

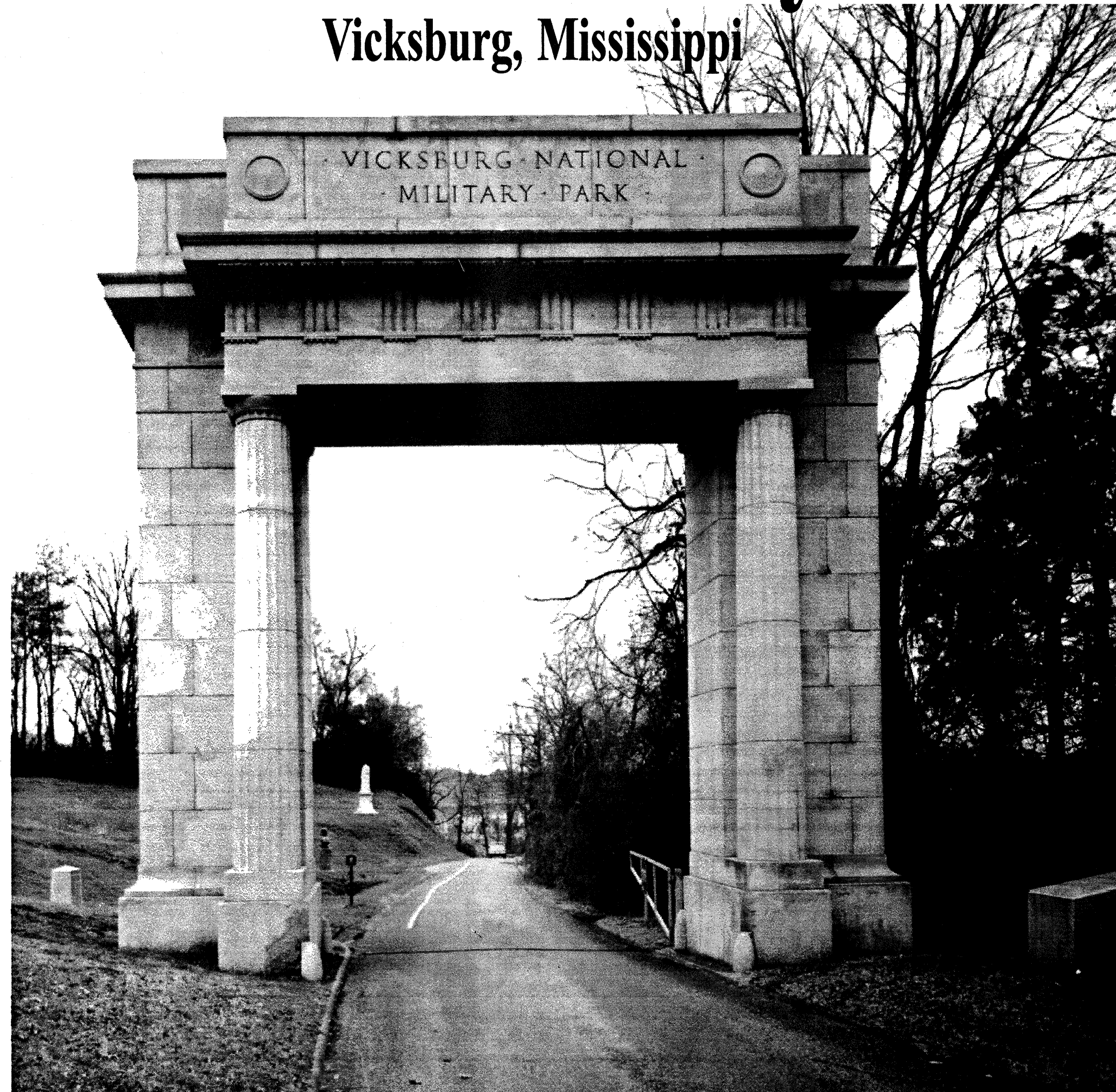
Vicksburg National Military Park Tour Roads

Vicksburg, Mississippi



Vicksburg National Military Park at Vicksburg, Mississippi was established by the U.S. War Department in 1899 to preserve the site of a pivotal battle of the American Civil War. The park was designed to provide visitors with access to and interpretation of historically significant areas, relating to the 1863 campaign for the city of Vicksburg. After the battle, various veterans groups, states and the federal government placed monuments, memorials and markers throughout the Confederate and Union troop lines to commemorate those who fought there. To facilitate visitors, it was necessary to develop a road system that would complement the site and provide quick and easy access to a monumental landscape with many points of interest.

Park commissioners and engineers involved with planning the tour roads, led by Resident Commissioner William T. Rigby, wanted to make the park as convenient as possible for its visitors. In their opinion, the park was intended for the average citizen who would spend a few hours touring the grounds, not the military or historical expert who would devote days or weeks to the study of siege operations. The result was a park tour designed to be seen from the road via horse, wagon, or carriage...and later automobiles. The tour roads, nearly a century old, have evolved from gravel roadways to an elaborate network of primarily one-way routes paved with concrete and asphalt. The tour roads were laid in curvilinear alignments over and around the rolling landscape passing by the most significant trenches, encampments and battle sites along the siege lines, thus presenting a variety of views of the restored battlefield with monuments, interpretive signs, artillery placements and other historical points of interest. Maintained vistas, mowed bays and other landscape concerns along the roads complement the visitor experience of the park while elaborate drainage systems protect the roadway from erosion of the loess soil during heavy rains.



Entrance Arch near park visitor center, 1997. Scanned from photo by Bill Faust.

This project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the Historic American Buildings Survey/Historic American Engineering Record Division (HABS/HAER) of the National Park Service, U.S. Department of the Interior. The Vicksburg National Military Park (VNMP) Roads and Bridges Recording Project was cosponsored by HAER (E. Blaine Cliver, Chief) and VNMP (William Nichols, Superintendent). The project was funded by the Federal Lands Highway Program (Thomas Edick, Administrator) through the National Park Service Park Roads and Parkways Program (Mark Hartsoe, Manager). The field work, measured drawings, historical reports, and photographs were prepared under the direction of Program Manager Todd A. Croteau and Richard Quin, Program Historian. The recording team consisted of William Pete Brooks, field supervisor; landscape architect Deb James, and architect Gregory Seale. Historical reports were prepared by project historian Courtney Youngblood. Formal large-format photography was done by William Foust. The team was assisted by VNMP Historian Terrence Winschel.



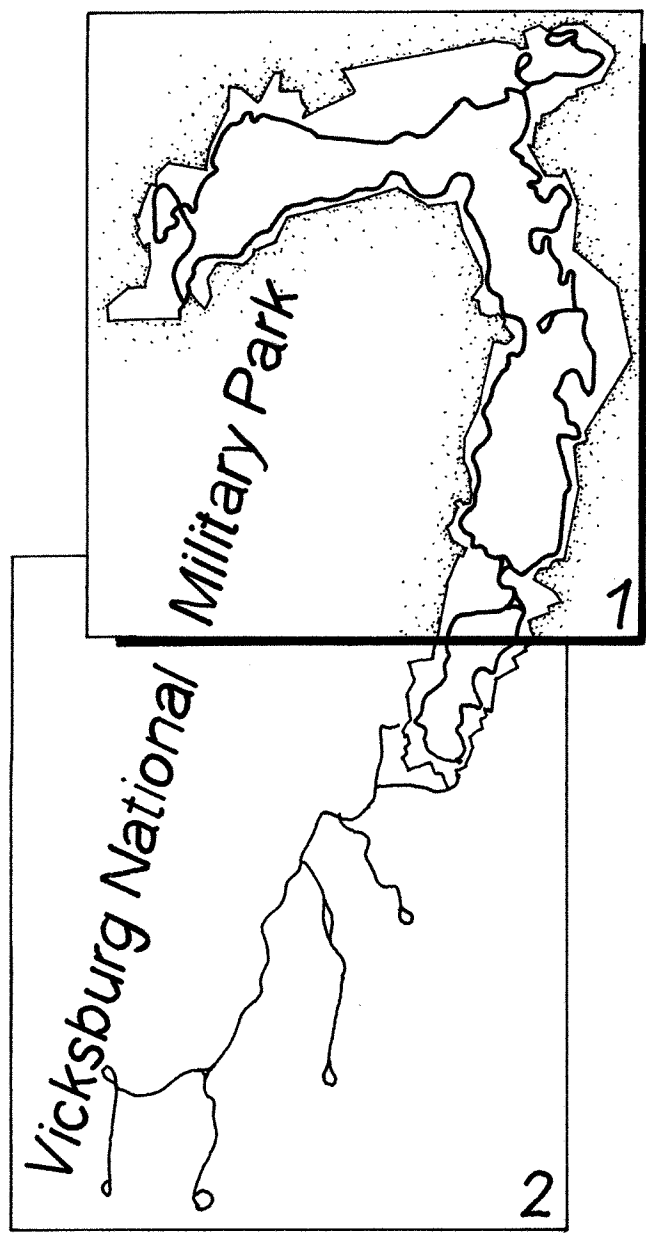
Vicksburg National Military Park was transferred to the National Park Service in 1933 and has been managed by the NPS since. Though most of the tour road features remain the same, several major changes have occurred. During the "Mission 66" period of the park service a large portion of the park and road system was ceded to the City of Vicksburg. This included the southern section of the crescent that formed the siege line. Although maintained as a city park, there are noticeable differences in the aesthetic quality. The presence of utility lines, fire hydrants and street lamps distracts from viewing the monuments. Within the national park such amenities are not visible.

The many bridges in the park are a particularly interesting feature of this road system due to their ornamental detailing and early construction technologies. The steel arch bridge on Confederate Avenue over Jackson Road is the only bridge of its kind in the state of Mississippi. Bypassed by another bridge in 1972, the structure remains and has been used as a pedestrian bridge. Nine Melantype concrete arch bridges were constructed along Union Avenue in 1903. These reinforced concrete bridges have held up remarkably over time, however, geologic forces, erosion, and heavy traffic have taken their toll. The brick-faced concrete arch bridge on Confederate Avenue, spanning Halls Ferry Road, was designed by the National Park Service and Bureau of Public Roads and is also the only bridge of its kind in the state.

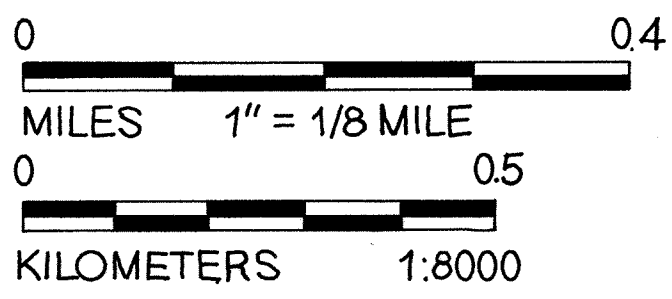
This documentation defines the unique characteristics of the Vicksburg National Military Park Tour Roads and interprets the evolution of design, construction and maintenance of the monumental landscape as related to the tour road experience. Today, the tour roads remain heavily used and the older structures along the routes are being considered for replacement. This record will preserve on paper those details that make the park unique.

REFERENCE MAP 1

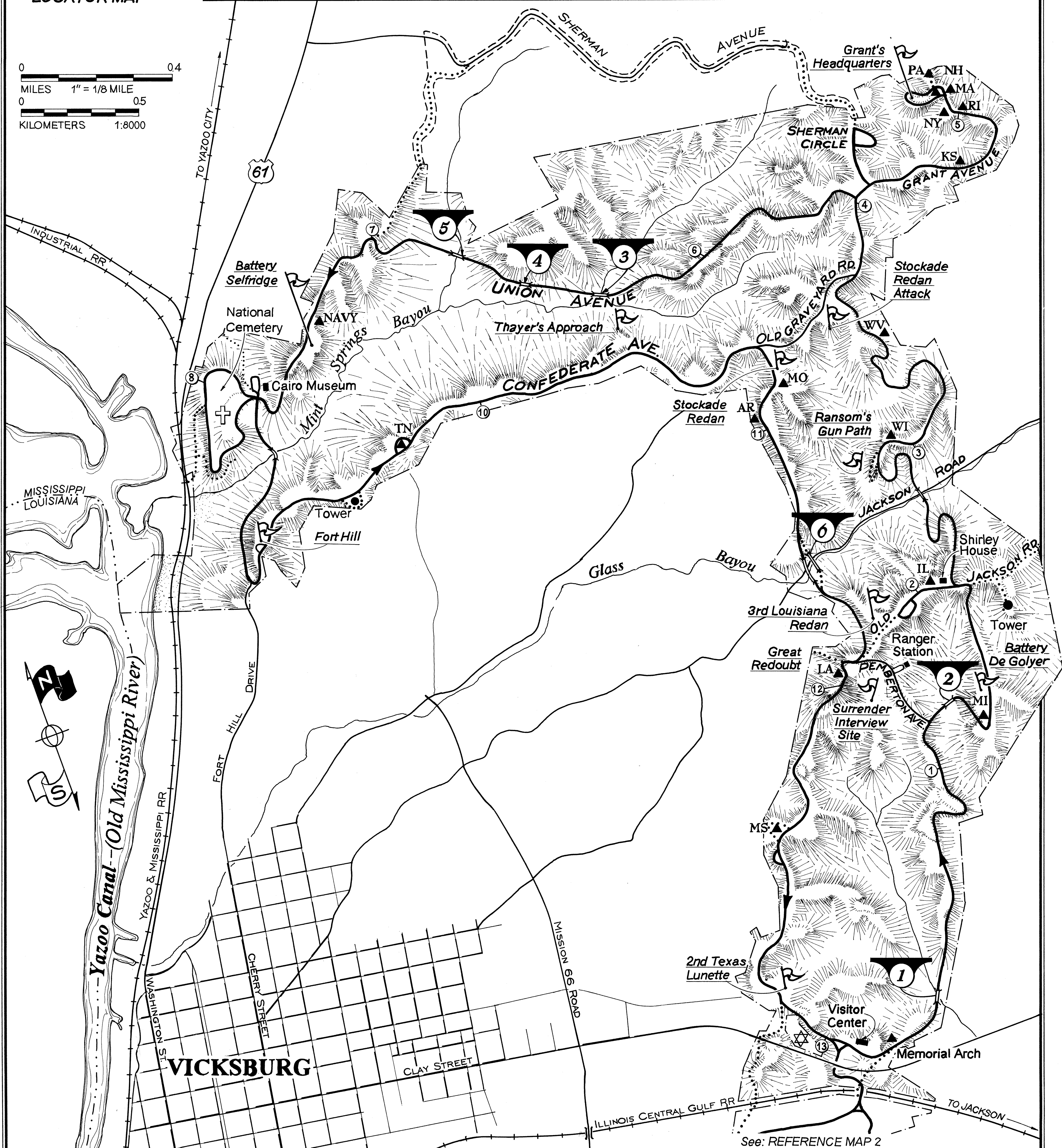
BASED ON: 1962 USGS 7.5 MINUTE MAPS: VICKSBURG EAST, VICKSBURG WEST & REDWOOD QUADRANGLES;
 "VICKSBURG NATIONAL MILITARY PARK, BY THE PARK COMMISSION..." MAP NOS. 1-4;
 AND PHOTOGRAPHS FOUND IN THE ARCHIVES OF THE VICKSBURG NATIONAL MILITARY PARK



LOCATOR MAP



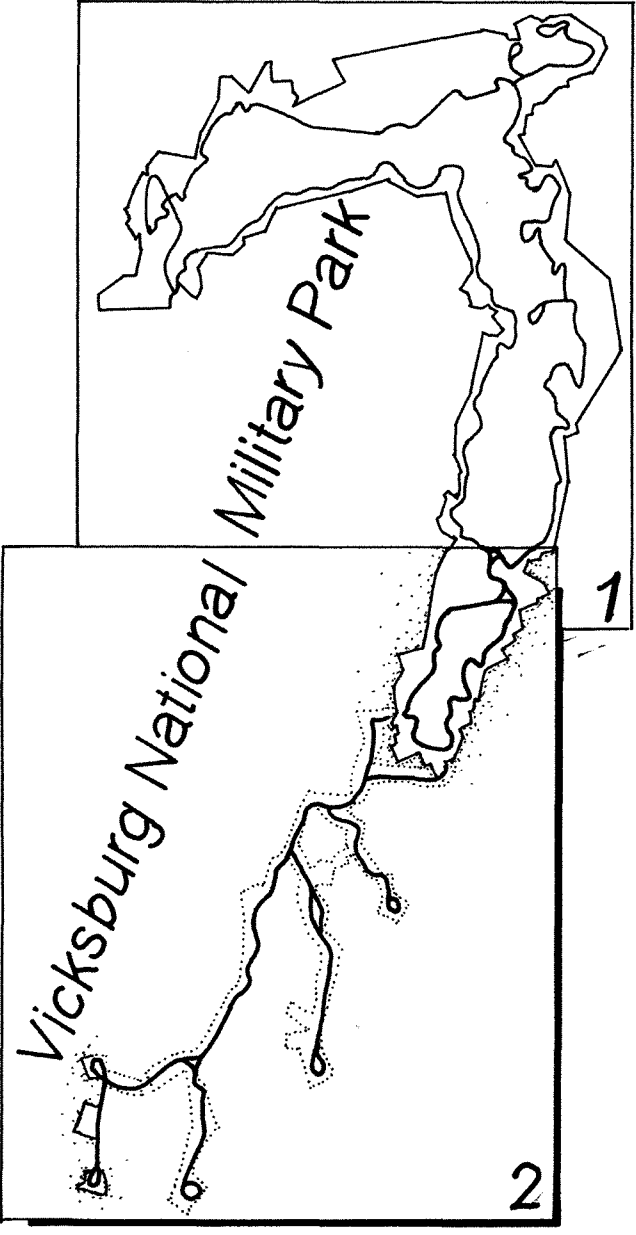
LEGEND		INDEX TO HISTORIC BRIDGES					
	PARK TOUR ROAD		BOUNDARY 1963 TO PRESENT	BRIDGE	HAER	MILE POST	SEE SHEET
	OBLITERATED ROAD		PARKLAND CEDED TO CITY, 1963	1 MELAN ARCH	MS-14A	0.2	8 OF 12
	CONNECTING ROAD		SIGNIFICANT MILITARY SITE	2 MELAN ARCH	MS-14A	1.2	8 OF 12
	HISTORIC BRIDGE		STATE MONUMENT	3 MELAN ARCH	MS-14A	6.4	8 OF 12
	MAJOR CITY STREET		RAILROAD LINE	4 MELAN ARCH	MS-14A	6.7	8 OF 12
				5 MELAN ARCH	MS-14A	6.9	9 OF 12
				6 STEEL	MS-12	11.4	1 OF 2



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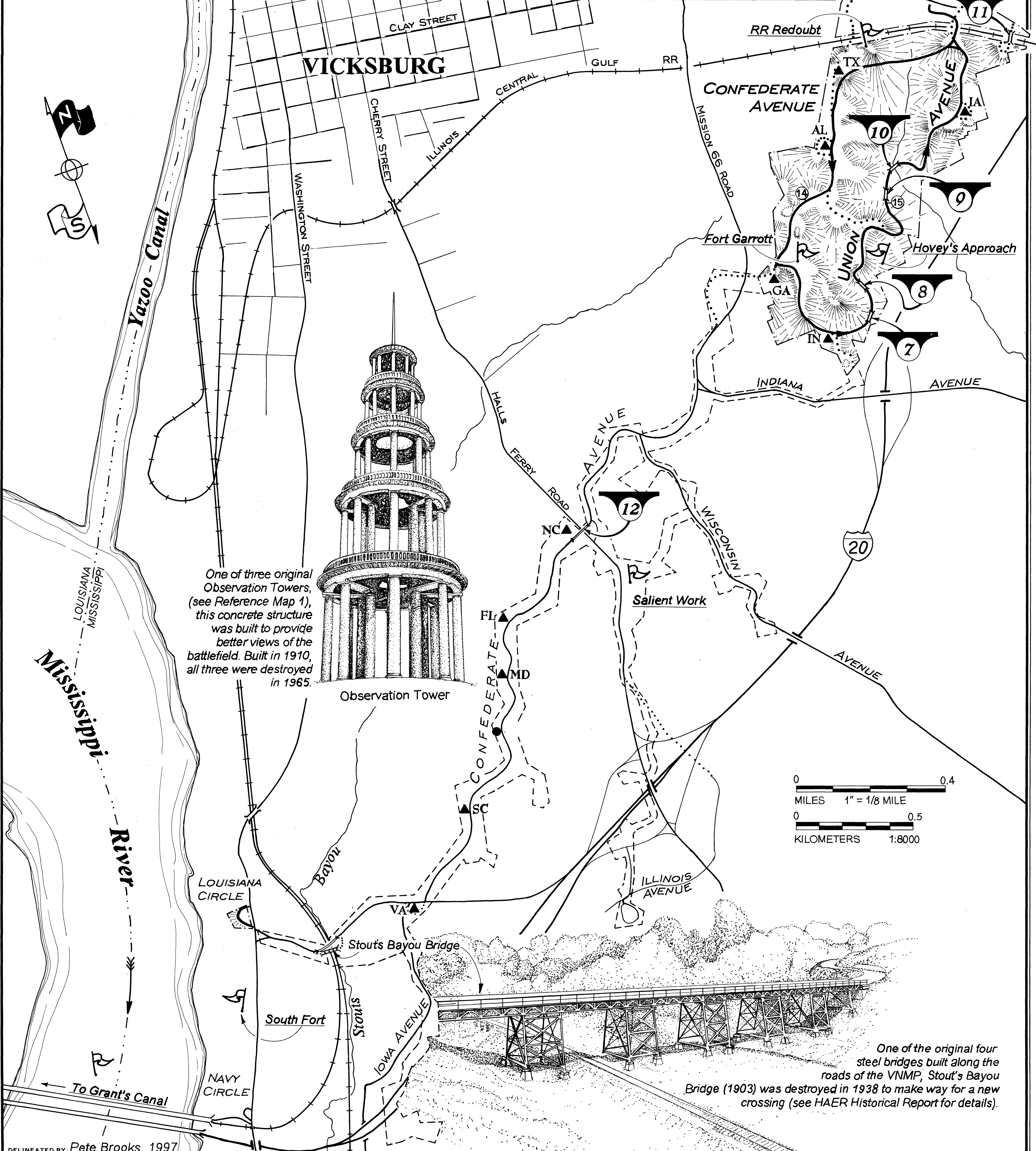
REFERENCE MAP 2

BASED ON: 1962 USGS 7.5 MINUTE MAPS: VICKSBURG EAST, VICKSBURG WEST & REDWOOD QUADRANGLES;
 UNIVERSALMAP'S "VICKSBURG MISSISSIPPI STREET MAP," 1997;
 "VICKSBURG NATIONAL MILITARY PARK, BY THE PARK COMMISSION..." MAP NOS. 1 & 3-6;
 AND PHOTOGRAPHS FOUND IN THE ARCHIVES OF THE VICKSBURG NATIONAL MILITARY PARK

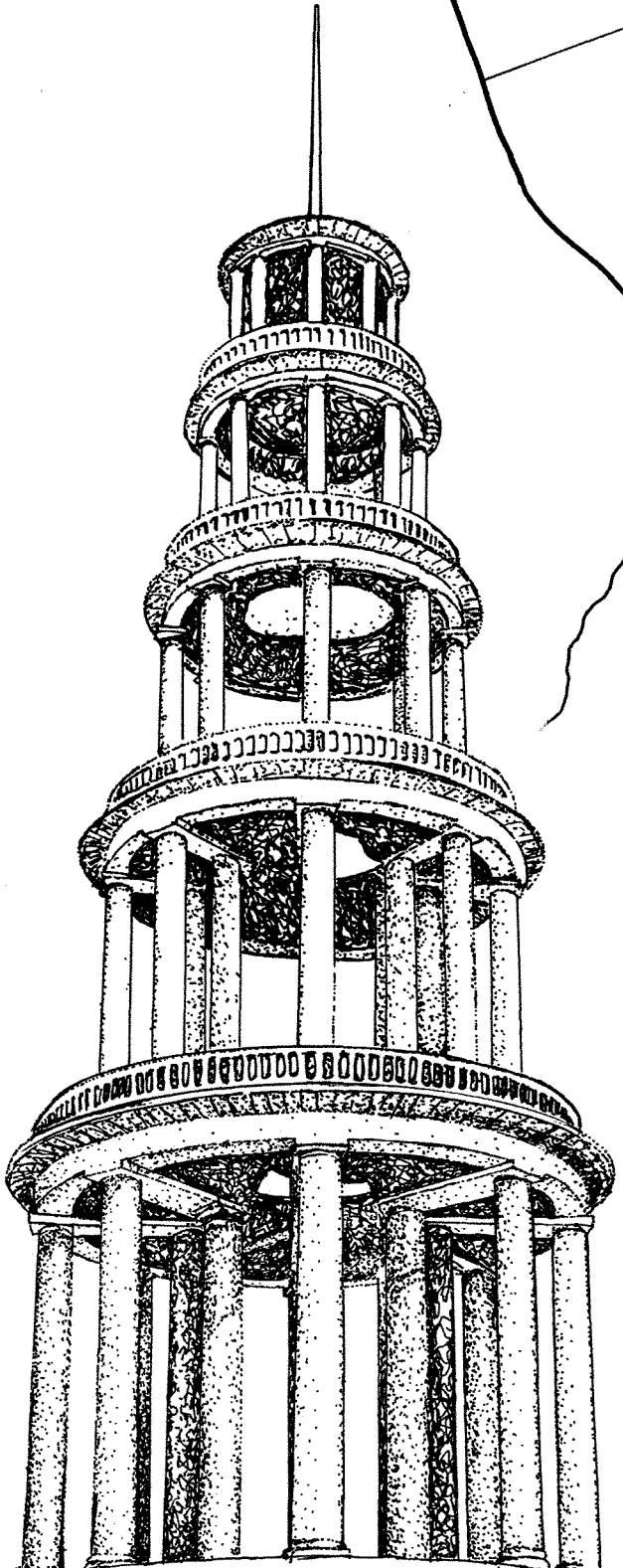


LOCATOR MAP

LEGEND		INDEX TO HISTORIC BRIDGES					
	PARK TOUR ROAD		BOUNDARY 1963 TO PRESENT	BRIDGE	HAER	MILE POST	SEE SHEET
	OBLITERATED ROAD		PARKLAND CEDED TO CITY, 1963	7 MELAN ARCH	MS-14A	14.4	9 OF 12
	CONNECTING ROAD		SIGNIFICANT MILITARY SITE	8 MELAN ARCH	MS-14A	14.5	9 OF 12
	HISTORIC BRIDGE		STATE MONUMENT	9 MELAN ARCH	MS-14A	15.0	9 OF 12
	MAJOR CITY STREET		RAILROAD LINE	10 MELAN ARCH	MS-14A	15.1	9 OF 12
				11 MALONEY CIRCLE	MS-14B	—	11 OF 12
				12 HALLS FERRY	MS-14C	—	12 OF 12

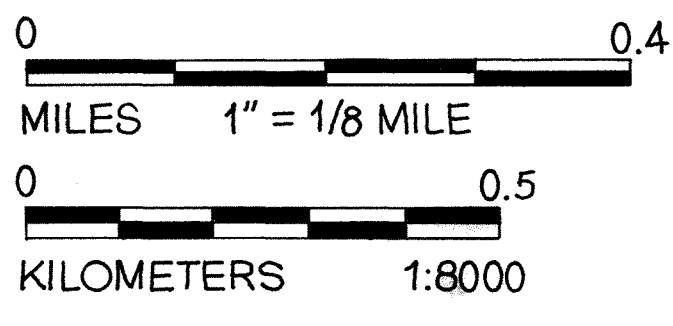


One of three original Observation Towers (see Reference Map 1), this concrete structure was built to provide better views of the battlefield. Built in 1910, all three were destroyed in 1965.



Observation Tower

One of the original four steel bridges built along the roads of the VNMP, Stout's Bayou Bridge (1903) was destroyed in 1938 to make way for a new crossing (see HAER Historical Report for details).

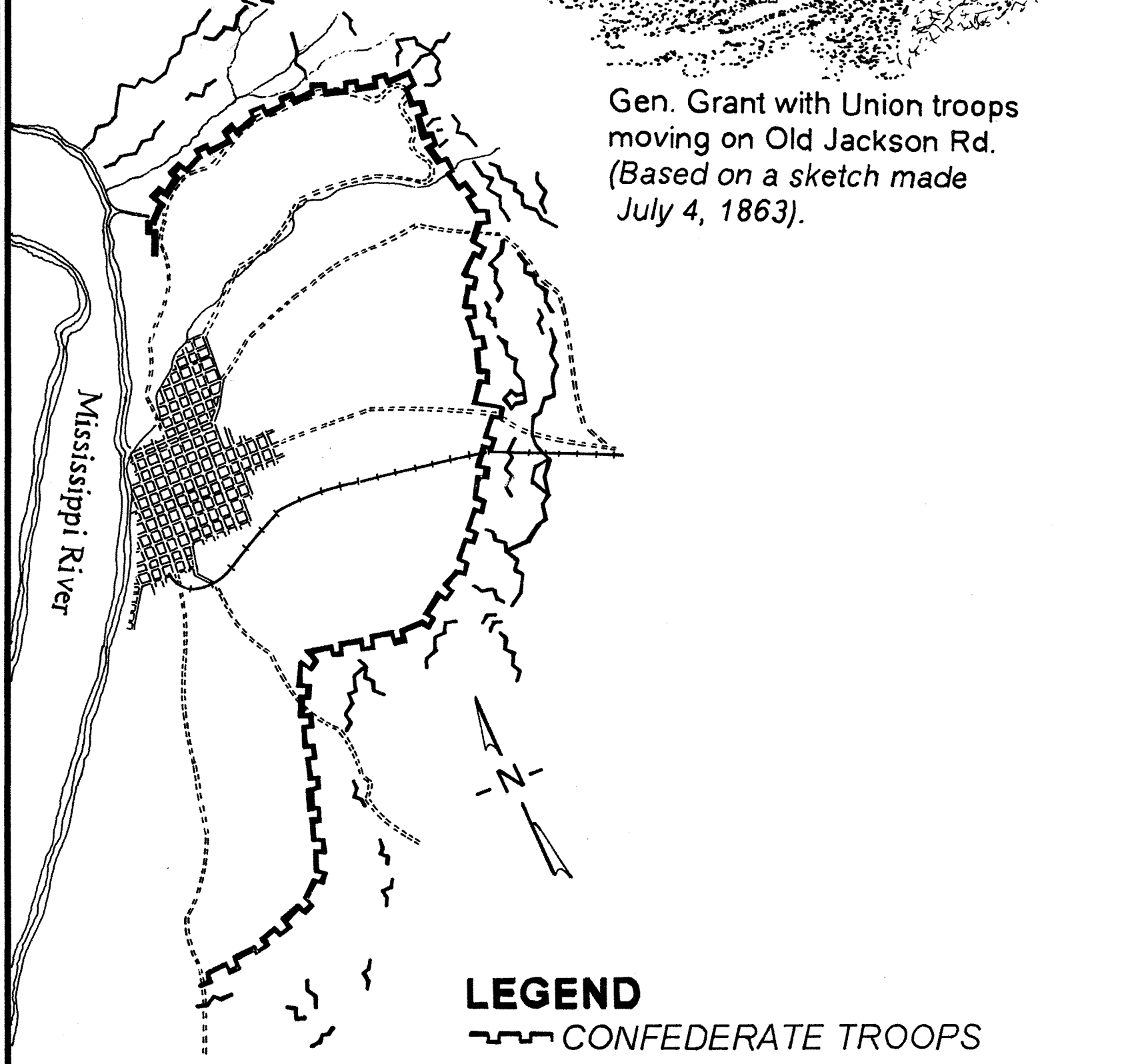
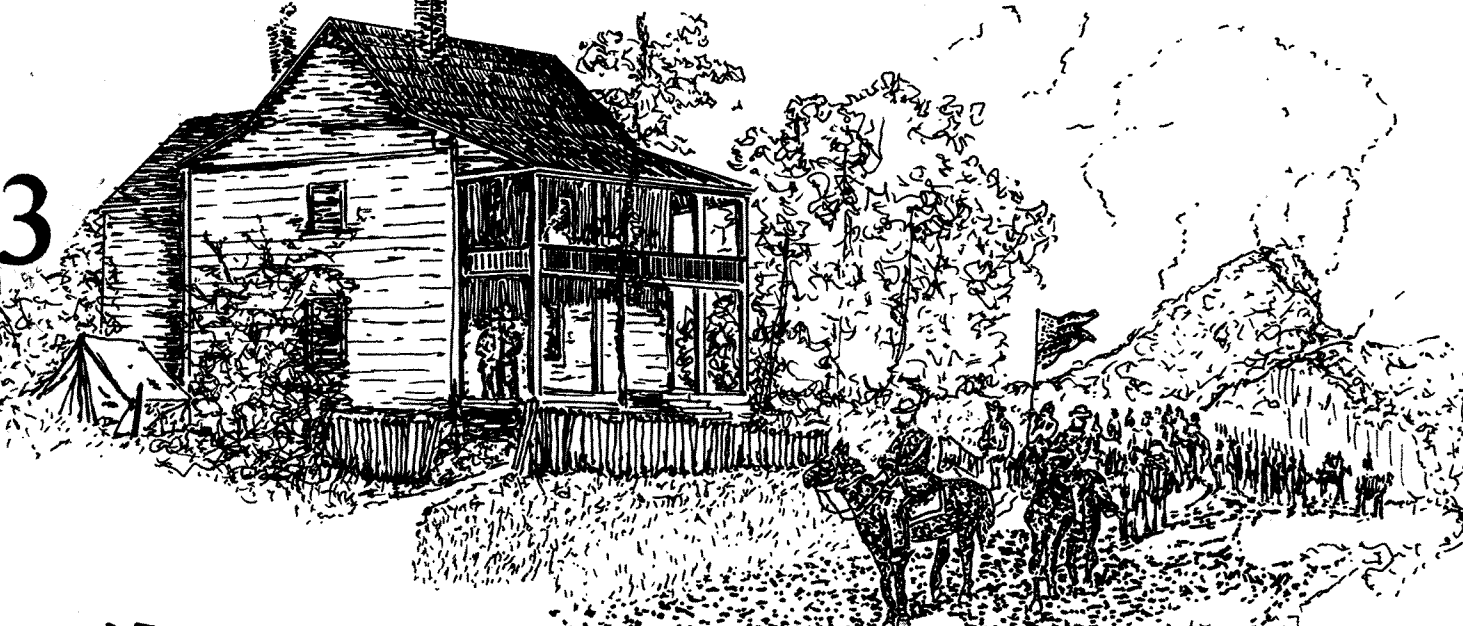


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EVOLUTION OF TRANSPORTATION

SIEGE OF VICKSBURG

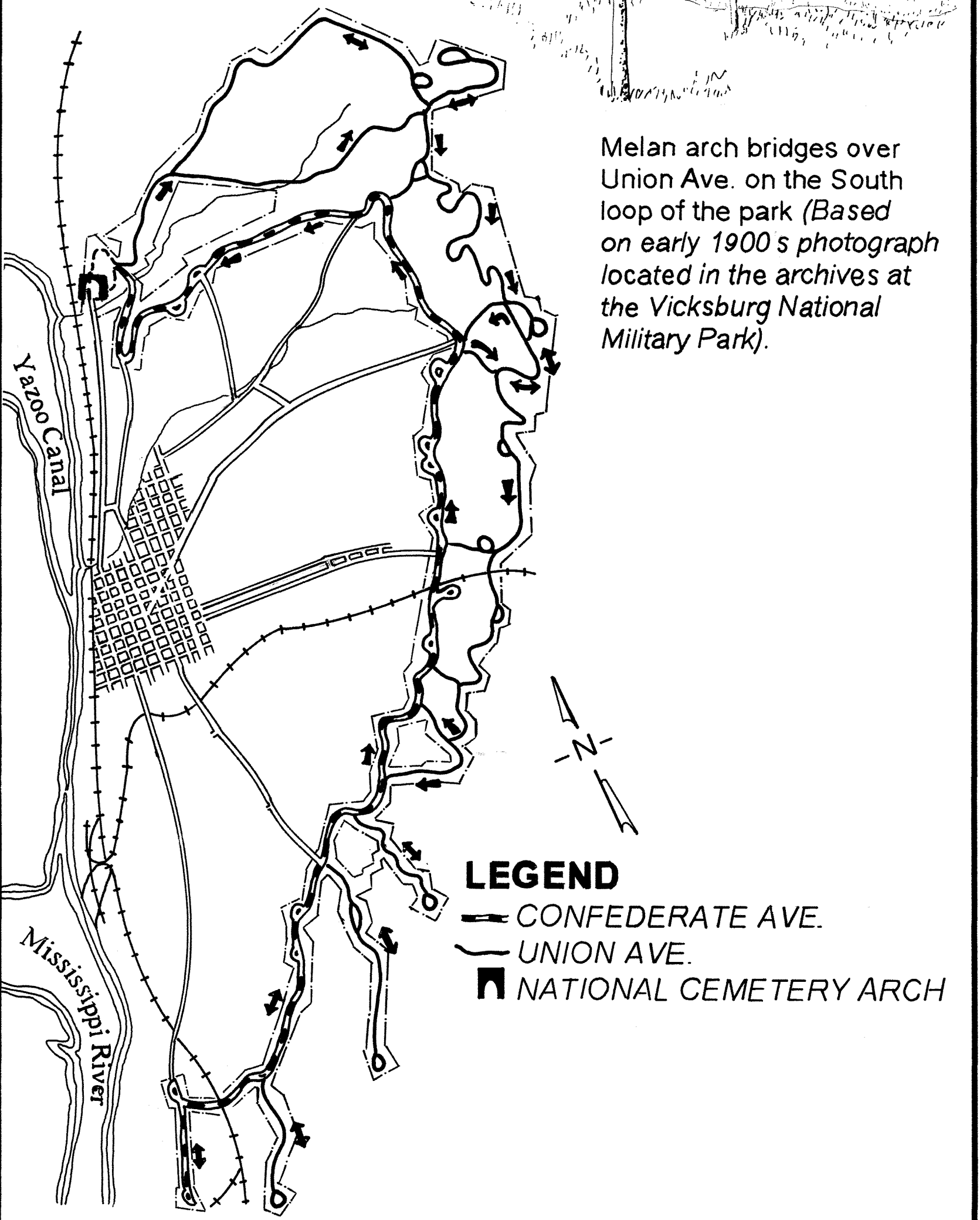
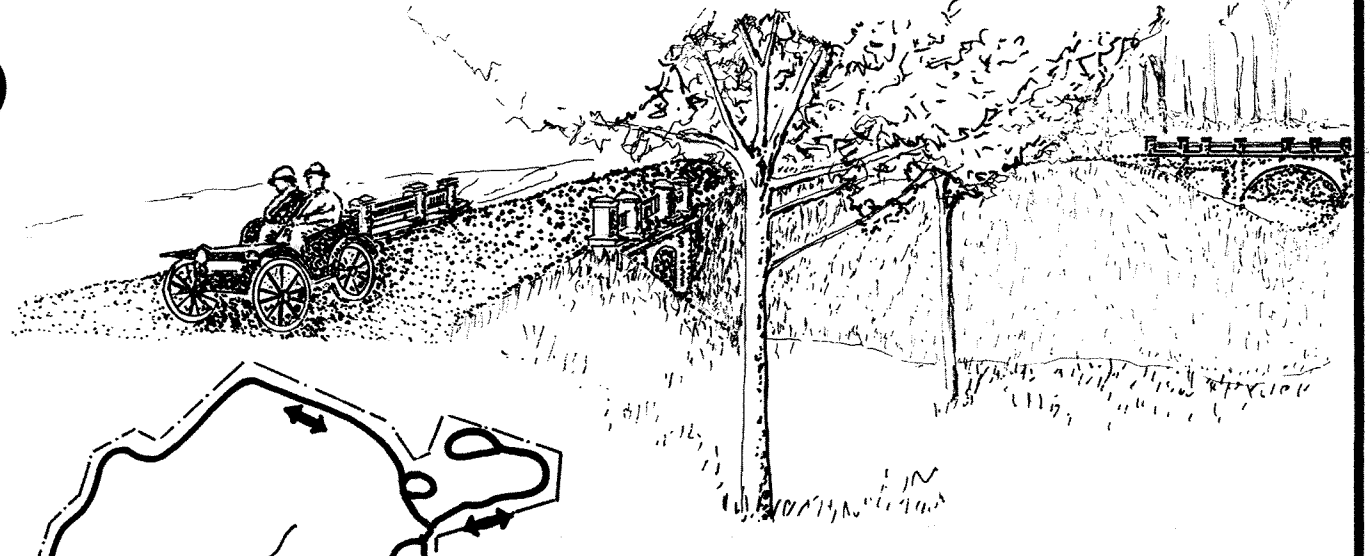
1863



- 1864** CONFEDERATE GEN. JOHN C. PEMBERTON SURRENDERS CITY TO GEN. U.S. GRANT ON JULY 4, AFTER 47 DAY SIEGE.
- 1866** NATIONAL CEMETERY CREATED
- 1876** MISSISSIPPI RIVER CHANGED COURSE
- 1899** NATIONAL MILITARY PARK ESTABLISHED
- 1901** ROAD CONSTRUCTION BEGAN
- 1902** YAZOO RIVER DIVERSION CANAL BUILT
- 1903** BRIDGE CONSTRUCTION AND PLACEMENT OF MONUMENTS BEGAN
- 1935** C.C.C. (CIVILIAN CONSERVATION CORPS) WORK ON DRAINAGE SYSTEM, EROSION CONTROL. PUBLIC WORKS ADMINISTRATION PROVIDED CONCRETE PAVING OF CONFEDERATE AVE.

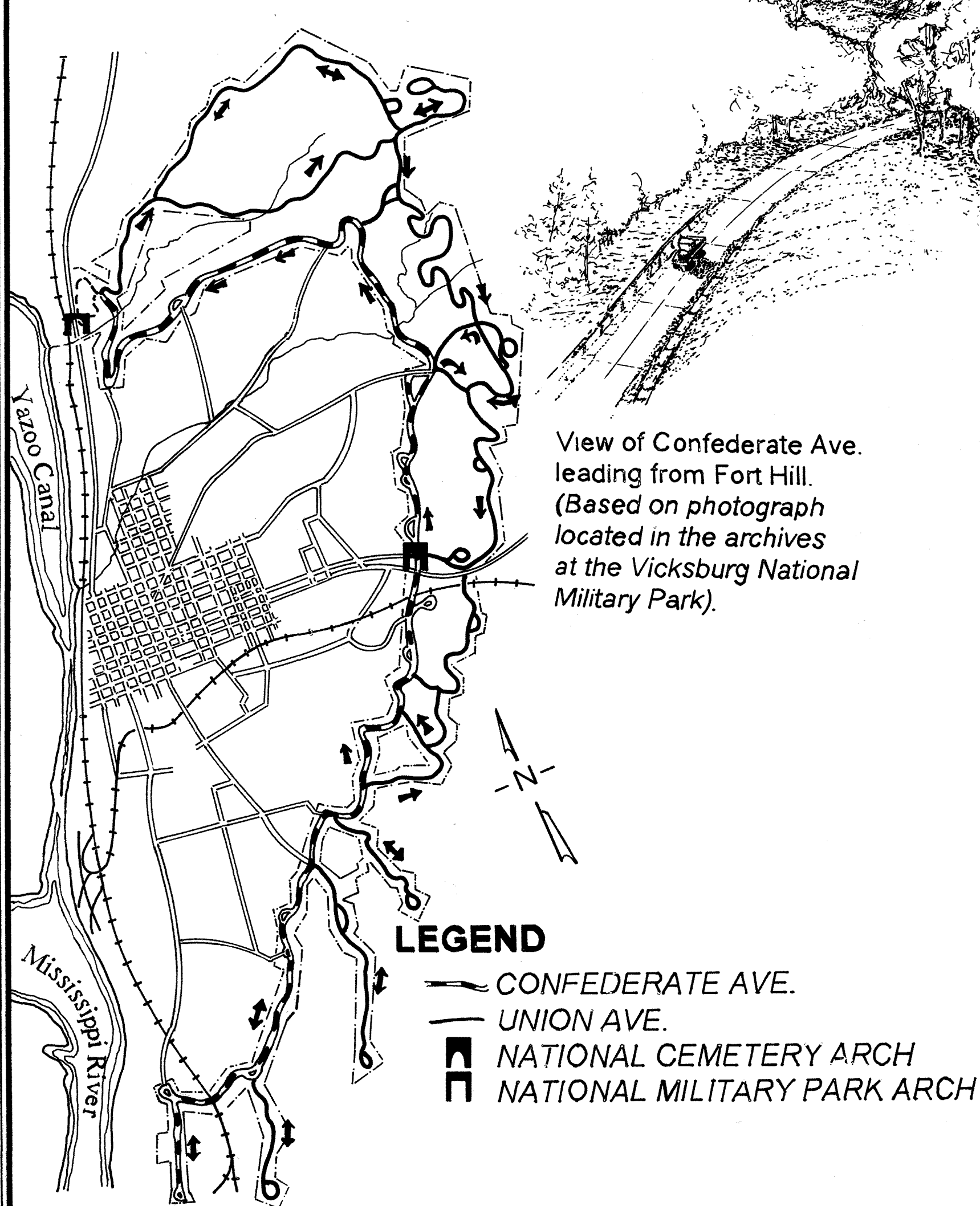
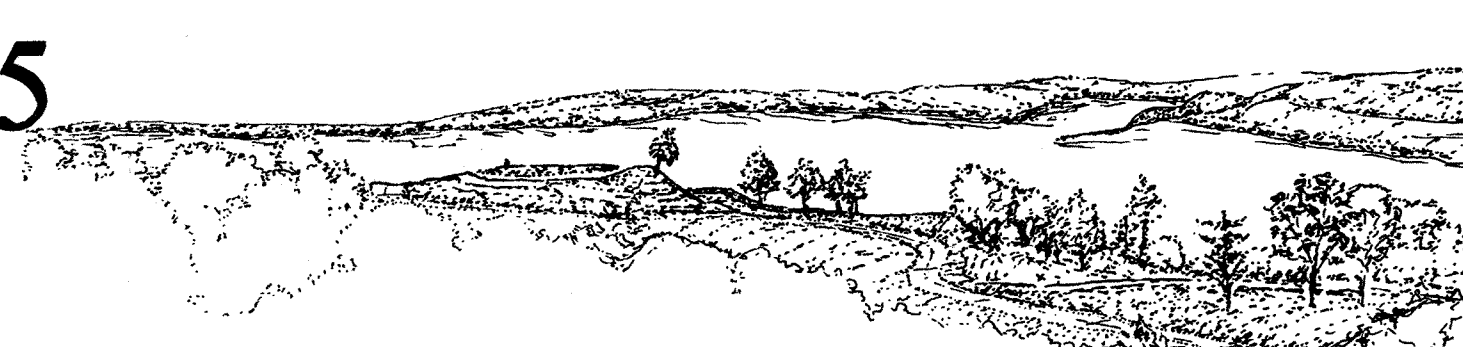
NATIONAL MILITARY PARK

1899



PARK ROADS PAVED

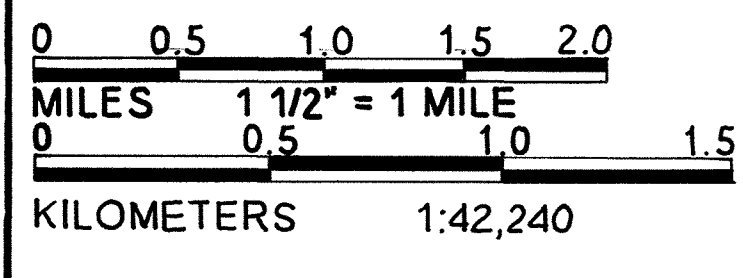
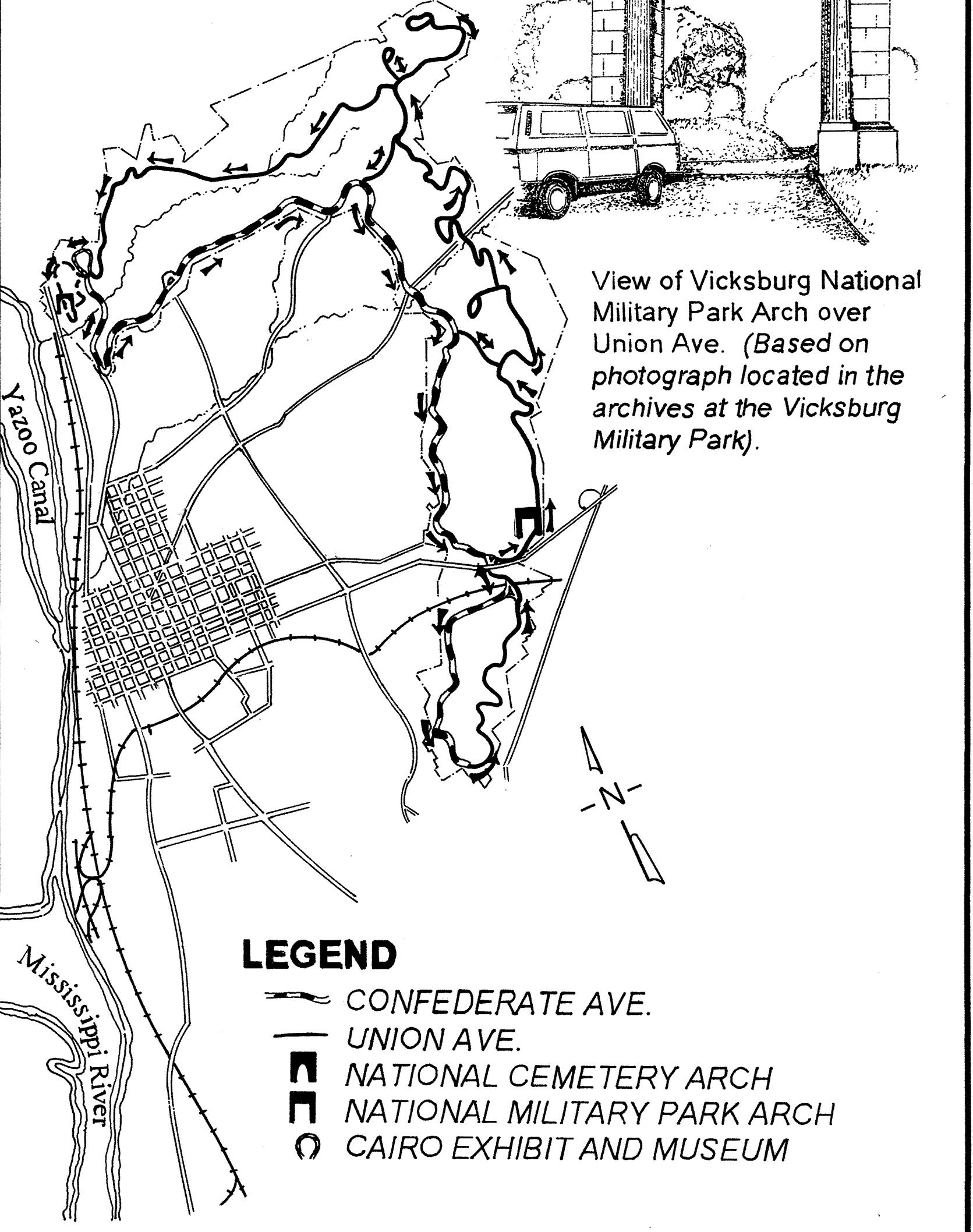
1935



- 1956-1966** MISSION 66 INITIATED 10 YEAR PROJECT: TRANSFERRED SOUTH PORTIONS OF PARK AND SHERMAN AVE. IN EXCHANGE FOR CITY-OWNED INTERIOR PARK SECTIONS. ENTRY ARCH MOVED TO UNION AVE.
- 1971** NEW VISITOR CENTER OPENED WHILE ASPHALT PAVING CONTINUED ON UNION AVE.
- 1977-1980** U.S.S. CAIRO MOVED TO PARK AND CAIRO MUSEUM OPENED
- 1997** MELAN ARCH BRIDGE #5 REPLACED WITH BOX CULVERT

PARK BOUNDARY CHANGE

1963

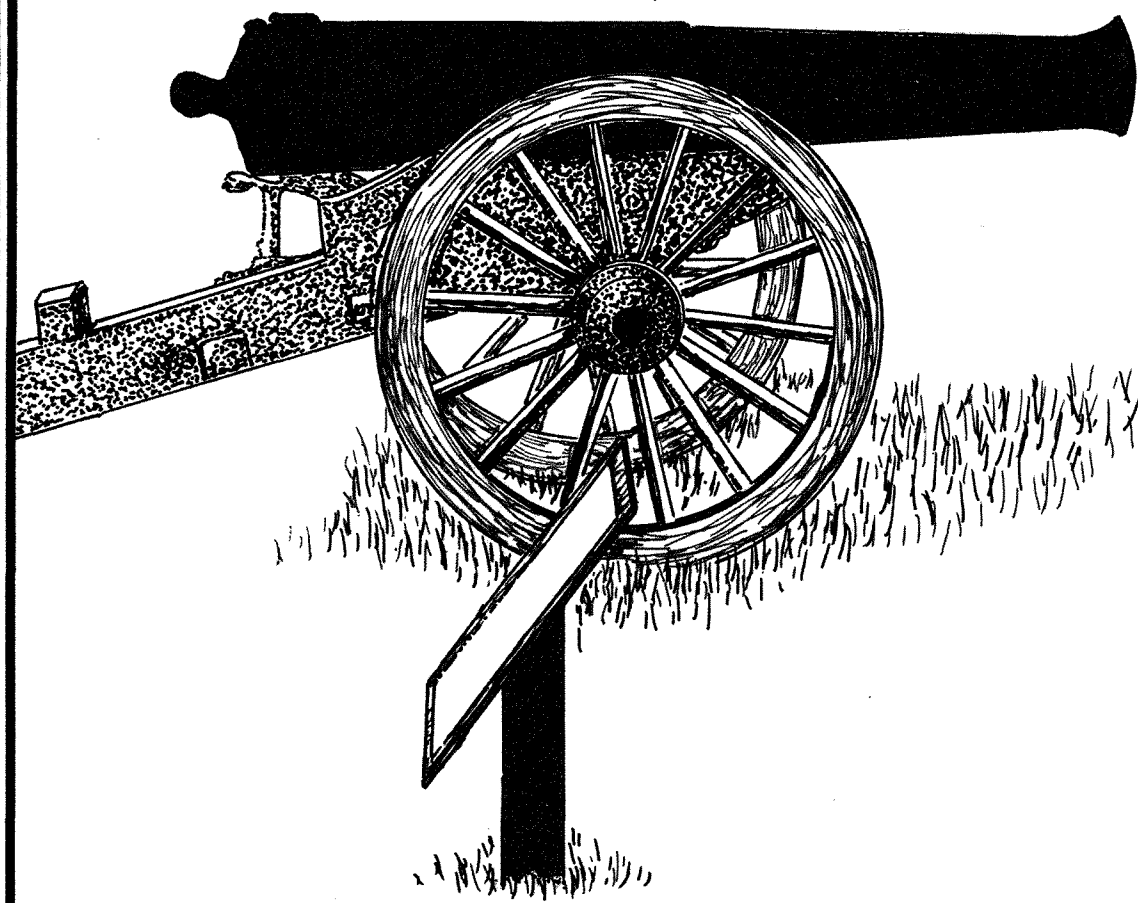


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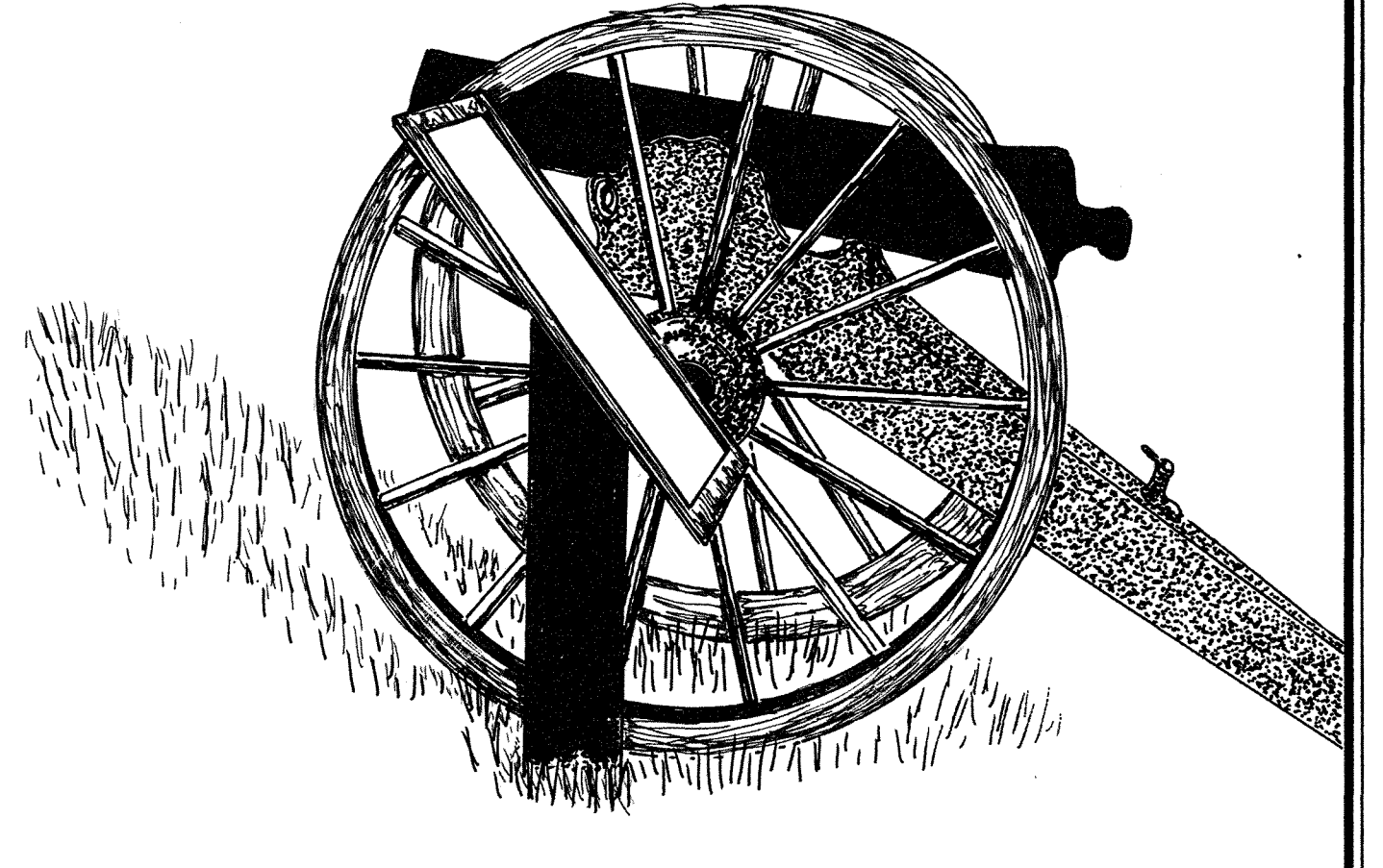
BATTLEFIELD TOUR ROADS

SCHEMATIC VIEW

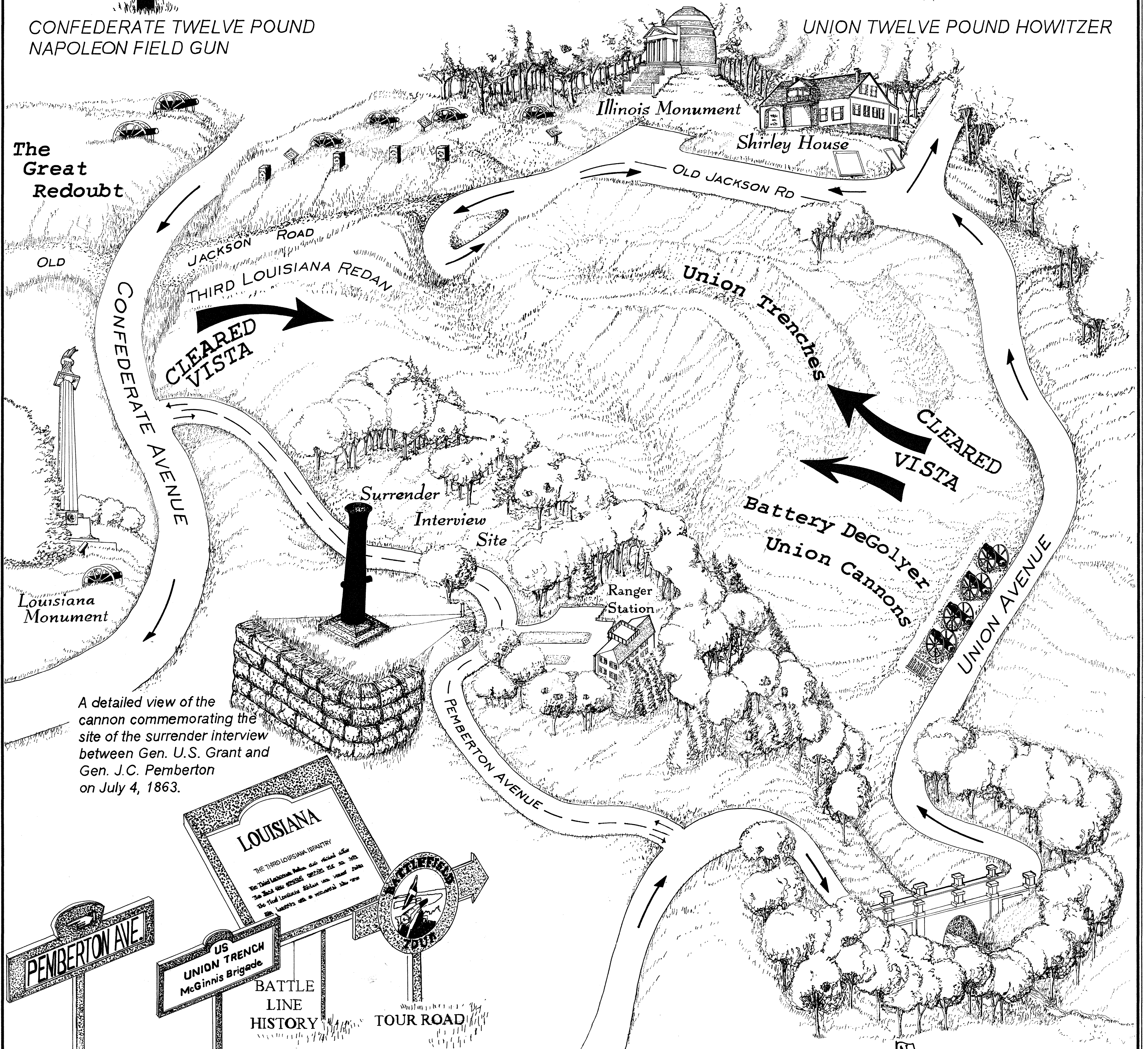
With Confederate Ave. and Union Ave. facing their respective battle lines, the park commissioners and engineers involved with planning the tour roads wanted to make the park as convenient as possible for its visitors to view the 1863 Vicksburg siege. Winding among the hills of Vicksburg, the tour roads follow many switchbacks and steep grades. Certain areas are shaded by a canopy of lush vegetation while other areas are intentionally kept open to view significant battle lines. This interpretive drawing represents the park areas between Pemberton Ave. and the Old Jackson Road as well as significant monuments and battle line history.



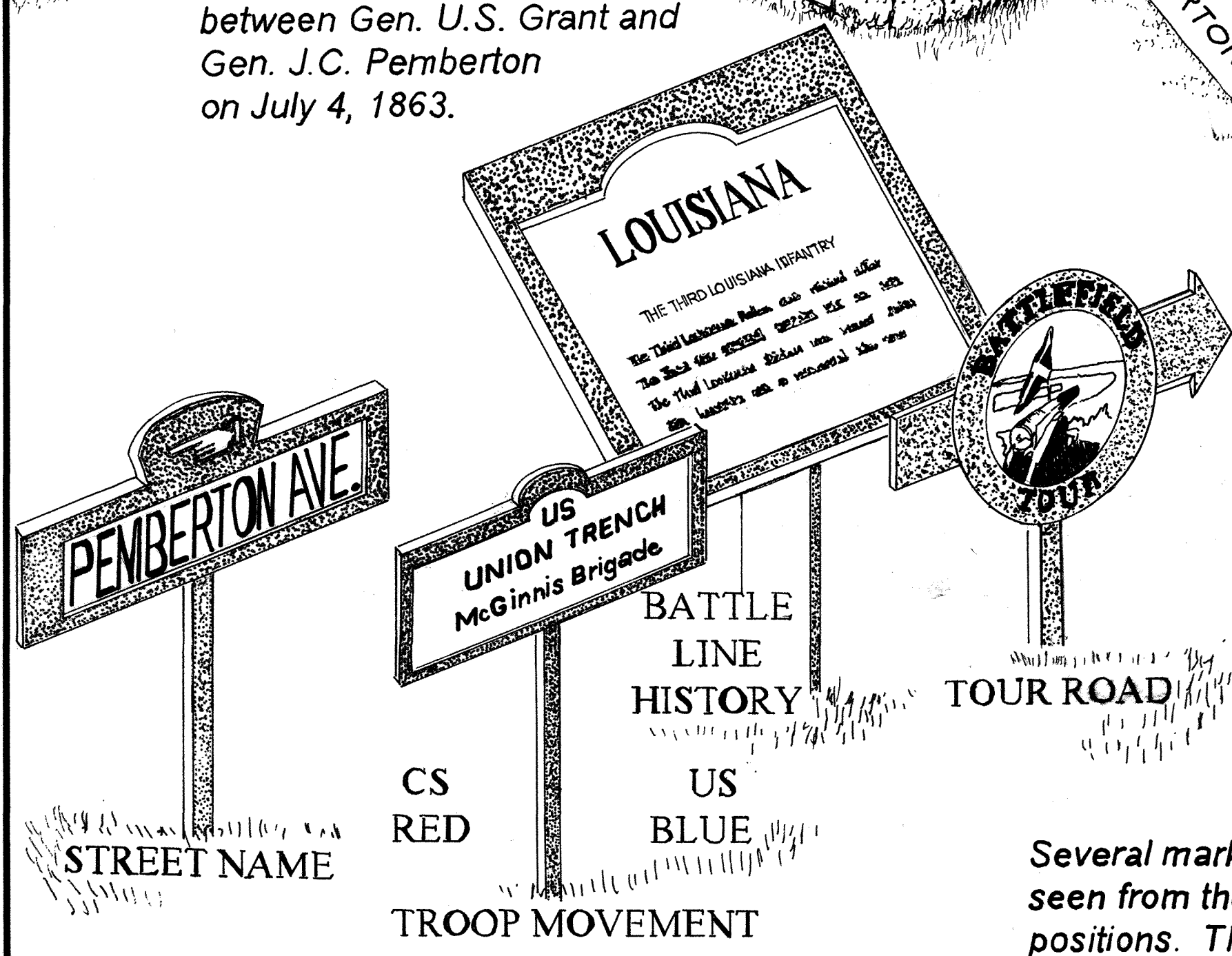
CONFEDERATE TWELVE POUND NAPOLEON FIELD GUN



UNION TWELVE POUND HOWITZER



A detailed view of the cannon commemorating the site of the surrender interview between Gen. U.S. Grant and Gen. J.C. Pemberton on July 4, 1863.

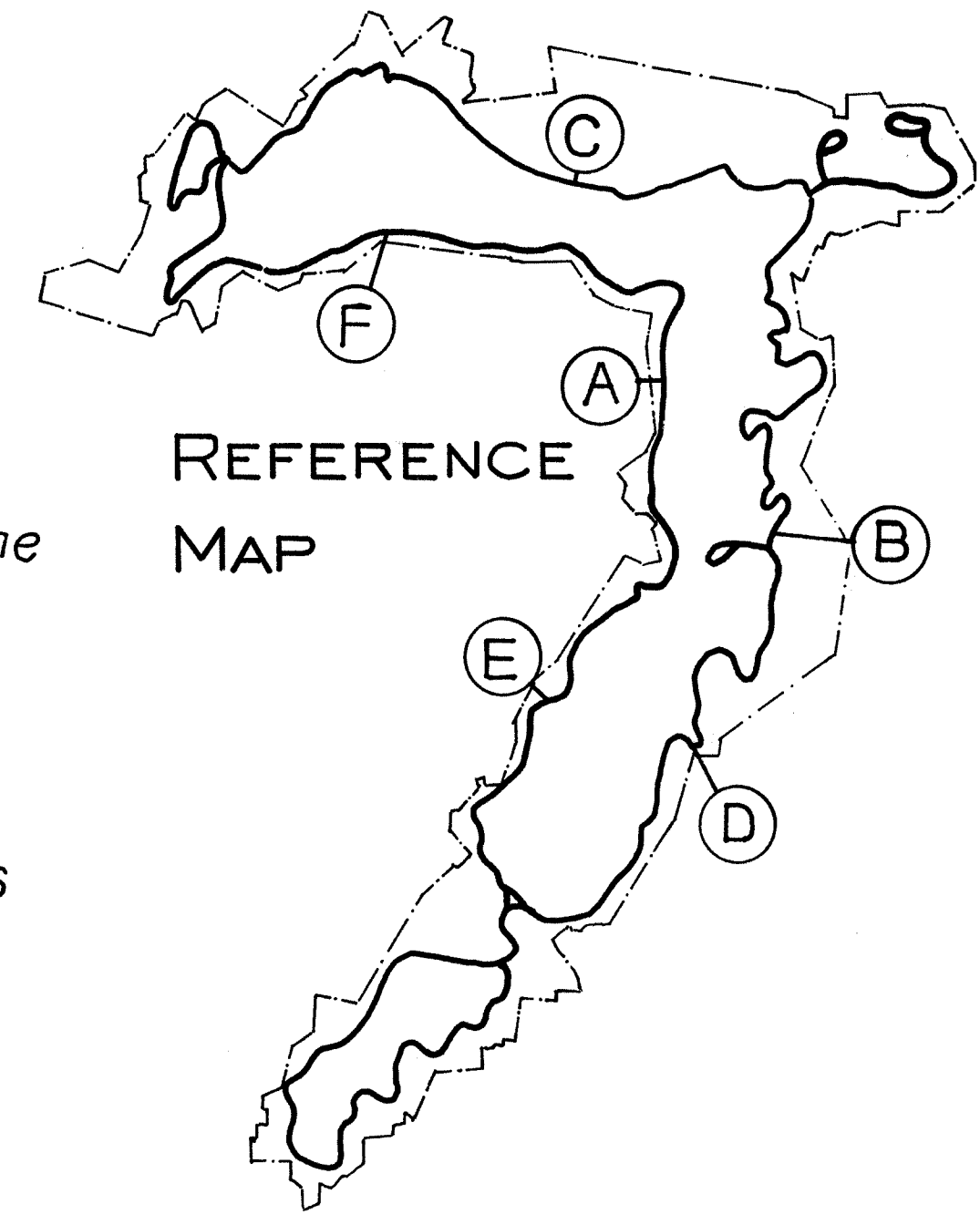


Several markers and explanatory tablets can be seen from the tour roads as well as battle line positions. These markers were placed facing the same direction as the troops and movements. Blue tablets indicate Union positions, while red markers indicate Confederate lines. Tour road signs are consistent with the visitor's tour map.

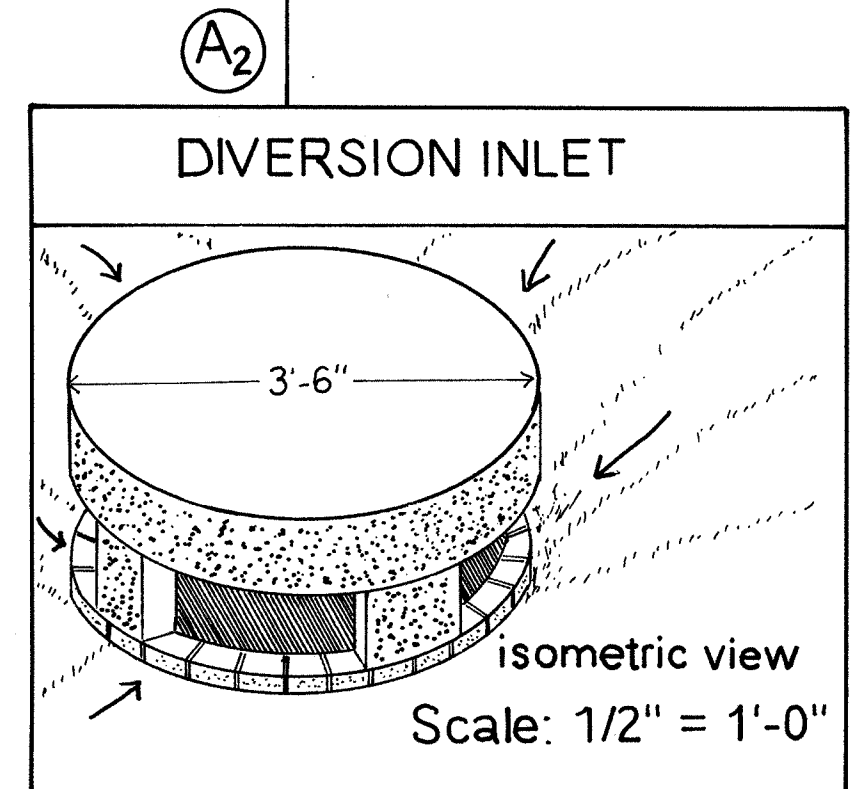
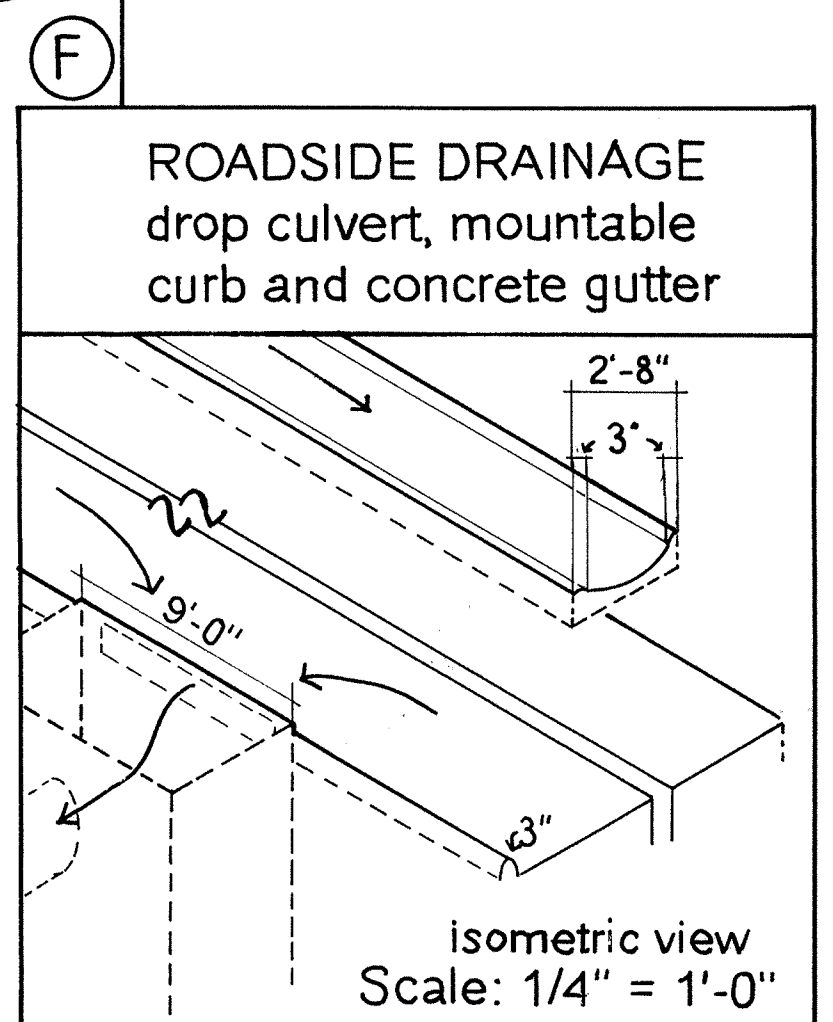
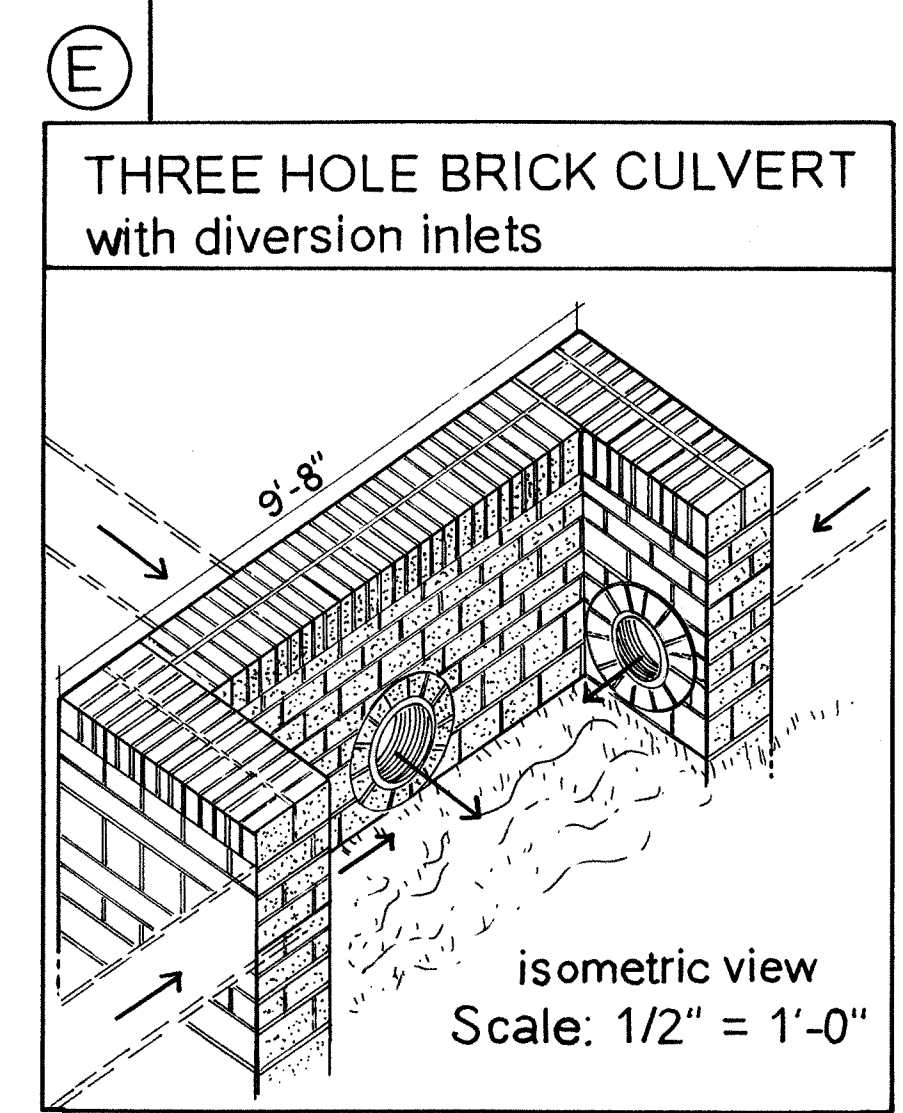
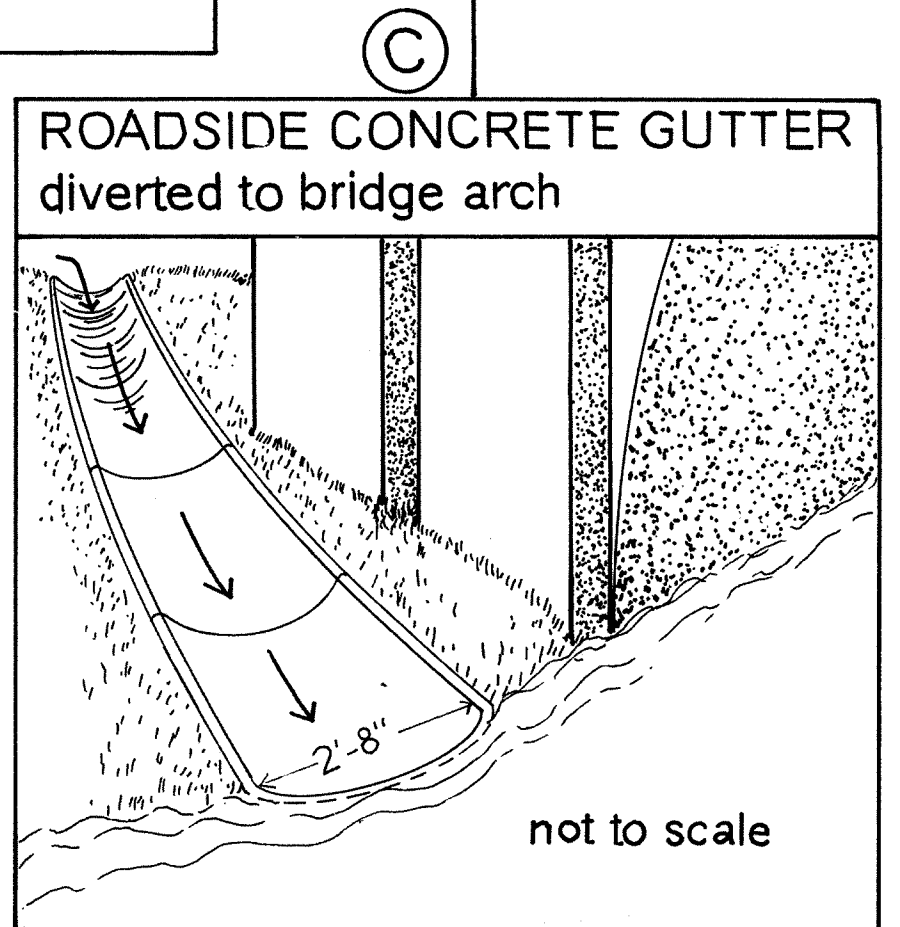
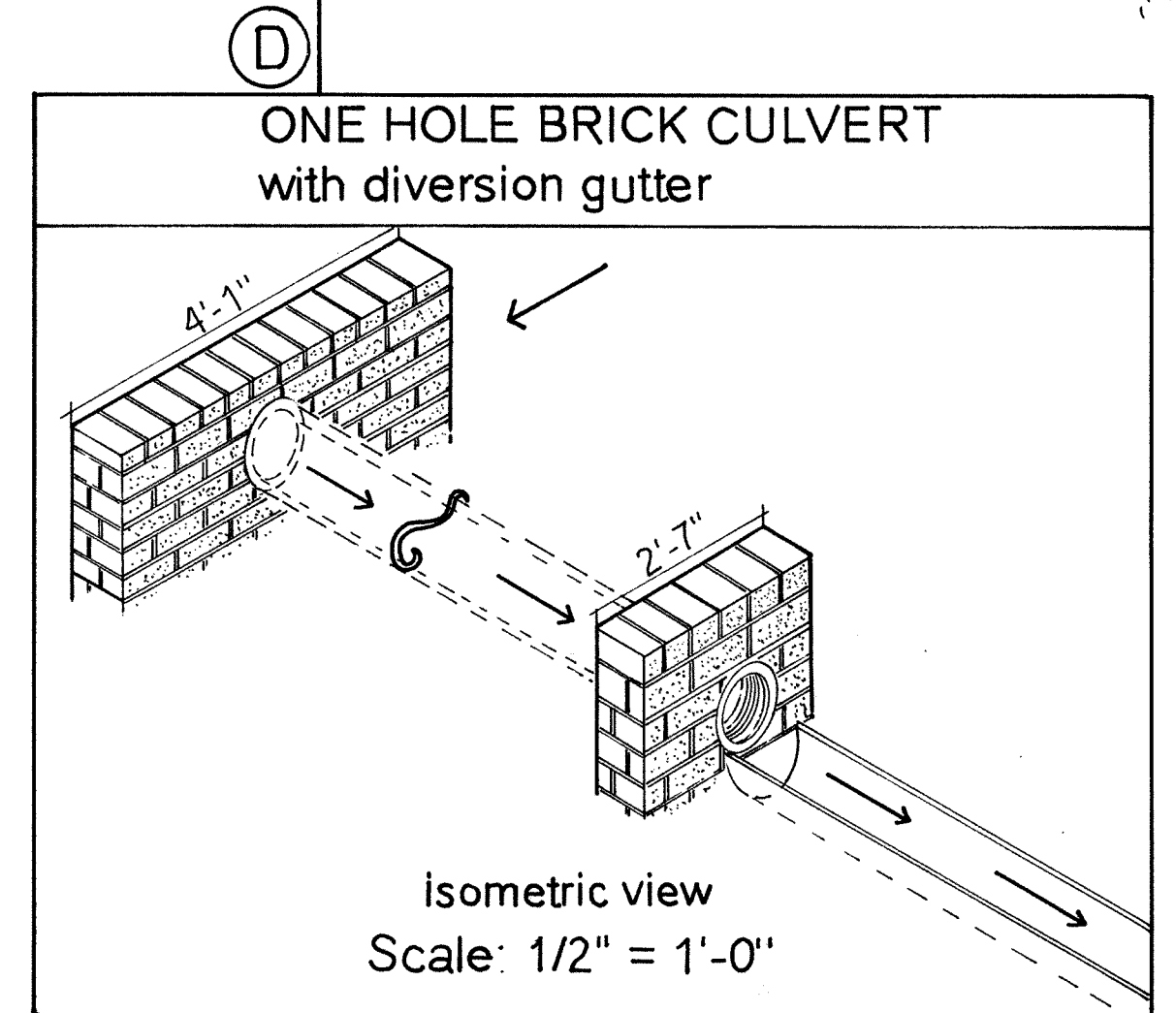
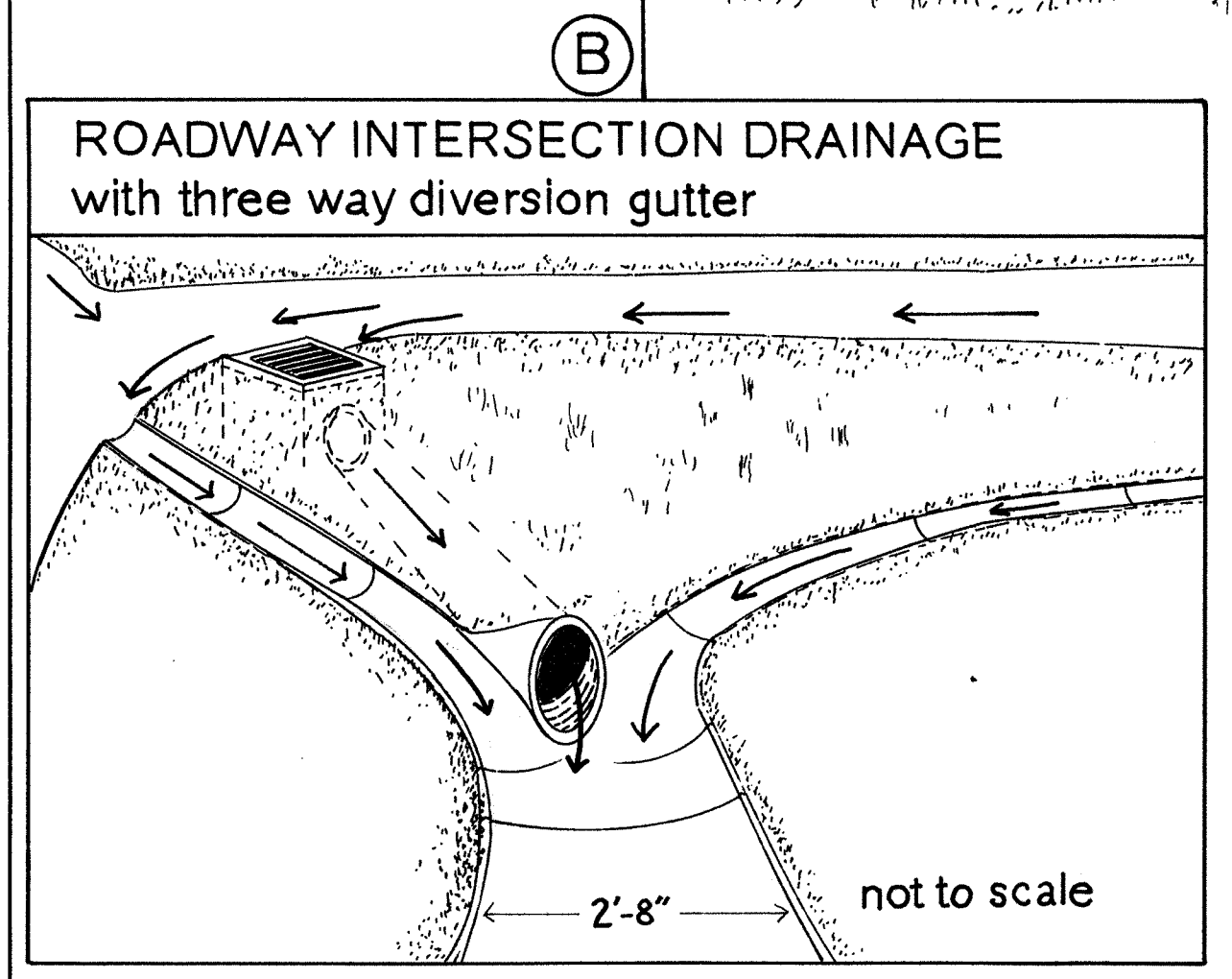
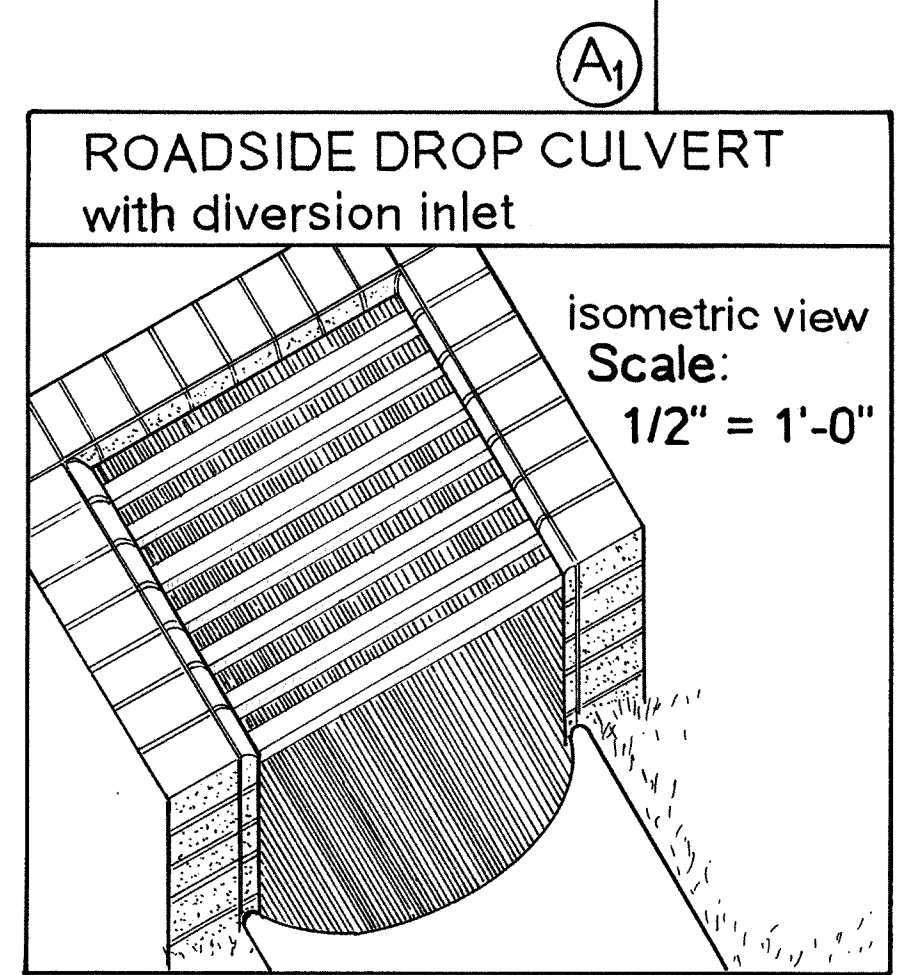
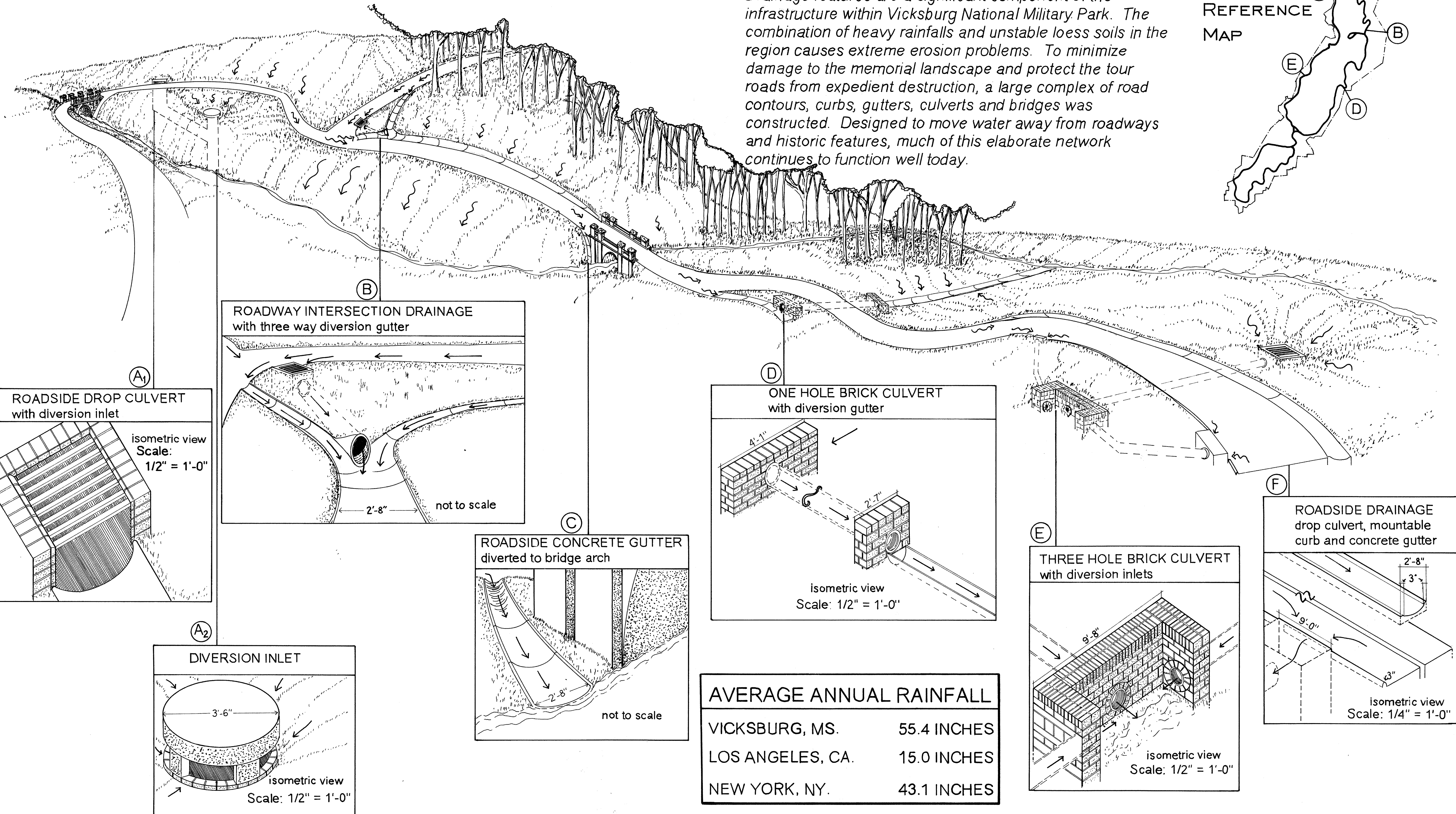
NOTE: These drawings are based on field photographs and historic photographs found in the archive of the Vicksburg National Military Park.

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DRAINAGE DESIGN PRINCIPLES



Drainage features are a significant component of the infrastructure within Vicksburg National Military Park. The combination of heavy rainfalls and unstable loess soils in the region causes extreme erosion problems. To minimize damage to the memorial landscape and protect the tour roads from expedient destruction, a large complex of road contours, curbs, gutters, culverts and bridges was constructed. Designed to move water away from roadways and historic features, much of this elaborate network continues to function well today.



AVERAGE ANNUAL RAINFALL	
VICKSBURG, MS.	55.4 INCHES
LOS ANGELES, CA.	15.0 INCHES
NEW YORK, NY.	43.1 INCHES

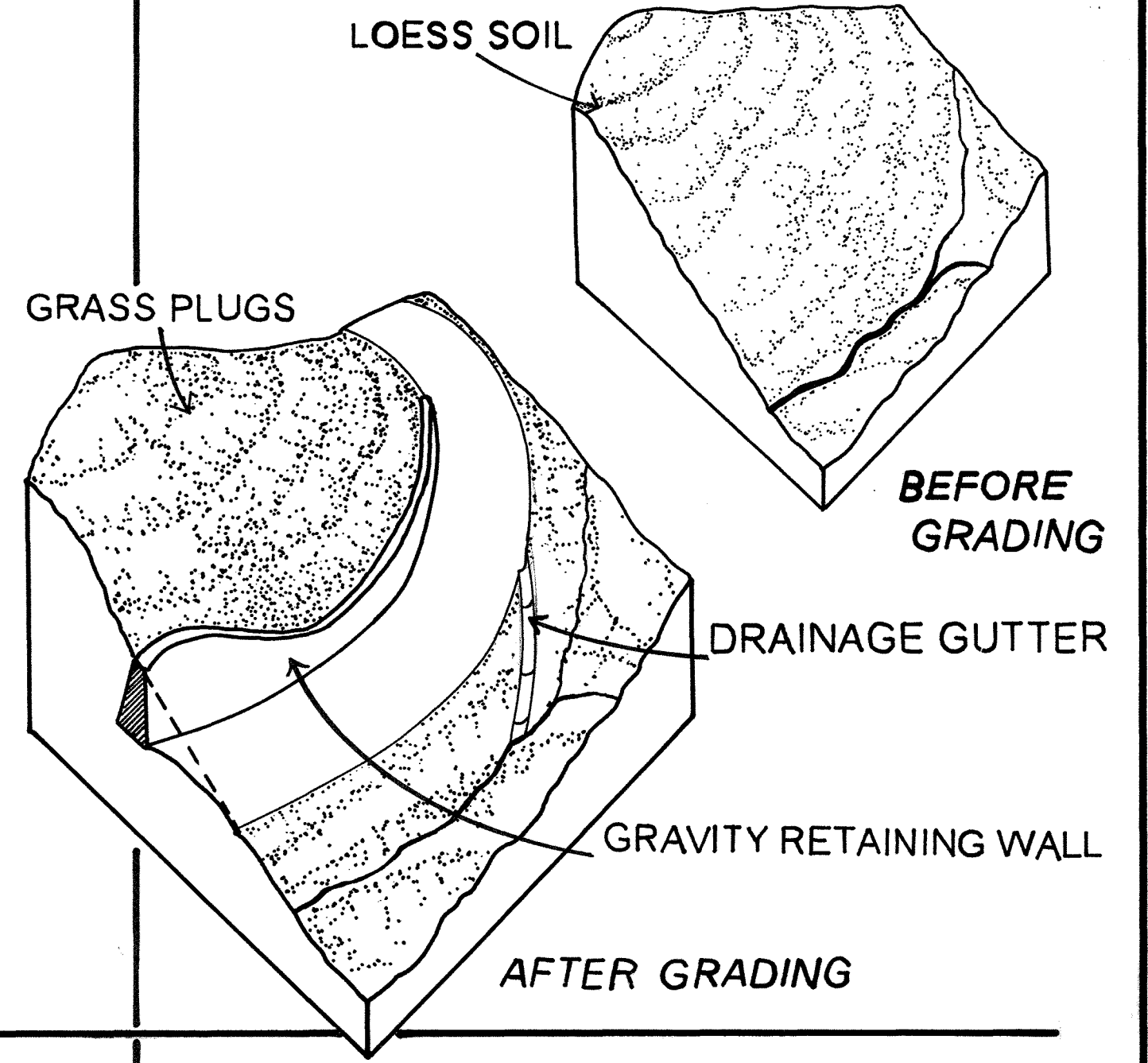
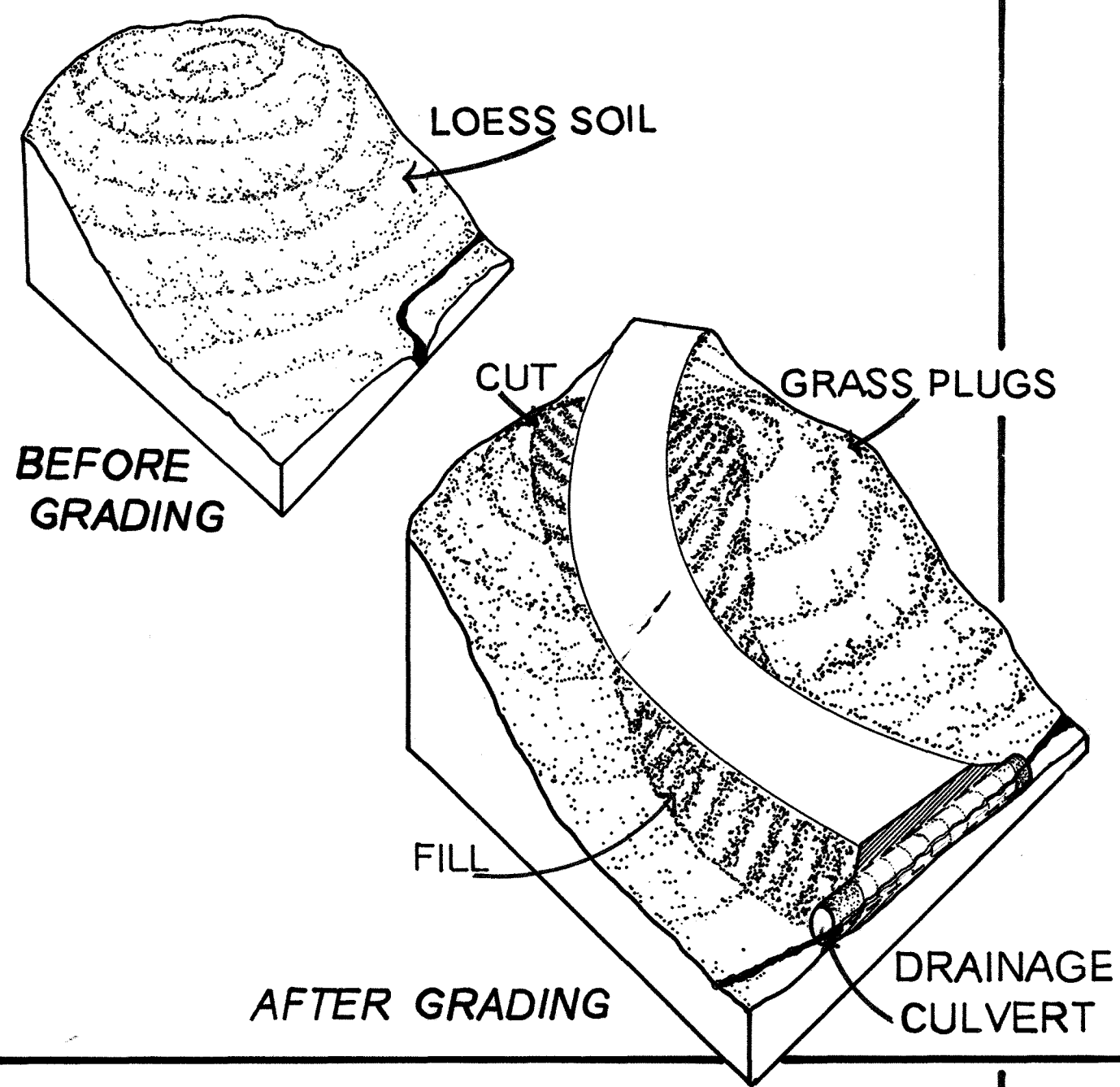
ROADWAY ENGINEERING

CONFEDERATE AVENUE

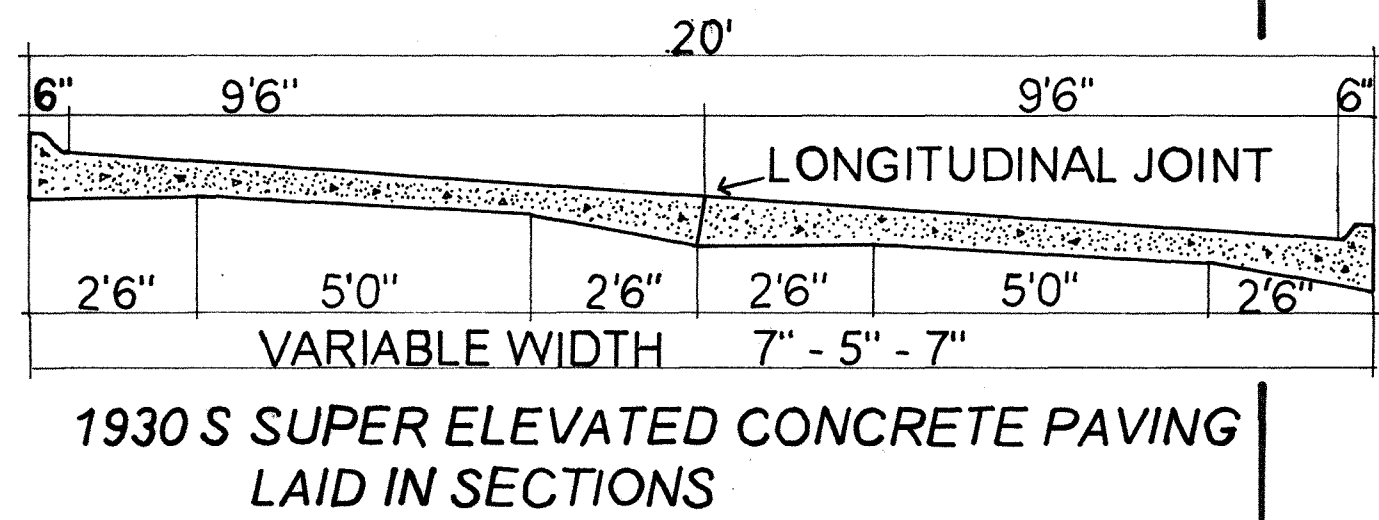
UNION AVENUE

GRADING

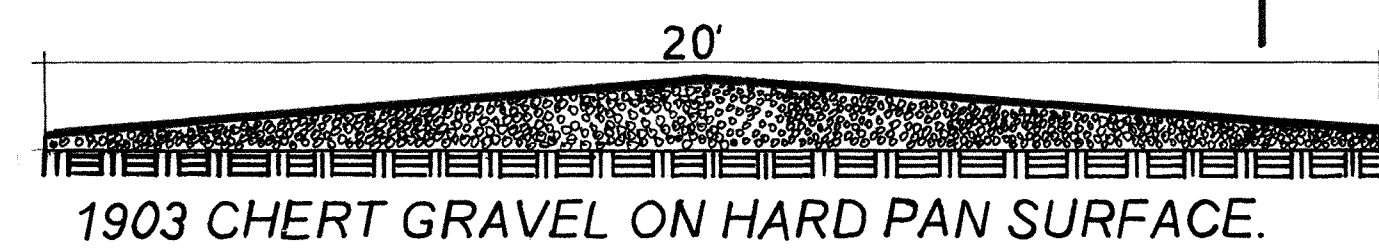
The grading of all of the park roads involved changing the elevation of the existing landscape to accommodate the necessary circulation and to facilitate the removal of storm water. Since the loess soil is highly erodible, stabilization of the graded hillsides was solved with installation of subsurface culverts and roadside gutters. Grass plugs on the sloped hillsides secured the loess soil from further erosion.



CONFEDERATE AVENUE 1930s



1930 S SUPER ELEVATED CONCRETE PAVING LAID IN SECTIONS

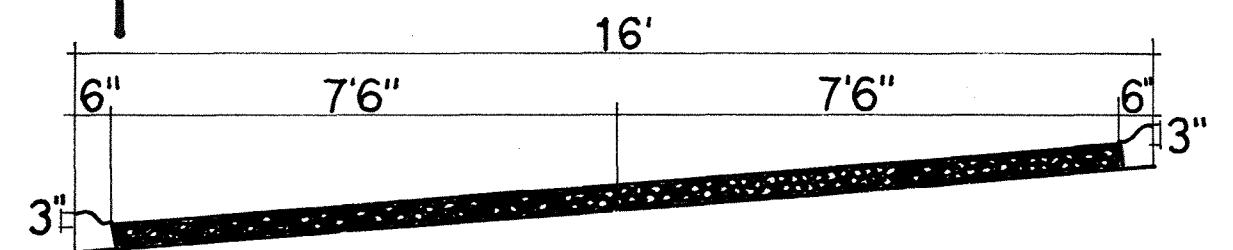


1903

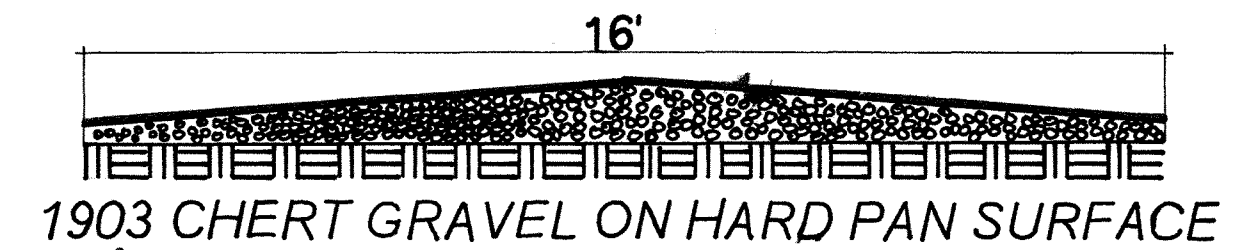
PAVING

The original 1901 dirt roadway on Confederate Ave. was 20' wide while Union Ave. was graded in 1903 at a width of 16'. By July 1903, the park roads were metalled, using chert gravel. During the 1930s, Confederate Ave. was paved in concrete sections, with cast curbs to accommodate the growing popularity of the automobile. Asphalt paving of Union Ave. began with the Mission 66 development program and was completed in the early 1970s.

UNION AVENUE 1970s



1970 S SUPER ELEVATED ASPHALT PAVING WITH 3" CONCRETE MOUNTABLE CURB



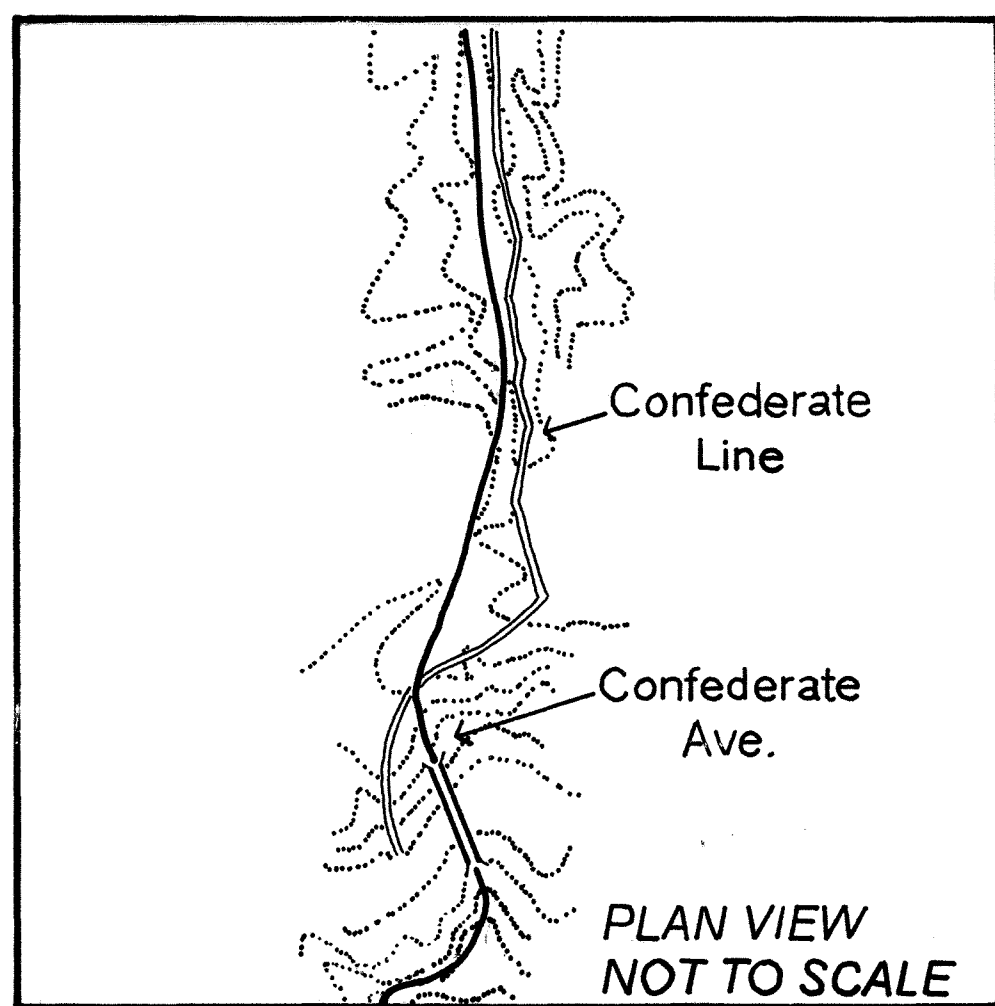
1903

CONFEDERATE AVENUE

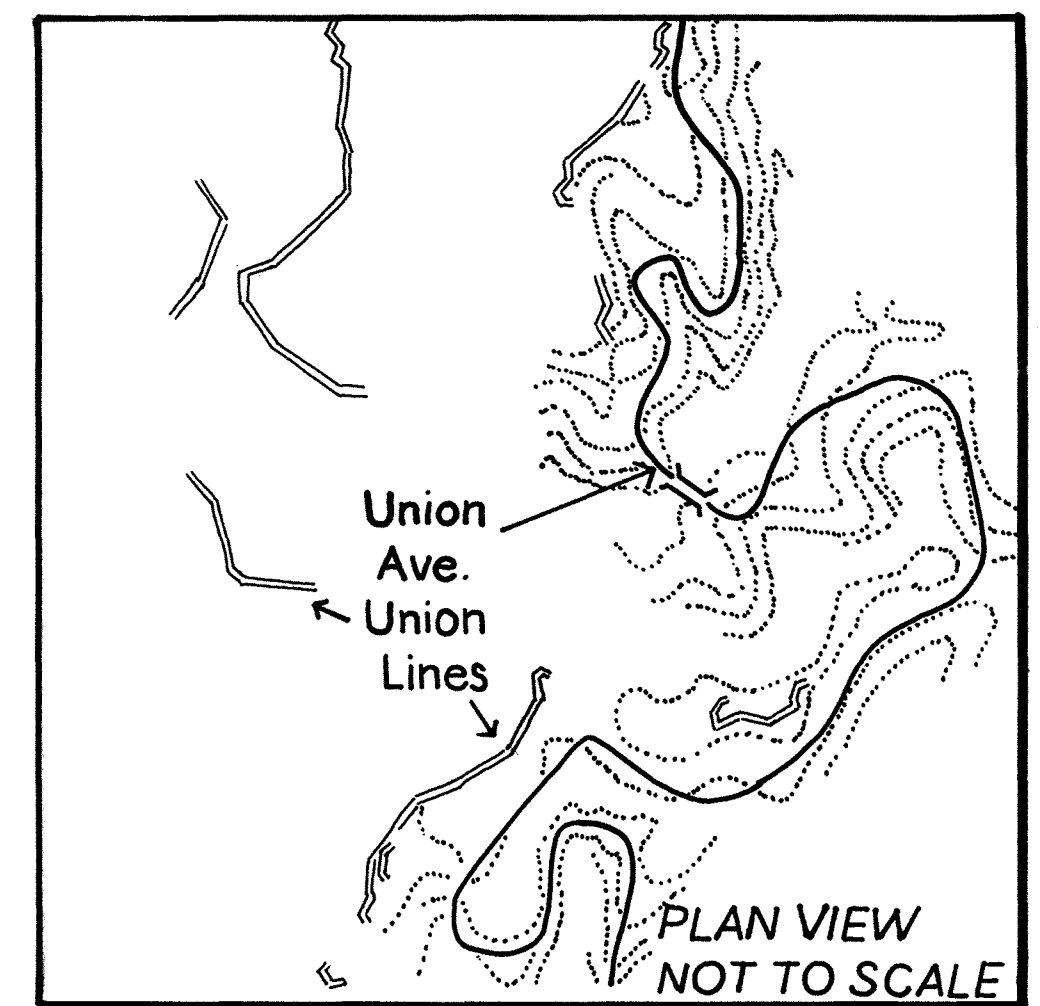
UNION AVENUE

ALIGNMENT

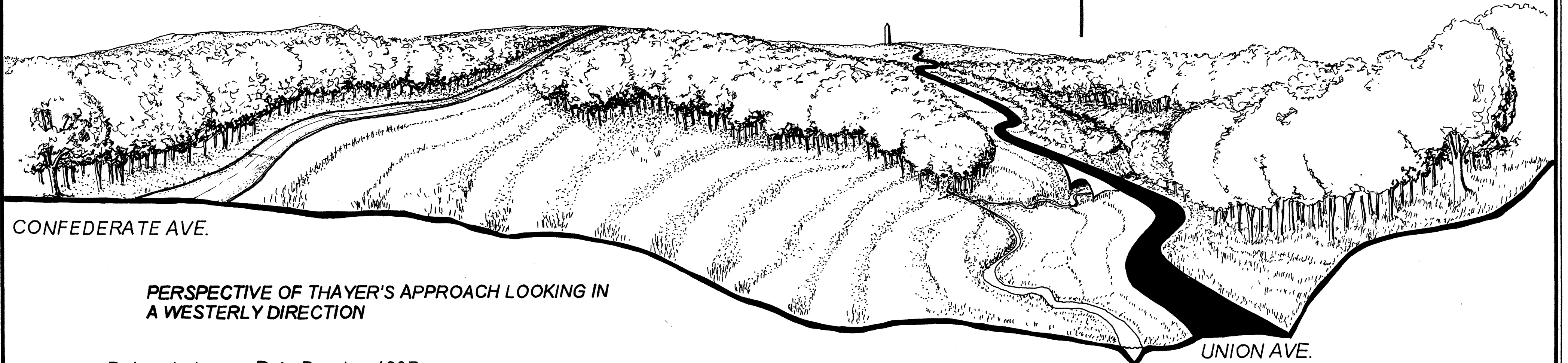
The park roads are aligned to follow the 1863 Vicksburg siege lines; the Confederate line surrounded the city of Vicksburg in the higher elevations, while the Union lines progressed from all sides at lower elevations. The natural hilly, sloped terrain creates a winding Union Avenue through thick vegetation. Confederate Avenue's meandery roadway curves through the higher ground, allowing views of Union Avenue.



CONFEDERATE AVE. FOLLOWING RIDGELINE



UNION AVE. FOLLOWING CONTOUR LINES



CONFEDERATE AVE.

PERSPECTIVE OF THAYER'S APPROACH LOOKING IN A WESTERLY DIRECTION

UNION AVE.

DELINEATED BY: Deborah James, Pete Brooks, 1997

NATIONAL PARK SERVICE ROADS & BRIDGES
RECORDING PROGRAM
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

VICKSBURG

VICKSBURG NATIONAL MILITARY PARK TOUR ROADS

WARREN COUNTY

MISSISSIPPI

SHEET
7 of 7

HISTORIC AMERICAN
ENGINEERING RECORD
MS-14





J.P.S. PHOTO

U.S. BATTERY D
1ST ILLINOIS LIGHT ARTILLERY
3RD DIVISION CORPUS ARMY OF THE MISSISSIPPI
CAPT. HENRY A. ROGERS
CAPT. HERICK J. WOOD
CAPT. HERICK SPARKSTROM
THE BATTERY WAS ORGANIZED AT
ST. LOUIS, MISSOURI, IN 1861 AND
SERVED IN THE WESTERN THEATER
OF THE CIVIL WAR. IT WAS
REORGANIZED AS THE 1ST ILLINOIS
ARTILLERY IN 1862 AND FIGHTED
AT THE BATTLE OF PERRYVILLE
IN 1862. THE BATTERY WAS
DISBANDED IN 1865.







4









S O S T K O O D Y K

YICKSBURG
NATIONAL BATTLEFIELD

HAER MS-14-1



HABER MS 14-22



HAER MS 14-3

HAER MS 14-4



VICKSBURG NATIONAL
MILITARY PARK



HAER MS 14 - 5



HAER MS 14-12



HAER MS 14-7

HAER MS14 - 8





HAER 10814-9

A black and white photograph of a landscape. The foreground is a grassy slope leading down into a valley. The valley floor is a dirt path that curves through the center. On either side of the path are grassy hills. In the middle ground, several bare trees stand on the right-hand slope. The background shows a line of trees under a bright, overcast sky. The photograph is framed by a black border.

HAER.MS.14-10

HAER MS 14-11



4





HAERMS14-J2





HAER MS 14-14



HAER MS 14 - 15



HAER MS - 14 - 16



HAER MS-14-17



HAER MS 14-17

HAER MS14 - 19



HAER MS 14-20



HAER MS-14-70





HAER MS 14-22



HAER M 14-25



HAER MS14 - 211



HAER MS 14-25



1985 MAR 14 27



HER MS 14-27



HAER, MS 14-29



AKER MS 14 - 29



HAER MS 14-30



HARRIS/4-31

15-112M-9H



HAER No. MS-14-33

P-2004



FAEK. No. ms. 14-34





HAER No. MS-14-35

PM-1226.2



H AER No. MS-14-36



HAER No. MS-14-37



5. View of erosion No. 27 near Fort Micala, Louisiana



H. A. R. No. M. S. 14-39



HAER No. MS-14-40



113512 10. 17. 14 - 41



HAER No. ms-14-42

H-26



HAER. No. M.S. - 14-43

H-23



By courtesy of the National Park Service

HAER No. MS-17-44



MOORE

HARK No. M3.14.25



Moore

HAGER NO. M.S. 14-46



HAER No. MS-14-47

HAER No. MS-14-48

