



*Aerial view of Fort Snelling, Saint Paul Dispatch and Pioneer Press Photograph,  
November 25, 1959 (Minnesota Historical Society Collection)*

# **New Fort Snelling Visitor Center: Response to Questions Raised during the Section 106 Consultation Process**

**Prepared by the  
Minnesota Historical Society**

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This document responds to written comments made to the Minnesota Historical Society by the Mississippi National River and Recreation Area (MISS) in a letter dated October 11, 2007, and discussions during a conference call on October 19 involving representatives from the Society, the Minnesota State Historic Preservation Office, and the Advisory Council on Historic Preservation. This response is organized into eleven sections, designated A-K.

## **A. Status of the Existing Visitor Center at Historic Fort Snelling**

MISS asks why the current facility can no longer be used for that purpose or modified to provide additional functionality.

The current Fort Snelling visitor center is a two-story structure that is largely underground, although the earth mounding above the upper floor rises six to eight feet above grade. It houses offices and files of the permanent site staff, ticketing and a gift shop, an auditorium that is used for visitor orientation, especially for school groups, and public programs, a large meeting room, the staff offices and labs of the Society's seven-person Archaeology Department, storage of archaeological collections, and space rented to the State Department of Administration for the offices and files of the State Archaeologist.

As described in Appendix A and Appendix B of the Society's August 30, 2007 "Documentation for Consultation," the Society's original intention was to expand and remodel this building to meet its expanded requirements. Mindful of the long history of problems with water intrusion that began even before construction of the building was completed—a sump pump has been running continuously since the building opened—the Society engaged the firm Collaborative Design Group and its mechanical consultant Engineering Design Initiative to evaluate the feasibility of this course of action. They studied the building during the summer and fall of 2004 and submitted their conclusions in January 2005. A copy of their full report has been submitted separately. Their findings were these:

1. The current visitor center has suffered significant problems from water intrusion since it was constructed in 1980. "The end result is that the building as a whole has relative high humidity and shows significant water damage in many areas. There is no clear evidence whether the ongoing water infiltration is due to static pressure in the bluff, the location of the building on an underground spring, the fact that the building roof is the lowest point on the site, or more likely a combination of issues."
2. The intrinsic problems presented by the building's placement and underground location mean that despite the best attempts at rehabilitation, "the underground structure will begin its accelerated decline again and MHS would be faced with this same discussion in 15 years." No permanent remedies are available, only temporary and expensive patches.
3. The engineers concluded that any attempt at rehabilitation "would be throwing good money after bad."

The building's condition has continued to deteriorate since that report. Water problems required cleaning and mold abatement of the HVAC system in 2005. The passenger elevator failed in August 2007 due to water infiltration that destroyed the controls. They have had to be replaced and a new waterproof ceiling installed in the elevator control room. In a separate incident, the HVAC/lighting controls also failed, requiring new control software, and a new computer and monitor. The ventilation pit sump pump and drain failed this past October requiring a new pump and piping. The pit floor drain is no longer repairable due to a collapsed drain line. During the week of October 15, 2007, persistent but not unusually heavy rains resulted in thirty active leaks in the building. Two sump pumps are now running continuously in the lower level and elevator shaft to evacuate water.

Because of public safety concerns about the stability of the entrance concourse due to the volume of leaking water and the visible damage to the ceiling, the Society engaged an engineering firm on October 19, 2007 to remove the earth above the building in that area to test its structural integrity.

The Society has been advised that staff who are sensitive to mold should be relocated. Given public awareness around "sick buildings," some potential visitors will undoubtedly choose to avoid the visitor center. The sight of water dripping through the ceiling into buckets in the entry level and pouring down the inside of doors, as occurred at a meeting during the October 2007 National Trust for Historic Preservation conference, are unsightly evidence of what visitors might well perceive as a disregard for basic infrastructure maintenance and a lack of concern for public health and safety.

Certainly, these moisture problems and the associated humidity are completely unacceptable in a building where staff, computers, files of historically significant information, archaeological artifacts, and permanent collections are located.

Inasmuch as all the evidence suggests that these problems are inherent and unsolvable in any permanent way, the Historical Society simply cannot in good conscience waste public money on attempts to redeem this building.

## **B. Requirements for a New Visitor Center**

Since the beginning of this project, the Historical Society has identified six expectations for a new visitor center, wherever it might be located.

1. The Society is committed to expanding the scope of the historical stories interpreted at the Fort. The Society's Indian Advisory Committee has advocated for such an interpretive change for many years, an interest that was confirmed by a variety of stakeholders on September 20 and October 17, 2007 during the first two in a series of meetings held by the Society to solicit public input on the program. This message was also strongly voiced in the public comments received during the MISS open house on September 11, 2007. The Native American and African American stories will be particularly significant.

2. The Society is committed to attracting more visitors to the site so that all Minnesotans might know and understand the importance of this place which is why it is being preserved. Attendance at Historic Fort Snelling has been in steady decline since the bicentennial in 1976, when it drew 158,894 visitors. The following year, that number dropped to 113,384. While there was a slight improvement in 1984, when the fort attracted 135,207 visitors, attendance declined to 105,625 in 1988, 99,950 in 1992, 85,728 in 1999, and 72,756 in 2004. On the other hand, the public response in 2004 when state budget reductions threatened a temporary closing of the fort indicates an extremely high level of public interest in the site. New programs for a wider audience are needed to draw new and return visitors. Some of these programs will occur in the frontier fort, some outdoors, and some, requiring more controlled environments, will have to occur in purpose-designed interior spaces. Modifications to the frontier fort as part of the proposed project will permit more school programs to occur there, further enhancing visitor appeal.

3. The Society is committed to managing the site in a manner that will generate sufficient revenue to assure its continued operation with a meaningful level of public programming. Operations at all the Society's sites and museums are far more dependent today on revenue from admissions, rentals and sales than previously.

MISS challenges the importance of such financial considerations in its comments on the "Documentation for Consultation": "The programmatic needs for food service, facility rental and even extra classroom facilities are not fundamentally tied to the needs of the historic site as an interpretive experience, but to the needs of the facility to support its program costs with additional revenue." As with the Park Service's own sites, features such as food service and appropriate spaces for classes are fundamental and inseparable components of a positive visitor experience. Moreover, the income from these sources is not "additional revenue," but is critically important to the very preservation of this National Historic Landmark.

4. The Society is committed to applying its extensive knowledge to create the most effective and efficient facility possible. This expertise reflects years of experience operating the twenty-six sites and museums and the recent design and construction of four successful museums and interpretive centers: the Minnesota History Center, Mill City Museum, the North West Fur Company Post, and the Forest History Center. Together, these venues attract over one million visitors annually. The Society's historic sites and exhibits staff command the highest national respect within their respective professions.

5. The Society is committed to preserving the built environment, as witnessed by thirty plus years of leadership in the historic preservation movement in Minnesota and by a strong institutional commitment to the respectful operation and management of the five National Historic Landmarks and the other National Register properties the Society preserves and interprets. In a typical year, the Society initiates and manages more than \$7 million in projects to preserve the historic structures it owns or manages and preserves. The projects are conducted with the strongest regard for the Secretary of the Interior's Standards and Guidelines. Historic Fort Snelling demands the same level of attention and respect.

6. The Society is committed to a program that connects visitors more closely to the Mississippi

River, the fort's raison d'être, and begins to weave back together the connection of the remaining historic buildings with the Upper Post. These desiderata are not new. They were identified in the 1993 reuse study for the cavalry barracks undertaken by MnSHPO. The authors of that report, a blue-ribbon task force of seasoned preservation professionals, noted several problems with the placement of buildings and visitor circulation when they wrote: "Visitors leaving the History Center cannot see the fort until rounding the corner of Building 18. Going and coming, they miss the view of the Mississippi because the buildings make the route along the top of the bluff inconvenient and obscure. Many use the street instead of the sidewalk, because it appears to be the most direct route to the fort." They continue: "Walking paths between the History Center and the fort would be obvious and convenient to the visitor and would lead them along the bluff and beside interpretive settings."

In addition to basic visitor way-finding, creating a vista that draws the eye to fort, the key attraction of the site, is an important element in creating a successful experience. This concept was embraced by the National Park Service at the Fort McHenry National Monument and Historic Shrine: the new visitor center there was deliberately placed where a visitor, looking out from a spacious and very modern building, has a dramatic view of the large American flag that is the central historical icon associated with that site. It is surprising, therefore, that MISS questions the desirability of creating a visual connection between the new Fort Snelling visitor center and fort: "The [Society's] report asserts that not seeing the frontier fort from the existing visitor center is a problem. We are not convinced this is a problem."

### ***Specific Design Considerations***

These goals and the specific programmatic requirements derived from them are outlined in the "Fort Snelling Visitor Center Predesign Document" submitted to the State Department of Administration in March 2007. The facilities planned for the new visitor center are no different from those the Society has incorporated into its other centers. Indeed, they are basic and will be familiar to anyone who has visited historic sites across the country like the National Park Service's own new visitor center, previously referenced, at the Fort McHenry National Monument and Historic Shrine in Baltimore. These features include rest rooms, a modest number of staff offices, a ticketing area and gift shop (adjacent so as to reduce staffing costs), a public meeting room, a gracious lobby of sufficient space to accommodate arriving groups and possible after-hour rental events, storage areas for retail inventory and chairs and tables, a space for caterers to set up for rental events, an unobtrusive loading dock that will accommodate deliveries of all sorts, and a gallery for exhibitions.

In its comments, MISS questions the need for the proposed gallery, saying that "Providing sufficient interpretation to enhance those experiences doesn't require large gallery space or even that a central visitor center be the exclusive gateway into the site experience." The Society has never suggested that all visitors will begin their experience there or that all interpretation will have to occur in that environment. Indeed, it cannot given the modest size of the gallery, 3,000 square feet. This size is comparable to recently constructed spaces at the Forest History Center and the North West Fur Company Post. It is far smaller than the 12,000 square feet at Mill City Museum or 40,000 feet at the History Center Museum.

MISS suggests further that the proposed galleries must surely be driving up the cost of the facility when it writes: “We believe it is too early to dismiss as unaffordable the adaptive reuse of the historic structures because of the high cost of meeting building requirements for a state of the art history museum.” This inference about the cost of the Society’s building requirements, repeated several times by MISS in its comments, is unwarranted. In an age where technologies become rapidly obsolete, state of the art means flexibility and simplicity of design to create a sustainable environment rather than complexity and expense.

## **C. Project Budget**

The Society submitted a capital request to the legislature in 2006 for \$22 million to the Fort Snelling revitalization project. While full funding was not received, the legislature did appropriate \$1.1 million for project design and Governor Pawlenty included the balance in his 2008 planning estimate. In June 2007, the Society submitted its capital budget request to the Minnesota Department of Finance for consideration during the 2008 session. The amount requested was \$24.8 million, the balance from 2006 adjusted for construction escalation over the intervening two years. In recent discussions with the legislative leadership and during committee visits to the site, the Society was given clear indication that this amount was the absolute maximum it could expect to receive from the State for the project. Additionally, the Society noted in its capital request that in the 2009 legislative session it will seek an additional ongoing annual appropriation of \$400,000 to support the program. Even if the State funds the full amount requested, the Society expects that it will have to raise an additional \$2 million in private support to cover costs not eligible for bond funds including the project predesign, relocation costs, market research, legal fees and consultants. Professional research indicates that even that amount may exceed what the Society might expect to raise in private support for this project given current trends in the philanthropy of individuals, corporations, and foundations. These fiscal realities have caused the Society to carefully adjust the scope and cost of the project to a level that may be supported initially and sustained over time. That would be \$28.9 million coming from three sources: funds already received the state legislature (\$1.0 million in 2005 and \$1.1 million in 2006), an additional \$24.8 million legislative request in 2008, and \$2 million from private sources.

## **D. Building 18 as a Visitor Center**

Given the programmatic objectives and the budgetary constraints previously described, there would be three major problems with the use of Building 18 as the new visitor center. Modifications to create a suitable gallery would require major alterations to defining building characteristics, namely the 10-foot-high ceilings and grid of supporting columns on 12-foot centers. These modifications, along with the need to create a suitable external lobby, would result in a significant adverse effect under the Secretary of the Interior’s Standards. Finally the cost of this plan would exceed the likely available funding by approximately \$4 million.

MISS questions the need for a gallery or at least one of this size, configuration, and functionality. They suggest that the Society consider the example of other, unspecified institutions that

presumably have built galleries within existing historical structures. Without specific examples, it is difficult to respond to this comment. The Society anticipates that this exhibition gallery space must not only serve current needs but also those of future generations, well beyond the expected lifespan of any contemporary exhibition effort. While twenty years may be judged the absolute maximum life expectancy of a major exhibition, the Society expects any museum building will have to last at least three to four times longer in order to justify the public investment in its construction. By way of illustration, an exhibit that succeeded in looking fresh and relevant to the public after twenty years would be considered an extremely rare success by museum standards, while a permanent museum structure that fails to prove functional after only twenty years would be judged a terrible failure by any measure.

For these reasons any responsible articulation of interior museum spaces must be flexible enough to accommodate at least three or four complete exhibition renovations over the life of the building. A flexible approach bears in mind that the exhibition medium is likely to change dramatically over the next quarter century, just as it has over the previous twenty-five years. Indeed, several exhibitions in the Historical Society's historic sites network are already on their second iteration replacing work created in the 1970s and 1980s. Exhibit galleries originally created with the least flexible designs have in some instances been completely gutted and remade (Charles Lindbergh Boyhood Home visitor center, where entire floor plates were remade and visitor flow through site and visitor center was essentially entirely reversed) or have been substantially reconfigured (Lower Sioux Agency, Forest History Center).

Through these experiences and through consultations with other museum operators, the Society has learned that this essential flexibility is most impeded by irremediable space constraints. These include tight configurations of load bearing walls and columns, low ceiling heights, blocked access to exterior loading areas by these configurations, visitor circulation constraints, limited load-bearing floor capacity, and excessive natural light. For example, the interpretive display of large and heavy equipment (e.g., the traction engine at Mill City Museum or the boxcar at the History Center) requires reinforced floors, clear spans for positioning maneuverability, ceiling heights tall enough to accommodate the height of both the object and the lighting grid necessary to illuminate it, and clear, direct access to exterior loading and unloading zones. Relatively open spaces optimize the flow of visitor traffic and the coherency of interpretation. In addition to precluding the display of tall artifacts, low ceiling heights also complicate lighting design considerably; this results in oblique lighting angles which, in turn, increase glare and shadow, interfering with visibility and legibility of exhibition elements. Tight column grids not only limit display to those exhibit elements with a relatively small footprint, they also contribute to shadow problems, constrain visitor pathways and block viewing angles.

Media presentations (e.g., the West Engine House theater at Mill City Museum) require sufficient ceiling height to accommodate riser seating audiences in increments of thirty (a school class size—a typical school bus brings sixty children). Media presentations also require viewing angles unblocked by load-bearing columns and walls. This consideration is most crucial. Given the broad historical scope of the story the Society plans to tell at the new Fort Snelling visitor center and the relatively small space committed to exhibition, the most practicable interpretive approach will likely be a video, film or multimedia show requiring theater-style riser seating, clear views, and a “black box” space excluding natural light. This makes the open and

flexible nature of the space especially critical. This area will also likely do double duty as a space for public programming. For these reasons, a fairly high-capacity space with bench seating, not unlike that at the Mill City Museum West Engine House theater, would seem most optimum for the near term.

This approach to design is not simply the preference of the Society's staff but represents current best practices as described in the museum professional literature. In the standard text on the subject, *The Manual of Museum Exhibitions*, Barry and Gail Lord write: "A gallery height of 18 feet would not be excessive for new, purpose-built museum space, which could be expected to display major collections flexibly over a 20 to 30 year period."

It is clear that these requirements, especially regarding ceiling heights and open floor plans, cannot be met within the existing configuration of the barracks buildings. It would be possible to remove columns and raise the ceiling in order to improve the building's functionality. Unfortunately, to do so would significantly alter defining characteristics of the building, violating the Secretary of the Interior's Standards. In earlier discussions, both the National Park Service and MnSHPO staff expressed serious reservations about radically changing the historic interior.

Even if the parties could agree to a mitigation strategy that would offset this impact, the cost of altering the building would increase the project's cost to at least \$4 million beyond available funds.

On the other hand, the construction of a new visitor center building allows for the creation of a gallery and lobby of suitable proportions to meet current and future needs and does so within budget. Given that the existing visitor center cannot be used and that the reuse of Building 18 is impractical and beyond the budget, a new visitor center remains the only "feasible" alternative with the meaning of Section 110(a)(2)(B).

## **E. Location and Design of a New Visitor Center**

### ***Building Location***

In considering the location of a new visitor center, several programmatic concerns emerged as well as consideration of the Secretary's injunction against placing new structures too near to historic buildings. The chief issues for interpretation were the desire to draw visitors closer to the river, to create a visual connection to the frontier fort (as previously discussed in this report and in the 1993 cavalry barracks reuse study, also previously cited), and to move visitors away from the noisy highway, which significantly detracts from the historic setting.

One or more of these considerations preclude locating the center either in the open area to the south of the frontier fort, adjacent to Buildings 17 or 18, or along the southern edge of the property near the highway. While MISS finds that the Society's concerns about the placement of the current visitor center lack "credibility," the fact remains that it is physically connected to Building 22 and quite close to Building 18. At various points, a visitor's view to one or more of the historic buildings is blocked by the glass and concrete extrusions of the "underground"

structure. The location selected for the new visitor center allows Buildings 18, 22, and 30 to once again have a visual relationship.

## ***History of Adjacent Buildings***

### **Evolution of the Lower Post: The Nineteenth Century**

Fort Snelling was built in the aftermath of the War of 1812 as the U.S. military expanded to protect the country's new territory. Within a few decades, though, the frontier had moved well beyond these forts. Obsolete for defense, the forts became garrisons for amassing troops to send to other locations.

Fort Snelling settled comfortably into this role. Indeed, many had questioned from the outset whether its walls could withstand much of an attack. As the population of Saint Paul and Minneapolis grew and settlers flocked to the western prairies, the fort's role continued to diminish. In 1856, the Secretary of War withdrew the garrison. The federal government sold the military reservation to Franklin Steele in the following year<sup>1</sup>.

The Civil War, conflicts with Native Americans, and Steele's failure to make scheduled payments for the property caused the federal government to reconsider the sale. The army reoccupied the fort in 1861. At this point, few of the fort's facilities were beyond the 1820s walls. A cemetery had been established along the Mississippi River bluff a distance west of the fort in the 1820s. The burial ground, which comprised "73 square rods of land and has a good substantial wooden picket enclosure," according to an 1866 report, was "1/8 mile east of a permanently located road, called the Hennepin and Fort Snelling road."<sup>2</sup>

The debt that the country incurred as a result of the Civil War resulted in conservative spending in the years immediately following the war. Military installations suffered as a result and were forced—as was true at Fort Snelling—to retain "temporary" buildings hastily erected during the 1860s. Army leaders, however, began planning a reorganization that would consolidate an inefficient collection of forts, cobbled together over time, into rational system of high-quality garrisons. Conflicts between settlers and Native Americans delayed action on this initiative during the 1870s, but conditions were soon to change with the forced movement of tribes to reservations, the growing population in the west, and the extension of the country's railroad network, which improved transportation for troops as well as settlers.<sup>3</sup>

Plans for a major overhaul of the army were presented to Congress in 1882 by William T. Sherman, commanding general of the army. He proposed upgrading some forts with brick and stone buildings for long-term service, improving others with frame buildings for temporary use, and jettisoning some posts immediately. While the concept was endorsed, its implementation

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<sup>1</sup> "Fort Snelling, Minn.," 3, in unidentified document, [May 11, 1885], available in collection of copies of records from the National Archives pertaining to Fort Snelling, P333, Box 10, File 5, Minnesota Historical Society (hereafter, NA-MHS).

<sup>2</sup> C. W. Nash to General M. Meigs, April 12, 1866, available in NA-MHS, Box 2, File 15.

<sup>3</sup> R. Christopher Goodwin, "National Historic Context for Department of Defense Installations, 1790-1940," 1995, vol. 1, 43, 46.

was slowed by a scarcity of funds and an abundance of political interference.<sup>4</sup>

During this period, the quartermaster began issuing standard plans and specifications. The first rudimentary set, issued in army regulations in 1860, addressed a variety of building types including barracks and stables. In response to the wide range of conditions encountered across the country, the buildings could be erected from whatever material was readily available—be it stone, wood, logs, or adobe. The quartermaster also provided basic guidelines for the overall layout of a garrison.<sup>5</sup>

It is uncertain how much these plans were considered in the 1860s construction at Fort Snelling. Extending west along the Mississippi River bluff line, outside of the fort's stone walls, these quarters, mess halls, stables, and other buildings apparently followed the pattern of frontier forts, where "temporary barracks [were] constructed by troop labor from materials at hand," according to the army's "National Historic Context for Department of Defense Installations, 1790-1940." "The typical barracks housed one company of men and contained sleeping quarters, a kitchen, and a mess room; it usually was a one-story, narrow, rectangular building with a porch. A barracks design of this type appeared in the unofficial 1860 Army regulations and is exemplified by examples of barracks identified at early frontier posts constructed before and after the Civil War." In fact, though, the illustration for "Soldier's Quarters for One Company" from the 1860 regulations shows an L-shaped rather than a rectangular configuration. The front section, which held quarters, is rectangular and flanked by porches on its long axis. Projecting behind is a narrower structure with a washing room, mess room, and kitchen, the latter with a substantial hearth and cooking range. The 1860s barracks along the Mississippi bluff appears to be multiples of this design, with the quarters sections connected end to end.<sup>6</sup>

Another set of plans appeared in 1872 in response to criticism of unhealthy and unsafe conditions on many posts by the surgeon general and others. Using plans developed and approved in a central office ensured that the army's buildings met at least minimal standards and kept costs under control. Still, standardization was not completely embraced by the army until the 1890s.<sup>7</sup>

The Upper Post at Fort Snelling was constructed during this transitional period. The officers' quarters on Taylor Avenue dating from 1879-1880 gave a hint of the exuberance that characterized American architecture in the last half of the twentieth century; the quarters built in 1892 between the earlier structures show a slightly different aesthetic. Soon thereafter, standard plans reflected the influence of the Beaux Arts, popularized by the 1893 Chicago World's Fair.

Congress approved the first appropriation for the Department of Dakota facilities at Fort Snelling in 1879. This covered construction of the headquarters' offices, a residence for the commanding

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<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.. The plan notes that "when the ground slopes considerably from front to rear, and other circumstances make the arrangement more economical and convenient, the Kitchen, Mess room, and Washing room will be placed in a basement under the main building and the back building will be omitted." This would create the basic rectangular form described by the context study. A recent photograph of a 1870 barracks of this design, built of stone and somewhat modified, appears in the second volume of the context study on page 33.

<sup>7</sup> Ibid.

officer, and twelve buildings to house his staff. The second appropriation in the following year included “buildings (probably fifteen) for quarters, mess-halls, kitchens &c., for general service clerks, enlisted men, and civilian employees employed at department headquarters,” “stables for public and private animals, forage-house, wagon and harness rooms,” and post infrastructure such as sidewalks, water supply, and heating. Both appropriations were for \$100,000, “a large sum,” General Sherman noted, but “I regard it as a strategic point which should always be held by the United States, and am therefore disposed to recommend almost any outlay which will make it valuable as a permanent military site.” His recommendation might have been influenced by his boss, Secretary of War Alexander Ramsey, who had served as territorial governor, governor, and U.S. Senator for Minnesota, and also as mayor of Saint Paul.<sup>8</sup>

The appropriations do not mention a facility for ordnance, but it appears that Building 22 dates from this period. Assuming this is so, it is the only above-ground extant feature at the Lower Post representing this era. A contextual study on “Army Ammunition and Explosives Storage in the United States: 1775-1945,” which the army issued in 2000, notes that “usually a fort only required one structure for ordnance storage, but multiple structures were constructed at larger installations. If possible, the magazine was constructed of brick or stone.” The army did not issue standard plans for these utilitarian structures in the nineteenth century, so their function largely dictated their form. Air pockets in the walls, independent drainage systems, and avoidance of iron in the structure were some of the unique design features employed to keep stores dry and inert—or, in the event of fire or explosion, to minimize damage to anyone or anything in the vicinity. Magazines were sometimes located near officers’ quarters to keep the building under surveillance and its contents close at hand. At Fort Snelling, though, Building 22 and a couple of other stone magazines were in the vicinity of the 1820s post cemetery, well away from the officers’ quarters.<sup>9</sup>

It appears likely that the walls of the old fort were mined for the construction of these buildings and the foundations for Upper Post buildings. By 1885, the walls were completely gone, according to a contemporary report: “Of the old defenses, only two towers remain; the other towers, walls, &c., having been demolished.”<sup>10</sup> All in all, the old fort and the area to the west, collectively known as the Lower Post, had become a backwater. The army considered it a separate administrative unit—and of a distinctly lower rank than the Department of Dakota. When John Biddle, the chief engineer officer of the Department of Dakota, prepared descriptions of the military reservation in 1885, he did one for the Department of Dakota and one for the “post” which, he described as “what remains of the old fort with additions made since 1865.”<sup>11</sup>

An accompanying map, somewhat off scale, shows an array of buildings at the Lower Post on the river side of Tower Avenue (which is not identified) between the old fort and the intersection of Bloomington Road (see Figure 1). Immediately adjacent to the where the fort wall had once

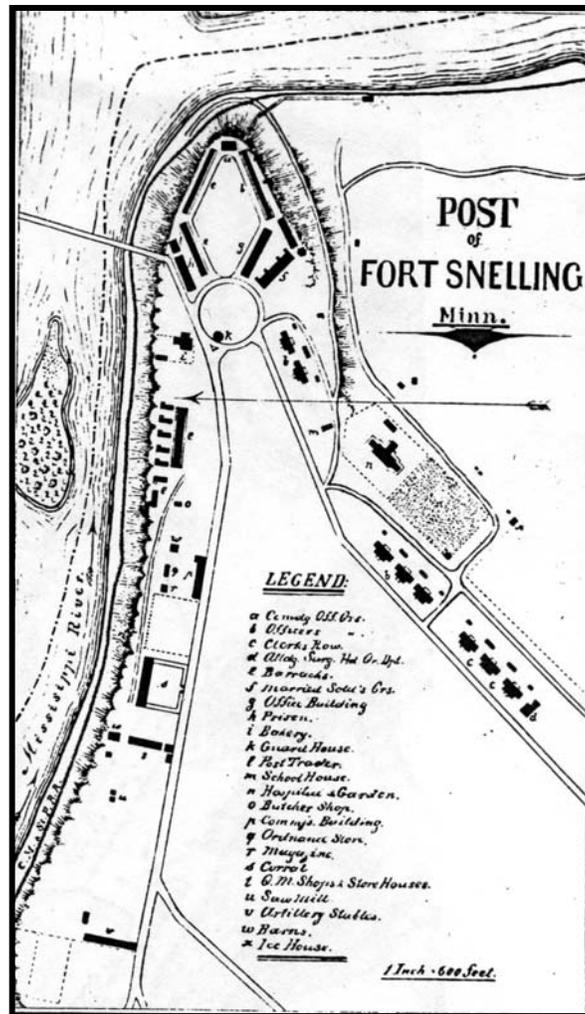
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<sup>8</sup> “Letter from the Secretary of War Transmitting Report of Lieut. Col. T. H. Tompkins, Recommending Appropriation of \$100,000 for Construction Buildings on the Fort Snelling Military Reservation,” Senate Ex. Doc. No. 54, 46th Congress, 2d sess.

<sup>9</sup> Joseph Murphey, Dwight Packer, Cynthia Savage, Duane E. Peter, and Marsha Prior, “Final Draft: Army Ammunition and Explosives Storage in the United States, 1775-1945,” prepared for the U.S. Army Corps of Engineers, Fort Worth District, July 2000, 10-12.

<sup>10</sup> “Fort Snelling, Minn.,” in unidentified document, [May 11, 1885], available in NA-MHS, Box 10, File 5.

<sup>11</sup> “Fort Snelling, Minn.,” 2, in unidentified document, [May 11, 1885], available in NA-MHS, Box 10, File 5.



**Figure 1. Post at Fort Snelling, 1885, prepared by office of John Biddle, Engineer Corps, Chief Engineer Officer of the Department of Dakota.**

stood was the “prison for military convicts: one story stone, 129-3/4 x 33 feet” (h), with the bakery, 38 feet by 28 feet (i), aligned at its northeast end. Almost directly north of the Round Tower was the post trader, who apparently had a fenced yard surrounding a house of irregular plan and, at the back corner of the parcel, a stable or storehouse.

Further west along the bluff was a barracks (e), the only one of the post’s three barracks that was outside of the original fort and not of stone. The report described the barracks “a two story frame building, 228-1/2 x 30-1/3 feet, with six detached Ls 56-1/4 x 18-1/4 feet, each containing kitchen and dining room, used by two companies of Infantry, one mounted battery and by recruit detachment.” Directly to the west along the bluff were two buildings that appear to be associated with the barracks. Perhaps these represent the “six washhouses” erected in 1884 for the troops occupying the barracks, which held four companies. At about the same time, the building’s porches were repaired.<sup>12</sup>

<sup>12</sup> Ibid.; C. K. Hodges [?], assistant quartermaster, to Quartermaster General, March 31, 1884, NA-MHS, Box 2, File 16.

Slightly inland was the butcher's shop (o). Building 22 (p) served as the "commissary and quartermaster store house: a one story stone building, 155-3/4 x 26 feet, with L 18 x 12 feet, also a small cellar." Clustered nearby were a barn (w), ordnance storehouse (q), and magazine (r).<sup>13</sup>

On the other side of the cemetery, which is identified only by dotted lines apparently indicating a fence, was a slightly smaller rectangular corral (s), which measured 179-1/2 by 157 feet. The north end of the corral was apparently formed by a "stone stable, 179-1/2 x 33 feet, with stalls for eighty-four animals, wagon sheds around inside of wall." Still further to the west were a row of buildings on a north-south axis that included a barn (w), quartermaster's shops and storehouses (t), and several small, unidentified structures. The quartermaster's shops were 120 by 21 feet. The small structures might have been a granary (30-1/4 by 20-1/4 feet), coal house (26 by 16 feet), and ice house (50-1/4 by 20-1/4 feet) mentioned by the report, or perhaps the "small frame stables for commanding officer and post surgeon."<sup>14</sup>

Two small structures to the west are a sawmill (u) "for cutting firewood, 24 x 18 feet." Frame artillery stables (v), 192 feet by 31 feet, capable of sheltering for fifty-seven animals, were beyond the junction of Bloomington Road. Perhaps the smaller building nearby was the "forage room and blacksmith shop in frame building, 50 x 16 feet."<sup>15</sup>

The exact construction dates for most of these buildings are difficult to determine. The barracks (e) are apparently Civil War vintage, although evidence is somewhat conflicting. While historic photographs appear to show the draft rendezvous area in the early 1860s, the quartermaster general wrote to the secretary of war after touring Fort Snelling in 1866: "In addition to the Post buildings a draft Rendezvous has been built since the war," adding: "They are the best buildings of the kind I have ever seen." The war he refers to is presumably the Civil War, suggesting that the buildings date from 1865-1866.<sup>16</sup>

Many of the other structures appear relatively new, given information on 1878 and 1882 maps. A group of buildings in the vicinity of the prison (h), which dated from 1864-1865, appear to have been demolished between the time these maps were drawn. This was presumably because of the construction of the bridge across the Mississippi in 1880, since the buildings stood in the way of the south abutment and access road. This project—concurrent with the arrival of the Department of Dakota—might have presented an opportunity for consolidating some facilities and an impetus for moving west of the cemetery, an area that was apparently not occupied previously. The 1878 map shows the quartermaster in a small office between the Round Tower and prison, and the quartermaster's stables and shops were left over from the Civil War era. In the 1882 map, these buildings are gone and the quartermaster's complex (p, s, t) has appeared, mostly west of the cemetery. The artillery stables (v) might have substituted for the stables just east of the barracks in 1878, which are gone on the 1882 map. The trader's house (l) also appears new in 1882, although it might have been assembled from other buildings in the vicinity, including a previous traders building that was near the prison on the 1878 map but not there in 1882.<sup>17</sup>

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<sup>13</sup> "Fort Snelling, Minn.," 2.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

<sup>16</sup> Quartermaster General to Secretary of War, June 16, 1866, available in NA-MHS, Box 2, File 15.

<sup>17</sup> "Map of Fort Snelling, Hennepin County, Minn., Showing the Latest Improvements to Date," drawn by "L.T.M.," December 27, 1878; E. B. Summers, "Map of Fort Snelling Reservation," 1882; both maps available at the Fort

At some point—perhaps when headquarters of the Department of Dakota moved back to downtown Saint Paul in 1886—the facilities duplicated at both posts were apparently consolidated at the Upper Post. The newer, improved quartermaster’s compound on Bloomington Road at the intersection of Minnehaha Avenue, for example, seems to have absorbed the Lower Post facilities, which disappear from maps in the late nineteenth century. Even the Lower Post cemetery was abandoned in the 1880s, at least for new burials. In the summer of 1887 the army authorized the construction of a vault and an iron fence for a new cemetery, no larger than two acres in size, south of the Upper Post. “The moving of the bodies from the old to the new site is not authorized,” though, according to the adjutant general’s office in Washington.<sup>18</sup>

When Colonel E. C. Mason took command of the fort in 1889, he moved the headquarters of the Third Infantry, the post’s regiment, to the building that had been headquarters for the Department of Dakota. At the same time, troops left the old quarters at the historic fort for new barracks along Taylor Avenue. The old buildings, in turn, were occupied by an ordnance department previously stationed at Fort Abraham Lincoln in North Dakota. Within a few years, though, the commandant had other plans for the old fort, “earnestly recommend[ing] that the wall which surrounded the fort be restored to its original form, [and] that the interior be reserved as a museum for the preservation of all manner of souvenirs and relics of the early days of the Northwest.” Instead, the buildings housed the Tenth Artillery while they waited for the construction of their new barracks on the parade grounds in 1903.<sup>19</sup>

## Expansion in the Twentieth Century

The twentieth century brought the U.S. military to the international stage. America’s entry into war with Spain in 1898 was a prelude to this new role. Ironically, although Spain lost the war, it won the aesthetic battle, influencing the architectural design of some army posts, particularly in the South and West, during the first decades of the new century.

Shortly after the war, the army launched a major reorganization, eliminating some posts and strengthening others. Fort Snelling was among the latter, as reported by the *Saint Paul Globe* in October 1903: “When the work now contemplated is finished, only two posts in the country, Fort Leavenworth . . . and Fort Riley can be compared with [Fort Snelling] either in point of number of its garrison strength or in the fineness and completeness of its buildings and equipment.” A total of 1,300 men—“800 infantry, 250 cavalry, and the same number of artillery”—were to be stationed at Fort Snelling.<sup>20</sup>

“Formerly the fort has only garrisoned eight companies of infantry,” a 1904 source reported, “but in the future this will be augmented by four more companies of infantry, making a full regiment, a squadron of cavalry and two batteries of artillery.” The buildings “now completed and in the course of erection” for the cavalry post are “4 Calvary stables, 2 Double sets captains’ quarters, 2

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Snelling visitor center.

<sup>18</sup> Adjutant General to the Commanding General, Division of the Missouri, Chicago, July 27, 1887, available in NA-MHS, Box 10, File 5.

<sup>19</sup> “New Quarters,” *Saint Paul Pioneer Press*, November 26, 1889; “Fort Snelling, Old and New,” *Harper’s Weekly* 39 (1895): 442-444; “Improvements Will Not Change Fort Snelling,” *Saint Paul Pioneer Press*, July 19, 1903.

<sup>20</sup> “Story of the Origin and Growth of Fort Snelling,” *Saint Paul Globe*, October 4, 1903.

Stable guard buildings, Prison building, Bakery, Blacksmith shops, Round tower (Administration bldg.), Hexagon tower (storehouse), 6 Quarters for line officers, Field officers' quarters, Barracks for 1 troop cavalry, Barracks for 3 troops cavalry." Although the report implies that all of the buildings were new, some were older buildings that were being remodeled.<sup>21</sup>

Standard plans were used for most of the new construction associated with the army's expansion campaign. The preparation and distribution of these plans, mostly developed in the 1890s, was centralized at the Quartermaster General's Office in Washington, D.C. According to the army's "National Historic Context for Department of Defense Installations, 1790-1940," "the Quartermaster Department adapted Colonial Revival architecture for buildings constructed during the first decade of the twentieth century. The new construction often retained the building forms from the Victorian era, but displayed Georgian Colonial Revival motifs such as modillioned cornices and Tuscan-columned porches."<sup>22</sup>

There was little leeway for modification of the standard plans. In work being done on Fort Benjamin Harrison, for example, the Quartermaster General's Office directed Construction Quartermaster B. F. Cheatham "to follow all plans scrupulously and to request permission for the slightest departures from these plans." This work was started in 1904, the same time that Fort Snelling was undergoing significant construction.<sup>23</sup>

Barracks were key buildings in the composition of a garrison, as the "National Historic Context" explains: "Barracks . . . became important elements in the installation plan and often were impressive buildings that defined the architectural character of the installation." The study notes that "barracks were usually one- to three-story, rectangular buildings, with the primary entrance on the wider elevation. Verandas were a common feature until the 1930s." In the late nineteenth and early twentieth centuries, barracks were most commonly built for two companies. "They typically had a central block flanked by wings with two-tiered porches. Porches served as corridors and provided ventilation. . . . On installations that served more than one branch of the Army, the barracks were designated as cavalry, artillery, or infantry barracks."<sup>24</sup>

The report includes a photograph of a cavalry barracks constructed in 1910 at Fort D. A. Russell (now F. E. Warren Air Force Base). The barracks appear identical to Buildings 17 and 18, although its design is attributed to a slightly different standard plan (75-M, in contrast to 75-G or 75-C at Fort Snelling).<sup>25</sup>

When it came to the layout of a complex, the army was less prescriptive. Posts were supposed to be "attractive," but specifics were few and far between. The most common configuration continued to be that used throughout the nineteenth century—a central parade ground ringed by key buildings, with secondary structures to the rear. "Barracks," the context study observes, "are located in prominent sites, generally in groups facing the parade ground or drill field."<sup>26</sup>

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<sup>21</sup> Saint Paul Chamber of Commerce, *Thirty-sixth Annual, June, 1904* (Saint Paul: Chamber of Commerce, 1904), 39.

<sup>22</sup> Goodwin, "National Historic Context for Department of Defense Installations," vol. 1, 181.

<sup>23</sup> *Ibid.*, vol. 1, 181.

<sup>24</sup> *Ibid.*, vol. 2, 315-316.

<sup>25</sup> *Ibid.*, vol. 2, 327.

<sup>26</sup> *Ibid.*, vol. 1, 181, and vol. 2, 316.

Given the army's increasing insistence on standardization, the initial plan for the 250-man cavalry post at Fort Snelling submitted in March 1902 by Colonel George E. Pond, the chief quartermaster at the fort, is surprising. The plan centered the cavalry in the much remodeled and reconstructed old fort.<sup>27</sup> A drawing prepared by the fort's construction quartermaster, Captain R. M. Schofield, in 1903 shows a "triple barrack," a massive, angled building, along the north and west side of the old parade ground. A single barrack was along the south side, with a longer quarters for six officers filling in the east side. The field officer was to reside in the former commandant's house. A carriage drive looped in front of the buildings and a service road ran behind them. The Round Tower was to be transformed in the adjunct's office and the Hexagon Tower retained for a storehouse.<sup>28</sup>

"Improvements will not change Fort Snelling," a headline in the *Saint Paul Pioneer Press* announced, adding that for "the remodeling work great care is being taken to preserve the historic view rather than to emphasize what is new, and with this in mind the buildings will be covered with plaster of a color suggestive of old age"—"probably light yellow." Preservation, however, was viewed differently than it is today. "Moorish architecture will replace the present nondescript," the newspaper reported. All the buildings will be made two stories and will have uniform roofs of red slate with terra cotta copings. In front of the buildings, at intervals of twelve feet, there will be Moorish columns forming a continuous colonnade, and there will be a tiled promenade around the entire post. There will be balconies at the rear of the reconstructed barracks, which will command views of the Mississippi and Minnesota rivers." "Stables," the article added, "will be erected near those underway for those of the artillery."<sup>29</sup>

Although the cavalry had initially planned to move into their new campus early in 1904, the work was apparently delayed. The plan was only slightly changed in July of that year when the *Saint Paul Globe* printed a large sketch map showing the new configuration of the old fort. Although the perspective was rather distorted, the map showed quarters for the cavalry officers at the base of Taylor Avenue, just beyond the original post, with a U-shaped cavalry barracks occupying most of the interior of the old fort. Two cavalry stables, their gabled ends fronting on Tower Avenue, were behind the artillery barracks, just west of another structure, probably Building 22. Along with two other buildings, probably stable guardhouses, these were the only structures north of Tower Avenue.<sup>30</sup>

In September 1903, Schofield, received authority to request proposals for the work.<sup>31</sup> Neither he nor Pond were likely anticipating the public outrage that the plans triggered. While the commandant's house and officers quarters were given a makeover "in the Spanish mission style, with red tile roofs and long arcades," according to a contemporary account, early preservationists stopped demolition of "two double sets of officers quarters, opposite the old tower," which were supposed to be replaced by "brick quarters similar to those erected for the

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<sup>27</sup> Major General James F. McKinley to Charles Stees, September 12, 1934, in "Fort Snelling 1920s 30s 40s" file, Fort Snelling Visitor Center office; "Story of the Origin and Growth of Fort Snelling," *Saint Paul Globe*, October 4, 1903.

<sup>28</sup> Captain R. M. Schofield, "Plan of Proposed Roads and Sidewalks at Lower Post, Fort Snelling, Minnesota," 1903, at Fort Snelling Visitor Center office.

<sup>29</sup> "Improvements Will Not Change Fort Snelling."

<sup>30</sup> "The Building Up of Fort Snelling," *Saint Paul Globe*, July 3, 1904.

<sup>31</sup> McKinley to Stees.

artillery officers.”<sup>32</sup> Most of the anger, though, was sparked by the sheathing of the Round Tower in stucco.

The Minnesota Historical Society came to the rescue and stopped the implementation of Pond’s grand scheme midstream. It was apparently at this juncture, sometime after July 1904, that plans for Buildings 17 and 18 were born.<sup>33</sup> Instead of the romantic ambience of the refurbished old fort, where the cavalry would have had a distinct campus with its facilities in close proximity, it ended up with a cobbled-together string of buildings that were neither distinctive nor well-positioned.

The artillery had already claimed a prime location on the parade grounds, the ceremonial heart of the fort. The two new barracks, according to an article in the *Saint Paul Pioneer Press* in October 1903, “will accommodate a battery each. They are two stories high and are built of red brick with Kettle river sandstone foundation. Long wooden verandas, supported by large white pillars, are the only features which break the regularity of the exterior.” The Johnny-come-lately cavalry barracks were forced to the opposite side of Tower Avenue, where their visual relationship with the parade grounds was partially obstructed by the artillery barracks. The presence of Buildings 17 and 18 was further diminished by their alignment with Tower Avenue, which skewed them away from the parade grounds. Their location did, at least, make them a prominent landmark to the many passersby on Tower Avenue, which became a streetcar route linked to Minneapolis in 1905 and, with the construction of a new bridge over the Mississippi in 1909, to Saint Paul.

The two-company barracks were a product of standard army plans—Plan 75-G, to be specific—a far cry from the ancient Spanish castle that Pond had envisioned. The “Context Study of the United States Quartermaster General Standardized Plans, 1866-1942” references Plan 75-G as a double barracks, 39 feet by 150 feet, citing the example built in 1904 at Fort McPherson. Interestingly, the study credits George Pond, who was responsible for stuccoing the Round Tower, with plans for a number of buildings at Fort Riley, Kansas, including cavalry barracks and stables.<sup>34</sup>

The four stables (Buildings 25, 27, 28, and 30) were likewise built from standard plans. The “Context Study of the United States Quartermaster General Standardized Plans, 1866-1942” explains: “Stables typically were long, rectangular, gable-roofed structures, with doors at the end elevations and windows along the side elevations. Most surviving examples were built of brick or stone. The stables for different branches are located in distinct areas of the post. . . . Cavalry

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<sup>32</sup> “The Building Up of Fort Snelling”; “Work Progresses at Fort Snelling,” *Saint Paul Pioneer Press*, October 25, 1903.

<sup>33</sup> “The Building Up of Fort Snelling.”

<sup>34</sup> U.S. Army Corps of Engineers, Seattle District, “Context Study of the United States Quartermaster General Standardized Plans, 1866-1942,” prepared for the U.S. Army Environmental Center Environmental Compliance Division, Aberdeen Proving Ground, Maryland, November 1997, 388-390. For Buildings 17 and 18 (originally 11-K and 12-K, respectively), the quartermaster inventory sheets, in the collections of the Minnesota Historical Society, Saint Paul, give the dimensions of each “main building” as 44 feet by 150 feet and each wing as 39 feet by 59 feet. A later notation seems to indicate that the plan was 75-C rather than 75-G but provides no explanation for this assertion. Specific information on buildings at Fort Snelling in the following pages is from the quartermaster reports, unless otherwise indicated.

and artillery stables were constructed generally as separate complexes consisting of stables, stable guard houses, and blacksmith shop. . . . Cavalry and artillery stables are characterized by monitor roofs and, at permanent installations, by a greater degree of architectural detailing than that found on other types of stables.” The study also mentions that “guardhouses typically were simple, one-story buildings that matched the stables in construction materials and character.”<sup>35</sup>

Had planning for the cavalry facility not been focused on the old fort but, instead, occurred at the same time as planning for the artillery barracks, it seems likely that the placement and physical relationship of both sets of barracks would have been more graceful. Perhaps this would have affected the location of the artillery wagon sheds, stables, and workrooms, which edged one side of the parade grounds. While pragmatic, this was a departure from the army’s aesthetic ideal of ringing parade grounds with barracks and other relatively ornate structures.

### **More Wars, More Change**

Even as Fort Snelling expanded, though, the days of the cavalry were numbered. Overall, the fort’s mission was to change repeatedly in the twentieth century. “From 1911 to 1916 only a caretaker’s squad was present during the absence of the 28<sup>th</sup> Infantry on the Mexican border,” Major Joseph H. Grant wrote in *Quartermaster Review*. Then, the fort was pressed into action to mobilize troops for World War I. In 1917, the fort was a training site for the Officers Reserve Corps. For a year following the war, the fort became U.S. General Hospital #29, where wounded soldiers were sent for rehabilitation. Still, despite the changes in the early decades of the twentieth century, Grant observed that “the major garrison of Fort Snelling has been, during most of its history, infantry.”<sup>36</sup>

It is perhaps fortunate that the fort’s population was low in June 1914 when a “cyclone” damaged Buildings 17 and 18. Both were further affected by a fire in August of the same year. A storm required a \$2,200 repair to Building 17’s porch in June 1922.

It is odd that there appears to be no record of when the link between the two barracks was constructed. The quartermaster’s inventory forms chronicle other alterations to the buildings in minute detail—eight window guards installed for \$18.56 in fiscal year 1912, two toilet bowls removed for \$12.66 in September 1941, one exhaust fan put in place for \$16.25 in December of the same year, to cite a few entries. A penciled note on the record for Building 17 that reads “new construction FY 1927 \$1,053” might refer to the link. The link is shown on a site map that is attributed to 1904. If the map originated at that date, it was obviously revised over time because a number of later features appear on the map, such as both the old and new bridges over the Mississippi. The new bridge opened in 1909. Also appearing is a T-shaped building (13-K) west of Building 18, with a small link (12-K) attaching the two buildings. The T-shaped building, formerly a kitchen, was moved to this location in 1919 to serve as a machine gun repair shop and storehouse. It was demolished in 1932.

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<sup>35</sup> U.S. Army Corps of Engineers, Seattle District, “Context Study of the United States Quartermaster General Standardized Plans, 1866-1942,” prepared for the U.S. Army Environmental Center Environmental Compliance Division, Aberdeen Proving Ground, Maryland, November 1997, 336-338.

<sup>36</sup> Joseph H. Grant, “Old Fort Snelling,” *Quartermaster Review* 13 (1934): 72.

The T-shaped building was associated with two small bursts of construction in the period between the world wars. The first was associated with World War I and the subsequent conversion of cavalry facilities for a machine-gun unit. The T-shaped building was joined in 1922 by Building 24 (F-47), a wagon shed, just to the west. Measuring 50 feet by 238 feet, it had wood walls, a concrete foundation, a wood and paper roof, and a gravel floor. The design of these structures was apparently based on the “600 series” standard plans for modular, wood-frame buildings. These plans, first developed in 1914, were revised in 1917 for the rapid construction of thirty-two cantonments for processing recruits. On the other end of the spectrum was Fort Snelling’s stone chapel, built in 1928.<sup>37</sup>

The work-relief programs of the Great Depression produced a variety of changes to the fort ranging from the installation of porches on the officers quarters to the raising of the grade of the parade grounds by several feet, one wheelbarrow of earth at a time. Along the river bluffs, crews were sent to stabilize eroded soil that was loosening foundations of fort buildings.<sup>38</sup>

Building 17 received a “one story and ground floor basement addition . . . to provide for an additional 24 enlisted men in each troop,” according to a notation in the building inventory dated May 21, 1936. A note adds: “Work incomplete: Floor to be put in new addition basement. Ceiling to be placed in basement of new addition.” The cost for the entire addition was \$4,988, some of which was provided by WPA funds and the remainder from the fort’s annual appropriation and “soldier labor.” A similar addition was constructed on Building 18. A series of machine gun sheds were built behind the barracks in 1936, only to be demolished about six years later, along with the wagon shed to the west (Building 24).

More destruction was to come in the 1950s, thanks in large part to the expansion of the long-established east-west route through the fort into a four-lane, limited-access highway. The 1903 artillery barracks (Buildings 33 and 34) and the stable guardhouses (Buildings 26 and 29) fell for its construction. Even worse than the loss of the buildings was the physical, visual, and perceptual barrier that the road imposed between the Upper and Lower Posts.

Historic Fort Snelling was spared from the same fate after a pioneering preservation battle led by the Minnesota Historical Society, but plans for the fort’s restoration/reconstruction to the 1820s period resulted in the loss of fort buildings from later eras, including the 1860s prison (Building 14) in 1972. Three of the four stables (Buildings 25, 27, and 28) were removed for the construction of the underground visitor center and its massive parking lot. These alterations dramatically changed the landscape of the Lower Post—as they were intended to do. The goal was to return the area to a semblance of its early nineteenth-century appearance, ignoring the shadow and roar of the adjacent freeway.

To complete this vision, Buildings 17 and 18 were slated for demolition after they were vacated by the Veterans Administration, which operated an outpatient clinic there. In fact, the 1968 Program for Preservation and Utilization, which was associated with the conveyance of the

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<sup>37</sup> Goodwin, “National Historic Context for Department of Defense Installations,” vol. 1, 199.

<sup>38</sup> “Brigadier General David L. Stone Surveys the Damage Done by Soil Erosion at Fort Snelling” (MH5.9 F1.3 p21) and “Soil Erosion Loosens Foundation at Fort Snelling” (MH5.9 F1.3 p22), both photographs from 1935 at Minnesota Historical Society, Saint Paul.

Lower Post from the federal government to the Minnesota Historical Society, required those buildings to be removed.

Preservation sympathies had changed, though, by the early 1990s when the General Services Administration began the process of transferring the buildings to the Minnesota Historical Society. The State Historic Preservation Office sponsored a reuse study in 1993 to consider alternatives for keeping the buildings in place. In April of that year, while the study was underway, thieves broke into the building and removed copper pipes and wiring, but the loss did not seriously damage the structures.

### ***Relationship to Adjacent Buildings***

Volume 2 of the army's "National Historic Context for Department of Defense Installations" discusses integrity issues for various building types. "Barracks," the report explains, "should retain most of their overall exterior form, architectural ornamentation, and construction materials from their periods of significance. Many pre-1940 barracks have been converted to office use. Porches may have been removed or enclosed; window, door, and roof materials often have been modified. Where subsequent additions or renovations have occurred, barracks still may have integrity if they retain the majority of their character-defining features, including setting, overall shape, pattern of openings, materials, and architectural details." The report adds: "In many cases, even with major modification, a barracks complex will contribute to the character of an historic district."<sup>39</sup>

As for stables, the context study for Quartermaster General standardized plans notes:

Stables and stable complexes are associated with a time when horses were essential to military operations. Horses were not only essential to cavalry and artillery units, but were used to move military supplies. . . . The evolution of the design of stable complexes is related to the development of installation planning, culminating in the post planning and beautification movements of the late nineteenth and early twentieth centuries." In considering integrity, the study observes that "few military stables continue to serve as stables. Most have been converted to other uses. . . . To possess sufficient integrity to contribute to an historic district, stables and their associated support buildings should retain their original location and most of their setting, design, exterior materials, workmanship, and association. Exterior elements that often have been modified include location and size of window and door openings and the installation of new doors and windows. In cases of subsequent additions or renovations, the stables and associated buildings still may have integrity if they retain the majority of their character-defining features, including building shape, roof design, exterior materials, overall pattern of openings, and relationship to associated buildings within the installation plan."<sup>40</sup>

Given this guidance, it appears that Buildings 17 and 18 retain good physical integrity overall. The link between the building and the 1930s additions to the rear date from the fort's period of

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<sup>39</sup> Goodwin, "National Historic Context for Department of Defense Installations," vol. 2, 320.

<sup>40</sup> U.S. Army Corps of Engineers, Seattle District, "Context Study of the United States Quartermaster General Standardized Plans, 1866-1942," prepared for the U.S. Army Environmental Center Environmental Compliance Division, Aberdeen Proving Ground, Maryland, November 1997, 338.

significance. Not all alterations made during a period of significance are significant, though, especially if they do not exhibit the same quality of design and construction. The link and the additions are deteriorating and would require costly repair. With a limited budget, restoring the buildings' front porches seems a better investment than retaining the later alterations.

The remaining stable, Building 30, recalls a period when horses were essential to military operations. As such, it is a very significant structure, even though related buildings—other stables, guardhouses, a blacksmith shop—no longer exist. Building 22 is likewise significant as a Lower Post vestige of the era when the Department of Dakota arrived at Fort Snelling.

The four surviving Lower Post buildings—17, 18, 22, and 30—that stand outside of the old fort walls each convey important historical information from the eras that produced them. Communicating these individual messages are the buildings' primary roles as part of the National Historic Landmark district. Their surroundings, altered repeatedly over almost two centuries, are a product of the last half of the twentieth century. This landscape can be improved by better interpretation and by the sensitive reworking of the landscape in conjunction with the construction of a new visitor center.

### ***Building Design and the Secretary's Standards***

The Secretary of the Interior has outlined four treatments for historic properties: preservation, rehabilitation, restoration, and reconstruction. At Fort Snelling, all have been used. The historic fort is a product of restoration and reconstruction. The proposed stabilization of Buildings 17, 18, and 30 provides an example of preservation. The plan for the new visitor center and landscape will rehabilitate a landscape where preservation, restoration, and reconstruction are not options. Preservation—maintaining the status quo—is not working; attendance at the site is dropping and the existing visitor center is deteriorating. Furthermore, the existing parking lot and visitor center do nothing to enhance the historic district. Restoration or reconstruction are not options. Too much has changed over time, and some of the modern intrusions, especially the highway, would overwhelm any effort to turn back the clock.

The Secretary of the Interior's Standards for Rehabilitation are not prescriptive with regard to new design in historic districts. Standard 9 states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment." The proposed design for the new visitor center meets these criteria in being both differentiated from the old and compatible with regard to materials, features, size, scale, proportion, and massing.

## **F. Landscape Plan**

The landscape plans being prepared by Coen+Partners are still in their initial stages. A copy of their plan at the schematic design stage has been submitted separately. The Society has engaged the firm to extend their work to the level of a master plan that extends beyond the boundaries of the Society's present project.

Within the area covered by the current project, certain aspects of the plan, such as the way in which it will incorporate the evidence of prior structures and occupancies, will have to be addressed in the anticipated programmatic agreement because archaeological work is ongoing. For example, given the extensive grading that has occurred where the existing parking lots are situated, it is not known whether any evidence of prior structures remains.

The advantage of the phased, master-plan approach is that future archaeological discoveries can be incorporated into the plan as appropriate. Also, it will be possible to modify the landscape master plan as the interpretive plan, which is currently under development, is finalized.

## **G. Archaeology**

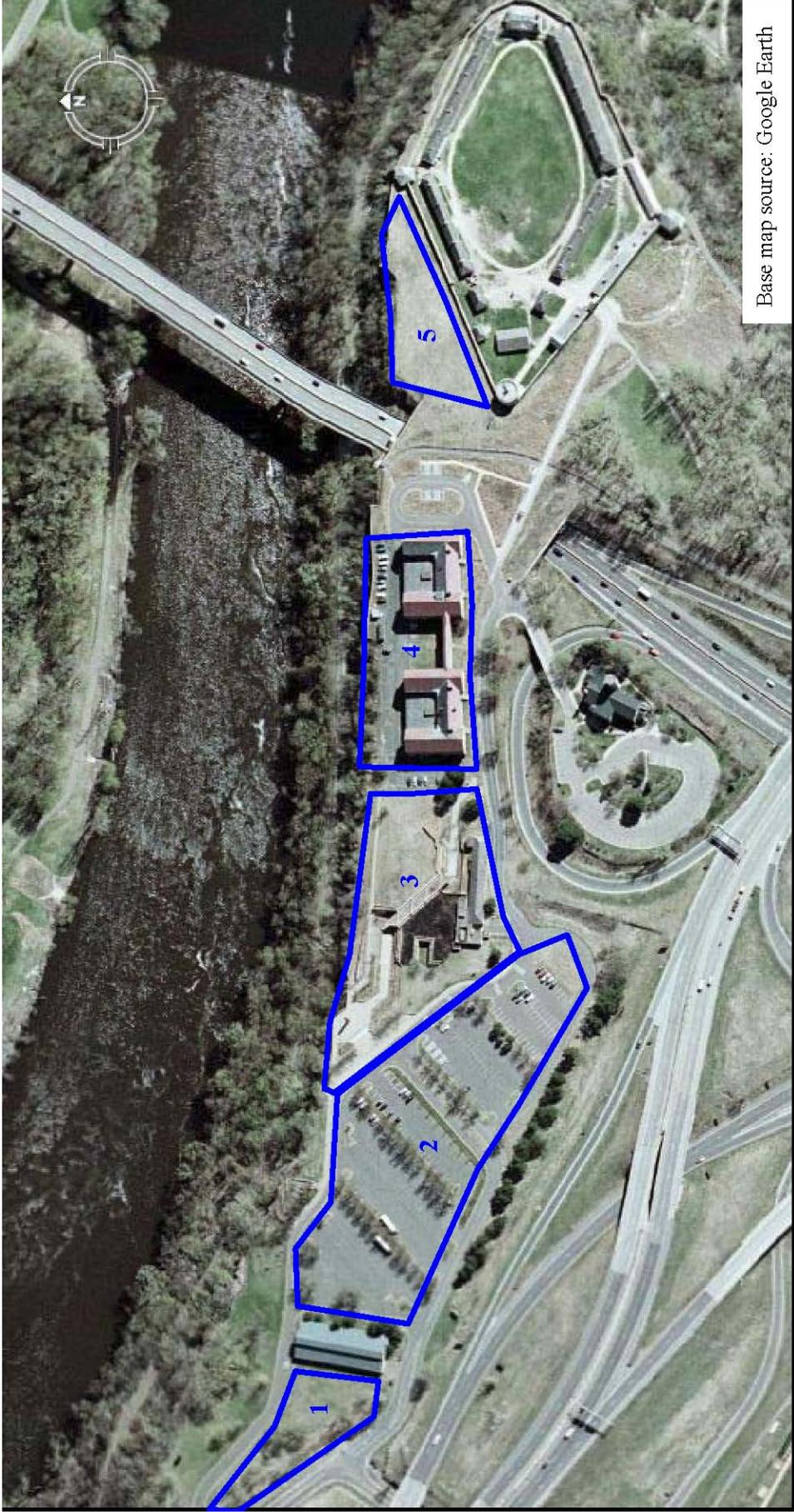
### ***Identification of Archaeological Resources***

The Society's submittal of September 30 included a short summary of archaeological work conducted at the Fort Snelling property over the past 50 years. That work has demonstrated that there is potential for archaeological features and deposits in primary context to be present on the property. However, conditions relevant to the identification of archaeological resources vary significantly across the property, and a range of approaches will be needed to address the questions of where archaeological features are present, how much integrity they retain and how they relate to the history of the fort. This is particularly true because current plans call for the revitalization of the property to take place in several stages over a period of years. The following discussion delineates the archaeological potentials and surface conditions in various parts of the Society's holdings at Fort Snelling, and describes anticipated approaches to identification of archaeological resources. It is based in part on review of a series of historic maps that illustrate locations and, sometimes, functions of the myriad buildings that have stood at the Lower Post over time. The specific building footprints identified through that effort would be considered to have the greatest archaeological potential, at least in terms of identifying features associated with the military occupation. Note that the approaches described below are designed to also take into account the possible presence of Precontact Period materials.

The areas discussed below are arranged from west to east across the property. Figure 2 illustrates the areas being described.

#### *1) West of Building 30*

This portion of the property has been identified as having archaeological potential specifically related to the presence of a blacksmith shop here from 1904 to 1914. The location of this building is documented in several maps dating between 1904 and 1912, and by Quartermaster's records. Archaeological survey of this portion of the property is currently underway. The survey will consist of shovel tests at a 15-meter interval coupled with metal detector examination. If structural remnants or *in situ* artifact deposits are found in shovel tests, limited formal excavation will be conducted to better delineate the nature of the features or deposits. If any identified features can be clearly linked to the 1904 blacksmith shop, they will be recommended to be considered contributing elements to the Fort Snelling National Register District.



**Figure 2. Areas for Archaeological Investigation at Historic Fort Snelling.**

## *2) Parking lot*

Since the submittal of September 30, additional information has been obtained about archaeological investigations conducted before the existing Fort Snelling visitor center was built. It was previously stated that limited excavations were conducted within the footprint of the building. A short memo has since been found that describes the nature of the fill that was excavated as a deposit of early 20<sup>th</sup>-century refuse. (A copy of the memo was included in the materials submitted to NPS on November 6). Inspection of the sample of materials retained from that excavation confirm that it comprises architectural components such as wire nails, dimension lumber and shingling material, with a smaller percentage of materials such as whiteware and glass fragments, some of which show evidence of having been burned.

To provide context, it must be noted that as of 1978, most of the terrain from Building 18 west to Building 30 was covered with asphalt pavement. Dates of installation of that pavement are unknown but presumably it dates to between 1946 and 1968, while it was managed by the Veterans Administration and before it came under the Society's control.

The memo referred to above suggests that the researcher assumed that the same early 20th-century deposit encountered in the excavation trench was present underneath the entire paved area. No information has been found about monitoring during construction of the existing parking lot that would confirm or refute that. "As-built" plans for construction of the current parking lot (circa 1982) were reviewed as part of this project; they indicate that the entire area was graded 4 to 6 inches below the level of the earlier pavement prior to installation of the current hard surfacing. While this may have removed a good portion of the early 20th-century fill, it is not known if evidence of earlier occupations, either military or ative American, might persist in this area.

Current plans for revitalization at Fort Snelling include a proposal to remove the large existing parking lot and reconfigure it as smaller parking areas, green space and pedestrian pathways. Once the extant hard surfacing has been removed, archaeological testing can be conducted to determine what types of historic deposits, if any, are present in that area. It is anticipated that the standard survey method of shovel testing at a set interval will be applied initially. (This will be coupled with monitoring in the area coincident with the old post cemetery, as discussed elsewhere in this document.)

## *3) Current Visitor Center/Building 22*

Substantial disturbance to natural soils and any associated artifact deposits or structural features can be readily documented within the footprint of the existing visitor center. Construction plans and photographs show that the area excavated extended from the edge of the small parking lot adjacent to Building 18, to approximately the top of the western ramp into the building. Current surface contours within that area have all been artificially created.

There is a possibility that some intact terrain – at least, intact relative to its 19th-century condition - persists on the eastern and southern sides of Building 22. These are very small areas, however, not locations where current plans propose any type of action that would

threaten archaeological deposits, and have limited potential to contain archaeological features except those related to the construction of Building 22 itself. Proposed stabilization of the building does not include any subgrade work; unless this changes, no archaeological testing is planned for these areas.

#### *4) Buildings 17 and 18*

The terrain surrounding Buildings 17 and 18 has archaeological potential in several spheres. One aspect relates to the construction of these buildings themselves, where builder's trenches may persist that hold artifact deposits and construction detail. Limited formal excavation in the range of ca. 6 square meters should be conducted in accessible areas adjacent to the foundations of the buildings to determine the presence or absence of these types of deposits. That same work can also begin to address the possible presence of structural remnants or artifact deposits related to earlier military uses of this location, as well as the possible presence of PreContact Period deposits.

Review of historic maps of Fort Snelling shows that the site currently occupied by Buildings 17 and 18 largely overlaps with a series of buildings that date to the Civil War and slightly later. Limited testing conducted near the buildings in 1998 showed that multiple layers of deliberately-placed fill cap intact deposits that predate 1904. Examination of topographic data, likewise, shows that the ground level adjacent to the buildings is almost a meter higher than the ground level adjacent to the reconstructed Fort wall near the Round Tower. This suggests that the ground surface has been artificially raised moving westward from the old fort, which in turn suggests that this area may have good potential to contain archaeological features related to the Fort's 19<sup>th</sup>-century history.

The area riverward of Buildings 17 and 18 is presently covered with asphalt pavement that extends from the building foundations to the edge of the bluff. This, of course, makes it impossible to conduct archaeological testing at this time. Once the pavement is removed, archaeological survey can be conducted in this area.

#### *5) North of the reconstructed Fort*

Current proposals for new pedestrian corridors at Fort Snelling include a possible pathway leading from the river side of Buildings 17 and 18 to a point near the Pentagonal Tower at the old fort. This area is known to have been the site of several buildings, mostly dating from the Civil War era. The nature and extent of structural or artifact features related to these buildings is unknown, and should be addressed by archaeological survey prior to the time the proposed construction proceeds. This is an item that will probably be included in a later stage of work than construction of a new visitor center, so archaeological work in this area will be deferred until decisions on the nature and timing of that work are made.

This area includes a set of features that are not conventionally thought of as "archaeological": limestone, brick and concrete walls along the Mississippi River bluff just below the reconstructed Fort. The walls include one section that is actually an abutment from the "second" Fort Snelling bridge, built in 1909. Although not visible when one is at Fort Snelling, these structures are a part of the vista seen when one approaches the Fort from the east or north.

These features are not well-documented at present, dates of construction for various segments are unknown. The earliest construction appears to have taken place in the 1860s. It is known that portions of the walls were reconstructed by WPA workers in the 1930s. More recently, the Society engaged a consultant to evaluate the condition of the walls and effect repairs in 1989. Products of that work included profiles and elevations showing the location and extent of the walls and bridge abutment as they were at that time. Additional documentation of construction methods and materials can be done as part of archaeological investigations.

In all cases, it is assumed that some formal excavation will be conducted in areas that yield evidence of intact structural remnants or artifact deposits. The extent of this work will be decided in consultation with SHPO staff, NPS staff and the Office of the State Archaeologist. Because Historic Fort Snelling is owned by the State of Minnesota, archaeological fieldwork on the property is subject to the license provisions of the Minnesota Field Archaeology Act (MS Ch. 138.31-138.42). All fieldwork will be conducted pursuant to the requirements of the Office of the State Archaeologist and in a manner consistent with the “SHPO Guidelines for Archaeological Projects in Minnesota” (MnSHPO 2001).

### ***Evaluation and Treatment of Archaeological Properties***

As stated in the Society’s earlier submittal, archaeological features and deposits that relate to the military occupation at Fort Snelling will be considered contributing elements to the National Historic Landmark District. Archaeological deposits related to earlier occupations will require formal evaluation on their own merits to determine possible National Register eligibility.

Although it is often standard practice to assume eligibility of archaeological sites with respect to National Register Criterion D – as sources of scientific data – increasingly, archaeological properties are being evaluated and managed as entities that are significant for other sorts of values. At Fort Snelling, one could make the argument that archaeological features that reflect functions and activities tied to the military occupation may be significant under Criterion A, for their association with a pattern of significant historic events. These would include both events that took place at Fort Snelling as well as those which played out at some distance from the Fort - EuroAmerican settlement of the Upper Midwest, the Civil War, the World Wars, among others.

Depending on how the significance of an archaeological property is defined, treatment might require a variety of approaches. The conventional method of mitigating adverse effect to archaeological properties is to conduct data recovery. That is, scientific data contained in the artifacts and features within the site and their spatial arrangements are recovered by means of formal archaeological excavation. If a property is considered significant solely for the scientific data it contains, and adverse effect cannot be avoided, this is a reasonable approach.

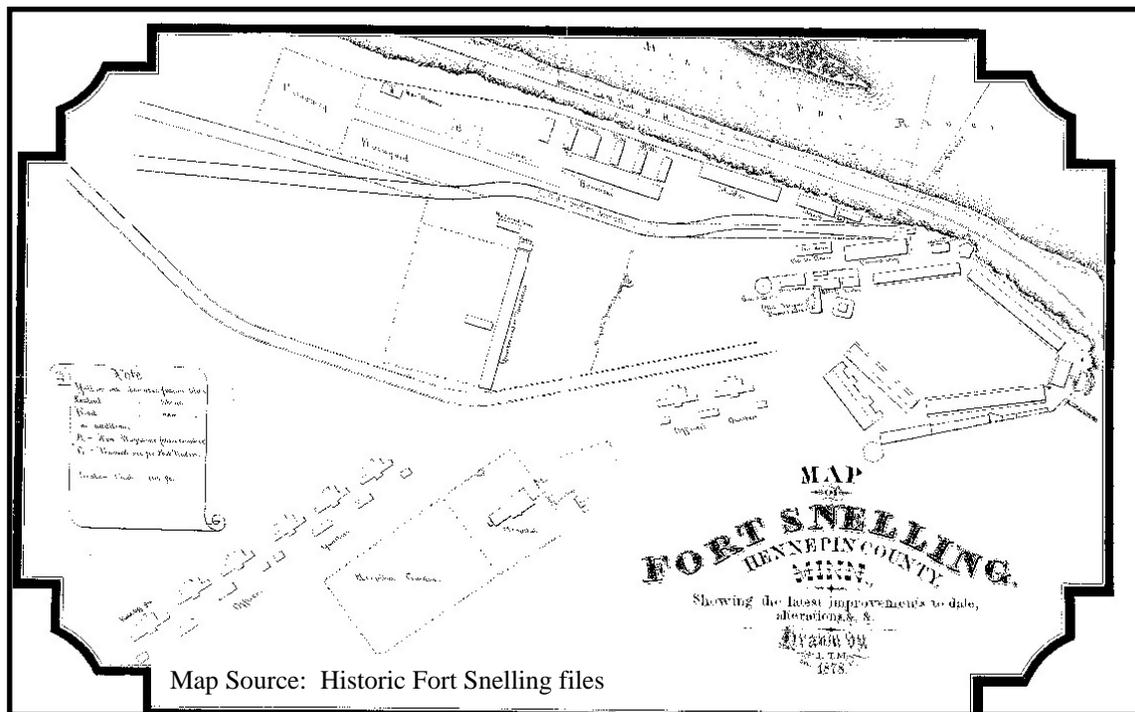
If, on the other hand, significance is ascribed to a property for its associative values, elimination of adverse effect, preservation in place and interpretation are more appropriate management strategies. At Fort Snelling, the new interpretive plan that is being developed provides a mechanism for including consideration of archaeological features and how they can inform the public’s understanding of the Fort’s role in the history of Minnesota and the nation.

## The Fort Snelling Cemetery

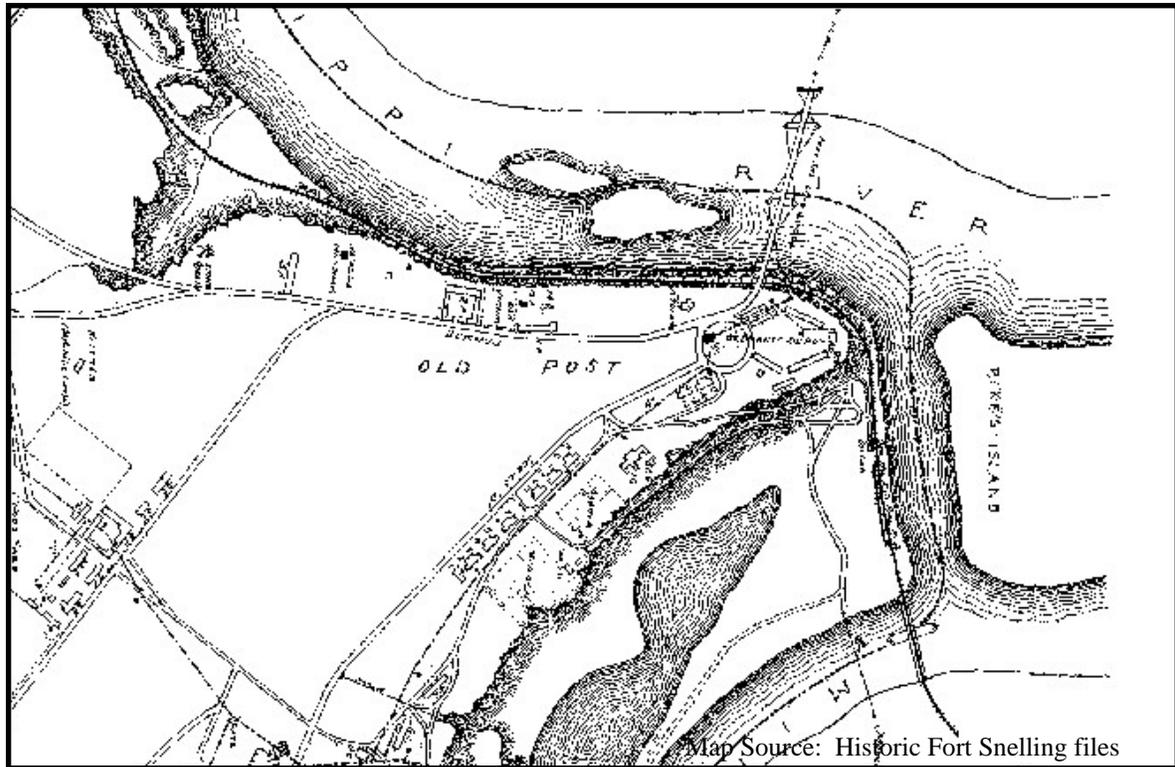
Questions continue to linger about the possibility of burials from the original Fort Snelling post cemetery being present within areas that will be affected by the proposed undertaking. A review of historic maps and photographs was thus done to clarify the location of the old cemetery relative to the modern landscape on the MHS property.

Many historic maps of Fort Snelling clearly delineate the location of the post cemetery. Two examples are shown in Figures 3 and 4. Additional documentation on the location of the 1800s post cemetery is found in a photograph dated 1905 (see Figure 5). This photo is described in the Society's Visual Resources Database as "looking east" at the old post cemetery. It depicts headstones in the cemetery, boundary fences on the east and north, and what is clearly the west side of Building 18 in the background. The building just beyond the fence is Building 9-K, a 12-foot by 18-foot stone magazine built in 1891 (shown as a small black rectangle in Figure 4). A portion of Building 22 - the ell at the east end of the building - is visible in the background on the far right of the photo. The location depicted in this photo for the post cemetery corresponds exactly with how its location is shown on numerous maps dating from the 1860s to 1904.

Figure 6 shows the location of the old post cemetery, taken from a 1904 map, as it appears overlain on a contemporary aerial photograph of Fort Snelling. Note that the location conforms to that shown in Figures 3, 4 and 5 – immediately to the west of Buildings 9-K and 22. Thus, we can see that the cemetery location encompasses terrain that today is occupied by the existing visitor center, the existing parking lot, and a small area of grassed lawn that lies just west of Building 22 and just south of the visitor center.



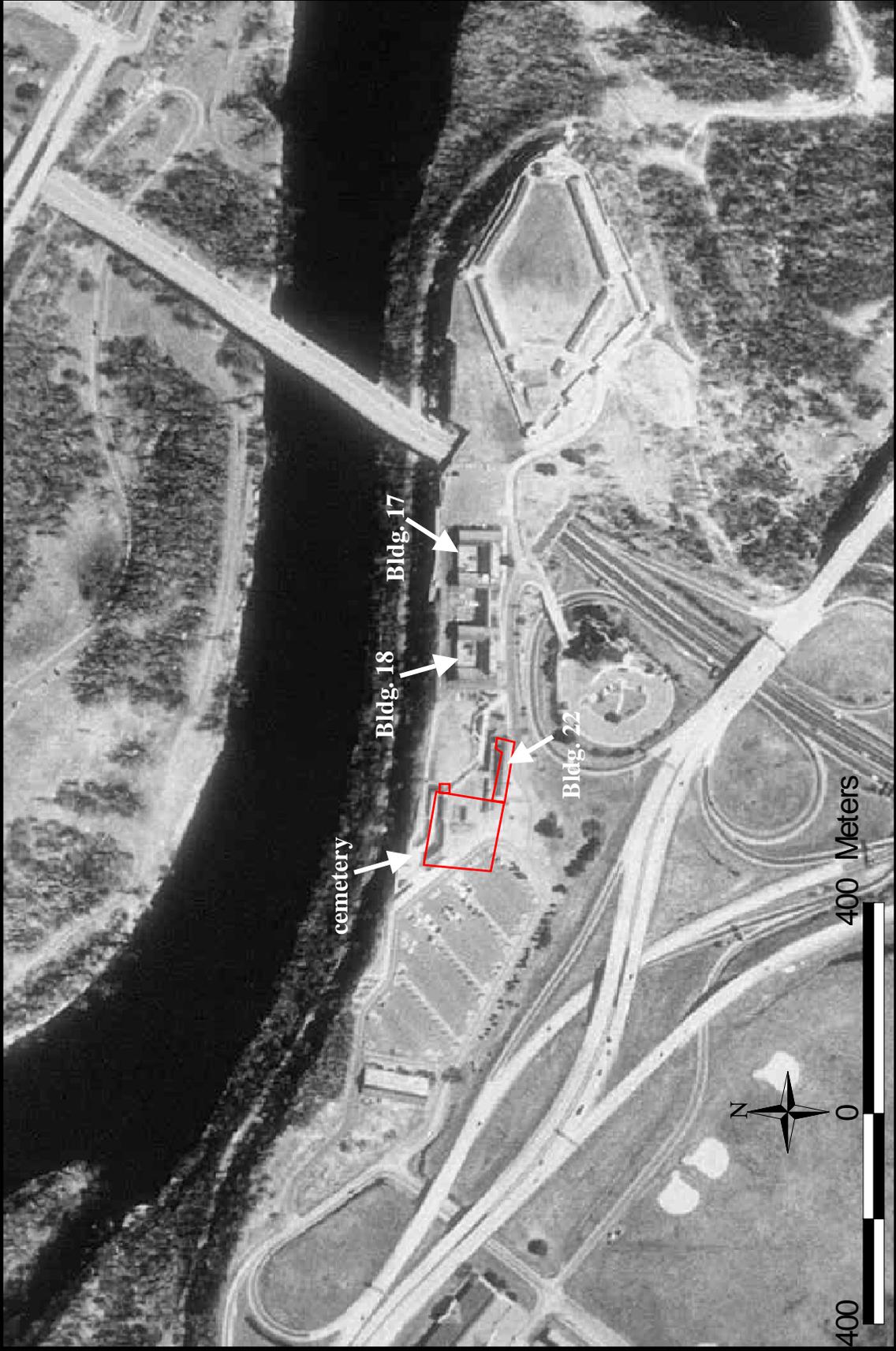
**Figure 3. 1878 Map of Fort Snelling, showing location of old post cemetery**



**Figure 4. 1895 Map of Fort Snelling, showing location of old post cemetery.**



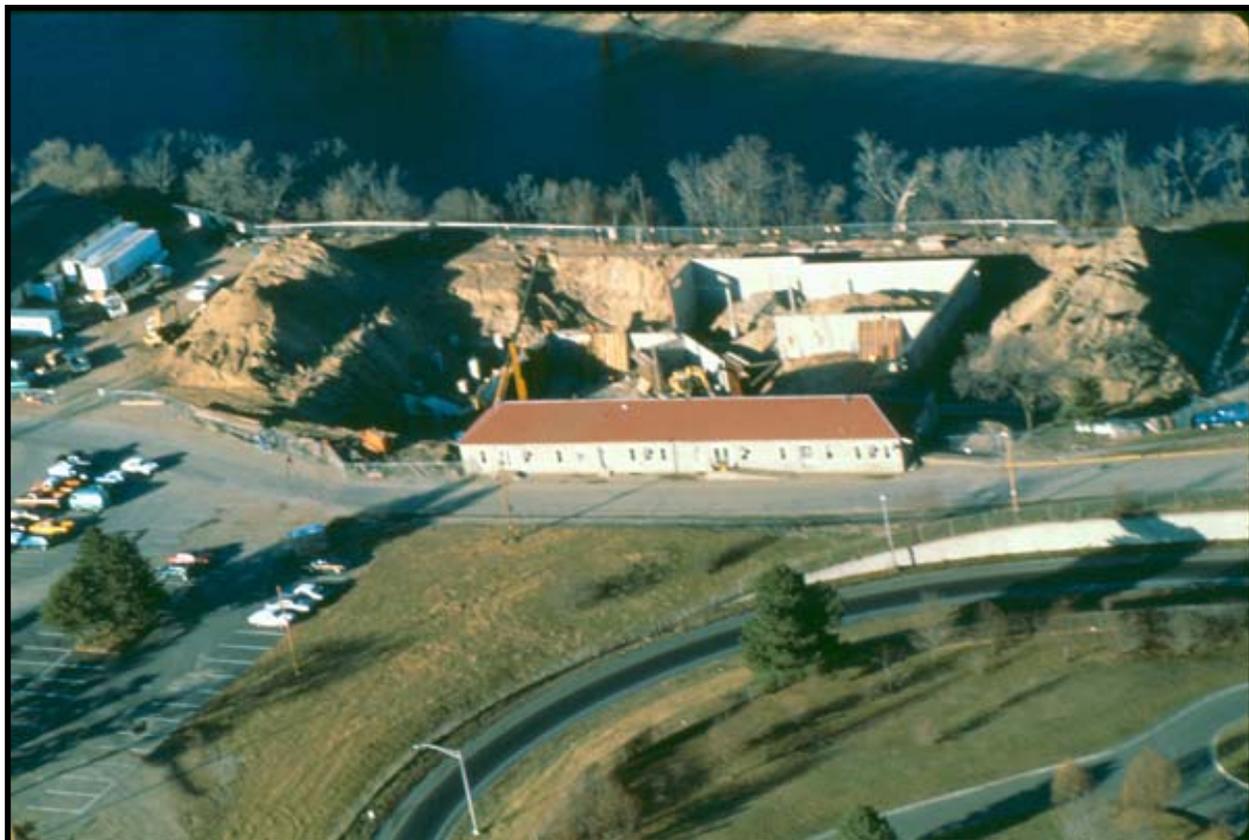
**Figure 5. 1905 photograph showing Fort Snelling cemetery (note Building 9-K in center background, north corner of Building 22 in far right background and Building 18 in far center background).**



Base map: St. Paul West Digital Orthophoto Quadrangle, 1991.

**Figure 6. Location of Historic Post Cemetery Relative to Modern Landscape Features**

Figure 7 is an aerial photograph, taken in 1980, of the existing visitor center under construction. Building 22 is in the foreground, with Building 25 to the left. Note the extent of excavation to the west and riverward of Building 22. Any graves that remained in this portion the old post cemetery certainly would have been obliterated by the 1980 construction.



**Figure 7. Current Fort Snelling Visitor Center under construction in 1980.**

It is less certain what the probability is that burials are still present underneath the eastern portion of the visitor center parking lot or in the very small patch of grassed terrain next to the lot. Officially, all graves were removed from the old post cemetery in 1905, and it is extremely likely that this is exactly the case, but past experience has demonstrated that mistakes do occur and some burials are occasionally missed during cemetery removal projects.

Identification of individual graves is a notoriously difficult process, in this case made more difficult by the presence of pavement over almost the entire area that might be thought to hold a slight possibility of containing one or more burials. This possibility can be addressed during construction by two-stage monitoring. The first stage would be careful examination of the ground surface after existing pavement and underlayment material have been stripped off. The objective would be to search for evidence of grave shafts. If features that possibly could be grave shafts are noted, consultation with the Office of the State Archaeologist to determine appropriate treatment would ensue. If no possible grave shaft features are noted, monitoring would continue during any further earthmoving activity necessary within the area delineated on historic maps as the “Old Cemetery”. Any noted evidence of the presence of burials would

require a cessation of construction until consultation with the Office of the State Archaeologist took place. Further work at that point would be determined by OSA recommendations.

It should also be noted that the Society is aware of a circulating rumor that may be fueling concerns about burials in the Area of Potential Effect for this project. The rumor asserts that a Native American burial was uncovered during construction of the existing visitor center. Such an incident did occur during the 1970s, but not at Fort Snelling. A native burial was uncovered during construction of the existing Interpretive Center at Grand Mound Historic Site. This incident is documented in Archaeology Department correspondence, and is mentioned in the National Historic Landmark nomination for Grand Mound currently under review by NPS.

### ***Programmatic Agreement Stipulations***

Most of the proposed archaeological research at Historic Fort Snelling can only take place once the planned revitalization is actually underway. Current conditions do not allow us to identify properties and assess effects at this time. This raises the need for a Programmatic Agreement in which the details of future actions can be laid out and agreed upon by the consulting parties.

A Programmatic Agreement for completion of archaeological research at Historic Fort Snelling should include, at a minimum, stipulations on the following issues:

- completion of archaeological survey in areas to be affected by the undertaking;
- creation of a context for evaluation by researching the results of prior archaeological work at Fort Snelling;
- methods and standards for evaluation of any identified archaeological features or deposits; and
- decisions on appropriate treatments for significant archaeological features and deposits.

## **H. Stabilization of Buildings 17, 18, 22, and 30**

The stabilization of the four buildings is described in detail in the “Documentation for Consultation.” Further details can be found in the schematic design drawings that have been submitted separately.

## **I. Reuse of Buildings 17 and 18**

In its plans for Buildings 17, 18, 22, and 30, the Society provides a model for approaching the preservation and reuse of buildings on the Upper Post. In addition to seeking \$11 million to stabilize the structures, the Society is actively working to identify reuse options by initiating a study of alternatives.

### ***Reuse Study***

The Society will issue a formal Request for Proposals in November seeking a consultant to help sort out the complex issues surrounding potential reuse at this unique location. A copy of the RFP has been submitted separately. A similar process has proven useful in identifying potential

reuses of another of the Society's properties, the grain elevators adjacent to the Washburn-Crosby Mills National Historic Landmark.

At Fort Snelling, one of the issues that must be examined is the potential impact of regulations regarding the use state bond moneys for building stabilization. Such funds can be used only by a public entity and for a public purpose. Given that state law defines historic preservation as a public purpose, acknowledging that there is a level of legislative interpretation involved, and considering the range of projects that have been funded in this way in the recent past, there are a number of possible conclusions. The reuse study will help to clarify these complex issues.

## **Parking**

MISS has cited several concerns about the issue of parking in any adaptive reuse of the buildings. Unfortunately, the comments suggest conflicting resolutions. On one hand, there is the Secretary of the Interior's admonition against "placing parking facilities directly adjacent to historic buildings." On the other, the Society's proposal to have tenants of Buildings 17 and 18 use existing parking is considered "not convincing," suggesting that the Society should create additional new parking near to the buildings to make them more attractive to prospective tenants. In any event, the distance from the parking lot to the barracks is far less than from the existing visitor center to the frontier fort. Given environmental concerns, the availability of public transit (including light rail), the expansion of bicycle trails in the area, and the desire to create a "greener" facility, the landscape architects are now projecting that the number of parking spaces on site will actually decrease over time. For the moment, the Society has considered the parking requirements of three realistic reuses: a youth hostel, a facility for the Society's archaeological programs, and generic government office space.

The idea of a youth hostel at Fort Snelling was considered by the Minnesota legislature in 1996. The firm of Miller-Dunwiddie-Associates was engaged by Hostelling International and the Minnesota AYH to prepare a predesign study for the Fort Snelling International Hostel. This undertaking called for the renovation of one of the barracks and the demolition of the other. If funded, the project was anticipated to be completed in 2000. The predesign projected that twenty parking spaces would be required.

A second possibility would be the reuse of one barracks building to house the Society's archaeological collections, staff, and labs, and a public research facility. This scenario actually was part of the Society's 2006 plan for the fort. Such a reuse would require parking for twelve Society staff and two individuals from the Office of State Archaeologist, all of whom would be expected to park at the far edge of the lots like other employees. The two to three visitors at any given time could park where there was available space on the same basis as other visitors to the site.

The use of the buildings for office space would require additional parking. Building 18 has an area of 32,414 gross square feet. Assuming that a typical office and office-related spaces estimates 225 square feet per office, the building would accommodate 144 office spaces. The industry standard is four parking spaces per 1,000 square feet, indicating that Building 18 would need 130 parking spaces. As this parking would be required only during weekdays when visitation is lowest at the site, it could easily be accommodated within the 275 planned spots.

Moreover, the Society would not expect that spaces designated for this use would be given priority, and certainly not that they would have to be near the barracks. Government agencies do not place a high priority on adjacent parking for employees. Its availability would not be a determining factor for such a public entity in deciding whether or not to occupy these buildings.

## **J. Demolition and Documentation of the Current Visitor Center**

The demolition of the existing visitor center will involve the removal of all interior walls. The outside walls will be removed to the level of 10 feet below natural grade. Holes will be drilled into the floors and remaining walls to allow the passage of water. The cavity would then be filled to the level of the adjacent surface. Prior to demolition the Historical Society will document the building for the Minnesota Historic Property Record with large-format photographs, copies of selected plans, and a narrative. The narrative will include an overview of contemporary underground construction in Minnesota. The original documentation set will be added to the official archive at the Historical Society library; a copy will be available at the new visitor center.

## **K. Modifications to the Frontier Fort**

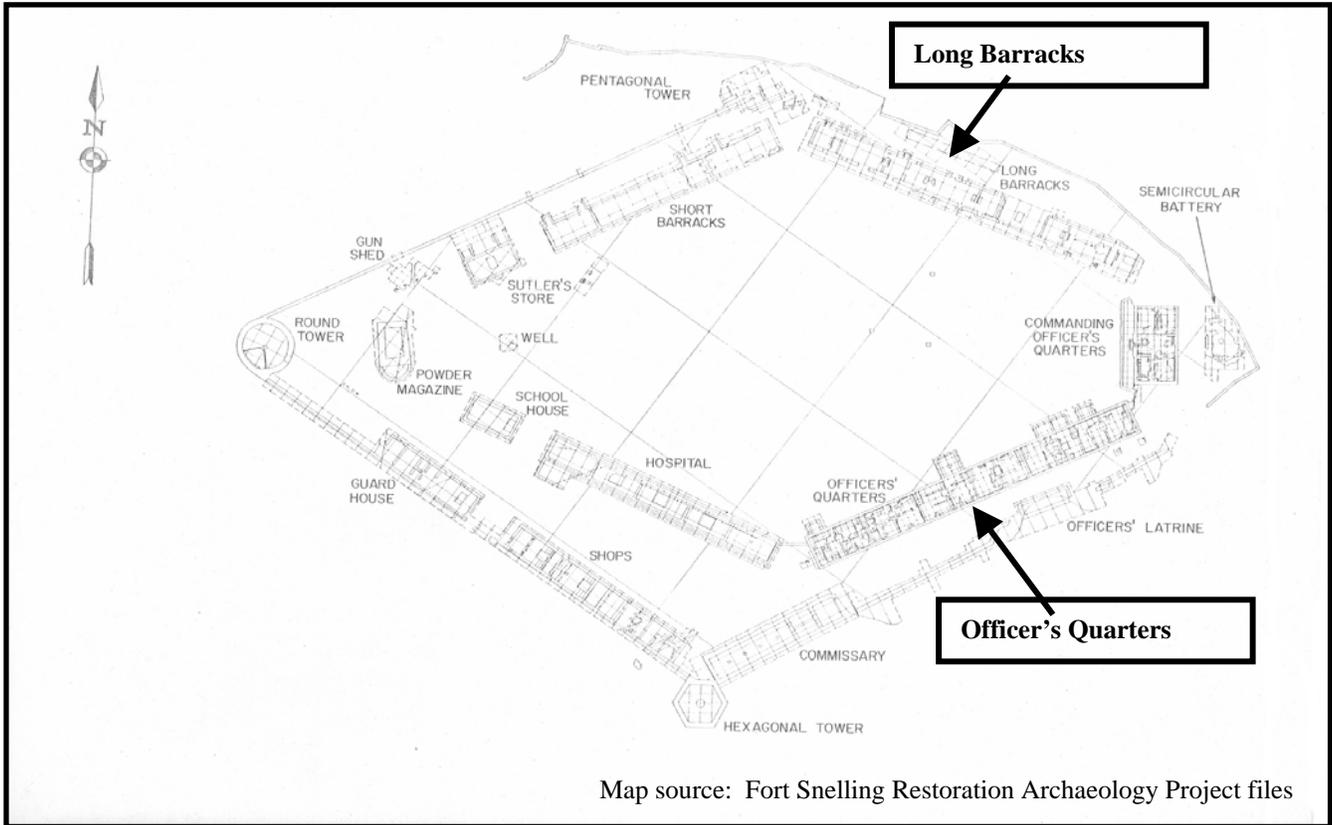
MnSHPO has asked for further documentation on the proposed changes within the frontier fort to better understand whether that work would affect original portions of the buildings. The following section provides information about the archaeological investigations of the two buildings of concern and a description of their reconstruction.

The current plan for revitalization includes several proposed augmentations to spaces in two buildings that are part of the reconstructed original Fort, in order to provide more usable staff space and make food service feasible. Changes are planned in two buildings: the Long Barracks (also known as the Wood Barracks), and the Officers Quarters. The locations of these buildings within the reconstructed Fort are shown in Figure 8.

The following descriptions of these two buildings are based on information contained in two documents: “Reconstruction Recommendations: Officers Quarters” by Robert A. Clouse (n.d.), and “Reconstruction of the Long Barracks: Fort Snelling Restoration” by John Grossman (1973). Both are internal documents that can be found in the files of the Fort Snelling Restoration Archaeology Project at Fort Snelling visitor center.

### *Long Barracks*

The Long Barracks was originally constructed between 1820 and 1823 as an enlisted man’s barracks. The stone foundation and one wood-frame story above ground had dimensions of 268 feet long and 22 feet wide. In 1845, the building was substantially remodeled, including replacement of the original wood-frame first story with a stone first story. The building continued to serve as barracks from that time until it was demolished in 1904-05, undergoing



**Figure 8. Locations of Long Barracks and Officers Quarters within reconstructed Fort Snelling**

construction and for the 1845 work, it was not always possible for the excavators to determine which basement features dated to the 1820s and which came two decades later.

Soils along the northern edge of the walled fort, where the Long Barracks is located, are quite shallow to bedrock, which required the 1820s builders to quarry into the bedrock to create cellars under some portions of the building. The presence of bedrock close to the modern ground surface also created an issue for those planning the reconstruction of the building in the 1970s.

The planned interpretive program at reconstructed Fort Snelling required that space in some building on-site be allocated to offices, changing rooms, lockers, a laundry room and a day room. The basement of the Long Barracks was chosen as the best space in which to house these functions. However, to accommodate these functions, there was a need for modern heating, ventilation and plumbing equipment that had to be hidden from public view. The space occupied by the requisite wiring, ductwork and piping, if run along the basement ceiling, would have lowered the ceiling height to an unacceptable level. But because the cellars were already cut into bedrock, increasing their depth was considered non-feasible. Thus, it was decided that the height of the first floor (the basement ceiling) would be raised by two feet to allow space for mechanical equipment in the basement. When the building was reconstructed, an additional two feet of limestone rubble foundation was added to the original

foundation (which had been found essentially intact during excavation) . Thus, only the lower portion of the building's basement walls is original construction from either 1825 or 1845. The upper two feet of the foundation visible to the public and the entire first floor of the building are modern reconstructions.

### *Officers Quarters*

The original Fort Snelling Officers Quarters building was built in 1823-24, contemporaneous with the other major constructions within the walled Fort. An 1824 letter written by Col. Josiah Snelling describes it as a split-level sort of building, with a single wood-frame main story fronting on the Parade Ground and a basement level of stone exiting at ground level towards the southeast curtain wall. Quartermaster's records from 1835 provide detail about interior construction: the main floor (Parade Ground level) was 268 feet long, divided into 14 paired apartments, each pair sharing an entrance door. The basement level was similarly divided into 14 paired kitchens that shared back-to-back fireplaces. Six of the kitchens had attached root cellars that extended northward under the Parade Ground.

In 1846, the Post Commandant had the wood-frame portion of the original 1820s Officers Quarters construction torn down and a new stone building constructed which provided twelve, instead of the original 14, paired apartments and basement kitchens. Most of the 1820s foundation of the building was used in the new construction, except for the northward (front) foundation wall, which torn out and moved about 3 feet further into the Parade Ground. The Parade Ground level story was rebuilt with limestone ashlar rubble to match the other stone buildings at the Fort.

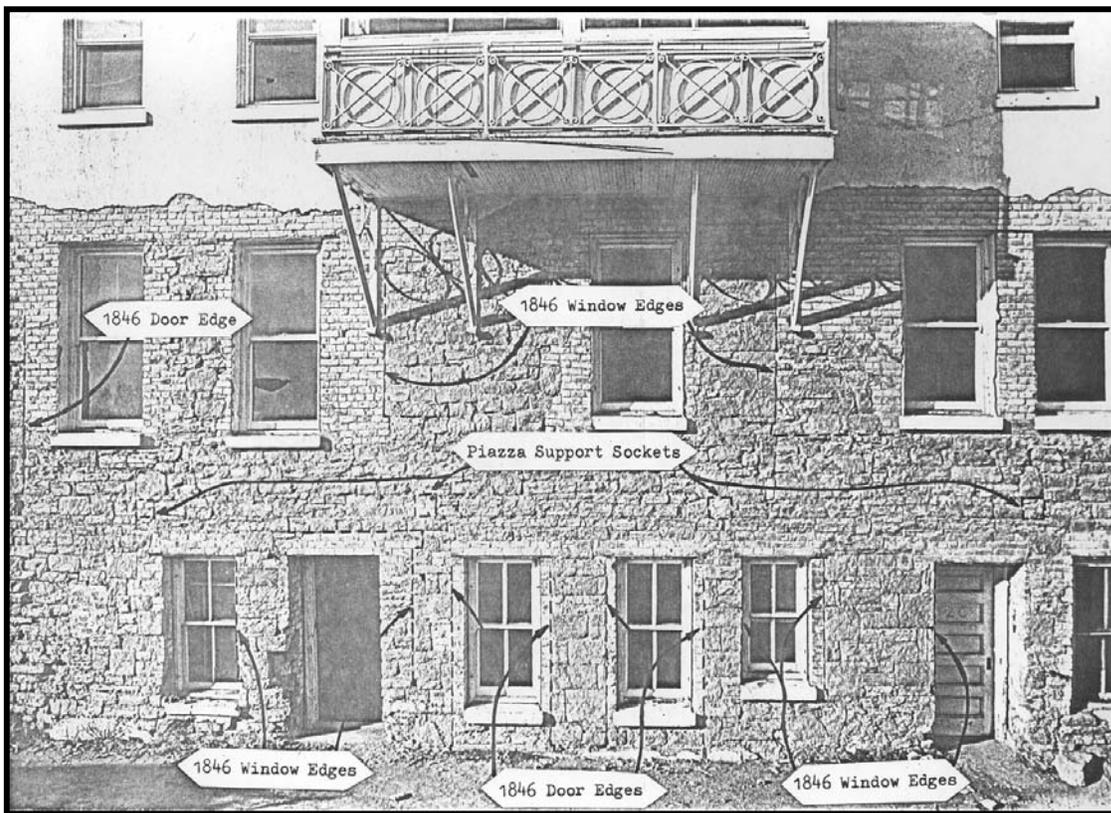
At the time that the State of Minnesota acquired the property that is now Historic Fort Snelling, the Officers Quarters still retained its original function, providing housing for officers serving at the nearby National Guard base. It had undergone extensive remodeling, much of it done in 1904-05. Stucco covered the 1840s stone walls and the front of the building was dominated by a Spanish-style arched façade.

After the building was vacated by the military in 1976, archaeological investigations to determine how much of the original building was still intact were begun. The first phase of that work was something rarely thought of as "archaeology": the systematic removal of interior walls and ceilings in the main floor apartments to reveal earlier construction materials. In the building's basements, poured concrete floors were mechanically removed and the materials underlying them were excavated with archaeological techniques. The results of these phases of work allowed for definition of sets of features that dated to the 1820s, to the 1845 remodeling, and to subsequent episodes of repair and remodeling.

In essence, the excavations revealed that some features dating to the 1820s were still extant: remnants of the original north foundation wall and original interior partition walls were discovered under several layers of fill in the basement of the building, as were excavated trenches that apparently had held sleepers for the basement floor. It also appeared that a portion of the 1820s west exterior wall had been retained and kept in its original location during the 1845 remodeling of the building.

Obviously, with the change in internal configuration from fourteen apartments in 1824 to twelve in 1845, all original (1820s) interior walls must have been moved, but it is presumed that a good deal of the stone from those walls was used to create the “new” interior partitions. During the 1976 excavation, the major interior partitions built in 1845, those which separate the paired sets of apartments, were found to be still extant in every case. These are major support walls that continued unbroken from the basement floor to the top of the Parade Ground level floor. Some showed evidence of modification (abandoned door locations filled up with brick, for instance), but were considered by the excavators to be substantially as they had been built.

On the first floor of the building (Parade Ground level), no non-load-bearing interior walls dating to either 1824 or 1845 were still present; the excavators ascribed this to the fact that the interiors had been gutted during the 1904-05 remodeling project. The only 19th-century features intact on this level were the exterior walls. These walls had been modified on multiple occasions, with new window and door openings cut into the stone and old openings sealed with brick (see Figure 9). But sufficient clues remained to the original locations of such building features that those who developed reconstruction plans were confident that the 1845 configuration could be restored.



**Figure 9. Illustration from Clouse (n.d.) showing west wall of Officers Quarters in 1973.**

In summary, the exterior walls of the Officers Quarters, on both the basement level and the main floor level, are considered 19th century construction, dating to either 1824 or 1845. Major interior partition walls are, likewise, original construction. All other interior walls and

staircases date to the 20th century. It should also be noted that, as of 1976, the east wall of the building was in very poor condition due to serious foundation cracks and was being supported by a brick buttress. Accordingly, reconstruction of this building included removal of the entire east end wall. The wall was rebuilt in its 1845 position with as much of the original building stone as possible.

#### *Proposed Modifications*

Current plans for modification of spaces within the Officers Quarters and Long Barracks focus on reconfiguration of modern walls within the buildings. In the Officers Quarters, a catering kitchen was installed in one of the lower-level apartments when the building was restored in the mid-1970s. The only planned change to this space is removal of a modern concrete block wall that subdivides the space. No changes will be made to the original 1840s load-bearing walls.

In the Long Barracks, a number of changes are contemplated to spaces on both the main floor level and the lower level (basement) of the building. However, these all focus on reconfiguration of interior walls that date to the 1970s reconstruction. Nothing is planned that will affect the lower portion of the foundation, which is the only remaining part of the structure that dates to the 1820s.