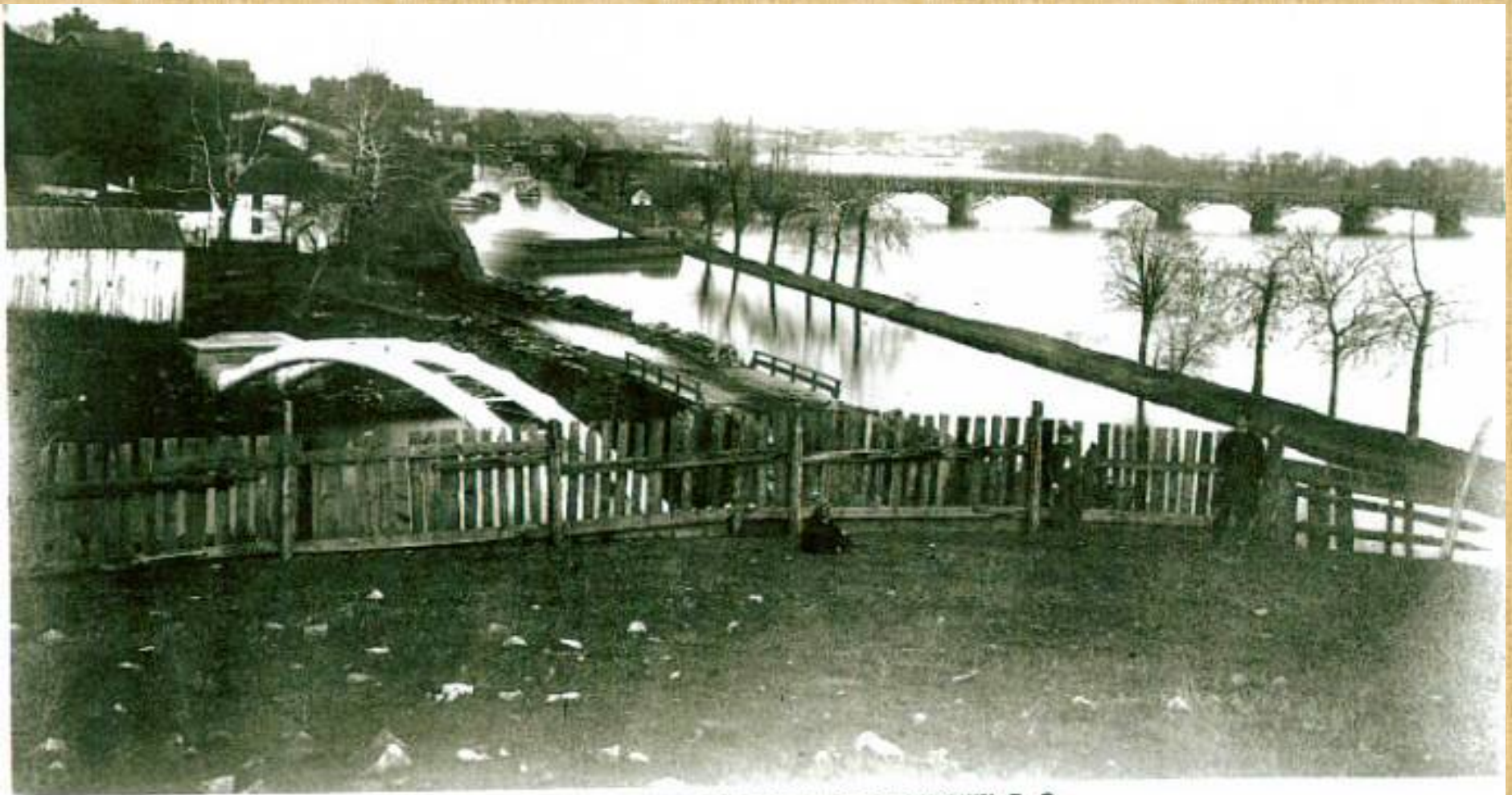
Map Showing Railroad Facilities in Alexandria during the American Civil War



B-5283



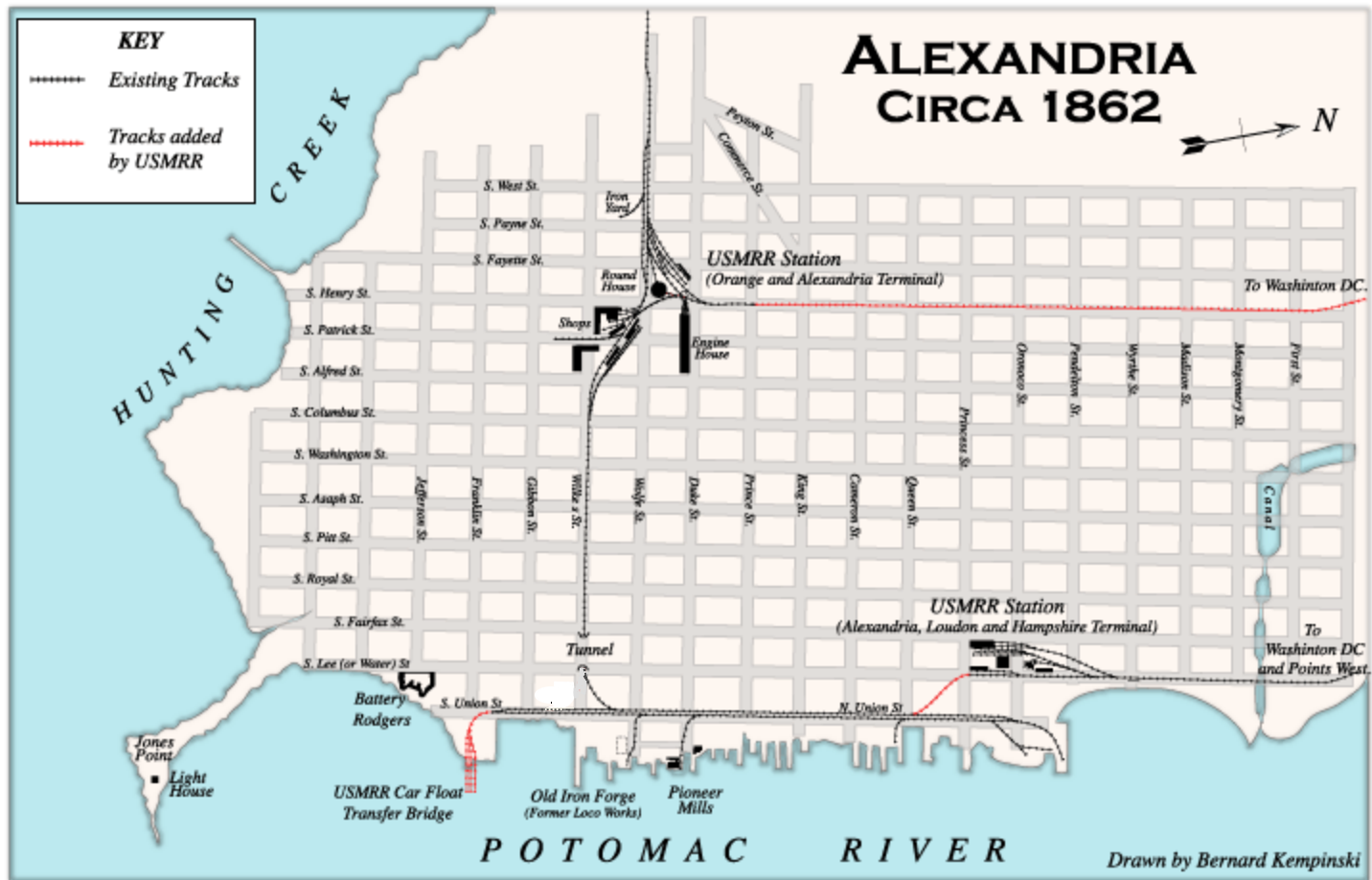




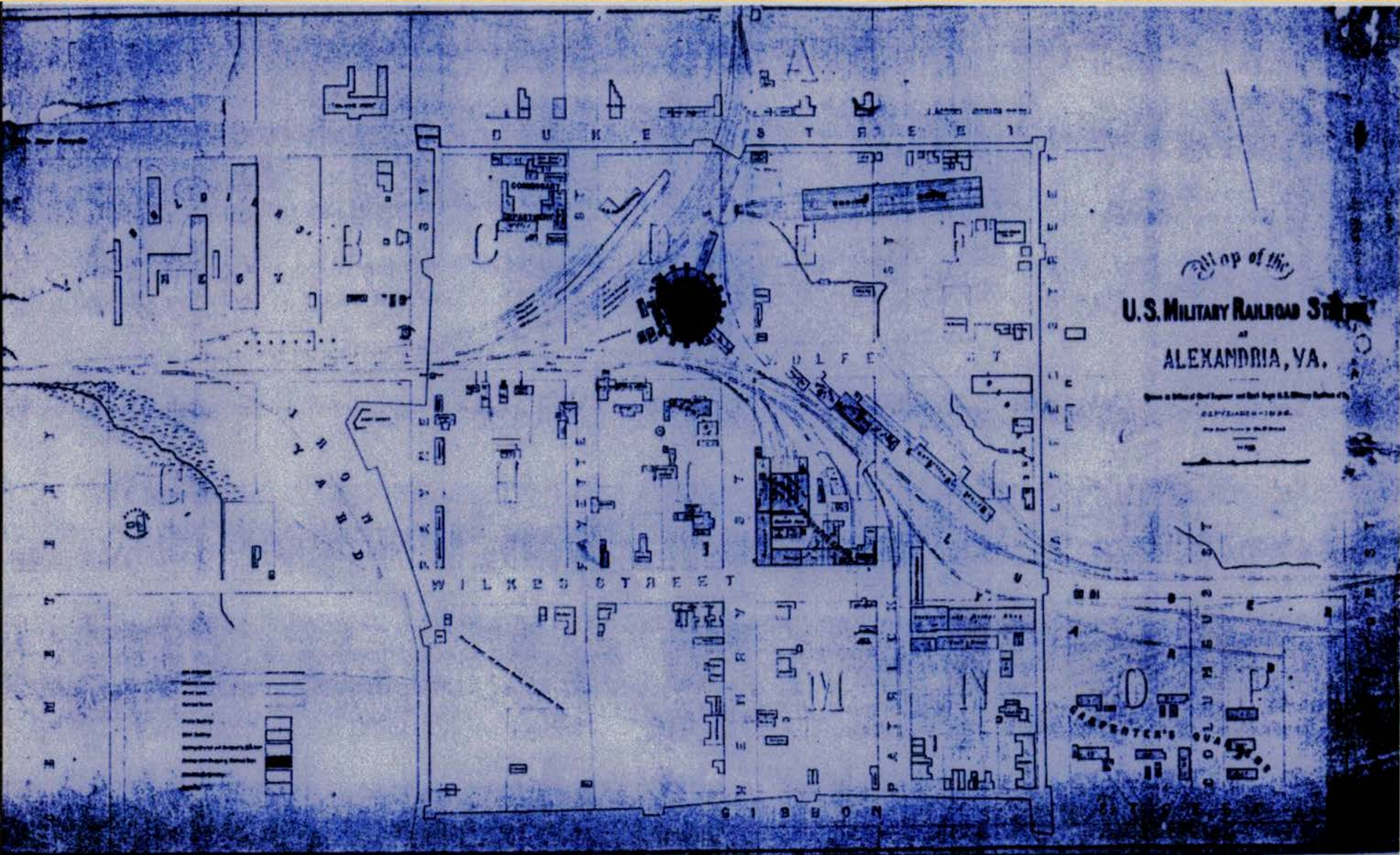
No. 213. AQUEDUCT BRIDGE, GEORGETOWN, D. C.,

Erected by Maj. Gen. M. C. Meigs.

Cost \$ 6,000,000 to build and thought to be an engineering feat

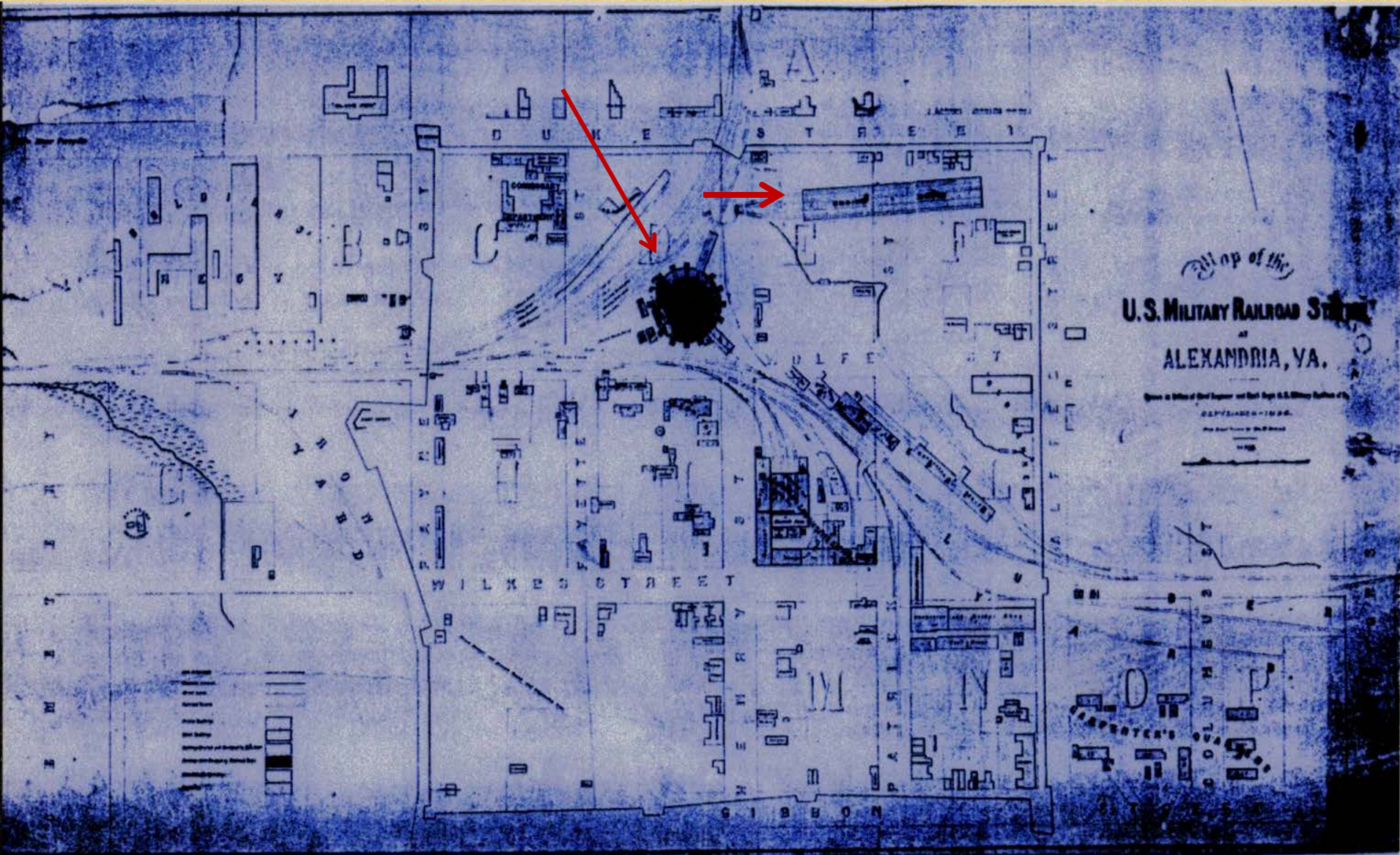


Map Showing Railroad Facilities in Alexandria during the American Civil War



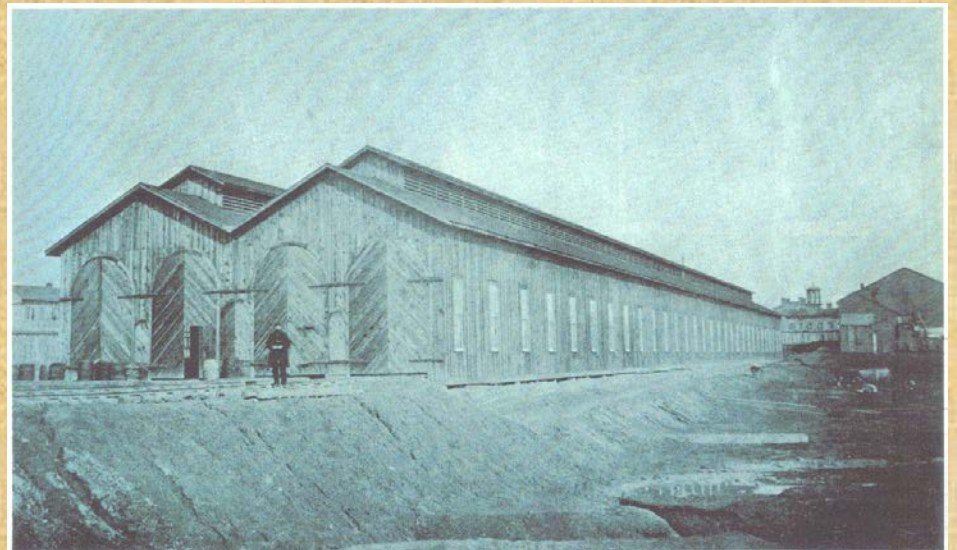
All up of the
U.S. MILITARY RAILROAD STATION
at
ALEXANDRIA, VA.

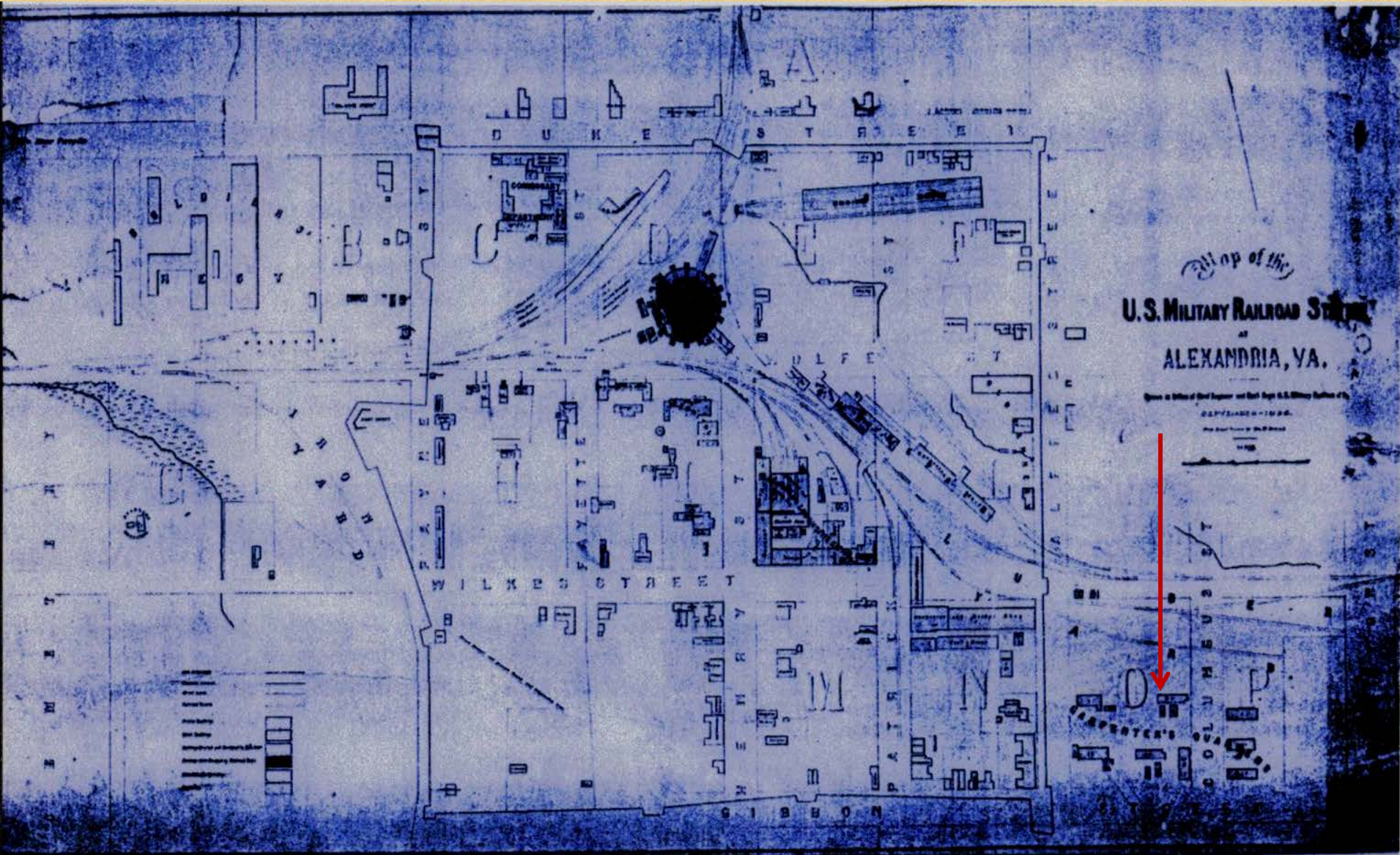
Scale in Miles of Road Engineer and Chief Agent U.S. Military Railroad of Va.
SEPTEMBER 1896.
No. 1000
11 1/2



All up of the
U.S. MILITARY RAILROAD STATION
at
ALEXANDRIA, VA.

Scale in Miles of Road Engineer and Chief Agent U.S. Military Surface of R.
SEPTEMBER 1866.
The Army Engineers of the U.S. Army
1142





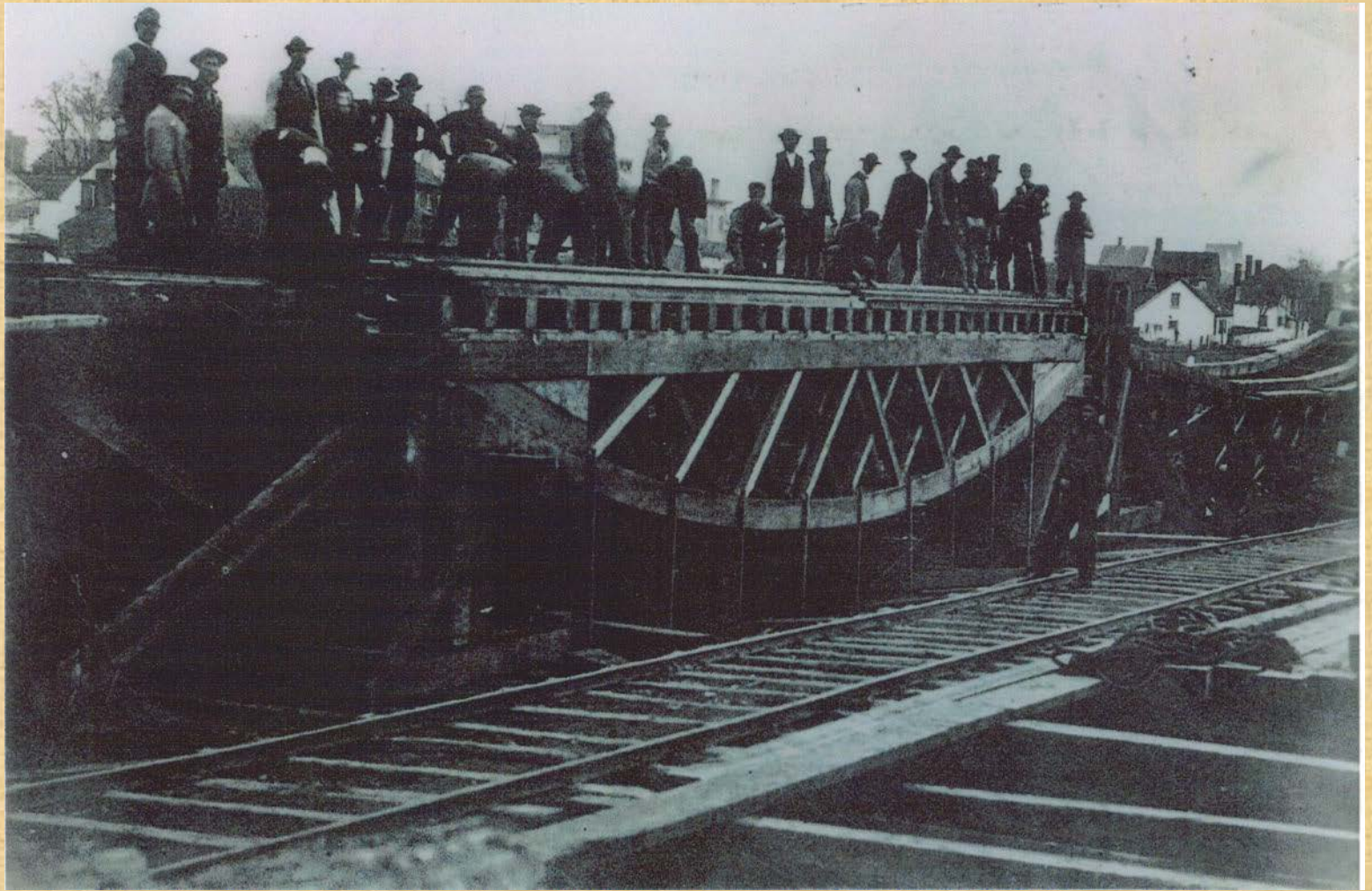
All up of the
U.S. MILITARY RAILROAD STATION
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Scale in Miles of Road Engineer and Chief Agent U.S. Military Surface of R.R.
SEPTEMBER 1866.
The Author is in the U.S. Army
1142

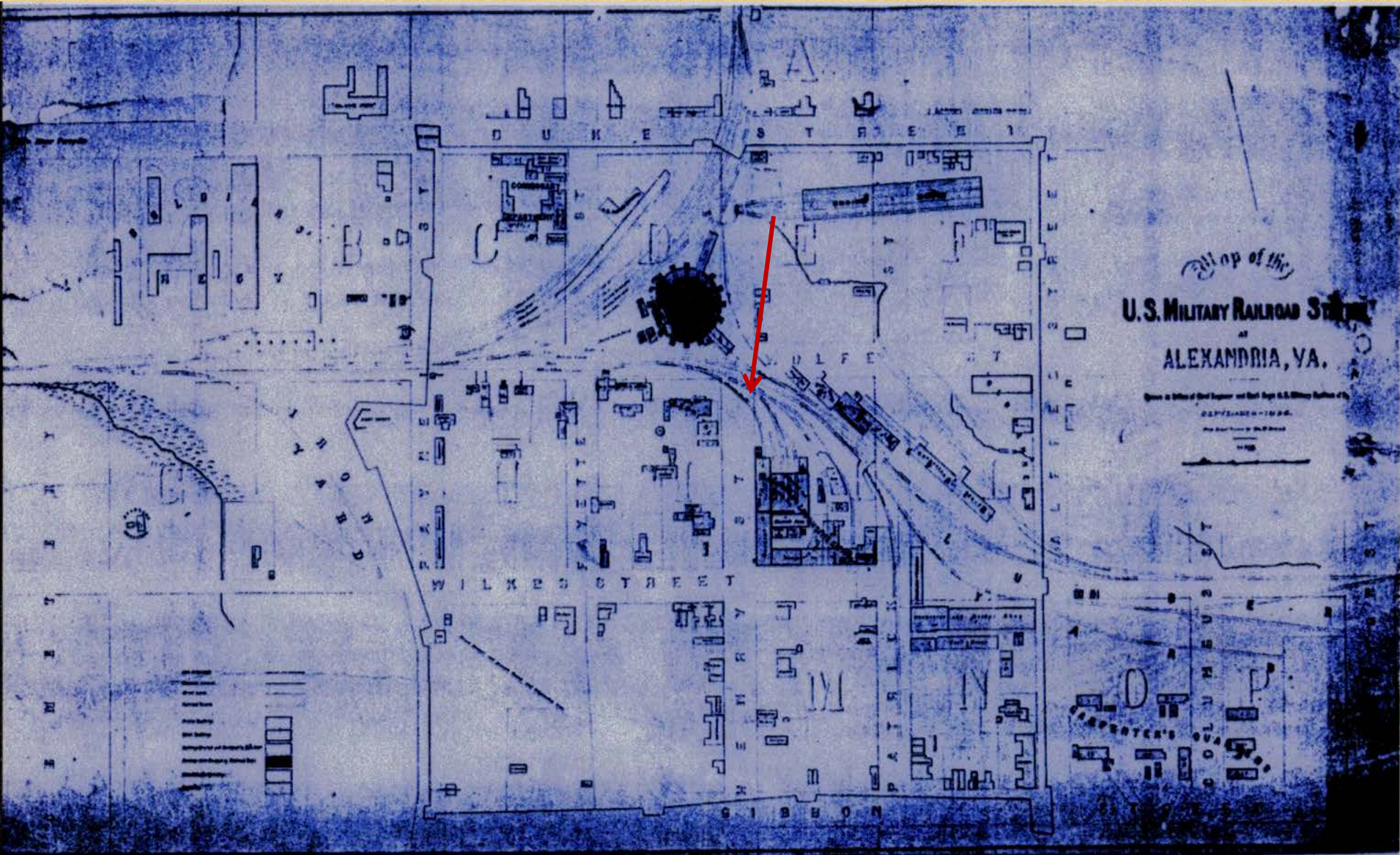












All up of the
U.S. MILITARY RAILROAD STATION
at
ALEXANDRIA, VA.

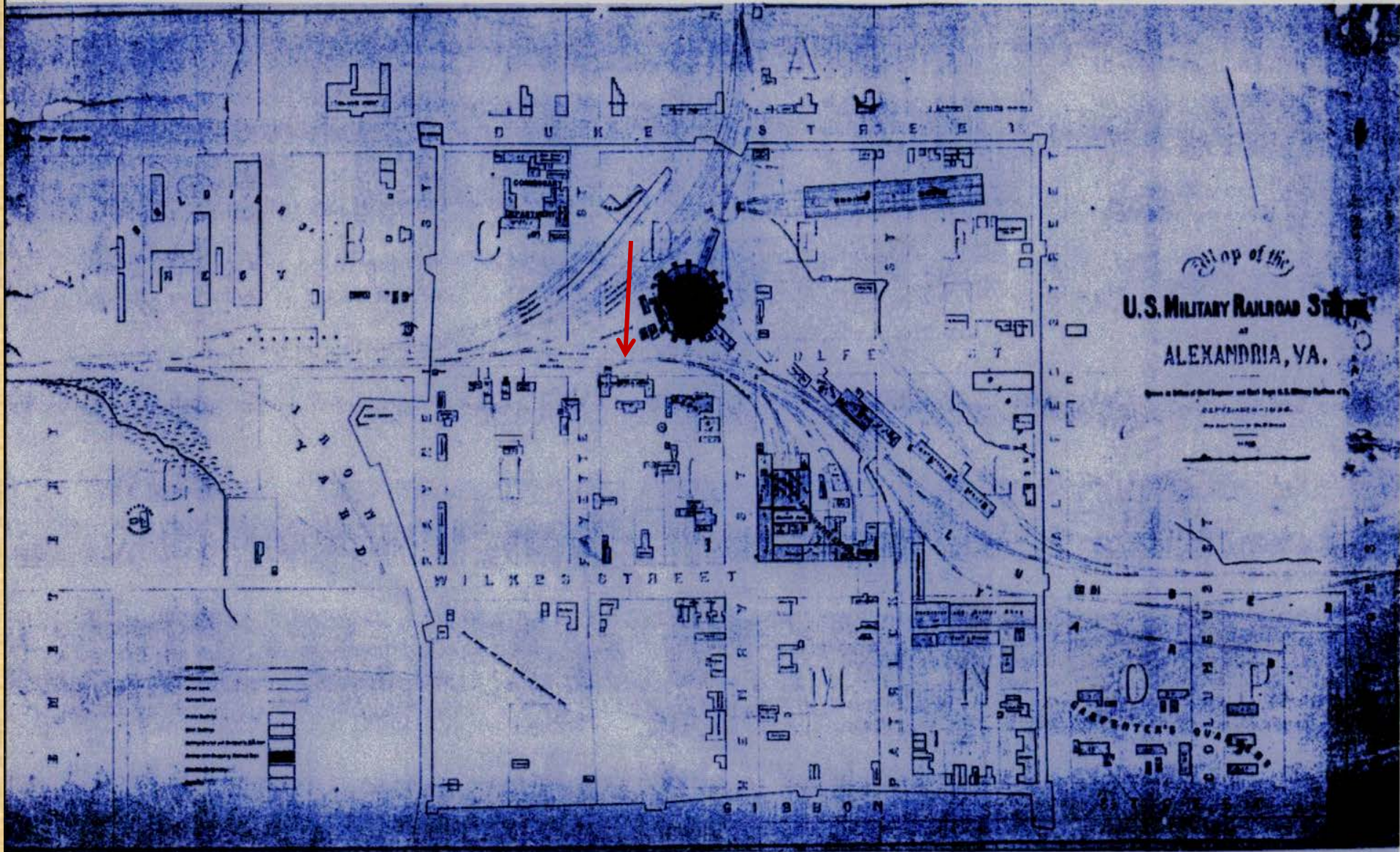
Scale in Miles of Road Engineer and Chief Agent U.S. Military Railroad of Va.

DEPT. OF WAR - 1896.

For full details see the plan sheet

1142



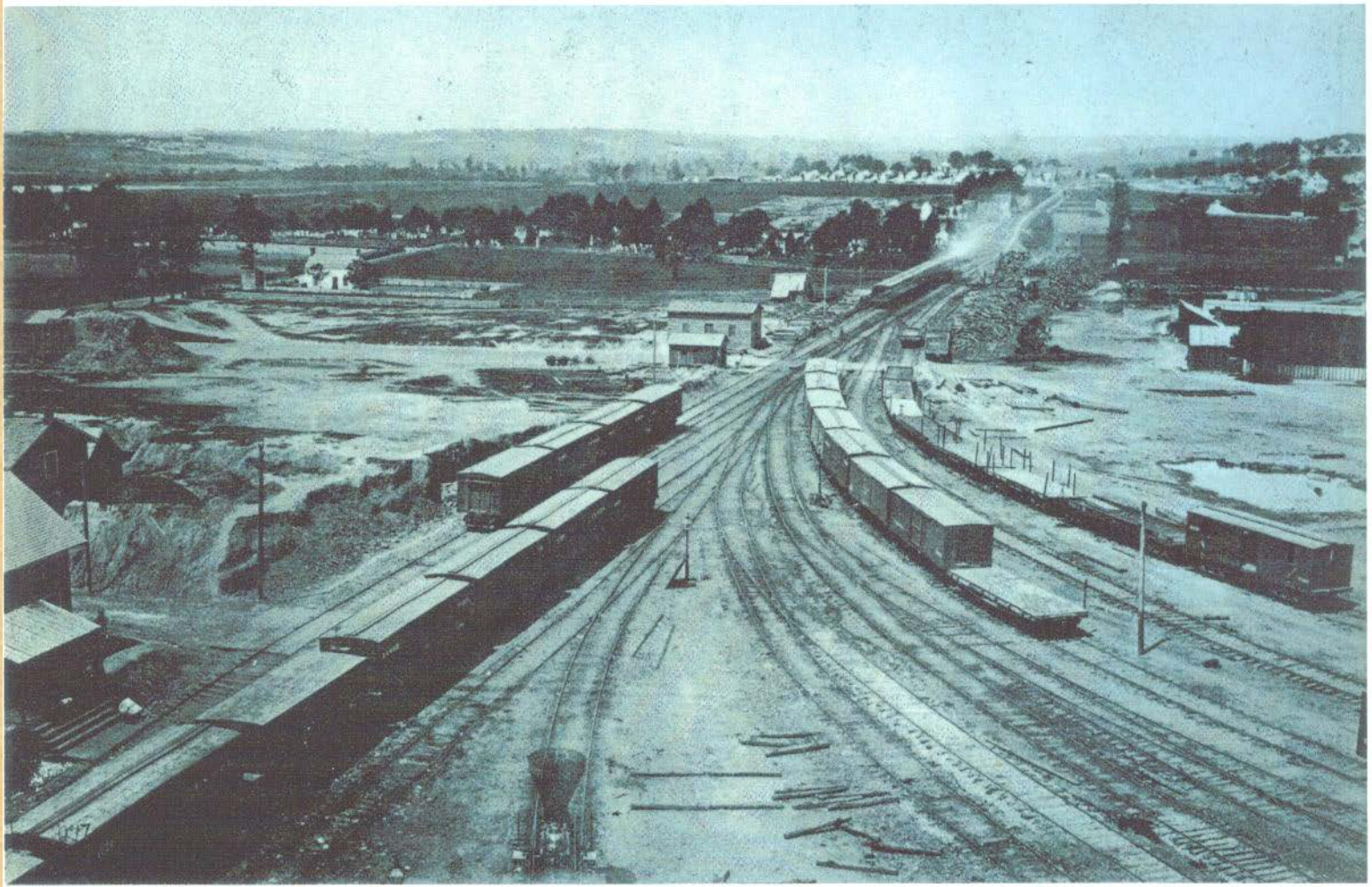


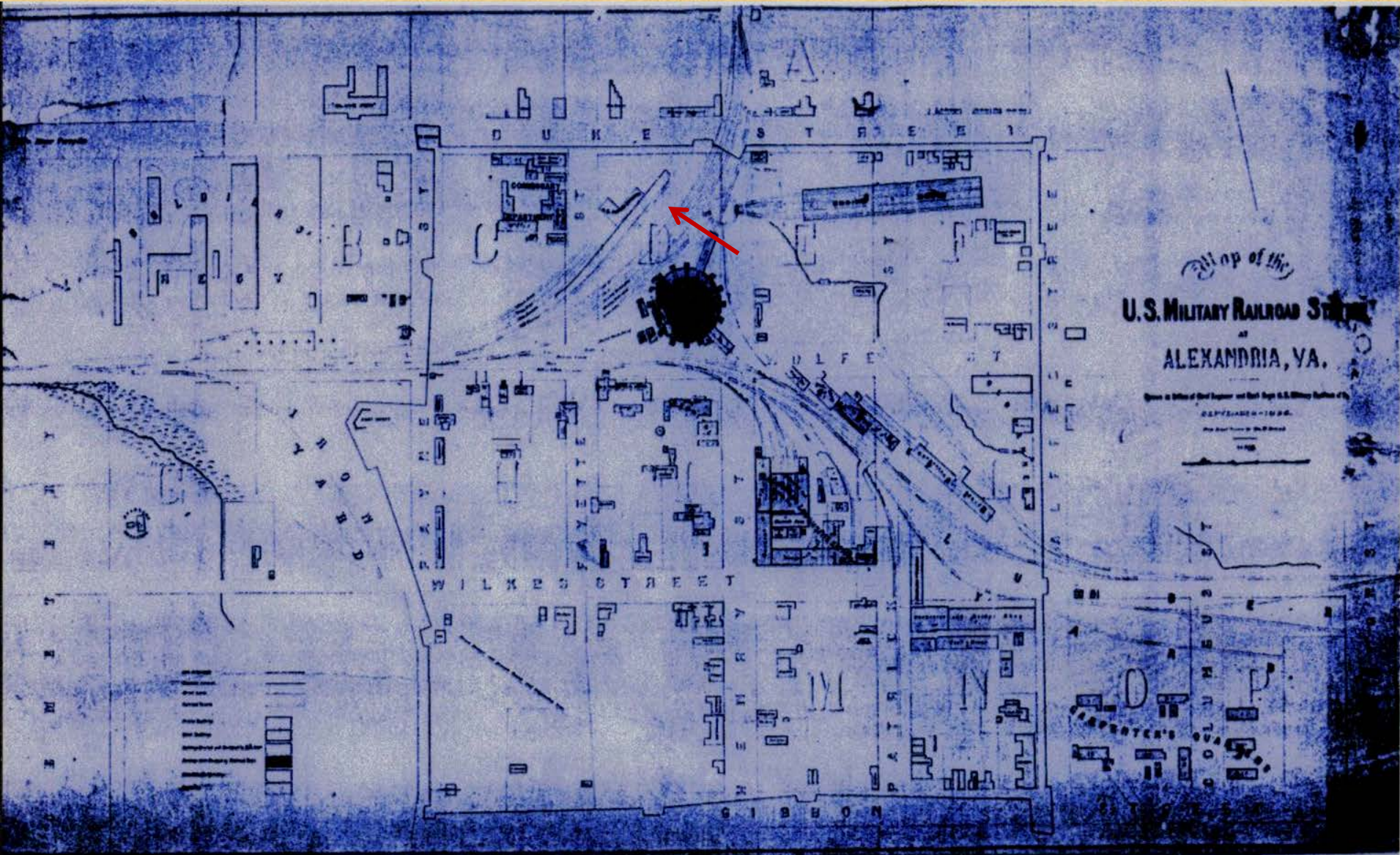
Plan of the
U.S. MILITARY RAILROAD STATION
AT
ALEXANDRIA, VA.

Scale of Miles of Rail Road and Feet Squares of U.S. Military Railroad of VA.
SEPTEMBER - 1862.
Prepared from the U.S. Survey
1862

- Water
- Highway
- Rail Road
- Wharf
- Warehouse
- Public Buildings
- Private Buildings
- Church
- Public Square
- Public Grounds
- Public Buildings
- Private Buildings
- Church
- Public Square
- Public Grounds







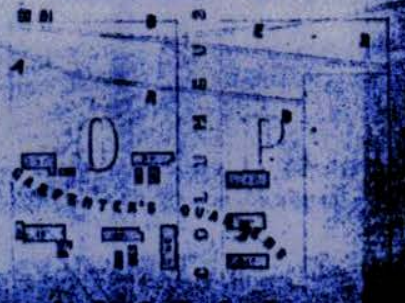
All up of the
U.S. MILITARY RAILROAD STATION
at
ALEXANDRIA, VA.

Scale in Miles of Road Engineer and Chief Agent U.S. Military Railroad of Va.

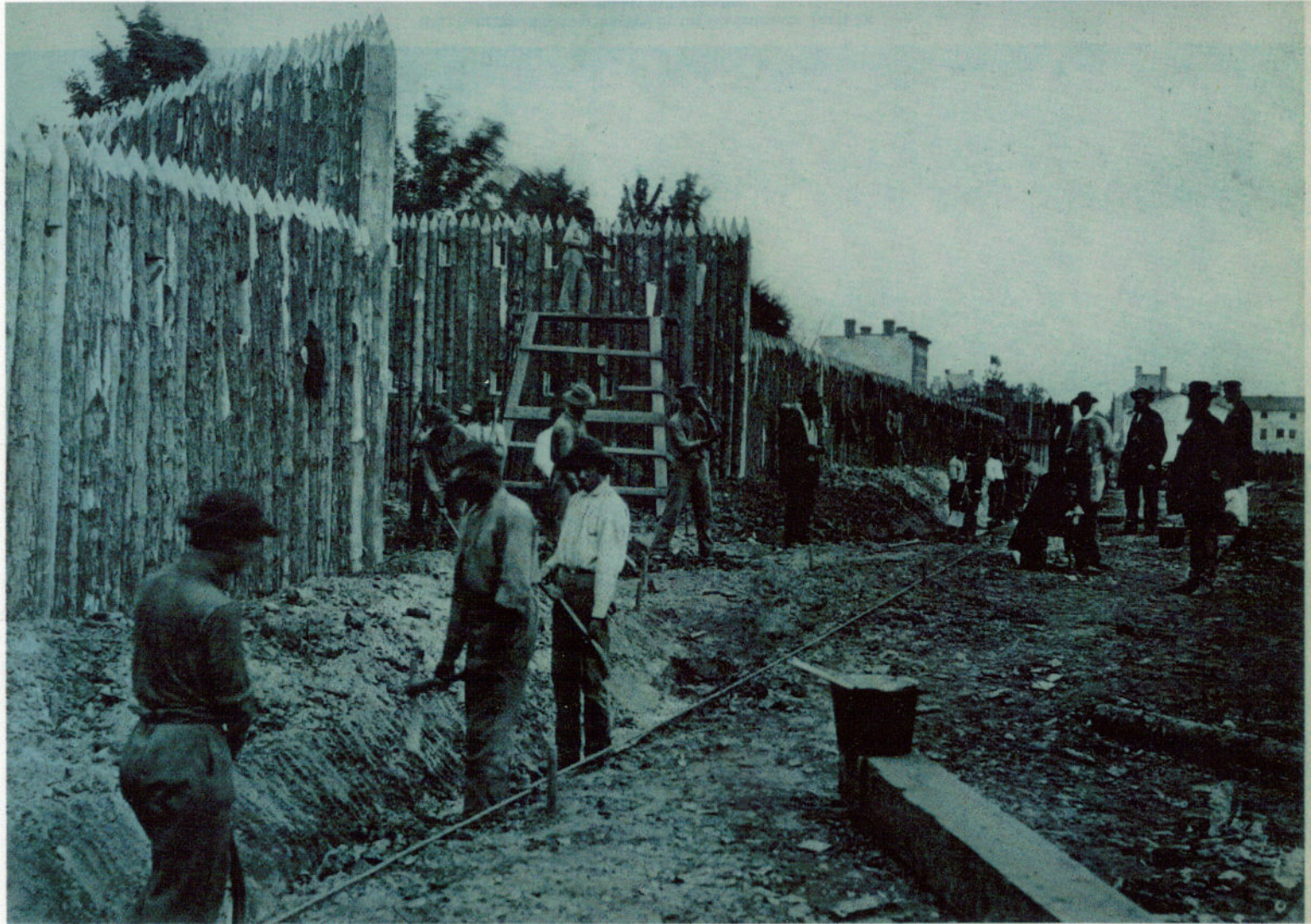
SEPTEMBER 1866.

For full details see the Manual

1866







T-Rails on flatcar

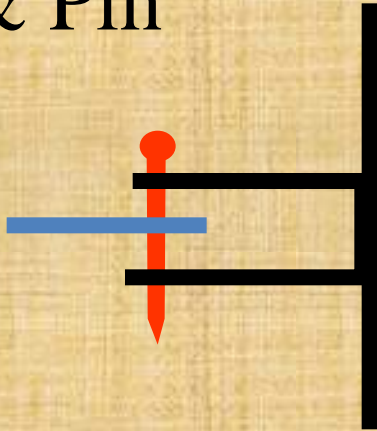


Couplers

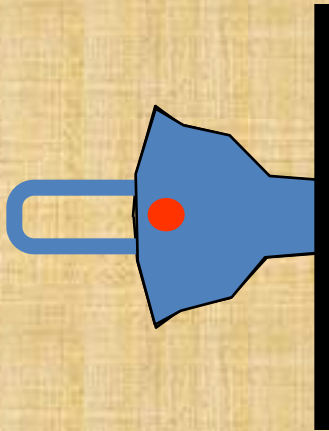


Link & Pin

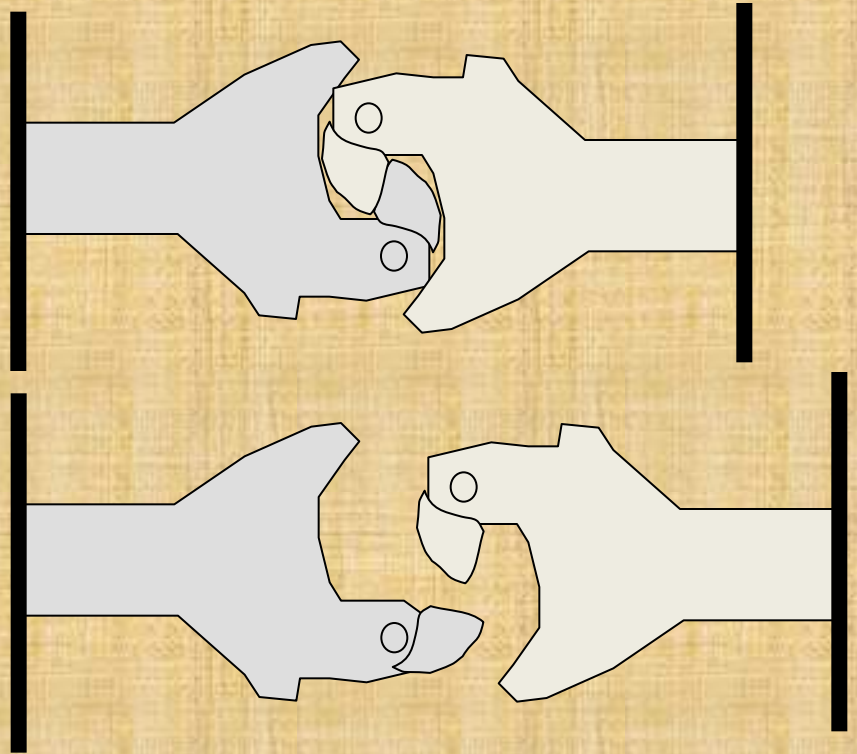
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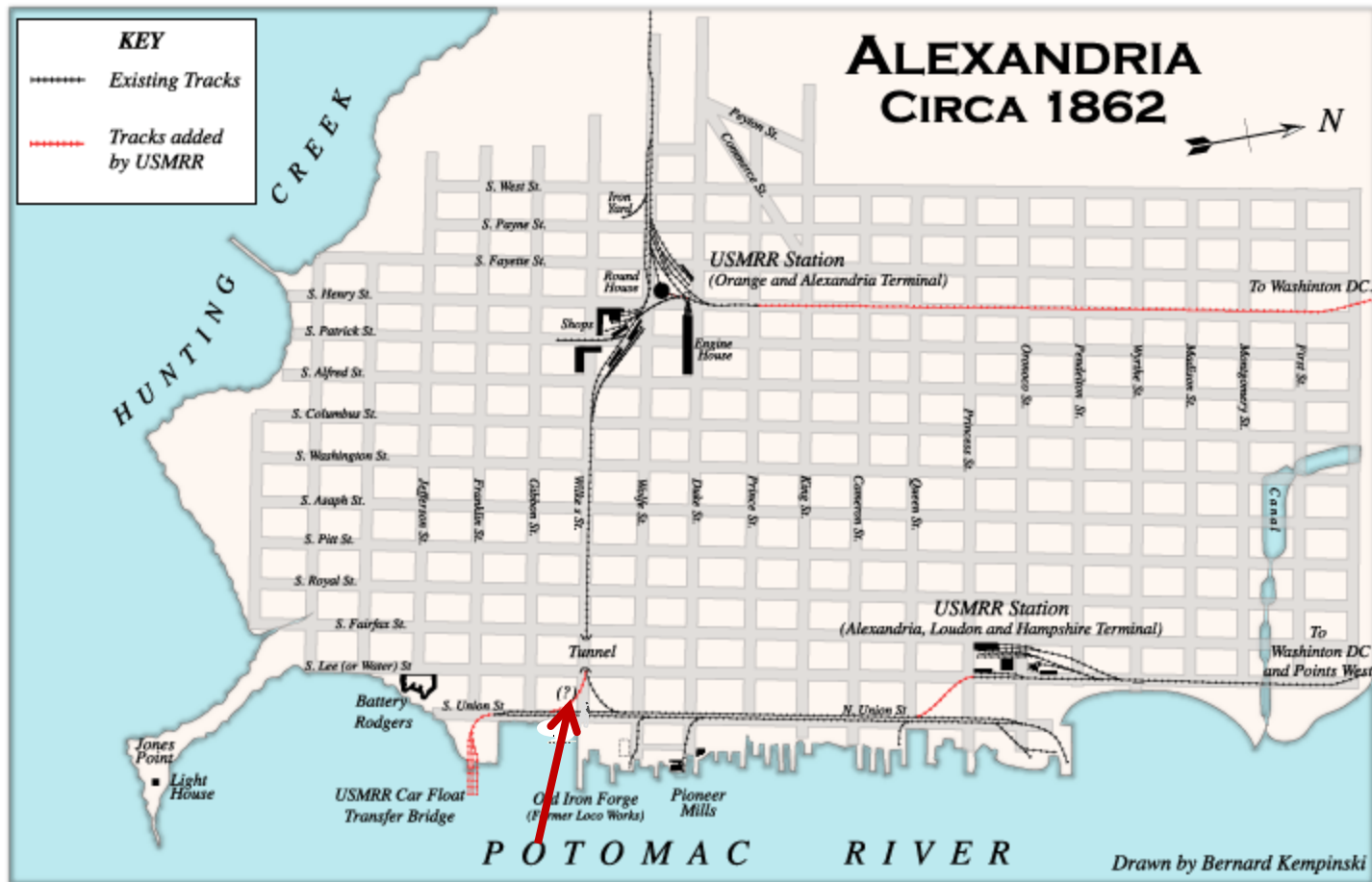
Top



Janney Coupler (1873)



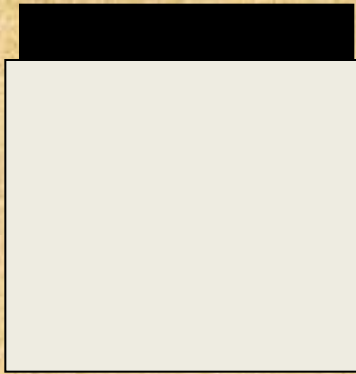
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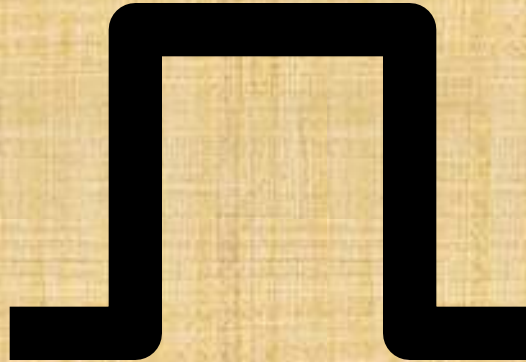
Map Showing Railroad Facilities in Alexandria during the American Civil War



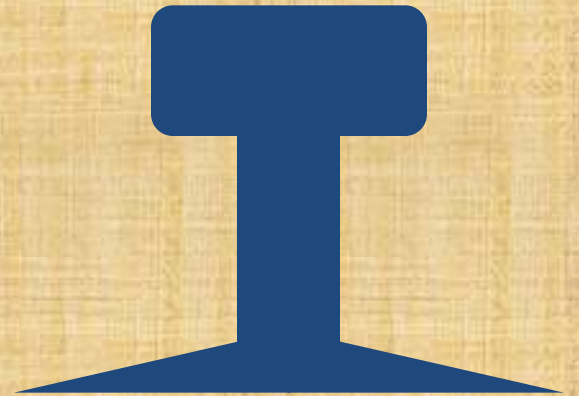
Rails



Strap Rail



U-Rail



T-Rail