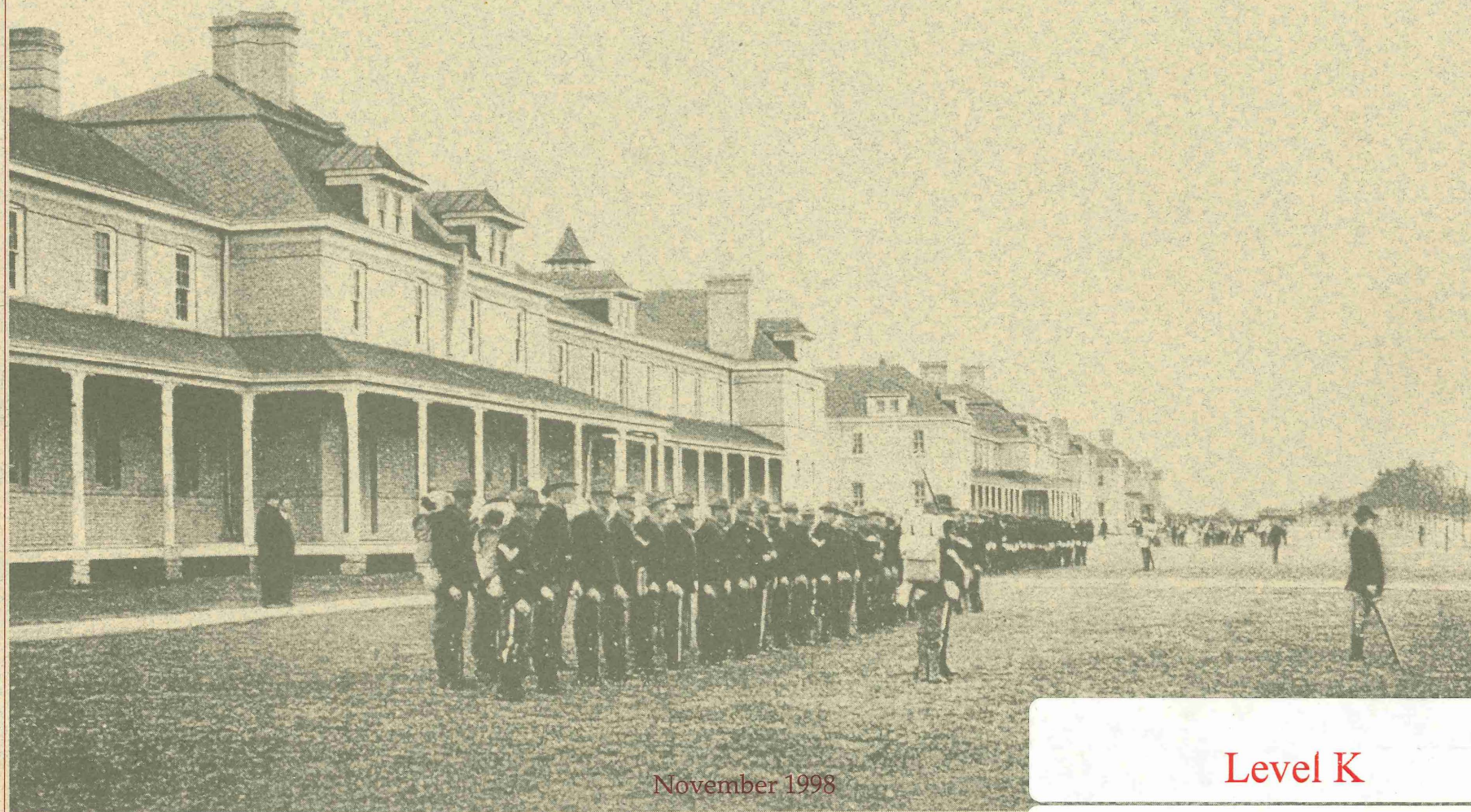




3 0307 00024 6390

Fort Snelling State Park ■ Upper Bluff ■ Reuse Study

Prepared by
the Fort Snelling State Park Upper Bluff Consultation Team
and Thomas R. Zahn & Associates



November 1998

Level K

C01- 0055

Consultant's Report

A special thanks to the Legislative Commission on Minnesota Resources (LCMR) for their financial support which made this study possible. Their concern for the preservation of the nation's rich cultural heritage is reflected in their financial commitment.

Funding for the *Fort Snelling State Park • Upper Bluff • Reuse Study* was approved by the Minnesota Legislature, ML 1997, charter 216, Sec. 15, subd 5A, Fort Snelling State Park Upper Bluff Utilization and AYH Hostel, as recommended by the Legislative Commission on Minnesota Resources from the Minnesota Future Resources Fund.

Fort Snelling State Park ■ Upper Bluff ■ Reuse Study

Prepared by
the Fort Snelling State Park Upper Bluff Consultation Team
and Thomas R. Zahn & Associates

The consultation was initiated and coordinated by the Minnesota Department of Natural Resources.
The project was also done in cooperation with the Minnesota Historical Society.

November 1998

Table of Contents

<i>Executive Summary</i>	Vision Statement	1
	Alternative Reuses Studied	5
	General Recommendations	5
	Building and Site Reuse Recommendations	7
<i>Study Introduction</i>	Study Concept	9
	Study Purpose	10
	Consultant Team	10
	Study Process	13
<i>Historic Background & Existing Conditions</i>	Chronology of Events	17
	Historic Overview	21
	Architecture	24
	<i>Fort Snelling State Park • Upper Bluff Area Map</i>	24
	Building Descriptions	25
	Architectural Context	35
	Existing Site Conditions	38
	Building Conditions	40
<i>Issue Analysis</i>	Archaeological Issues	43
	Airport Issues	43
	<i>Noise Monitoring Chart</i>	47
	<i>Noise Abatement</i>	47
	Education Issues	48
	Historical Significance Issues	49
	Legal Issues	51
	Multiple Building & Multiple User Issues	52
	Political Issues	53
	Preservation Issues	54
	Recreation Issues	55
	Tourism Issues	57
	Transportation Issues	59
	Development Issues	60
	Project Management Issues	63

Economic Analysis Projections

Introduction	65
<i>Building Analysis and Cost Estimate Spreadsheet</i>	66
Key to:	
<i>Building Analysis and Cost Estimate Spreadsheet</i>	68
Break Even Analysis for Private Development	
<i>Barrack Building #101</i>	73
Break Even Analysis for Private Development	
<i>Officer's Quarters, Building #152</i>	76

Alternatives Uses

Introduction	79
Alternatives	80
Different Scenarios for the Upper Bluff	81

Potential Sources for Funding

83

Implementation Strategy

Introduction	87
Implementation Activities	89
Implementation Phasing	94

Appendices

Reuse Worksheets	97
List of Preparers, Contributors and Consultants	105

Bibliography

106

R e u s e S t u d y G u i d e l i n e s

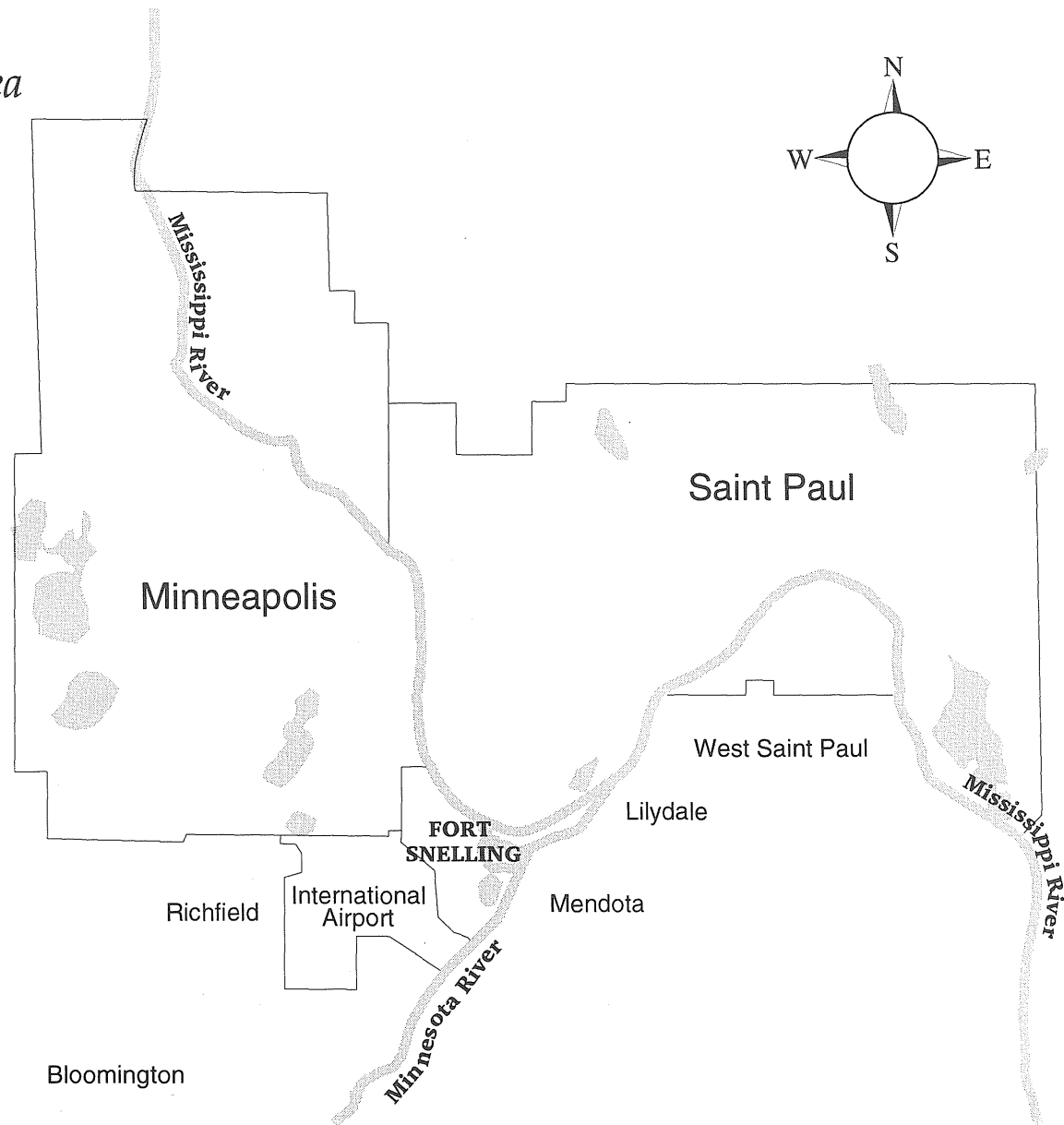
The reuse process requires a delicate balance of many design and political factors to guarantee that the final report represents a thorough, unbiased and practical analysis of the site under study. To clarify this process a number of tenets need to be stressed. Reuse studies are:

- **Locally Initiated**—*The reuse study process originates through a community's or local group's request for help.*
- **Independent**—*Once the process begins, the report and its conclusions are the responsibility of the reuse study consultation team.*
- **Objective**—*The consultation team enters the process without preconceived recommendation(s) for reuse.*
- **Analytical**—*The purpose of the reuse study process is to gather information and form recommendations through an analysis of that information. This analysis includes identifying needs and opportunities within the context of physical and political constraints.*
- **Inclusive**—*The consultation team actively seeks a variety of opinions in its attempt to develop sound and unbiased recommendations for reuse.*
- **Preservation oriented**—*The process assumes the preservation of the buildings under study, however, loss of a building due to the lack of an economically viable reuse is always a possibility.*
- **Locally Implemented**—*Once the consultation is completed and the report printed, it is the responsibility of the community/local group to determine which recommendations can and should be implemented. It is ultimately their responsibility to preserve and protect the historic resource that provides focus to their community's history.*

Abbreviations used in this study include:

BOQ	Bachelor Officer's Quarters
DBL	Decibels
DNL	Day-Night Level (decibels)
EIS	Environmental Impact Statement
ELC	Environmental Learning Center
FAA	Federal Aviation Administration
GCSF	Gross Construction Square Feet
GSA	General Services Administration
GRSF	Gross Rentable Square Feet
HPTC	Historic Preservation Training Center
HUD	Federal Department of Housing and Urban Development
ISTEA	Intermodal Surface Transportation Efficiency Act
L&WCF	Land and Water Conservation Fund
LCMR	Legislative Commission on Minnesota Resources
LRT	Light Rail Transit
LTCP	Long Term Comprehensive Plan
MAC	Metropolitan Airport Commission
MHS	Minnesota Historical Society
MnDNR	Minnesota Department of Natural Resources
MnDOT	Minnesota Department of Transportation
MNRRRA	Mississippi National River Recreation Area
MOA	Mall of America
MPCA	Minnesota Pollution Control Agency
MPRB	Minneapolis Park and Recreation Board
MSP	Minneapolis/Saint Paul International Airport
NHL	National Historic Landmark
NPS	National Park Service
NRHD	National Register Historic District
NRHP	National Register of Historic Places
PAST	Preservation Advisory Services Team
TAB	Transportation Advisory Board
TIF	Tax Increment Financing
WPA	Works Progress Administration

*Fort Snelling
& the Metropolitan Area*



Executive Summary

The Upper Bluff area of Fort Snelling State Park is one of Minnesota's, and the nation's, most historic and culturally important sites. It is also one of the most underutilized historic resources within the state. The purpose of the Upper Bluff study is to help the MnDNR determine the feasibility of reuse for these significant buildings and the surrounding 141 acres.

The Minnesota Reuse Consultation Team is a technical assistance program styled after the Preservation Advisory Services Team (PAST) program of the Midwest Regional Office of the National Trust for Historic Preservation. The Minnesota Team concept was developed to provide preservation consultation to communities and government agencies within the State needing professional help in determining the feasibility of reuse for their threatened historic buildings and sites. Since 1988 there have been over 25 successful reuse studies completed in Minnesota.

For the Upper Bluff study the consultation team was composed of a variety of "built environment" professionals. The range of team disciplines and interests was dictated by the complexity of contexts presented by the Fort Snelling Upper Bluff Area. Consequently, team disciplines included recreational planning, tourism planning, landscape planning, preservation, and historical architecture, park management and economic specialists.

In December of 1997 the team convened at Fort Snelling State Park to identify potential new uses and users for the structures and surrounding acreage, and to develop a guide for the realization of those uses. During the five day on-site portion of the study the team held over 35 interview sessions, with over 50 interviewees participating in the process.

Vision Statement The reuse team developed vision statements which describe the "best future" for this 141 acre site and its collection of 28 historic buildings. Vision statements clearly highlight both the importance and the potential of the Upper Bluff, themes which might otherwise be lost in a public policy discussion rife with complex and practical issues which need to be resolved. While the body of this study will identify these complex and practical issues and deal with them in realistic ways, the primary motivation for resolving these issues is to advance that time when the visions become reality. It is important to remember that the visions, although stated as separate entities, compliment one another.

Common Conditions for Visions

- The Upper Bluff and its four distinct components: Officers Row, Area J, golf course, and polo grounds constitute a unique mix of historic buildings and recreational amenities not to be found anywhere else in Minnesota. The close proximity and easy access of this site to 60% percent of the state's population, combined with its unique mix and unquestioned historical significance, make the site a priority candidate for a sensitive reuse plan.
- The Upper Bluff is a historical and operational extension of Old Fort Snelling, an extension which partially served the military needs of the United States throughout the Civil War, the Western Expansion, the Spanish American War, and both World Wars. The Upper Bluff is a site which has significantly influenced state, regional, national and international affairs. Any proposed reuse for the site must acknowledge and maintain these historic connections.
- The historical significance of the buildings is primarily derived from their interrelationships as a group rather than from individual buildings. It is imperative therefore that any reuse plan preserve and reuse all or most of the existing buildings.
- The portion of Taylor Avenue which fronts both Officer's Row and three Enlisted Barracks is a very significant streetscape which must be preserved for future generations. Inclusion of the Post Headquarters Building is a logical addition to this streetscape.
- The Polo Grounds, which currently provides a number of public playing fields, must remain as open space unencumbered with buildings and available to future generations for recreational and exposition purposes.
- It is imperative to maximize use of existing on-site open space for recreational uses. In addition, the existing open space should be expanded by the acquisition of additional lands as they become available (i.e. such as the lands west of Bloomington Road).

VISION I

The historical significance of the Upper Bluff is a story that should be expressed by every means available so that all Minnesotans recognize the irretrievable loss of their common heritage if this unique mix of historic buildings, streetscape, and open space is lost for public use.

Citizens of Minnesota are made aware of the rich history of the Upper Bluff and the role played by Fort Snelling in opening up the Dakotas and Montana. Themes like Custer, the Buffalo Soldiers, and supply lines to frontier forts will be developed to lend substance to the Upper Bluff's claim to fame. If old Fort Snelling is the crucible of modern Minnesota, then the Upper Bluff represents seasoning and maturity of a new state (Minnesota) and of a new nation, the United States of America, as both progressed from raw frontier outposts to the status of major players in the modern world. The rise of both coincided with the development and expansion of Fort Snelling in the Upper Bluff between 1870 and 1920.

Making the general public aware of this is an important step toward reversing the current status of the Upper Bluff. It will take strong political support to generate the financial and other resources necessary to do justice to the Upper Bluff. It will take a major educational effort to make the case to the general public that investment of these resources is highly desirable. An important part of this vision is the growing public support to pro-actively intervene toward the end of converting the buildings and site for appropriate reuse, rather than continuing the current course of "benign neglect."

VISION II

The historic buildings will be stabilized pending the completion of all rehabilitation work necessary to return each one to its appropriate reuse.

Regardless of the eventual reuse for each individual building, it is important to make the commitment now to provide the financial resources to secure the buildings against vandalism, to repair roofs, and to make other such repairs necessary to protect them from additional physical deterioration until such time as major renovations can be undertaken. An important element of this vision is obtaining the funding to stabilize each building to prevent further deterioration in the process.

VISION III

The process leading to appropriate reuse of each individual building will involve three distinct components: (1) the educational opportunities inherent in the reuse construction phase, (2) the return of each building to active, although in most cases different uses, and (3) upgrading infrastructure including roads, utilities, police and fire protection, and connection with mass transit.

Part of the return to the general public of a restored Upper Bluff is the educational and training opportunities that will be available to interested citizens during the rehabilitation process.

This vision foresees a Historic Preservation Technology Center in place which uses the actual rehabilitation of each of the buildings as a laboratory where students in a certified curriculum gain hands-on experience on how to rehabilitate historic buildings. Each building will be rehabilitated according to the specifications of a specific tenant. A viable reuse for some of the buildings is as a conference and training center. Such a center would build upon a number of positive attributes, including: the availability of over 350,000 square feet for development, the campus arrangement of the buildings, recreational amenities, a nine hole golf course, a large open space with the flexibility to be used for team sports as well as for major outdoor expositions, proximity to 60% of the state's population; plus, an authentic history related to both site and buildings. The vision here is that an appropriate developer can be found to develop a conference center which builds on the existing attributes of the Upper Bluff Area.

All necessary utilities will be upgraded in a timely fashion so that the users of the restored buildings have a complete and modern infrastructure in place.

VISION IV

The nine hole golf course and athletic fields will be improved and remain for public use.

The golf course and playing fields provide for a variety of recreational and cultural needs. Providing the public the use of these facilities was a major rationale for transferring administrative control of the Upper Bluff from the military to the MnDNR. The wisdom of this transfer has been borne out by the heavy use of these facilities over the years.

Alternative Reuses Studied

The following alternatives were evaluated for analysis during the on-site component of the reuse study.

- **Public reuse**—This alternative assumes that the buildings and grounds should be put back into service with a public use only. Discussed was the renovation of the buildings for uses such as governmental offices, military museums, and nonprofit organization offices.
- **Recreation reuse**—This alternative assumes the possible demolition of some or all of the buildings on the 141 acre site to meet expanding recreational and open space needs for the metropolitan area.
- **Education reuse**—This alternative assumes that the buildings be put to educational reuses. The site could provide a home for alternative education, continuing education, and/or technical training. The *Governor's Residential Academy Program*, charter schools and an Historic Preservation Technology Center would fit into this category.
- **Business reuse**—This alternative assumes that the buildings could support a variety of commercial reuses. Once renovated, the buildings would certainly project the image of stability, status and quality of design that a commercial tenant might seek. Proposed uses discussed included, but were not limited to, a conference and training center, offices and bed-and breakfast inns.
- **Multipurpose reuse**—This alternative assumes a combination of two or more of the above listed uses. Discussed was the appeal of a public/private reuse such as an Historic Preservation Technology Center, military museums, the *Residential Academy*, charter schools, and a conference and training center.

General Recommendations

After reviewing the above alternatives and subsequent use analysis, the team makes the following recommendations on the potential reuse of the Fort Snelling State Park Upper Bluff site. The team stresses the significance of this important historic resource to the state and to the nation. The architectural analysis determines that the majority of the buildings could be put back into use assuming that the cost of renovation of the extant buildings could be met through a public/private cooperation. *Also, the Department of Natural Resources (MnDNR) has indicated a need to maintain a revenue-producing component to the reuse of the Upper Bluff. The revenue would provide income for State Park operations and planning.*

1. **The Minnesota Department of Natural Resources (MnDNR), the Minnesota Historical Society (MHS) will work together with the National Park Service (NPS) and other agencies and private interests to realize the reuse recommendations.**

2. The Team recommends that a deed modification be made that allows uses in addition to recreation on the site. If historic building and landscape preservation is in fact a desired long-range goal, then it seems highly unlikely that this goal can be achieved with the existing deed in place. Allowing a public/private mix of uses seems very desirable from a number of standpoints, and is not unprecedented at other locations around the country.
3. Because of the complexity inherent in developing the site and its vacant buildings, it is recommended that a project implementation team be secured to guide the realization of the recommendations for reuse. Their responsibilities would include, but not be limited to:
 - developing a master plan outlining an approach and timetable for the rehabilitation of the buildings,
 - marketing the site to appropriate local, regional, national and international interests,
 - coordinating any private or semi-private reuse of any open space on the 141 acres,
 - working with the MnDNR, the Minnesota Historical Society, the University of Minnesota, regional vocational schools and trade interests to explore the feasibility of establishing an Historic Preservation Technology Center at the site,
 - working to secure public or private interest in developing a conference and training center on the Upper Bluff,
 - working with state agencies to determine the feasibility of using a portion of the buildings for educational uses such as the Governor's Residential Academy, charter schools, and an Urban Environmental Learning Center,
 - working with museum interests in securing adequate quarters for their collections once appropriate buildings have been rehabilitated,
 - seeking additional tenants (public and private) for the site's remaining historic buildings, and
 - working to insure that the potential reuses are compatible with the surrounding recreational park uses.

4. The boundaries of both the National Register site and National Historic Landmark designation should be redefined to:

- take into account all the changes that have occurred since their initial designation,
- include more recently designated National Register eligible buildings, and
- account for archaeological data related to the site.

The federally designated boundaries were defined in 1969 and 1978 respectively and are not only out of date, but often established as ones of convenience (e.g. the 800' contour line for the NHL boundary) rather than in relationship to relevant historic components.

The assignment of this National Register property to the "Initial Contact Period-Initial U.S. Presence" historic context either needs to be redefined or additional contexts need to be added to the significance of the site. Many of the structures date to after the turn of the 20th century and as such do not have their significance in that context.

The MnDNR should work closely with the Minnesota Historical Society and the National Park Service in redefining the boundaries of the Fort Snelling historic districts.

Building and Site Reuse Recommendations

The Team recommends that the site and buildings be reused with the mix of uses as follows:

- Rehab Building #53—Gymnasium— providing for either indoor recreational uses, housing in the form of weekly studios (rentals), or a hotel
- Rehab Building #54—Medical Detachment Barracks—for Charter School classrooms
- Rehab Building #55—Post Hospital—to dorm-type housing, for an Urban Environmental Learning Center, Americorps, or Residential Academy
- Rehab Building #57—the Band Barracks—to its former use (used by Charter Schools etc.)
- Rehab Building #62—Dead House— to offices or interpretive facility (excellent views of the Minnesota River Valley)

- Convert Building #63—Quartermaster Shops—to a picnic shelter
- Rehab Building #64—Fire Station—to compliment the fire museum proposed for Building #201, adjacent to the study area
- Rehab Building #65—Post Guard House—as a food concession and welcome center
- Rehab Building #67—Post Headquarters—as the Upper Bluff headquarters and administrative offices
- Rehab Building #76—Civilian Employees Quarters— for overnight stays or offices
- Rehab Building #101—Barracks—as a military museum, Civil War through modern times.
- Rehab Building #102—Barracks—as a conference and training center with housing across Taylor Avenue at Officer's Row (Buildings #152-#161)
- Rehab Building #103—Barracks—as an Historic Preservation Technology Center, arts center and jobs training center
- Rehab Building #112—the Bakery—to once again provide baked goods
- Rehab Building #151—the Bachelor Officer's Quarters—to serve as the clubhouse, pro-shop and food concession, with 2nd floor offices or housing
- Rehab Officer's Row—Buildings #152-#161— for overnight stays including one or two Bed and Breakfast Inns
- Reconfigure the polo grounds to allow for more athletic fields, while retaining flexibility for special events
- Retain nine-hole golf course with minor changes to improve play
- Replant Taylor Avenue and Minnehaha Avenue with appropriate street trees
- Provide landscaped noise barrier along the airport fence
- Explore the trail connections between the Upper Bluff, the Old Fort, and the trails along the Minnesota and Mississippi Rivers

Study Introduction

Study Concept

The Minnesota Reuse Consultation Team is a technical assistance program styled after the Preservation Advisory Services Team (PAST) program of the Midwest Regional Office of the National Trust for Historic Preservation. In November of 1986 the PAST Team began a study of the National Register-listed Johnston Hall in Faribault. This 1888 seminary building was vacant and threatened with imminent demolition. Today, Johnston Hall is successfully serving as a renovated medical office building as recommended in the PAST report.

The Minnesota Team concept was developed to provide preservation consultation to communities within the state needing professional help in determining the feasibility of reuse for their threatened historic buildings. The composition of the team varies, based on the constraints and opportunities presented by the property, but the core team is usually made up of a principal investigator, a preservation architect, a real estate development specialist, reuse-related professionals, and a representative of the MHS State Historic Preservation Office.

Since the Minnesota Team's inception, the consultation study concept has been applied to a variety of building types including:

- the Sherburne County Courthouse, Elk River (1988);
- the Tettegouche Camp, Silver Bay (1989);
- the Joyce Estate near Grand Rapids (1989);
- the Old Main at the University of Minnesota-Duluth (1989);
- the WCCO Elevator Houses No. 2 & No. 3, Minneapolis (1989);
- the West Wing of the Gillette Children's Hospital, Saint Paul (1989);
- the George Washington Armstrong House in Saint Paul (1990);
- the Mannheimer-Goodkind House, Saint Paul (1990);
- the Thorstein Veblen Farmstead in Rice County (1990);
- the Minneapolis Armory (1990);
- the Gideon H. Pond House and Farm site, Bloomington (1992);
- the Cavalry Barracks, Buildings 17 & 18, Fort Snelling (1993);
- the Scottish Rite Temple, Minneapolis (1994);
- the Stillwater Territorial Prison Site, Stillwater (1994);
- the Harding and Johnson School buildings in Aurora (1996);

- the Kasota Village Hall in Kasota (1997);
- the Saint James Opera House in Saint James, Minnesota (1997); and
- Central High School in Red Wing (1998).

Study Purpose

The Upper Bluff Area of Fort Snelling State Park is one of Minnesota's most historic and culturally important sites. This study was designed to help the MnDNR determine the feasibility of reuse for the 28 historic buildings and the surrounding 141 acres.

Through discussions held by the MnDNR and representatives of the Minnesota Historical Society, it was decided that the best way to approach the future disposition of the underutilized buildings was to conduct an adaptive reuse study. Through funding made available through the Legislative Commission on Minnesota Resources, the MnDNR then decided to conduct the study, help form a consultation team, and provide support services in the completion of the reuse study.

Consultation Team

The Fort Snelling State Park • Upper Bluff • Reuse Study Team assembled for this study was made up of:

Phyllis Hanson

Metropolitan Council
Mears Park Centre
230 East 5th Street
Saint Paul, Minnesota 55101

Recreational Planner

Ms. Hanson, a licensed landscape architect, brings professional experience in park and land use planning. Ms. Hanson's experience comes from over 10 years in the private sector as a park and land use planning consultant, and 7 years as a planner/landscape architect with the Metropolitan Council.

John Kuester

J.L.Kuester Community Development Services
19834 York Street NW
Elk River, Minnesota 55330

Tourism Planner

Mr. Kuester served as an Advisor to the National Trust for Historic Preservation and has participated on past reuse studies, bringing his community development/tourism planning skills into the analysis for reuse. He served on the reuse teams for Embarrass, Elk River and Aurora and worked as a consultant to the Iron Range Resources and Rehabilitation Board (IRRRB) to develop a feasibility plan for heritage tourism in northeastern Minnesota.

Chuck Liddy

Preservation Architect

Miller•Dunwiddie•Associates, Inc.
123 North Third Street, Suite 104
Minneapolis, Minnesota 55401

Mr. Liddy is a registered architect in Minnesota and other states, and a Vice-President with Miller•Dunwiddie•Associates. Mr. Liddy served as the Preservation Architect on reuse studies for the George Washington Armstrong House in Saint Paul, the Minneapolis Armory, the Cavalry Barracks at Historic Fort Snelling, the Minneapolis Scottish Rite Temple, and the Stillwater Territorial Prison. Mr. Liddy recently completed a nine year term on the State Review Board of the State Historic Preservation Office, and was previously Chair of the Minneapolis Heritage Preservation Commission.

John Mannillo

Economic Specialist

Suite 550 Gilbert Building
413 Wacouta Street
Saint Paul, Minnesota 55101

Mr. Mannillo is a licensed Minnesota Real Estate Broker, and Real Property Administrator who was the developer and owner of the Pioneer Building, the Endicott Buildings, and the Gilbert Building in Saint Paul's Historic Lowertown District. Mr. Mannillo served as economic consultant in the reuse studies of Johnston Hall in Faribault, the Sherburne County Courthouse in Elk River, the Old Main building on the University of Minnesota-Duluth campus, the Gillette Children's Hospital, the Minneapolis Armory, and the George Washington Armstrong House in Saint Paul.

Lee Markell**Park Planner**

Minnesota Department of Natural Resources
Box 39
500 Lafayette Rd.
Saint Paul, Minnesota 55155

Mr. Markell is a licensed landscape architect with 25 years experience in various aspects of landscape architecture including site planning and design, historic landscape preservation, landscape restoration, and project management. He has worked for the MnDNR for the past 18 years as a landscape architect, land protection specialist, and park planner. He has served on the Eagan Advisory Park Commission since 1990, chairing the Commission since 1995.

Charles Nelson**Historical Architect**

State Historic Preservation Office
Minnesota Historical Society
345 Kellogg Boulevard West
Saint Paul, Minnesota 55102

Mr. Nelson serves as the Historical Architect for the State Historic Preservation Office. He is responsible for reviewing all restoration proposals for National Register properties throughout the State and administers the Secretary of the Interior's Standards for Historic Preservation projects. He also administers the federal tax incentives program for rehabilitation of historic properties. Mr. Nelson supplies historical data and evaluates the feasibility of the proposed alternative reuses to maintain compliance with the Standards.

Bill Weir**Park Management Specialist**

Minnesota Department of Natural Resources
Regional Park Manager
1200 Warner Road
Saint Paul, Minnesota 55106

Mr. Weir serves as the Regional Park Manager for the Metro Area State Parks. As Park Manager, he supervises the maintenance, operations and development of the state parks in the 7 county metro area. Mr. Weir has

worked for the MnDNR since 1968, and has served the state as a Landscape Architect, Regional Park Manager, and Natural Resource Manager. He brought administrative expertise to the reuse study process.

Thomas R. Zahn

Principal Investigator

Thomas R. Zahn & Associates
University Club of Saint Paul
420 Summit Avenue
Saint Paul, Minnesota 55102

For twelve years Mr. Zahn served as an Urban Planner and then Preservation Planner for the City of Saint Paul. He is a Past-President of the Preservation Alliance of Minnesota and an Advisor to the National Alliance of Preservation Commissions. Mr. Zahn heads a preservation and design consulting office that provides a spectrum of preservation services in both the public and private sectors. He has served as Principal Investigator on the majority of the historic property reuse studies in Minnesota.

Study Process

Each member of the team was supplied with a Fort Snelling Upper Bluff information packet prior to the consultation. Each packet contained pertinent information about the site's location, condition, and historical significance. The packets also included regional and local information, newspaper clippings, and letters providing perspectives on the disposition of the property.

The reuse consultation began on November 19, 1997 when the team first convened to interview representatives of the National Park Service's Federal Lands to Park Program, and the Government Services Administration (GSA). The interviews provided insight into the governmental regulations and requirements of the present deed restrictions which stipulates that the land and buildings of the Upper Bluff can only be used for recreational purposes.

On December 1, 1997, the team began the intensive, week-long, on-site interviews and consultation. The study began with a guided driving tour of the Upper Bluff area and the surrounding historic buildings. This was followed by a walking inspection of the interior of a few of the buildings. Following the tours and inspections, the team spent the afternoon in interview sessions at the Thomas Savage Visitor Center in the Fort Snelling State Park. That evening

the team made a presentation of the reuse process at the first of three scheduled public meetings. The presentation was made in the Fort Snelling History Center Auditorium.

The team spent the following four days interviewing a variety of individuals and representatives of organizations that have a relationship to the Upper Bluff area, who could provide additional expertise to the analysis, or who were seen as potential tenants for future development of the site.

During the first week in December, the consultation team met with over 50 interviewees, representing the following organizations:

- the Veteran's Administration
- the National Park Service
- the Government Services Administration
- the United States Army Reserve
- the Legislative Commission on Minnesota Resources
- the Minnesota Department of Natural Resources
- the Minnesota Department of Tourism
- the Minnesota Historical Society
- the Preservation Alliance of Minnesota
- the Minnesota Recreation and Parks Association
- Hosteling International—Minnesota AYH
- the Metropolitan Airports Commission
- The Metropolitan Council
- the Ramsey County Rail Authority
- the Hennepin County Transit Authority
- the Minneapolis Parks and Recreation Board
- the Richfield Recreational Services
- the Saint Paul Parks Department
- the Fort Snelling State Park Association

In addition the team interviewed a variety of representatives of military and municipal museum interests, preservation, recreational, educational, and private development interests.

Following the five day on-site consultation, the team developed a list of issues/considerations that impact the reuse of the property and its 28 buildings. That meeting, and subsequent discussions among the team members, have produced a list of alternative uses, a team "vision" for the Upper Bluff site, recommendations, and a methodology to put this strategically located and nationally important cultural resource back into a productive reuse.

On February 26, 1998 a second public meeting was held to present the team's initial findings regarding the future potential of the Upper Bluff site and buildings. At that meeting the public was introduced to the "vision" for the site developed by the team. The evening also included a discussion of the various issues that impact the site's disposition, a presentation of the types of reuses that were being considered, and a question and answer period where the audience could express their concerns, recommendations, and dreams for the site.

Concurrent with the reuse consultation and under the direction of Robert Clouse, the Archaeology Department of the Minnesota Historical Society prepared a report titled "All That Remains—A Study of Historic Structures at Fort Snelling Minnesota." The report provides information and historical context for the remaining historic buildings, structures and features that are contributing elements to the Fort Snelling National Register site and Fort Snelling National Historic Landmark. Parts of that study have been woven into this report.

In addition, the firm of Angstrom Analytical, Inc. completed a "Limited Scope Environmental Survey Report" which included a preliminary hazardous materials assessment on the Upper Bluff's 28 historic structures.

The consulting firm of Arden Engineers made an assessment of the site infrastructure and provided a cost estimate for utility upgrades. Refer to the *Upper Bluff Building Analysis and Cost Estimate Spreadsheet*, pages 66-67, for details on abatement costs and utility upgrades.

Historic Background & Existing Conditions

Chronology of Events Fort Snelling and Upper Bluff Area

The following is a listing of significant events, in chronological order, which help frame the significance of the site and have led to the commencement of the reuse study for the Fort Snelling State Park Upper Bluff.

Date	Event
1804-1805	During their exploration of the Louisiana Territory, Meriwether Lewis and William Clark recommended the establishment of military fortifications at critical Missouri and Mississippi river junctures to maintain peace and protect trade with the American Indians. Among the sites recommended was St. Anthony's Falls.
1805, Sept.	Lieutenant Zebulon Pike negotiated a treaty with the Dakota tribe granting the US government 100,000 acres at the confluence of the Mississippi and St. Peters (Minnesota) Rivers.
1819, Aug.	The first fort was constructed. The first commander, Lieutenant Colonel Henry Leavenworth, chose the low ground on the right bank of the mouth of the St. Peter's River as the site for a temporary quarters. The location, however, soon proved to be unhealthy.
1820	Fearing spring floods and more disease, Leavenworth moved his troops to high ground near a spring a mile up the west bank of the Mississippi River - this became Camp Coldwater. During the summer, Colonel Josiah Snelling became the new commander of the regiment. Under his energetic direction, a new stone fort was constructed atop the bluff on the west bank of the confluence of the St. Peters and Mississippi rivers. The new post was given the name Fort St. Anthony the following year.
1825	Construction of the new post was completed. The following year, in recognition of his considerable achievement, the War Department officially changed the name of the site to Fort Snelling.

1849	The Minnesota Territory was formed, with Saint Paul as its political center. As the western frontier became ever more remote, Fort Snelling became more of a tourist attraction than a military necessity.
1858	Fort Snelling and eight thousand surrounding acres were sold under dubious circumstances to Franklin Steele, a former sutler, for \$90,000. Following the sale, the fort was abandoned.
1861-1865	The outbreak of the Civil War and the U.S.-Dakota Conflict prompted the reactivation of the fort.
1866	The Army decided to retain the post for use as headquarters for the Department of the Dakotas.
1879	At the recommendation of General Alfred H. Terry, to provide better accommodations for the officers and men of the Department of the Dakotas, work began on 30 new buildings. Headquarters, officers quarters and support facilities were constructed.
1889	New brick infantry barracks were constructed.
1903-1907	New barracks, officers quarters, stables, warehouses, artillery sheds and workshops were constructed. The enlarged post was now at its fullest development.
1917-1918	As a site for the training of officers, over 2,500 junior officers graduate from the post. Late in 1918 most of the site was designated as US General Hospital Twenty-nine to treat convalescent wounded.
1918-1939	The fort became known as the 'Country Club of the Army.' A golf course, officers' club, streetcars to both cities, military shows and polo games, demonstrations by the trick horse 'Whisky,' and the largest game preserve of a US military installation make it a popular post for soldiers.
1938	The Work Progress Administration reconstructed portions of the post at a cost of \$500,000.
1940	The Selective Service Act led to the opening of a Recruiting and Induction Station and a Reception Center. Over 600,000 soldiers were processed here during the Second World War.

- 1944 A Military Intelligence Service Language School was established at the post. Over 6,000 linguists, mostly Nisei (Japanese-Americans) graduated.
- 1946 Fort Snelling was decommissioned following the end of World War II. The site was turned over to the Veteran's Administration.
- 1960 Fort Snelling, including the Upper Bluff was designated a National Landmark.
- 1961 Fort Snelling State Park was established.
- 1966, Oct. Upper Bluff area was placed on the National Register of Historic Places.
- 1969, Oct. Historic Fort Snelling and the Chapel were deeded to the State of Minnesota.
- 1971 The U.S. Department of the Interior conveyed 141 acres of surplus Federal property known as the Upper Bluff area to the MnDNR exclusively for public park and recreational purposes in perpetuity. The quitclaim deed included restrictions that require the property to be developed and used according to the Program of Utilization submitted by the MnDNR as part of its application to acquire the property. The MnDNR incorporated the Upper Bluff area into Fort Snelling State Park.
- 1976 The State designates the Mississippi River and its adjacent corridor within the metropolitan area a Critical Area.
- 1977, May An Act for Fort Snelling Officer's Row was signed, authorizing commissioner of administration to lease/sell buildings and adjacent land.
- 1977, Sept. A Request for Proposal was released to obtain a concessionaire for Officer's Row buildings in September.
- 1979 The 1971 Utilization Plan was amended to allow for a concession for the golf course and proposed rehabilitation of Officer's Row and J-Area. A concession agreement was signed with the Officer's Row Corporation to operate the golf course and Officer's Row.

The Mississippi River Critical Area is permanently designated.

- 1988 Congress designates the Mississippi River and Recreational Area a unit of the national park system.
- 1991, Aug. Authority for continued military occupation of J-Area was extended for 4 years, than in 1995 for an additional 3 years.
- 1991, Sept. The Officer's Row Corporations concession agreement was terminated by the Executive Council. The MnDNR issued a Request for Proposal for a new concessionaire for the golf course and Officer's Row buildings.
- 1992 Minneapolis Park and Recreation Board became the concessionaire for the golf course and polo grounds.
- 1995 The Comprehensive Management Plan for the Mississippi National River and Recreation Area is approved.
- 1997 The Department of the Army vacated Area J.
- 1997, Nov. The reuse study for the Upper Bluff area formally began with the convening of a consultation team.
- 1998, Oct. The Fort Snelling State Park•Upper Bluff Reuse Study was completed and printed for distribution.

Historic Overview

The Upper Bluff at Fort Snelling possesses historical significance as an intact and cohesive grouping of buildings directly associated with the growth and development of the military post at Fort Snelling — the fort beyond the walls. As the military post at Fort Snelling was given more responsibilities, it expanded outward along the Upper Bluff. Serving a succession of needs, the Upper Bluff reflected the changing roles of the military and the nation it served, both in times of peace and in war.

Fort Snelling originated at the suggestion of Meriwether Lewis and William Clark during their exploration into the Louisiana Territory. They recommended in 1805 the establishment of a fort near St. Anthony's Falls to protect trade and maintain peace along the northwestern frontier. The same year, Lieutenant Zebulon M. Pike, on behalf of the United States, negotiated a treaty with the local Dakota (Sioux) Indians for tracts of land within their territory upon which to construct a U.S. military post. The land Pike acquired included the area around St. Anthony Falls, the confluence of the Mississippi and St. Peters (Minnesota) Rivers, and extended as far as the mouth of the St. Croix River. An expedition was sent into the upper Mississippi region in 1817 to review the land purchased by Pike. It was not until 1819 that a small contingent of U.S. soldiers, under the command of Lieutenant Colonel Henry Leavenworth, were sent to the area to build a fort. Colonel Josiah Snelling became the new commanding officer in 1820. It was Snelling who selected the site for the fort and decided on the design and the materials. An Indian Agency building was located near the post as well. The original name of Fort St. Anthony was changed in 1826 to Fort Snelling in honor of the commanding officer .

The fort's original mission of safeguarding trade and security gradually lost importance as the "frontier" moved ever further west, especially after Minnesota became a territory in 1849. The fort and surrounding military reservation were sold to Franklin Steele for \$90,000 under dubious circumstances in 1858. Shortly thereafter the American Civil War broke out, and Fort Snelling was reoccupied by the military and declared the location of the draft rendezvous and training facility for volunteers. The Dakota War that also arose placed additional duties in the care of the military post. A number of wooden structures were built along the Minnesota River bluffs towards the southwest to house functions necessary to fulfill its new duties, including barracks, officers quarters, kitchens and mess halls, a blacksmith's shop, a carpenter's shop, numerous stables, and other facilities. None of these remain standing today.

There is little evidence of growth in the garrison immediately after the end of the Civil War, with the exception of the construction of a new hospital in 1874, located where the north end of the Mendota Bridge now rests. Four years later, the Department of the Dakotas headquarters were moved from Saint Paul to Fort Snelling, initiating a new period of growth. Following the geographic pattern established during and after the Civil War, new

construction spread out in the contiguous areas available along the Upper Bluff. The early development of the Officer's Row (Buildings #154, #156, #158, and #160) on Taylor Avenue, the headquarters building (Building #67) built in 1879, the 1880 ordnance depot (Building #22, outside the study area), and new barracks completed in 1885 (Buildings #101-#103), are all related to the post's enhanced administrative role. The Upper Bluff area of the military post became the new focus of activity, while the original stone Fort Snelling was relegated to the status of ordnance depot. The growth at the military post slowed when the Department of the Dakota headquarters returned to Saint Paul in 1886, but between 1878 and the early 1890s more than 30 buildings had been added to the military post.

The placement of the new Officer's Row and barracks buildings reinforced the rank and social distinctions found in military life. The physical separation between officers and enlisted personnel was further demarcated by the construction of a road, sidewalks, landscaping, and a greater 'set-back' for the Officers' Quarters. By the mid-1880s, a structured streetscape had emerged along the Upper Bluff.

A movement towards the consolidation of many small forts into fewer and larger military posts began in the late nineteenth century, especially following the Spanish American War in 1898. As the United States became a world power, it was felt necessary to assemble greater numbers of soldiers in one place so that they could train together in larger formations. The military post at Fort Snelling reflected this change of reasoning by another period of rapid growth. A new hospital (Building #55) was constructed in 1898, along with a gymnasium (Building #53), in 1903. The latter is one of only two red brick buildings remaining on Taylor Avenue. Additional barracks for cavalry (Buildings #17 and #18)(outside the study area) and artillery (now gone), and a number of support facilities for housing animals (Buildings #30 and #209), artillery gun sheds (Buildings #202 and #207)(outside the study area), and artillery work shops (Buildings #205 and #206)(outside the study area) were constructed during this period as well. Altogether 18 structures remain from the turn of the century expansion.

The Fort Snelling military post was used to train National Guard and regular army soldiers in 1916 in preparation for the war in Europe, although it wasn't until the spring of 1917 that the United States entered the war against Germany and her allies. At Fort Snelling, over 150 structures were constructed—dedicated to housing, mess and training—including extensive trench warfare training grounds. None of these facilities or structures survive today. The military post specialized in officer training, eventually graduating 2,500 junior officers. Late in 1918 most of the site was designated as US General Hospital Twenty-nine to treat convalescent wounded.

The artillery drill fields of the late nineteenth century were converted to other uses in the 1920s. By 1927, the area was used as a recreation field with a polo field, a polo practice field, a running track, and baseball diamonds. In 1928

an officers club (Building #395) (outside the study area) was constructed overlooking the Minnesota River. In addition, the base had a game preserve. A 9-hole golf course was also added, although the date of construction is unknown. Due to the construction of Trunk Highway 5 in the late 1950s and later airport expansion, the majority of the old course was destroyed. The current nine-hole course does not share any of the "holes" from the earlier golf course. By 1938 softball diamonds, pool and hockey arena, tennis courts, and lighting for the athletic field were added. Fort Snelling became known as "The Country Club of the Army."

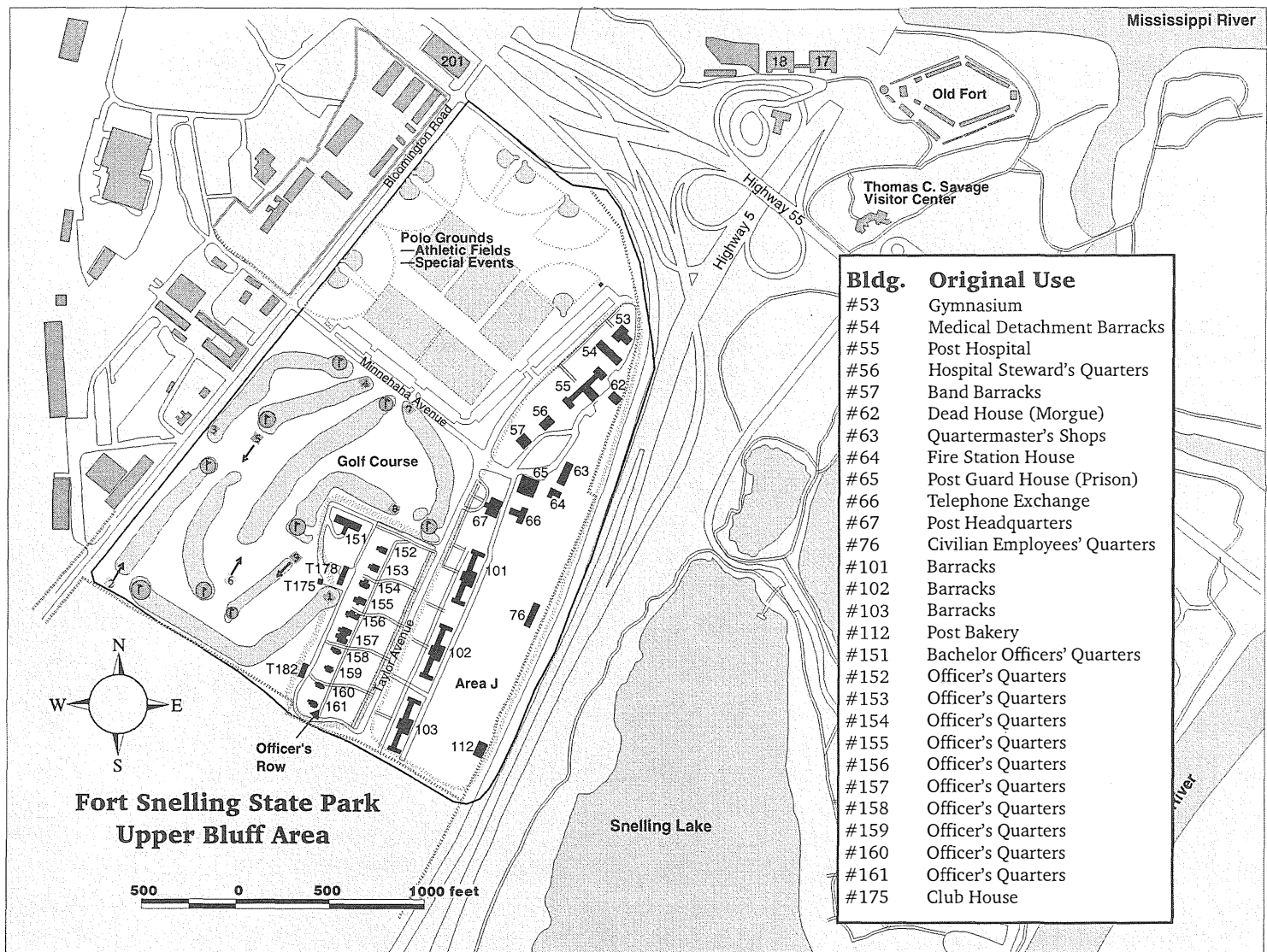
The Great Depression in 1929 almost led to the closure of Fort Snelling for a second time. During the early 1930s Fort Snelling became the location of a Supply Company of the Minnesota District CCC (Civilian Conservation Corps), changing to a Headquarters Company in 1934. Along with the WPA (Work Progress Administration), the CCC presence at the military post led to lasting modification to the grounds and buildings throughout the fort, such as re-roofing, construction of garages, pouring cement floors in existing buildings, lining drainage ditches with stonework to reduce erosion, and even raising the surface level of the drill fields about one foot, using only wheelbarrows of dirt. The total cost of these modifications amounted to \$500,000. Building #223 (outside the study area) was constructed in 1935 as a commissary warehouse for the CCC unit at Fort Snelling.

Another conflict with Germany, and Japan, was seen as likely by the late 1930s. A barracks for the medical detachment (Building #54) was constructed in 1939. The following year the Selective Service Act led to the opening of a Recruiting and Induction Station and a Reception Center. After the entry of the United States in W.W.II in December, 1941, the military post at Fort Snelling swelled in size to over 300 buildings. Most of these structures no longer survive. Over 600,000 soldiers were processed here during the Second World War. Specialized units such as military police, railroad, and a Military Intelligence Service Language School received training at the military post as well.

The active role of Fort Snelling as a military post ended in October, 1946, when the federal government closed the base and turned it over to the Veterans Administration. The area gradually was passed to various agencies of the state of Minnesota, beginning in 1961 with the establishment of Fort Snelling State Park. Proposals to develop the Upper Bluff without disturbing its historic value began in the 1970s, although various issues have caused these plans to be postponed.

Architecture

There are 28 extant buildings in the Upper Bluff study area that are considered historically significant or important to its recreational uses. The following section lists these buildings by name and building numbers and gives a brief history of each.



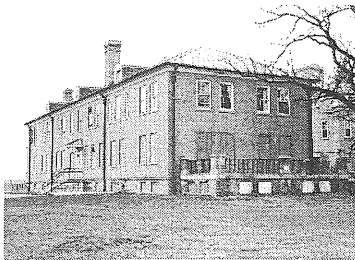


Gymnasium: Building #53

Date of Construction: 1903

Foundation: stone Walls: brick Roof: slate

Built from the first congressional funds dedicated for the construction of gymnasiums and canteens, it served as a center for indoor recreation for troops. On a 1904 plan it is listed as the post exchange. It was remodeled during WWII to include a ballroom on the second floor, a billiard room and lounge on the first floor, and bowling alleys and post exchange in the basement. This two story red brick structure is accented with keystones, a main entry surround and water table course of gray limestone. It is one of only two red brick buildings remaining along Taylor Avenue. The exterior of the structure is one of the least altered of the remaining Fort buildings.



Medical Detachment Barracks: Building #54

Date of Construction: 1939

Foundation: stone Walls: brick Roof: slate

The Medical Detachment Barracks is one of the most recent buildings that remains at Fort Snelling. This two-story, yellow brick building was constructed next to the hospital to provide housing for the approximately 75 men assigned to hospital duty. The structure is identified as a hospital annex in an undated United States Army document. The hipped roof contains three gabled roof dormers on the front and back. Unlike other buildings along Taylor Avenue, its facade fronts southwest towards the hospital rather than towards the street.



Post Hospital: Building #55

Date of Construction: 1898

Foundation: stone Walls: brick Roof: slate

The hospital was one of eight to be built from dedicated congressional funds that year. It replaced an earlier hospital that sat at what is now the southwest end of the Mendota Bridge. Designated as U.S. Hospital No. 29, it received additions in 1905, 1910, and 1935 to provide expanded care facilities. The structure contained isolation wards, surgery facilities, a kitchen, dental facilities, and a dispensary along with hospital ward rooms that held 150 beds. The two-story wooden porches that extended along the front of the building, and the one story porch that was on the central projecting bay have been removed. The yellow brick, two-story construction had a hipped roof with double hipped roof dormer, while the wings had two double dormers. Wings added at right angles to the original wings provide a gable end to the facade of the building.

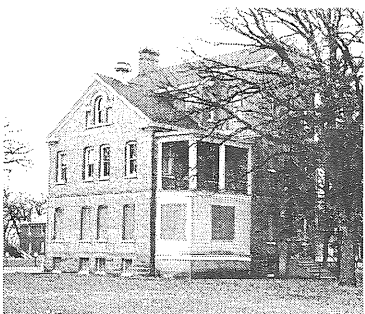


Hospital Steward's Quarters: Building #56

Date of Construction: 1900

Foundation: stone Walls: brick Roof: slate

This two-story, red brick, Colonial Revival building next to the hospital was initially constructed to house the hospital's principal non-commissioned officer, the chief steward and his family. The structure has a hipped roof with one chimney on the south roof slope. The original full-width wooden porch has since been replaced by a brick one with a rusticated concrete block foundation. The asymmetrically placed front door is common on Colonial Revival structures built around the turn of the century. The windows have segmental-arch lintels and have a 6/6 pattern of glazing. There is a small, single story addition off the eastern rear corner of the house.

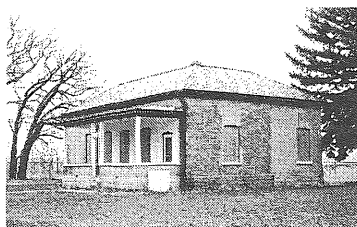


Band Barracks: Building #57

Date of Construction: 1903

Foundation: stone Walls: brick Roof: slate

This two and one-half story yellow brick Colonial Revival building with a three story central projecting bay was initially designed as housing for the military band. It was built near the fort flagstaff and central administration building since the band played for guard mounts, retreats and other scheduled ceremonies. During the early 1920s it served as an isolation hospital. It has a two story porch on either side of the projecting bay with round columns supporting the roof. The lower portion of each of the porches has been closed in. The gables on either end of the building contain Palladian windows. The windows and doors have segmental arch lintels.



Dead House: Building #62

Date of Construction: 1904

Foundation: stone Walls: brick Roof: slate

This single story yellow brick building was originally constructed as the morgue (dead house). It is thought that this structure served as storage for corpses during those months when the ground was too frozen to allow internment. In 1933 it was essentially doubled in size and converted to living quarters.



Quartermaster Shops: Building #63

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

Building #63 has served a number of functions throughout its existence. It was initially constructed as quartermaster shops when the Department of the Dakotas headquarters moved to Fort Snelling and resulted in new construction in this area of the fort. In the latter part of the nineteenth century it served as the post exchange. In the 1930s it was converted to eight sets of married non-commissioned officers' quarters. This two story yellow brick building is in very poor condition with gaping holes in the roof. Brick work on the walls does not use common bond construction, using instead metal ties between the withes. These have rusted through and the outer withe of brick has collapsed in a section of the east wall.



Fire Station House: Building #64

Date of Construction: 1903

Foundation: stone Walls: brick Roof: slate

This brick structure was built to house two fire engines. The tower at the rear of the structure may have housed a fire siren of some sort. At some point prior to 1933, a second story was added with living quarters for fire personnel. A single story addition was constructed on the south side of the building in 1933.



Post Guard House: Building #65

Date of Construction: 1891

Foundation: stone Walls: brick Roof: cortright tile

The post guard house was initially constructed as a one story brick building to hold the daily guard as well as prisoners. In 1908 a brick addition was built on the south side, increasing the capacity to 65 prisoners. A second brick addition was made in 1912 to house a dining room and kitchen. After the Fort closed in 1946, the structure was used by the Veterans Administration Fire Department until the 1980s. This building has a full width porch on the west side.

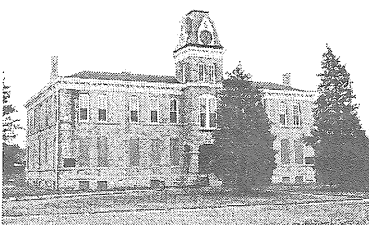


Telephone Exchange: Building #66

Date of Construction: 1927

Foundation: cement Walls: brick Roof: asphalt shingle

Originally constructed as a wooden structure, this building was replaced as a one story red brick building serving the communication needs of the Fort. The building was added to in 1939 to house troops assigned to this facility. It also housed a photography laboratory and a film library.

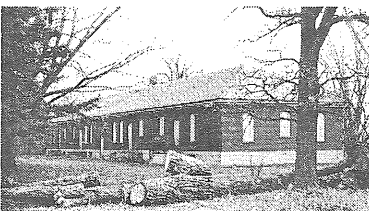


Administration Building: Building #67

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: tin

Building #67 was originally constructed as the administration building of the Department of the Dakotas headquarters when it was moved from Saint Paul to Fort Snelling in 1879. The Department of the Dakotas headquarters returned to Saint Paul in 1886. After that point Building #67 was used as the post headquarters until the Fort closed in 1946. A fire occurred in the building in 1916. The clock tower was added in 1883. This two story yellow brick structure was a central focal point of the line of buildings along Taylor Avenue.



Civilian Employees' Quarters: Building #76

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This red brick one story structure was originally built to house six civilian employees. It was remodeled in 1912 to house four non-commissioned officers' families. In 1933, two porches were added.



Barracks: Building #101

Date of Construction: 1885

Foundation: stone Walls: brick Roof: corright tile

This building is one of what was a row of four identical infantry barracks. The fourth structure was demolished as a result of airport expansion. Construction of the barracks was part of a post expansion, begun in 1879 for the Department of the Dakotas headquarters and the military's efforts at consolidation. The structure is two and one-half stories, constructed of yellow brick. The body has a gable roof with a dormer on each side. The center pavilion has a mansard roof with two dormers. The pavilion contains separate entrances for each side of the building. The wings have hipped roofs with three dormers each. All the dormers on the structure have hipped roofs. In the rear,

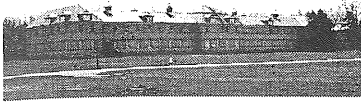
a single story building has been connected to the structure. The facade once held a single story shed roofed verandah that has been removed. A two-story rear porch was also removed. In 1936, the Work Projects Administration (WPA) made two 2-story additions to the back of each of the wings to house an additional 53 men in each addition. These additions have concrete foundations.

Barracks: Building #102

Date of Construction: 1885

Foundation: stone Walls: brick Roof: cortright tile

Same description as Building #101

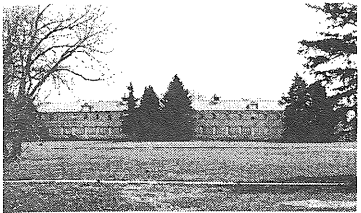


Barracks: Building #103

Date of Construction: 1885

Foundation: stone Walls: brick Roof: cortright tile

Same description as Building #101



Post Bakery: Building #112

Date of Construction: 1891

Foundation: stone Walls: brick Roof: shingle

This single story building is constructed out of yellow brick. The hipped roof was originally metal, was replaced by slate in 1907-08, and is now shingle. The roof has a small gable over the front door. The window and door openings originally had flat-arch lintels of brick, but are now have segmental-arch lintels. Some window openings have been filled in with brick. Between 1910 and 1927, a "cantonment building [was] attached as [quarters] for married men." It had a sitting room, kitchen, two bedrooms, and a hall. Perhaps this housed the baker and his family. Baking equipment was still being installed in the 1930s, so it can be assumed that it was still operating as the post bakery



at that time. At an unknown date, the chimney on the north side of the building was removed. In 1936, the smokestack visible in the current photo was installed, the remaining chimney and roof vent visible in historic photos were probably removed at that time.

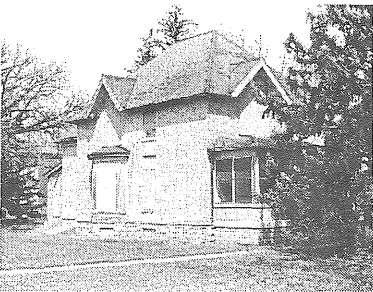


Bachelor Officers' Quarters: Building #151

Date of Construction: 1904

Foundation: stone Walls: brick Roof: slate

This red brick Colonial Revival building has a hipped roof with a gable roofed bay projecting out from the center of the facade. The bay is supported by four columns on the first story. The structure originally had two 2-story wood porches with flat roofs on either side of the central bay. The main entrance to the building is located under the second story bay. The windows of the structure have flat-arch lintels and sills made of stone. In 1929, two 12'-x-12' 6", two-story additions were made to each side of the back to house a total of four kitchens for these living quarters. It had a cement block foundation, brick walls, and a tin roof. Sometime after 1929, brick additions were made to either side of the facade and the wood porches were replaced in brick. In 1936, a concrete addition was made to install a new boiler. This building also served as the Officers' Country Club in the 1920s.

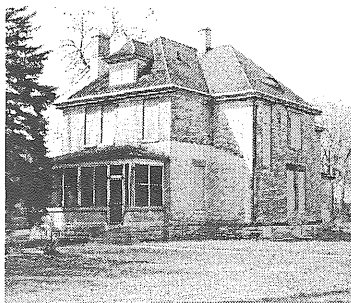


Officer's Quarters: Building #152

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of five houses built to this particular plan. However, this is the only remaining example of that plan at Fort Snelling. It is of the Queen Anne style and has a cross-hipped roof. As was common in the Queen Anne style, the roof also has lower cross gables on the north, south, and east sides, which have a decorative cornice. The single story full width wood porch is decorated with modest spindlework. However, the original porch was replaced by a smaller brick porch. There is a bay window on the south side of house. A decorative balustrade sits on the roof of the porch outside a pair of windows on the facade. A pair of windows have a hipped pent roof on the north side of the building. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces.

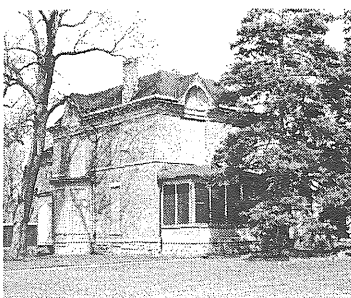


Officer's Quarters: Building #153

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Officer's Quarters: Building #154

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces.



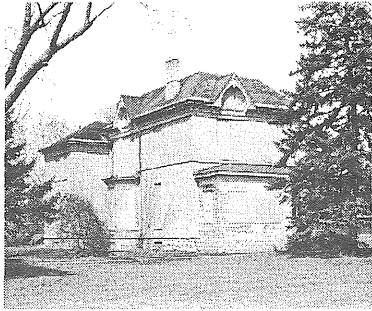
Officer's Quarters: Building #155

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house

on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Officer's Quarters: Building #156

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. Unlike the other houses of this style, this house has had a two-story hipped roof addition made on the southwest corner of the back.

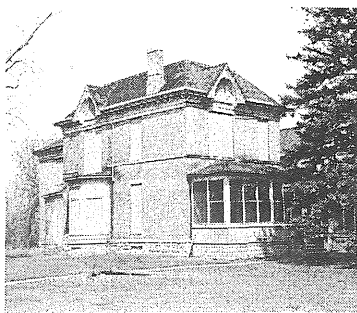


Officer's Quarters, Double Set: Building #157

Date of Construction: 1905

Foundation: stone Walls: brick Roof: slate

This two and one-half story yellow brick duplex has a cross gable roof with cornice returns. The roof was originally covered in slate but now has shingles. The plan is U-shaped, with a symmetrical facade and two wings behind. Most of the windows have segmented-arch brick lintels and were once flanked by a pair of shutters. A pair of arched windows fill the front gable and there are Palladian windows in each side gable. A denticular cornice runs beneath the gables. One story porches wrap around the front corners and have Colonial Revival columns. The porches once also once had a denticular cornice. The wrap-around porches are unusual for the Colonial Revival style and may be a holdover from the Queen Anne style. The picture above seems to show a back porch on the structure as well.

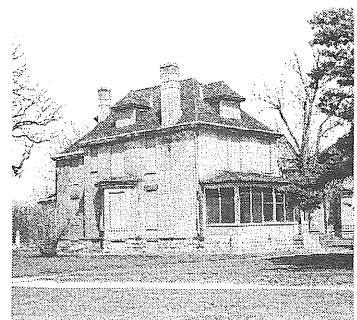


Field Officer's Quarters: Building #158

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces.



Officer's Quarters: Building #159

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



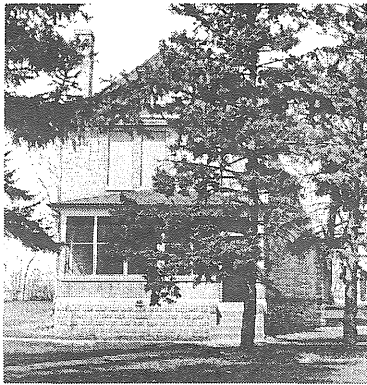
Officer's Quarters: Building #160

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a

finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces.

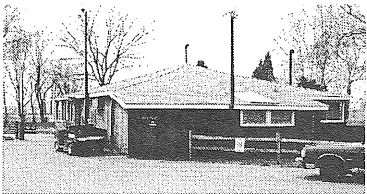


Officer's Quarters: Building #161

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Golf Course Clubhouse: Building #175

Date of Construction: 1940

The original function of this single story frame building is unknown. It is currently used as the club house for the adjacent golf course. The structure has a low-pitched pyramidal roof covered with shingles. It has a shed-roofed addition on the north side of the building. It is covered in wood siding.

Architectural Context

Over the years, the buildings of the Upper Bluff at Fort Snelling have been divided into two groups for reference purposes: Officer's Row and Area J. Although there are overall similarities among many of the buildings throughout both areas, there are also major distinctions, as outlined below.

Area J

Area J is comprised at the north end of administrative and other buildings used to support the functions of the fort. At the south end, across Taylor Avenue from Officer's Row, are three remaining enlisted men's barracks buildings. Area J buildings were constructed between 1879 to 1939, with the large majority built in the late 19th and early 20th centuries. All appear to have solid masonry exterior bearing walls. Given their wide range of uses, the limited amount of time that the evaluation team was able to be in them, and the fact that drawings were available for only a small portion of them, it was difficult to assess the structural system for each. Smaller buildings generally appear to be solid masonry load bearing exterior walls with wood frame partitions, floors, and roofs; while the larger buildings appear to employ interior structures of either steel or concrete columns and beams. There are additions to the rear of many of the structures that have wood siding.

The exteriors of Buildings #53, #56, #64, #66, and #76 are red brick with white trim. The remaining buildings in Area J are buff colored brick with white trim, except for Building #62 which has dark brown trim. A large number of the buildings have slate roofs, but many have asphalt.

The buildings in Area J have been vacant from as long ago as 1980 to as recently as 1997. This accounts for the wide range of conditions encountered, particularly at the interiors. Structurally, the buildings appear to be sound, with the exception of Building #63, which is in very poor condition at both the interior and exterior.

The buildings of Area J are a mixture of one and two stories. All have basements, and the Post Hospital (#55) and the Band Barracks (#57) have finished attics. Many have porches, including Buildings #56, #57, #62, #65, and #66, although only those at Buildings #57 and #65 appear original, and the porch at Building #57 has been enclosed on the first floor. Buildings #55, #101, #102, and #103 have obviously had their original porches removed, since evidence of them is apparent at the brick work at their facades. At the Medical Detachment (#54), evidence shows, and available drawings and photographs support the fact, that one story dayrooms were removed at each end of the structure.

The buildings were designed to serve a wide variety of functions. As such, they range in size from small specialized structures such as the Dead House (#62) and Fire Station (#64) to larger structures such as the Hospital and the Barracks. The gross area of the buildings including basements at Area J is approximately 410,000 SF.

Having been built and altered over a period of 60 years, the Area J structures generally represent a predominant Colonial Revival style. This was a popular style for buildings in the U.S. from about 1880 through much of the first half of the twentieth century and is primarily exhibited in Buildings #53, #54, #56, #57, #62, #66, #76, #101, #102, #103, and #112. Of these, Buildings #53 and #54 also possess elements of the Colonial Revival's Georgian prototype. Variations or exceptions to the predominant Colonial Revival style in a number of the Area J buildings are as follows:

Building #55 has both Georgian and Neoclassical elements, such as its original (but missing) full-width porch and central entrance element.

Building #57 has strong Classical Revival elements with its large, gable roofed, 2-1/2 story entrance porch.

Building #63 exhibits a simple Greek Revival style, with its gabled roof, wide trim band beneath the roof, and front entry porches. These have been modified from their original appearance.

Based on historic photos, the Fire Station (#64) appears to originally have been Italianate in style, with a prominent hose-drying/siren tower, bracketed eaves, and segmental arch windows. However, its second floor and south side additions have radically altered its appearance.

Building #65 exhibits French Colonial style traits, with its steep, hipped roof and full-width porch under the overhanging roof.

The Administration, or Clock Tower (Building #67) exhibits classic Italianate styling, with its low pitched roof; bracketed eaves; tall, narrow segmental arch windows; and prominent tower.

Officer's Row

In general, Officer's Row is comprised of the residential buildings west of Taylor Avenue that housed either married or bachelor officers. The residential structures were constructed between 1879 and 1904, with the garages and golf course club house being built between 1927 and 1940. The houses and Bachelor Officer's Quarters (BOQ — Building #151) are generally solid masonry load bearing exterior walls with wood frame partitions, floors, and roofs. There are some additions to the rear of the structures that appear to be wood framed and have wood siding. The clubhouse has plywood siding, and the garages are either concrete or concrete block.

The exteriors of the single residences are buff colored brick with red asphalt shingle roofs and gray/beige trim. The double residence is a similar brick and trim color, but has what appears to be a gray slate roof. The BOQ is a red brick with white trim and also appears to have a gray slate roof.

The clubhouse is currently being leased to the Minneapolis Park and Recreation Board. The BOQ was used as quarters until it was vacated in 1980. The residences of Officer's Row were also used as quarters until they were vacated in 1970. Considering how long the buildings have been vacant, they generally appear to be sound structurally.

The buildings of Officer's Row are two stories with basements and unfinished attics. They all have porches, although some of the porches are not original. Only Buildings #156 and #157 appear to have their original porches; evidence of the original porches at Buildings #152, #153, #154, #155, #158, #159, #160, and #161 is apparent at their front brick work. The majority of the residences were designed as single family houses with approximately 1,400 square feet (SF) per floor. However, Building #157 was designed as a double house, with each side having just over 1,500 SF per floor. Many of them appeared identical, and it is likely that they were constructed from pattern book designs widely used by the military.

The BOQ was designed with approximately 7,000 SF per floor.

Not including the clubhouse, the gross area, including basements but not attics, of the residences and BOQ at Officer's Row is approximately 71,000 SF.

Stylistically, the buildings of Officer's Row are more cohesive than those of Area J, since they were generally built over a shorter time period. Also, since they served as residences, their uses did not significantly change during their history, and they have been altered less radically. The single and double residence structures generally represent late 19th century styles, including Eastlake, Italianate, and Georgian Revival which were popular styles of domestic buildings in the United States from approximately 1880 to 1900. Identifying features of this style include steeply pitched roofs of irregular shape, often with a dominant front-facing gable or dormer; bays, projections, or other ornamentation to avoid a smooth-walled appearance; and an asymmetrical facade with a partial or full-width porch which is usually one story high and extends along one or both side walls. Gables often are ornamented with decorative wood motifs.

Buildings #154, #156, #158 and #160 display many of the characteristics noted above for the Queen Anne style; however, they also have distinct characteristics of the French Second Empire, and its related Italianate, style. Such characteristics include mansard roofs; tall, narrow windows with elaborate crowns which are often curved; and decorative brackets under the eaves. Both the French Second Empire and the Italianate styling dominated urban housing in America between 1860 and 1880.

The BOQ (#151) is generally representative of the Colonial Revival style with its overall hipped roof; full-height, gable-roofed entry porch projection at the center of the facade; and full-width, flat roofed, wood porches. The central facade projection also exhibits influences of the Neoclassical style with its prominent square support columns and semi-circular fanlight at the front gable. This style, which is in turn made up of elaborations found in Early Classical Revival and Greek Revival styles, were very popular for domestic buildings in the United States during the first half of the 20th century. Interest in classical styles was rekindled by the World's Columbian Exposition held in Chicago in 1893.

Existing Site Conditions

Natural Resources

Survey notes, maps, paintings, drawings, journals, and reports dating from the 1800s, describe what is known as the Upper Bluff as being comprised of open prairie and marshes, with scattered oak and hickory trees. Also present were wooded bluff sites, probably goat prairies on east and southeast facing slopes. The Upper Bluff area is in a transition zone between upland prairies, wetlands, oak woods, and brush lands.

Most of the original plant and animal communities have been eliminated from the Upper Bluff, but several small remnants do still exist in the area. There are pre-1950s records of a population of Hill's Thistle (*Cirsium hillii*), a state list "Special concern Species", in the Upper Bluff area, which has often been found in the prairie-woodland transition zone. The previously noted populations have never been relocated, and are most likely extirpated from the area. However, there are remnant prairie and oak savanna communities nearby which could be linked with possible restoration areas, including parts of the Upper Bluff Area.

The Upper Bluff Area is separated from the main body of Fort Snelling Park by Minnesota State Highway 5. The Minnesota Department of Transportation and Fort Snelling State Park Staff have discussed a joint project on both sides of the Highway 5 corridor from Highway 494 to the Highway 62-55 interchange. The goal is to reestablish oak savanna and prairie communities in this area.

Throughout Area J are a large number of bur oaks which were reportedly started from seedlings prior to 1900. Recent increment borings have yielded ages up to 101 years for those trees sampled. Prairie restoration can be enhanced by incorporating the Area J's natural resources into the highway corridor restoration zone. While Area J's plant communities are not a part of the original landscape, they do replicate important components of that landscape and have a good potential for restoration. Woodland and prairie restoration can be done regardless of what the final determination is for the cultural resources, including the historic structures.

The value of the preservation and restoration activities in Area J also greatly enhances the environmental education and interpretive opportunities for visitors to the area. This is especially true when the target audience is school age children and school groups. There is great value in being able to provide visitors with the opportunity to get a view of the river bluff area and it's connection to the other natural communities. One of the best viewing areas of the Minnesota River Valley is from Building #62, the Dead House in Area J.

Site Infrastructure

In January and February of 1998, the condition of all site utilities was assessed by a consulting engineering firm. They recommended that the electric, telephone, and gas lines be totally replaced. The primary lines for these utilities will be installed by the appropriate utility company at no cost to the owner. This work would be done at the time of site redevelopment.

Storm sewer and sanitary sewer lines were televised to determine their condition. The consultant recommended that these lines be cleaned of all sediment and debris. Slip lining of certain portions of these utilities may be necessary to repair line breaks.

The water system will need up-grading and repair in several areas. Up-grading the system to provide fire protection and potable water will likely be the most costly infrastructure improvement. Infrastructure improvements and costs are addressed in the Economic Analysis Projections chapter, starting on page 65 of this study.

Roads and Parking

There are presently 2 miles of bituminous roadways on the site. The condition of these roadways varies significantly. Bloomington Road and Minnehaha Avenue were repaved by Hennepin County in 1997. The surface of Taylor Avenue is in poor condition, with numerous potholes present. Leavenworth Avenue is in good condition. The streets

behind Officer's Row and Area J are in fair condition. New roadwork would be minimal if no new buildings are added to the site.

Major parking at the site lies adjacent to the Polo Grounds. Parking for approximately 300 cars is afforded at this location. Parking for an additional 400 to 600 cars is available behind the Area J buildings. Much of the area described is already surfaced with bituminous and may only need to be overlaid and striped to serve as parking.

Parking for events where attendance is expected to be less than 5,000 people at any one time can be accommodated on site if adequate directional signing is provided. Presently the availability of parking behind the barracks in Area J is not apparent to the first time user. Parking for major events, where attendance is expected to be more than 5,000 will require offsite parking. Off site parking at the Whipple Building may be a possibility on weekends and weekdays after 5:00 pm. This parking area will account for 1000 to 1200 cars, and is within a few minutes walk of the Polo Grounds.

Building Conditions

The buildings of the Fort Snelling Upper Bluff were evaluated as to their condition over a three day period in early December, 1997 by staff of Miller-Dunwiddie-Associates, Inc., Architects. All buildings were evaluated as to their exterior condition, and most buildings were entered so that the interior could be evaluated as well. Three of the buildings were not able to be entered.

In evaluating the buildings, it was assumed that they would undergo extensive renovations to fit a new reuse. Therefore, although items such as peeling paint and damaged plaster are unsightly, they appeared to be "cosmetic" and the result of roof leaks and/or no maintenance or heat over a long period of time, rather than being due to structural defects. As such, they were not considered significantly in the evaluations. Also, in all cases it was assumed that buildings would be reroofed, windows would be replaced, and mechanical and electrical systems would be completely redone as part of any rehabilitation work; and they were therefore also not considered in the evaluations. Other assumptions pertinent to particular buildings or groups of buildings are noted in the discussion to follow.

An overview of the buildings follows. Note that hazardous materials have been assessed and will be discussed separately.

Area J

Exteriors: The brick and mortar is in generally good condition with some minor cracking through masonry units. Stone coppings, sills, and belt courses are generally in good condition with selected weathered areas in need of repair or replacement. Some areas of stone foundations have been significantly eroded in the areas of downspouts. Wood elements (fascias, soffits, etc.) are generally in fair to good condition, with some areas of damage along eave lines. The amount of damage generally appears to vary according to how long a particular building had been vacant. Porches exist at Buildings #56, #57, #62, #65, and #66; but only those at Building #57 and #65 appear original. For the purposes of this report, it is assumed that they would be rehabilitated as is during any renovation work. Porches have obviously been removed at Buildings #54, #55, #101, #102, and #103. It is assumed that these would be restored as part of any rehabilitation.

Interiors: Again, based on when they were vacated, interior conditions range from poor to very good. Some could be re-inhabited immediately if utilities were reestablished. Only the Quarter Master's Building (#63) and the Barracks buildings (#101, #102, #103) did not rank as good, very good, or excellent. Area J buildings are more likely able to support a wider variety of reuses, primarily because of their sizes (they range from 7,200 SF to 51,000 SF) as well as their more flexible structural systems. Because of that, the condition of the particular features inside each building did not weigh heavily in the evaluations, since it is assumed that there would be extensive interior renovations in most cases. The possible exceptions to that would be unique structures such as the Gym/Service Club (#53) and the Band Barracks (#57).

Officer's Row

Exteriors: The brick and mortar is in generally good condition with some minor cracking through masonry units. Stone coppings, sills, and belt courses are generally weathered and need repair or replacement. Some areas of stone foundations have been significantly eroded in the areas of downspouts. Wood elements (fascias, soffits, etc.) are generally in fair condition, with some areas of damage along eave lines near roof valleys. Porches are not original, except at building 157, and it is assumed that all the original porches would be restored as part of any rehabilitation. Their conditions have therefore not been considered in the evaluation.

Interiors: Considering that all buildings on Officer's Row, with the exception of the Bachelor Officer's Quarters, have been vacant since 1970, the interiors of the buildings were in surprisingly good shape. Discounting their

appearance due to the peeling paint and/or damaged plaster already noted, most of the buildings were classified as being in good condition. There were some areas where fireplace mantles and stair balusters and rails had been removed, but in most cases they were still in the buildings. Likewise, most trim and moldings were intact. Only building 152 was noted as being in poor condition on the interior, due primarily to a large hole in the roof.

With the above information as background, the results of the building evaluations are indicated on the "Building Analysis and Cost Estimate" beginning on page 63.

Issues Analysis

Archaeology Issues

No subsurface archaeological investigations were conducted as a part of the current research project. However, as previous research has demonstrated, the archaeological resources that exist within the Fort Snelling National Register Historic District (NRHP) and the Fort Snelling National Historic Landmark (NHL) are varied and significant. Over twenty years of excavations at the site of Minnesota's earliest military occupation has amply demonstrated the abundance, breadth, and importance of information contained in subsurface deposits. In the area designated as the "Fort Snelling Upper Bluff," historic maps and other documents clearly indicate the presence of earlier structures that are no longer extant. These locations undoubtedly contain associated archaeological deposits that are of a significance greater than or equal to that of the standing structures. In addition, it is expected that archaeological deposits and features will occur in and around existing standing structures. The archaeological features and deposits likely to occur in these areas will consist of structural foundations, refuse middens, and builder's trench fill to name a few. Besides the resources associated with the historic military occupation, there is evidence of the presence of pre-European contact Native American heritage activity in areas adjacent to the bluff above Trunk Highway 5.

In light of these facts it must be recognized that any structural removal, replacement/removal of underground utilities, or other ground disturbing activities will undoubtedly have an adverse effect on these archaeological manifestations. Archaeological resources on state, state subdivision, or federal lands, or that are within NRHP or NHL designated boundaries are currently afforded protection under Minnesota Statutes 138.31-138.42 and/or under section 106 of the National Historic Preservation Act and the Archaeological Resources Protection Act.

Airport Issues

The airport presents both opportunities and constraints to park development and use. The southern boundary of the Upper Bluff lies within 750 feet of the north main parallel runway (12L/30R) at Minneapolis-Saint Paul International Airport (MSP).

The Draft EIS for the airport's 2010 development plan indicates that the overall air quality of the airport from aircraft operations does not exceed adopted standards. It should be recognized that under some meteorological conditions (especially with south and southwest winds), there may be exhaust/fuel odors drifting into the Upper Bluff area. Such conditions should be assessed in greater detail, especially for certain land uses where central air-conditioning and/or filtering may be necessary.



The visual effects of airport development on nearby properties has been addressed in the 2010 development EIS. Aircraft using runway 12L/30R can be partially screened from view by plantings along the airport fence. Aircraft on runway 4/22 are further away, but are visible from all of the Upper Bluff area; however, there are minimal daily operations using this runway.

It appears that none of the existing buildings on the Upper Bluff present obstructions to air navigation.

The entire Upper Bluff area is affected by some level of aircraft noise impact. Increasing numbers of “quieter” Stage III aircraft will be introduced over time. However, the projected increases in total operations indicates that current noise impact areas are likely to remain as permanent problem areas.

An MSP airport “Noise Policy Area” is defined in the *Aviation Chapter* of the Metropolitan Development Guide. If the reuse of structures in the Upper Bluff area is limited to rehabilitation in-place, then it would be interpreted under the noise compatibility guidelines as “Infill-Reconstruction or Additions to Existing Structures.” If, for some reason, this proposed reuse is interpreted to mean “New Development or Major Redevelopment”, the land use constraints would be more restrictive - residential, medical and education would be inconsistent.

Under the Infill definition, specific land use compatibility is identified for each use by noise zone. Overall, there would be no Inconsistent land uses as relates to noise. Most land uses would be considered “Provisional”, having to meet an interior noise level structure performance standard of the Aviation Guide (refer to MS 473.192 and Council’s model noise ordinance). A number of the uses would be considered as “Conditional” uses, which means that in addition to the structure performance standards, other conditional review factors would be applied.

In general, the Upper Bluff area south from Minnehaha Avenue will need to incorporate exterior to interior noise control into the building design and construction/reconstruction. This usually means application of acoustic building techniques, not necessarily additional materials; an acoustic engineer should be involved with the development of architectural plans prior to reconstruction. These same type of noise control measures may need to be considered in the remainder of the Upper Bluff area depending upon the noise sensitivity of the proposed use and the “quality” experience desired.

While acoustic privacy is achievable for the interior spaces of the buildings, there will still be the outside noise environment to consider. Most of the noise impact is caused by transportation noise, a mobile noise source. This means there will be periods of higher and lower noise, both on a daily and seasonal basis, but it is almost always

present. For outside recreational activities, the warm weather season is the most critical time to assess. Noise levels that cause speech interference for group sports activity may be a problem near the boundary with the airport. Further away from the boundary there would be problems with some outdoor activities such as open-air performances.

Another aspect of noise is the potential impacts from low-frequency noise, which cause vibration of structures and/or interior fixtures. This condition is usually thought to occur relatively near the runway, but may extend into parts of the Upper Bluff property. The possibility of this impact on some of the structures should be assessed further, since it could have a definite effect on specific uses and quality of experience desired/required.

The airport terminal handles about 30 million passengers arriving and departing the Twin Cities area. In addition, there are about 24,000 people employed at the airport. Some of these tripmakers are passing the Upper Bluff area. The number of passersby may present a threshold of activity sufficient to support some types of land uses in the park.

The Upper Bluff buildings could provide quality meeting space near the airport. A major consideration is cost of providing the buildings within a quality context, and an assessment of the competition. To be designated as quality space may require upgrading to "smart-building" standards to be competitive. The competition here will be both public (airport) and private (eg. Mall of America [MOA]) sector. For example, there are public policies and agreements on terminal concessions development and on convention centers in the MOA complex. Providing a meeting space type land use may have a stronger potential if related to the historical fort site and an "historic village" type master plan approach .

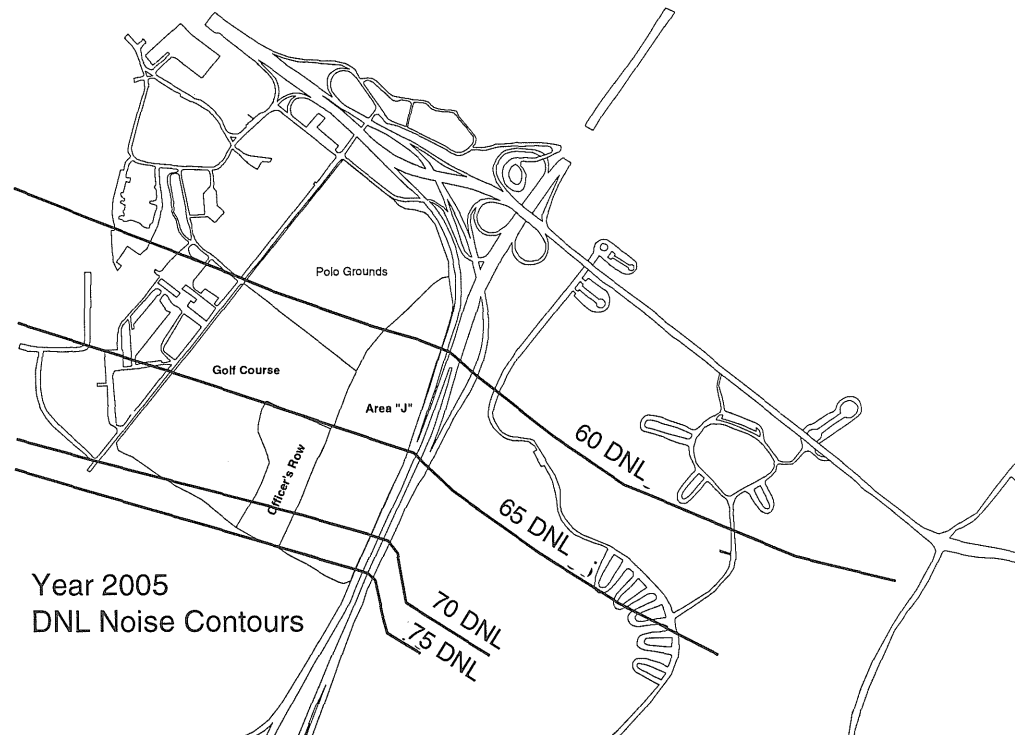
The site structures could support some airport tenant uses/needs. This land use type would be feasible, but again, the competition [eg. hotels] needs to be assessed.

The site structures could support some airport use/needs for the MAC. If the forecasted aviation demand continues in the post 2010 period, it would be beneficial to airport development to have nearby expansion room available. Some level of consolidation will be needed to accommodate additional on-airport development. That will be true for MAC and FAA office and support facilities that may be taking up on-airport space more suited to direct airline use. It will also be true for the adjacent federal and state military areas. There could be several additional alternatives for the Fort Snelling vicinity (development opportunities) available in the event that a federal base-closure action occurs.

The timing aspects of short, mid, and long-term airport development needs to be taken into account in the Upper Bluff development plan. Phasing of land uses, whether reuse of existing buildings or total new uses,

should be a key element of implementing the development plan. For example, consideration should be given to promote lower density /activity uses along the southern part of the Upper Bluff, or designing “temporary” uses that can be moved if needed.

The park development plan's ability to be “successful” may be improved if the Upper Bluff development(s) are conceived and executed within a broader land use plan that links it to the properties west of Bloomington Road. Consideration should also be given to what coordination and potential agreements may be needed with the MAC, or other public entities, concerning infrastructure (utility) needs, or if the Upper Bluff site is to be marketed primarily to airport related customers.



Noise Monitoring

Airport related noise monitoring was conducted on March 21, 1998 at the Upper Bluff by Brian Timerson (MPCA) and Shane Vandervoort (MAC). They installed 12 sound level monitors at various locations, 9 monitors inside buildings and 3 monitors on the grounds. All monitors ran for a minimum of 24 hours. Both runway configurations (30 R and 30 L, and 12 R and 12 L) were used during that time, since wind conditions changed over the course of the day. This time frame allowed for a good representative sample of air traffic noise. The maximum noise level observed during takeoff activities was recorded at 92 decibels (bBA) at site #3, located at the south end of Taylor Ave.

A significant drop (12 decibels) in noise levels (from 78 dBA to 66 dBA) occurred from the south end of Taylor Avenue to the south end of the Polo Grounds adjacent to Minnehaha Avenue. Noise levels inside buildings varied according to distance from the runways and the type of building construction. In some instances windows were broken or completely missing, which influenced the degree of noise experienced. The Band Building (#57) was apparently constructed with acoustics in mind. An Ldn of 36 dBA was recorded for that building, compared to an Ldn of 65 dBA for the adjacent building #56 (Hospital Steward's Quarters).

Listed below are the noise levels recorded at the 12 monitoring sites:

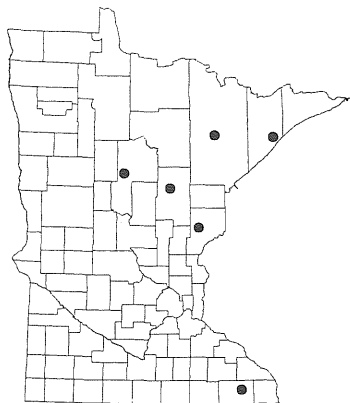
<u>Location</u>		<u>Description</u>	<u>Ldn (in dBA)</u>
Exterior site number	1	South end Polo Grounds	66
	2	West entrance Building #65	66
	3	South end Taylor Avenue	78
Interior of Building	# 53	First floor-west side	41
	# 56	First floor-southeast room	65
	# 57	First floor-southeast room	36
	# 62	First floor-northwest room	47
	# 67	Second floor-northwest room	48
	# 102	Second floor-northwest room	59
	# 103	First floor-northwest room	56
	# 151	First floor-northeast room	52
	# 161	First floor-southeast room	56

Noise Abatement

Although further analysis is needed, it is felt that a noise barrier located near the airport fence could significantly reduce air craft related noise. This barrier, if properly landscaped, would also be an aesthetic improvement to the site, separating the historic site from the airport property.

Building interiors can be "sound proofed" with window/door/and insulation upgrades.

Education Issues



Existing ELCs include the Long Lake Conservation Center in Palisade, the Wolf Ridge ELC in Isabella, the Deep Portage Conservation Reserve near Hackensack, the Audubon Center of the North Woods in East Central Minnesota, the Laurentian Environmental Center in Britt, and the Eagle Bluff ELC in Lanesboro, Minnesota. None exists in the Twin Cities Metropolitan

Numerous educational uses have been suggested for the Upper Bluff. One is focused around the concept of an urban area Environmental Learning Center (ELC). An ELC is generally defined as a resident camp within a natural area where children and families spend a few days to learn about the environment and related topics. Many amenities, both natural and cultural, exist near the Upper Bluff, which make this location ideal for an ELC. They include the natural areas of Fort Snelling State Park, the historical features of Historic Fort Snelling, and the Military History of the Upper Bluff. Furthermore, an ELC in the Twin Cities has the advantage of being a short distance from the majority of the state's population.

The ELC would offer a wide range of programs attractive to intercity, outstate and interregional audiences. The ELC at the Upper Bluff would be designed to be a support facility to the existing programs at Fort Snelling State Park, Fort Snelling Visitor Center, and Minnesota Valley Natural Wildlife refuge. The study areas already exist in the vicinity, and the presence of many opportunities within a small geographical area enhance each other.

Under the concept of an ELC, a building or buildings could be used to support the existing natural and cultural "study areas" in the vicinity. Support facilities would include lodging and food service. This concept could provide an opportunity to celebrate our multi-cultural society in an educational atmosphere.

A second concept is an Historic Preservation Training Center (HPTC) with potential ties to the University of Minnesota, area trades schools, and/or local trades unions. This Center might be tied to a construction management program focusing on basic skills up to highly technical skills.

Charter schools may find the Upper Bluff as an attractive setting. Fort Snelling has one of the more significant collections of natural and historic resources in Minnesota. The location of the Upper Bluff is excellent for use to meet inner-city educational needs and provide opportunities in 'their own back yard.' The educational community and the public in general are not aware of the multifaceted educational opportunities (cultural and natural resources) available at Fort Snelling. A mechanism to create that awareness is needed.

Historical Significance Issues

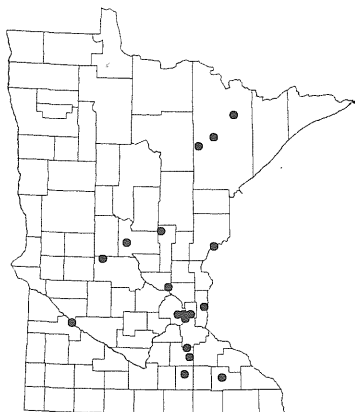
The Upper Bluff area at Fort Snelling possesses historical significance as a cohesive grouping of buildings associated with the growth and development of the military post beyond the walls of old Fort Snelling. As the responsibilities of Fort Snelling grew from the original task of supporting the westward drive of the United States, to later serving security concerns reaching around the world, the military post expanded outward along the Upper Bluff. The Upper Bluff at Fort Snelling provides a tangible setting, allowing the visitor to better understand the history and evolution of the military post, the culture that formed within it, and the nation it served. This historical significance of the Upper Bluff limits the range of options available for reuse considerations, yet presents unique advantages as well.

The history of the site is not appreciated by the general public. The events that affected the growth and development of the Upper Bluff occurred at some distance from the military post, sometimes in different hemispheres. This makes it difficult for the visitor to associate these historic events with the Upper Bluff. Remedies such as placing prominent artifacts from, or reminiscent of, pertinent historic events (such as a military vehicle or cannon to symbolize the training conducted at the post during WW II) would need to be carefully considered so as not to negatively impact the appreciation of the military post's other roles.

The buildings on the Upper Bluff site are neither as old, nor perceived as historic as the original fort. The administrative and residential nature of some of the buildings in the Upper Bluff are reminiscent of those found in many older sections of American cities. They lack the direct impact and exotic quality of the ramparts and towers found at the older Fort Snelling. The mundane nature of daily life and administration at any military post fails to capture one's imagination without some extra stimulus or additional avenue for appreciation.

The military history displayed through the Upper Bluff buildings can be interpreted from varying viewpoints. Every story has at least two sides, history being no exception. Certain events lose their glamour or even popular support with the progression of time. The strong-arm role of military action, and the 'otherness' of military culture, have become viewed by some as counter to the pursuit of a peace loving and democratic nation, a case in point being the military campaigns against the Native Americans during the nineteenth century. However, to preserve and reuse the Upper Bluff buildings need not be taken as condoning such controversial events, nor does the site represent only one period of history. Careful marketing of the site may be needed to make clear its intended role of preserving our nation's heritage and not a glorification of military conflict.

The preservation of buildings (perceived by some as liabilities) is viewed as an obstacle to additional open space for recreational uses. The loss of park land to airport expansion has left some groups looking for alternate



There are 21 National Historic Landmarks in Minnesota. Those located in the Metro area are: the Fort Snelling Historic District; the James J. Hill House, the F. Scott Fitzgerald House, and the Frank B. Kellogg House in Saint Paul; the Pillsbury A Mill and the Washburn A Mill in Minneapolis; and the Peavey-Haglin Experimental Concrete Grain Elevator in Saint Louis Park.

space to take its place. Tearing down the buildings at the Upper Bluff would make expanded room for uses such as an 18-hole golf course. Two problems with this view exist: The site is already being used for recreational activities, for example by community soccer teams; and razing the historic buildings could make future airport expansion into the Upper Bluff more likely, rendering any triumph in the name of expanded park land temporary at best.

The history of the site could accommodate additional tourism opportunities. The Upper Bluff is basically the remains of an historic community — deriving its livelihood from service as a military post. The site could be developed with a “historic village” approach in mind, celebrating calendar events and holidays in a nostalgic manner. Festivals and historical reenactments are other obvious opportunities. Pioneer, Civil War, and World War enthusiasts are likely to be attracted to the multiple appeals of the site.

The history of the site could accommodate additional educational opportunities. The Upper Bluff area offers a unique learning experience. Its wealth of natural, pioneer, military and Native American historical connections touches on a broad range of educational topics. The placement of Officers Row vis-a-vis the enlisted men’s barracks speaks volumes about the use of landscape to reinforce contemporary social values, for example. In addition, early maps of the military post clearly indicate the location of buildings now lost through the passage of time. Such locations, and those surrounding still existing structures, could very well prove of educational use for those interested in archaeology. The site’s generally central location within the Twin Cities metropolitan area makes it very accessible for student groups. Finally, the site would compliment the excellent educational facilities already present at Historic Fort Snelling, the Interpretive Program at Fort Snelling State Park, and the natural history programs at the Minnesota Valley National Wildlife Refuge.

The story, as told through the remaining buildings on the site, has integrity. The evolution of the United States from an emerging nation to a world power can be traced through the growth of the military post at Fort Snelling along the Upper Bluff. The military post at Fort Snelling played an important role in supporting the expansion of the western frontier and dealing with the Native Americans striving to retain their traditions and lands. Different themes emerge as the United States assumed global responsibilities from the turn of the century through the World Wars. The Upper Bluff grounds and buildings were constructed in response to various needs and events that helped shape American, and world, history.

The site and structures possess a sense of nostalgia for people that were in the service. The military utilization of the site occurred within living memory. The Upper Bluff area was a temporary ‘home’ to the over 600,000 soldiers who

were processed and trained at the military post during WW II, for example. Moreover, veterans from other military posts will no doubt recognize elements at the site that are familiar. The preservation of former military sites are often viewed as a recognition of the veteran's own contributions as well.

The reuse of the buildings could compliment the surrounding recreational uses. Concessions, public telephones, and lodging facilities would not only make recreational events and activities more enjoyable, they would also provide convenience and make events more safe for the participants themselves.

The recreational uses could compliment the preservation of the buildings. Sporting events such as soccer, softball, rugby, and open play do not significantly take away from the original appearance of the site. Outdoor activities such as festivals, parades, flea markets, farmers markets, antique shows, equestrian events, military demonstrations, and historic reenactments could proceed to the benefit of the event and the site itself.

Legal Issues

The Upper Bluff Area of Fort Snelling State Park was deeded (transferred) to the State of Minnesota Department of Natural Resources in 1971 through the Federal Lands to Parks Program. The Quit Claim deed contains specific requirements that the property be used for "public park or recreational purposes." The deed also states that the "property shall not be sold, leased, assigned, or otherwise disposed of..." It does allow the MnDNR, however, to enter into "concession agreements" with non-governmental parties to provide facilities and services relating to public park or public recreation purposes. The deed also has a condition that allows the United States of America to revert the property back to the USA if the property is needed for national defense. The deed has an additional condition that reserves the right of the USA to "enter upon the land for the purpose of mining and removing same". These restrictions, and the fact that it is state property, involve some unique and challenging legal issues for the development and reuse of the Upper Bluff.

The overlapping jurisdictions of Federal, State, and local governments will complicate efforts to arrive at mutually agreeable solutions to reuse proposals. The property also lies within the Mississippi National River and Recreation Area (MNRRA). Legal issues regarding reuse will therefore require time to work through. In addition, a Section 106 review and mitigation would be required for any demolition of historic structures.

Recently, the National Park Service indicated a willingness to work with the State to change the deed in order to expand the reuse options. This deed change will also require the approval of the General Services Administration (GSA).

The Upper Bluff area is also governed by Land and Water Conservation Fund (L&WCF) requirements. If park lands acquired with L&WCF funds are taken out of recreational use, they must be replaced with land of comparable fair market value and reasonable equivalent usefulness. Conversion affects only the land, not the buildings. According to the Land and Water Act of 1965, no lands assisted with the fund may be converted to non-recreational use without prior written permission of the Secretary of the Interior.

Multiple Building & Multiple User Issues

The Upper Bluff contains over twenty-eight buildings of various sizes and types. Because of that, there are a number of issues that impact its potential reuse.

The “Building Analysis and Cost Estimate” spreadsheet (see page 64) indicates that the total projected renovation costs for the site and structures. This large number of buildings makes it unlikely that one user will be found that can use all the structures.

Since there are so many buildings of such varying size, there are multiple options for how the buildings can be reused, what organizations may be interested in reusing them, and their related rehabilitation costs. For example, it is estimated that some buildings could be completely rehabilitated for as little as \$500,000, and none are estimated to cost more than approximately \$6,000,000. Those amounts are relatively affordable, and may make it more likely to attract organizations interested in reusing them.

A major value of the buildings rests in their campus configuration. If some buildings need to be demolished, it may negatively impact the value of the remaining structures. However, the fact that the buildings possess a strong and cohesive campus character is one of their most positive assets for attracting potential reuses.

The variety of private, public, and/or recreational uses on the site could create a greater potential for user conflicts. However, increasing the number, variety, and diversity of users may instead increase the marketability of the site and its potential for development. Multiple uses may dictate a greater need for property management; but such uses, particularly public/private partnerships, may make plan implementation more appealing to governmental units for funding.

Political Issues

Political issues are many and complex, and will involve effective communication and interplay between multiple players. Resolution of the reuse issues will involve participation by the National Park Service, the General Services Administration, the Minnesota Legislature, the Minnesota Department of Natural Resources, the State Historic Preservation Office, the Metropolitan Airports Commission, and the Metro Council. Since these agencies have different mandates and serve different constituencies, finding areas of common agreement may be difficult under the best of circumstances.

At another level, the role of an informed and motivated public should not be ignored either. The interests of the public were underscored with the transfer of the Upper Bluff to the Minnesota Department of Natural Resources for the purpose of enhancing recreational opportunities for public use. The processes to resolve the reuse complexities do not take place in a political vacuum. The cultural and recreational assets of the Upper Bluff are public assets, and the public will have its say concerning the best use of these assets.

The location of the Upper Bluff site immediately adjacent to the MSP International Airport makes it potentially an attractive expansion area for the Metropolitan Airports Commission. MAC's interest/desire in expansion can put the goals of restoring the historic buildings and maintaining the recreational amenities for public use at risk at anytime. MAC is currently mandated by the State Legislature until at least 2020 to follow a plan which does not utilize the Upper Bluff site.

Any solution to insure the future for the Upper Bluff will require partnerships and/or coalitions which currently are not in place. Resolving the conflicting agendas of the organizations listed in the Introduction will take time, due to the multiple players and complex issues to be addressed.

Guaranteed access to the golf course and playing fields are important to the cities of Minneapolis, Richfield and Saint Paul. Pending changes in the recreational resources currently available to Richfield creates potential competition for the right to operate the Upper Bluff recreational facilities. These facilities are currently managed by the Minneapolis Park and Recreation Board.

The Fort Snelling State Park Association, which was formed in 1961, has a history of successfully fighting encroachment upon the State Park. The Association is a powerful advocate, with a strong interest in preserving rather than demolishing the remaining historic buildings. The Association also is a powerful potential ally with the

credibility to bring other allies such as the Minnesota State Legislature on board to support a viable reuse plan for the Upper Bluff. Additional effective advocacy for preservation of the Upper Bluff Area can be expected from The Preservation Alliance of Minnesota and from the National Trust for Historic Preservation.

Interviews with many people with a perspective on the Upper Bluff have raised a number of social goals that could be addressed through development of the site and buildings. In addition to the current goals of recreation and historic preservation, interviewees mentioned affordable housing, an environmental learning center for inner-city youth, office/facility space for museums and other nonprofit organizations, training opportunities for workfare participants, hands-on training for historic restoration crafts persons, a learning environment for healthy home construction techniques, and student housing as uses that can help meet social needs.

Many of those interviewed by the reuse team expressed a willingness to work as partners with the Minnesota Department of Natural Resources to implement reuse strategies for the Upper Bluff Area.

Preservation Issues

There is a perception that preservation and maintenance of historic buildings is more expensive than building new, and the use of existing buildings limits the potential uses. However, this is not necessarily so. There have been recent examples where renovated buildings in the multifamily housing market, as an example, have cost no more, and in some cases less, than similarly sized new facilities. Often, the type, size, and quality of the resultant spaces are also superior to those found in new construction. Amenities such as high ceilings and wood floors come at a high price in new construction, whereas they may already exist in an historic building. In addition, income producing historic buildings can qualify for 20% investment tax credits, as well as potential facade easements, all of which reduce either the up-front or the long-term costs. In the case of Fort Snelling Upper Bluff buildings, depending on how the rehabilitation is structured, their reuse could also put them on the tax rolls for the first time since the fort was founded.

Many times when dealing with historic buildings, the general public does not understand the importance of preserving them; and in the case of the Fort Snelling Upper Bluff structures, the general public may not even know that they exist. This is not an inherent problem with the buildings themselves, however; it is more an issue of public relations.

Although the number of buildings may be perceived to be a detriment, their varying sizes and types may make the site more attractive to development and in a shorter time frame than trying to find a single user. Their diversity in numbers, sizes, and styles also provides an opportunity for them to become a venue for educational and occupational historic preservation training activities, a reuse possibility that is discussed elsewhere in the report.

A final concern in preserving the buildings of the Upper Bluff may be that, because airport expansion has eliminated large numbers of other structures that used to exist there, the remainder have lost their "context". Similarly, there is concern that reuse of the buildings could preclude the continued use of the surrounding open space for recreational activities. Granted, there would be more context if the airport had not removed large numbers of other structures. However, much of the original integrity and context exists, creating significant viewsapes. Likewise, it is less likely that the open space will be negatively impacted by the reuse of the buildings. It is more likely that the open space recreational uses will have a positive impact on the reuse potential for the buildings.

The buildings of the Upper Bluff represent a major asset in the history of the State of Minnesota. Since they are in generally good condition, their preservation in any number of ways, public or private, could create a whole new interpretation of the history of Fort Snelling, from the Dakota Conflict through World War II, thus creating more tourism opportunities.

The existing buildings also represent a large amount of "embodied energy", that is, the energy that it took to produce the building materials (brick, wood flooring, plaster, etc.) in the first place. Many of these materials would not have to be replaced, therefore additional energy would not need to be expended to produce them for a new structure. Reuse of buildings thus represents the ultimate in recycling, since less landfill space may be needed and less energy may be expended to produce new structures housing similar uses.

Recreation Issues

The 141 acre Upper Bluff includes the Polo Grounds and a regulation 9 hole golf course. Historically, this area has been used for recreation purposes. As the name implies, it has been the site of Polo matches, parades for the military, and in more recent times as a softball/soccer/rugby complex. Currently, the Minneapolis Park and Recreation Board has a concessionaire agreement with the MnDNR to operate and maintain the ball fields and golf course. Other recreational use has included special events, such as ethnic gatherings to celebrate heritage and customs, and military expositions.

Under the concessionaire agreement, the Minneapolis Park and Recreation Board pays the MnDNR a portion of the revenues, based on usage of the golf course. Current revenues are sufficient for the MPRB to cover the costs of maintenance and operations of the golf course and athletic fields. The athletic fields are intensively used for soccer and softball. The MPRB has been approached by the City of Saint Paul for potential use of the Upper Bluff area for



Several recreational areas are located near the Upper Bluff. This includes Fort Snelling State Park – consisting of the newly opened visitor center, swimming beach and picnic areas, trails, Historic Fort Snelling with interpretive/visitor center and Chapel. Another is the MnDNR State Bicycle trail through Camp Coldwater and Minnehaha Regional Park. Also nearby is Minnehaha Regional Park – a major landscape and recreational attraction to the Twin Cities. Minnehaha Regional Park, with the Minnehaha Falls, offers large picnic areas and pavilions, trails, restored historic structures, gardens, and scenic boulevards. This park has undergone significant rehabilitation and development within the last five years. Current plans for the park's near future include a pedestrian bridge over Hiawatha Avenue developed in conjunction with MnDOT's Hiawatha Avenue Transitway project. The redevelopment of Hiawatha Avenue, scheduled to begin later in 1998, will improve the connection of the airport with downtown Minneapolis.

The City of Richfield has leased 160 acres of land from the MAC for the past 20 years. This area, named Rich Acres, includes a regulation 18 hole and Par 3, 9 hole golf course with clubhouse, driving range, and parking. The golf courses has between 80,000-90,000 rounds of play each year. Typically, the driving range revenues exceed \$190,000. Other uses include 12 ballfields, an archery range, and community gardens.

In 1996, the Minnesota Legislature, in response to the Minneapolis/Saint Paul International Airport Dual Track planning process, determined that the airport would remain in its present location. As part of the airport's planning, a new north-south runway is proposed on the Rich Acres lands currently leased to the City of Richfield. Additional recreational areas being lost include two Richfield neighborhood parks.

Local parks serving active recreation in the near vicinity include Bossen Park-athletic ballfields (owned and operated by the MPRB), and Taft Park-trails and ballfields (on land part owned by Richfield and part owned by the MAC with a lease to Richfield).

Recreation/open space needs are critical in the Upper Bluff area. Airport expansion has, and will continue to, significantly increase the demand for recreation lands. Other factors include the significant growth in soccer participation in recent years, and the projected continued growth in this sport-not only with youth, but with adults as well.

Potential recreation opportunities in the existing buildings, such as Olympic Training for table tennis, archery, and indoor shooting should be pursued. A closer examination of the gymnasium (#53) may reveal additional recreation opportunities.

In 1997, the Metropolitan Council initiated a study group of agencies that own land and utilize recreation facilities in the airport vicinity, including the Upper Bluff. This group includes federal, state, and local agencies. The group has identified some opportunities to expand the use of the Upper Bluff, and other nearby open space areas, through the acquisition and lease of federal properties.

Tourism Issues

The National Trust for Historic Preservation defines Heritage Tourism as “*visiting historic and cultural attractions to experience a city, state or region’s past in an enjoyable and informative way.*” Williamsburg (VA), Washington D.C., Gettysburg (PA), Mt. Rushmore (SD), The Alamo (TX), Charleston (SC), Mt. Vernon (VA), Split Rock Lighthouse (MN), the Minnesota State Capitol, and Historic Fort Snelling are all examples of heritage tourism destinations which attract tourists interested in learning about some aspect of heritage. Heritage Tourism thrives in Minnesota and in many other places in the United States because tourists have a quality experience which relates an authentic story (interpretation) in a setting of preserved and protected historic resources. Heritage Tourism is also the economic engine in many communities in the United States and throughout the world.

The buildings and site of the Upper Bluff Area are the tip of a historical narrative waiting to be told with accuracy and creative flair; the type of authentic narrative that, when developed and appropriately interpreted, will be of compelling interest to many of the Citizens of Minnesota and elsewhere. The narrative begins with the relationship between the Plains Indians fighting to retain their traditional lands and a young Nation expanding westward to achieve its “Manifest Destiny,” and the role that Fort Snelling played in opening up the Western United States between 1870 and 1900. The narrative continues with different themes through WW I and WW II. This narrative with its fabric of diverse themes has appeal to many, including the Civil War buff, the WW II Vet, and those interested in the conflicted history of Native American/US Government relations.

This authentic historic connection is what makes the Upper Bluff Area unique and special, a treasure not only to the Citizens of Minnesota, but to the nation as well. While the narrative does not provide the stand-alone economic strength that will make the Upper Bluff a self-supporting tourism destination, it does have great potential to market the site for other purposes, to enhance the quality of the site for future tenants, and to attract a diverse audience of interested citizens to the site to experience their heritage.

There is no “case statement” in place which gives tourists reasons to want to visit the Upper Bluff area. The average citizen does not know that this area is historically important, does not know what happened here and elsewhere

that may connect with his/her life or the lives of other family members, and does not know the stories the site and buildings represent. There has been little organized effort to interpret the area and to systematically integrate the diverse array of historical themes into a comprehensive print and media campaign designed to give tourists a reason to visit the Upper Bluff to experience their heritage.

There is no infrastructure in place to provide tourists with a quality experience. Buildings are closed and not accessible. There are no interpretive markers in place to tell the story of individual buildings and/or sites. There are no public restrooms on-site. There is no "living history" interpretation of significant events associated with the site. There is little visible security for either buildings or people. There is no signage which leads people off of major roadways onto the site, or which guides them through the site in an orderly way. If the average citizen accidentally finds himself at the Upper Bluff, there is nothing in place that provides a clue as to what he or she is looking at or motivates a person to further explore the site.

The site has a great location within the metropolitan area, adjacent to Fort Snelling, close to the Mall of America, and near the airport. The site borders both Minneapolis and Saint Paul. The Mall of America and the Airport daily bring hundreds of thousands of visitors to locations within minutes of the Upper Bluff Area. Historic Fort Snelling is an established heritage tourism site located immediately next to the Upper Bluff Area.

The site has great accessibility via major transportation corridors. Tourists should have little trouble reaching the Upper Bluff, as the site is well served by State Highway 5, US Highway 55, and Interstate 494.

The site is located near the confluence of the Minnesota and Mississippi Rivers. The meeting place of major rivers, especially one in the middle of an urban center, has tourism appeal, especially when in combination with the marshes, wetlands, mini-lakes, islands and other natural features of Fort Snelling State Park.

The site has a potential global market draw that could feature pre- and post- contact historical aspects of the Upper Bluff site. The Mall of America is a major draw for the international traveler. Another major draw for select international travelers such as the Japanese is the American "Wild West." Native American connections with Fort Snelling State Park, Historic Fort Snelling, and the Upper Bluff Area are many and diverse. While further marketing analysis is needed to pinpoint the exact visitation and dollar impact of the international heritage tourist, common sense dictates that the close proximity of Fort Snelling State Park and its wealth of natural, pioneer, military and Native American historical connections to the Mall of America, is a potential partnership which needs to be further explored.

Transportation Issues

The Upper Bluff Area is located within the fully developed portion of the metropolitan area. The site is within an hour's drive of more than half the state's population and enjoys close proximity to the two central cities, the airport, the Mall of America (MOA) and outdoor recreational activities associated with Fort Snelling State Park and the State's two major rivers. The site is well served by major freeways located south and west of the Trunk Highway 5/Trunk Highway 55 interchange.

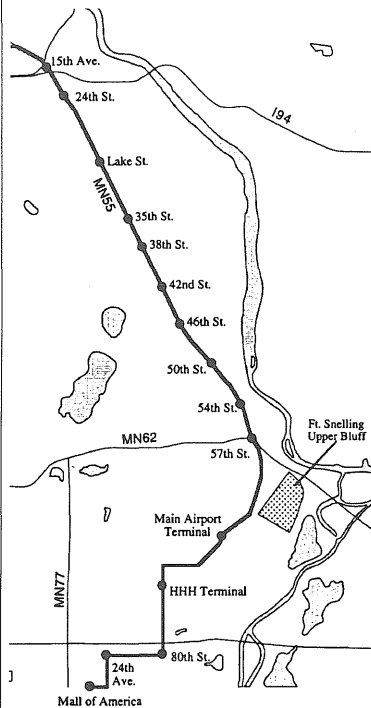
Despite its proximity to major freeways, direct access to the site is confusing. Visibility of the Upper Bluff area from the adjacent freeways is limited. Good signage will be critical both to site access and circulation through the area. Of the freeways serving the site, only Trunk Highway 62 has been identified in MnDOT's 2020 Transportation System Plan for improvement. MnDOT intends to continue its ongoing analysis of the MSP expansion proposal to identify transportation needs for trunk highways serving the area.

Future access to the site may be enhanced by improved transit service. The Hiawatha Avenue Transitway, currently under study, would connect downtown Minneapolis with MSP International Airport and the Mall of America. Right-of-way for a separate, dedicated transitway has already been preserved within the Hiawatha Avenue (Trunk Highway 55) corridor. The transitway would provide exclusive express bus service and/or Light Rail Transit (LRT), predicated on their cost-effectiveness and availability of adequate funding for implementation. The location of the Upper Bluff area could take advantage of such transit way service to the airport.

Also under study is a second transit way, which would link downtown Saint Paul to the airport and MOA. The draft alignment alternatives being explored show a connection with the Hiawatha corridor transit way in the vicinity of the GSA building. While the transit ways could improve access to the site for both residents and tourists, their infrastructure could adversely impact the historic fort site. Provisions would be needed to get the transit riders to the park. If the Park were to develop pedestrian and bicycle connections to Fort Snelling State Park and its hiking trails, the Council's transportation policy plan supports linking bike and pedestrian facilities to transit. Bicycle lockers should be provided at transit hubs and provision for bringing bicycles on buses should be encouraged.

Opportunities to connect improvements at the Park with improvements to the transportation system serving it are supported by the Council's Transportation Policy strategy 15d which states:

When investing for regional transportation needs, special consideration should be given to preservation and enhancement of the region's cultural and natural resources. The improvements to, and maintenance of,



*Light Rail Transit
Proposed Route*

highway and transit facilities should carefully consider the aesthetic relationship of facilities with the natural, scenic, historic, archaeological, social and cultural environment.

Investment in new highways and transit facilities should be consistent with regional plans and policies for parks and open space. The enhancements should add value to their use. Priority for funding for such purposes should be placed on projects that create a more livable urban environment and foster increased use of alternative modes of travel to the auto.

Development Issues

An important factor in the development of this site is whether there is public, or private, ownership interest in the improvements planned.

The location of the Upper Bluff at Fort Snelling creates many attractions to a private developer. Located within a five minute taxi ride of MSP airport, it provides a tremendous advantage to businesses that focus their operations outside of the metropolitan area. Likewise, the site offers potential uses that might be spawned by the many travelers that are frequently passing through the airport. It is centrally located within the metropolitan area and is easily reached by the existing highway infrastructure. Therefore it is also very attractive for businesses which serve a local customer base. Once off the highway, navigation through the site can be confusing for the first-time visitor. Directional signing will be a necessary component of any redevelopment process.

Due to the unique complexities of this site, it seems likely that some form of public development should be involved in this process. Any private development that can be encouraged to accompany this public venture will also act as a means to add support to the public portion.

If any, or all, of the property is sold for private (for-profit) development, an adjoining city or municipality would likely have to annex the respective area. Property taxes would have to be collected and city services provided, including police and fire protection, street maintenance, and trash removal. Utilities also become a major consideration. Water must be provided for domestic use, as well as for fire safety. Gas and electric will also be required at the site. The existing sewers are over 100 years old and will likely have to be repaired or replaced.

Conventional development of the Upper Bluff area will face several obstacles that are unique to this site. As the site is a state park, any use of the property will be complicated with the need to gather concurrence from all the interested and involved parties for any new use for the site. Historical preservation guidelines call for the

maintenance of existing structures in their current state or restoration to the original design. Buildings may not be altered to a totally different exterior design. This preservation of the streetscape will eliminate possible alternatives that might add certain new structures.

Some of the attractions to the site, such as its proximity to the airport, also create issues such as noise levels and building restrictions that a developer must overcome. Typical development uses for the property, such as retail, commercial, and particularly residential, would require added construction dollars to prevent the airport's high noise level from impacting the viability of those projects. Likewise, any building height restrictions imposed due to the proximity to the airport may result in an unacceptable building-to-land cost ratio. If a building is required to be only a few stories high, its use has to generate more rent per square foot to justify the cost of acquiring and developing the infrastructure of the site.

Other obstacles faced by a developer on this site would be the unusual difficulty to acquire financing, unless the issues of transferring ownership are overcome. Issues such as the current deed restrictions that limit the land use to "recreational" purposes, potential problems associated with any airport expansion, and the limited adaptability of the land to other uses if the original venture fails, complicate obtaining conventional financing. Simply reflecting on the number of authorities involved in any development will discourage many developers. Private developers traditionally accept the risk of a project with the assurance that their concept can be quickly and efficiently carried to the income producing stage. Therefore, for a private developer to select a site that does not allow a quick, "cookie-cutter" type of development, the project must offer substantial "upside" rewards. A developer's level of risk is considerably reduced by the knowledge that a project can be quickly completed and then freely repositioned, or sold, if it is not initially successful. The Upper Bluff site presently does not offer much of this flexibility.

The regulations that affect the Upper Bluff complicate any such fallback position and therefore increase the risk levels faced by a private developer. Typical development companies do not have the internal staff, or resources, which are sophisticated enough to coordinate the process of obtaining the necessary approvals and cooperation of the regulatory groups involved. Those developers with such extensive resources would have to either be comfortable with the potential of success to be willing to embark upon this project, or they would need to know that these concerns were resolved by others prior to beginning the construction phase. It is much more likely that a private developer would choose a project with fewer restrictions and with a land use that allows them to follow tried and proven development concepts than risk a one-time project which almost assuredly will be a lengthy process. Also, since the existing deed restrictions require a "land lease" or other concession agreement to make development possible, the high

rewards sought by a traditional private developer would need to result from the operations of the development and not its potential future sale.

The additional engineering, design, and construction costs required to bring the current structures to a usable level and to comply with codes may discourage a typical developer. The subsequent maintenance of buildings of this age could be more expensive than new construction, and with the likely involvement of historical preservation requirements, the maintenance will be more specific. However, although historical preservation requirements may make additional new construction difficult, if a developer did choose to construct a new building, they would still face identical concerns such as airport noise levels and height restrictions; new construction will not be a “cheap and easy” solution.

There may be an opportunity to utilize district heating or cooling to serve the various buildings as well as other properties in the area nearby, such as the airport. District Energy’s systems have proven to be both environmentally beneficial and economically feasible in downtown Saint Paul. Similar systems have shown the same results worldwide.

TIF funding can be used for some of these expenses. The cities of Minneapolis, Saint Paul, and Richfield are possible choices for annexing the property. Another option would be to contract with one or more of these municipalities to have them provide the necessary police, fire, and water services. (See tax increment financing in the *Potential Sources of Funding*, page 84.)

Development of this site can provide many benefits to the community. Depending upon the final use of the project, the community would be able to enjoy new recreational, educational, or cultural resources, as well as commercial facilities. The project could generate new jobs, homes, and businesses. The result of the development would be additional revenue to the state, county, and municipalities, as the income, property and sales taxes are generated. Current ‘eyesores’ would be recycled into renovated structures that enhance the area.

With its proximity to the Mall of America, there may be a potential draw of the innumerable visitors frequenting that location. Also, being at the confluence of the Minnesota and Mississippi Rivers, the location is not only extremely scenic, but also potentially accessible by waterway. This location is easily identifiable and, due to its historical background, it is very well known. All of this would typically be a major inducement to a private developer whether the project was commercial or residential in nature.

The advantage of public development is best seen when considering the mixed goals for the site. Many of the likely uses for the site will transcend the local community. Projects that emphasize the historical, archaeological, and environmental elements of the site will be of statewide significance. Likewise, projects that focus upon educational resources are most likely to be associated with the state's higher education systems and vocational schools, and therefore be of a broader nature. Any project that leverages the airport traffic in either a business or tourism agenda will be at least of metropolitan impact and likely statewide, national, or of international impact. Even the more complex restrictions on the property exist due to its association with national or statewide agencies. Therefore a successful use of this site seems most likely to result from a publicly funded venture. Such a venture would be able to recognize the intrinsic value that redevelopment of this site will bring and therefore justify the required funds.

While development and reuse of the site is definitely needed and beneficial, privately funded development is not likely to occur without some added cooperation, coordination, and incentives. The successful development of this site will require an appreciation for the goals and requirements of every party involved, including the private developer. Whereas the resources and financial strength of one of the region's larger development companies might be desirable, it appears more likely that a smaller developer, or a group of developers, would be willing to consider the uniqueness of a project such as the Upper Bluff. Attracting such a developer will require providing a central source that can coordinate the complexities associated with the numerous regulations, organizations, and entities involved. If the use for this site can be agreed upon by the various agencies involved, it should be possible to solicit specific projects that would meet those uses.

Project Management Issues

The successful implementation of the recommendations contained in this study will require ongoing leadership from the Department of Natural Resources and will require a project manager to accomplish the reuse recommendations. The reuse study team recommends that a project manager, who has experience in historic preservation planning, be hired to coordinate the complex details for the development of the property. Tasks will include: finding tenants or developers, working on funding alternatives, determining how police and fire protection will be delivered, determining how utility systems will be upgraded and managed, working with the National Park Service (NPS) and General Services Administration (GSA) on deed changes, working with MHS on preservation issues, and working with the local communities to meet recreational needs.

The actual development of the site will require that a process be defined for obtaining the necessary approvals. If an individual, or central source, can be identified to act as the coordinator for this element of the development, the overall process would be more likely to succeed. By resolving these problems up front, the development should proceed much quicker and more smoothly.

Once the final nature of the development is defined, the project manager could identify which sources of financing and other funding might be available for the various elements involved in the project. Individual developers could be sought that would promote their own projects and that would solicit the appropriate sources of funds within the provided framework of regulatory requirements. The MnDNR will need to consult with professionals in the area of property management and marketing.

Since none of the buildings are currently used, there are numerous opportunities to customize the site development to meet the project demands. The challenge will be to selectively fit the numerous recommendations of this reuse study into a viable redevelopment project.

Economic Analysis Projections

Introduction

The accompanying “Building Analysis and Cost Estimate Spreadsheet” has been developed to document the Upper Bluff’s existing building sizes and conditions. Based on those sizes and conditions, costs for various outcomes for each building, from demolition to full rehabilitation, have been projected. Information from the spreadsheet is also used as the basis for other sections of the report. For example, the “Break Even Analysis” utilizes “Low Intensity Reuse Costs” for two of the buildings to illustrate the economic viability of their reuse.

In order to determine the costs associated with a particular reuse for a building, group of buildings, or all buildings on the Fort Snelling Upper Bluff site, the following guidelines in utilizing the spreadsheet should be kept in mind:

- Because of the time that may elapse until any construction for reuse, it is recommended that further mothballing steps be taken as soon as possible. The cost of this work at each building would therefore have to be added to the other rehabilitation costs that would follow: Exterior Rehab, Low Intensity Reuse, or High Intensity Reuse.
- Reuse Abate Cost figures only need to be factored in with either the Low Intensity or High Intensity Reuse cost figures. They would not be factored with Demo Costs, Mothball Costs, or Exterior Rehab Costs.
- Exterior Rehab Costs would only be factored with Mothball Costs. Since both Low Intensity and High Intensity Reuse Costs include complete exterior rehabilitation, Exterior Rehab Costs should not be factored with those costs.
- The Quarter Master’s Building (No. 63) is in such poor shape that it is unlikely that it can be rehabilitated for a reasonable cost. Its exterior brick has been sandblasted, thus exposing the bricks’ softer interiors and making the exterior walls more vulnerable to water absorption and freeze/thaw cycles. The result of this has been significant damage to the brick. Also, the deterioration of the roof has caused major interior structural deterioration. There have therefore been no costs shown for Exterior Rehab, Low Intensity Reuse, or High Intensity Reuse for Building 63. Demo costs are shown, as is a cost for mothballing.

Upper Bluff Building Analysis and Cost Estimate Spreadsheet

Bldg	Original Use	Year Built	Year Vacant	# of Flrs.	Bsmt	Building Footprint	Gross Floor Area	Rebuild Porch	Ext. Cond.
53	Gym/Service Club	1903	1993	2	Yes	5,250	15,750	No	4
54	Med. Detachment	1939	1997	2	Yes	5,900	17,700	1,120	5
55	Post Hospital	1898	1992	2.5	Yes	14,575	51,013	3,500	4
56	Hospital Stew. Qtrs.	1900	1993	2	Yes	900	2,700	No	3.5
57	Band Barracks	1903	1993	2.5	Yes	2,800	9,800	No	4
62	Dead House (Morgue)	1933	1997	1	No	1,600	3,200	No	5
63	Quarter Master	1879	1980	2	Yes	4,000	12,000	No	1
64	Fire Station	1903	1980	2	Yes	1,800	5,400	No	2.5
65	Prison	1891	1980	1	Yes	8,500	17,000	No	3
66	Telephone Bldg.	1939	1995	1	Yes	4,900	9,800	No	4.5
67	Post Headquarters	1879	1997	2	Yes	6,300	18,900	No	4
76	Civil. Empl. Qtrs.	1938	1987	1	Yes	5,900	11,800	No	4
101	Barracks	1889	1981	2	Yes	14,600	43,800	5,800	3
102	Barracks	1889	1981	2	Yes	14,600	43,800	5,800	2.5
103	Barracks	1889	1981	2	Yes	14,600	43,800	5,800	3
112	Post Bakery	1891	1987	1	Yes	1,900	3,800	No	4
151	Bach. Officer's Qtrs.	1904	1980	2	Yes	6,800	20,400	No	3
152	Officer's Quarters	1879	1970	2	Yes	1,400	4,200	350	4
153	Officer's Quarters	1892	1970	2	Yes	1,400	4,200	350	3
154	Officer's Quarters	1879	1970	2	Yes	1,600	4,800	350	3
155	Officer's Quarters	1892	1970	2	Yes	1,440	4,320	350	3
156	Officer's Quarters	1880	1970	2	Yes	1,440	4,320	400	3
157	Officer's Quarters	1905	1970	2	Yes	3,350	10,050	1,500	3
158	Officer's Quarters	1880	1970	2	Yes	1,600	4,800	350	3.5
159	Officer's Quarters	1892	1970	2	Yes	1,400	4,200	350	3
160	Officer's Quarters	1880	1970	2	Yes	1,600	4,800	350	2.5
161	Officer's Quarters	1892	1970	2	Yes	1,400	4,200	350	4
T-175	Club House	1940	Leased	1	No	700	700	No	4
						132,255	381,253		

Streets, Curb & Gutter, & Parking Lot Work

Utility Upgrades

Landscape Upgrades

Totals

*See the accompanying "Key to Building Analysis and Cost Estimate Spreadsheet" for an explanation of this spreadsheet.

Bldg	Int. Cond.	Demo Costs	Mothball Costs	Exterior Rehab Cost	Reuse Abate Cost	Low Intensity Reuse Cost	High Intensity Reuse
53	3	\$80,125	\$68,087	\$314,795	\$185,000	\$1,354,598	\$1,752,188
54	4.5	\$156,950	\$76,346	\$402,518	\$315,000	\$1,586,104	\$2,035,500
55	1.5	\$293,544	\$211,813	\$1,163,908	\$435,000	\$4,375,609	\$5,866,438
56	3.5	\$13,450	\$12,821	\$58,559	\$85,000	\$318,347	\$300,375
57	3.5	\$107,300	\$41,811	\$197,967	\$106,000	\$882,131	\$1,090,250
62	4.5	\$19,700	\$16,170	\$65,604	\$35,500	\$358,050	\$356,000
63	1	\$63,000	\$100,000	\$0	\$0	\$0	\$0
64	3	\$23,400	\$24,255	\$108,801	\$61,000	\$532,744	\$600,750
65	3.5	\$77,500	\$79,926	\$342,111	\$101,000	\$1,453,856	\$1,891,250
66	4	\$48,300	\$46,662	\$197,967	\$61,200	\$882,131	\$1,090,250
67	3.5	\$119,650	\$81,428	\$376,646	\$233,000	\$1,604,728	\$2,102,625
76	4	\$50,800	\$55,902	\$245,553	\$63,400	\$1,040,944	\$1,312,750
101	1.5	\$213,300	\$186,879	\$1,109,724	\$340,000	\$3,771,653	\$5,037,000
102	2	\$201,000	\$186,879	\$1,109,724	\$307,000	\$3,771,653	\$5,037,000
103	2	\$207,600	\$186,879	\$1,109,724	\$334,300	\$3,771,653	\$5,037,000
112	Lckd	\$35,400	\$18,942	\$77,385	\$68,200	\$405,694	\$422,750
151	3	\$92,400	\$87,780	\$414,414	\$212,000	\$1,723,838	\$2,269,500
152	1	\$19,700	\$19,173	\$100,774	\$47,400	\$351,698	\$483,000
153	3	\$20,050	\$19,173	\$100,774	\$48,800	\$351,698	\$483,000
154	Lckd	\$22,500	\$21,714	\$112,555	\$49,000	\$401,940	\$552,000
155	3	\$20,320	\$19,681	\$103,130	\$53,600	\$361,746	\$496,800
156	3	\$20,620	\$19,681	\$105,151	\$54,500	\$361,746	\$496,800
157	3	\$41,175	\$43,948	\$262,127	\$168,700	\$841,562	\$1,155,750
158	3	\$20,800	\$21,714	\$112,555	\$46,100	\$401,940	\$552,000
159	4	\$17,200	\$19,173	\$100,774	\$41,700	\$351,698	\$483,000
160	2.5	\$20,400	\$21,714	\$112,555	\$46,200	\$401,940	\$552,000
161	3	\$19,700	\$19,173	\$100,774	\$48,300	\$351,698	\$483,000
T-175		\$2,450	\$0	\$0	\$0	\$0	\$0
		\$2,028,334	\$1,707,722	\$8,506,566	\$3,546,900	\$32,011,395	\$41,938,975
		\$197,000	\$0	\$350,000	\$0	\$350,000	\$350,000
		\$0	\$62,000	\$0	\$0	\$274,000	\$1,004,000
		\$0	\$0	\$200,000	\$0	\$200,000	\$200,000
		\$2,225,334	\$1,769,722	\$9,056,566	\$3,546,900	\$32,835,395	\$43,492,975

The recommendation for Building 63 is that it either be fenced off in an historically appropriate manner and left as a ruin, or torn down and replaced with a picnic shelter of a similar massing on the site. The mothballing cost for Building 63 therefore is included to cover either of those outcomes.

- Only Demo Costs are shown for Building T-175, the golf course clubhouse, which was built in 1940. It appears to be a non-contributing structure whose current function, it is recommended, could be housed in Building 151, the Bachelor Officer's Quarters.
- Three other existing buildings, T-178, T-182, and 188, are garages built between 1928 and 1930 and are not shown on the spreadsheet. All appear to be non-contributing structures. It is assumed that no money would be spent to rehabilitate them in any way, and it is likely that they would be torn down as part of any major rehabilitation work. Their demolition costs are insignificant in relation to the overall costs indicated.

Building, Original Use, Year Built, and Year Vacant: These are self explanatory.

of Flrs: This refers to the number of floors above grade. For example, buildings shown as 2.5 have two floors plus a usable attic. For the purposes of this report, only attics that have been used in the past are shown as included in the number of floors. Therefore, it has been assumed that none of the attics of the buildings on Officer's Row, for example, would be rehabilitated, since they have not been used in the past.

Bsmt: Indicates whether or not the building has a basement.

Building Footprint: This is the area of ground surface covered by the building in square feet (SF).

Gross Floor Area: This is the total area of all the floors of the building in square feet. This would therefore include basements, all floors above grade, and attics (where indicated).

Rebuild Porch?: This indicates whether the reconstruction of a porch is assumed as being part of any rehabilitation work. Where a number is shown, it indicates the total area of all levels of all porches, in square feet, that would be reconstructed as part of the work.

Ext. Cond.: This is an evaluation of the exterior condition of the buildings. The ratings are as follows:
5 = Excellent: Virtually no work required.

- 4 = Very Good: Selective re-pointing of the masonry surfaces; selective replacement of stone sills, belt courses, and/or foundation stones; selective repair to fascias, soffits, etc.;
- 3 = Good: The building appears structurally sound, but approximately 50% of the exterior may need repair, including such items as cracks in the masonry or mortar joints; more extensive tuckpointing of the masonry surface; more extensive repair or replacement of stone sills, belt courses, and/or foundation stones; and more extensive repair to fascias, soffits, etc.
- 2 = Fair: No apparent structural deficiencies in the floor, roof, and/or wall structure, but extensive work is necessary to restore it to original condition, including such items as cracks in the masonry or mortar joints; extensive tuckpointing of the masonry surface; extensive repair or replacement of stone sills, belt courses, and/or foundation stones; and extensive repair to fascias, soffits, etc.
- 1 = Poor: Structural deficiencies of the roof and/or wall structures are apparent, and the building either should not be entered or extreme caution should be taken if it is entered.

Int. Cond.: This is an evaluation of the interior condition of the buildings. The ratings are as follows:

- 5 = Excellent: With reestablishment of utilities, the building could be immediately reused.
- 4 = Very Good: With reestablishment of utilities, the building could be reused with minor patching of interior finishes and/or painting.
- 3 = Good: The building is not habitable as it exists. There may be some floor and/or plaster damage and extensive painting and finishing would need to be done.
- 2 = Fair: The building is not habitable as it exists. There may be sagging joists, buckled floors, and extensive plaster damage.
- 1 = Poor: The building is not habitable as it exists. There may be structural deficiencies in the roof and/or wall structure, and the building either should not be entered or extreme caution should be taken if it is entered.

Demo Costs: This is the estimated cost to demolish each building, including the cost to undertake the hazardous materials abatement.

Mothball Costs: This is the estimated cost to “mothball”, or stabilize each building from further deterioration. Note that it does **not** include the cost to abate hazardous materials. In the past when the buildings were vacated, they were mothballed with varying degrees of success. Steps taken have included covering window and door openings subject to being entered by unauthorized persons with plywood and providing ventilation grilles in the plywood to allow air to circulate. One door has been kept in each building for access, and it has been secured using a hasp latch and padlock. The majority of the damage seen at building interiors has been caused by roofs that have been allowed to deteriorate and/or lack of heat for extended periods of time. To limit further deterioration, the following items have been included in the mothball costs:

Additional securing of openings: This would entail repair or replacement of existing plywood, or closing in with concrete block, those openings that have been breached repeatedly in the past.

Temporary repair of soffits, fascias, etc.: Using plywood, particle board, etc., this will prevent further water infiltration into the building walls and interiors.

Major repair or replacement of the roof: This will also prevent further water infiltration.

New Security Door: This would include the installation of a hollow metal access door and frame with a heavy duty mortise lockset and deadbolt.

Contractor General Conditions and Overhead and Profit: These have been included at 5% and 10% respectively.

Mechanical and Electrical: Note that provision for heating the buildings has not been included. Most have been unheated for so long that heating them now would not make much difference. Ventilation grilles would be included as part of the work of securing exterior openings. No electrical work would be included.

Exterior Rehab Cost: This is the estimated cost to completely rehabilitate or restore the exteriors of the buildings. Note that this cost would **not** include hazardous materials abatement or interior rehabilitation. It would provide for a restored, weatherproof building shell, with interior work to be performed by others or at a later date. Exterior rehabilitation costs have been extrapolated from recent cost estimates for historic buildings of similar type. To restore the building exteriors, the following items have been included in the exterior rehabilitation costs:

Complete Repair of Exterior Masonry: Existing masonry surfaces, both stone and brick, would be repaired and cleaned. It is assumed approximately 5% of exterior masonry surfaces would be replaced and all masonry surfaces would be re-pointed.

Complete Repair of Exterior Wood Trim: Existing wood soffits, fascias, trim, etc. would be repaired or replaced.

Complete Restoration of Historic Porches: All missing historic porches would be reconstructed. Historically inappropriate existing porches would be removed and replaced with historically accurate porches.

Re-Roof: All roofing, flashings, and related items would be replaced. This would be heavy duty asphalt shingles in most cases. The estimate also allows for repair and replacement of the limited number of slate roofs where they occur.

New Exterior Doors: Where possible, existing doors would be repaired. Other exterior doors would be replaced with historically appropriate doors.

New Windows: Where possible, existing windows would be repaired and new storm windows added. Others would be replaced with historically appropriate windows and storms.

Painting: All surfaces that were historically painted would be painted.

Contractor General Conditions and Overhead and Profit: These have been included at 5% and 10% respectively.

Reuse Abatement Cost: This is the estimated cost to abate any hazardous materials that may be present in each particular building. This work would have to be done prior to any interior rehabilitation.

Low Intensity Reuse Cost: This would restore the buildings to what would be considered a “vanilla box” standard in the jargon of commercial construction. This would allow for others to move in and, at their expense, finish spaces to suit their needs. The exteriors would be completely restored as outlined in Exterior Rehab Costs outlined above. Low intensity reuse costs have been extrapolated from recent cost estimates for historic buildings of similar type. To accomplish this work, the following items have been included:

Site Work: This would include parking lots, landscaping, and accessibility upgrades.

Selective Demolition: This would include general demolition of portions of buildings that are non-historic. On larger buildings, it would also include extensive interior demolition to remove non loadbearing walls, create new openings for stairs and elevator shafts, etc. On the smaller buildings, such as those on Officer’s Row, it is assumed that the interiors would be reused more in their “as is” configuration, therefore there would be less extensive interior demolition.

Complete Repair of Exterior Masonry: Existing masonry surfaces, both stone and brick, would be repaired and cleaned. It is assumed approximately 5% of exterior masonry surfaces would be replaced and all masonry surfaces would be re-pointed.

Complete Repair of Exterior Wood Trim: Existing wood soffits, fascias, trim, etc. would be repaired or replaced.

Complete Restoration of Historic Porches: All missing historic porches would be reconstructed. Historically inappropriate existing porches would be removed and replaced with historically accurate porches.

Re-Roof: All roofing, flashings, and related items would be replaced. This would be heavy duty asphalt shingles in most cases. The estimate also allows for repair and replacement of the limited number of slate roofs where they occur.

New Exterior Doors: Where possible, existing doors would be repaired. Other exterior doors would be replaced with historically appropriate doors.

New Windows: Where possible, existing windows would be repaired and new storm windows added. Others would be replaced with historically appropriate windows and storms.

Interior Work: The interiors would receive insulation, gypsum wallboard, and paint on the inside of all exterior walls; new or repaired ceilings; new or revised exit systems; rest rooms as required by code; and

window blinds. As noted previously, basements and attics, where indicated, would be included in this work.

Painting: All interior and exterior surfaces that were historically painted would be painted.

Elevators: Larger buildings would each receive one elevator. It is assumed that elevators would not be added to the smaller buildings at Officer's Row (152 through 161) since current codes would not require it. It is assumed they would be added at all buildings at Area J. However, the particular building's reuse would dictate whether accessibility to upper floors or basements would be required. For example, public buildings would be required to be totally accessible. If elevators are required in the smaller buildings, the costs should be increased by approximately \$90,000 for each elevator added.

Mechanical and Electrical: New mechanical and electrical systems would be installed. They would have distribution only to exit corridors, stairs, and other common spaces. Distribution within a future "tenant" space would be by the user.

Contractor General Conditions and Overhead and Profit: These have been included at 5% and 10% respectively.

High Intensity Reuse Cost: This would completely restore the buildings on the interior and the exterior. High intensity reuse costs have been extrapolated from recent cost estimates for historic multi-tenant residential or hotel style buildings of similar type. These costs were selected because of the higher interior costs due to a larger number of bathrooms, kitchens, partitions, etc.

In addition to the work required under a the "Low Intensity Reuse Costs" the following items have been included in the "High Intensity Reuse Costs":

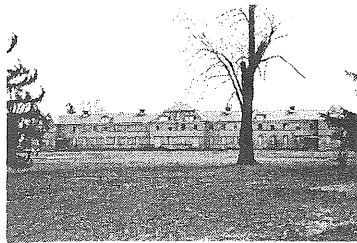
Interior Work: The interiors would be completely built-out with insulation, gypsum wallboard, and paint on the inside of all exterior walls; new or repaired ceilings; new or revised exit systems; new interior partitions; toilets as required by code; and window blinds. As noted previously, basements and attics, where indicated, would be included in this work.

Elevators: Under this category, all buildings are assumed to receive one elevator.

Mechanical and Electrical: Complete new mechanical and electrical systems would be installed as required by the reuse.

Break Even Analysis for Private Development

Barracks Building #101



Building #101 is a two-story building with a basement that was originally constructed in 1889 as a barracks. This analysis is prepared with the assumption that a private developer would have to actually acquire the parcels of land through purchase. This price is reflected in the respective proforma. The developer would also be eligible for tax increment financing benefits (TIF), historic tax credits and facade easement deductions. For the purposes of this break-even analysis, three acres of land were assigned to this building and an overall acquisition cost of \$3.30 per square foot was assumed for the land and building. Environmental abatement costs of \$340,000 and low intensity reuse construction costs of \$3,771,653 are projected for this facility. Fully developed, it is estimated that the 43,800 gross construction square feet in this facility will cost \$6,664,038. The final development should provide 39,420 gross rentable square feet.

If property taxes of \$3.00 per rentable square foot were assessed to the 39,420 square foot development, an annual property tax of \$118,260 would be levied. Assuming the developer elected to contribute a facade easement for the building to the Preservation Alliance of Minnesota, there would be a lower assessment value attributed to the developer for property taxes. If a dedication of 15% of the building's costs were attributed to the facade easement, property taxes would be reduced by \$17,739 due to the lower assessment value. This would then leave the developer with an exposure of \$100,521 for the annual property taxes. Actually a full assessment of the property would normally phase in over a three-year period, with only a partial assessment in the second year of ownership and with the first year remaining at its current valuation.

TIF may be available for this project. TIF is a technique that uses the increased property values attributed to redevelopment to provide an incentive to encourage development. A taxing entity (in this case the actual entity must be determined) could provide annual funding to a developer to help pay its property taxes or up-front payment to assist in the development. The Barracks #101 building has never had an established tax basis, therefore any increase in its fully assessed valuation would qualify for TIF. Assuming the municipality elects to use ten years as the base for TIF and the property is generating the \$100,521 annually in tax revenue, the taxes generated over ten years would be \$1,005,210. The municipality would require a portion of these taxes to be used for the necessary infrastructure (i.e., water, sewer, gas, electric, streets, curbs, landscaping, etc.) that is required for the project. The projected infrastructure of the entire Upper Bluff Area J is \$1,554,000. Therefore the amount attributable to the Barracks #101 would be \$166,105, or \$3.79 per square foot, when distributed on the basis of gross floor area for the complex. This would result in a grant paid up-front to the Developer of \$839,105 in (TIF) toward the development costs of Barracks #101.

Net leases in this project should stipulate that the property tax expense be passed on to the tenants at the rate applied prior to the TIF contribution.

The fully developed project cost of \$6,664,038 may qualify for conventional debt financing of up to 75% of the amount at a prevailing rate of 9%, 25-year term. Once the \$839,105 of TIF is applied, the required financing would amount to \$4,158,924. This would result in debt service of \$34,902 monthly, or \$418,824 annually. This type of financing could be obtained by a qualified borrower but most likely would require a call provision after five years with an adjustment to market interest rates. These rates will be determined by past performance, success of the project, and prevailing interest rates.

It would require obtaining a net rent of \$10.62 with 100% occupancy for the building to break-even on its 25-year financing costs. This amount reflects the annual debt service allocated to the gross rentable square feet of the project. An 85% occupancy is a more reasonable assumption in the break-even analysis as it provides an attractive profit margin and a more realistic level of anticipated rents. With the assumption that occupancies of 85% are maintained, the Developer will be responsible for 15% of the ongoing operating expenses for the project. Therefore utilizing a 15% margin for upside is not unreasonable. **At an 85% occupancy level, net rents should be approximately \$12.50.**

Operating expenses are estimated to be approximately \$8 per square foot, including utilities and taxes. **This would result in a need to target average gross rentals for the project at an average of \$20.50 per rentable square foot.** Since this is an average gross rental target, the lower rents from the less desirable basement space would have to be offset with higher rents on the upper two floors. Therefore if the basement was marketed at rates of \$6 per rentable square foot net, the upper floors would require net rents of \$15.75 per rentable square foot to achieve the target rent. This would result in gross rental rates being offered at \$14 per rentable square foot for the basement and \$23.75 per rentable square foot for the upper two floors.

With the recent tightening of supply in the Twin Cities office market, rental rates have been consistently increasing. Rates in the metropolitan area for newly constructed office space are currently achieving gross rates of \$25 to \$30 per rentable square foot. If it is necessary to add an inducement to the marketing of the space, the savings in the property taxes typically recognized in the first two to three year partial assessment period can be passed on to a prospective tenant. This would allow the tenant slightly lower initial rates and encourages a quicker lease-up period.

**FORT SNELLING DEVELOPMENT
PRIVATE DEVELOPER PROFORMA—BARRACKS #101**

YEAR BUILT	1889
ACREAGE INVOLVED	3
NUMBER OF FLOORS (NOT INCL. BSMT.)	2
BUILDING FOOTPRINT	14600
GROSS CONSTRUCTION S/F (GCSF)	43800
GROSS RENTABLE S/F (GRSF - assume 90% of GCSF)	39420

PROJECT COSTS:

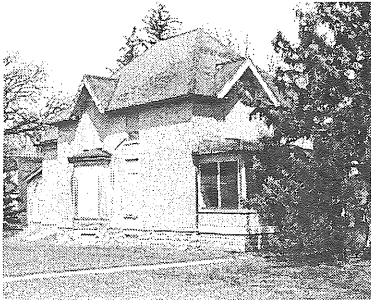
ACQUISITION COST (LAND & BUILDING)		\$431,244	\$431,244
	<i>PER SQUARE FOOT OF LAND</i>	\$3.30	
CONSTRUCTION COSTS		\$3,771,653	
ARCHITECTURAL/ENGINEERING FEES @ 8% of construction costs		\$301,732	
ENVIRONMENTAL ABATEMENT COSTS		\$340,000	
CONSTRUCTION INTEREST @ 9%, 5 MOS. (INTEREST ONLY)		\$181,674	
TOTAL ABATEMENT & CONSTRUCTION COSTS		\$4,595,059	\$4,595,059
	<i>PER SQUARE FOOT OF GCSF</i>	\$104.91	
TOTAL ACQUISITION, ABATEMENT, & CONSTRUCTION COSTS			\$5,026,303
	<i>PER SQUARE FOOT OF GCSF</i>	\$114.76	
DEVELOPER FEES @ 4% (ACQ., ABATEMENT, & CONSTRUCT.)		\$201,052	
CAPITALIZED OPER. COST ALLOW. (\$6 per rentable s/f for 1 yr.)		\$236,520	
FINANCE FEES @ 2.5 POINTS ON 75% OF BASE LEVEL PROJ. COSTS		\$102,448	
TOTAL - OTHER COSTS		\$540,020	\$540,020
TOTAL PROJECT COST: BASE LEVEL			\$5,566,323
	<i>PER SQUARE FOOT OF GCSF</i>	\$127.08	
LEASEHOLD IMPROVEMENTS:			
REGULAR FLOORS @ \$31.77 psf		\$834,916	
BASEMENT @ \$20.00 psf		\$262,800	
TOTAL LEASEHOLD IMPROVEMENTS		\$1,097,716	\$1,097,716
	<i>PER SQUARE FOOT OF GRSF</i>	\$27.85	
TOTAL PROJECT COST: FULLY DEVELOPED			\$6,664,039
	<i>PER SQUARE FOOT OF GRSF</i>	\$169.05	

SOURCE OF FUNDS:

EQUITY (25% OF TOTAL PROJ. COST: BASE LEVEL)	\$1,666,010	
DEBT (75% OF TOTAL PROJ. COST: BASE LEVEL)	\$4,158,924	
TAX INCREMENT FINANCING	\$839,105	
TOTAL FUNDS		\$6,664,039

Break Even Analysis for Private Development

Officer's Quarters, Building #152



The assumptions made in the break-even analysis for Barracks #101 would also apply to this analysis. Officer's Quarters #152 is a two-story building with a basement that was originally constructed in 1879. For the purposes of this break-even analysis, one-half acre of land was assigned to this building and an overall acquisition cost of \$3.30 per square foot was assumed for the land and the building. Environmental abatement costs of \$47,400 and low intensity reuse construction costs of \$351,698 were projected for this facility. Fully developed, its estimated that the 4,200 gross construction square feet in this facility will cost \$677,000. The final development should provide 3,780 gross *rentable* square feet.

If property taxes of \$3.00 per rentable square foot were assessed to the 3,780 square foot development, an annual property tax of \$11,340 would be levied. Assuming the developer elected to contribute a facade easement for the building to the Preservation Alliance of Minnesota, there would be a lower assessment value attributed to the developer for property taxes. If a dedication of 15% of the building's cost were attributed to the facade easement, property taxes would be reduced by \$1,701 due to the lower assessment value. This would then leave the developer with an exposure of \$9,639 for the annual property taxes. Actually a full assessment of the property would normally phase in over a three-year period, with only a partial assessment in the second year of ownership and with the first year remaining at its current valuation.

Assuming TIF is employed on the same basis as for the Barracks #101 building, the taxes generated would be \$9,639 annually, and \$96,390 for ten years. As in the analysis for Barracks #101, an amount of \$3.79 per square foot of gross floor area would be attributed toward the necessary infrastructure improvements. Allowing for the \$15,928 dedicated toward the infrastructure, the building would be eligible for an up-front grant of \$80,462 in TIF.

Net leases in this project should stipulate that the property tax expense be passed on to the tenants at the rate prior to the TIF contribution.

The fully developed project cost of \$677,000 may qualify for conventional debt financing of up to 75% of the amount at a prevailing rate of 9%, 25-year term. Once the \$80,462 of TIF is applied, the required financing would amount to \$427,288. This would result in debt service of \$3,586 per month, or \$43,032 annually. This type of financing could be obtained by a qualified borrower but most likely would require a call provision after five years with an adjustment to market interest rates. These rates will be determined by past performance, success of the project, and prevailing interest rates.

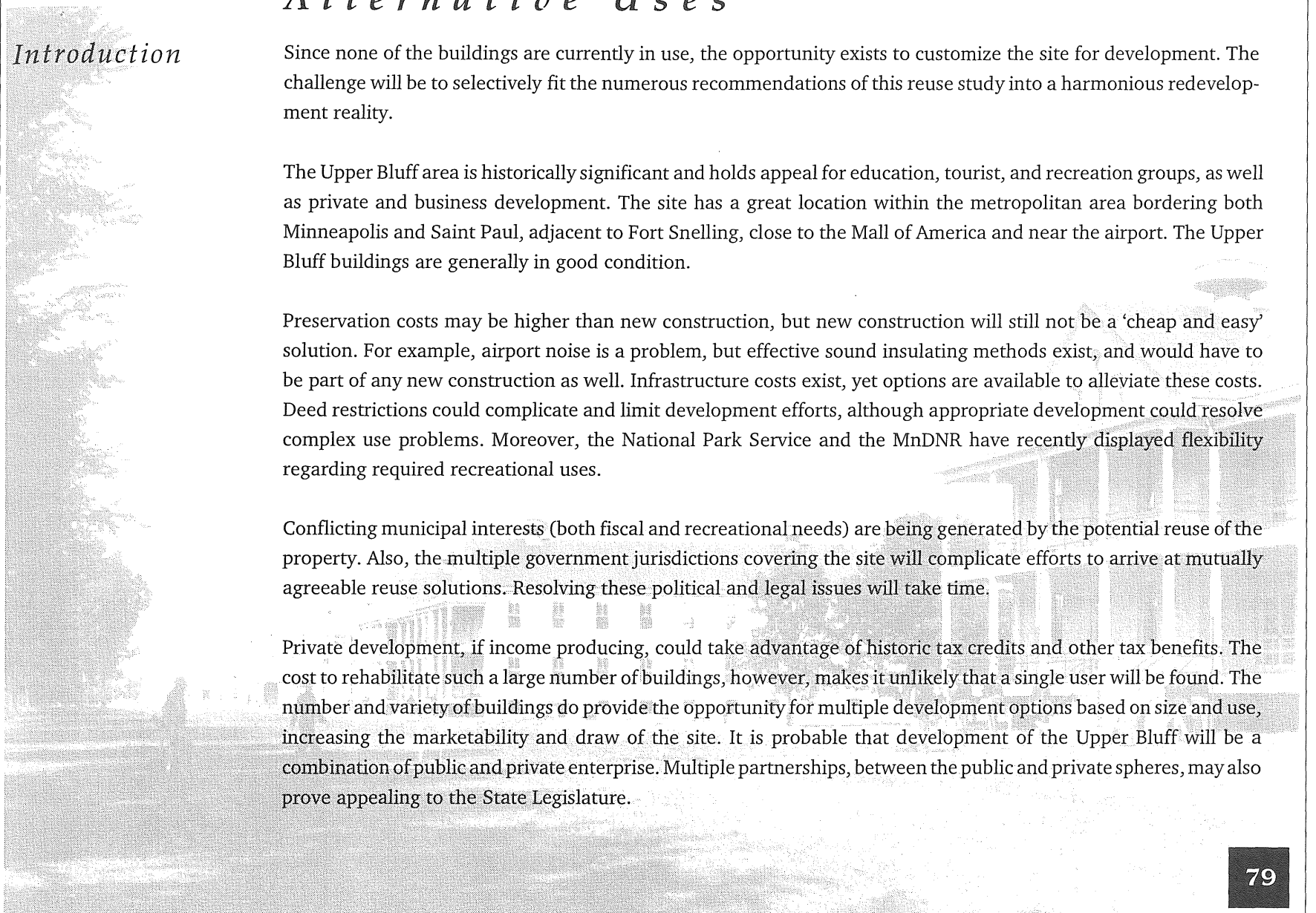
It would require obtaining a net rent of \$11.38 with 100% occupancy for the building to break-even on its 25-year financing costs. An 85% occupancy is a more reasonable assumption in the break-even analysis as it provides an attractive profit margin and a more realistic level of anticipated rents. **At an 85% occupancy level, net rents should be approximately \$13.39.**

Operating expenses are estimated to be approximately \$8 per square foot, including utilities and taxes. **This would result in a need to target gross rentals for the project at an average of \$21.39 per rentable square foot.** Since this is an average gross rental target, the lower rents from the less desirable basement space would have to be offset with higher rents on the upper two floors. Therefore if the basement were rented for \$6 per rentable square foot net, the upper floors would require net rents of \$17.09 per rentable square foot to achieve the target rent. This would result in gross rental rates being offered at \$14 per rentable square foot for the basement and \$25.09 per rentable square foot for the upper two floors.

As stated previously, with the recent tightening of supply in the Twin Cities office market, rental rates have been consistently increasing. Rates in metropolitan area for newly constructed office space are currently achieving gross rates of \$25 to \$30 per rentable square foot. If it is necessary to add an inducement to the marketing of the space, the savings in the property taxes typically recognized in the first two to three year partial assessment period can be passed on to a prospective tenant. This would allow the tenant slightly lower initial rates and encourages a quicker lease-up.

**FORT SNELLING DEVELOPMENT
PRIVATE DEVELOPER PROFORMA—OFFICER'S QUARTERS #152**

YEAR BUILT		1879	
ACREAGE INVOLVED		0.5	
NUMBER OF FLOORS (NOT INCL. BSMT.)		2	
BUILDING FOOTPRINT		1400	
GROSS CONSTRUCTION S/F (GCSF)		4200	
GROSS RENTABLE S/F (GRSF - assume 90% of GCSF)		3780	
<u>PROJECT COSTS:</u>			
ACQUISITION COST (LAND & BUILDING)		\$71,874	\$71,874
	<i>PER SQUARE FOOT OF LAND</i>	<i>\$3.30</i>	
CONSTRUCTION COSTS		\$351,698	
ARCHITECTURAL/ENGINEERING FEES @ 8% of construction costs		\$28,136	
ENVIRONMENTAL ABATEMENT COSTS		\$47,400	
CONSTRUCTION INTEREST @ 9%, 5 MOS. (INTEREST ONLY)		\$18,717	
TOTAL ABATEMENT & CONSTRUCTION COSTS		\$445,950	\$445,950
	<i>PER SQUARE FOOT OF GCSF</i>	<i>\$106.18</i>	
TOTAL ACQUISITION, ABATEMENT, & CONSTRUCTION COSTS			\$517,824
	<i>PER SQUARE FOOT OF GCSF</i>	<i>\$123.29</i>	
DEVELOPER FEES @ 4% (ACQ., ABATEMENT, & CONSTRUCT.)		\$20,713	
CAPITALIZED OPERATING COST ALLOW. (\$6 psf for 1 yr.)		\$22,680	
FINANCE FEES @ 2.5 POINTS ON 75% OF BASE LEVEL PROJ. COSTS		\$10,523	
TOTAL - OTHER COSTS		\$53,916	\$53,916
TOTAL PROJECT COST: BASE LEVEL			\$571,740
	<i>PER SQUARE FOOT OF GCSF</i>	<i>\$136.13</i>	
LEASEHOLD IMPROVEMENTS:			
REGULAR FLOORS @ \$31.77 psf		\$80,060	
BASEMENT @ \$20.00 psf		\$25,200	
TOTAL LEASEHOLD IMPROVEMENTS		\$105,260	\$105,260
	<i>PER SQUARE FOOT OF GRSF</i>	<i>\$27.85</i>	
TOTAL PROJECT COST: FULLY DEVELOPED			\$677,000
	<i>PER SQUARE FOOT OF GRSF</i>	<i>\$179.10</i>	
<u>SOURCE OF FUNDS:</u>			
EQUITY (25% OF TOTAL PROJ. COST: BASE LEVEL)		\$169,250	
DEBT (75% OF TOTAL PROJ. COST: BASE LEVEL)		\$427,288	
TAX INCREMENT FINANCING		\$80,462	
TOTAL FUNDS			\$677,000



Introduction

Alternative Uses

Since none of the buildings are currently in use, the opportunity exists to customize the site for development. The challenge will be to selectively fit the numerous recommendations of this reuse study into a harmonious redevelopment reality.

The Upper Bluff area is historically significant and holds appeal for education, tourist, and recreation groups, as well as private and business development. The site has a great location within the metropolitan area bordering both Minneapolis and Saint Paul, adjacent to Fort Snelling, close to the Mall of America and near the airport. The Upper Bluff buildings are generally in good condition.

Preservation costs may be higher than new construction, but new construction will still not be a 'cheap and easy' solution. For example, airport noise is a problem, but effective sound insulating methods exist, and would have to be part of any new construction as well. Infrastructure costs exist, yet options are available to alleviate these costs. Deed restrictions could complicate and limit development efforts, although appropriate development could resolve complex use problems. Moreover, the National Park Service and the MnDNR have recently displayed flexibility regarding required recreational uses.

Conflicting municipal interests (both fiscal and recreational needs) are being generated by the potential reuse of the property. Also, the multiple government jurisdictions covering the site will complicate efforts to arrive at mutually agreeable reuse solutions. Resolving these political and legal issues will take time.

Private development, if income producing, could take advantage of historic tax credits and other tax benefits. The cost to rehabilitate such a large number of buildings, however, makes it unlikely that a single user will be found. The number and variety of buildings do provide the opportunity for multiple development options based on size and use, increasing the marketability and draw of the site. It is probable that development of the Upper Bluff will be a combination of public and private enterprise. Multiple partnerships, between the public and private spheres, may also prove appealing to the State Legislature.

The successful development of the site will be a major management job in determining who runs and who funds the development. Any organized effort to develop the site and buildings will require an experienced project manager. Since the site does not fall within a municipality, the providers of infrastructure and community services such as police and fire protection will need to be addressed.

Alternatives

The variety of alternative uses suggested during the on-site interview and public meeting phases of this study included the following:

1. Recreational

- Develop a land bridge to the lower park
- Equestrian center
- Fitness center
- Teen recreation center
- Veterans memorial park
- Picnic shelters/pavilions (similar to the Durkee Atwood Building on Nicollet Island)
- Consolidated cultural repository
- Metropolitan golf course and ball fields
- Orchestra amphitheater
- Provide trails to Old Fort and other area trails

2. Education

- Preservation technology school (Possibly in conjunction with the UofM, Normandale, etc.)
- Education campus (state university, community college, etc.)
- Conference center
- Law enforcement training facility
- Environmental learning center
- Montessori and childcare
- Charter schools
- Governor's Academy

3. Office Campus

- MnDNR or other state agency

- Commercial incubator offices (provide shell improvements only)
- MAC or other airport offices
- Mixed use (office/residential)
- Rental car storage and offices
- Duty Free Zone

4. Housing

- Rental housing or rent-to-own
- For sale housing (complete units)
- For sale housing (shell improvements only)
- Student housing for the UofM (assuming adequate mass transit)
- Small historic village (with necessary retail)
- Fancy hotel
- Low cost hotel/hostel
- Longer term residential style hostel
- Veteran's retirement living
- Bed and breakfast inns

5. Historical

- Promote Upper Bluff as the third component of the Fort Snelling site, after the Old Fort and Lower Park
- Fort Snelling's role in the Civil War effort

Different Scenarios for the Upper Bluff

The study team examined various scenarios for the Upper Bluff. Each scenario described herein assumes that the deed is modified to allow for uses in addition to recreation while retaining the historic streetscape. Public access to the entire site including the interior of most buildings would be provided.

1. MnDNR retains ownership of the entire 141 acres including all the buildings.

MnDNR (with state bonding dollars) upgrades all the infrastructure, removes selected buildings, abates hazardous materials, and renovates all building exteriors, including historic porch restoration. Tenants, either public or private are responsible for interior renovation that follow specific architectural guidelines. Tenants pay a monthly rent and

are responsible for all utilities. Cost of this alternative would be between \$32,000,000 and \$43,000,000. The Reuse Team prefers this scenario.

A variation of this would be for MnDNR to just upgrade the infrastructure and allow tenants to renovate both exterior and interior of all building. Renovation would be guided by architectural guidelines. A State corporation similar to a Port Authority would be established to provide lending and bonding capability.

2. The MnDNR preserves 8 to 10 of the most significant buildings as a core area, removing the other buildings to allow for more outdoor recreation on the site.

Cost of this alternative is estimated at \$16,000,000.

Potential Sources for Funding

The feasibility and ultimate preservation and reuse of the existing structures on the Upper Bluff are directly dependent on funding from a variety of sources. Some of these funds are available only for private developments that generate tax income for a local municipality or the State of Minnesota. Other sources of funding are available only for developments which directly benefit the public sector. It is possible to combine sources of funding for public/private partnerships.

Funds Available for Private Reuses:

- **Historic Tax Credits**—Since the site is on the National Register of Historic Places, most of the buildings are eligible for Historic Tax Credits if they are privately developed. These tax credits amount to 20 percent of the total rehabilitation costs. Individual investors are restricted by active and passive investor tax laws. Corporations, however, do not suffer these restrictions. A rehabilitation can extend up to a five year phased period and, therefore, tax credits can be taken over a similar period of time. Tax credits remain as one of the more attractive financial incentives for private historic preservation.
- **Federal Housing Tax Credits**—These credits are available if an apartment rental development and its occupants meet program guidelines. To utilize the tax credit, a minimum of 20 percent of the units must meet rental guidelines. All of the rental units may be dedicated to low income tenants. Allocation of credits must be obtained from a local municipality or the Minnesota Housing Finance Agency
- **Federal Department of Housing and Urban Development (HUD)**—Favorable financing available from HUD is most likely not a source of funding for these buildings in that the entire study area falls within the DNL 65 decibel range by proximity to the airport.
- **Facade Easements**—The Economic Recovery Tax Act of 1982 allows property owners to take a tax deduction for donating easements of buildings listed on the National Register. This historic facade easement is a way of protecting a structure while permitting the owner to retain possession and use of these structure. The easement must be donated to a nonprofit group which agrees to preserve and protect the historic elements of the facade. The Preservation Alliance of Minnesota is a nonprofit membership organization that is qualified to receive historic facade easements and presently holds a number of such easements.

The contribution of a facade allows the owner to take a charitable deduction based on a percentage of the value of the restored building. These can range up to 25 percent of the value of the building depending on the area of historically significant facades. In addition, a financial contribution is also required to fund the ongoing oversight of the donated facade.

- **Tax Increment Financing (TIF)**—Buildings which are privately owned and which pay property taxes to a local taxing municipality qualify for TIF financing. TIF is a technique that uses increased property values attributed to redevelopment, to help pay for private redevelopment costs. Since no property taxes were ever paid on any of the Upper Bluff property, the increment or new tax revenue could be substantial. It may then be returned to the private developer/property owner. This could be in one up front lump sum by the local municipality selling guaranteed bonds to raise the funds. The municipality could also return payments over a period of years. A rule of thumb is for a municipality to recover the TIF expenditures over about a 10 year period. There are however many examples of TIF bonds being paid off over longer periods of time.

A TIF district would have to be established and determine the period of time bonds would be issued. This will in turn determine the level of funding available to private developers.

Funds Available for Public Reuses:

- **Intermodal Surface Transportation Efficiency Act (ISTEA)**—The federal gasoline tax is distributed to the states through this congressional act. It is to be used for transportation enhancement. The Met Council through its Transportation Advisory Board (TAB) makes the determination of which projects are funded in the metro area.
- **Private Foundation or Private Corporate Funding**—These funds are charitable in nature and would likely only be available for projects directly benefiting the public. This may be intended for a cultural or educational format in conjunction with preserving the buildings and environment.

Funds Available for Public/Private Reuses:

- **Legislative Commission on Minnesota Resources (LCMR)**—The function of the LCMR is to make funding recommendations to the legislature for special natural and cultural resource projects. These projects help maintain and enhance Minnesota's resources. Historic preservation qualifies for potential funding. These funds are appropriated biennially and may be used for any individual, organization (profit or nonprofit), community or state agency.
- **Legislative Bonding Bill**—A state agency would issue a request, authored by a legislator in both legislative houses. This funding request would then be included in the biennial bonding bill, which occurs during even numbered years (e.g. 1998, 2000, 2002)
- **Metropolitan Airport Commission (MAC) Sound Insulation Program**—The Federal Aviation Administration (FAA) has introduced this program to insulate buildings from airport noise within the DNL 65 area. This has been funded by the Airport Improvement Program. The FAA has set the primary rules. MAC administers the funds granted to the affected property owners. While the Airport Improvement Program has, however, been reduced by Congress, it has largely replaced by Passenger Facility Charges (PFC) from each ticket sale. To qualify, properties have to be in the DNL 65 area. Currently single family and duplex residences qualify. Eventually this could extend to other types of buildings, including those on the Upper Bluff.
- **Department of Trade and Economic Development Funding**—There are a variety of funding programs for different kinds of economic development. The requirements to qualify for the different programs are determined separately for each development.
- **Fort Snelling Trust**—A bonding and lending authority similar to the Presidio Trust of San Francisco could be established. It would be on a smaller scale and funding would come from the State of Minnesota rather than the Federal Government. The trust would be a wholly owned Minnesota corporation which will operate within administrative and legislative oversight. The trust could provide financing to developers similar to a structure like the Saint Paul Port Authority, where the developer can ultimately own the property. It could also enter into lease arrangements with revenues being reinvested into the entire park. The Trust would be governed by a representative Board of Directors.

- **Nonprofit Users**—Over the years, there have been a number of private nonprofit cultural institutions or smaller museums who have expressed a need to house collections. If facilities were provided, it would be feasible that their own fund-raising as well as admission fees could cover the ongoing expenses of operation.
- **National Parks Service Funding**—The Upper Bluff is located within the boundaries of the Mississippi National River and Recreation Area (MNRRA). Congress added the MNRRA to the National Park System in 1988 to acknowledge the national significance of the Mississippi River. A Comprehensive Management Plan provides a policy framework for coordinating efforts to protect and interpret the nationally significant resources in this 72 mile river corridor. It provides basic visions and general policies to preserve resources, provide for visitor use, and manage land and water throughout the corridor.

In keeping with the direction of the CMP, MNRRA is seeking construction funding through the National Park Service, Department of the Interior, budget for the development of the cooperative educational facilities. This is currently a high priority for the MNRRA since progress is already underway on the development of several of the facilities and deadlines must be met for successful cooperative efforts. Another important vision and policy in the CMP is the preservation of historic structures and cultural landscapes in the MNRRA. Preservation of the historic structures at Fort Snelling is compatible with this vision in the CMP. Funds could be requested through the National Park Service budget for preservation of these structures.

Implementation Strategy

Introduction

The future success of the Upper Bluff depends not only on a sound plan but on a workable approach to management. Perhaps no other Minnesota state park faces such tremendous management opportunities and challenges. The opportunities center around the partnerships and programs that can be developed to bring the Upper Bluff back to life. Upper Bluff management must include the expertise and flexibility to create these partnerships. The challenges involve the long-term care of the Upper Bluff and the need to ensure the economic viability of its operations. Through state support, innovative funding options, and onsite revenue generated by tenants, the Upper Bluff can attain a secure future.

Management and governance must be built around the ability to craft partnerships, secure capital investment, attract philanthropic support, lease structures, and secure income, from tenants. To develop such a management structure, the MnDNR should do the following:

- Continue to conduct extensive research of public projects around the country with similar challenges and circumstances. (This research, combined with public testimony and consultant analysis, will form the basis for the management approach proposed for the Upper Bluff).
- Provide continuing MnDNR oversight; use MnDNR expertise in professional areas well represented in the agency, such as resource preservation, planning and design, visitor services, and education.
- Establish a state chartered management partner with skills and authorities that supplement existing expertise, particularly in professional areas that are not widely represented in the agency, such as financing, capital improvement, programming, and leasing.

Public/Private Partnership

The Study Team envisions a public/private partnership to achieve the promise of the Upper Bluff. The centerpiece of this management structure would be a state chartered institution that works in partnership with the MnDNR. This entity would be authorized by the state legislature as a public corporation or private nonprofit foundation. Many examples - the Fort Mason Foundation, Lowell Commission, the Presidio Trust, Salem Partnership, and Pennsylvania Avenue Development Corporation, point to the benefits of a well-structured partnerships in implementing public projects.

Roles and Responsibilities

Minnesota DNR

Under the partnership, the MnDNR would retain primary responsibility for the Upper Bluff. This will include:

- providing overall management ensuring that all applicable federal laws, regulations, and MnDNR policies are met
- monitoring compliance with the plan and approving any modifications to the plan
- setting programmatic guidelines and goals
- providing technical assistance, particularly in resource management, education, and interpretation
- managing and constructing infrastructure - e.g. roads and utilities
- managing MnDNR facilities
- assigning buildings, functions, and areas to be managed by the institution
- providing and managing tenant and visitor services, including public safety services, concessions, and interpretive services

Partnership Institution (PI)

The partnership institution would be authorized by the state legislature and established to work with the MnDNR in fulfilling the Upper Bluffs management requirements. This will include:

- managing assigned buildings and areas
- helping to achieve the goals of the Upper Bluff plan through partnerships with public, nonprofit, and private institutions
- negotiating and entering into leases and other contractual agreements needed to implement the plan; seeking appropriate tenants and leasing buildings to these tenants
- funding operations by retaining and reinvesting net revenues supplemented by public and private funds
- developing and implementing public and private innovative funding approaches to help finance costs for building and infrastructure repair and rehabilitation
- seeking and accepting privately donated funds
- responding flexibly to staffing and operational needs

The partnership institution would have an appropriate governing board with MnDNR representation. Members will be appointed by the governor who can provide expertise in architecture, history, park and urban planning, real estate, construction, business, and fund-raising. The board will also have links with key public agencies and the Fort Snelling Park Association.

The partnership institution together with the MnDNR will cooperate and coordinate with adjacent neighborhoods and surrounding communities to integrate services, resolve issues, and minimize any adverse impacts.

Funding for the institution's operations will be through state appropriations. As lease revenues and income grow, the institution will become more self-sufficient.

Economic Viability

To transform the Upper Bluff into a viable community, substantial financial resources are needed. With an innovative management structure, the Upper Bluff's rehabilitation and long-term operation can be financed through a combination of public and private sources. This will ensure that the Upper bluff and its facilities are put to productive use and that the costs of transforming the site into a park are not borne exclusively by the government.

The capital costs of building rehabilitation and site improvements for park visitors will be about \$45 million (see cost estimates in Appendix). Under the proposed partnership management structure, with private sector efficiencies and market-driven assumptions, the total cost for implementing the plan can be reduced substantially; this assumes that projects will be grouped under large building rehabilitation contracts to achieve economies of scale. The work will be programmed and funded over a 7 year period. Priority work will include road upgrading and utility system improvements to get the buildings into active use. Other park enhancement projects, such as golf course and soccer field improvements, can be funded in later phases.

It is estimated that nearly 50% of the building rehabilitation and site improvement costs will be raised through building and facility rental fees, once revenue retention authority is granted by the legislature and rents can be applied toward operating and capital costs. Approximately 25% will be funded over time by state appropriations. The remaining 25% will be funded by a combination of private philanthropy, government tax credits, and other agencies.

Implementation Activities

To ensure the successful implementation of the plan, a number of actions must be carried out:

- legislation must be adopted by the legislature
- tenants must be selected, interagency cooperation must be expanded
- the public must have opportunities to comment, and additional studies must be completed. The following sections describe how these actions will be taken and what they will involve.

Legislation

To implement the plan, the MnDNR will collaborate with consultants to develop legislation for adoption by the state legislature to:

- create a partnership institution that would manage and maintain properties assigned to it
- provide a range of capital financing tools to be used by the partnership institution in carrying out its duties
- provide needed authorities for general leasing of buildings
- allow proceeds from rents to be retained to defray costs of maintenance and programs
- authorize the MnDNR to use fees collected to subsidize transportation services such as a shuttlebus to Historic Fort Snelling, Fort Snelling State Park, MSP Airport, and the Mall of America

Park Partner Selection

Park partners, including institutions, nonprofit organizations, private enterprise, and concessionaires, will be critical in implementing the plan and achieving the vision of the Upper Bluff. Partners will enliven the post with new programs. The selection of park partners will be guided by the following criteria:

- Dedication to the Upper Bluff's purpose as part of the state park system - the MnDNR's mission is to preserve the Upper Bluff's significant resources and make them available for public enjoyment; programs should enhance visitor experiences and respect and protect the site's intrinsic qualities.
- Contribution to implementing the park management plan - the MnDNR is seeking partners that will carry out the objectives of the plan and the vision for the Upper Bluff.
- Contribution to national and international distinction - the Upper Bluff will serve a national and international audience; the MnDNR is seeking a collection of park partners whose distinctive programming will serve the world community.
- Financial feasibility - the MnDNR is seeking partners with the organizational capability needed to operate their programs and undertake capital investments.

Park partners will be selected by the MnDNR and the PI through a tenant selection process, using a variety of techniques and authorities. Tenants will be responsible for implementing affirmative action, disabled access, cultural and educational programming, and transportation system management (TSM) strategies. Tenants will be required to follow applicable laws and guidelines to preserve the state park values that add to the Upper Bluff's uniqueness.

Building Use Strategy

The current building inventory is approximately 380,000 square feet, the amount of space to be leased to small - and medium sized tenants is considerably less. Of the current amount, about 20,000 square feet are scheduled for demolition. Nearly 100,000 square feet are proposed for conference, training and education centers.

Tenant organizations will generally be responsible for rehabilitation and maintenance costs related to the buildings they occupy. They must have the financial, organizational, and structural capacity to carry out and sustain a viable enterprise and the financial ability to make capital investments. Some financial assistance for capital improvements will be made available through the PI, through authorities to be granted by the legislature. This may include credit enhancement, historic building tax credits, and rent abatement.

Buildings in good condition will be first to be placed under lease agreements to ensure that revenue is generated in the early years of the project. By 2004, it is anticipated that almost one-half of the complex and main post will be leased to tenant organizations; full occupancy will occur no later than 2006. The conference center will be operating by 2002. Major concessions will be in place by 2002, and housing fully occupied by 2004.

Interim Use Policy

The MnDNR policy for interim use at the Upper Bluff is to permit short-term leasing of existing buildings as long as the leasing meets the following criteria:

- Long-term park goals are not jeopardized.
- Any building treatment is performed to MnDNR standards and guidelines.
- Park resources are protected or improved (e.g., historic buildings are stabilized).
- The park receives fair value for space.

Consideration will be given to the following types of organizations:

- Providers of programs consistent with the plan
- Providers of visitor services or concessions
- Users of space for single events

Despite the interim use program, there may be some buildings on the site that remain unoccupied for several years. The MnDNR will ensure that these structures are stabilized (doors and windows secured, access restricted, etc.) and are inspected on a regular basis. Essential repairs, such as patching leaking roofs, will be made by the MnDNR in a timely manner. Any such vacant buildings will be under constant consideration for leasing. Upper Bluff management will promote their use to appropriate tenants and arrange for tours and marketing presentations to ensure their prompt leasing.

Interagency Partnerships

Upper Bluff managers will collaborate with local, state, and federal agencies to ensure successful implementation of the plan. Key agency partners include adjacent cities, counties, MHS, NPS, MnDOT, GSA, VA, MAC, and MPRB.

Implementation of the Upper Bluff plan will require that the MnDNR continue to consult with city government departments and officials to resolve concerns, obtain technical assistance, and coordinate projects and policies. During the planning process, these activities will be facilitated by a full-time Project manager. Areas requiring ongoing coordination include impacts on adjacent neighborhoods; traffic management and public transit; mutual aid to protect public safety in emergencies; city services such as water and sewer treatment; housing; and public involvement. Memorandums of understanding and mutual aid agreements will need to be developed to address these areas.

The MnDNR is interested in promoting demonstrations of environmentally sustainable technologies including golf course and athletic field management, and may work with some of the park partners to develop programs in this area.

Affirmative Action

The MnDNR is committed to affirmative action and will ensure that the park will be built on a foundation that is rich in diversity. In implementing the plan, the MnDNR and its park partners, guided by policies and regulations on affirmative action, will help assure diversity is reflected in contracting, leasing, employment, and the provision of programs and services.

Public Participation in Plan Implementation

Ongoing public involvement will be coordinated through the MnDNR and the Fort Snelling Park Association.

Additional Plans and Studies

The Reuse Study is the initial step in planning for the future of the Upper Bluff. This document is designed to address a broad array of actions, concepts, and themes. Review of this document will lead to amendments as new information becomes available. Additional data collection, site planning, and design will have to be conducted to implement the objectives in the plan. Specifically, plans will be required for infrastructure upgrades, large-scale site improvements, building and landscape rehabilitation, and natural resource restoration. Some of this work will involve public discussion and the preparation of additional planning documents.

The following plans and studies will be prepared in the next phases of planning; some have already been initiated.

Cultural Resources. Technical studies and reports including design guidelines and building rehabilitation guidelines will be completed before major design and construction activities begin. These guidelines will comply with the Secretary of the Interior's Standards for Rehabilitation.

Natural Resources. A botanical survey, wetlands feasibility study, and several wildlife studies will be conducted to identify, evaluate, and develop more specific natural resource objectives. Additional planning documents that are required include a rare and endangered species protection and management plan, alien plant removal plan, fire management plan, water resource management plan, and plans for incorporating recreational use and trails into natural environments.

Interpretation. An interpretive prospectus and exhibit plan will be prepared to provide the details for implementing the overall interpretive program. These plans will incorporate traditional MnDNR techniques while exploring innovative and experimental strategies.

Site Planning. Site plans, which comply with the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes, will be prepared for the following areas:

- Golf Course
- Polo Grounds
- Officer's Row
- Area J

These plans will include site designs and any required environmental compliance. Smaller-scale area plans may be completed for specific project areas requiring additional environmental assessment, such as the golf course facilities and operations, possible wetland restoration, and utility system improvements.

Transportation. The following plans and studies will be completed to address transportation issues and concerns: park-wide road system evaluation and pedestrian circulation and safety study, public transportation plan, trail plan, and sign plan. These studies, coordinated by the MnDNR, will involve analysis of potential transportation solutions and impact assessment of automobile, transit, pedestrian, and bicycle use and site improvements.

Infrastructure. Plans for the water supply and distribution system, the sanitary sewer system, the electrical system, and storm water management are being developed and funded by the MnDNR.

Implementation Phasing

Implementation of actions proposed in this plan will require logical phasing for the many aspects of the plan. The highlights of that phasing are shown here.

Phase One: The Transition

Goal: Mobilize the organization to provide essential services and facilities.

The following actions will be accomplished during the transition:

- Upgrade the infrastructure - water, sewer, electrical, and storm drains - to meet applicable codes.
- Establish public safety functions including police and fire protection, and emergency medical services.
- Develop legislative proposals to establish a state chartered institution with necessary authorities.
- Develop a museum/visitor center at the main post for public orientation and information.
- Seek and select partners (tenants) to provide programs and occupy buildings (ongoing).
- Develop preservation and design guidelines to direct future planning and plan implementation.
- Establish a monitoring program for hazardous materials cleanup to ensure public health and safety.
- Conduct a feasibility study and preliminary design for the golf course wetland restoration.
- Make critical road safety repairs and initiate cooperative public transportation planning.
- Establish interim use guidelines.
- Initiate site plans for the main post.
- Construct wayside interpretive exhibits.

Phase Two: The Beginning of the Upper Bluff Improvements

Goal: Initiate site improvements and start up programs.

- Complete site plans for the main post and initiate construction.
- Initiate wetland restoration at the golf course.
- Prepare a public transportation plan and initiate implementation.
- Establish permanent public safety facilities.
- Develop and implement park-wide trail and bicycle route plans.
- Restore the flag pole area at the Headquarters (#67)
- Establish a museum collections management facility.
- Initiate long-term building rehabilitation.
- Develop an interpretive prospectus.
- Prepare site plans for small sites.
- Initiate native plant enhancement.
- Rehabilitate Building #151 as new golf course clubhouse.
- Rehabilitate Buildings #54 and #55 for residential environmental education.
- Improve parking in Area J.

Phase Three: Midway to Full Conversion

Goal: Provide additional amenities and refine programs.

- Continue building rehabilitation.
- Remove non historic buildings to enhance open space.
- Restore some of the historic gardens at the Fort.
- Implement public transportation plan.

Phase Four: Completing the Work on the Upper Bluff

Goal: Complete long-range improvements, evaluate progress, and set new goals.

- Complete building rehabilitation.
- Complete parking and roadway improvements.
- Complete native plant and historic forest restoration projects.

Appendix I: Reuse Worksheets

The following worksheets were generated by the consultation team after the on-site interviews. It represents a listing of the factors by category that positively and negatively effect the potential for reuse of the historic buildings and 141 acres of the Upper Bluff site.

Airport Issues

Airport issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The airport generates high noise levels that somewhat limit reuse potential of the property
- The airport generates air pollution
- Future airport expansion needs may again look to the Fort Snelling site to alleviate confinement pressures
- The FAA regulates zoning, heights, etc. in lands adjacent to the airport

Airport issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The proximity to the airport generates potential uses and users for the Upper Bluff site
- The airport brings people into the metro area that may need a site in the vicinity to fill time
- The buildings could provide quality meeting space near the airport
- The site and structures could support some airport use needs

Archaeology Issues

Archaeology issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The discovery of significant archaeological finds on the site might delay timely development
- The significance of the archaeological finds on the site are an unknown

Archaeological issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The site might provide a great archaeological teaching opportunity

Development Issues

Development issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The high noise levels generated by aircraft are seen as a detriment in developing certain uses on the site
- Deed restrictions have eliminated most development potential by limiting the uses for the site to site specific recreation

- The deed and resulting use restrictions have made securing funding, mortgages, etc. impossible or next to impossible
- Costs to get the infrastructure in place and operating will be high
- Preservation and maintenance of older buildings may be more costly than newer construction
- Any organized effort to develop the collection of military buildings and the surrounding site will require a project coordinator
- Development of the buildings may be incremental and require a good deal of time to realize full development
- The preservation and rehabilitation of the buildings may limit future airport expansion

Development issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Development could recycle the buildings
- Appropriate development could resolve complex use problems
- Opening the buildings for development creates a use for the now vacant buildings
- Development of the buildings could generate taxes, new jobs, income, etc.
- Private and/or public development of the buildings could preserve and keep future options open

Economic Issues

Economic issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The cost of preservation will be high
- The cost may be high when compared to the benefit return to the public
- Funding sources for development have been next to nonexistent in the past, probably due to deed restrictions
- Operating cost for the campus of buildings will be high
- The longer the buildings are not maintained, the larger the cost to rehabilitate will be
- Soundproofing the structures is an additional expenditure not necessary in most rehabilitations

Economic issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The cost of demolition of the buildings will be high
- Private development and rehabilitation of the historic structures could provide preservation tax advantages
- With the preservation of the buildings, a new tax source could be created
- There could be a return on the public investment to the structures
- The rehabilitation of the structures would potentially create jobs
- Development of the site might provide new business opportunities

Education Issues

Education issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The start up costs and cost of operation for public education programs would be great
- Transportation costs to get the client to and from the site would be great
- Almost all educational reuses would require public expenditure
- The site presently has no vision, a lack of focus of education
- There is a feeling that an educational use may be a duplication of efforts that already exist at the historic fort and its supporting facilities

Education issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Many educational needs could be met with partnerships within the complex
- The site is ideally located for use to meet inner-city educational needs
- There is an advantage in the site's proximity to other educational opportunities

Historical Issues

Historical issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The history of the site is not appreciated by the general public
- The buildings on the Upper Bluff site are not as old, or perceived as historic, as the original fort and site
- The military history displayed through the Upper Bluff buildings can be interpreted in a negative fashion
- The preservation of buildings (perceived as liabilities) is viewed as an obstacle to additional open space for recreational uses

Historical issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The history of the site could accommodate additional tourism opportunities
- The history of the site could accommodate additional educational opportunities
- The story, as told through the remaining buildings on the site, has integrity
- The site and structures possess a sense of nostalgia for people that were in the service
- The reuse of the buildings could compliment the surrounding recreational uses
- The recreational uses could compliment the preservation of the buildings

Infrastructure/Community Service Issues

Infrastructure/community service issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The site's infrastructure needs to be upgraded or replaced
- The cost of the upgrading is an unknown
- Since the site does not fall within a municipality, the providers of the infrastructure and community services such as police and fire protection are an unknown

Infrastructure/community service issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Some infrastructure exists—such as the street system
- The site might be a good candidate for a “district energy” system
- When finished the infrastructure will be “state of the art”

Landscape Issues

Landscape issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The vacated buildings give the appearance of a ghost town
- The property around the buildings are minimally landscaped and maintained
- The viewscape of the row has been altered with past expansion of the airport
- The adjacent airport and the highway configuration are incompatible land uses

Landscape issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The building landscape is relatively intact representing a working, post Civil War military buildingscape
- The site clearly represents two periods of growth and construction in military base planning

Legal/Deed Issues

Legal/deed issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- Presently the deed from the Federal government to the State restricts the site and its buildings to Fort Snelling State Park specific recreational uses. (May be seen as a positive)
- L&WCF (Land and Water Conservation Fund 1965) requires that if park lands are taken out of recreational use they must be replaced with land comparable in fair market value and reasonably equivalent usefulness. Conversion affects only the land, not the buildings. (According to the Land and Water Act of 1965, no lands assisted with the fund may be converted to non-recreational use without prior written permission of the Sec. of the Interior).

- There are multiple governmental layers that are required for approvals
- Legal issues require time to work through
- The site is not located in a municipality (May be seen as a positive)
- Section 106 review and mitigation would be required for any demolition of historic structures
- The property falls within the Mississippi River Critical Area (State designation). Guidelines and Standards in Executive Order 79-19 must be followed by State agencies as well as local governments

Legal/deed issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Recent flexibility being displayed by Park Service and MNRRA staff regarding reconsideration of required “recreational” use for the buildings
- MnDNR has displayed flexibility in reuse of the buildings
- The deed protects the property for the purposes for which it was deeded to the state. (May be seen as a negative)

Multiple Building Issues

Multiple Building issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- It will be costly to rehabilitate such a large number of buildings
- The unlikely finding of a single user for all the buildings lends to a complexity of development
- Since a major value of the buildings rest in their campus configuration, if some buildings need to be demolished, the value of the remaining buildings is diminished

Multiple building issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The variety of buildings give the development multiple options and cost levels
- The number and configuration of the remaining buildings have a campus quality
- The many differing building sizes provide the opportunity for an appropriate size/use

Multiple Users Issues

Multiple User issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The more varying uses that exist on the site, the greater the need for project/ property management
- With a variety of private, public and recreational uses at one site, there may be some user conflicts

Multiple User issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Increasing the number and types of uses will increase the opportunities for development
- A variety of uses will probably increase the market and draw to the site

- Multiple partnerships (private and public) may appeal to the legislature
- Interest in the property will increase with diversity of use and users

Political Issues

Political issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The property and its contents fall under multiple jurisdictions
- The increased value of restored buildings on the site may impede future airport expansion
- The resolution of political issues is time consuming
- There are conflicting municipal interests (both fiscal and recreational needs) that are being generated by the potential reuse of the property

Political issues that impact reuse of the Upper Bluff site and buildings *positively*.

- A strong, nonprofit advocacy citizen group, the Fort Snelling State Park Association, exists and promotes preservation over demolition of the remaining buildings
- LCMR (Legislative Committee for Minnesota Resources) of the state Legislature is interested in preservation and notes that historic buildings in Minnesota are considered by the Legislature to be natural resources
- The reuse of property could provide the opportunity to satisfy social needs
- The reuse of property could provide opportunities for partnerships

Preservation Issues

Preservation issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- Costs of preservation and maintenance of older buildings may be higher than with new construction
- The general public doesn't know that the historic buildings and site are there
- The general public does not understand the value and importance of historic preservation
- Preservation of the existing buildings limits reuse possibilities
- The building grouping has lost part of its original context with the development of the airport and highway system
- The number of buildings on the site make preservation through appropriate uses more difficult
- The preservation of the buildings would eliminate the use of their land for open space/recreational uses.

Preservation issues that impact reuse of the Upper Bluff site and buildings *positively*.

- A private developer could take advantage of historic property tax credits
- The reuse of the building would put the buildings on the tax rolls (for the first time)

- Preservation of the existing buildings could provide for a tourism opportunity
- The buildings could provide the venue for educational and occupational training activities
- The preservation of the existing open space could continue to provide recreational opportunities for the residents of the surrounding communities
- Preservation of the site and buildings retains important Minnesota historic and “natural” resources
- The buildings are basically in good condition
- Much of the original context and integrity exists creating significant views

Recreational Issues

Recreational issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- There appears to be a turf issue on the use of the open space by a number of municipalities
- Some uses could threaten the buildings and the polo field as it now exists
- The use of all the land for recreational uses might serve to limit the income potential of the site
- There are limited connections (and no direct access) from the Upper Bluff and the lower park

Recreational issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Expanded open space uses at the Upper Bluff site would help alleviate open space/recreational needs of the surrounding municipalities
- A recreational use for the buildings and the site would constitute a use of the property as deeded from the federal government to the state
- Continued recreational use could preserve the integrity of the polo field
- Organized recreational uses generate income for the managing municipalities
- Recreational reuse generates opportunities for all age groups
- Recreational use of the property could compliment the history of the site

Site/Project Management Issues

Site/Project Management issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The successful development of the site will be a major management job in determining who runs and who funds the development
- The requirement of project management adds another cost to the development
- The MnDNR does not have the interest nor the expertise to manage the development of the site

Site/Project Management issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Appropriate and effective management can lead to good project coordination
- Since the development is starting with a clean slate, the development can be customized to the need

Tourism Issues

Tourism issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- No vision has been developed in the past for the interpretation of the site and its buildings
- Difficulty of traffic accessibility limits potential reuse
- The site has no tourism plan, no “case statement” and consequently there is no reason to visit the site

Tourism issues that impact reuse of the Upper Bluff site and buildings *positively*.

- The site has a great location within the metropolitan area, adjacent to a highly visited historic attraction, and near the airport
- Mall of America and Fort Snelling magnet
- The site is accessible via major transportation corridors
- The site is located near the confluence of the Minnesota and Mississippi Rivers
- The site might encourage a global market draw which could feature the pre- and post-contact periods

Transportation Issues

Transportation issues that impact reuse of the Upper Bluff site and buildings *negatively*.

- The site has poor and somewhat confusing access
- While educational uses for the site may be desirable, the transportation costs to get the client to the site may be high
- Light rail routes might adversely impact the historic fort site
- The southern portion of the site could be subject to further encroachment by future airport needs

Transportation issues that impact reuse of the Upper Bluff site and buildings *positively*.

- Central location with highway access is central to the major metro municipalities and the airport
- The site is located within one hour’s travel of well over half of the state’s population
- The site could have good access to the Minnesota and Mississippi Rivers
- The history of Minnesota’s transportation could ideally be interpreted at this site
- The site will have good light rail access, according to plans currently being developed

Appendix II : List of Preparers, Contributors and Consultants

Preparers

Phyllis Hanson
John Kuester
Chuck Liddy
John Mannillo
Lee Markell
Charles Nelson
Bill Weir
Thomas Zahn

Contributors

Gordy Chinander-MnDNR
Robert Clause-MHS
Kate Hagerty-MnDNR
JoAnn Kyril-NPS
Joe Niznik-MnDNR
Steven Osman-MHS
Jesse Richards-MPCA
Bart Richardson-MnDNR
Elizabeth Knudson Steiner-MHS
Brian Timerson-MPCA
Shane Vandervoort-MAC

Consultants

Angstrom Environmental
Arden Engineering
CSL (Conventions, Sports and Leisure)
Danewick Poole Environmental
Miller Dunwiddie Associates, Inc.
J.L.Kuester Community Development Services
John E. Mannillo & Associates
Thomas R. Zahn & Associates

Bibliography

- Clouse, Robert Alan, and Steiner, Elizabeth Knudson, All That Remains, A Study of Historic Structures at Fort Snelling, Minnesota, Saint Paul: Minnesota Historical Society, 1998
- Hall, Steve, Fort Snelling, Colossus of the Wilderness, Saint Paul: Minnesota Historical Society Press, 1987
- Lynch, John E., Planning Civilian Reuse of Former Military Bases, Washington D.C.: President's Economic Adjustment Committee, 1991
- Minnesota Department of Natural Resources, Fort Snelling State Park Management Plan, Saint Paul, 1997
- Minnesota Department of Natural Resources, Fort Snelling State Park Military Reserve Area Use Study, Phase I: Historical Background, Saint Paul, 1991
- Office of Economic Adjustment, Civilian Reuse of Former Military Bases, Summary of Economic Adjustment Projects, Washington D.C., 1996
- U.S. Department of the Interior, Creating a Park for the 21st Century; from military post to national park, Final General Management Plan Amendment, Presidio of San Francisco, National Park Service, 1994
- U.S. Department of the Interior, "A Challenge for the Military Mission, Preservation in the Armed Forces," CRM, Cultural Resource Management, volume 20, no. 13, National Park Service, 1997
- U.S. Department of the Interior, and Mississippi River Coordinating Commission, Comprehensive Management Plan, Mississippi National River and Recreation Area, National Park Service, 1995