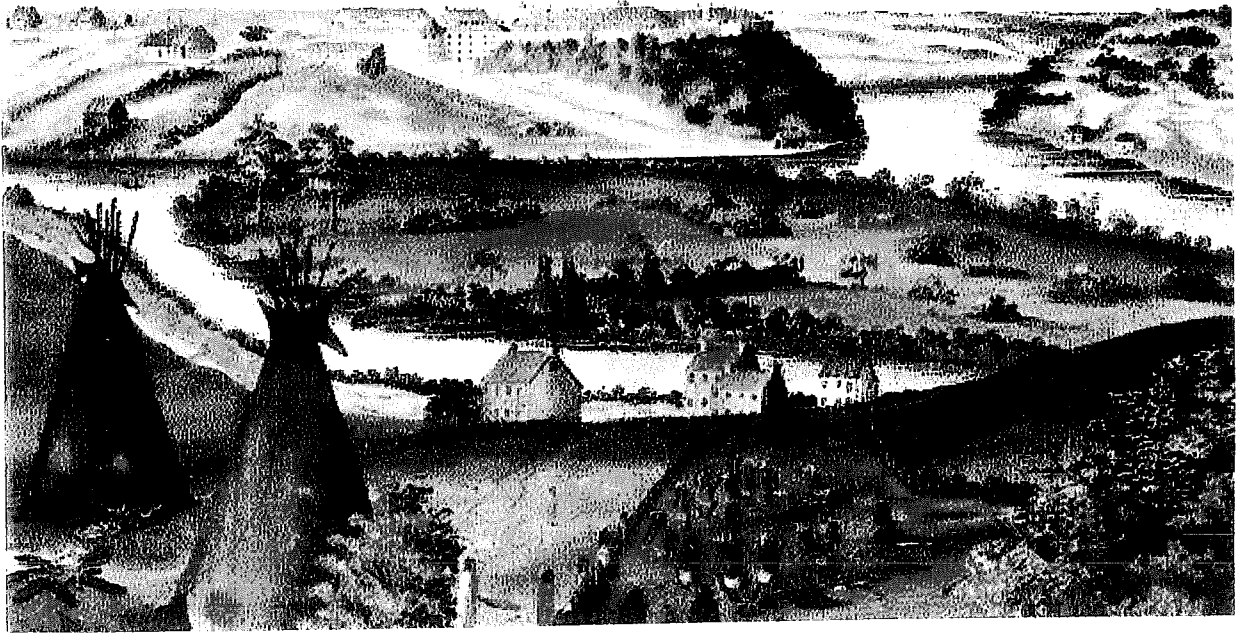


INDIAN AGENCY



**Before the Fort:
Native American Presence at the
Confluence of the Mississippi and Minnesota Rivers**

Prepared for:
Minneapolis Park and Recreation Board
200 Grain Exchange
400 South Fourth Street
Minneapolis, Minnesota 55413
612-661-4813

Prepared by:
Christina Harrison
Archaeological Research Services
1812 15th Avenue South
Minneapolis, Minnesota 55404
612-870-9775

June 2002

ABSTRACT

Fort Snelling is a historic site of local as well as regional and national significance and has been listed as a National Historic Landmark, a National Register of Historic Places historic district and an archaeological site included in the Minnesota archaeological inventory as 21 HE 99. Originally part of a large military reserve created in 1804, the "Upper Bluff" segment at the Mississippi/Minnesota River confluence remained under federal ownership for nearly 170 years even as the reserve boundaries kept shrinking in step with the diminishing military significance of the fort. In 1971, however, a portion of the upper bluff segment was donated by the federal government to the state under the Lands to Parks Program which requires that the land be dedicated to public park and recreational use in a manner still subject to federal review. The area is now managed by the Minnesota Department of Natural Resources (DNR) as part of Fort Snelling State Park.

In the late 1990s, the Minneapolis Park and Recreation Board (MPRB) proposed to develop a portion of the upper bluff area as a youth athletic complex. Because of continued federal involvement, the proposal triggered the need for cultural resource review under Section 106 of the National Historic Preservation Act with associated regulations. Consultation between the National Park Service, the Minnesota State Historic Preservation Office (SHPO), the Minnesota Historical Society (MHS), the DNR, the MPRB, the Veterans Administration and the Fort Snelling State Park Association led to the adoption of a memorandum of agreement (MOA) which spelled out the mitigation needed to offset any adverse effects of this project on structural and archaeological cultural resources.

One of the requirements of the MOA was the preparation of a historical study that could serve as the basis and guide for future historic interpretation of the "Upper Bluff" area as it extends southwest from Highway 55 and the old fort compound. The study should address both the military use of the area and the Native American presence that preceded and, in part, overlapped with it.

The MPRB, with financial support from the DNR, retained Hess, Roise and Company to conduct the study. Hess Roise staff, with Charlene Roise as principal investigator, have reviewed the history of the "New Fort" that was built on the Upper Bluff in the decades following the Civil War. The results have been presented in a companion report titled "From Frontier to Country Club: A Historical Study of the 'New' Fort Snelling."

As a subcontractor to Hess Roise, Christina Harrison of Archaeological Research Services (ARS) has reviewed the Native American evidence, focusing primarily on existing publications and a variety of MHS and SHPO records (inventory site files, historic maps, archaeological reports, and cultural evidence curated by MHS) as well as on miscellaneous archival information either available on-line or previously compiled by ARS in connection with other research projects in the upper bluff area. The results are presented in the form of a narrative, a chronology and a suggestion of interpretive potential for each of two periods: the time before initial contact

between Native Americans and European explorers, traders and missionaries, and the time between approximately the mid-1600s and the withdrawal of the Dakota Indians from the Fort Snelling region in the wake of the 1851 Treaties of Mendota and Traverse des Sioux.

CONTENTS

INTRODUCTION	1
THE NATIVE AMERICAN PRESENCE AT THE MISSISSIPPI- MINNESOTA RIVER CONFLUENCE	3
THE ENVIRONMENTAL SETTING OF THE “UPPER BLUFF” AREA	
AS RECONSTRUCTED FROM PALEOENVIRONMENTAL DATA	4
AS SEEN BY EARLY TRAVELERS	5
THE PRE-CONTACT PERIOD	
ARCHAEOLOGICAL RESEARCH IN THE FORT SNELLING AREA	7
MAJOR CULTURAL PERIODS/TRADITIONS	8
ARCHAEOLOGICAL EVIDENCE FROM THE PRE-CONTACT PERIOD	13
THE CONTACT AND POST-CONTACT PERIODS	
THE EASTERN DAKOTA	30
THEIR INTERACTION WITH EURO-AMERICANS	33
PRIMARY SOURCES OF INFORMATION	35
ANNOTATED CHRONOLOGY OF SIGNIFICANT DATES AND EVENTS	36
INTERPRETIVE THEMES	
THE NATIVE AMERICAN PRESENCE BEFORE INITIAL EUROPEAN CONTACT	39
THE EASTERN DAKOTA OF THE CONTACT AND POST- CONTACT PERIODS: SOURCES OF INFORMATION	40
THE EASTERN DAKOTA OF THE CONTACT AND POST- CONTACT PERIODS: INTERPRETIVE POTENTIAL	43

THE INDIAN AGENCY

CARTOGRAPHIC AND PICTORIAL INFORMATION	45
WRITTEN ACCOUNTS	52
INTERPRETIVE POTENTIAL	52

IMPACT OF THE FUR TRADE AND CHANGING FEDERAL POLICY ON THE EASTERN DAKOTA

SEQUENCE OF EVENTS	55
INTERPRETIVE POTENTIAL	56

REFERENCES

FIGURES

Cover *View of Fort Snelling ca. 1850.*

1. Archaeological sites in the Minnesota and Mississippi River valleys within the southern Twin Cities metropolitan area.	12
2. Map of Fort Snelling in 1824	15
3. Location of Investigated TH 55 Exit Ramp to East TH 5 and Archaeological Remains of 1875 Hospital/Pre-Contact Period Native American Site	16
4. MSP Airport Study -- Archaeological Survey Areas 1992	18
5. Topographic Map of Central and Northern Parts of MSP Study Area	19
6. Topographic Map of Southern Part of MSP Study Area	20

7.	Southern Half of 1939 Map	21
8.	Northern Half of 1939 Map	22
9.	Archaeological Sites Found at Fort Snelling	23
10	1936 Aerial View of Fort Snelling and Buildings along Taylor Avenue, with Post Bakery Site Located East of Second and Third of Four Infantry Barracks	24
11.	Upper Bluff Athletic Complex: Location of Archaeological Survey.	26
12.	MAC Drainage Improvement Project: Location of Project Area	28
13.	MAC Drainage Improvement Project: Boundaries of Proposed Action and Location of Archaeological Sites.	29
14	Skin lodges used in winter and while traveling. Detail from <i>Dakotah Encampment</i> (Seth Eastman)	31
15	<i>Dakotah Village</i> (Seth Eastman)	32
16.	Early Topographic Map of the Fort Snelling Area	46
17.	Map of the Fort Snelling Area (Taliaferro 1835)	47
18.	Fort Snelling and Vicinity in 1837 (E.K. Smith)	48
19.	Topographical Survey of the Military Reservation, Embracing Fort Snelling (Thompson 1839)	49
20.	Topographical View of Portion of the Military Reserve, Embracing Fort Snelling (Colby 1848)	50
21.	Map of the Military Reservation of Fort Snelling, Minnesota. (Eastman 1857)	51
22.	Eastman's 1857 Map of Indian Agency and Public Gardens, Superimposed on USGS Quadrangle for St.Paul West, Minn.....	53
23.	Possible Locations of Indian Agency Superimposed on 1939 Map of Fort Snelling	54

This report has been prepared for the Minneapolis Park and Recreation Board with support from the Minnesota Department of Natural Resources. Cliff Swenson served as project manager for the park board. A companion report has been prepared by Abigail Christman and Charlene Roise, Hess Roise and Company, entitled "From Frontier to Country Club: A Historical Study of the 'New' Fort Snelling."

INTRODUCTION

Fort Snelling is a historic site of local as well as regional and national significance and has been listed as a National Historic Landmark, a National Register of Historic Places historic district and an archaeological site included in the Minnesota archaeological inventory as 21 HE 99. Originally part of a large military reserve created in 1804, the "Upper Bluff" area at the Mississippi/Minnesota River confluence remained under federal ownership for nearly 170 years even as the reserve boundaries kept shrinking in step with the diminishing military significance of the fort. In 1971, however, a portion of the upper bluff segment was donated by the federal government to the state under the Lands to Parks Program which requires that the land be dedicated to public park and recreational use in a manner still subject to federal review. The area is now managed by the Minnesota Department of Natural Resources (DNR) as part of Fort Snelling State Park.

In the late 1990s, the Minneapolis Park and Recreation Board (MPRB) proposed to develop a portion of the upper bluff area as a youth athletic complex which would encompass the large open space referred to as the drill fields/parade grounds/polo fields as well some adjacent property -- a proposal which, because of continued federal involvement, triggered the need for cultural resource review under Section 106 of the National Historic Preservation Act with associated regulations. Consultation between the National Park Service, the Minnesota State Historic Preservation Office (SHPO), the Minnesota Historical Society (MHS), the DNR, the MPRB, the Veterans Administration and the Fort Snelling State Park Association led to the adoption of a memorandum of agreement (MOA) which spelled out the mitigation needed to offset any adverse effects of this project on structural and archaeological cultural resources.

One of the requirements of the MOA was the preparation of a historical study that could serve as the basis and guide for future historic interpretation of the "Upper Bluff" area as it extends southwest from Highway 55 and the old fort compound. The study should address both the military use of the area and the Native American presence that preceded and, in part, overlapped with it.

The MPRB, with financial support from the DNR, retained Hess, Roise and Company to conduct the study. Hess Roise staff, with Charlene Roise as principal investigator, have reviewed the history of the "New Fort" that was built on the Upper Bluff in the decades following the Civil War. Christina Harrison of Archaeological Research Services (ARS) has focused on the Native American evidence as a subcontractor to Hess Roise.

For their aspect of the study, ARS staff relied on a variety of MHS and SHPO records -- inventory site files, historic maps, archaeological reports, and cultural evidence curated by MHS -- as well as on miscellaneous archival information either available on-line or previously compiled by ARS in connection with other research projects in the upper bluff area. Charles Diesen, Museums Collections Curator at MHS, and David Radford, archaeologist with the

Minnesota State Parks Cultural Resource Management Program, both shared important information about recent or as yet unpublished research. Scott Anfinson, National Register Archaeologist at SHPO, assisted with much appreciated advice and information throughout the duration of the project.

Unless otherwise indicated, the maps used for this report are from the research collections at the Minnesota Historical Society. The report was prepared by Christina Harrison. John Strot assisted with the records search and literature review.

THE NATIVE AMERICAN PRESENCE AT THE MISSISSIPPI-MINNESOTA RIVER CONFLUENCE

According to a model that divides the state into nine archaeological regions and is based, in part, on hydrologic characteristics, the Mississippi/Minnesota River confluence with surrounding uplands form part of the Central Lakes Deciduous Region but are also in close proximity to the Prairie Lakes and Southeast Riverine Regions, which encompass most of southwestern and all of southeastern Minnesota (Anfinson 1990). Located at the confluence of two major waterways and near the juncture of three distinctly different archaeological regions, the Fort Snelling area has the rich and complex past typical of areas located at the crossroads of cultural influences -- of ideas and behavior patterns that have been transmitted through migration and colonialization, warfare and conquest, or simply more intermittent exploration and trade.

The first documented visit of a Euro-American to this area was that of Father Louis Hennepin who passed the mouth of the Minnesota River on his way up the Mississippi River towards Mille Lacs in 1680. By comparison, archaeological evidence of a Native American presence at the confluence of the two rivers spans the preceding nine millennia.

As proven both archaeologically and by written accounts, indigenous groups continued to occupy the area also throughout the period of initial contact with Euro-Americans:

- for decades, their villages and hunting grounds still surrounded the military reserve that had been negotiated in 1805 between Lieutenant Zebulon Pike and local Dakota groups;
- they also had formal reasons to be present within its boundaries once an Indian Agency had been established adjacent to the newly constructed Fort Snelling in 1820;
- just across the Minnesota River, one of their main reasons for contact with Euro-Americans, the fur trade, was centered at Mendota -- "meeting of waters" in the Dakota language -- the settlement which had been established in the 1820s to serve as the regional headquarters for the American Fur Company.

They remained in the region west of the Mississippi River also after 1837, when two large areas east of that river were opened for logging and settlement through treaties signed with the Ojibwe and the Dakota.

By 1851, however, the Dakota had exchanged all their land in the future state of Minnesota for government annuities and life within designated reservations. Although some of their descendants later returned to reestablish Dakota communities south and west of the Minnesota/Mississippi river confluence and although the Fort Snelling area still is integral to the spiritual beliefs of some Dakota, the period of even intermittent physical presence of Native Americans within the fort area was essentially over by the early 1850s.

According to the research design for this study, its objective is to provide a foundation for future interpretive work on the part of Fort Snelling that is located southwest of Highway 55 and sometimes is referred to as the "New Fort" or the "Upper Bluff" area (Roise and Harrison 2001). While a companion volume deals with its history following the Civil War and discusses the first significant military use of the upper bluff area as the headquarters for the Department of Dakota (Christman and Roise 2002), the focus of this volume is on the preceding Native American use of the area.

Just as the history of Fort Snelling has to be understood in the wider context of national policy and military developments, the Native American presence on the "Upper Bluff" needs to be discussed in a larger context that, for the precontact period, includes at least the region that surrounds the Mississippi-Minnesota River confluence, and for the subsequent contact and post-contact periods includes references to broader patterns of Native American - Euroamerican contact and changes in the U.S. government's Indian policy.

THE ENVIRONMENTAL SETTING OF THE "UPPER BLUFF" AREA

AS RECONSTRUCTED FROM PALEOENVIRONMENTAL DATA

Historically, the upper bluff area encompassed a level to gently rolling expanse of prairie that now has been almost completely altered by landscaping for the "New Fort Snelling", the airport, other federal facilities and the construction of three four-lane highways. The area is bounded on the north by the steep bluffs of the Mississippi River and on the east/southeast by the somewhat gentler bluff slopes of the Minnesota River valley. What now is a patchwork of lawns, roads, paved parking lots and runways, covers a fairly thin deposit of sandy and loamy soils that mantle a bedrock sequence of Ordovician dolomite, sandstone, shale and limestone. The soil cover thins very rapidly towards the bluff edge and exposed areas of St. Peter Sandstone, capped by Glenwood Shale and Platteville Limestone, are common along the steep bluff slopes.

The area lies within the Mississippi Valley Outwash Region, a landscape characterized by nearly level terraces that flank the river and its tributaries. A massive valley carved by Glacial River Warren is now the oversized basin of the Minnesota River -- a relatively narrow channel which is flanked by intermediate terraces of silt and sandy loam over sand and gravel deposits or bedrock (AES 1973; Wright 1972:564 and 572).

Embedded within the glacial deposits of nearby moraines are cobbles of lithic raw materials suitable for the manufacture of stone tools. Other materials, primarily cherts from the Prairie du Chien formation below the St. Peter Sandstone, have been exposed along the major rivers and within the tributary ravines that have dissected the bluff lands.

At the time of the original land survey and prior to more extensive impact by Euro-American settlement, uplands north and west of the Mississippi/Minnesota River confluence supported a patchwork of open prairie and stands of aspen/oak as well as oak barrens (Marschner 1974). In the vicinity of Fort Snelling, the uplands and south-facing river bluffs were covered by open prairie. Down in the main valley, river bottom forest (primarily elm, ash, cottonwood, boxelder, basswood, maple, willow and hackberry) alternated with wet prairies, marshes and slough grasslands.

Easy access to a range of habitats would have provided a rich variety of plant and animal resources: in the the forested areas, species such as white-tailed deer, cottontail rabbit, woodchuck, raccoon and bear, and on the prairie -- or along the prairie/woodland border -- larger game such as bison and elk as well as numerous smaller species. The rivers, lakes, sloughs, and marshes harbored muskrat and beaver, numerous types of waterfowl, clams and many species of fish and turtle (Anfinson 1990).

Reaching farther back in time, pollen cores and macrobotanic evidence attest to quite dramatic changes in the regional environment throughout the postglacial period. A periglacial parkland of spruce and larch followed the retreat of the Wisconsin glaciers and the tundra vegetation associated with their margins. Continued warming then caused the spruce to be succeeded by pine forest which in turn was followed by a deciduous forest composed primarily of oak and elm. A warming and drying trend which peaked at 7000 to 6000 B.P., caused the prairie and its transitional prairie-woodland margin to expand some 75 miles north and east of their normal limits. Linked with these climatic warming trends were an increase in the frequency of prairie fires and a marked decline of the water table which caused many small lakes to dry up completely (Wright 1972b, 1974; Anfinson and Wright 1990).

Pollen cores from Hennepin County have provided more specific environmental data for the general study area, charting changes from the middle Holocene to the present (Grimm 1983). They suggest that woodlands prevailed throughout the Holocene in the northeastern Big Woods (including much of what is now Hennepin County.). This is perhaps best explained by local infrequency of fire due to a rolling topography with numerous deep lakes which would have retained water even during the middle Holocene. Just as significant was probably the protection provided by major firebreaks such as the main rivers and the larger lakes. Local vegetation consisted of a fairly balanced mixture of woodland and prairie from 6330 to 3810 B.P., followed by oak- dominated woodlands from 3810 to 280 B.P. The onset of cooler and wetter climatic conditions encouraged the development of Big Woods forests (dominated by elm, maple and basswood) from 280 B.P to the beginning of Euroamerican clearing and settlement (ibid. 1983).

AS SEEN BY EARLY TRAVELERS

Some of the first Europeans and Americans to visit the area found it well worth a vivid description!

Jonathan Carver, 1766:

Ten miles below the Falls of St. Anthony the River St. Pierre, called by the natives the Waddapawmenesotor, falls into the Mississippi from the west. It is not mentioned by Father Heennipin, although a large fair river: this omission, I conclude, must have proceeded from a small island that is situated exactly at its entrance, by which the sight of it is intercepted. I should not have discovered this river myself, had I not taken a view, when searching for it, from the high lands opposite, which rise to a great height.¹

Zebulon Pike, 1805:

From the St. Croix to the St. Peters the Mississippi is collected into a narrow compass; I crossed it at one place with 40 strokes of my oars, and the navigation is very good. The E. bank is generally bounded by the river ridges, but the W. sometimes by timbered bottom or prairie. The timber is generally maple, sugar-tree, and ash. From the St. Peters to the Falls of St. Anthony the river is contracted between high hills, and is one continual rapid or fall, the bottom being covered with rocks which in low water are some feet above the surface, leaving narrow channels between them. The rapidity of the current is likewise much augmented by the numerous small, rocky islands which obstruct the navigation. The shores have many large and beautiful springs issuing forth, which form small cascades as they tumble over the cliffs into the Mississippi. The timber is generally maple. This place we noted for the great quantity of wild fowl.²

Stephen Long, 1817:

At the mouth of this River [St. Peter] is an Island [Pike] of considerable extent, separated from the main by a Slough of the Mississippi into which the St. Peter's discharges itself ... Immediately above the mouth of the St. Peter's is a tract of flat Prairie extending far up this river ... This tract is subject to inundation in time of high water, which is also the case with the flat lands generally situated on both of these rivers. Next above this tract is a high point of land, elevated about 120 feet above the water and fronting immediately on the Mississippi but separated from the St. Peter's by the tract above described. The point is formed by the bluffs of the two rivers intercepting each other.

The rocky formations at this place were arranged in the following order from the surface downward: A coarse kind of limestone in thin strata containing considerable silex. A kind of soft, friable stone of a greenish colour & slaty fracture probably containing a vast number of shells ... The next in order is a white or yellowish sandstone so easily crumbled that it deserves the name of a sandbank rather than that of a rock. It is of various depths from 10 to 50 or 75 feet and is of the same character with that found at the caves before described. The next in order is a soft, friable sandstone of a greenish colour ... These stratifications occupied the whole space from low water mark nearly to the top of the Bluffs ...

¹ As quoted in Clouse 1999:8.

² See Footnote 1.

The banks on both sides of the [Mississippi] river are about 100 (50) feet high, decorated with Trees and shrubbery of various kinds. The Post Oak, Hickory, Walnut, Lynden, Sugar tree, White Birch & the American Box, also various evergreens, such as Pine, Cedar, Juniper &c, added their embellishment to the scene. Amongst the shrubbery were the Prickly ash, Plumb & cherry tree, the gooseberry, the Black and red raspberry, the Choak berry, Grape vine &c. There were also various kinds of herbage and Flowers, among which were the wild parsley, rue, spikinard ... Red and white roses, Morning Glory, and various other handsome flowers.

Passing up the river on the brow of the Mississippi Bluff, the ground rises gradually for a distance of about 600 yards, where an extensive broad valley of moderate depth commences. But on the St. Peter's, the bluff retains nearly the same altitude, being intersected occasionally by ravines of moderate depth (Kane et al 1978:71-76).

Samuel Pond, 1835:

I will suppose that you should make us a visit in the summer. Leaving Fort Snelling and traveling northwest you would cross a green and level prairie three miles wide when you would come to a beautiful stream of water [Minnehaha Creek] ... It is called by the Indians "the little river." [T]here are a few trees on each side of it. It issues out of a lake a short distance above where we cross it, and a little ways below it falls I think nearly a hundred feet. This is a beautiful cataract [Minnehaha Falls] & I seldom pass by without going to see it.

After crossing this stream and getting out from among the trees which grow in its banks you would enter upon another prairie stretching off to the north as far as you could see & casting your eyes to the north west you would perceive a hill which would appear to you much higher than any other ground in sight (though it is but half a minutes walk from the bottom to the top) .. a little to the right of it you would see another piece of high ground covered with timber.³

THE PRE-CONTACT PERIOD

ARCHAEOLOGICAL RESEARCH IN THE FORT SNELLING AREA

Not only has the "upper bluff" area been quite dramatically changed by the military use of Fort Snelling, but more recent, large-scale construction of four-lane highways and the Minneapolis-St. Paul International Airport began long before their impact on archaeological resources could be properly assessed through systematic, legally mandated cultural resource investigations. Consequently, our understanding of the cultural history of the area is rather incomplete, patched together from a variety of sources:

³ Samuel Pond to Herman Hine 1835, as quoted in White and White 1998:5.

- the results of archaeological surveys that have been conducted in connection with more recent construction projects, most of them quite limited in scope and areal extent;
- miscellaneous site inventory information found in the files of the State Historic Preservation Office and the Office of the State Archaeologist, some of it based on historic records with minimal and imprecise locational descriptions;
- extrapolation from and comparisons with the archaeological record of adjacent regions.

During the late nineteenth century, Theodore H. Lewis conducted a survey of burial mounds and other earthworks throughout the upper Midwest, covering many parts of Minnesota including the Twin Cities region (Winchell 1911). Somewhat later, Jacob V. Brower described a number of burial and habitation sites along the upper Mississippi River (Brower 1898-1904; Winchell 1911). Among the numerous mound groups that Lewis recorded -- more than a thousand in Hennepin County alone -- are several that are located within a few miles of Fort Snelling.

Beginning in the 1930s, more comprehensive site survey and excavation was conducted in various parts of the state by archaeologists from the University of Minnesota and later also by research teams from Hamline University, the St. Paul Science Museum (now Science Museum of Minnesota), and the Minnesota Historical Society. Since the 1970s, federal and state historic preservation legislation has mandated a more systematic effort to inventory, evaluate, and recover data from cultural heritage sites.

Within the metro region, much of the earlier archaeological research was focused on the Mississippi and Minnesota River valleys (Gibbon and Streiff 1990; Johnson 1974). Recent expansion of the airport and the TH 5/TH 55 interchange, along with various construction projects around old Fort Snelling and within Fort Snelling State Park, have generated a number of compliance surveys both in the Minnesota River valley and on the upper bluffs (Clouse 1996; Clouse and Steiner 1998 and 1999; George 1999; Harrison 1996 and 2000; Peterson et al 1983, 1992, and 1993; Radford and George 1992, 1993 and 1994). It is unfortunate that earlier construction of the main TH 5 alignment and adjacent segments of the airport was not preceded by such investigations and it is now clear that these projects destroyed significant segments of the Minnesota River bluffs that elsewhere have proven intensively used by Native Americans.

Archaeological investigations that have been conducted within the upper bluff area and adjacent portions of the Minnesota River valley will be briefly described below, following a review of the major cultural periods/traditions that are relevant to the Fort Snelling area.

MAJOR CULTURAL PERIODS/TRADITIONS

Evidence is scanty for the earliest portion of the cultural sequence that has been defined for this general region. The **Paleoindian and Early Archaic periods** (ca. 10,000 to 3000 B.C.) were

characterized by small, mobile hunting societies with a subsistence economy focused on the hunting of large game like bison as well as on smaller game, fish and plant resources. Throughout the first millennia, a distinct warming and drying trend followed the disappearance of the glaciers, culminating with the altithermal period when open grasslands spread across the landscape. Most distinctive in the lithic tool kits of the time were large, well made, lanceolate bifaces used as projectile points and probably also as cutting implements. Also in use were large, bifacially flaked knives, choppers, scrapers and more expedient tools made, with a minimum of modification, from large flakes.

Finds that can be securely attributed to these early periods are scarce and often limited to isolated finds of diagnostic points. This is true also of the Fort Snelling region where the only certain link so far with that period is a Late Paleo-Indian spear point recently found just across the Minnesota River at Mendota, during excavations around 21 DK 31 -- the 19th century Henry Sibley residence and American Fur Company District Headquarters, which stand on top of a series of five Native American occupations (Clouse 1997).

During the **Middle to Late Archaic periods** (ca. 3000 to 800 B.C.), groups on the western prairie continued to rely heavily on bison hunting while "Eastern Archaic" groups, in addition to some big-game hunting, also developed an increasingly diverse technology for the hunting and trapping of smaller game, fishing, foraging and the processing of food and edible plants. Economic diversification and regionalized adaptation to a greater variety of environments continued throughout the period as the climate changed to cooler, wetter conditions and oak savanna and even denser hardwood forests spread across much of the area, leaving true prairie mainly on the upland plateaus and well drained terraces in the river valleys. Chipped lithics were still predominant in the tool kits but but often changed and improved. Projectile points are now smaller and stemmed or side-notched, used to tip darts rather than spears. In addition, pecked and ground stone implements came into widespread use and copper, hammered into a variety of implements and ornaments, is found in Late Archaic contexts.

Most habitation sites from these periods are found along larger lakes and rivers and seem to be seasonal camps associated with an established round of subsistence activities. Middle to Late Archaic sites are more common than those of the previous periods. In part, this may reflect an increase in population density but it is also likely that many early Archaic sites, once associated with the river bottoms and shorelines of a much drier climate, now are inundated by water or buried by layers of flood deposited silt.

Archaic points, other chipped lithics as well as ground and polished tools (gouges, grooved mauls, grindstones and net-sinkers) have been found in excavated context along the Mississippi and Minnesota River valleys and adjacent uplands. Many more have been collected from cultivated fields throughout the area. In addition, there are also a number of recorded "lithic scatters" that lack ceramic evidence and therefore are likely to predate the next major phase.

Evidence that appears to be Archaic has been found on the upper bluff both within old Fort Snelling and to its south, at the TH5/TH 55 interchange and the Post Bakery Site closer to the airport. An Archaic component has also been identified at 21 DK 31 in Mendota.

The **Woodland period** (ca. 800 B.C. to the time of early Euro-American contact) brought significant change and innovation: the manufacture of ceramic vessels, the construction of burial mounds, the harvesting of wild rice and -- in some parts of the upper Midwest and to a varying degree -- the beginning of horticulture. Hunting and gathering continued to be the predominant subsistence strategies through the early, middle and late phases of the period but certain technological refinements, such as the adoption of the bow and arrow, appear to have increased their efficiency.

Woodland settlement and land use patterns in the area around Fort Snelling reflect its location near the juncture of three archaeological regions.

Within the Central Lakes region:

"base camps tend to be located on the major lakes, while smaller campsites are found along lakes and major rivers. The beginning of intensive wild rice use (ca. A.D. 800) coincided with a population increase ... with villages often located near productive wild rice beds such as stream inlets or outlets to lakes.

The region has more mounds than any other. Most burial mounds are found on elevated landforms near major lakes (e.g. Lake Minnetonka) with some concentrated along the upper Minnesota, Crow Wing and Crow Rivers." (Anfinson 1990:158.)

Along the Mississippi River and its tributaries, archaeological sites in the valleys as well as along the adjacent uplands reflect settlement patterns typical of the Southeast Riverine region:

"habitation sites are found on bluff tops, in caves and rock shelters, on river terraces, and on knolls and stream deltas in the floodplain. Large village sites are not common ... away from major river valleys. Many Early and Middle Woodland habitation sites may be deeply buried in lowland alluvium.

Mounds are concentrated along the Mississippi River and are especially dense at major river junctions with the Mississippi. The densest mound concentration in the state is found at Red Wing near the Cannon River mouth.

Numerous scatters of lithic debris are found in the region's interior (and) lithic quarry sites are common ... due to numerous outcrops of dolomite and sandstone containing cherts and quartzites" (Anfinson 1990:156-157.)

West of the Minnesota/Mississippi River confluence, within the Prairie Lakes Region, wooded settings suitable for habitation were generally limited to sheltered river valleys and the immediate vicinity of lakeshores. Resource procurement sites would also be most common at water-edge locations where animals and wild plants were concentrated. Tall grass prairie along with a dense scatter of lakes and sloughs made overland travel difficult and the Minnesota River appears to have been the major transportation route through the region (Anfinson 1990:155).

Burial mounds and habitation sites are common along the bluffs and terraces of the Minnesota River valley and also on the Mississippi below Fort Snelling (while less is known about this river immediately upstream). A map from 1992 (Figure 1) shows the distribution of archaeological sites at that time -- most of them from the Woodland period -- and more have been identified during the last decade.

No mounds have been recorded in the immediate vicinity of Fort Snelling. Closest are mound groups 21 HE 7 to 11 a few miles southwest of the airport, in commanding settings along the bluffs of the Minnesota River, as well as 21 HE 8, a large group of 108 mounds once visible to their south, on the other side of the valley, and two groups recorded at Mendota (21 DK 17 and 18).

The earliest Woodland period, recognized by the use of rather plain, thick-walled ceramic vessels, is poorly represented around the Mississippi/Minnesota River confluence but is known from sites somewhat further down the Mississippi. To date, it has been found only on one site near Fort Snelling -- at 21 HE 316, near the National Cemetery.

The presence of Middle Woodland ceramics and large, conical burial mounds in the eastern metropolitan area is a clear indication that local groups were in contact with and traded with Havana-Hopewell populations of the Ohio-Illinois area between approximately 400 B.C. and A.D. 400. Havana-like sherds have also been found at Mendota (21 DK 31).

Cord-impressed Late Woodland ceramics are also associated with distinctive burial patterns -- St. Croix Ware with the Arvilla complex of central and northwestern Minnesota and Madison Ware with the Effigy Mound complex of southeastern Minnesota and adjacent areas along the Mississippi. Cord-marked sherds have been found on the upper bluff, at above-mentioned 21 HE 316 and nearby 21 HE 317, and also on sites down in the valley: one just below the old fort (part of 21 HE 99), two on riverine terraces west of Lake Snelling (21 HE 337 and 338), one in the flood plain near Gun Club Lake (21 DK 34), and two on a terrace southeast of the river (21 DK 65 and 68). On several of these sites, a fair amount of shell was mixed in with the cultural evidence, suggesting that these localities, along with small Woodland sites found elsewhere on the lower Minnesota River, were associated with fairly intensive procurement of floodplain resources.

Late Woodland groups appear to have coexisted, for some time, with small groups of horticulturalists who established themselves in semi-permanent villages along the Mississippi

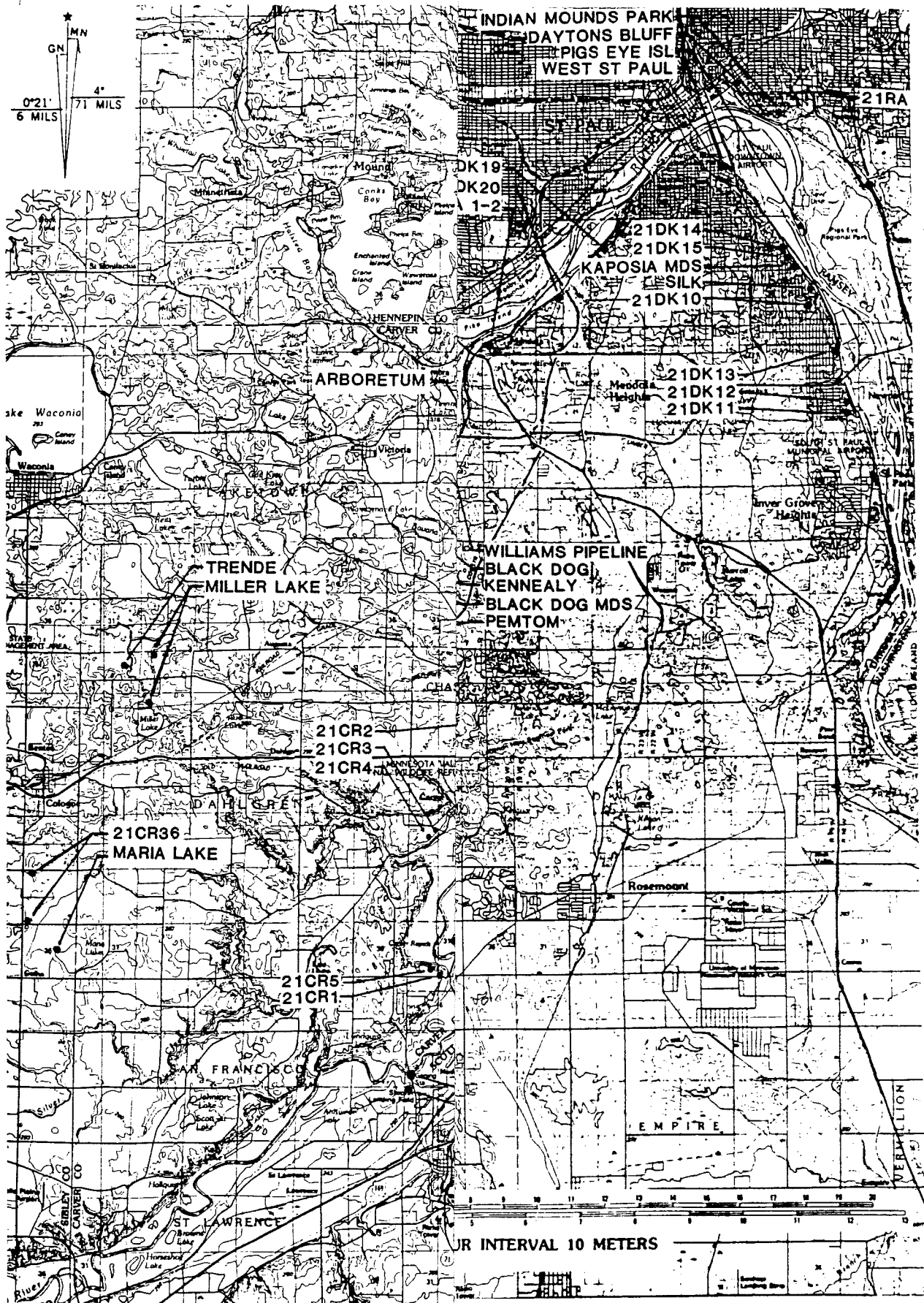


FIGURE 1. Archaeological sites in the Minnesota and metropolitan area, plotted on 1:100,000 scale USGS map

and its major tributaries: representatives of the **Oneota tradition**, which emerged around A.D. 950-1000 and which, in spite of many traits shared with complex Mississippian cultures of the south (such as horticulture and settlement patters), still seems to have developed essentially out of an indigenous Woodland base. A later variant of this manifestation, the **Silvernale Phase** of A.D. 1150 to 1350, saw more direct contact with the south and the Middle Mississippian culture centered on Cahokia, Illinois. Further west, sites of the related **Plains Village** tradition extend from the upper Minnesota River to the Missouri River region.

The Oneota and Plains Village traits that break with earlier traditions (intensified horticulture; a modified and diversified tool kit; new methods of dwelling and mound construction; a wider variety of ceramics and non-utilitarian, often exotic items) all reflect the emergence of increasingly sedentary, complex and stratified social groups. The shift in subsistence and settlement patterns is documented by archaeological sites with large storage pits, post molds, thick organically rich occupation floors, implements like scapula hoes and antler picks, and organic remains such as charred beans and corn kernels.

In spite of the documented presence of Oneota sites along the Mississippi River downstream from Fort Snelling and also along the central and upper Minnesota River, none have as yet been identified in the immediate vicinity of the confluence but Plains Village ceramics were recovered from the Pahl Site (21 DK 65), located on a terrace of the Minnesota River a few hundred meters downstream from the TH 77/Cedar Avenue bridge crossing (George 1999).

Little is known about the later pre-contact period of this area. The Mississippian villages of the Silvernale phase seem to have declined at about the same time as related complexes elsewhere in the Midwest. Later Oneota manifestations, on the other hand, may have continued into the period of initial Euro-American contact as they did in the Orr phase of southern Minnesota and Iowa where Oneota traditions began to blend with early European influences among groups thought to have been the Siouan speaking Oto and Iowa. The latter later moved west, probably under pressure from Eastern Dakota groups coming down from the north and it was the Dakota who met the first Euro-Americans to visit the area.

ARCHAEOLOGICAL EVIDENCE FROM THE PRE-CONTACT PERIOD

As mentioned in the preceeding section, a number of sites have been identified both on the "upper bluff" and in the valley. Relatively few have been intensively studied through formal excavation and analysis. Consequently, while some can be at least tentatively associated with specific cultural manifestations, we still have a rather sketchy understanding of their use and place in the regional settlement patterns.

On the promontory above the confluence of the Mississippi and Minnesota Rivers, Minnesota Historical Society archaeologists have conducted a number of excavations within and around **Old Fort Snelling (21 HE 99)**. Investigations completed during the 1950s and 1960s guided the

restoration of the fort during the 1970s and 1980s. They also unearthed an extensive collection of artifacts associated with life at the fort (Callender 1959; Clouse and Steiner 1998).

By comparison, the evidence for earlier, Native American use of the area is rather limited and it has never been fully analyzed, however, even cursory inspection of the pre-contact period materials from just one relatively small segment of the old fort suggests that early Native American use of the area was quite significant. During the excavation of the fort's hospital -- which stood (and has since been reconstructed) near its south/ southwestern wall, fairly close to the bluff of the Minnesota River (Figure 2) -- nearly 800 items were collected from soils removed to a depth of about two feet within an approximately 18 feet by 60 feet large area.

The materials, curated at the Minnesota Historical Society, were inspected by ARS in 2002; Charles O. Diesen, Museum Collections Curator, provided information about the excavation. The majority of the items are chipped lithics: seven complete or fractured projectile points, three end scrapers, and some 740 pieces of debitage (chipping debris). There are also fire-cracked granite and basalt cobbles, some shell fragments and a charred seed. Most of the chipped lithics are of local Prairie du Chien Chert (90%). The rest are of materials available in nearby glacial till deposits or from sources further down the Mississippi drainage (siltstone, jasper taconite, white quartz, Galena and Cedar Valley Cherts). The chipping debris represents all but the latest stages of tool production (though smaller final thinning flakes may have been missed during the sifting of excavated soils).

There are no ceramic sherds in this collection and the projectile points are either side-notched with slightly concave, "eared" bases, i.e. of a type common during the Late Archaic, or they are fragments of long, slender blades shaped through fine, bifacial flaking, also typical of the Archaic.

In 1991-1992, highway archaeologists investigated areas that would be impacted by the proposed reconstruction of the Mendota Bridge and the TH 5/TH 55 interchange (Figure 3). Testing on the northeastern side of the interchange identified the structural remains of what appears to be a later hospital used during the 1870s (Peterson et al 1992:391 and 1993:286). Some of these tests also produced pre-contact period evidence: a scatter of Prairie du Chien Chert and white quartz chipping debris similar to the evidence from the old fort hospital.

Also included within the 21 HE 99 boundaries is a Woodland period site that was identified by Minnesota State Park archaeologists during testing for the new visitor's center in the Minnesota River valley just below the old fort.

At the base of the river bluff, beneath several meters of soil that has eroded down the slope, is a buried, dark top soil that, when sampled, produced grit-tempered, cord-impressed ceramics

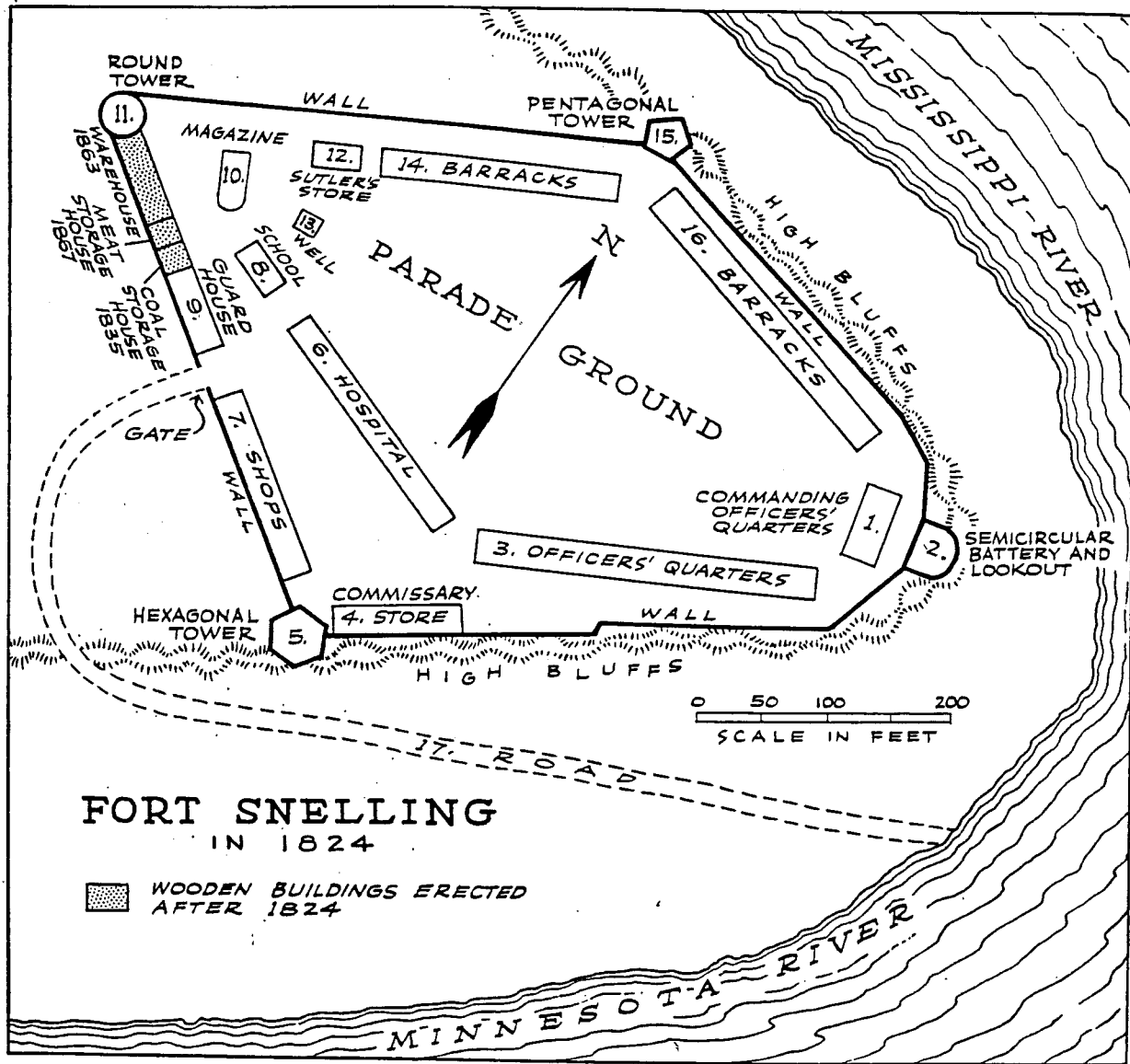


FIGURE 2.

Map of Fort Snelling in 1824 by Chester Kozlak.

(From Callender 1959, page 12)

typical of the late Middle to early Late Woodland transition, along with a scatter of lithics and burnt as well as unburnt animal bone (Radford et al 1997).

Between 1992 and 1995, several archaeological investigations were completed by Archaeological Research Services (ARS) in connection with the Minneapolis-Saint Paul International Airport Dual Track Planning Process (Harrison 1996). Subject to review were (Figures 4 to 9):

- four areas along the as yet minimally disturbed periphery of the existing airport and, outside its boundaries,
- a storm water outfall pipe that would run along the base of the Minnesota River bluff towards the Mississippi, and
- the possible easements for three Runway Protection Zones that would extend from the airport across the Minnesota River valley, one of them including the southwestern segment of the New Fort Snelling/Taylor Avenue complex.

Five archaeological properties were identified:

The **Post Bakery Site** is a previously unknown pre-contact period component of **21 HE 99**. As presently defined, the site extends approximately 250 meters along and 30-40 meters in from the Minnesota River bluff but may originally have covered a much larger area, continuing southwest into what is now the much disturbed eastern segment of the airport and northeast into the more built-up, as yet untested area east of the Department of the Dakotas headquarters. Historic photographs as well as a comparison between current and older topographic maps suggest that as much as half the width of the original site was destroyed during the construction of TH 5 (Figures 8, 9 and 10).

The site straddles a ravine that has been carved into the bluff by a small tributary stream. The find area produced a continues scatter of pre-contact period lithics (nearly 1500 items) -- mostly chipping debris produced during tool manufacture but also a few formal tools. One of them is a reworked projectile point of a type found both on Late Archaic and Initial Woodland sites. The absence of ceramics, however, suggests an Archaic affiliation for the site which may be contemporary with -- and even continuous with -- the evidence at the old fort.

Most of lithics were of local Prairie du Chien Chert. Other materials, less common, would have been brought or traded in: Cedar Valley, Galena and Grand Meadow Cherts. The evidence extended from the sod down to depths of between 75 and 115 centimeters below the surface -- a vertical spread that might have been caused by root disturbance and animal burrowing (bioturbation). There was, however, enough clustering to suggest the presence of spatially and chronologically distinct activity areas.

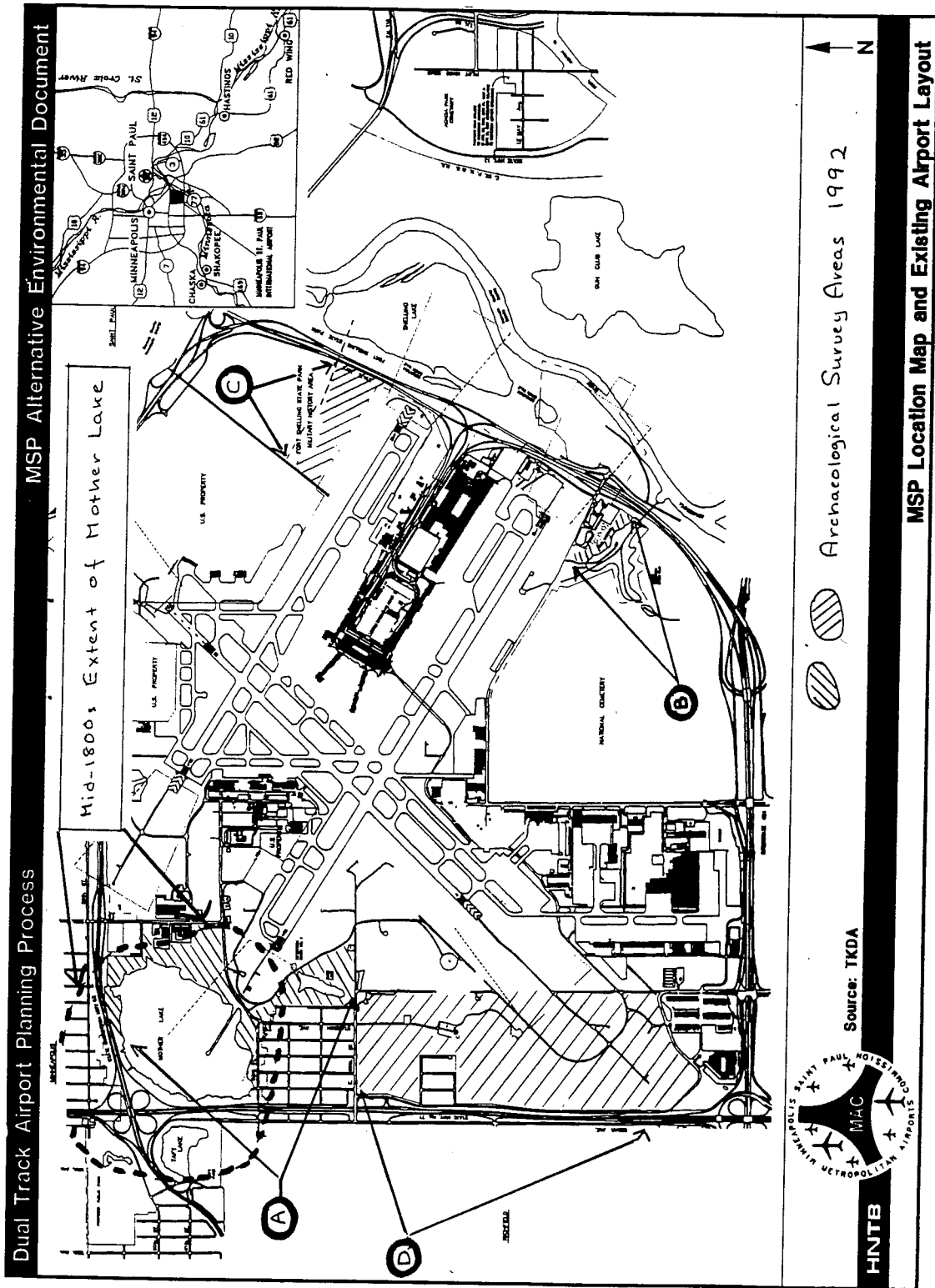
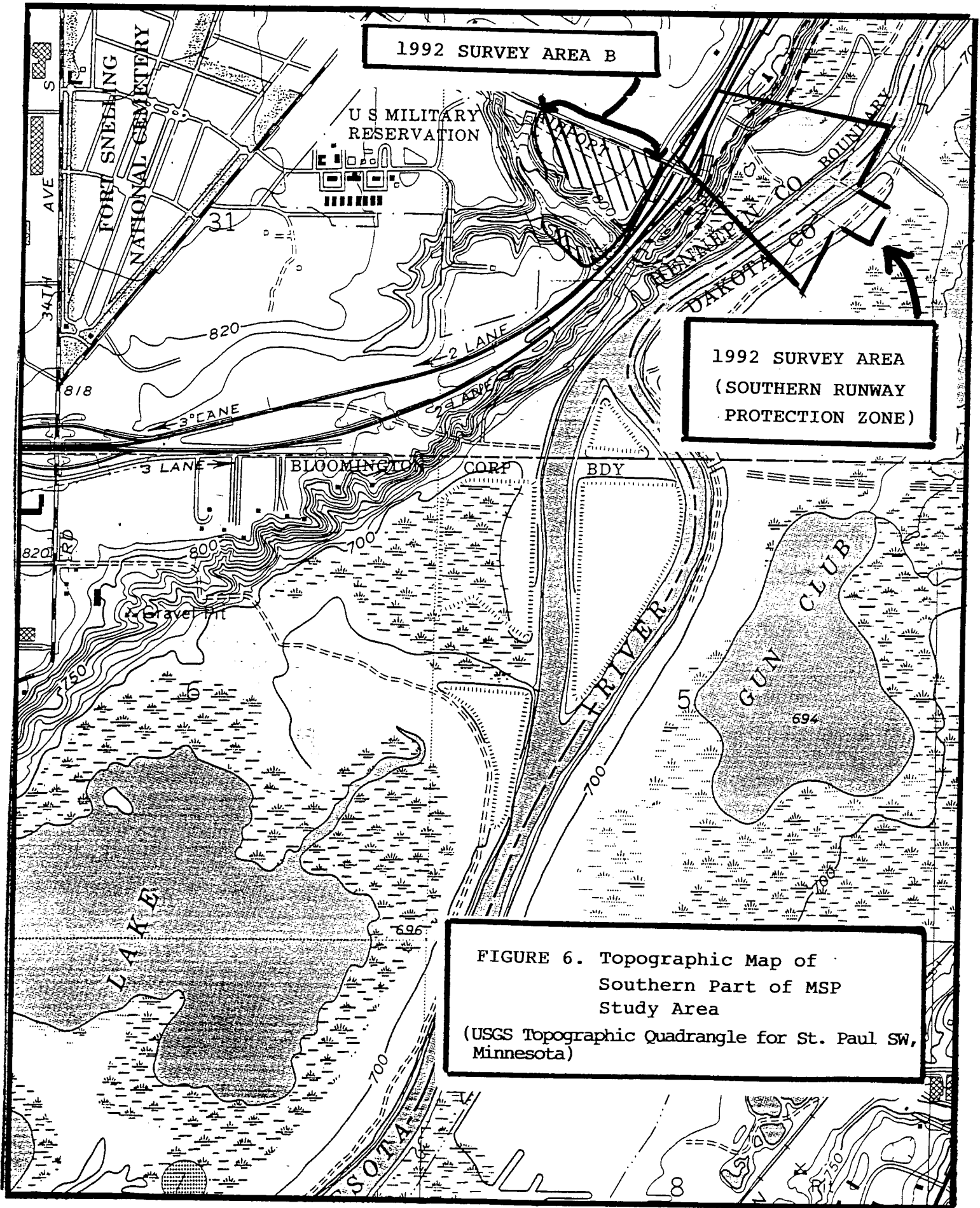


FIGURE 4. MSP Airport Study -- Archaeological Survey Areas 1992 (Harrison 1996, Figure 1)

FIGURE 5. Topographic Map of Central and Northern Parts of MSP Study Area.

(USGS Topographic Quadrangle for St. Paul
West, Minnesota)



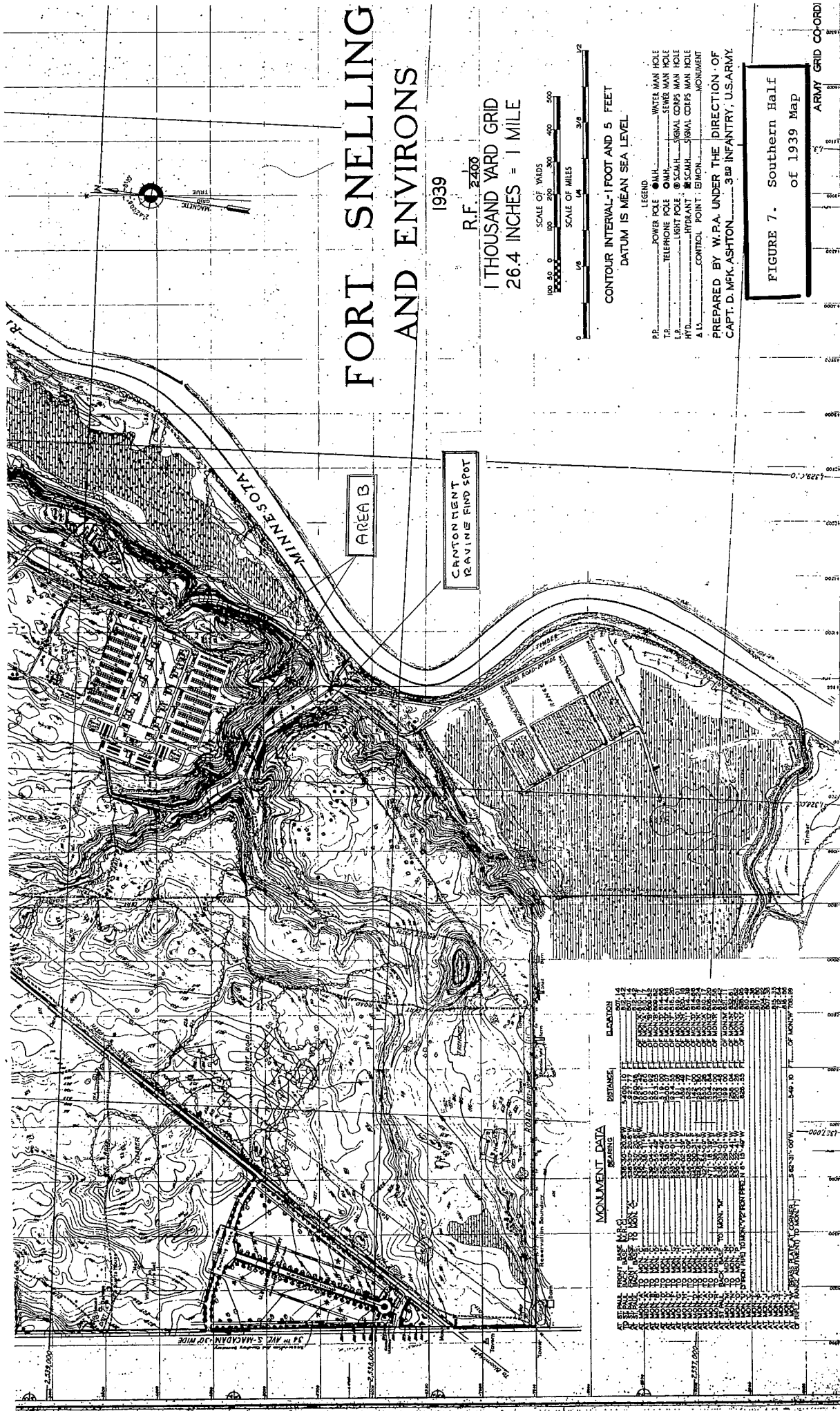


FIGURE 7. Southern Half
of 1939 Map

ARMY GRID CO-ORD



FIGURE 8. Northern Half of 1939 Map

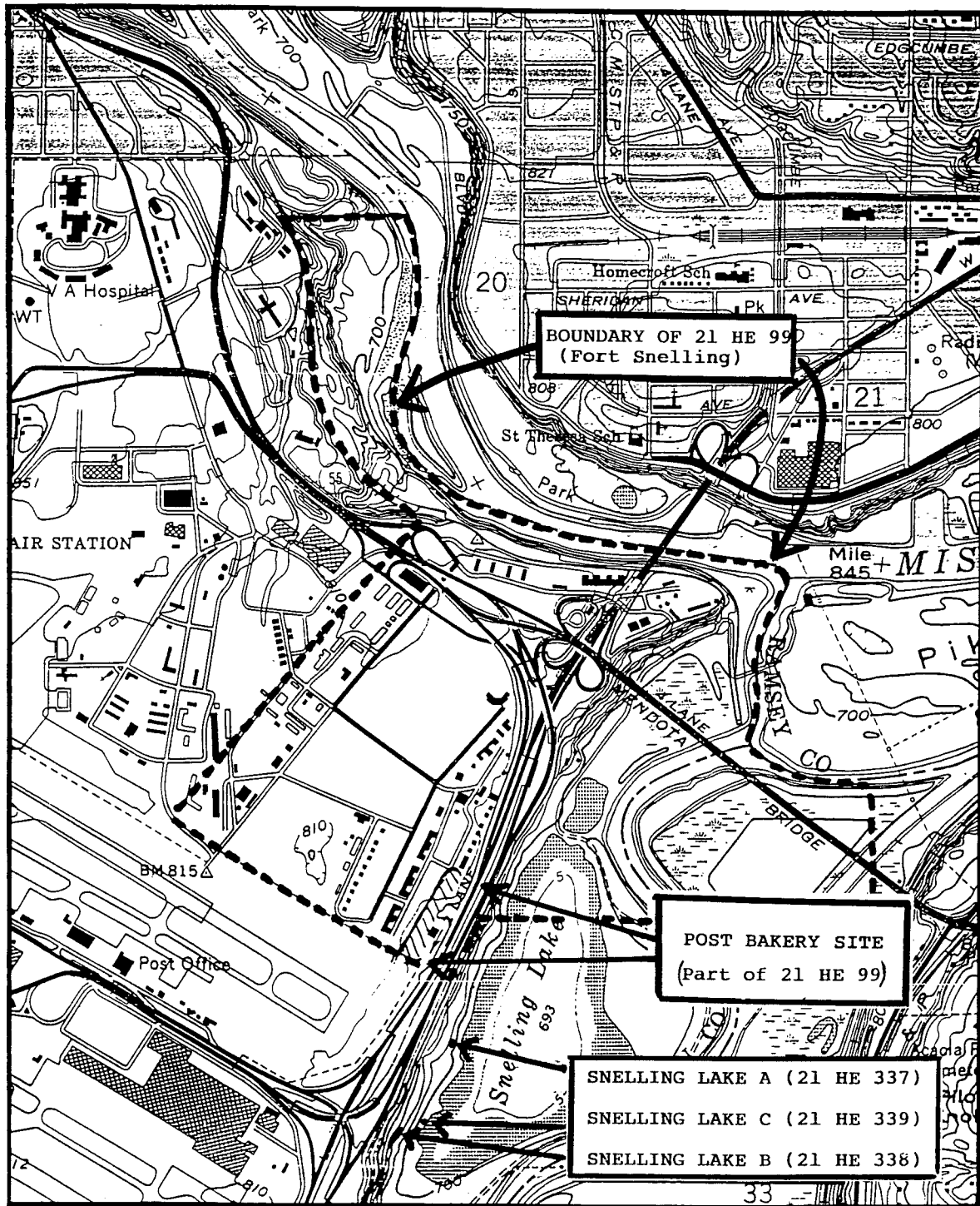


FIGURE 9.
Archaeological Sites Found at Fort Snelling

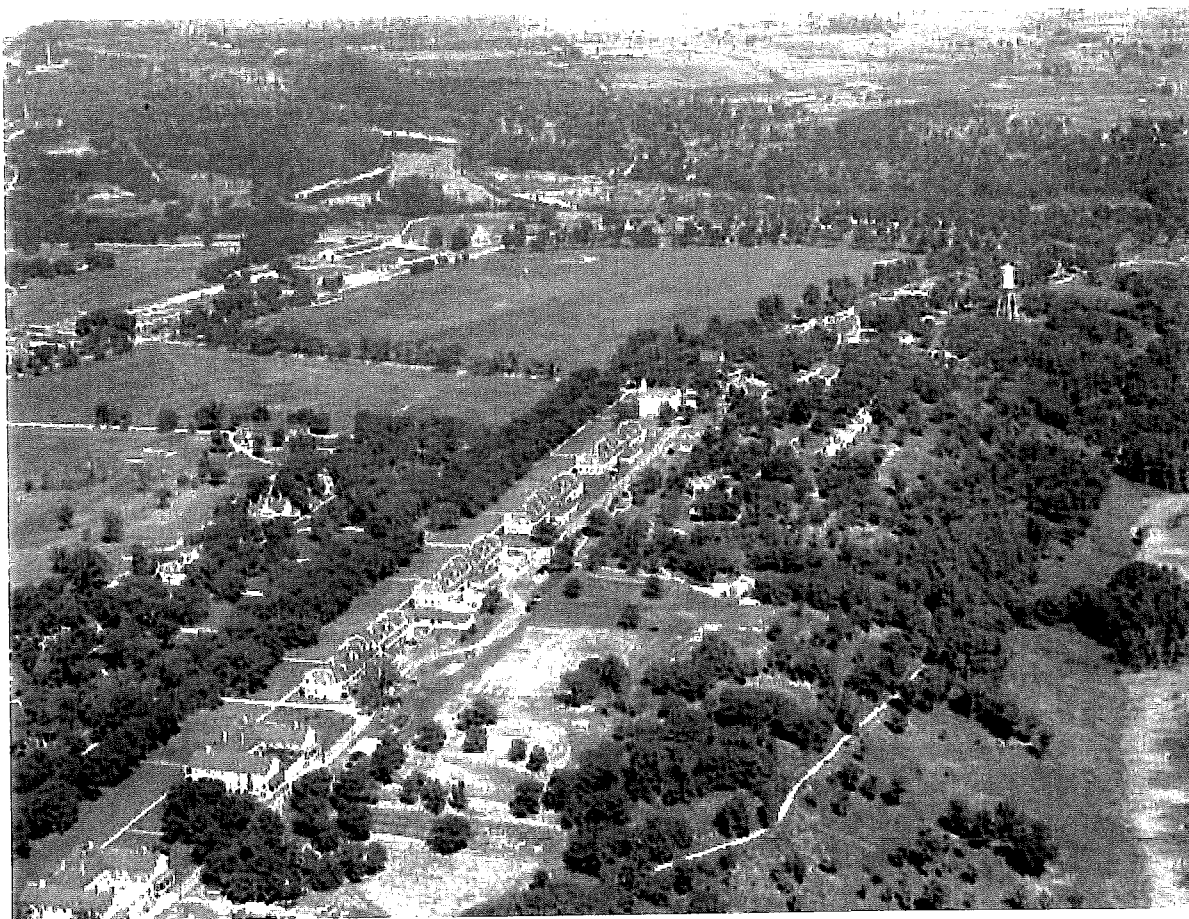


FIGURE 10

1936 Aerial View of Fort Snelling and Buildings along Taylor Avenue,
with Post Bakery Site Located East of Second and Third of Four Infantry Barracks.
(Photographer: Minneapolis Star Journal Tribune; Photograph Collection, MHS Negative No. 58138)

(cf Figures 8 and 9)

Mixed in with the precontact evidence of the upper levels was historic debris associated with the late 19th/early 20th century use of the area: fragments of window, bottle and tableware glass, glazed china, stoneware, terra-cotta, corroded metal, brick, coal and charred wood.

Test placement was systematic but may still have missed 19th century Native American evidence associated with short-term encampments south of the Indian Agency.

Down in the Minnesota River valley, on terraces between the steep bluff and Snelling Lake, are three smaller Native American habitation sites (Figure 8):

Snelling Lake A (21 HE 337) evidence includes a triangular Late Woodland projectile point, some cord-marked Late Woodland ceramics, other chipped lithics, grinding/polishing stones, fire-cracked rock and burnt bone, all found within the first 40 centimeters below the surface (cmbs).

Snelling Lake B (21 HE 338) also produced some Late Woodland ceramic evidence and a sparse scatter of debitage, all between the sod and 60 cmbs. A significant portion of the site may have been taken out by the construction of Wood Duck trail -- a woods road that follows the base of the bluff (Figure 8).

Snelling Lake C (21 HE 339), also partially destroyed by the same trail, was identified from the isolated find of a chert flake between 10 and 20 cmbs.

Due southwest of the airport, 1992 Survey Area B encompassed some of the high ground around a southeast-trending ravine between the National Cemetery and Post Road (Figure 6). An actively used part of the Fort Snelling military induction and training center during the first half of this century, then modified by the construction of a fuel storage area and a gas station, the northeastern side of the ravine proved very disturbed. Testing on the nearly undisturbed southwestern side yielded a single find: a stemmed chert projectile point of a type common to the Late Archaic and early Woodland periods. The point, found between 30 and 40 cmbs, was recorded as a find spot without a formal site number: the **Cantonment Ravine Site** (Figure 7).

Another segment of the upper bluff area was investigated by ARS in connection with a proposal by the Minneapolis Park and Recreation Board to develop a portion of the area into a sports facility: the Upper Bluff Athletic Complex (Harrison 2000).

As shown in Figure 11, the archaeological survey focused on the open area that is located between Taylor, Leavenworth and Bloomington Avenues and formerly was known as the "artillery and cavalry parade ground" or "polo grounds". Added to the scope were segments of a proposed water main that would link the New Fort Snelling complex to the water supply of the City of Minneapolis: one segment designed to follow the perimeters of the parade/polo grounds

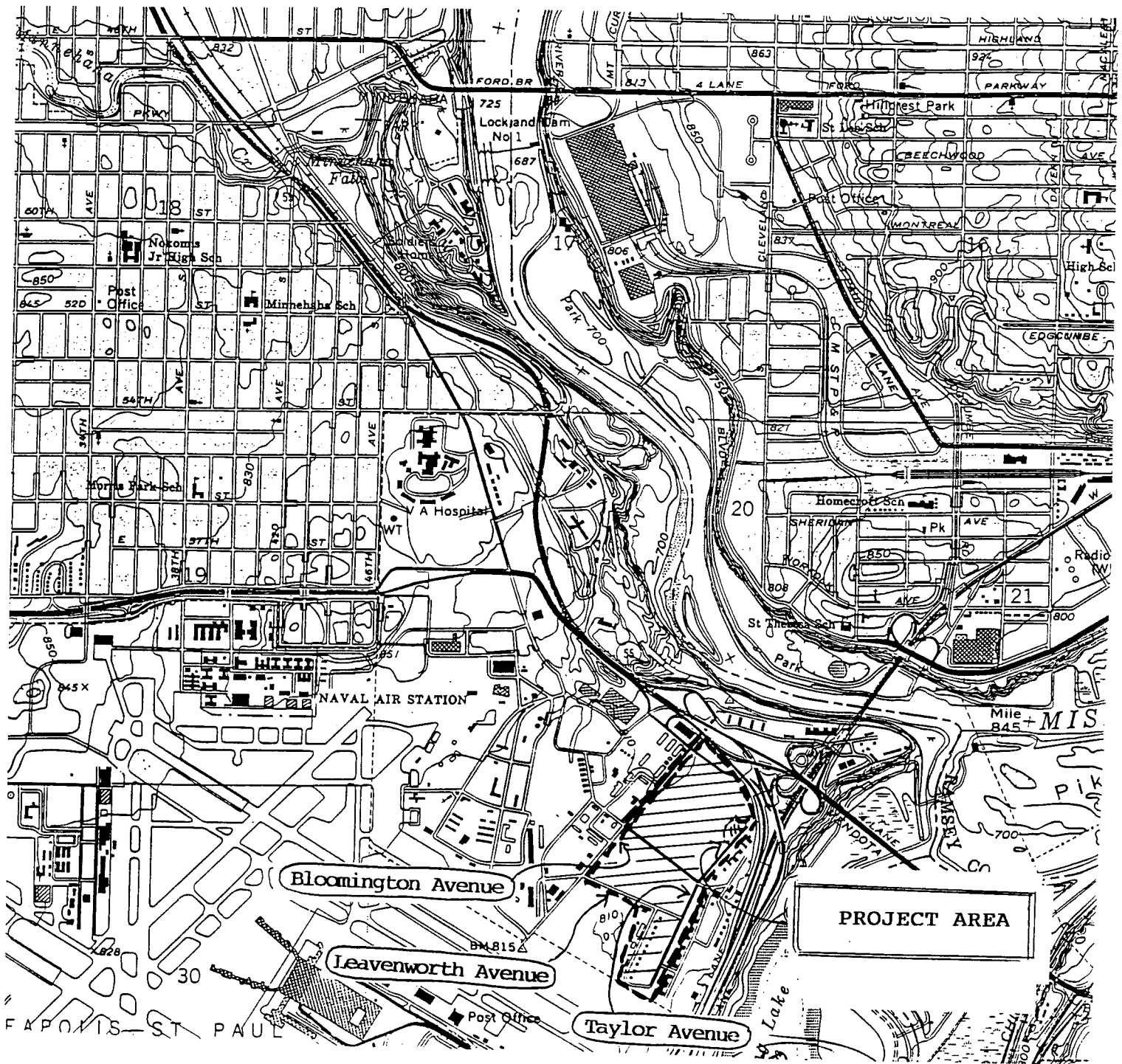


FIGURE 11.

Upper Bluff Athletic Complex: Location of Archaeological Survey

and another segment that would loop around the southwestern portion of Taylor Avenue between what remains of a row of four infantry barracks southeast of the avenue and a row of officer's residences on the opposite side.

No archaeological survey was required west of Bloomington Avenue once a review of the above-ground cultural resources of the quartermaster area and the artillery complex, conducted by Hess, Roise and Company, historical consultants, had indicated that this portion of the project was too disturbed to retain more than negligible archaeological potential. (Roise 2000).

Shovel testing, mechanical trenching and large-diameter soil-boring proved largely negative as did monitoring of construction during the fall of 2001. All that was found was some demolition debris in fill removed from the TH 5/TH 55 interchange area and used to level the grounds west of Taylor Avenue for parking. The results were not a complete surprise considering that:

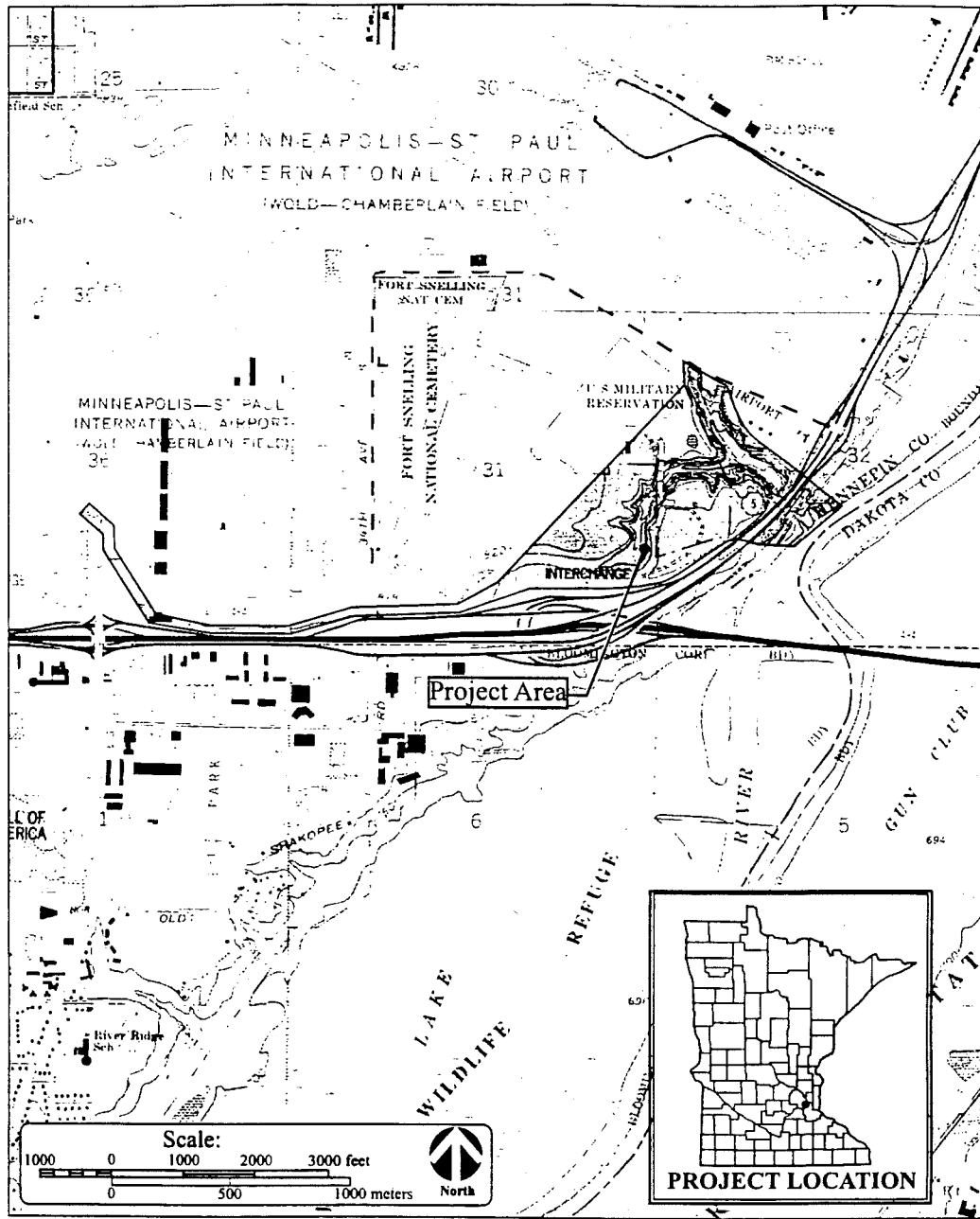
- the 1992 investigations at the Post Bakery Site already had indicated that pre-contact period evidence petered out well east of Taylor Avenue;
- with the exception of life at the Indian Agency on the bluff southwest of Fort Snelling, most 1820s-1850s activities within the military reservation were associated with the old fort and its immediate vicinity (or the area to its north, around Coldwater Spring), while the upper bluffs along the Minnesota River were used primarily as fields and gardens;
- a series of historic maps of the upper bluff area indicate that the the Indian Agency, for the most part, must have been destroyed by the TH 5/TH 55 interchange and that any structural remains of the agency that may have survived (along with associated artifacts) probably would be located east of Taylor Avenue and well outside the polo-field study area.

Southwest of Post Road, the "Cantonment Ravine" area, in the 19th century referred to as Land's End, has also been studied more intensively in connection with a Metropolitan Airport Commission proposal to construct a series of stormwater treatment ponds and culverts to carry runoff from the expanded airport (Perkl et al 2001). Reconnaissance survey and intensive testing conducted by URS/BRW, Inc. identified two pre-contact sites on the southwestern side of the ravine and also revisited the Cantonment Ravine Site found by ARS in 1992 (Figures 12 and 13)

Site **21 HE 316** is a habitation site with ceramics from the Early and Late Middle/Early Late Woodland periods. In other respects, it compares closely with the above-mentioned Post Bakery Site. It overlooks a tributary ravine and is situated on a grassy terrace near the edge of the bluff, probably in part destroyed by the construction of TH 5. Chipped lithics are predominant -- mostly debitage and mostly of Prairie du Chien Chert (with some quartz and a few flakes of Knife River Flint, Tongue River Silica, chalcedony and basalt). The evidence extended from just below the sod down to 110-115 cmbs and showed enough clustering to indicate the presence of distinct components and activity areas.

URS/BRW

Figure 1. Location of Project Area

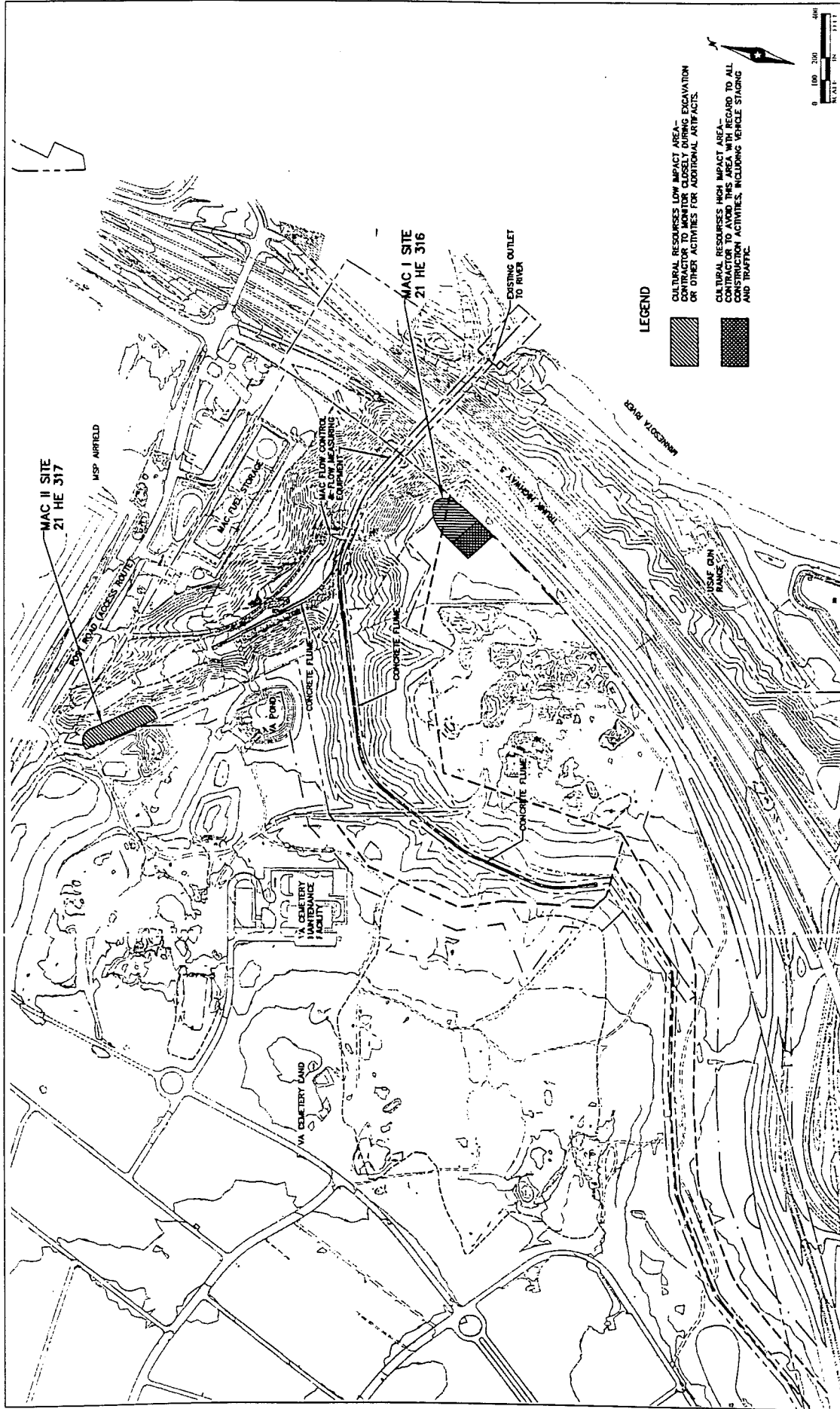


Base Map Source: USGS 7.5 minute Topographic Quadrangle- St. Paul SW, MN 1967 (photorevised 1993), and St. Paul West, MN 1967 (photorevised 1972)

FIGURE 12.
MAC Drainage Improvement Project: Location of Project Area
(Perkl et al 2001, Figure 1)

URS/BRW

Figure 21. Boundaries of Proposed Action



Cultural Resource Investigations: MAC Drainage Improvement Project
January 2001

69

FIGURE 13.
MAC Drainage Improvement Project: Boundaries of Proposed Action and Location of
Archaeological Sites (Perkl et al 2001, Figure 21)

Site **21 HE 317** occupies a narrow terrace between disturbed areas to the north and west and the steep, wooded ravine. Other than three Late Woodland sherds and some fire-cracked rock, lithic debitage makes up most of the evidence -- a fairly consistent scatter between 15 and 105 cmbs. Again, Prairie du Chien chert is the predominant raw material, followed by Tongue River Silica, and siltstone as well as a smattering of jasper, orthoquartzite, quartz, basalt, Cedar Valley Chert, jasper taconite, Grand Meadow Chert and Gunflint Silica. Quite prolific but also disturbed, the site was not considered to meet National Register criteria and has now been destroyed.

No more evidence was found around the Cantonment Ravine find spot which, lacking further research value, also has been destroyed.

URS/BRW also tested the Minnesota River floodplain at the mouth of the ravine -- the reported location of the 1820's trading post at Land's End. Results proved negative as they did when ARS, with Science Applications International Corporation (SAIC), investigated the same area as part of a survey of the United States Air Force property between TH 5 and the Minnesota River (SAIC/ARS 1995).

THE CONTACT AND POST-CONTACT PERIODS

THE EASTERN DAKOTA

In their journals and letters, French, British and American explorers, military men, traders and missionaries made numerous references to the Eastern Dakota, among them **the Mdewakanton** on the Minnesota and Mississippi Rivers between Shakopee and Winona, **the Wahpekute** along the Cannon River, and **the Wahpeton** on the Upper Minnesota River.

Historic accounts refer to a number of eastern Dakota settlements: summer villages that were occupied during the growing season and abandoned for a round of short-term camps the rest of the year as their inhabitants balanced gardening with the gathering of wild plants and with the hunting needed to satisfy both their own needs and those of the fur trade (Figures 14 and 15).

The most thorough discussion of Dakota beliefs, social customs and material culture is found in the writings of **Samuel Pond**, who worked among the Dakota as a missionary between 1834 and 1851 (Pond 1940 and 1986). Living with several of the groups, he learnt their language and became a keen observer and recorder of their way of life.

Pond estimated the number of Mdewakanton to be a little less than two thousand and described the different bands, their chiefs and their villages. Closest to Fort Snelling were Kaposia on the

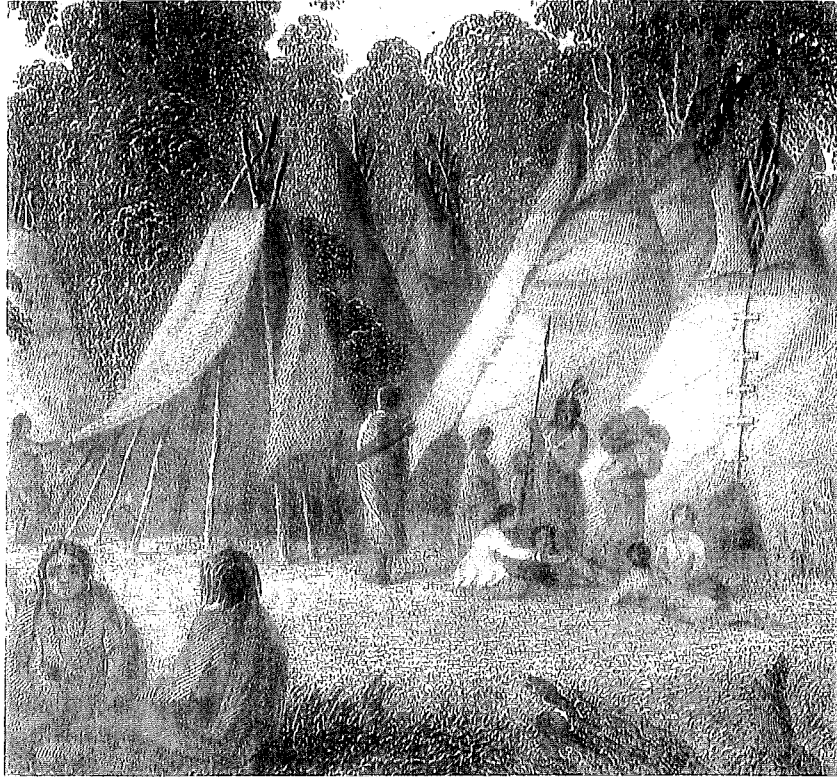


FIGURE 14: Skin lodges used in winter and while traveling. Detail from *Dakotah Encampment*.
FIGURE 15: *Dakotah Village* (Both 1853 engravings after Seth Eastman, from Spector 1993:71 and 76)

Mississippi River a few miles south of the site of St. Paul, and then, along the Minnesota River, Black Dog village a few miles above Fort Snelling, Pinisha (Penichon's) village near the mouth of Nine Mile Creek, Tewapa village at Eagle Creek and the village of Shakopee.⁴ A few miles west of the fort was Cloud Man's village on the eastern shore of Lake Calhoun.

Pond also described the annual round of Eastern Dakota resource procurement. In October, people abandoned the summer villages on the main rivers for the fall and winter hunt which kept them moving through more forested regions in search of deer and smaller game. Late winter was a time for fishing, the trading of furs and deer skins or the processing of hides into clothing. During March, most of the men hunted muskrats while the rest of the band made maple sugar. A number of sugar camps are thought to have been located in sheltered, wooded areas around Fort Snelling. By May, the bands had returned to their summer villages to live in bark houses rather than tepees, fish in local lakes and streams, gather wild plant foods and plant their gardens with corn. Summer was also a time for visiting with other Dakota and for bartering with the traders. By late summer and early fall, there was wild rice to be harvested in many of the area lakes.

With few exceptions, these Dakota groups are not well represented in the archaeological record. A few of their settlements have been investigated: **the Kennealy Creek village site (21 DK 31)** which has been interpreted as part of Black Dog's village (George 1999), **the Wahpeton Dakota village at Little Rapids**, shown in Figure 1 as located approximately 7 miles upstream from Shakopee (Spector 1993), **the 1850s Mazomani Homesite (21 YM 50)** at Upper Sioux Agency State Park (Gonsior et al 1996), and **Inyangmani's (Running Walker's) 1854-1862 village** on the Upper Sioux Reervation (Berg 1998). Burials associated with the village have also been excavated (Wilford 1944) or salvaged prior to construction (Peterson 1977 and 1978).

Some historic Dakota sites, if located on a frequently inundated flood plain or at the base of a bluff slope, may have been quite deeply buried by alluvial or colluvial deposits. For the most part, however, intensive farming or development have presumably destroyed the villages that once occupied somewhat higher, fertile river and lakeshore terraces, concentrated, as the evidence would have been, in the upper horizons of the cultivated soil (George 1999; Spector 1993).

THEIR INTERACTION WITH EURO-AMERICANS

In addition to their contact with missionaries and traders along the Minnesota River, the Dakota were frequent visitors at **the Indian Agency** that had been established near Fort Snelling by Major Lawrence Taliaferro in 1820. The agency also attracted people from more distant Dakota and Ojibwe groups who were drawn to the area by the opportunities for trade or the need for assistance and mediation in times of hardship or conflict (Taliaferro 1894; White and White 1998:28). In close proximity to the the fort and the agency were several licensed trading operations (Nute 1930):

⁴ Also briefly described, with references, in Roberts 1993: 27-33.

- At Mendota, the **American Fur Company** regional headquarters which was the administrative center for fur trade with the Dakota that ranged as far west as the Missouri River. "Annually, hundreds of voyageurs, Native Americans, and traders converged upon Mendota, bringing furs by canoe and oxcart" (Clouse 1999:6).
- At Camp Coldwater, north of the fort, the **trading house of Benjamin Baker** who, during the 1820s and 1830s, was licensed to trade with the Ojibwe and largely specialized on the region around the upper Mississippi and its headwaters even though he also employed some traders with Dakota connections to go up the Minnesota River.
- At **Land's End**, on the northern side of the Minnesota River, about a mile upstream from the agency and just outside the military reservation, a **trading post** that in the 1820s was run by a Mr. Lamont and then, from 1831, by Joseph R. Brown.

These outfits had been preceded, in the first decades of the 1800s, by **independent traders**, like Joseph Rolette who, with two partners from the Red River settlement, built a post on Pike's Island, and by Jean Baptiste Faribault and Archibald Campbell, who also had posts near the confluence.

In Minnesota, the **Contact Period** has been dated to A.D.1650-1837 and it includes the establishment of Fort Snelling in 1819-1820 and the first decades of organized, if limited, United States military influence on the region. It also saw the beginnings of civilian Euro-American settlement, primarily along the Mississippi River.

The **Post Contact period** began in 1837 when two large areas east of the Mississippi were opened for logging and settlement through treaties signed with the Ojibwe and the Dakota. Even before the treaties had been ratified in early 1838, settlers and prospecting lumbermen had arrived at the doorstep of Fort Snelling.

West of the Mississippi, Euro-American settlement was still sporadic until the ratification of the 1851 Treaties of Mendota and Traverse des Sioux opened the area to homesteading. With rapidly growing river towns and their steam boat landings serving as gateways, settlers poured into the river valleys and hinterlands. Within a few decades, practically all arable lands in the area had been claimed. With the construction of roads, the arrival of the railroads, and the logging of the river valley forest, lands could be cleared that soon would yield some of the richest crops in the Midwest. Spurred by rapid population growth and intensifying industry and commerce, urban development began to engulf the Fort Snelling military reservation.

By signing the 1851 treaties, the Dakota had exchanged all their land in the future state of Minnesota for government annuities and life on designated reservations. Within a few years, they had largely withdrawn from the lower Minnesota River valley and before long, the land that so recently fed and sheltered them had been changed beyond recognition.

The last major presence of Dakota Indians at Fort Snelling followed in the wake of the U.S. Government-Dakota Conflict of 1862. The following winter, approximately 1600 "Indians and half-breeds" were interned in a fenced encampment on the riverbottoms below Fort Snelling, -- held in captive custody until those who survived illness and harsh conditions could be transported by steamboat to Fort Randall (Cavender 1988; Folwell 1921-30:252-263; Roberts 1993:163)

PRIMARY SOURCES OF INFORMATION

Historic use of the upper bluff area is documented by a variety of records. Specific references will be listed below in the discussion of potential interpretive themes. They include:

- eyewitness accounts written by nineteenth century residents at or visitors to the Fort Snelling military reservation;
- a series of historic maps that range in date between 1823 and the late 1940s and are kept on file at the Minnesota Historical Society;
- published and unpublished contemporary discussions of the history of Fort Snelling with vicinity -- sources that include a number of reports on earlier cultural resource investigations.

Most of the pre-1870s descriptions of the military reservation focus on events and developments that were associated with the old fort and its immediate vicinity but some mention dates, events and persons that were relevant also to the southern portion of the upper bluff area. Most useful are the letters, diaries and memoirs of persons directly involved with the Indian Agency either as employees or visitors.

Historic maps illustrate the appearance of the upper bluff area during the time of the Indian Agency. Unfortunately, comparison with current maps and aerial photographs suggests that the agency buildings were located on a portion of the upper bluff that has been largely or completely destroyed by the construction of the TH 5 and TH 55 interchange. The agency buildings appear to have been the only substantial physical evidence of 1820s-1850s activity south of the old fort. The maps are consistent in the way they portray the use of the rest of the area as open prairie or public gardens during the early days of the military reserve.

Even though the upper bluff area appears to have lacked other structures, it was almost certainly well used by Native Americans and Euro-Americans alike and the earlier maps show that a number of trails criss-crossed these uplands.

As previously mentioned, several segments of the upper bluff area have been tested in connection with the restoration of the old fort, the expansion of the Minneapolis - St. Paul International Airport and more recent construction within the old parade grounds/polo fields area between

Taylor and Bloomington Avenues. The investigations have identified the remnants of several pre-contact period habitation sites but only very sparse evidence of historic Native American use of the area. Even the extensive collections from Old Fort Snelling include relatively few Native American artifacts. Scattered across the ground or buried close to the surface, the evidence of historic Indian encampments is unlikely to have survived the construction of New Fort Snelling and nearly a century of intensive use of the area.

In more sheltered environments like the Minnesota River valley and the historic village of Mendota, archaeological evidence has had a better chance of survival and the results of several recent investigations in this area can, in some measure, balance the paucity of evidence on the upper bluff (Clouse 1997; George 1999; Radford and George 1997).

ANNOTATED CHRONOLOGY OF SIGNIFICANT DATES AND EVENTS

1650s - Beginning of French exploration and fur trade in the Upper Mississippi region.

1680 - An exploration party that includes Father Louis Hennepin discovers and names the Falls of St. Anthony.

1682 - Robert Cavalier de La Salle takes formal possession, for the King of France, of the territory drained by the Mississippi River with tributaries. French forts begin to be established along the major water routes and later also several Jesuit missions.

1763 - Lands east of the Upper Mississippi are ceded by France to Great Britain. British fur traders take over, among them Jonathan Carver who had a trading post at Traverse des Sioux in 1766-67, and Peter Pond who traded with the Dakota out of a post established at the mouth of the Minnesota River in 1773-75.

1783 - The same area is ceded by Great Britain to the United States and the fur trade is soon taken over by the Northwest Company and independent traders.

1803 - Through the Louisiana Purchase, the United States gains control also of lands west of the Mississippi.

1804 - The Lewis and Clark expedition considers St. Anthony Falls one of the areas that would be strategic for future fort construction.

1805 - Lieutenant Zebulon Pike negotiates a treaty with the Dakota and establishes a military reserve at the confluence of the Mississippi and Minnesota (then St. Peter) rivers. Included within its boundaries is a wide expanse of uplands west of the two rivers, reaching as far upstream as to St. Anthony Falls. Pike's name was later given to the large island where he set up camp, at the mouth of the Minnesota River.

1812 - United States at war with the British. Lord Selkirk establishes a colony of Irish and Scots in the lower Red River valley.

1817 - Major Stephen Long is commissioned to explore the Mississippi River with tributaries. The Mississippi/Minnesota River confluence is again recommended for a military post. Long returns in 1823 to further explore and describe the Minnesota River valley and its inhabitants.

1819-1820 - Construction of a fort (at first known as Ft. Anthony) is begun under Lieutenant Colonel Henry Leavenworth and then continued under Colonel Josiah Snelling. Troops, at first, establish Camp Coldwater at a spring considered sacred by many Dakota.

1821-1823 - Troops build a saw mill at St. Anthony Falls which soon is followed by grist and flour mills. Discouraged settlers from the Selkirk colony begin farming near the new fort. The first steamboat reaches St. Anthony.

1818 - Lieutenant Lawrence Taliaferro resigns from the army and is urged by President James Monroe to take a post as a Indian agent. The following year, John C. Calhoun, Secretary of War whose department also included the Office of Indian Affairs, instructed Taliaferro to establish an Indian Agency among the Sioux (Dakota) and Chippewa (Ojibway) at the confluence of the St. Peters and Mississippi rivers.

1820 - Taliaferro (now given the honorary military title of "major") arrives at Fort Snelling. He first maintains an office at the fort but gradually establishes separate agency headquarters a short distance to its southwest.

1823 - Troops build a Council House for the Indian Agency near the edge of the bluffs (destroyed by fire in 1830 and never replaced).

1826 - Taliaferro purchases a nearby building to serve as the main Agency House. His staff now includes Scott Campbell, interpreter, and John Marsh, Sub Agent.

1824 - Taliaferro begins to plan a Native American agricultural community and, within a few years, negotiates with Chief Cloudman to establish this community (Eatonville) at Lake Calhoun near the western edge of the military reservation. In 1831, he hires Philander Prescott to oversee the community.

1830s - Taliaferro continues efforts to promote education and agriculture among the Dakota, inviting missionaries to serve as teachers of secular subjects as well as religion. In 1834, Samuel and Gideon Pond arrive at Fort Snelling, staying, at first, in one of the Agency buildings, then taking up residence at the Lake Calhoun. The following year, another mission is established at Lake Harriet. Neither proved long-lived as the Lake Calhoun-Lake Harriet band of the Mdewakantons abandoned their villages in 1839 (Pond 1986:xi-xv). The Pond brothers continue their work with the Dakota and in 1847, Samuel Pond establishes another mission at Shakopee's

Mdewakanton village on the Minnesota River, some twenty-five miles upstream from Fort Snelling.

1834 - Henry Sibley becomes the agent for the American Fur Company trading post that had been established in the 1820s at Mendota, south of Fort Snelling on the opposite side of the Minnesota River.

1836-1837 - Joseph N. Nicollet, explorer, cartographer and keen observer of Dakota linguistics, customs and social organization, spends the winter at the Agency. One of his maps includes a sketch of the Agency with surroundings and suggests the presence of Indian tepees close to the Agency.

1837-1838 - Taliaferro holds treaty negotiations with the Dakota near the Agency, prior to leading a delegation to Washington for ratification. The Dakota and Ojibwe cede their lands between the Mississippi and St. Croix Rivers. Land is now open for a rapid influx of Euro-Americans. and squatters' claims mark the beginning of the Twin Cities.

1839 - Increasingly dissatisfied with local fur traders and with the U.S. government's failure to carry out the provisions of the treaty, Taliaferro resigns and leaves the Agency in 1839.

1849 - The newly organized Department of the Interior is given the responsibility to oversee all Indian Agency operations. The following year, the Indian Agency at Fort Snelling (managed, during the 1840s, by Amos Bruce, R.G. Murphy and Nathaniel McClean) was designated a "Sub Agency" by the U.S. Senate.

1851 - In the Treaties of Mendota and Traverse des Sioux, the Indians cede also the lands west of the Mississippi and begin to move to designated reservations. The Fort Snelling military reservation is reduced in size and much of the land platted for urban development. The St. Peter's River is officially renamed the Minnesota River.

1858 - Franklin Steele purchases the much deteriorated post, along with adjacent lands, and owns it during the Civil War when, however, the old post regained its importance as a military training center. By the end of the war, the stone fort was surrounded by dozens of temporary frame buildings.

Following General Sherman's inspection in 1866, a decision was made to retain the post. Steele traded back all but 1500 acres. Elements of several infantry regiments rotated through the crowded facility which served as the headquarters for the Military District of Minnesota, as a supply base for western forts and expeditions, and as a processing center for recruits on their way west. In 1868, the old post suffered a major fire.

1862-1863 - The U.S. Government-Dakota conflict and the interment of captive Dakota in the valley below Fort Snelling.

1878 - Fort Snelling becomes the headquarters for the Department of Dakota which had been organized in 1866 to control Minnesota as well as parts of the Dakota and Montana Territories but which at first was headquartered in downtown St. Paul. The move prompted the appropriation of \$100,000 for new construction. By 1879, work had begun on thirty new buildings, including headquarters and officers quarters (Officers Row) along Taylor Avenue as well as various support facilities. At the same time, much of the old fort was torn down.

INTERPRETIVE THEMES

THE NATIVE AMERICAN PRESENCE BEFORE INITIAL EUROPEAN CONTACT

Though much diminished in extent and appearance by the impacts of historic land use, two locations within the upper bluff area offer possibilities for on-site archaeological interpretation of the pre-contact period.

Depending on the future use found for the buildings southeast of Taylor Avenue, some form of marker or interpretive kiosk could be placed on the northern portion of the Post Bakery site, i.e. on the open, still fairly undisturbed grassy area that lies north of the Post Bakery (Building 112) and is separated from it by a small ravine. Paleoenvironmental data and historic written descriptions could be used to reconstruct how the area may have appeared a few thousand years ago, while historic photographs and early topographic maps of the area would indicate how much of the site has been lost to highway construction and how easily it once could have been accessed from the river bottoms. A time-line, a summary description of Archaic lifeways and drawings of some of the evidence would be appropriate, as would a comparison with the evidence from the old fort hospital which may well represent the northern end of the same pre-contact period occupation.

Closer to the old fort, northeast of the Gymnasium (Building 53), the edge of the bluff overlooks the TH 5/TH 55 interchange and the approach to the Mendota bridge to the northeast but beyond these recent intrusions, as well as more towards the east, is the wide expanse of the Minnesota River valley -- a view that suggests, as themes for interpretation:

- the appearance of the area as it changed throughout the last ten millennia;
- the strategic setting and natural resources that would have attracted Native Americans and encouraged travel, trade and cultural cross-fertilization;
- the main periods and characteristics of past Indian use of the area, with a time-line and a graphic rendering of what sites have been found and how they relate to the Minnesota River, the valley floor, the river terraces, the bluffs and the tributary ravines (but without specific locational detail).

The development of these themes should draw on the research conducted at Fort Snelling, along the upper bluff area and in the Minnesota River valley, both as it was described and referenced above in the pre-contact period segment and as it then would be updated, from time to time, with current research (which even in the last few years has added considerably to our understanding of the area). An interpretive kiosk would be ideal but may be considered too visually intrusive. Alternatively, a set of smaller markers or single-panel displays could be supplemented with a triptych-style pamphlet similar to those already used for cultural resource interpretation by the U.S. Army Corps of Engineers.

Other archaeological localities on the upper bluff would be less suitable for on-site interpretation either because they are too inaccessible from the Fort Snelling complex, like 21 HE 316 on the bluff next to the ravine by Post Road, or because they have been covered by structures as in the case of the evidence below the reconstructed fort hospital or the exit ramp from TH 55 to TH 5. Once the pre-contact period from within the original fort has been fully analyzed, however, the Native American component(s) that predate it should be displayed and interpreted as part of the existing Fort Snelling exhibits.

Archaeological interpretation of the Fort Snelling area would also benefit from an effort to connect the evidence on the upper bluff with that of the valley below both physically, through additions to the existing trail system, and cognitively through interpretive displays.

THE EASTERN DAKOTA OF THE CONTACT AND POST-CONTACT PERIODS

Sources of Information

To date, interpretation of this theme has little to gain from archaeological evidence and has to rely almost exclusively on written and pictorial information as well as oral Dakota tradition.

The information that can be gleaned from archaeological evidence was cited above in the main contact/post-contact period segment. Of the references listed there, the one about the Wahpeton Dakota village at Little Rapids is probably the most useful for the purpose of interpretation (Spector 1993).

The written record is all the more abundant. Descriptions given in 18th-19th century letters, journals and memoirs tend to be the ones that are most colorful and quotable but they are also often marred by cultural bias or simply by ignorance about the Dakota and an inability to speak their language. Many have not been published and are accessible only through archival research. Others have been either compiled or reprinted and edited by scholars who have supplemented the original with useful clarifications and the results of contemporary research. Among the sources most often cited and quoted are:

Jonathan Carver, British explorer who travelled up the Minnesota River as far as present-day New Ulm in the fall of 1766 and included some descriptions of the Dakota and their surroundings in his memoirs (Carver 1956 [1781]). Many of his observations were later criticized as inaccurate by the members of the 1817 and 1823 Long expedition (Keating 1959 [1825]:287).

Zebulon Montgomery Pike, who in 1805 was the first American soldier to explore the upper Mississippi and who then negotiated a treaty with the Dakota and established the military reserve at the confluence of the Mississippi and Minnesota (then St. Peter) Rivers (Pike 1805-1807).

Major Stephen H. Long, who, as topographical engineer for the US government, was commissioned by the War Department to the Mississippi with tributaries and travelled as far north as the Falls of St. Anthony in 1817, then up the Minnesota River in 1823, bringing with him, among others, **James Calhoun**, astronomer and assistant topographer, **William Keating**, geologist, and **Thomas Say**, zoologist and botanist. Their journals and scientific descriptions include valuable references to the Native Americans they encountered, their way of life and their physical surroundings (Long 1978; Keating 1959 [1825])

Henry Rowe Schoolcraft, geologist who joined the 1820 expedition that Governor Lewis Cass of the Michigan Territory launched up the Mississippi River as far north as Cass Lake and later included several descriptions of the Fort Snelling area in his recollections (Schoolcraft 1821).

George Featherstonehaugh, an English geologist, who, in 1835, explored the entire length of the Minnesota River to its source at Big Stone Lake (Featherstonehaugh, 1847).

Major Lawrence Taliaferro, government agent to the Dakota 1819 to 1840 and described as conscientious, fair, understanding of/sympathetic towards the Indians and well liked by most (Pond 1996: 23). His journals are matter of fact descriptions of both the Dakota and the Ojibwe, their leaders, and their conflicts, and discuss mediations and other official agency interactions with them. They tell us less about Dakota and Ojibwe culture (Taliaferro 1820-1840 and 1894).

Joseph Nicollet, French scientist and cartographer, who in 1838-1839 led two government sponsored expeditions into the Minnesota and Missouri River regions. His 1843 map is considered the first authentic rendering of the region. His letters and journals provide a wealth of detail about the land and the Dakota. During the winter of 1836-37, he was a guest of Taliaferro's at the Indian Agency and also at the American Fur Company and home of Henry Sibley at Mendota (Nicollet 1976).

Samuel Pond, who arrived from the East Coast with his brother Gideon in order to do mission work but is considered by many to have produced the best ethnography of the

Mdewakanton Dakota -- a people that he knew well from living and traveling with them for much of the 1830s and 1840s (Pond 1940 and 1986). Fluent in their language and a careful observer, he has provided detailed descriptions of their material culture, social organization, subsistence and settlement patterns. His analysis of their social institutions and religious beliefs shows more cultural bias but the descriptions, with their attention to detail, are still invaluable and easily corroborated by more recent and balanced ethnographic studies of Dakota attitudes and spiritual beliefs.

Philander Prescott, who arrived from New York to work as a clerk at the sutler's store at Fort Snelling and continued as a fur trader, first with the Columbia and American Fur Companies at Land's End, then as an independent. After 1837, he was a fairly unsuccessful farmer on the St. Croix at what is now Prescott. Later employed as a government interpreter at the Agency, he lived near Fort Snelling (Pond 1986; Prescott 1966).

Stephen and Mary Ann Riggs, missionaries who, after a brief stay near Fort Snelling in 1837, were active at Lac qui Parle on the upper Minnesota River and became very familiar with the language and lifeways of the Dakota. Unlike the other missionaries to the Dakota, all men, Mary Riggs could more easily befriend the Dakota women and describe their way of life (S. Riggs, 1880; M.L. Riggs 1996; White and White 1998:172-177).

Henry Sibley, who from 1834 was in charge of the trading post at Mendota. As the general superintendant of the American Fur Company among the Dakotas, he also furnished traders at more remote locations with merchandise and accepted their furs in return. In addition, he assisted other travellers with supplies, escort and good advice. The Mendota post was the point of rendezvous for all the employees of the company and was visited by Indians "from all parts of the country". (Pond 1986:15; Sibley 1872).

Useful and quotable are also the recollections of some early pioneers who encountered and described the Dakota as they were in the 1840s and early 1850s, prior to their move to the reservations:

The memoirs of **John H. Stevens**, who was the first civilian to build a house on the west side of the Mississippi River (in 1849-50) and who played a prominent role in the founding and early growth of Minneapolis, wrote about its history and later, in his memoirs, described the area, the Dakota Indians and the early settlers of the mid-nineteenth century (Stevens 1890).

"Old Rail Fence Corners", a volume of 18th century recollections compiled by a committee of women (all "Daughters of the American Revolution") and edited by **Lucy Leavenworth Wilder Morris**. Many of the stories describe the area and the Dakota as they were in the 1840s and early 1850s (Morris 1914).

The cultural bias and Euro-American perspective that is present even in the more objective and professional of these historic accounts are, to a degree, balanced by other writers who present more of a Dakota perspective, among them:

Mary Eastman, daughter of Mdewakanton Dakota Chief Cloudman and wife of Captain **Seth Eastman**, who was stationed at Fort Snelling in 1830-31 and 1841-48, and during that time created an invaluable pictorial record of Dakota life in a series of sketches and paintings of their villages and everyday activities. She provided the written comments to a published collection of his images (Eastman 1853) as well as her own account of "the Life and Legends of the Sioux" (Eastman 1849).

Charles A. Eastman, a mixed-blood Wahpeton Dakota and grandson of Mary and Seth, who in the first of two autobiographies describes a traditional Indian childhood of the 1860s-70s and who also, often with his wife Elaine Goodale Eastman, wrote nine other books about the Sioux Indians (Eastman 1902 [1971]).

Considerably later but still useful is information provided by Dakota elders for Paul Durand's study of the Dakota "homeland" in the Twin Cities region (**Durand 1994**) and Carolyn Anderson's thesis on "Dakota Identity in Minnesota 1820-1995" (**Anderson 1997**).

Interpretive Potential

Two fairly recent studies have already made extensive use of these and other sources to discuss the history of Fort Snelling and the lower Minnesota River valley and then develop interpretive themes:

A cultural resource study and interpretive plan prepared for the Minnesota Department of Natural Resources Parks and Recreation Division by Historical Research, Inc. and the Institute for Minnesota Archaeology (**Roberts et al 1993**) -- a records and literature review of historic structures and archaeological resources for the Minnesota Valley Trail between Mendota and Le Sueur. While much of the information concerns later Euro-American history, the segments on "Ancient Native American Cultures", the fur trade and historic Dakota settlements are quite detailed and well referenced but need to be supplemented with the results of more recent investigations. Some of the recommended interpretive themes and suggestions for on-site interpretation are applicable also to the "upper bluff" with vicinity.

In "Fort Snelling in 1838: An Ethnographic and Historical Study", Helen and Bruce White propose an interesting approach to the interpretation of the fort by focusing on the demographic complexity around the military reservation and the Mississippi/Minnesota

River confluence in 1838 -- the year that treaties with the Dakota and Ojibwe opened areas east of the Mississippi to lumbering and farming and drastically increased the cultural diversity of the region (**White and White 1998**). In a series of well researched and referenced chapters, the study describes the makeup of and the interaction between:

- the Mdewakanton Dakota settlements;
- the Ojibwe and other Native Americans that intermittently were present at the Indian Agency and the trading posts;
- the Indian Agency, headed by Major Taliaferro, primarily concerned with the Dakota communities but also with some of the Ojibwe groups;
- a well established fur-trade community of mostly French and British origin: the Columbia Fur Company trading post at Land's End (1822-1827), the American Fur Company at Mendota (1820s-1840s), and Baker's post near Coldwater Spring (1820s-1830s);
- the U.S. military community at Fort Snelling, including relatives and visitors;
- several hundred non-Indian civilians: settlers, people working for/connected with the trading posts, support services for the military post or the Indian Agency;
- settlers present in the area already before but in increasing numbers after the 1837 Treaty: former fur traders and soldiers, lumber men (mostly from New England), settlers from the Red River Colony;
- missionaries intent on Christianizing and civilizing the Dakota Indians;
- visitors brought by fashionable Mississippi River steamboat tours, often curious about Indian lifeways (Blegen 1939, 1975).

While interpretation at the level of detail suggested by Helen and Bruce White may be too ambitious and impractical, the information and ideas they provide could be distilled into simpler sketches of each community and the way they coexisted and interacted, with an emphasis on the impact they had on the local Dakota and their way of life.

As the closest archaeological remains of a 19th century Dakota village -- the Kennealy Creek Village site -- is located across the Minnesota River and more than four miles south of Fort Snelling, there is, to date, no feasible locality for on-site interpretation. This does not preclude the possibility of an interpretive display that combines images by Seth Eastman with quotes from or condensed summaries of contemporary descriptions and with drawings, photographs or replicas of Dakota objects in the collections of the Minnesota Historical Society. Again,

depending on future use of that area, a spot along the least disturbed edge of the bluff may be a suitable location, in part because of the view it would provide of the valley and some of the areas that were important to the Dakota.

THE INDIAN AGENCY

Cartographic and Pictorial Information

To date, no structural evidence has been identified that can be interpreted as the remains of the Indian Agency. Efforts to even reconstruct its location have had to rely on a series of historic maps that illustrate the appearance of the upper bluff area during the time of the Agency, included here as Figures 16 through 21:

- An anonymous map from 1823 which shows the fledgling fort surrounded by open prairie, largely uninhabited except for a few Dakota villages and a road that connects the fort with the still untamed St. Anthony Falls (Anonymous 1823).
- Taliaferro's own map from 1835, which is more informative but less true to scale, and still portrays the area as largely tree-less. The agency enclosure encompasses three buildings -- two substantial stone houses and one smaller structure. The unfinished second council house is nearby but closer to the river bluff. There are several Dakota villages in the river valleys as well as the agricultural communities near Lake Calhoun and two trading posts, but the area that surrounds the Agency and the Council House is nothing but open prairie (Babcock.1945).
- A somewhat later map, drawn in 1837, which shows the Agency buildings and the Council house in more detail (E.K. Smith).
- A view from around 1850, shown on the cover of this report, which looks towards Fort Snelling and the Agency from the Mendota settlement across the Minnesota River, with the Agency near the left edge (Sergeant E.K. Thomas).
- Two very similar maps, drawn in 1839 and 1848, which both show the area southwest of the Agency as public gardens and meadows. Except for a trail near the edge of the bluff, that area appears open and natural (Thompson 1939; Colby 1848).
- An 1857 map which indicates that there has been little change over the two preceding decades (Eastman 1857).

The 1847 map, prepared by trained surveyors working for Seth Eastman, would appear to be the most accurate and comparisons with the grid that was established by the original government

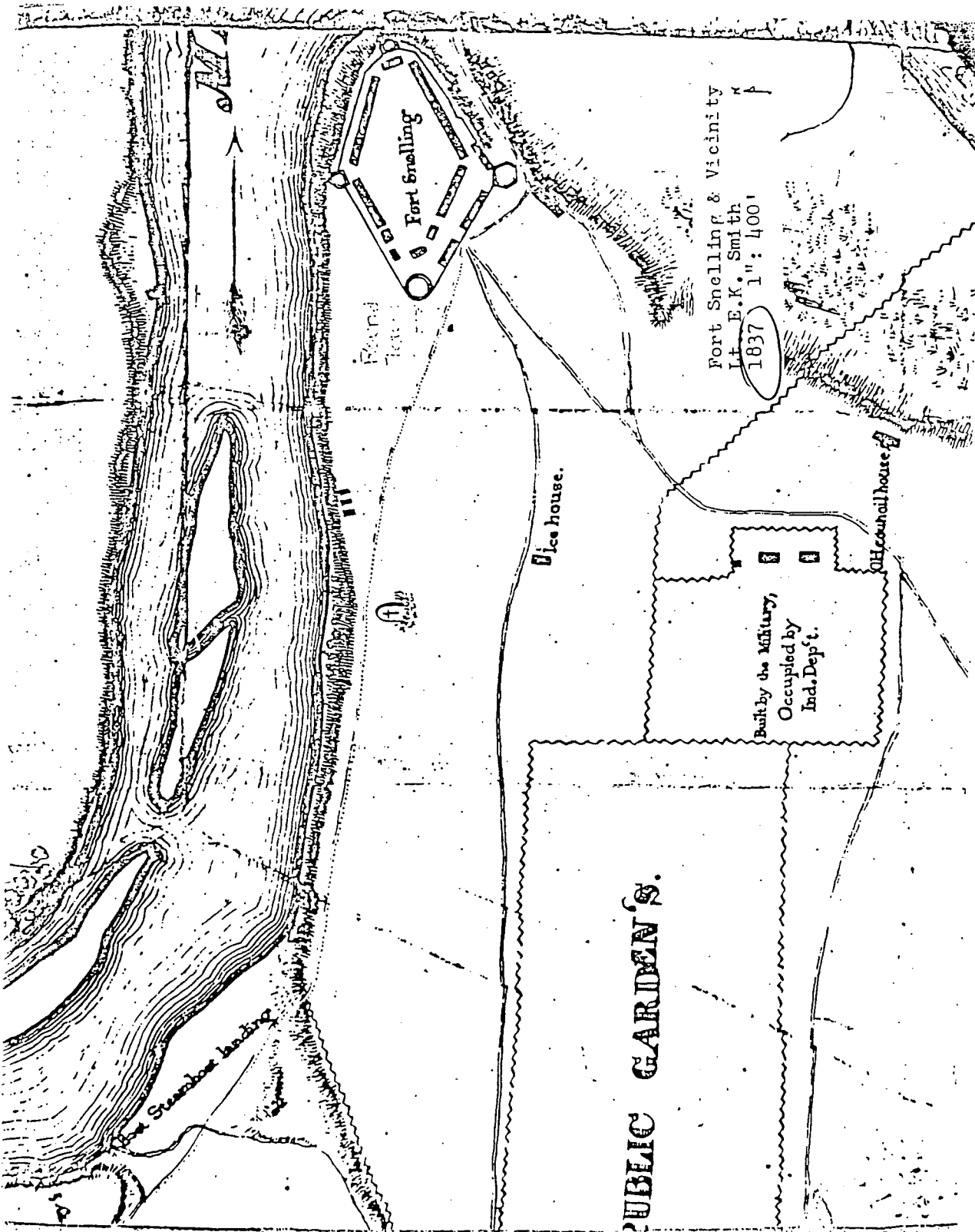


FIGURE 18. Fort Snelling and Vicinity in 1837.

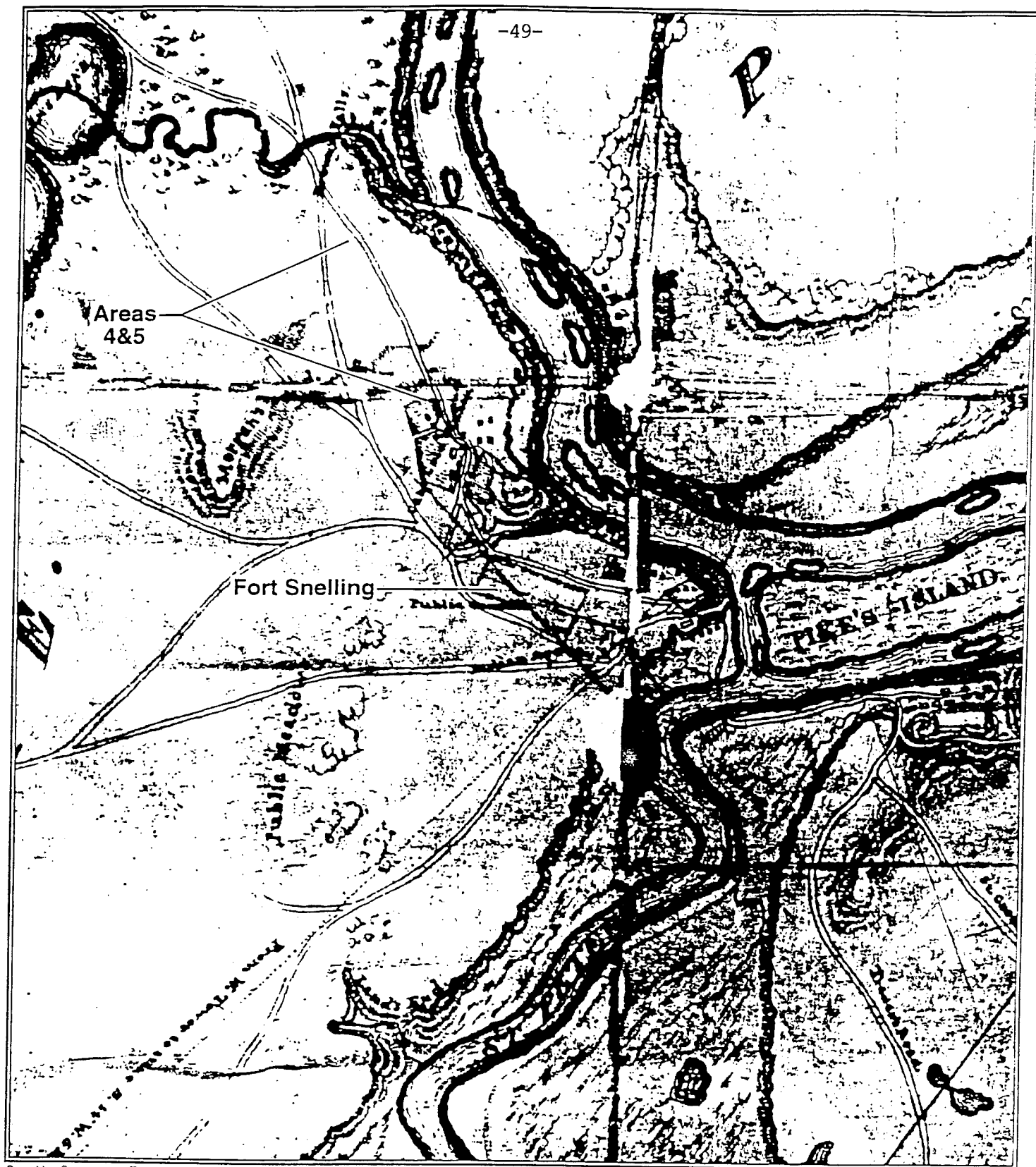


FIGURE 19.

Topographical Survey of the Military Reservation, Embracing Fort Snelling
(Thompson 1839)

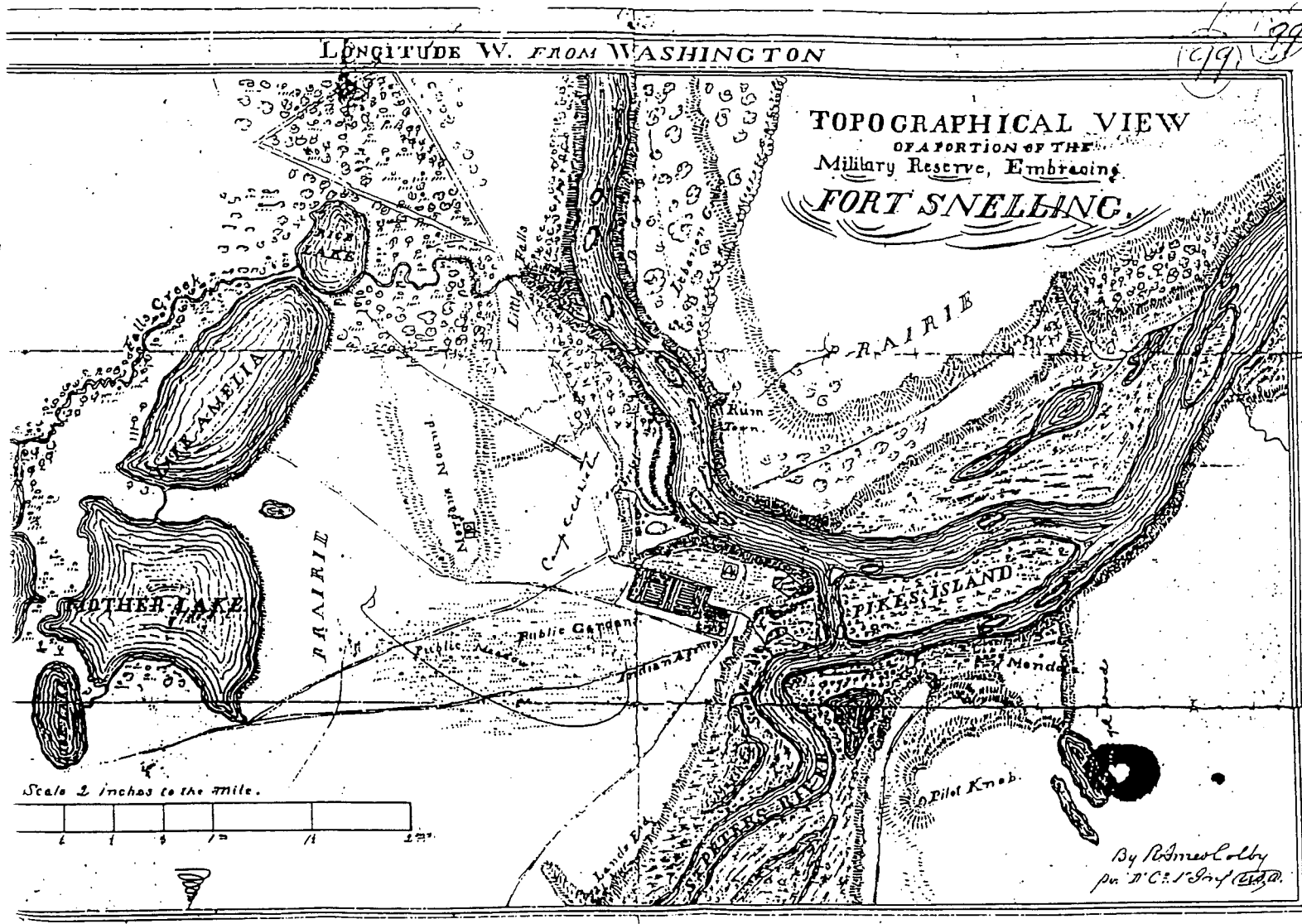


FIGURE 20.

Topographical View of Portion of the Military Reserve, Embracing Fort Snelling
(Colby 1848)

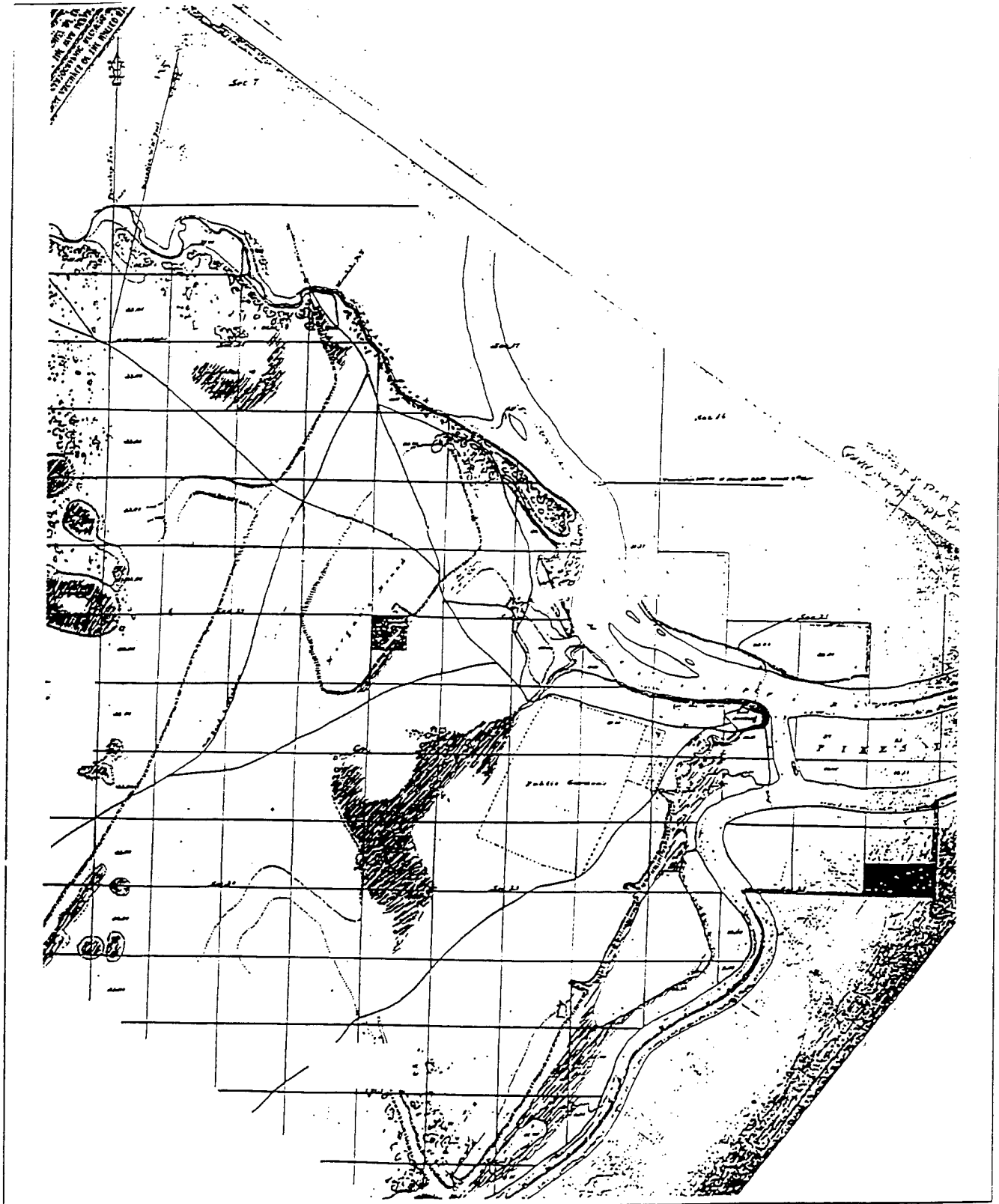


FIGURE 21.

Map of the Military Reservation of Fort Snelling, Minnesota.
(Eastman 1857)

survey show very minor discrepancies. Superimposed on a modern USGS topographic quadrangle, the Eastman rendering indicates that most if not all of the enclosure for the two main Agency buildings fell within the area that was taken out by the TH 5/TH 55 intersection (Figure 22). It is possible, however, that the southwestern end of the enclosure may have survived beneath the open, partly grassy, partly paved area by the old Gymnasium (Building 53).

A similar interpretation is given in Figure 23 where the information from Smith 1837, Colby 1848 and Eastman has been plotted on a 1939 topographic map of the Fort Snelling area (Works Progress Administration 1939). The same composite also shows the impact caused by the construction of TH 5, TH 55 and the intersection that links them.

Written accounts

The primary source would be Taliaferro's own records (Taliaferro 1820-1840 and 1894; White 1966) and those of frequent visitors (Pond 1986; Prescott 1966).

Interpretive Potential

If our reconstruction of the location of the Indian Agency is correct, there is little if anything left in the archaeological record. The place where it was, however, can still be viewed from the bluff edge north of Building 53 (the Gymnasium) -- the place already recommended as one possibility for the interpretation of the pre-contact period. A display about the Agency, placed in this spot, could serve as a poignant reminder not only of what was but of the forces that changed it.

A main function of the agency was to regulate the fur trade, an aspect of 19th century history that already is well interpreted at the Fort Snelling History Center and at the Mendota Historic District. Other aspects of Agency life, along with the responsibilities and achievements of Taliaferro as the Indian Agent, would be worth further interpretation next to the presumed site of this activity: the frequent presence of Native Americans at and around the agency; Taliaferro's role as a mediator and the often complicated dynamics between the Dakota and Ojibwe; his encouragement of missionary work and his efforts to promote education and agriculture among the Dakota (with references to the community at Lake Calhoun).

While we lack the physical evidence needed for accurate reconstruction, there are enough historic maps, pictorial renderings and written descriptions (Taliaferro 1820-40; Hansen 1958) to at least suggest, to a visitor, what the Agency compound may have looked like.

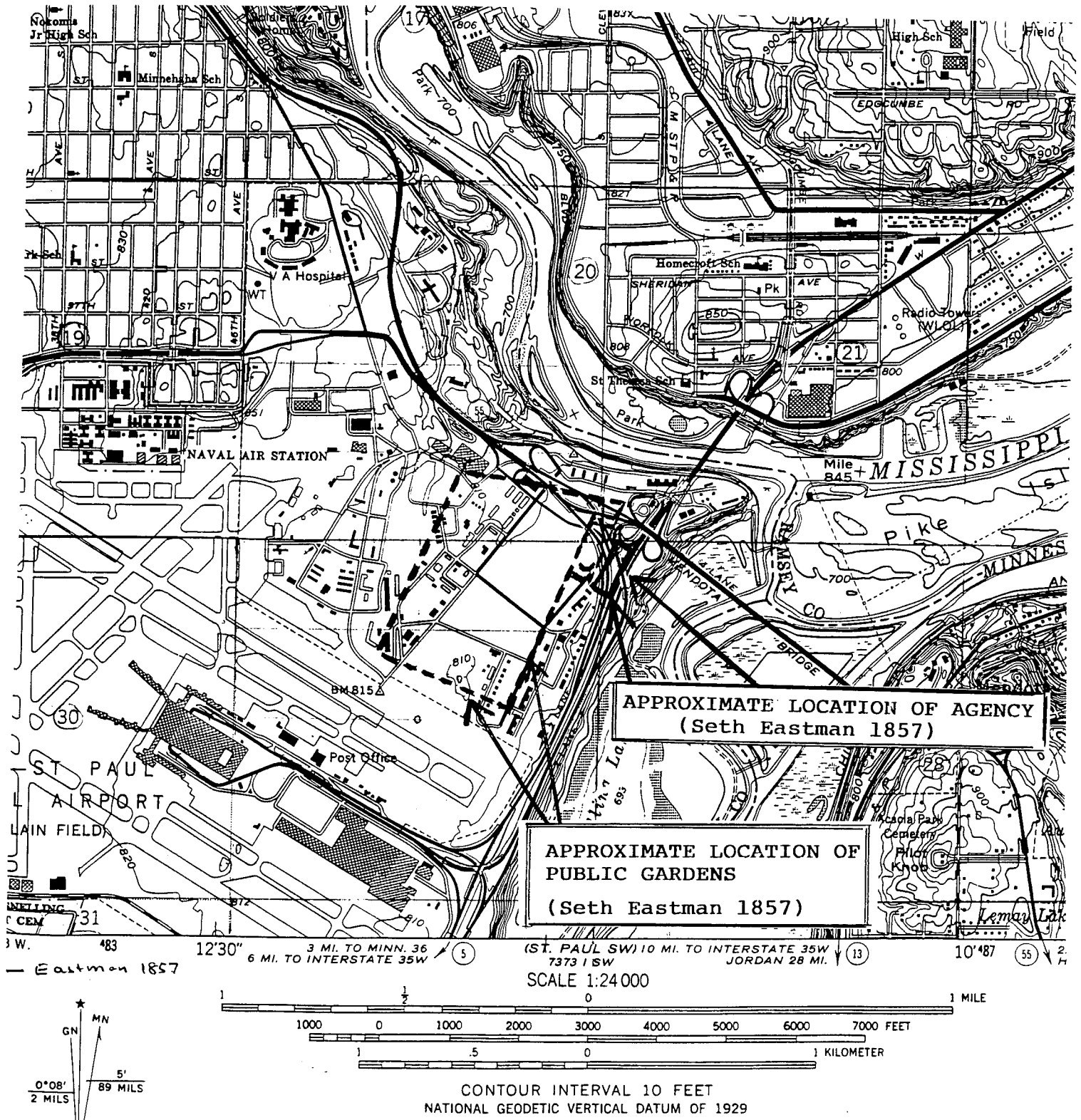


FIGURE 22.

Eastman's 1857 Map of Indian Agency and Public Gardens,
Superimposed on USGS Quadrangle for St. Paul West, Minn.

MISSISSIPPI

TH 55

FIGURE 23
Possible Locations of Agency
Superimposed on 1939 Map
of Fort Snelling

TH 5

Smith 1837
Colby 1848
Eastman 1857

fence along freeway

tested area

Athletic Field

Polo Field

Polo Practice Field

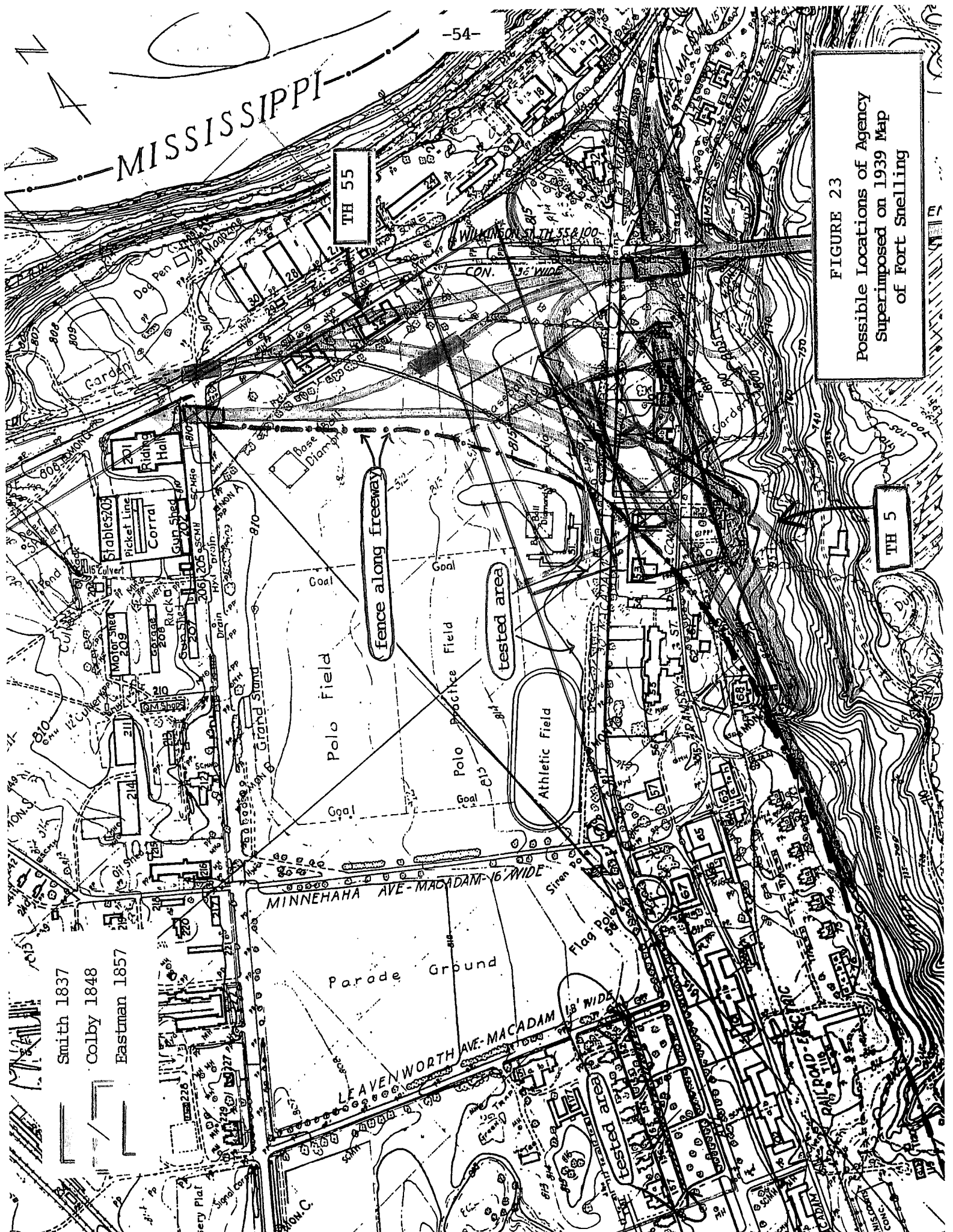
Parade Ground

MINNEHAHA AVE - MACADAM - 16' WIDE

LEAVENWORTH AVE - MACADAM - 18' WIDE

Flag pole

tested area



IMPACT OF THE FUR TRADE AND CHANGING FEDERAL POLICY ON THE EASTERN DAKOTA

Sequence of Events

The historic studies by Norene Roberts and by Helen and Bruce White both discuss the negative impact of the fur trade on the Native American community:

- the increasing dependency on the traders and the effect of the fur trade on their traditional subsistence activities;
- the diminishing returns from hunting during the 1840s and the fluctuating needs of the European market;
- the political and commercial rivalry between different traders and their frequently dubious methods and motives in the waning years of the fur trade (Roberts 1993:22-25; White and White 1998: 141-150).

Many of these problems were discussed already by early observers like Samuel Pond and they are a recurring theme in the voluminous journals and correspondence of Taliaferro (Pond 1986; Taliaferro 1820-1840 and 1894; White 1966).

Changes in the U.S. Governments Indian policy -- to a large extent dictated by, at first, the fur trade and then the need to open up new lands for lumbering and farming -- also had a profound impact on the Dakota and Ojibwe.

The Treaties of 1837 were drawn up "in keeping with a trend in national treaty making at that time, putting into practice the desire of the government to acquire Indian lands east of the Mississippi and apparently to consolidate Indian populations west of the river... (White and White 1998: 42).

While the ultimate goal may have been to open up the land for settlement, the treaties did not necessarily require the Indians to leave the area. The Ojibwe did not have to move their settlements from the ceded land and retained their hunting, fishing and gathering rights. The Dakota, however, gave up access to their hunting grounds east of the Mississippi. Their villages, on the other hand, could remain as most were located west of the river.

Following the ratification of the treaties in the spring of 1838, the Dakota gathered in large numbers around Fort Snelling and the Agency, waiting month after month for the promised annuities that would make up for low fur prices and the reluctance of the traders to provide goods on credit (White and White 1998:43). The pattern repeated itself during the following

decades. Many, among them the Pond brothers, felt that United States Indian policy had a very detrimental impact on the life of the Dakota and that the handout of government rations each fall had lessened their incentive to hunt and also discouraged them from further attempts at farming (Pond 1996:xvi and 180-185). Taliaferro, frustrated, resigned in 1840 (Taliaferro 1820-1840 and 1894; White 1966).

The problems with the fur trade worsened in the decade following Taliaferro's departure. By the time Euro-American settlement in the Minnesota River valley intensified in the early 1850s, many traders had recognized that revenues from the fur trade were of minor significance compared to the trade with the new settlers and that if trade with the Indians served a purpose, it was to guarantee the traders that by selling to the Indians they could get their share of the governments annuity payments.

With the ratification of the 1851 Treaties of Mendota and Traverse des Sioux, the Dakota had given up their lands west of the Mississippi for the promise of annuities and autonomy within designated reservations.

Within a decade, however, problems with traders and annuity distribution had worsened to the point of open hostility and the eruption of the U.S. Government-Dakota Conflict. Once troops dispatched from Fort Snelling had quelled the hostilities, some 1600 Dakota were interred on Pike Island below the fort before removal to a reservation on the Missouri River.

Interpretive Potential

Less is known about the Indian Agency during the decade that followed Taliaferro's departure and about his successors Amos Bruce, R.G. Murphy and Nathaniel McClean.

In 1849, the newly organized Department of the Interior was charged with the responsibility to oversee all Indian Agency operations. In 1850, the Agency at Fort Snelling was designated a "Sub Agency" by the U.S. Senate.

Traders at Mendota were still issued licenses for trade with the Dakota until 1853 when the latter had left the area for their reservations on the upper Minnesota River. The fate of the agency compound after that time is not clear. Visitors to the area report seeing the old stone buildings in later years but their use is not known (Hansen 1958:72).

Again, there is no archaeological justification per se for on-site interpretation of the events and trends that are summarized above and again, they would appear more appropriately dealt with at the Fort Snelling History Center and at the Mendota National Register Historic District. Even so, if a historic marker or an interpretive display is placed next to what was the location of the agency compound, it would be seem important to describe and discuss also the waning days of the Dakota presence at Fort Snelling.

REFERENCES

- Agricultural Experiment Station (AES), University of Minnesota
1973 *Minnesota Soil Atlas: St. Paul Sheet*. AES Miscellaneous Reports 120.
 St. Paul, Minnesota.
- Anderson, Carolyn R.
1997 *Dakota Identity in Minnesota, 1820-1995*. Ph.D. dissertation, Indiana
 University.
- Anonymous
1823 *A Topographical View of the Site of Fort St. Anthony at the Confluence of the
 Mississippi and St. Peter Rivers*.
 Manuscript Collection No. C22, Henry H. Sibley Papers,
 Map. No.7. Minnesota Historical Society, St. Paul.
- Anfinson, S. F.
1990 Archaeological Regions in Minnesota and the Woodland Period. In *The Wood-
 land Tradition in the Western Great Lakes: Papers presented to Elden Johnson*,
 edited by G. Gibbon, pp. 135-166. University of Minnesota Publications in
 Anthropology Number 4, Minneapolis.
- Anfinson, S. F. and H. E. Wright, Jr.
1990 Climatic Changes and Culture in Prehistoric Minnesota. In *The Woodland
 Tradition in the Western Great Lakes: Papers presented to Elden Johnson*,
 edited by G. Gibbon, pp. 213-232. University of Minnesota Publications in
 Anthropology Number 4, Minneapolis.
- Babcock, Willoughby M.
1930 Minnesota As Seen by Travelers: Up the Minnesota Valley to Fort Ridgely
 in 1853. *Minnesota History*. 11:161-184. Minnesota Historical Society, St. Paul.
- 1945 The Taliaferro Map of the St. Peter's Indian Agency. *The Minnesota
 Archaeologist*. 11:118.
- Berg, Richard E.
1998 *A Supplemental Report of a 1997 Archaeological Survey For a Proposed Water
 Tower and Water Lines on the Upper Sioux Reservation in Yellow Medicine
 County, Minnesota*. Bureau of Indian Affairs Minneapolis Area Office,
 Minneapolis.

Blegen, Theodore C.

1939 The "Fashionable Tour" on the Mississippi. *Minnesota History*, 20:377-396.

1975 *Minnesota: A History of the State*. Second edition. University of Minnesota Press, Minneapolis

Brower, Jacob W.

1898-1904 *Memoirs of Explorations in the Basin of the Mississippi*. 8 vols. H.L. Collins Co., St. Paul.

Callender, J.M.

1959 *New Light on Old Fort Snelling: An Archaeological Exploration, 1957-58*. St. Paul: Minnesota Historical Society.

Carver, Jonathan

1781 *Travels Through the Interior Parts of North America in the Years 1766, 1767, and 1768*. Reprinted in 1956 by Ross & Haines, Inc., Minneapolis.

Cavender, Chris C.

1988 The Dakota People of Minnesota. *Hennepin County History* 47 (3). Hennepin County Historical Society, Minneapolis

Christman, Abbey and Charlene Roise

2002 *From Frontier to Country Club: A Historical Study of the "New" Fort Snelling*. Hess, Roise and Company, Minneapolis.

Clouse, Robert A.

1996 *Fort Snelling, Minnesota: Intrasite Variability at a Nineteenth Century Military Post*. Unpublished Doctoral Thesis, University of Illinois at Urbana-Champaign.

1997 *Interim Report on Archaeological Excavations at the American Fur Company District Headquarters/Henry H. Sibley House (21 DK 31), Mendota, Minnesota*. Minnesota Historical Society, Archaeology Department, St. Paul.

1999 *Archaeological Investigations at the Hypolite Dupuis House, Mendota, Minnesota*. Minnesota Historical Society, Archaeology Department, St. Paul.

Clouse, Robert A. and Elizabeth K. Steiner

1998 *All That Remains: A Study of Historic Structures at Fort Snelling, Minnesota*. Minnesota Historical Society, Archaeology Department, St. Paul.

- 1999 *An Archaeological Assessment of Proposed ISTE A-funded Development at Fort Snelling, Minnesota (S.P. 94-100-17).* Minnesota Historical Society, Archaeology Department, St. Paul.
- Colby, R. Ames
- 1848 *Topographical View of Portion of the Military Reserve Embracing Fort Snelling.* Records of the Office of the Chief of Engineers, RG 77, Sheet No. US 324-99, National Archives, College Park, Maryland.
- Durand, Paul
- 1982 *Ta-Ku-Wa-Kan Ti-Pi, The Dakota Homeland in the Twin Cities Metropolitan Area.* Prior Lake, Minnesota: Published by author.
- Eastman, Charles
- 1971 *Indian Boyhood.* Dover Publications, Inc. New York. Originally published in 1902.
- Eastman, Mary
- 1849 *Dakotah, or Life and Legends of the Sioux.* John Wiley, New York.
- 1853 *The American aboriginal portfolio.* Lippincott, Grambo and Company, Philadelphia.
- Eastman, Seth
- 1857 *Map of the Military Reservation of Fort Snelling, Minnesota.* Records of the Office of the Chief of Engineers, RG 77, Sheet No. 20-4, National Archives, College Park, Maryland.
- Featherstonehaugh, George W.
- 1970 *A Canoe Voyage up the Minnaw Sator.* Two volumes. Originally published by Richard Bently, London. Reprinted in 1970 by Minnesota Historical Society, St. Paul.
- Folwell, William W.
- 1956 *A History of Minnesota.* Volume 1. Minnesota Historical Society, St. Paul. Originally published in 1921-1923.
- George, Douglas
- 1999 *Dredge Spoil Site Project, Fort Snelling State Park, Dakota County, Minnesota.* Minnesota Historical Society, Minnesota State Park Cultural Resource Management Program, St. Paul.

Gibbon, Guy with Jan Streiff

- 1990 Elden Johnson, an Appreciation. In *The Woodland Tradition in the Western Great Lakes: Papers Presented to Elden Johnson*. University of Minnesota Publications in Anthropology Number 4, Minneapolis.

Gonsior, LeRoy, Leslie Peterson, Robert Clouse and Stacy Allan

- 1996 *Archaeological Investigations of the Mazomani/Kvistero Homesite (21 YM 50) Upper Sioux Agency State Park, Yellow Medicine County, Minnesota*. Minnesota Historical Society, Archaeology Department, St. Paul.

Grimm, E.

- 1983 Chronology and Dynamics of Vegetation Change in the Prairie-Woodland Region of Southern Minnesota, U.S.A. *New Phytologist* 93:311-350.

Hansen, Marcus L.

- 1958 *Old Fort Snelling: 1819-1858*. Ross & Haines, Inc., Minneapolis.

Harrison, Christina

- 1996 *The Archaeological Resources of Minneapolis-St. Paul International Airport: with Vicinity: Summary Report on the 1992-1995 Investigations*. Report prepared for the HNTB Corporation and the Metropolitan Airports Commission. Archaeological Research Services, Minneapolis.

- 2000 *Report on Archaeological Investigations Conducted within the Upper Bluff Segment of Fort Snelling State Park, Hennepin County, Minnesota*. Prepared for the Minneapolis Park and Recreation Board. Archaeological Research Services, Minneapolis.

Johnson, Craig M.

- 1992 Phase III Archaeological Investigations at Sites 21SC36 and 21SC37, Scott County, Minnesota. *Reports of Investigations No. 219*, Institute for Minnesota Archaeology, Minneapolis.

Johnson, Elden

- 1974 Lloyd A. Wilford and Minnesota Archaeology. In *Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford*. Minnesota Prehistoric Archaeology Series No. 11. Minnesota Historical Society, St. Paul.

Keating, W. H.

- 1825 *Narrative of an Expedition to the Source of the St. Peter's River, Lake Winnepeek, Lake of the Woods, &c, Performed in the Year 1823*. London. Reprinted by Ross & Haines, Inc., Minneapolis, 1959.

Long, Stephen H.

- 1978 *The Northern Expeditions of Stephen H. Long: The Journals of 1817 and 1823 and Related Documents.* Edited by Lucile M. Kane, June D. Holmquist and Carolyn Gilman. Minnesota Historical Society Press, St. Paul.

Marschner, F.

- 1974 *The Original Vegetation of Minnesota: Compiled from U.S. General Land Office Survey Notes.* North Central Forest Experiment Station. St. Paul. (Map reprinted from original published in 1930.)

Morris, Lucy Leavenworth Wilder, Compiler

- 1914 *Old Rail Fence Corners.* Reprinted in 1976 by Minnesota Historical Society Press, St. Paul.

Neill, Rev. Edward D.

- 1882 *History of the Minnesota Valley,* in publication compiled by George E. Warner and Charles M. Foote. North Star Publishing Company, Minneapolis.

Neill, Edward D. and J. Fletcher Williams

- 1881 *History of Hennepin County and the City of Minneapolis, Including the Explorers and Pioneers of Minnesota and Outlines of the History of Minnesota.* North Star Publishing Company, Minneapolis. Reprinted by Johnson, Smith & Harrison, Printers, Minneapolis, 1977.

Nicollet, Joseph N.

- 1976 *Joseph Nicollet on the Plains and Prairies: The Expeditions of 1838-39 with Journals, Letters and Notes on the Dakota Indians.* Edited by Edmund C. Bray and Martha Coleman Bray. Minnesota Historical Society Press, St. Paul.

Nute, Grace

- 1930 Posts in the Minnesota Fur-Trading area, 1660-1855.
Minnesota History, 11: 353-385.

Perkl, Bradley E., James Lindbeck, Scott Buskey and Barbara Mitchell

- 2001 *Phase I and Phase II Cultural Resource Investigations: The Metropolitan Airports Commission Drainage Improvement Project in Hennepin County, Minnesota.* URS/BRW, Inc., Minneapolis.

Peterson, Leslie D,

1977 *Investigation of the Black Dog Village and Burial Sites.* Unpublished report, with amendment. Minnesota Historical Society, St. Paul.

1978 *The Minnesota Trunk Highway Archaeological Reconnaissance Survey: Annual Report -1977.* Minnesota Historical Society, St. Paul.

Peterson, Leslie D. and William J. Yourd

1983 *The Minnesota Trunk Highway Archaeological Reconnaissance Survey: Annual Report -1983.* Minnesota Historical Society, St. Paul.

Peterson, Leslie D. , Kent Skaar, and Wanda Watson Radford

1992 *The Minnesota Trunk Highway Archaeological Reconnaissance Study Annual Report -1991.* Minnesota Historical Society, St. Paul.

Peterson, Leslie D. , David J. Mather, and Wanda Watson Radford

1993 *The Minnesota Trunk Highway Archaeological Reconnaissance Study Annual Report -1992.* Minnesota Historical Society, St. Paul.

Pike, Zebulon Montgomery

1805-07 *The Expeditions of Zebulon Montgomery Pike to the Headwaters of the Mississippi River, through Louisiana Territory, and in New Spain, During the Years 1805-6-7.* Eliot Coues editor. Reprinted in 2 volumes by Ross & Haines, Minneapolis, 1965.

Pond, Samuel W.

1940 Two Missionaries in the Sioux Country. *Minnesota History* 21:15-32, 158-175 and 272-283.

1986 *The Dakota or Sioux in Minnesota As They Were in 1834.* First published in 1908. Reprinted with an introduction by Cary Clayton Anderson (pages vii-xxi). Minnesota Historical Society Press, St. Paul.

Prescott, Philander

1966 *The Recollections of Philander Prescott, Frontiersman of the Old Northwest, 1819-1862.* Edited by Donald Dean Parker. University of Nebraska Press, Lincoln.

Radford, David S. and Douglas C. George

1992 *Minnesota State Park Cultural Resource Management Program: Annual Report 1991.* Minnesota Historical Society, St. Paul.

- 1993 *Minnesota State Park Cultural Resource Management Program: Annual Report 1992.* Minnesota Historical Society, St. Paul.
- 1994 *Minnesota State Park Cultural Resource Management Program: Annual Report 1992.* Minnesota Historical Society, St. Paul.
- 1997 *Minnesota State Park Cultural Resource Management Program: Annual Report 1996.* Minnesota Historical Society, St. Paul.
- Riggs, Maida Leonard, editor
- 1996 *A Small Bit of Bread and Butter: Letters from Dakota Territory, 1832-1869.* Ash Grove Press, South Deerfield, Massachusetts.
- Riggs, Stephen R.
- 1880 The Dakota Mission. *Minnesota Historical Collections*, 3: 115-138.
- Roberts, Norene, with Clark Dobbs, Kim Breakey, Craig Johnson, John Muehlhausen and Howard Mooers
- 1993 *A Lower Minnesota River Valley Cultural Resource Study and Interpretive Plan for the Minnesota Valley State Park and Trail.* Historical Research, Inc. and Institute for Minnesota Archaeology, Minneapolis.
- Roise, Charlene K. and Christina Harrison
- 2001 *Research Design: Historical Assessment of Fort Snelling Focusing on the "New Fort" and Native American Uses of the Land.* Hess, Roise and Company and Archaeological Research Services, Minneapolis.
- Schoolcraft, Henry R.
- 1821 *Narrative Journal of Travels through the Northwestern Regions of the United States, Extending from Detroit through the Great Chain of American Lakes, to the Source of the Mississippi River ... in the Year 1820.* E.& E. Hosford, Albany.
- Science Applications International Corporation (SAIC) and Archaeological Research Services
- 1995 *Archaeological Survey Report, Minneapolis-St. Paul International Airport Air Reserve Station, Minneapolis, Minnesota. :* SAIC and Archaeological Research Services, Boise, Idaho and Minneapolis, Minnesota.
- Sibley, Henry H.
- 1872 *Reminiscences: Historical and Personal.* *Minnesota Historical Collections*, 1: 457-485.

Spector, Janet D.

- 1993 *What This Awl Means: Feminist Archaeology at a Wahpeton Dakota Village.*
Minnesota Historical Society Press, St. Paul.

Stevens, John H.

- 1890 *Personal Recollections of Minnesota and Its People, and Early History of Minneapolis.* Minneapolis, Minnesota.

Taliaferro, Lawrence

- 1835 "Map of the Fort Snelling Area" in *Fort Snelling: Colossus of the Wilderness*, Steve Hall, author.
Minnesota Historical Society Press, St. Paul.

1820-40 Diaries and letters, on file at the Minnesota Historical Society, St. Paul.

1894 Autobiography. *Minnesota Historical Collections* 6: 189-255.

Thompson, J.L.

- 1839 *Topographical Survey of the Military Reservation Embracing Fort Snelling.*
Made by order of the War Department, done at Fort Snelling October-November
1839 by Order of Major Plympton.
Manuscripts Collection No. C22, Minnesota Historical Society, St. Paul.

Trygg, J.W.

- 1969 *Composite Map of United States Land Surveyor's Original Plats and Field Notes.*
Minnesota Series, Sheet 7. J.W. Trygg, Ely, Minnesota.

White, Helen McCann

- 1966 *Guide to a Microfilm Edition of The Lawrence Taliaferro Papers.*
Minnesota Historical Society, St. Paul.

White, Helen and Bruce

- 1998 *Fort Snelling in 1838: An Ethnographic and Historical Study.*
Turnstone Historical Research, St. Paul, Minnesota.

Wilford, Lloyd A.

- 1944 Indian Burials Near Black Dog's Village. *The Minnesota Archaeologist.*
July 1944:92-97.

Winchell, N.H.

- 1911 *The Aborigines of Minnesota.* Minnesota Historical Society, St. Paul.

Works Progress Administration

- 1939 "*Fort Snelling and Environs*", prepared under the direction of Captain D. Ashton of the 3rd Infantry, U.S. Army.

Wright, H.E. Jr.

- 1972a Physiography of Minnesota. In *Geology of Minnesota: A Centennial Volume*, edited by P.K. Sims and G.B. Morey, pp. 559-580. Minnesota Geological Survey, St. Paul.
- 1972b Quaternary History of Minnesota. In *Geology of Minnesota: A Centennial Volume*, edited by P.K. Sims and G.B. Morey, pp. 515-547. Minnesota Geological Survey, St. Paul.
- 1974 The Environment of Early Man in the Great Lakes Region. In *Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford*, edited by E. Johnson, pp. 8-14. Minnesota Prehistoric Archaeology Series Number 11. Minnesota Historical Society, St. Paul

Also, on front cover:

Sergeant E. K. Thomas

- ca. 1850 *View of Fort Snelling*. Courtesy of Minneapolis Institute of Arts.