Draft Environmental Assessment

FOR

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS
OFFICE OF ASSET ENTERPRISE MANAGEMENT

FORT SNELLING VETERANS HOSPITAL
MINNEAPOLIS, MINNESOTA CAMPUS
PARCEL A
BUILDINGS 210, 211, 214, AND 215
FORT SNELLING, MINNEAPOLIS, MINNESOTA 55417

PARCEL B
BUILDINGS 227, 228 AND 229
FORT SNELLING, MINNEAPOLIS, MINNESOTA

REPORT DATE: APRIL 2014

***PHASE ONE* INC.**

THE NATIONWIDE ENVIRONMENTAL SPECIALISTS
"Setting the Due Diligence Industry Standard"

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***PHASE ONE* INC.**
ENVIRONMENTAL ASSESSMENT SPECIALISTS

April 3, 2014

United States Department of Veterans Affairs
Office of Asset Enterprise Management
James M. Sullivan
810 Vermont Avenue NW
Washington D.C. 20420

RE: ***PHASE ONE* INC.** Project No. 7169
Draft Environmental Assessment
Subject Site Location: Buildings 210, 211, 214, and 215 (Parcel A)
Buildings 227, 228, and 229 (Parcel B)
Fort Snelling, Minneapolis, Minnesota 55417

Dear Mr. Sullivan:

Enclosed with this letter are copies of the Draft Environmental Assessment completed by ***PHASE ONE* INC.** for the site referenced above.

Please don't hesitate to contact us should you have any questions regarding the analysis, or if we can be of additional assistance. We look forward to working with you again in the future.

Sincerely,

Eric Kieselbach
President

Enclosure

23282 Mill Creek Drive, Suite 160 Laguna Hills CA 92653 **Tel: (714) 669-8055 • Fax: (714) 669-8025**

DRAFT ENVIRONEMENTAL ASSESSMENT

PARCEL A
BUILDINGS 210, 211, 214 AND 215
FORT SNELLING, MINNEAPOLIS, MINNESOTA 55417

PARCEL B
BUILDINGS 227, 228, AND 229
FORT SNELLING, MINNEAPOLIS, MINNESOTA

PROJECT NO. 7169

BY

***PHASE ONE* INC.**
23282 MILLCREEK DRIVE, SUITE 160
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SECTION 1.0

INTRODUCTION

This report presents the results of the Draft Environmental Assessment conducted by ***PHASE ONE* INC.** for Parcel A, Buildings 210, 211, 214, and 215 and Parcel B, Buildings 227, 228, and 229, Fort Snelling, Minneapolis, Minnesota 55417 (See Figure 1, Site Location Map). The analysis was undertaken at the request of the United States Department of Veterans Affairs (VA), in accordance with ***PHASE ONE* INC.**'s ***Standard Terms and Conditions***, as outlined in ***PHASE ONE* INC.**'s ***Letter of Intent/Authorization*** for Project **Nº** 7169.

1.1 PROJECT BACKGROUND

The Building Utilization Review and Repurposing (BURR) initiative is a VA strategic effort to identify and repurpose underutilized VA land and buildings nationwide in support of VA's goal to end Veteran homelessness.

The Proposed Action is an Enhanced Use Lease (EUL) for the development of permanent housing for homeless that includes:

- Leasing of land consisting of a four (4) acre parcel (North Site) and a two (2) acre parcel (South Site) to CommonBond Veterans Administration Minneapolis Limited Partnership (CBVAMLP), a subsidiary of CommonBond Communities Inc. (CommonBond) (private entity);
- The lease of five (5) buildings, three on the North Site (Buildings 210, 211, and 214) and two buildings on the South Site (Buildings 227 and 229), to CBVAMLP for rehabilitation as housing for homeless veterans using federal low income housing credits and federal historic preservation tax credits;
- Mothballing of one (1) building on the North Site (Building 215) to be retained by the VA; and
- The demolition of one (1) building on the South Site (Building 228) by the VA.

Details of the rehabilitation changes can be found in the *Fort Snelling VA Housing Tax Credit Part 2 and Minnesota Part A Application* which is incorporated in its entirety into this environmental assessment as Appendix E. Building schematics have been included in Appendix G.

1.2 PURPOSE AND NEED

The purpose of the proposed action is to provide housing to homeless Veterans, reduce the inventory of underutilized real estate, and transfer the operation and maintenance costs to a lessee or developer.

The proposed action is needed to help address the number of homeless Veterans. According to Volume 1 of the 2012 Point-in-Time Annual Homeless Assessment Report, "On a single night in

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January 2012: 62,619 veterans were homeless in the United States, about 13 percent of all homeless adults." Further, Secretary of Veterans Affairs Eric K. Shinseki stated: "We have a moral obligation to ensure that Veterans and their families have access to affordable housing and medical services that will help them get back on their feet."

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SECTION 2.0
ALTERNATIVES

2.1 DEVELOPMENT OF ALTERNATIVES

This project consists primarily of five existing historic structures, buildings 210, 211, 214, 227, and 229, with two relatively small new-construction additions between 210, 211, and 214. Because of the historic nature of the structures onsite, demolition was not an option as we were restricted to acceptable historic preservation guidelines from the Minnesota State Historic Preservation Office and the National Park Service. Consequently, the alternatives we considered related primarily to the design of the additions and the use of spaces within the existing buildings.

Initially, other buildings on site such as building 222 were proposed, however, the building is being used as active logistics and it was decided that the loss of this building would be too burdensome, so it was dropped from consideration. Also buildings 228 and 215 were considered as part of the action; however, building 228 was determined to be too dilapidated for renovation and building 215 was too small to prove useful so they were excluded from the development plan. Due to the historic nature of building 215, it was decided to be mothballed to preserve its historic integrity. Due to the historic nature of building 228, it was decided to be documented prior to demolition to preserve its historic integrity.

Buildings 227 and 229 were originally constructed as housing. Alternatives with respect to these buildings related only to methods of updating existing building systems (electrical, HVAC, plumbing, and insulation) and adding ADA accessibility ramps. Although the buildings were constructed with hot water heating, the existing boilers are not functional and no cooling systems are in place. The options available to these systems are the repair of the boilers along with the addition of new mini-split air conditioning or a conversion to a forced-air heating and cooling system and abandonment of existing boilers/radiators. Of these options, only the forced-air option allows for sufficient heating and cooling of the structures within historic guidelines.

Handicapped accessible entry to buildings 227 and 229 does not currently exist, but must be added to comport with ADA requirements. A ramp has been proposed at the rear of each building to provide that access. Two alternatives were considered: an exposed wood and metal ramp with railings extending from the rear of each building to the parking areas or re-grading the soil and lawn to provide a gradual ramping to the buildings coupled with a smaller wood structure attached to the buildings. The second alternative has been selected because it provides the necessary ADA access while minimizing visual impact to the historic structures and landscape.

The No Action Alternative would leave the subject site in its current condition. As such, no new homeless housing would be created and the site would continue to be underutilized. This alternative does not address the purpose and need of the proposed action. The buildings on the

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subject site would continue to degrade due to lack of use and lack of maintenance associated with vacant buildings. The proposed action would provide tangible reward in the form of housing and a boost to the local economy due to the redevelopment of the subject site with manageable minor impacts from construction activities.

2.2 ALTERNATIVES RETAINED FOR DETAILED ANALYSIS

The proposed action was retained for detailed analysis as it is the only action that meets the needs and purpose as stated by the VA.

The No Action Alternative was retained for detailed analysis in addition to the proposed action.

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SECTION 3.0
AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

3.1 AESTHETICS

Existing:
From the April 2010 *Fort Snelling West District - Historical Context Study and Development Guidelines*: "Extant and demolished buildings in the West District fall into four basic types: one- to two-story brick structures (1894-1910), single-story stone structures (1890s), one- to two-story clapboard-sided wood-frame structures (ca. 1879-1917), and single-story concrete and concrete-block structures (1930s). Building types reflect a hierarchy of function. Brick is used for the buildings housing the most important activities: the main storehouse (222), drill hall (201), non-commissioned officers' quarters (227, 229), stables (211, 214), and shops (205, 206, 210, 218). Wood-frame buildings typically play a secondary and often more temporary role. Stone was a special-purpose material, used when a building's function had a high potential to cause fires. Finally, concrete was the material of choice in the 1930s, the area's last phase of construction. In terms of both function and visual character, the early twentieth-century red-brick buildings dominate the area."
Note: The above referenced document is included in its entirety in Appendix G of the *Preliminary NEPA Analysis* which is incorporated in its entirety as Appendix A of this document.

No Action:
Aesthetically nothing would change. However, since the buildings would not see any refurbishment they will continue to degrade eventually diminishing the aesthetic value of this historic property.

Proposed Action:
While covered in more detail below in below in *Section 3.4 Cultural Resources*, the Fort Snelling West District is within the boundaries of the Fort Snelling Historic District. The Fort Snelling West District is listed on both the National and Minnesota State Registers of Historic Places. As such, the Proposed Action is required to adhere to the Secretary of the Interior's Standards for Rehabilitation which, in essence, requires that the project conform to the current aesthetics and not alter them significantly. Extensive consultation with the Minnesota State Historic Preservation Office and the National Park Service is continuing to ensure compliance with these standards.

3.2 LAND USE

Existing:
The site consists of two parcels of land totaling approximately 6.41 acres with several structures on each parcel; Parcel A has Buildings 210, 211, 214 and 215 while Parcel B has Buildings 227, 228, and 229. The parcel and buildings are located within Fort Snelling. These buildings are currently

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unused except for some storage. The former use of several buildings was housing and support for the occupants.

No Action:
There would be no change to the existing land use.

Proposed Action:
The proposed action would restore these buildings to their former residential and support use; no impacts are expected.
See Appendix G – Building Schematics for additional details.

3.3 AIR QUALITY

Existing:
The existing impact of the current buildings and surrounding area is minimal. According to the Environmental Protection Agency (EPA) Green Book Nonattainment Areas for Criteria Pollutants (http://www.epa.gov/air/oaqps/greenbk/index.html) Fort Snelling is not located in an EPA Non-Attainment zone related to air quality. No current air permits are required.

No Action:
There would be no change to the existing air quality.

Proposed Action:
The proposed action would have short term air quality impacts related to construction. Dust and debris control plans will be implemented to reduce impacts to non-significant levels. The only air quality permits/monitoring that will be required are related to the removal and abatement of lead-based paint and asbestos containing materials during demolition. These activities will be conducted in accordance with regulatory agency guidelines to assure minimal impacts. Subsequent to construction activities, no air permits will be required for the continued operation of the housing project.

3.4 CULTURAL RESOURCES

Existing:
The proposed action will affect buildings in the Fort Snelling West District, which is within the boundaries of the Fort Snelling Historic District and listed on both the National and Minnesota State Registers of Historic Places.

No Action:
There would be no change to the existing land use.

Proposed Action:
Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by

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ACHP. Revised regulations, "Protection of Historic Properties" (36 CFR Part 800), became effective August 5, 2004.

As part of the Section 106 process and the application for Part II Federal Historic Rehabilitation Tax Credits, the VA has been consulting with the Minnesota State Historic Preservation Office and the National Park Service.

The guidelines governing the proposed action to comply with both issues are the Secretary of the Interior's Standards for Rehabilitation. The Standards are ten basic principles created to help preserve the distinctive character of a historic building and its site, while allowing for reasonable changes to meet new needs. The Standards apply to historic buildings of all periods, styles, types, materials, and sizes. They apply to both the exterior and the interior of historic buildings, encompass related landscape features, the building's site and environment, and attached, adjacent, or related new construction. They are intended to be applied to projects in a reasonable manner taking into consideration economic and technical feasibility.

In a letter dated July 3, 2013, the Minnesota State Historic Preservation Office determined that sufficient documentation of the historic properties of building 228 had been presented and the demolition could proceed following the archeological survey. In the same letter, the plan for mothballing building 215 was also approved with minor modifications. Please see Appendix C for a copy of the letter.

In a letter dated November 22, 2013, the Minnesota State Historic Preservation Office determined that all the steps required by Section 106 had been met and, so long as the PART II Tax Credit Application was approved by the National Park Service, the resulting action would have no adverse effect on the Fort Snelling Historic District. Please see Appendix C for a copy of the letter.

In a letter dated January 30, 2014, the National Park Service suggested revisions to the proposed action that would meet the Secretary of the Interior's Standards for Rehabilitation. As approval of the PART II Tax Credit Application is essential to the viability of the proposed action, revisions will continue to be made until the application is approved. Please see Appendix C for a copy of the letter.

As a part of the Section 106 Process, a literature review (incorporated in its entirety as Appendix H), Phase I Archeological Resources Investigation (incorporated in its entirety as Appendix B), and tribal consultation (incorporated in its entirety as Appendix F) were conducted in addition to extensive consultation with the Minnesota State Historic Preservation Office (See SHPO letters in Appendix C). No adverse affects were found to impact cultural resources.
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3.5 GEOLOGY AND SOILS

Existing:
During the last Ice Age, retreating glaciers left thick moraine deposits over the bedrock in the area. As the glaciers melted, torrential melt waters carved through the deposits to form the

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valleys of what are now the Minnesota, Mississippi, and St. Croix Rivers. Fort Snelling is located in the Mississippi River Sandplains Landscape Region at the confluence of two great rivers, the Minnesota and the Mississippi. According to the US Department of Agriculture, Natural Resources Conservation Service, the soil type is U4A-Urban land-Udipsamments (cut and fill) complex.

No Action:
There would be no change to the existing geology and soils.

Proposed Action:
The proposed action requires no grading or other activities that would result in major changes to the geology and/or soils in the area.

Please see the Preliminary NEPA Analysis incorporated in its entirety as Appendix A for further documentation.

3.6 HYDROLOGY AND WATER QUALITY

Existing:
According to the Minnesota River Basin Data Center at Minnesota State University, Mankato, the Minnesota River drains into a basin of 14,840 square miles including all or parts of 37 counties; 1,610 square miles in South Dakota and the remaining area in North Dakota and Iowa. The Minnesota River meanders 335 miles from where it originates on the Minnesota-South Dakota border to its confluence with the Mississippi River near Fort Snelling. The Minnesota River Basin is divided into 12 hydrologic major watersheds and 13 management watersheds. Fort Snelling is located in the Lower Minnesota River Major Watershed. The Minnesota River has been cited as one of the most polluted rivers in the state and nation. As the state's largest tributary of the Mississippi River, the Minnesota River's volume increases the Mississippi's flow by 57% and adds disproportionately to its pollutant load. Considerable attention and support have been given to clean up efforts. In recent years, there have been significant improvements in point source pollution control (like industrial and wastewater treatment plant improvements) as well as continued adoption of conservation and best management practices within the Minnesota River Basin.

The existing facility utilizes existing City of Minneapolis systems for stormwater and sewer connections.

No Action:
There would be no change related to existing hydrology and water quality issues.

Proposed Action:
No significant changes will be made to existing systems and all changes will be permitted through the City of Minneapolis. As such, minimal impacts to existing hydrology and water quality issues are expected.

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3.7 WILDLIFE AND HABITAT

Existing:
The site is located in a developed area and consists of old buildings with manicured grass lawns and ornamental trees and shrubs. Surrounding development includes an airport. Given the site's location in an existing developed area and lack of native habitats, sensitive biological resources would generally not be expected to occur in the area. The site does have a high potential to support nesting of non-raptorial bird species protected by the Migratory Bird Treaty Act. Larger trees on the site and the nearby Mississippi River and lakes have the potential to support nesting raptors, which often nest earlier than non-raptorial species. All of these species are protected by the Migratory Bird Treaty Act. Bald Eagle (Haliaeetus leucocephalus) also occurs in the region, has potential to occur in the area, and is protected by the Federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c).

No Action:
There would be no change to the existing wildlife and habitat.

Proposed Action:
The proposed action will not make any changes that would have long term effects on existing wildlife or habitats. However, construction activities may have the potential to affect nesting activities of species protected by the Migratory Bird Treaty Act. In general, the nesting bird season in central Minnesota is May 1 to July 31. If project construction is expected to begin during the nesting season, a nesting bird survey should be conducted on and within 300 feet of the site within one week prior to equipment mobilization on the site. Impacts to any detected nesting birds can be avoided via appropriate species-specific disturbance-free buffers, which should be determined by a biologist familiar with the nesting species.

Details of potential impacts can be found in the *Biological Review* which is incorporated in its entirety into Appendix A of the Preliminary NEPA Analysis which has been incorporated in its entirety in this environmental assessment as Appendix A.

3.8 NOISE

Existing:
Fort Snelling is located in the vicinity of urban Minneapolis and adjacent to the Minneapolis-St. Paul commercial airport. It is also adjacent to a Metro Transit Park and Ride lot. As such, typical urban noise levels will dominate the facility with temporary increases related to vehicle and air traffic.

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No Action:
There would be no change to the existing noise levels.

Proposed Action:
The proposed action will not have any long term impacts related to noise impacts on the existing urban noise levels.

Short-term impacts related to construction activities will occur related to the proposed action. Construction is expected to last ten to twelve months. No large grading equipment will be required and construction activities will be limited to normal business hours on weekdays to minimize the impacts as much as possible.

3.9 FLOODPLAINS, WETLANDS, AND COASTAL ZONE MANAGEMENT

Existing:
The project area is not located in a floodplain, wetland, or coastal management zone.

No Action:
There would be no effect on floodplains, wetlands, or coastal management zones.

Proposed Action:
There would be no effect on floodplains, wetlands, or coastal management zones.

Details relating to the research of these items can be found in the *Preliminary NEPA Analysis* which is incorporated in its entirety into this environmental assessment as Appendix A.

3.10 SOCIOECONOMICS

Existing:
Across Minnesota, high school graduation rates increased between 2005 and 2009. While projections indicate a continuous decline for the general population, high school graduation rates in populations of color will increase as much as 40% between 2005 and 2015. In 2009, an estimated 19.5% of Minneapolis residents over age 25 had a high school diploma. An estimated 25.8% had a bachelor's degree and an estimated 16.5% had a graduate or professional degree.

In Minneapolis, the median household income, based on 2005-2009 estimates, was $45,625; lower than the national median income of $51,425 per household.

According to 2005-2009 estimates, 73.5% of Minneapolis residents over 16 years of age were employed compared with 65% for the U.S. as a whole.

No Action:
There would be no change to existing socioeconomic factors.

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Proposed Action:
The proposed action would have both short and long term positive impacts on the community. In the short term, local businesses and their employees would benefit from construction related jobs lasting ten to twelve months. In the long term, the facility is designed to reduce the number of homeless veterans by providing housing as well as employing four staff members.

3.11 COMMUNITY SERVICES

Existing:
The proposed location is served by Hennepin County Sherriff and Fire Departments.

No Action:
There would be no change to the existing community services.

Proposed Action:
The proposed action is not planned to put an additional burden on these agencies.

3.12 SOLID AND HAZARDOUS MATERIALS

Existing:
A Phase I Environmental Site Assessment dated March 13, 2014 was reviewed.

According to the report no Recognized Environmental Conditions (RECs) exist. The following additional conditions were reported:

One Controlled REC exists:

1. Building 215 had four former underground storage tanks. A closed Leaking Underground Storage Tank case is listed with the Minnesota Pollution Control Agency (MPCA). Soil contamination as a result of a release from the underground storage tanks was discovered in October 1991 and the four underground storage tanks were removed. In November of 1991, 2,100 tons of soil was excavated from the tank site and transported offsite where it was thermally treated. Case closure was awarded in July 1992; however, residual soil contamination was left in place. It was estimated that 150 cubic yards of contaminated soil remained underneath Building 215; the soil located north of the building, underneath the road, was also contaminated.

Note: Building 215 is within the parcel boundary of the action, but this building is being mothballed and will not be part of the housing development.

One *De Minimis* environmental condition exists:

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1. Building 210 was used as shops from 1907 to approximately 1937; electrical motors were removed in 1937 and relocated to an off-site building. Building 211 was converted to a tank and motor shed in 1932. No records were on file with regulatory agencies regarding the use of hazardous materials and no significant areas of staining were observed during the site reconnaissance. The past practices of hazardous materials usage by these former occupants were unverifiable.

Two Non-ASTM conditions exist:

1. The subject site is in a county where the average measurement for radon is greater than 4pCi/L. Radon sampling is site specific.
2. Given the construction date of the subject buildings the past use of leaded piping and/or fixtures may be present in the buildings. Lead-containing water is considered hazardous to health at certain levels.

An Asbestos and Lead Based Paint Report was completed on May 14, 2012. The report identifies the asbestos-containing materials in the buildings in addition to lead painted surfaces/materials in the buildings.

No Action:
In the no action scenario, potential asbestos containing materials and lead based paint would continue to degrade which would increase the risk to personnel using these facilities.

Proposed Action:
As identified in the Phase I Environmental Site Assessment and Asbestos and Lead Based Paint Reports, the buildings involved in the proposed action have asbestos and lead concerns. Demolition and renovation activities will be conducted according to regulatory agency guidelines. Asbestos and lead will be removed, encapsulated, and/or disposed of as needed under the supervision of licensed professionals to ensure the safety or workers and future occupants.

3.13 TRANSPORTATION AND PARKING

Existing:
The existing facility has parking areas and access via Bloomington Road. The surrounding facilities accessing the same nearby roads include:

- The Metro Transit Park and Ride lot at the Fort Snelling Light Rail Station. This facility includes 1,080 parking spaces and shares access using Bloomington Road.
- The Bishop Henry Whipple Federal Building. This facility has approximately 1,600 employees and approximately 1,100 parking spaces.
- The Northern Star Council Boy Scout Base Camp. This facility is located in the former 35,000 square foot Calvary Drill Hall (Building 201) and has had over 100,000 visitors since opening in 2010.

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No Action:
There would be no change to the existing transportation and parking facilities.

Proposed Action:
Parking is not being added to the project. Existing parking areas will be reconstructed and/or resurfaced at existing locations. A pickup/drop-off lane will be included at the main entry to buildings 210/211/214 to facilitate van pool and similar access. The resident population will target homeless veterans and families, many of whom will not have personal vehicles. The maximum occupancy of the facility is 84 with 4 employees. Adjacent light rail transit is expected to provide considerable resident transit access. New traffic to the site will include staff and service providers.

Based on the nearby existing facilities which support thousands of vehicles daily, a worst case scenario of the addition of 88 vehicles to the infrastructure will be insignificant.

See the *Fort Snelling VA Housing Tax Credit Part 2 and Minnesota Part A Application* incorporated in its entirety as Appendix E of this report for additional details related to parking.

3.14 UTILITIES

Existing:
The existing buildings have all normal utilities supplied by municipal sources.

No Action:
There would be no change to the existing land use.

Proposed Action:
All required utilities currently service available to the project buildings. The main electrical connection will be upgraded and relocated to provide sufficient service for the change to residential use. Natural gas, water, sanitary, storm, telephone, and cable services will use existing connection points.

See the *Fort Snelling VA Housing Tax Credit Part 2 and Minnesota Part A Application* incorporated in its entirety as Appendix E of this report for additional details related to utility changes.

3.15 ENVIRONMENTAL JUSTICE

Existing:
There are no known environmental justice issues affecting Fort Snelling.

No Action:
There would be no change to the existing land use.

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Proposed Action:
There are no known environmental justice issues that will be created by the proposed action.

3.16 CUMULATIVE IMPACTS

Existing:
Minor repair and refurbishment work has occurred at Fort Snelling. There has been a fire alarm system upgrade for buildings 222 and 224. Some lead based paint abatement has been performed on building 222. The repair of the roof of building 271 is being planned. Building 201 was converted from a Calvary Drill Hall to a Boy Scout Base Camp in 2010.

There are plans to renovate and reuse the Upper Post area as well as reuse of nine buildings for a charter school and offices.

No Action:
There would be no change to the existing land use.

Proposed Action:
The BURR initiative involves redeveloping VA properties across the nation. Due to the relatively small size of this action and the relatively large distance between the actions, there are no expected cumulative impacts which need to be addressed related to the initiative.

As for cumulative impacts at Fort Snelling, none of the recent or planned projects should cause a significant impact even cumulatively. All projects involve the reuse of vacant, unused, or underutilized buildings while preserving the historical importance and authenticity of Fort Snelling for future generations to enjoy.

3.17 POTENTIAL FOR GENERATING SUBSTANTIAL CONTROVERSY

Existing:
There are no known issues generating substantial controversy regarding the Fort Snelling facility.

No Action:
There would be no change to the existing land use.

Proposed Action:
There are no known issues that may generate controversy. Due to the construction employment and addition of homeless housing, the action is expected to be well received by the community.

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SECTION 4.0
PUBLIC INVOLVEMENT

Extensive public involvement has already occurred for this proposed action as part of the Section 106 process. A brief overview of significant events follows:

- July 28, 2011 – Public Hearing presented by the Veterans Administration
- December 2, 2011 – Open House held by the developer CommonBond
- December 6, 2011 – Initiated Section 106 Consultation with the Minnesota State Historic Preservation Office
- December 12, 2011 – Meeting with Fort Snelling Consortium Group
- February 28, 2012 – Meeting with St. Paul Public Housing Authority
- March 29, 2012 – Meeting with Housing Advocacy at State Capital

Please see the *Public Participation Process for the Fort Snelling West District Development Project* incorporated in its entirety as Appendix D of this report for additional events and specific details.

The Draft Environmental Assessment will be made available to the public and a Notice of Availability published in the local newspaper and the VA website. The public will have 30-days to provide comment on the Draft EA in accordance with NEPA regulations.

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SECTION 5.0
MITIGATION

Based on the above analysis, no formal mitigation measures will be required in order to reduce a significant impact. The following minimization measures are intended to be implemented to further reduce impacts:

- Aesthetics & Cultural resources – Design will be altered to meet the Secretary of the Interior's Standards for Rehabilitation.
- Air Quality & Solid and Hazardous Materials – Regulatory guidelines will be followed during construction and demolition activities to minimize effects related to lead and asbestos
- Wildlife & Habitat – Construction will occur outside of nesting season or appropriate surveys and mitigation measures will be implemented to avoid impacts to birds protected by the Migratory Bird Treaty Act.
- Noise – Common noise mitigations measures and best management practices will be implemented during construction.

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SECTION 6.0
CONCLUSIONS

No significant adverse effects resulting from the implementation of the proposed action were identified.

The following areas were investigated in this report and found to have no significant impact to the environment:

- Aesthetics
- Geology and soils
- Hydrology and water quality
- Land use
- Floodplains, wetlands, and coastal zone management
- Community services
- Transportation and parking
- Utilities
- Environmental justice
- Cumulative impacts
- Potential for generating substantial controversy

The following areas were investigated in this report and found to require minimization measures reduce the impact to the environment:

- Air quality: Short-term, minor impacts related to construction activities
- Cultural resources: Short-term, minor impacts related to construction activities and construction that meets the Secretary of the Interior's Standards for Rehabilitation
- Wildlife and habitat: Potential minor impacts to existing habitats during construction activities
- Noise: Short-term, minor impacts related to construction activities
- Solid and hazardous materials: Short-term impacts related to the generation of construction debris. Hazardous materials will be managed/disposed as needed according to regulatory agency guidelines

The following areas were investigated in this report and found to have a positive impact to the environment:

- Socioeconomics: Short-term impacts include the employment and purchasing of goods and services from the local community related to construction activities. Long-term impacts include the reduction of homeless veterans and the employment of onsite staff members.

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SECTION 7.0
LIMITATIONS

To achieve the study objectives stated in this report, we were required to base ***PHASE ONE* INC.**'s conclusions and recommendations on the best information available during the period the investigation was conducted and within the limits prescribed by ***PHASE ONE* INC.**'s client in the contract/authorization agreement and standard terms and conditions.

***PHASE ONE* INC.**'s professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields. The findings, recommendations, and conclusions, were mainly based upon the examination of historic records, maps, aerial photographs, and governmental agencies lists. No warranty or guarantee, expressed or implied, is made as to the professional conclusions or recommendations contained in this report. The limitations contained within this report supersede all other contracts or scopes of work, implied or otherwise, except those stated or acknowledged herewith.

This report is not a legal opinion. It does not necessarily comply with requirements defined in any environmental law such as the "innocent landowner defense" or "due diligence inquiry." Only legal counsel retained by the client is competent to determine the legal implications of any information, conclusions, or recommendations in this report.

The findings, conclusions, recommendations, and professional opinions contained in this report have been prepared by the staff of ***PHASE ONE* INC.** , in accordance with generally accepted professional practices.

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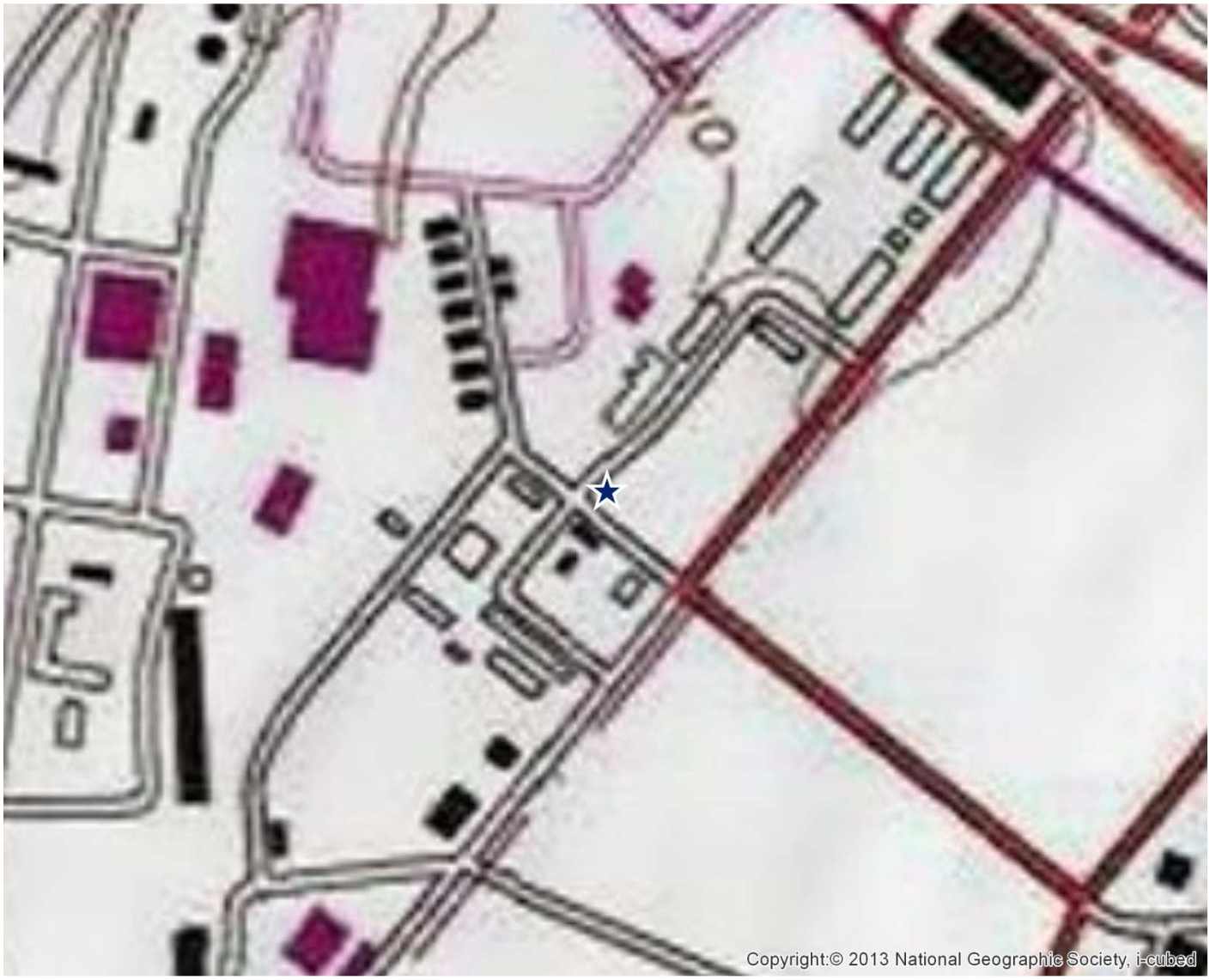
SECTION 8.0
FIGURES

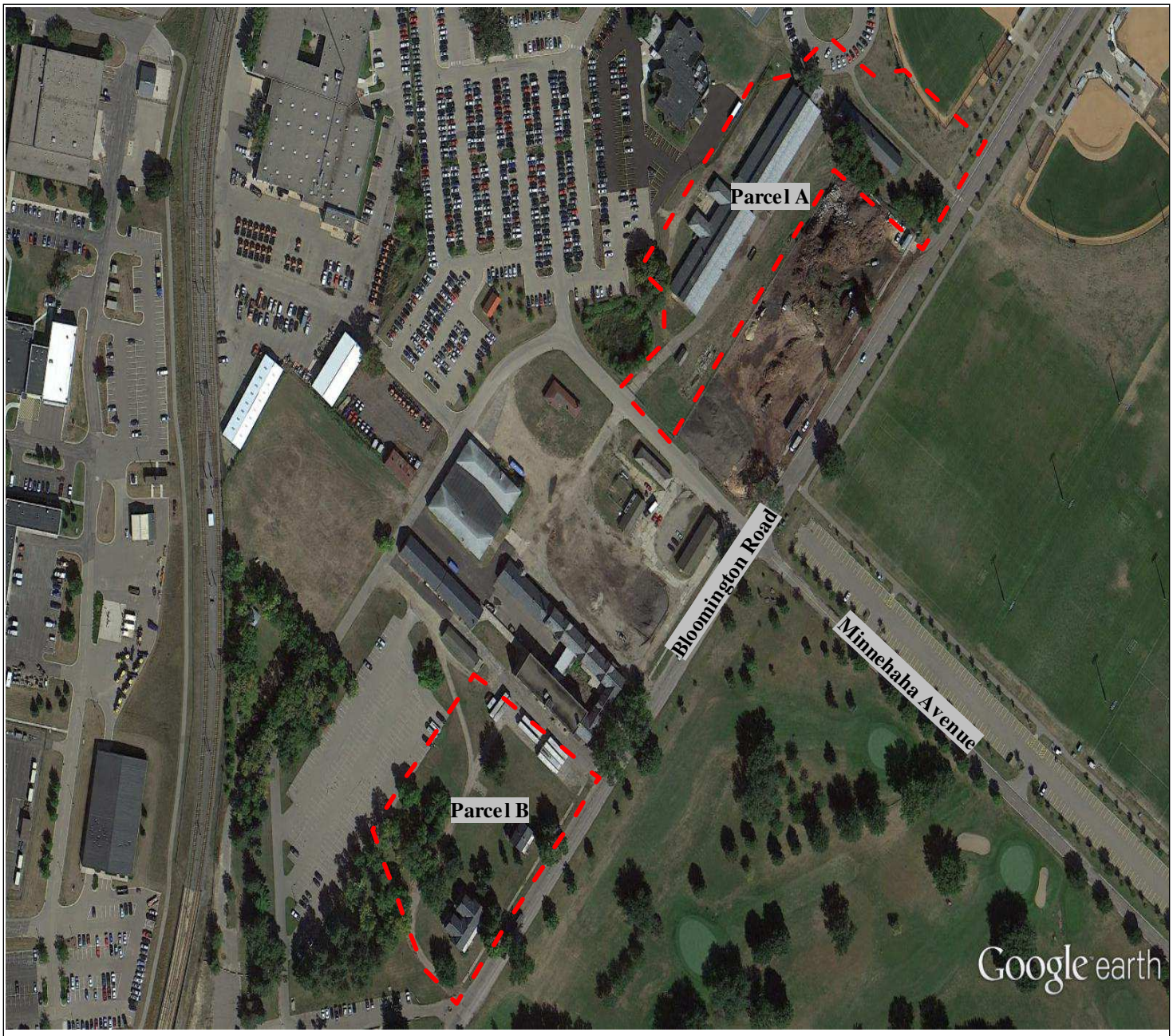


SITE LOCATION MAP

U.S. Geological Survey. Saint Paul West Quadrangle, 7.5 Minute Series

N

PHASE ONE INC.	Parcel A Buildings 210, 211, 214, and 215 Parcel B Buildings 227, 228, and 229 Fort Snelling, Minneapolis, MN 55417	FIGURE: 1 JOB: 7169 DATE: 3/14/2014



NOT TO SCALE

KEY

= SUBJECT SITE

N

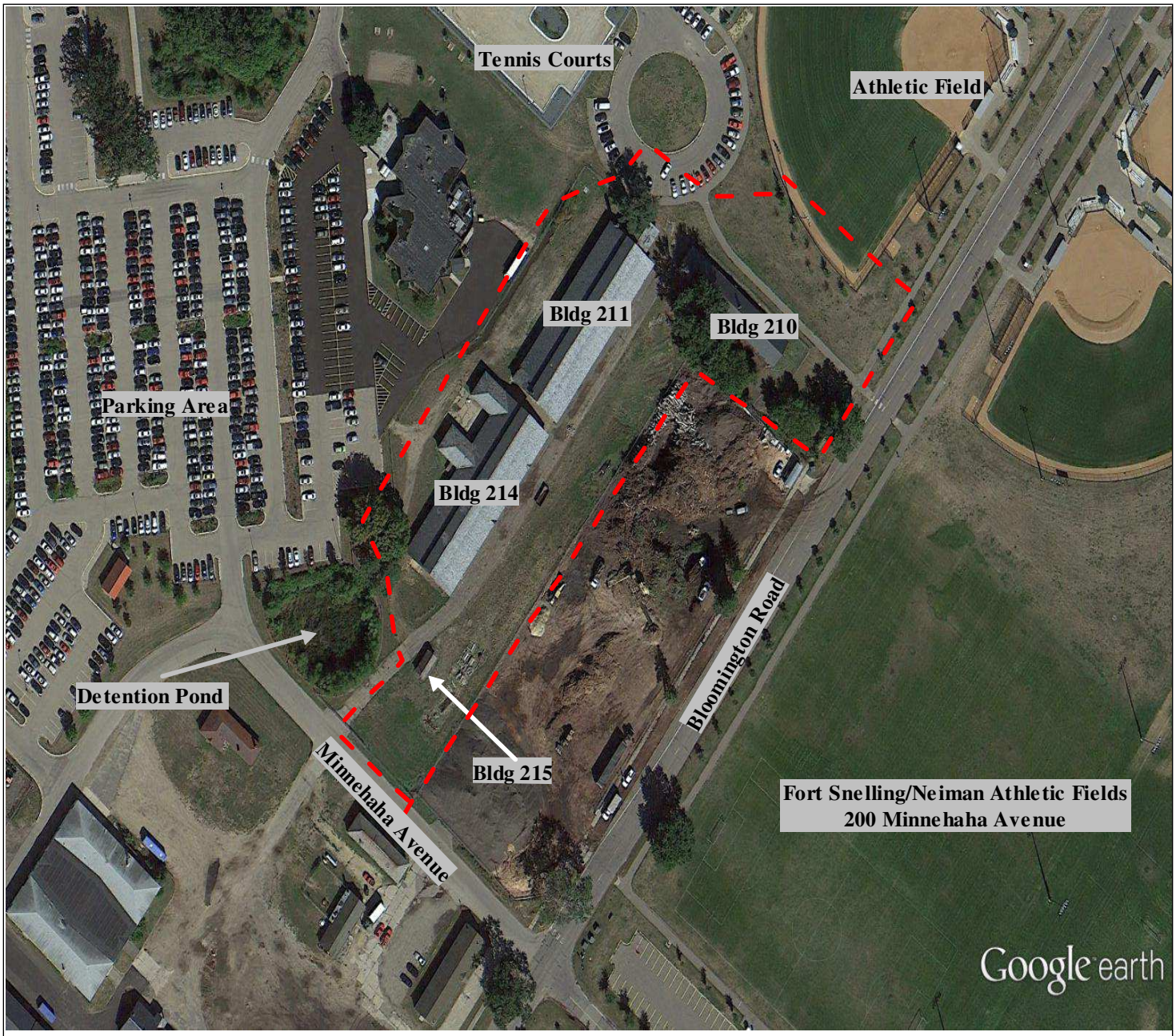
***PHASE ONE* INC.**

ENVIRONMENTAL ASSESSMENT SPECIALISTS

PARCEL A AND PARCEL B
FORT SNELLING
MINNEAPOLIS, MINNESOTA 55417

DRAWN: LT

SITE PLAN	
FIGURE:	2
JOB:	7169
DATE:	3/14/2014



NOT TO SCALE

KEY

= SUBJECT SITE

N

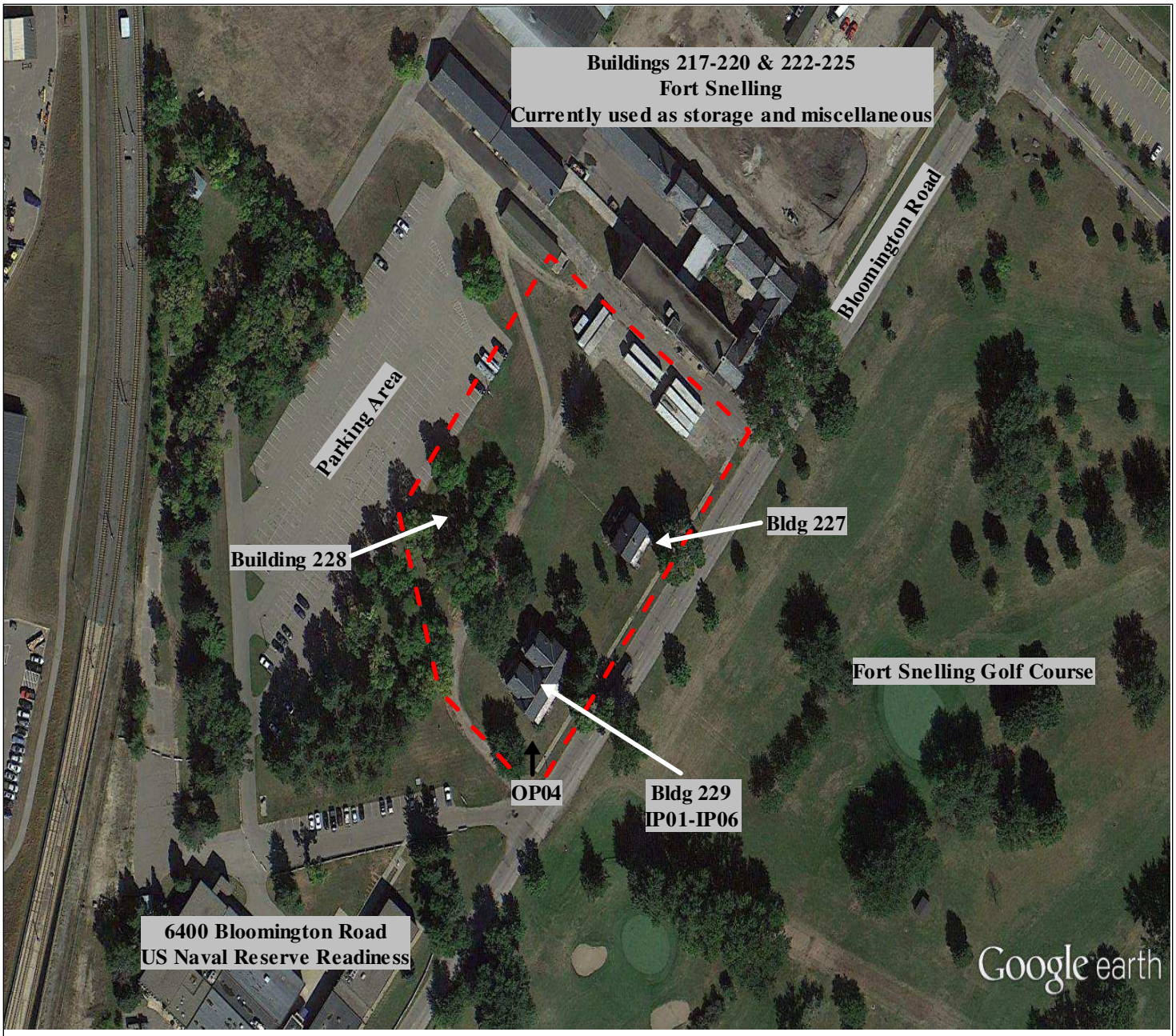
***PHASE ONE* INC.**

ENVIRONMENTAL ASSESSMENT SPECIALISTS

PARCEL A
BUILDINGS 210, 211, 214, AND 215
FORT SNELLING
MINNEAPOLIS, MINNESOTA 55417

DRAWN: LT

SITE PLAN	
FIGURE:	2A
JOB:	7169
DATE:	3/14/2014



NOT TO SCALE

KEY

= SUBJECT SITE

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PHASE ONE INC.
ENVIRONMENTAL ASSESSMENT SPECIALISTS

PARCEL B
BUILDINGS 227, 228, AND 229
FORT SNELLING
MINNEAPOLIS, MINNESOTA 55417

DRAWN: LT

SITE PLAN	
FIGURE:	2B
JOB:	7169
DATE:	3/14/2014

SECTION 9.0
APPENDICES

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Appendix A

Preliminary NEPA Analysis
Phase One, Inc.
January 2012

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PRELIMINARY NEPA ANALYSIS

FOR

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS
OFFICE OF ASSET ENTERPRISE MANAGEMENT

FORT SNELLING VETERANS HOSPITAL
MINNEAPOLIS, MINNESOTA CAMPUS
PARCEL A
BUILDINGS 210, 211, 214, AND 215
FORT SNELLING, MINNEAPOLIS, MINNESOTA 55417

PARCEL B
BUILDINGS 227, 228 AND 229
FORT SNELLING, MINNEAPOLIS, MINNESOTA

REPORT DATE: JANUARY 2012

***PHASE ONE* INC.**

THE NATIONWIDE ENVIRONMENTAL SPECIALISTS

"Setting the Due Diligence Industry Standard"

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***PHASE ONE* INC.**
ENVIRONMENTAL ASSESSMENT SPECIALISTS

January 27, 2012

United States Department of Veterans Affairs
Office of Asset Enterprise Management
James M. Sullivan
810 Vermont Avenue NW
Washington D.C. 20420

RE: Preliminary NEPA Analysis
Subject Site Location: Buildings 210, 211, 214, and 215 (Parcel A)
Buildings 227, 228, and 229 (Parcel B)
Fort Snelling, Minneapolis, Minnesota 55417
***PHASE ONE* INC.** Project No. 7169

Dear Mr. Sullivan:

Enclosed with this letter are copies of the Preliminary NEPA Analysis completed by ***PHASE ONE* INC.** for the site referenced above. As you will note in the report, our conclusions regarding the environmental condition of the site are summarized both in **Section 1.0*, Executive Summary***, and **Section 5.0*, Conclusions.***

Please don't hesitate to contact us should you have any questions regarding the analysis, or if we can be of additional assistance. We look forward to working with you again in the future.

Sincerely,

Eric Kieselbach
President

Enclosure

23282 Mill Creek Drive, Suite 160 Laguna Hills CA 92653 **Tel: (714) 669-8055 • Fax: (714) 669-8025**

PRELIMINARY NEPA ANALYSIS

PARCEL A
BUILDINGS 210, 211, 214 AND 215
FORT SNELLING, MINNEAPOLIS, MINNESOTA 55417

PARCEL B
BUILDINGS 227, 228, AND 229
FORT SNELLING, MINNEAPOLIS, MINNESOTA

PROJECT NO. 7169

BY

***PHASE ONE* INC.**
23282 MILLCREEK DRIVE, SUITE 160
LAGUNA HILLS, CA 92653
(800) 524-8877

THIS REPORT WAS PREPARED FOR THE SOLE USE AND BENEFIT OF OUR CLIENT, UNITED STATES DEPARTMENT OF VETERANS AFFAIRS, AND IS BASED, IN PART, UPON DOCUMENTS, WRITINGS, AND INFORMATION OWNED AND POSSESSED BY OUR CLIENT. NEITHER THIS REPORT, NOR ANY OF THE INFORMATION CONTAINED HEREIN, SHALL BE USED OR RELIED UPON FOR ANY PURPOSE BY ANY PERSON OR ENTITY OTHER THAN OUR CLIENT. ALL STANDARD TERMS, CONDITIONS, AND LIMITATIONS BY ***PHASE ONE* INC.** APPLY AT ALL TIMES AND FOR THIS REPORT AND ALL REPORTS ISSUED BY ***PHASE ONE* INC.**

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2.0 NEPA SCOPE OF WORK

3.0 SITE LOCATION AND DESCRIPTION

4.0 NEPA CHECKLIST

5.0 ISSUES REQUIRING FURTHER DISCUSSION

6.0 CONCLUSIONS

7.0 LIMITATIONS

8.0 FIGURES

9.0 APPENDICES

Appendix A Biological Report and SOQ
Appendix B Wetlands Map
Appendix C Flood Insurance Map
Appendix D Miscellaneous
Appendix E Resumes

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SECTION 1.0

EXECUTIVE SUMMARY

This report presents the results of the Preliminary NEPA (National Environmental Policy Assessment) Analysis conducted by ***PHASE ONE* INC.** for Parcel A, Buildings 210, 211, 214, and 215 and Parcel B, Buildings 227, 228, and 229, Fort Snelling, Minneapolis, Minnesota 55417 (See Figure 1, Site Location Map). The analysis was undertaken at the request of the United States Department of Veterans Affairs, in accordance with ***PHASE ONE* INC.**'s ***Standard Terms and Conditions***, as outlined in ***PHASE ONE* INC.**'s ***Letter of Intent/Authorization*** for Project **Nº** 7169. The findings and conclusions of this investigation are based upon the Scope of Work summarized in Section 2.0.

At the time of this assessment, the site consisted of two parcels of land totaling approximately 6.41 acres with several structures on each parcel. Parcel A has Buildings 210, 211, 214 and 215. Parcel B has Buildings 227, 228, and 229. (See Figure 2, Site Plan.) At the time of this analysis, details of the construction of the housing for homeless veterans have not been finalized which affects the conclusions of this report.

Given the findings and conclusions of ***PHASE ONE* INC.**'s analysis, further investigation **is not** recommended for the following categories of potential impacts:

- Natural Areas
- Ecology

No significant impacts are anticipated in these categories as long as mitigation measures described in the report are implemented.

Given the findings and conclusions of ***PHASE ONE* INC.**'s analysis, further investigation **is** recommended for the following categories of potential impacts:

- Historic Preservation
  - Concurrence from the State Historic Preservation Office
- Environmental Quality
  - Potential Noise Impacts
  - Potential Impact on Air Quality
  - Potential Traffic Impacts (May require additional investigation)
  - Potential Alteration of Storm water Runoff and Retention

Given the findings and conclusions of ***PHASE ONE* INC.**'s analysis to date, the need for preparation of an Environmental Impact Statement is unlikely.

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SECTION 2.0

NEPA SCOPE OF WORK

The National Environmental Policy Act of 1969 (NEPA) was signed into law by President Richard Nixon on January 1, 1970. With some limited exceptions, all Federal agencies in the executive branch have to comply with NEPA before they make final decisions about federal actions that could have environmental effects. Thus, NEPA applies to a very wide range of federal actions that include, but are not limited to, federal construction projects, plans to manage and develop federally owned lands, and federal approvals of non-federal activities such as grants, licenses, and permits. NEPA and the Council on Environmental Quality (CEQ) regulations implementing the procedural requirements of NEPA (40 CFR Parts 1500 through 1508) require that each Federal agency consider the impact of its actions on the human environment and prescribe procedures to be followed. The 38 CFR Part 200 contains the US Department of Veterans Affairs (VA) general policy regarding NEPA implementation and procedures that supplement the CEQ regulations for meeting NEPA requirements.

The purpose of a Preliminary NEPA Analysis is to determine the significance of environmental impacts from a federal agency's undertaking. It is intended to briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or an Environmental Assessment; this analysis facilitates preparation of either document.

***PHASE ONE* INC.** thoroughly reviewed materials and completed a NEPA Checklist along with corresponding backup documentation. The NEPA Checklist (Provided in Section 4.0) addresses the Natural Areas, Ecology, Historic Preservation, and Environmental Quality. This includes the following:

Natural Areas

- Wilderness Areas
  - Wilderness.net
  - USGS 7.5 minute Topographic Map
  - National Atlas
- Wildlife Preserves
  - USGS 7.5 minute Topographic Map
  - National Atlas
  - National Wildlife Refuge System
- National Trails
  - USGS 7.5 minute Topographic Map
  - National Atlas
  - National Trail System

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- Wild and Scenic Rivers
    - USGS 7.5 minute Topographic Map
    - National Atlas
    - National Wild and Scenic Rivers System
- Floodplains
    - FEMA Flood Map (See Flood Map, Appendix C)
- Coastal Zone
    - USGS 7.5 minute Topographic Map
    - Minnesota Department of Natural Resources
- Wetlands
    - Historic Aerial Photographs
    - United States Fish and Wildlife Service, National Wetlands Inventory (See Wetlands Map, Appendix B)
    - Site Inspection
    - Soil type compared to USDA list of Hydric soils

Ecology

- Federal Endangered Species Act
    - United States Fish and Wildlife Service
    - Minnesota Department of Natural Resources
    - Biological Report and SOQ (Appendix A)
- Migratory Bird Treaty Act
    - United States Fish and Wildlife Service
    - Minnesota Department of Natural Resources
    - Biological Report and SOQ (Appendix A)
- Critical Habitats
    - United States Fish and Wildlife Service
    - Minnesota Department of Natural Resources
    - Biological Report and SOQ (Appendix A)

Historic Preservation

- Review of records maintained by the State Historic Preservation Office
    - State Historic Preservation Office
- Review of National Register of Historic Places
    - National Register of Historic Places
- Review of National Landmark Registry
    - National Historic Landmarks Survey
- Historic Preservation Concurrence from the State Historic Preservation Office
    - State Historic Preservation Office

Environmental Quality

- Potential Noise Impacts
- Potential Impact on Air Quality
- Potential Presence of hazardous or toxic substances
- Potential for Pollution or Hazardous Waste Generation
- Potential Dislocation of Persons or Residences
- Potential Traffic Impacts
- Potential Alteration of Stormwater Runoff and Retention

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SECTION 3.0

SITE LOCATION AND DESCRIPTION

3.1 General Location

The Fort Snelling Veterans' Affairs Medical Center (VAMC) is located just east of the Minneapolis - St. Paul International Airport, Minnesota. It lies south and west of the Mississippi River on a relatively flat plain. The VAMC occupies portions of Section 20 and Section 29, Township 28, Range 23 of the US Geological Survey's 7.5-minute St. Paul West quadrangle, dated 1993.

3.2 Site Location

The subject site consists of two parcels of land totaling approximately 6.41 acres with several structures on each parcel. Parcel A has Buildings 210, 211, 214 and 215. Parcel B has Buildings 227, 228, and 229. The existing site is located at a base elevation of approximately 813 feet above mean sea level.

3.3 Site Reconnaissance

On December 2, 2011, a site reconnaissance of the proposed approximately 6.41 acre area was conducted. At the time of the reconnaissance, the site consisted developed, landscaped area. The ground visibility was excellent (100%) at the time of the reconnaissance.

3.4 Proposed Activities

The United States Department of Veterans Affairs (VA) has developed the *Building Utilization Review and Repurposin*g (BURR) initiative. This initiative is a VA strategic effort to identify and repurpose underutilized VA land and buildings nationwide in support of the VA's goal to end Veteran homelessness. The focus of the BURR Initiative is on permanent housing; however, the VA will consider all development plans, including a mix of permanent and transitional housing.

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SECTION 4.0

NEPA CHECKLIST

A NEPA Checklist was prepared for the subject site. This checklist is provided on the following pages. The checklist indicates the potential short term and long term impacts to Natural Areas, Historical Preservation, Ecology, and Environmental Quality. The checklist also indicates if mitigation is required, and if the evaluation is complete.

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NEPA Checklist

Category	Comments	Potential Short Term Impact	Potential Long Term Impact	Mitigation Required	Evaluation Complete
NATURAL AREAS					
Wilderness Areas	None within 10 miles				X
Wildlife Preserves	None within 10 miles				X
National Trails	None within 10 miles				X
Wild and Scenic Rivers	None within 10 miles				X
Floodplains	Outside the 100 year floodplain				X
Coastal Resources	None within 10 miles				X
Wetlands	Soil type is U4A—Urban land-Udipsamments (cut and fill) complex. This soil is not hydric.				X
ECOLOGY					
Federal Endangered Species Act	Due to the area's existing anthropogenic disturbance, no protected species are expected to occur on or near the site.				X
Migratory Bird Treaty Act	The site does have a high potential to support nesting of non-raptorial bird species protected by the Migratory Bird Treaty Act. If project construction is expected to begin during the nesting season, a nesting bird survey should be conducted on and within 300 feet of the site within one week prior to equipment mobilization on the site. Impacts to any detected nesting birds can be avoided via appropriate species-specific disturbance-free buffers, which should be determined by a biologist familiar with the nesting species. In general, the nesting bird season in central Minnesota is May 1 to July 31.	X		X	X
Critical Habitats	There are no designated critical habitats in central Minnesota.				X
HISTORIC PRESERVATION					

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Category	Comments	Potential Short Term Impact	Potential Long Term Impact	Mitigation Required	Evaluation Complete
Review of records maintained by the State Historic Preservation Officer	A records search will be performed as part of the preparation of the historic preservation package for SHPO concurrence.	**TBD**	**TBD**		
Review of National Register of Historic Places	Fort Snelling is listed on the National Register of Historic Places and also designated as a State Historic District. There is a possibility for viewshed issues.	**TBD**	**TBD**		
Review of National Landmark Registry	The Upper and Lower Posts are National Historic Landmarks	**TBD**	**TBD**		
Concurrence from the State Historic Preservation Office	Several complex issues will need to be addressed for concurrence. See Section 5.0 for a discussion of these issues.		**X**	**X**	
ENVIRONMENTAL QUALITY					
Potential Noise Impacts	Noise is likely to increase during construction; however, once construction is completed the long term impacts are likely low. The effects would be dependent on the final project specifications, so this determination is not final.	**X**		**X**	
Potential Impact on Air Quality	Air quality is likely to decrease during construction; however, once construction is completed the long term impacts are likely low. The effects would be dependent on the final project specifications, so this determination is not final.	**X**		**X**	
Potential Presence of Hazardous or Toxic Substances	The Phase I ESA identified asbestos- and lead-based paint risks due to the age of the current buildings. These materials will need to be disposed of according to regulatory agency guidelines and there will be worker safety issues related to the demolition. In addition, the subject site is located in a county where there is an elevated risk for radon gas. If passive measures are not included in the construction plans, testing should be performed.	**X**		**X**	**X**
Potential for Pollution or Hazardous Waste Generation	The potential for the generation of pollution or hazardous waste from a residential use is unlikely.				**X**

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Category	Comments	Potential Short Term Impact	Potential Long Term Impact	Mitigation Required	Evaluation Complete
Potential Dislocation of Persons or Residences	The subject site consists of vacant buildings in a landscaped setting. Some of the buildings were used for residential purposes, however, they are currently vacant. People will not be dislocated by this project.	**X**			**X**
Potential Traffic Impacts	Traffic is likely to increase and be subject to disruption during construction. The long term effect will likely be an increase of traffic as well. The effects would be dependent on the final project specifications, especially number of residents and workers anticipated, so this determination is not final.	**X**	**X**	**X**	
Potential Alteration of Stormwater Runoff and Retention	The effects would be dependent on the final project specifications, so this determination is not final.	**Unknown**	**Unknown**	**Unknown**	

The undersigned has reviewed and approved the completion of this NEPA Land Use Checklist for the above-mentioned site. The results shown above represent the site as of the time the research was performed.

TBD=To Be Determined

Prepared by: Eric Exton Signature: Eric Charles Exton

Title: NEPA Compliance Manager

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SECTION 5.0

ISSUES REQUIRING FURTHER DISCUSSION

Historic Preservation - Concurrence from the State Historic Preservation Officer

Fort Snelling is listed on the National Register of Historic Places and also designated as a State Historic District. There are two designated National Historic Landmarks associated with Fort Snelling.

Based on the above, the following items need to be noted and addressed:

- Due to the disturbance of the subsurface, a Phase I Archaeological Survey may need to be performed by a qualified historic archaeologist to determine if subsurface artifacts remain.

- Due to the status of being listed on the National Register of Historic Places all building designs should use The Secretary of the Interior's Standards for Rehabilitation (36 CFR 67). Some important notes from the standards:

    - The historic character of a property shall be retained and preserved.
    - Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
    - Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

- Any designs should be evaluated by a professional meeting the Secretary of the Interior's Qualifications for Architectural History and/or Historic Architecture to ensure that the design is consistent with the current historic district.

- Once the final design has been determined, Public Notice will be required for all interested parties in the Section 107 process. All comments should be evaluated and addressed as needed, and concurrence should be sought from the State Historic Preservation Officer. Note: The Public Notice period will require 30 days. Once completed, the concurrence process can take an additional 30 days.

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SECTION 6.0

CONCLUSIONS

This project will have short and long term impacts, some of which may require mitigation. Based on the information reviewed to date, as long as the recommendations contained in this report are followed, there is no expectation of significant impact which would require an Environmental Impact Statement (EIS). This project will likely require the preparation of an Environmental Assessment (EA), Public Comment, and a Finding of No Significant Impact (FONSI).

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SECTION 7.0

LIMITATIONS

To achieve the study objectives stated in this report, we were required to base ***PHASE ONE* INC.**'s conclusions and recommendations on the best information available during the period the investigation was conducted and within the limits prescribed by ***PHASE ONE* INC.**'s client in the contract/authorization agreement and standard terms and conditions.

***PHASE ONE* INC.**'s professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields. The findings, recommendations, and conclusions, were mainly based upon the Scope of Work in Section 2.0, examination of historic records, maps, aerial photographs, and governmental agencies lists. No warranty or guarantee, expressed or implied, is made as to the professional conclusions or recommendations contained in this report. The limitations contained within this report supersede all other contracts or scopes of work, implied or otherwise, except those stated or acknowledged herewith.

This report is not a legal opinion. It does not necessarily comply with requirements defined in any environmental law such as the "innocent landowner defense" or "due diligence inquiry." Only legal counsel retained by the client is competent to determine the legal implications of any information, conclusions, or recommendations in this report.

The findings, conclusions, recommendations, and professional opinions contained in this report have been prepared by the staff of ***PHASE ONE* INC.** , in accordance with generally accepted professional practices.

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SECTION 8.0
FIGURES

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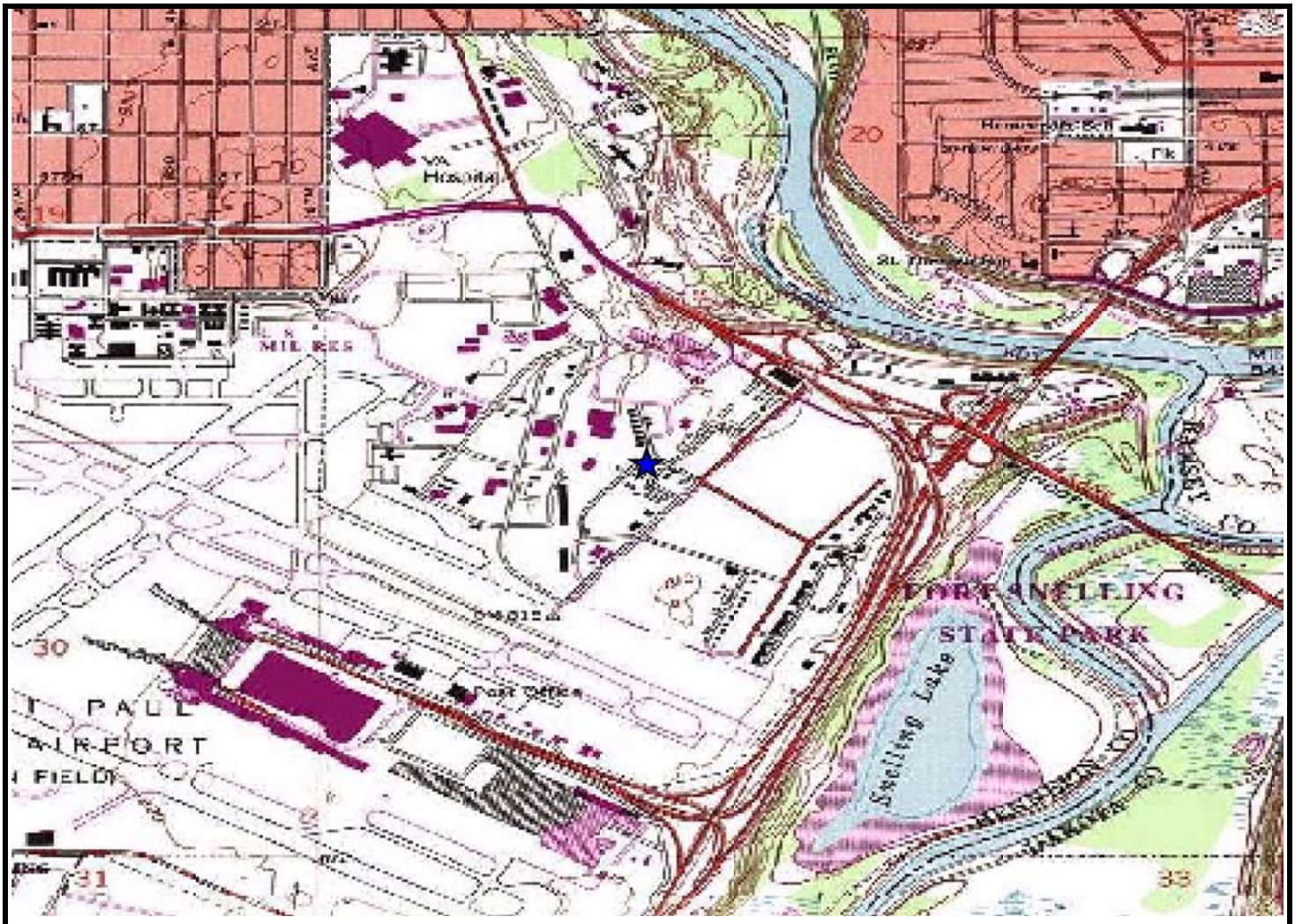
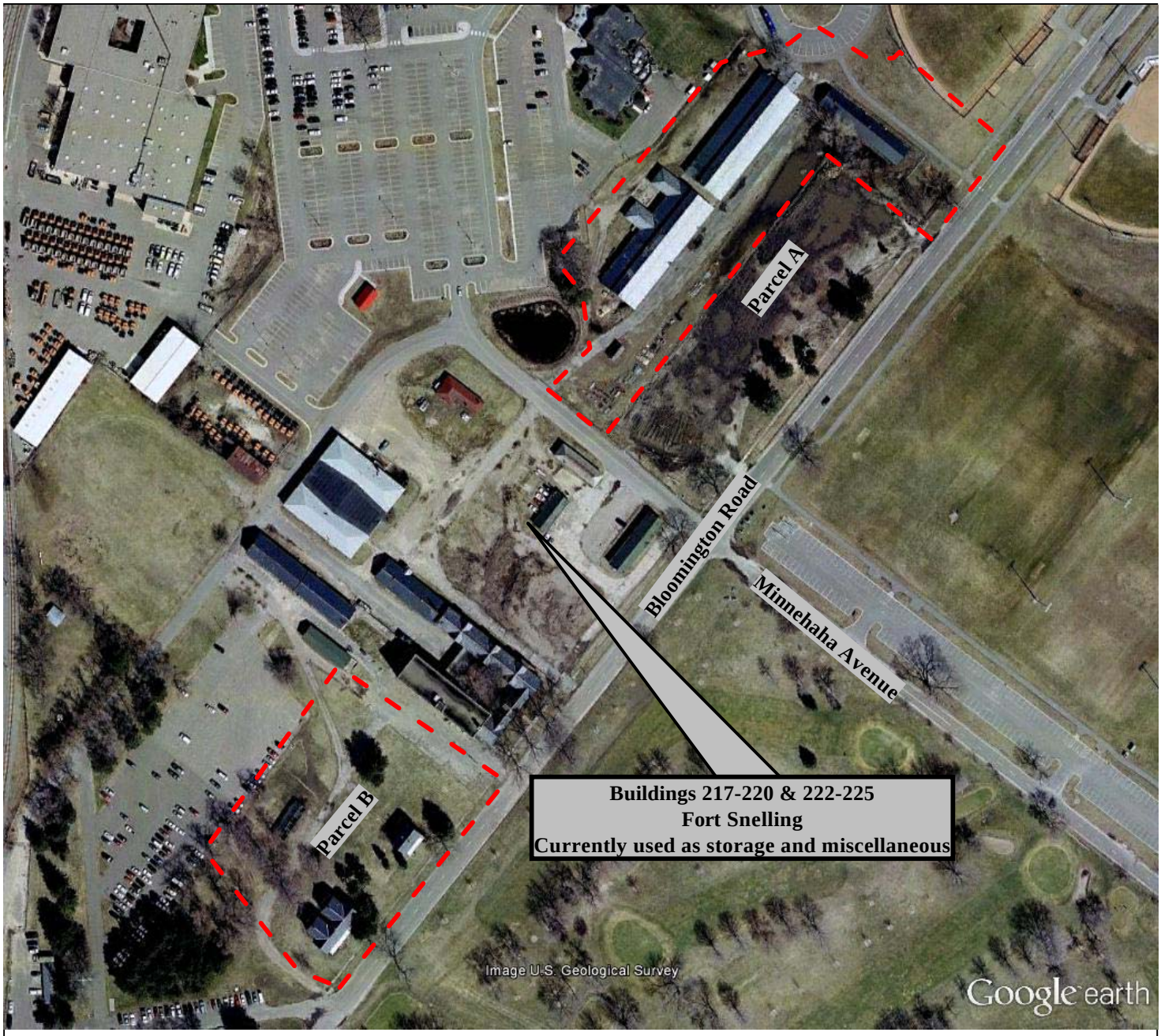


SITE LOCATION MAP

U.S. Geological Survey. Saint Paul West Quadrangle
7.5 Minute Series, Approximate Scale: 1: 28560

PHASE ONE INC.	**Fort Snelling** **Minneapolis, MN 55111**	FIGURE: 1 JOB: 7169 DATE: 12/1/2011



NOT TO SCALE

KEY

= SUBJECT SITE

N

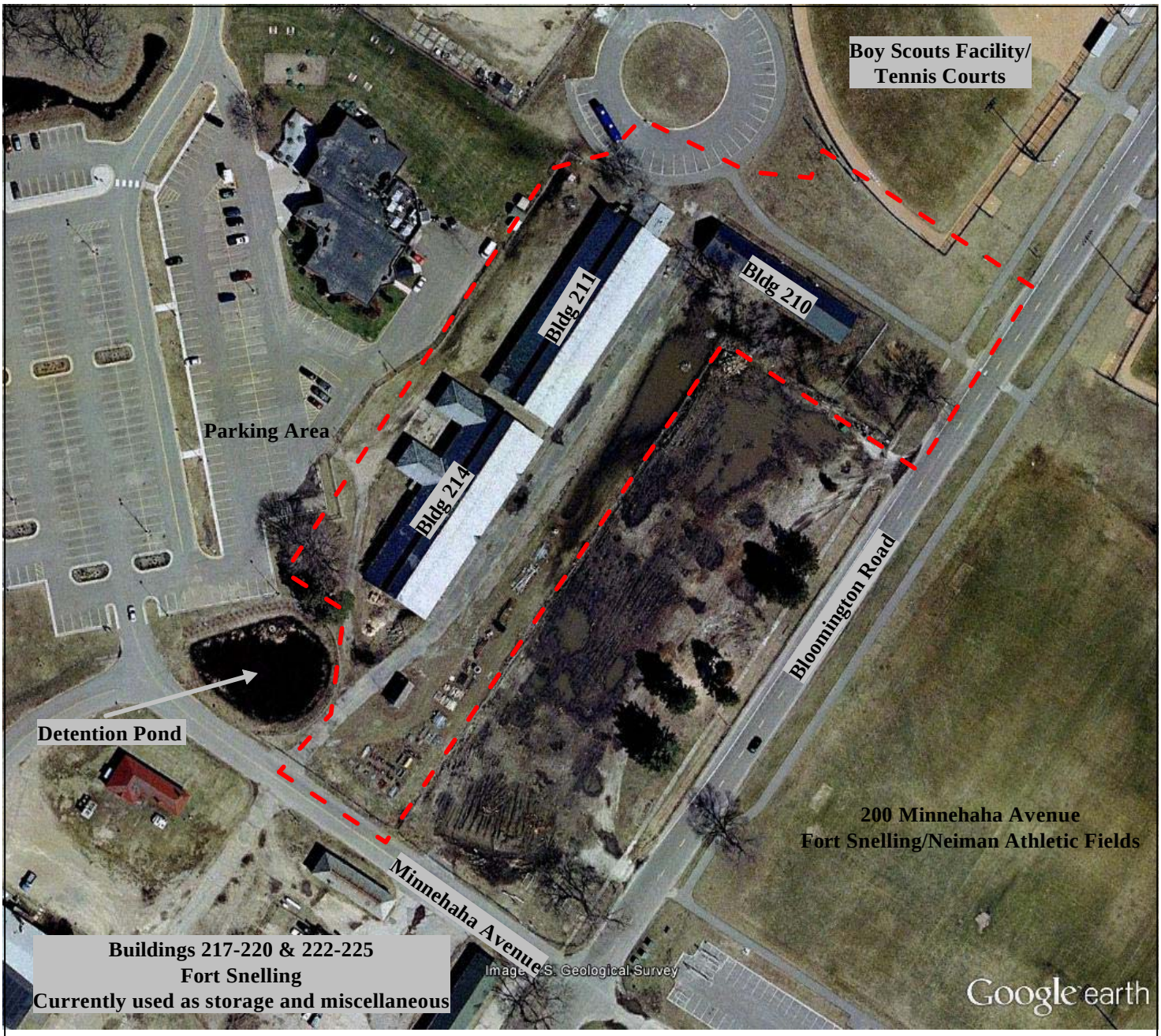
***PHASE ONE* INC.**

ENVIRONMENTAL ASSESSMENT SPECIALISTS

PARCEL A AND PARCEL B
FORT SNELLING
MINNEAPOLIS, MINNESOTA 55417

DRAWN: LT

SITE PLAN	
FIGURE:	2
JOB:	7169
DATE:	12/1/2011



NOT TO SCALE

KEY

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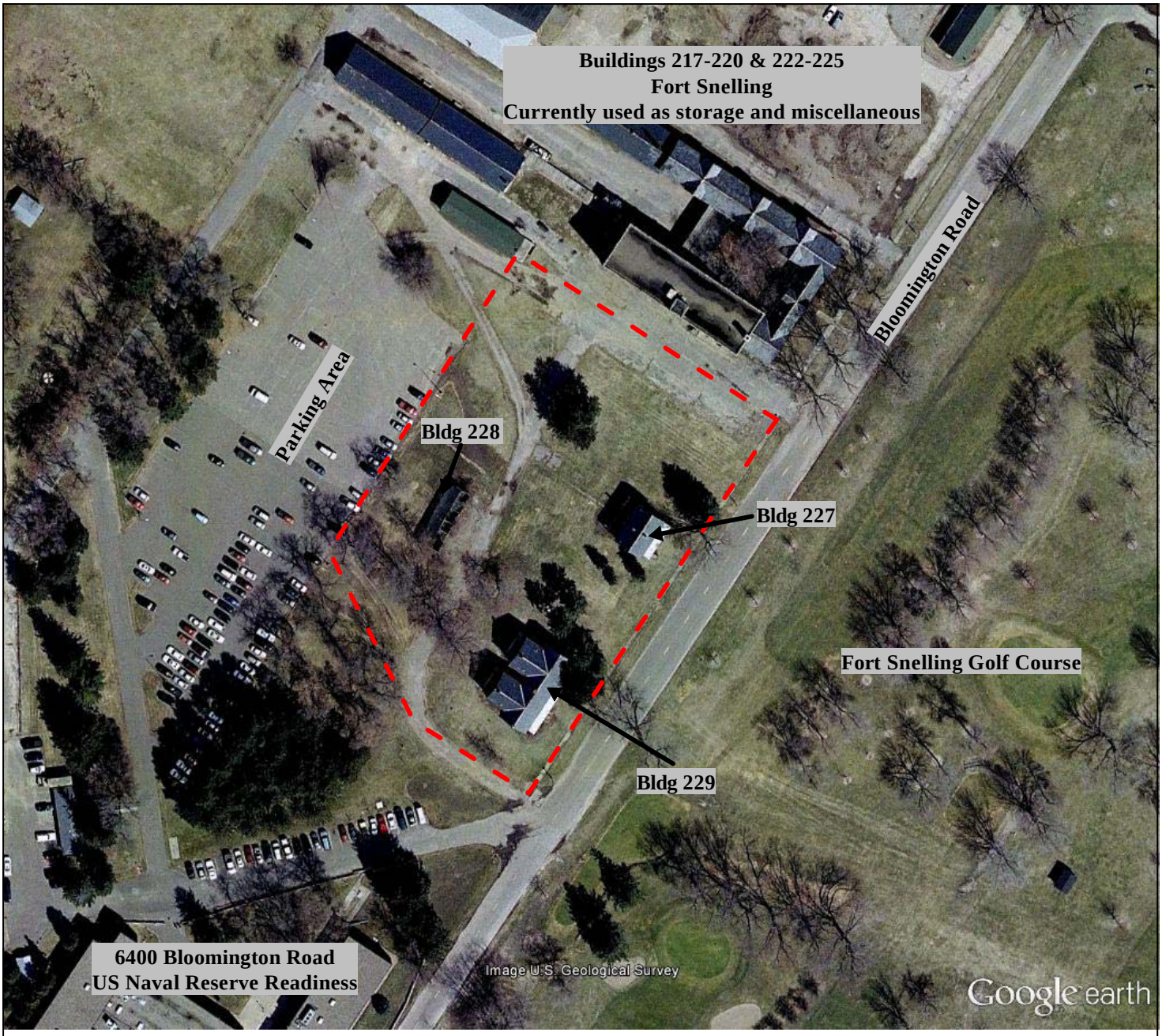
PHASE ONE INC.

ENVIRONMENTAL ASSESSMENT SPECIALISTS

PARCEL A
BUILDINGS 210, 211, 214, AND 215
FORT SNELLING
MINNEAPOLIS, MINNESOTA 55417

DRAWN: LT

SITE PLAN	
FIGURE:	2A
JOB:	7169
DATE:	12/1/2011



NOT TO SCALE

KEY

= SUBJECT SITE

N

***PHASE ONE* INC.**

ENVIRONMENTAL ASSESSMENT SPECIALISTS

PARCEL B
BUILDINGS 227, 228, AND 229
FORT SNELLING
MINNEAPOLIS, MINNESOTA 55417

DRAWN: LT

SITE PLAN	
FIGURE:	2B
JOB:	7169
DATE:	12/1/2011

SECTION 9.0
APPENDICES

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Appendix A

Biological Report and SOQ

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Bloom Biological, Inc.
Research | Consulting | Conservation

December 14, 2011

Mr. Eric Exton
Phase One, Inc.
23282 Mill Creek Drive
Suite 160
Laguna Hills, California 92653

SUBJECT: Results and conclusions of a biological literature review and database evaluation for a proposed project at the VA Medical Center located at Fort Snelling near Minneapolis, Minnesota

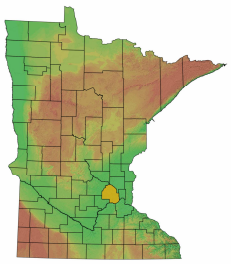
Dear Mr. Exton;

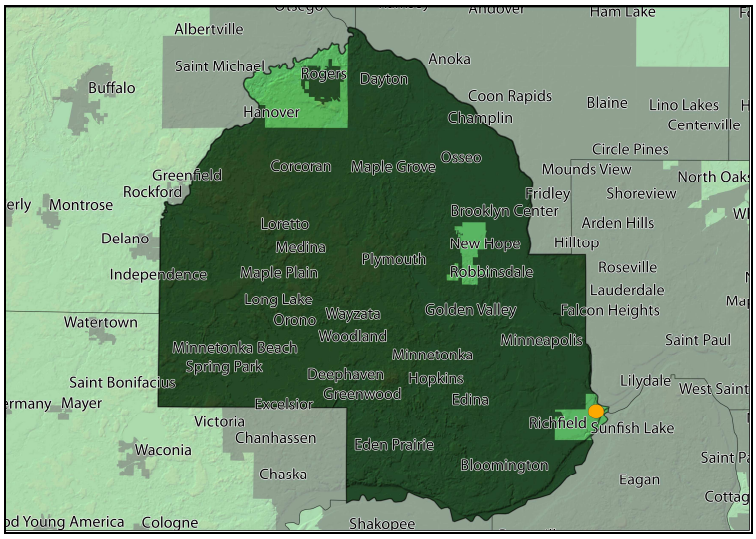
Bloom Biological, Inc. (BBI) was retained by Phase One, Inc. to conduct a biological literature review and database evaluation for a proposed project at the VA Medical Center located at Ft. Snelling near Minneapolis, Minnesota. The evaluation included a review of site photographs provided by Phase One, Inc. and geospatial data from the US Fish and Wildlife Service (Service) and Minnesota Department of Natural Resources. Based on this evaluation, it is BBI's conclusion that construction of the proposed project at the US Veterans Medical Center is unlikely to adversely affect any sensitive biological resources. If construction is initiated between March 1 and July 31 a survey for nesting birds protected by the Migratory Bird Treaty Act is recommended.

SITE LOCATION AND PROJECT DESCRIPTION

The site is comprised of two parcels totaling approximately 6.4 acres at the VA Medical Center facility located at Ft. Snelling in the vicinity of the City of Minneapolis, Hennepin County, Minnesota (see Figure 1). The site's Public Land Survey System location is the southern edge of Section 20 and northern edge of Section 29, Township 28, Range 23 of the US Geological Survey's 7.5-minute *St. Paul West* quadrangle. The site is flat, with an elevation of approximately 815 feet above mean sea level. The US Department of Veterans Affairs proposes to redevelop these portions of the property, potentially as housing for the homeless.

Figure 1. Site location relative to the state (left) and county (right).





APPLICABLE REGULATIONS

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA) [42 U.S.C. 4321 et seq.] was signed into law on January 1, 1970. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the federal agencies. The Act also establishes the Council on Environmental Quality (CEQ).

Title I of NEPA contains a Declaration of National Environmental Policy which requires the federal government to use all practicable means to create and maintain conditions under which man and nature can exist in productive harmony. Section 102 requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. Specifically, all federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment. These statements are commonly referred to as environmental impact statements.

FEDERAL ENDANGERED SPECIES ACT

Take of a federally listed threatened or endangered species is prohibited under federal law without a special permit. Section 10(a)(1)(B) of the ESA allows for take of a threatened or endangered species incidental to development activities once a Habitat Conservation Plan (HCP) has been prepared to the satisfaction of the USFWS and a Section 10(a) incidental take permit has been issued to the applicant. For federal projects (including those involving federal funding), Section 7 of the ESA allows for consultation between the affected agency and the USFWS to determine what measures may be necessary to compensate for the incidental take of a listed species. A "federal" project is any project that is proposed by a federal agency or is at least partially funded or authorized by a federal agency. Additionally, if the listed species or its habitat occurs in a portion of the project subject to federal jurisdiction (such as "Waters of the United States"), then consultation under Section 7 of the Act is usually permissible and may be required.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act of 1918 (MBTA) is a federal law governing the taking, killing, possession, transportation, and importation of various birds, their eggs, parts and nests. The take of any number of a bird species listed as protected on any one of four treaty lists is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent overutilization. The MBTA also prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, certain bird species, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

METHODS

BBI biologist Marcus C. England placed the boundary of the proposed project into BBI's geospatial database based on maps provided by Phase One. This boundary was then compared against publicly-available geospatial datasets provided by the Minnesota Department of Natural Resources, and viewed on high resolution aerial photography. The boundary was also viewed in Google Earth for a regional context. Site photographs provided by Phase One were also reviewed.

RESULTS AND DISCUSSION

The site is located in a developed area and consists of old buildings with manicured grass lawns and ornamental trees and shrubs. Surrounding development includes an airport. Given the site's location in an existing developed area and lack of native habitats, sensitive biological resources would generally not be expected to occur in the area with some exceptions as described below.

BIOGEOGRAPHIC CONTEXT

The proposed project is located at the junction of the Mississippi River and Minnesota River watersheds in a region predominantly composed of Eastern Broadleaf Forest. The Mississippi River flows approximately one-third mile northeast of the site, with urban development and a major freeway in between the site and the river. Snelling Lake is located approximately one half mile east of the site within Fort Snelling State Historic Park.

FEDERALLY-LISTED SPECIES & CRITICAL HABITAT

Because of the area's existing anthropogenic disturbance, no species listed under the ESA would be expected to occur on or near the site. In addition, there is no designated or proposed critical habitat for federally-listed species in central Minnesota.

NESTING NON-RAPTORIAL BIRDS

The site does have a high potential to support nesting of non-raptorial bird species protected by the Migratory Bird Treaty Act. If project construction is expected to begin during the nesting season, a nesting bird survey should be conducted on and within 300 feet of the site within one week prior to equipment mobilization on the site. Impacts to any detected nesting birds can be avoided via appropriate species-specific disturbance-free buffers, which should be determined by a biologist familiar with the nesting species. In general, the nesting bird season in central Minnesota is May 1 to July 31[1].

NESTING RAPTORIAL BIRDS, INCLUDING BALD EAGLE

Larger trees on the site and the nearby Mississippi River and lakes have the potential to support nesting raptors, which often nest earlier than non-raptorial species. All of these species are protected by the Migratory Bird Treaty Act. Bald Eagle (*Haliaeetus leucocephalus*) also occurs in the region, has potential to occur in the area, and is protected by the Federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c). BBI recommends surveys for nesting raptors, including Bald Eagle, within one half mile of the site beginning March 1, at the start of the Bald Eagle nesting season in Minnesota. Impacts to any detected nesting birds can be avoided via appropriate species-specific disturbance-free buffers, which should be determined by a biologist familiar with the nesting species.

---

[1] US Fish and Wildlife Service communication in *Northern Lights Migratory Bird Nest Avoidance and Monitoring Plan* prepared in 2009 by Northern Natural Gas.

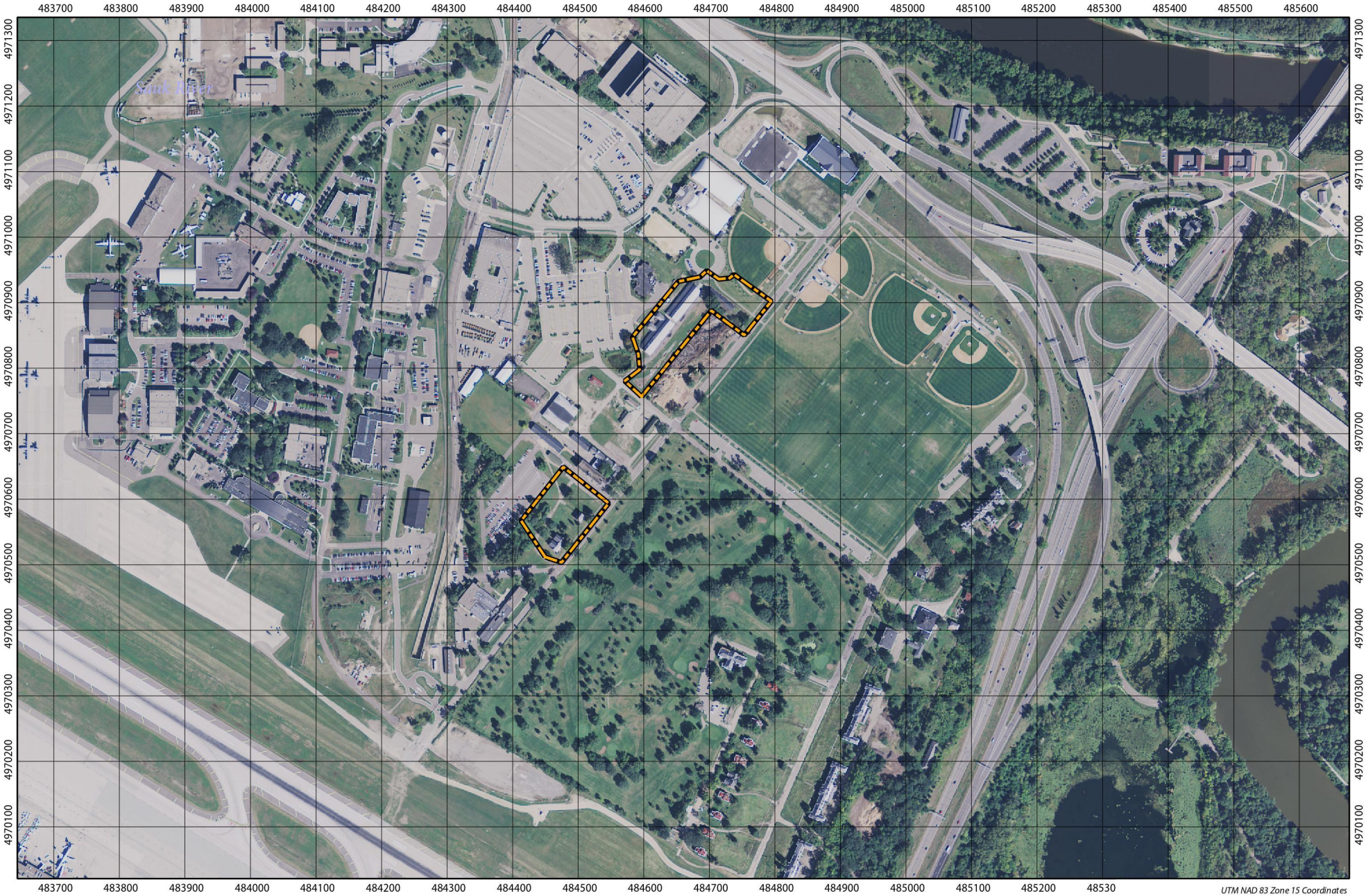
If you have any questions or comments regarding this letter, please contact me directly at 213-304-1826.

Sincerely,

BLOOM BIOLOGICAL, INC.

Marcus C. England
Vice President

Attachments: Exhibit 1



UTM NAD 83 Zone 15 Coordinates
Author: Marcus C. England
Map Date: 16 December 2011
Aerial Photography: US Department of Agriculture

Site Boundary

0 300 600 900 ft
1:8000

Exhibit 1: Site Overview

US Veterans Medical Center | Ft. Snelling, Minnesota

Bloom Biological, Inc.
Research | Consulting | Conservation

Appendix B

Wetlands Map

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U.S. Fish and Wildlife Service

National Wetlands Inventory

Dec 11, 2011

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

Appendix C

Flood Insurance Map

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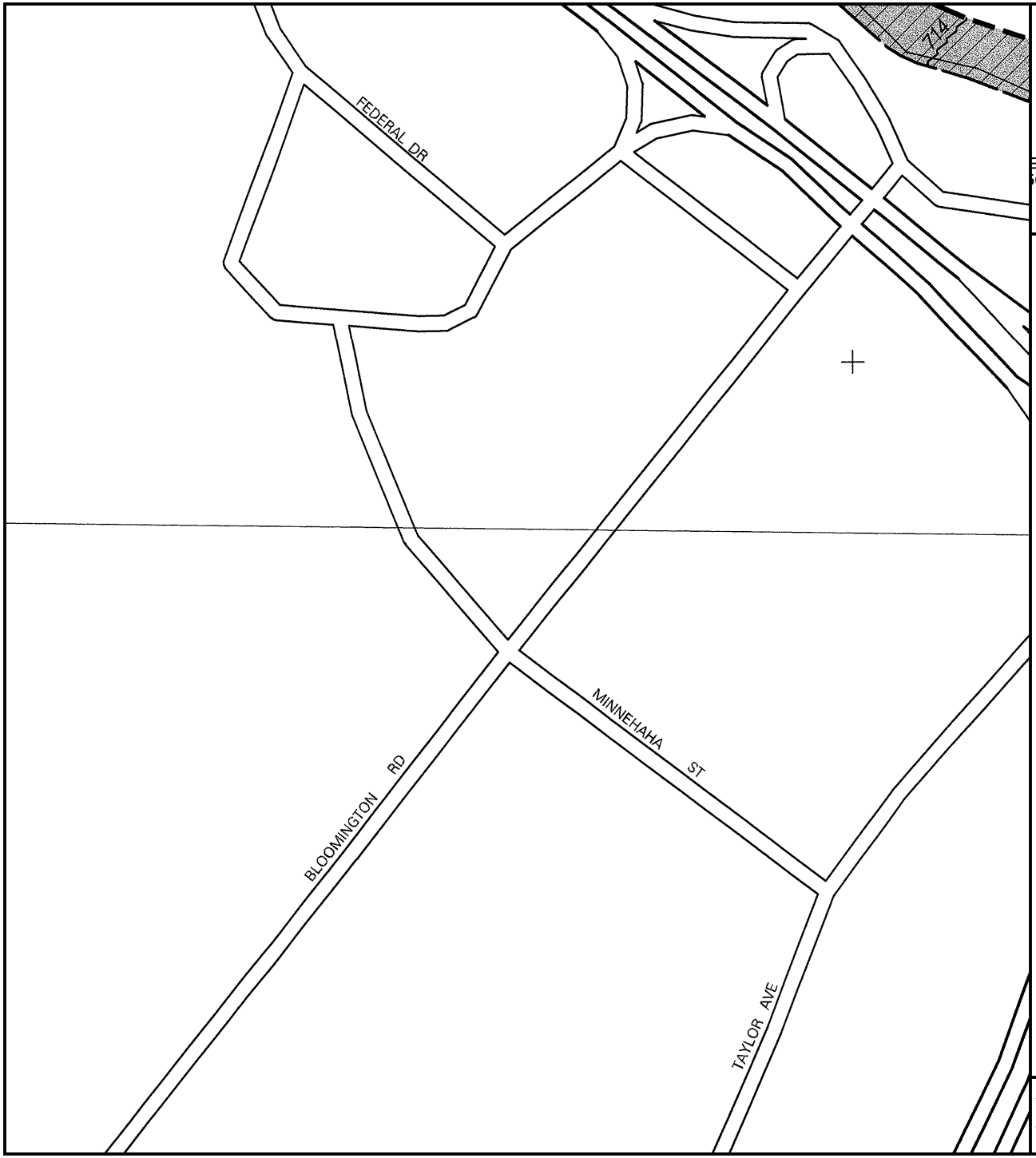

MAP SCALE 1" = 500'

250 0 500 1000 FEET

50 0 150 300 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0389E

FIRM

FLOOD INSURANCE RATE MAP

HENNEPIN COUNTY, MINNESOTA

(ALL JURISDICTIONS)

PANEL 389 OF 479

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MINNEAPOLIS, CITY OF	270172	0389	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
27053C0389E

EFFECTIVE DATE
SEPTEMBER 2, 2004

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Appendix D

Miscellaneous

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Fort Snelling West District - Historical Context Study and Development Guidelines

Prepared by Miller Dunwiddie Architecture and Hess, Roise and Company

April 2010

**This project has been funded in part by the State of Minnesota
from the Arts and Cultural Heritage Fund through the Minnesota Historical Society
and with support from Hennepin County.**

Fort Snelling West District - Historical Context Study and Development Guidelines

Prepared for

Hennepin County

Prepared by

Miller Dunwiddie Architecture
Hess, Roise and Company

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Dan Cornejo: Cornejo Consulting
Michael Schroeder: LHB, Corp.
Tom Lincoln: Kimley-Horn and Associates, Inc.

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Appendix II: Building Parcel Area, Coverage and Development Potential
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Appendix III: West District Reuse Study – Building Summary spreadsheet

Appendix IV: Hennepin County Memo dated March 10, 2010

Appendix V: Secretary of the Interior's Standards

Preface

With the Fort Snelling Upper Post lying entirely within unincorporated Hennepin County, the County in 2006 updated the 1998 Fort Snelling State Park "Upper Bluff" Reuse Study as part of its Fort Snelling Base Relocation and Alignment Closure (BRAC) Grant. This work led Hennepin County to begin building stabilization efforts in partnership with the Minnesota Department of Natural Resources using Hennepin County Sentence to Serve (STS) Crews. In 2006 Hennepin County received a National Park Service *Save America's Treasures* (SAT) Grant to continue these building stabilization efforts, again partnering with the Minnesota Department of Natural Resources and Hennepin County STS crews. In 2007 Hennepin County received a National Trust for Historic Preservation *Johanna Favrot Grant* to study open space and landscape issues at the Upper Post. In 2008 and again in 2010, Hennepin County received allocations of $500,000 and $1.2 million, respectively, from the Minnesota Legislature to continue and expand stabilization efforts on the Upper Post.

This report has been financed in part with funds provided by the State of Minnesota from the Arts and Cultural Heritage Fund through the Minnesota Historical Society. Hennepin County wishes to thank the Society for the grant, which enabled us to conduct a historical context survey of the interiors of the 17 extant buildings in the portion of the Fort Snelling West District that is within the National Register and State Historic Districts. This area is currently under review as part of a Hiawatha LRT Fort Snelling Station Area Plan, funded by a Federal Transportation Grant, which did not include funding for an interior survey.

Hennepin County would also like to thank the property owners in the West District for their assistance and input for this report, in particular: Steve Tharaldson of the US Department of Veterans Affairs Minneapolis Medical Center, Judd Reitkerk of the Minneapolis Park and Recreation Board, and John Andrews of the Northern Star Council of the Boy Scouts of America, and their staffs.

The interior context survey is an important supplement to the overall Historical Context Study of the Station Area Plan to inform reviewers, planners, and future developers of the historic nature of the fort's former Quartermaster, Artillery, and Cavalry areas. This report is a critical step toward a land use plan to guide the redevelopment and reuse process.

The efforts at the site are growing in momentum, and the Minnesota Historical Society has allowed that momentum to continue and move toward implementation.

Patrick R. Connoy
Senior Administrative Manager
Hennepin County

Introduction

Study Area

This Historical Context Study evaluates the area of Fort Snelling west of Bloomington Road. It focuses on a portion of Fort Snelling that is listed on the National Register of Historic Places and also designated as a State Historic District. For the purposes of this study, the area is being referred to as the West District, which is not an historic name from its use by the Army. The West District was historically the support area of the fort and currently houses a mix of historic and non-historic buildings, open space, and parking lots.

This study also supplements a Johanna Favrot Grant-funded study of the adjacent National Historic Landmark Upper Post completed in 2008 and entitled, "Fort Snelling Upper Post Open Space & Landscape Development Guidelines." The development guideline graphics from that study have been updated to coordinate with this report and are included, where appropriate, herein.

Property Ownership & Historic District Boundaries

Like the adjacent Fort Snelling Upper Post and nearby Historic Fort Snelling, the Period of Significance for the study area extends from 1819, when the Historic Fort was first built on the bluff overlooking the Minnesota and Mississippi Rivers, to 1946, when the property ceased being an active Army post. Some of the sites in the West District have remained in Federal ownership since then and some have been transferred to others.

The property owners in the West District study area are the US Department of Veterans Affairs (VA) Minneapolis Medical Center, the Minneapolis Park and Recreation Board (MPRB), the Northern Star Council of the Boy Scouts of America (BSA), and the US Navy Reserve. Two historic buildings (#237 and #239) that are included in this study are located outside the West District and the National Register and State Historic District boundaries. Both are on land owned by the VA that is leased by the Metropolitan Council. The GSA, MNDOT and Metro Transit also own or lease land west of the historic districts and are not included in this historical context study. See the map Fort Snelling Area Property Ownership for more information on property ownership.

The exact boundaries for both the National Register Historic District and the State Historic District are unclear and, as previously indicated, Buildings 237 and 239 are outside of them. In addition, both the Upper and Lower Posts are National Historic Landmarks; but the West District, which provided support to those areas, does not have landmark status. As development planning continues for the Fort Snelling area, the historic district boundaries should be re-studied to be clearly and legally defined, to include Buildings 237 and 239 and possibly exclude areas that have been greatly altered and don't maintain their historic integrity, and to incorporate the West District, if appropriate, within the Landmark Historic District.

Study Purpose

This study is intended to add to past studies of Fort Snelling and contribute to a Hiawatha LRT Fort Snelling Station Area Plan being prepared simultaneously for Hennepin County by a consulting team led by Dan Cornejo and including LHB Architects and Planners and Kimley-Horn Associates. That report is studying the development potential for the larger Fort Snelling area. It is assumed that the Station Area Plan will encourage that the historic buildings at Fort Snelling be reused so that they can be saved for future generations and that appropriate new development also be encouraged to take place within the Fort Snelling area so that it once again becomes active and viable. This study strongly supports that.

Fort Snelling is an unincorporated area of Hennepin County and, as such, has no underlying governmental zoning controls. This report, like the Favrot Grant-funded report noted earlier, is therefore intended to be a substitute for a zoning ordinance, planning guidelines, or similar documents. Its purpose is to provide historical preservation, restoration, rehabilitation, and development guidelines and information for the West District so that developers interested in buildings or sites there understand the opportunities that exist as well as the parameters that will govern the work. This study, like a zoning or planning document, is a framework for development that doesn't specify exactly what use should go where or what specific buildings should look like. It is designed to provide flexibility in its interpretation.

This report also identifies the contributing West District historic buildings, open spaces, and landscapes that should be retained, as well as potential areas for new development. It specifically addresses where new development could take place and the siting, massing, density, and other characteristics of such new development. It is important to note that this report is not meant to be an in-depth scholarly study. Rather, it is intended to provide an overview of the importance of the historic West District of Fort Snelling. As redevelopment ideas are brought forward, additional research will likely be needed by proposers to supplement, support, and otherwise inform their specific proposals.

Regulatory & Code Reviews

Ultimately, any new development or rehabilitation in the West District will be judged and interpreted against the National Park Service (NPS) Secretary of the Interior's Standards for Rehabilitation, the overarching document upon which the guidelines in this study were developed. The procedure under which development proposals will be reviewed will be an NPS Federal Section 106 review process and, depending on the proposed development, a Historic Tax Credit review.

The guidelines contained in this study will be applied within that review structure, which will be led by the State Historic Preservation Office (SHPO) of the Minnesota Historical Society. NPS representatives may also take part if circumstances arise that warrant their involvement. Because of that, the study team included current SHPO and NPS representatives who have participated throughout the process. It is therefore assumed that, because of their involvement, the guidelines are a reasonable interpretation of the Standards at the time they were written. Also, while the guidelines are designed to address many questions that may arise, this report also provides direction for securing more detailed information from the Technical Preservation Services Division of the U.S. Department of the Interior and valuable reference information through SHPO.

As stated before, Fort Snelling has no underlying governmental zoning controls and, likewise, there is no Building Code or Permit Review authority specific to the area. Construction work at the Upper Post is reviewed by State of Minnesota Code Officials because it is State property. Recent construction at the Boy Scout's Building 201 was also reviewed by State Code Officials because of the lack of other authority. It should therefore be assumed that, unless a new governmental structure is created at Fort Snelling that also designates Building Code and Permit Review to another entity, such reviews will be done by the State of Minnesota Building Code Officials.

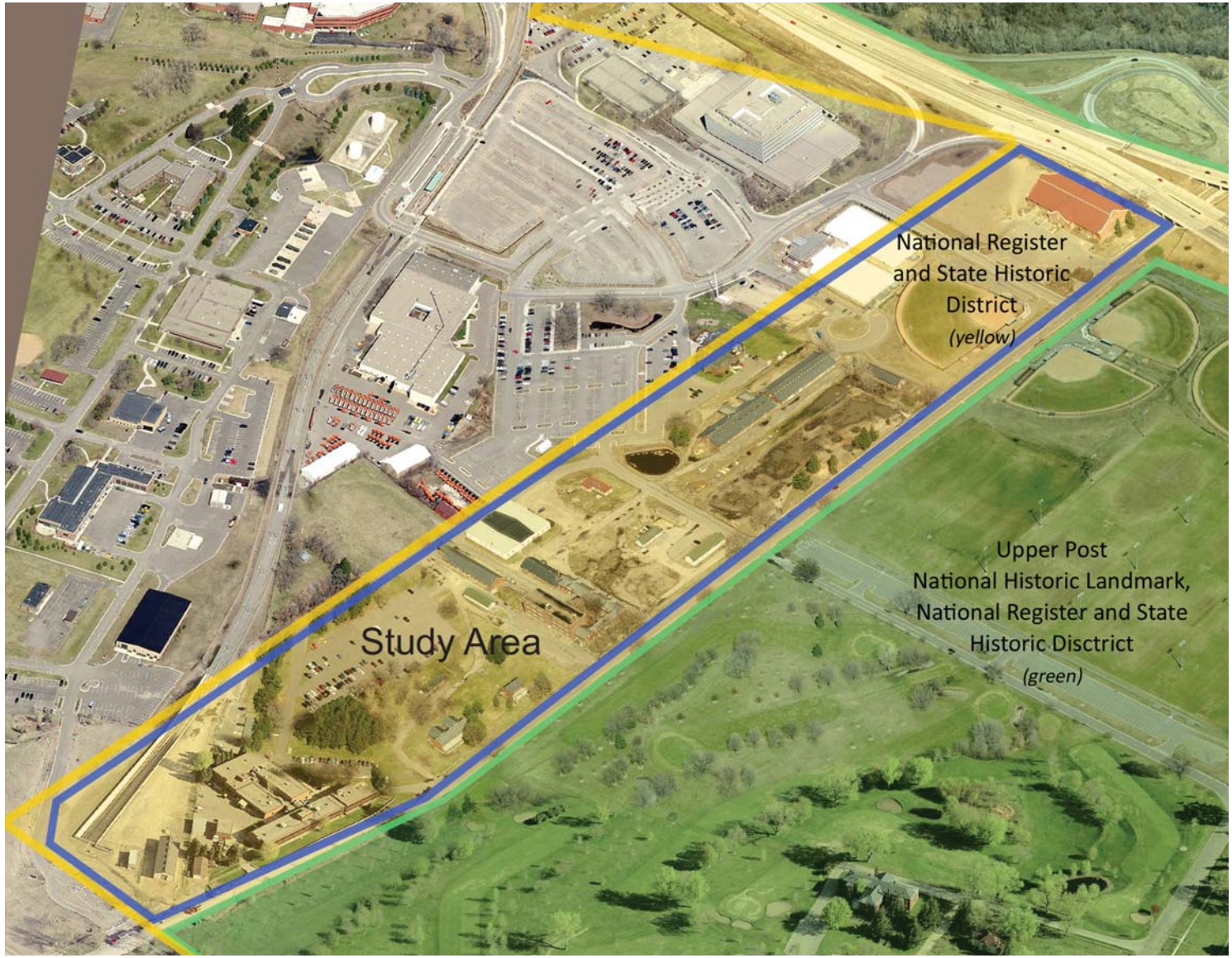
No matter who does the Code and Permit Reviews, the Minnesota State Building Code will apply to construction work at the West District. Under the Code, historic buildings have some latitude when conforming to some Building Code requirements, such as accessibility. The Code Officials identified to review a specific project should be consulted early to determine to what extent this may apply.

The Secretary of the Interior's Standards for Rehabilitation

The guidelines and information in this report have been prepared to be in accordance to the Secretary of the Interior's Standards for Rehabilitation as interpreted by the study team. The Standards are ten basic principles created to help preserve the distinctive character of a historic building and its site, while allowing for reasonable changes to meet new needs. The Standards apply to historic buildings of all periods, styles, types, materials, and sizes. They apply to both the exterior and the interior of historic buildings, and also encompass related landscape features and the building's site and environment and attached, adjacent, or related new construction. They are intended to be applied to projects in a reasonable manner, taking into consideration economic and technical feasibility. For information, they are listed in Appendix V.

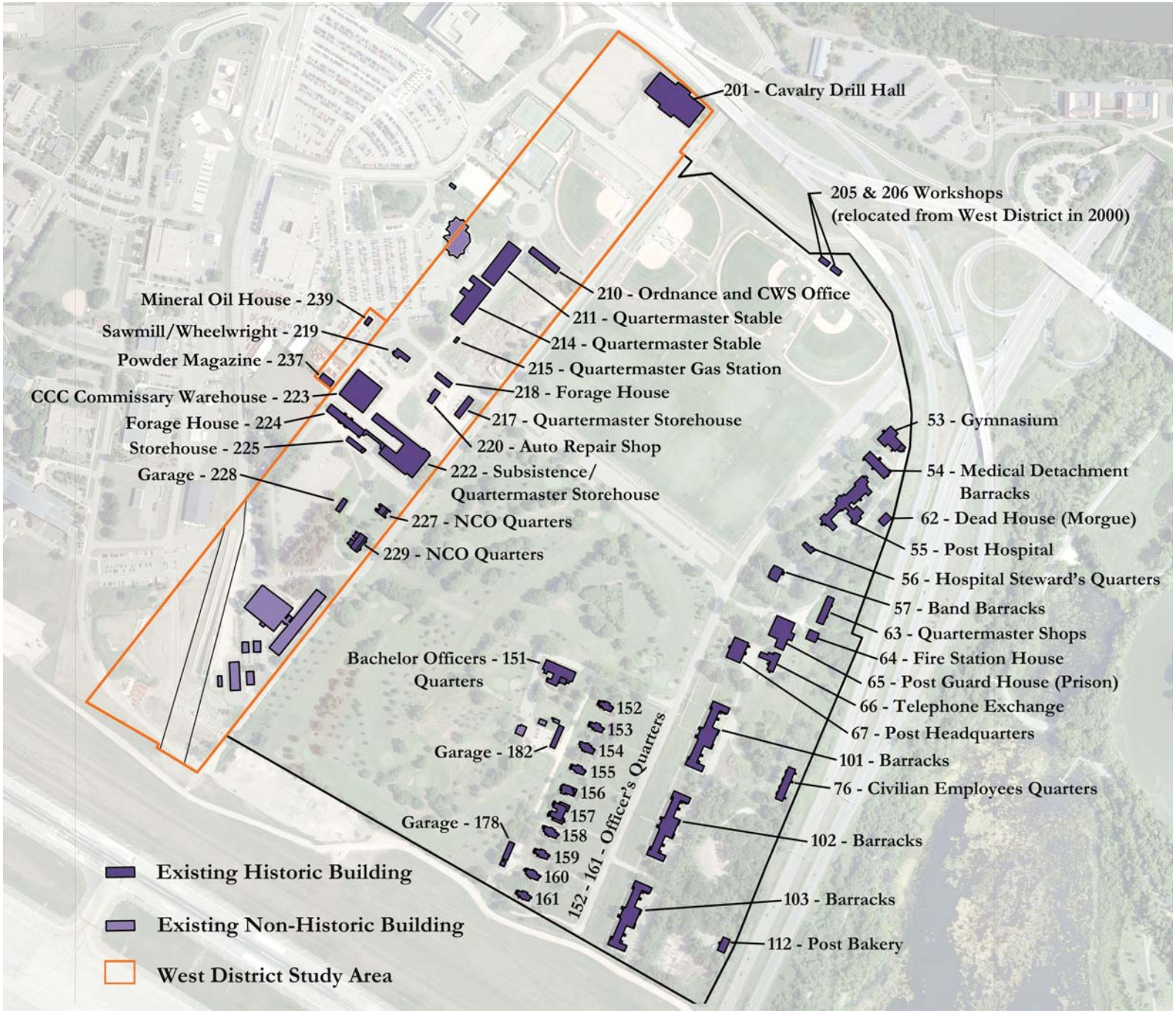
The Standards will be subject to interpretation by reviewers on a case-by-case basis as appropriate to specific development proposals in the West District. Developers are strongly encouraged to meet early in the planning process with SHPO staff to discuss their ideas and see how the Standards are being interpreted at that time and how they may apply to the specific proposal.

Study Area Map

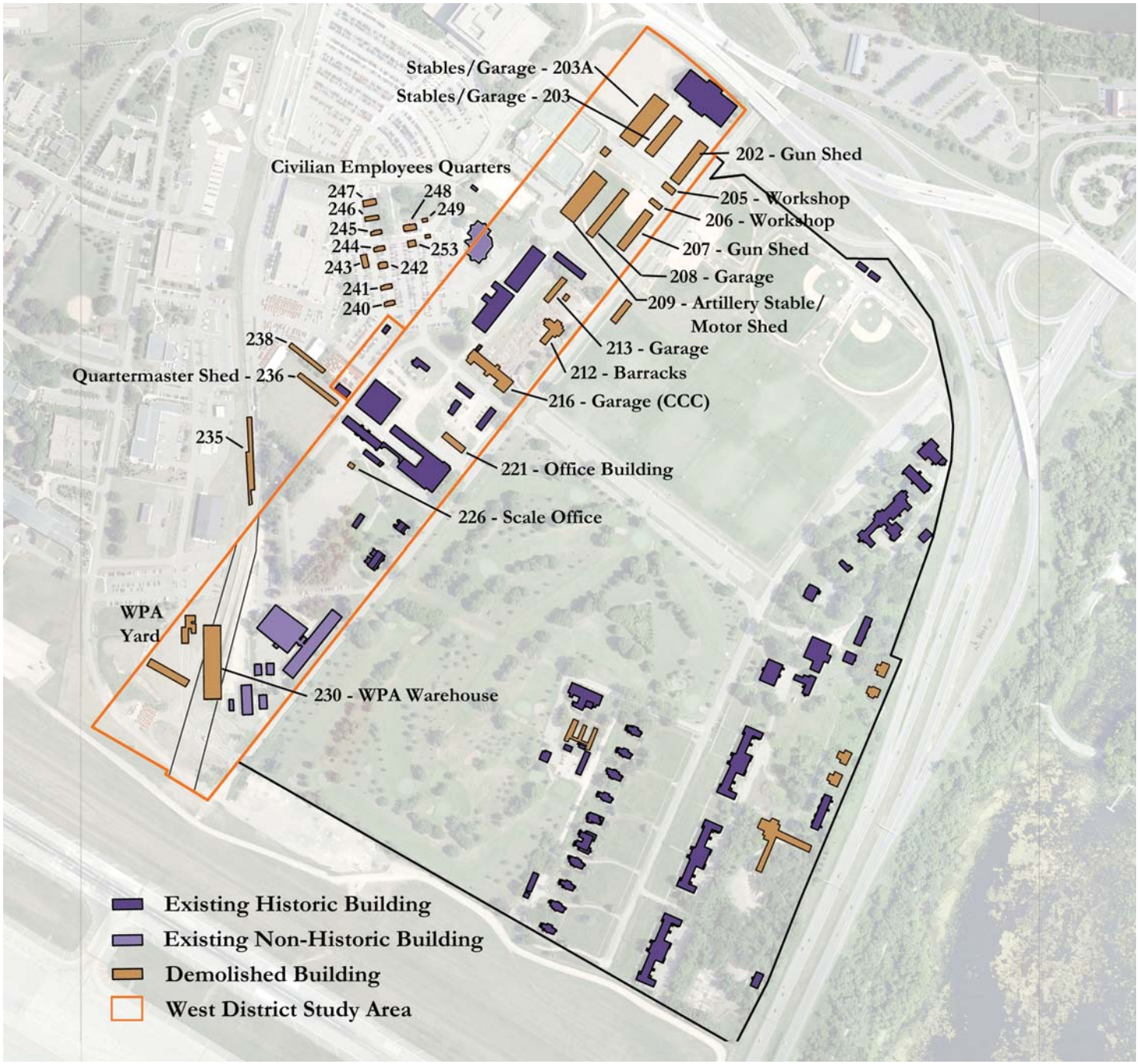


Fort Snelling Area Property Ownership Map

Existing Building Identification Map



Demolished Building Identification Map



Historical Context Study

Introduction

Fort Snelling is often called the "Birthplace of Minnesota", but also encompasses an area sacred to the Mdewakanton (Dakota) tribes. The fort, built between 1820 and the 1940s, served at various times as an Army outpost during settlement of the frontier; a Civil War era fort; headquarters for the Department of the Dakota; and as training and induction facilities during the Spanish-American War, Mexican Expedition, and World Wars I and II. Between the world wars, its amenities earned it the sobriquet "Country Club of the Army." In 1946, the fort was decommissioned and turned over to the VA, and in the 1970s it was transferred to the State of Minnesota. The restored 1820s fort, sometimes referred to as the Lower Post, has been a living history museum operated by the MN Historical Society for 30 years. The Upper Post area is currently under utilized, but its 26 buildings have been mothballed awaiting future reuse.

The Historical Context Study summarizes the history of the site, the historic character of the West District, as well as providing specific information about each building. Historic zones are established based on the historic use of the site, their coherence of scale, period of construction, and circulation. The Historic Context Study is divided into the following five sections:

- Historical Context – Upper Post of Fort Snelling
- Historic Zones
- Historic Materials and Massing
- Fort Snelling Upper Post: Properties West of Bloomington
- Fort Snelling West District Interior Conditions

Much of the information in the "Historic Materials and Massing" section was based on "Design Guidelines For Minneapolis Park and Recreation Board Development at Fort Snelling Including Parade Ground, Quartermaster Area, Artillery Complex, and Cavalry Drill Hall,*" April 20, 1999; Prepared for the Minneapolis Park and Recreation Board by Charlene K. Roise; Hess, Roise and Company.*

Historical Context - Upper Post of Fort Snelling

Upper Post of Fort Snelling

Construction of Fort Snelling, originally known as Fort Saint Anthony, was begun in 1819. The fort's first buildings were situated on a bluff overlooking the junction of the Mississippi and Minnesota Rivers. This area would later be known as Old Fort Snelling or the Lower Post. The fort's original purpose was "to control the principle avenues of communication, provide support for the Indian agency," quell conflicts among local Indian tribes, and deter white settlement in Indian territories. When the original fort was completed, it was surrounded by four stone walls.[1]

By the mid-nineteenth century, the American frontier had moved well beyond the Mississippi River and Fort Snelling became a garrison where troops gathered to embark to other locations. "As the population of Saint Paul and Minneapolis grew and settlers flocked to the western prairies, the fort's role continued to diminish. In 1856, Secretary of War Jefferson Davis withdrew the garrison." The following year, Fort Snelling, estimated at roughly 8,000 acres, was sold to entrepreneur Franklin Steele and a group of investors for $90,000. Steele hoped to turn the fort into a town site. Steele surveyed the land and platted the City of Fort Snelling, which had it been built, would have obliterated the sites of both the Upper and Lower Posts of the fort. Although Steele failed to make the scheduled payments, he managed to retain possession of the property for some time.[2]

Once the Civil War began in 1861, the fort was commandeered by the military. When the war ended four years later, Steele's hopes for a town at the fort had vanished, but he demanded either the return of his investment or legal title to the land. In 1868, Steele filed a claim of $162,000 against the government for its use of the fort during the Civil War, hoping that this "back rent" would offset the unpaid balance still owed from the 1857 sale. This process dragged on for several years. Finally in 1873, the government reached a compromise with Steele and he was given a deed to 6,395 acres of land that were formerly part of the Fort Snelling Military Reserve.[3]

The 1860s witnessed the first major expansion of facilities beyond the walls of the original fort to house troops for the Indian conflicts in Minnesota and the nation's Civil War. Barracks, stables, and other buildings were erected west of the fort along the bluffs overlooking the Mississippi. Following the Civil War, the United States spent relatively little on the military, as it repaid the heavy debts incurred by that conflict. Still, "Army leaders began planning a reorganization to consolidate an inefficient collection of forts, cobbled together overtime, into a rational system of high-quality

1 Robert Alan Clouse and Elizabeth Knudson Steiner, "All that Remains: A Study of Historic Structures at Fort Snelling, Minnesota," prepared for the Minnesota Department of Natural Resources, Division of Parks and Recreation, 1998, vi.

2 Charlene Roise, "Fort Snelling Buildings 17, 18, 22, and 30: Their Evolution and Context," prepared for the Minnesota Historical Society, February 2008, 4; "Fort Snelling To Be Sold," *Saint Paul Daily Minnesotian*, April 3, 1857; "The Fort Snelling Reserve and the Secretary of War," *New York Times*, August 25, 1857; Thomas Moncure, "Map of the City of Fort Snelling, Minnesota," 1857, MHS Collections. The *Minnesotian* estimated that the fort encompassed about 8,000 acres, worth fifty dollars per acre.

3 William Watts Folwell, *A History of Minnesota,* rev. ed. (Saint Paul: Minnesota Historical Society, 1961), 1:514-515. See also *Catalogue of 6,300 Acres of Land to be Sold at Public Auction, at Minne-ha-ha Falls. 1st and 2nd Days of July*, printed list, available at MHS.

garrisons."[4]

Beginning in the late 1870s, Fort Snelling's Upper Post was developed to the south of the original fort along the Minnesota River bluffs. The impetus for this expansion was the move of the headquarters for the Department of the Dakota from Saint Paul to the fort. The department, which had been established in 1866, oversaw all military activities and forts within Minnesota and the territories of Dakota and Montana. In June 1878, one newspaper noted, "The west walls of Fort Snelling are being pulled down, it is said with a view to the enlargement of the fort to an eight company post. But the changes that are being made may probably be attributed to an order which locates the headquarters of the Department of the Dakota at Fort Snelling instead of St. Paul." The reporter speculated that government hoped to save money housing its staff at the fort instead of paying expensive city rents. During 1878, a Minneapolis newspaper periodically noted the building progress: "Nine new buildings are to be constructed at Fort Snelling, to be partially occupied by officers and partially by troops"; and "The Seventh cavalry is to arrive at Fort Snelling some time during the month, and fifty carpenters and ten stone masons are wanted to push the work on the buildings in course of erection."[5]

Although many buildings erected during this period have been demolished, a number survive. Building 22, originally known as the Ordinance Storehouse, was erected west of the original fort. If quartermaster records provide a correct construction date of 1878, this is the only building at the Lower Post that represents this period of growth. Ashlar blocks for this building and others in the newly established Upper Post were presumably mined from the walls of the old fort, which disappeared around this time.[6]

The most significant development of this era, however, is the Upper Post. Funding for the headquarters for the Department of the Dakota was appropriated in 1880. The "clock tower" building represents a clear transition to the Upper Post. Construction of the Second Empire style brick building (Building 67; C-1), a landmark on Taylor Avenue, was begun sometime in 1880 and largely completed the following year. During this same period, a new Officers' Row, consisting of single-family brick residences, was erected along Taylor Avenue.[7]

By 1885, the walls surrounding the old fort had been demolished and only two towers remained in place. "All in all, the Lower Post had become a backwater. The army considered it a separate administrative unit —and of a distinctly lower rank than the Department of the Dakota." The location of the quartermaster's facilities illustrates the move from the old fort to the Upper Post. An 1878 map locates one quartermaster facility near the fort's guardhouse along with another quartermaster storehouse to the west, well beyond the fort walls, adjacent to the civilian employees quarters.

4 Roise, "Fort Snelling Buildings 17, 18, 22, and 30," 4, 6.

5 "The Department of Dakota—Arrival of Gen. Terry at St. Paul," *New York Times*, November 12, 1866; "An Unreasonable Order," *Minneapolis Tribune*, June 28, 1878; "Military Headquarters," *Minneapolis Tribune*, July 29, 1878; *Minneapolis Tribune*, June 25, 1878; "Gossip About Town," *Minneapolis Tribune*, September 12, 1878; "Gossip About Town," *Minneapolis Tribune*, September 23, 1878.

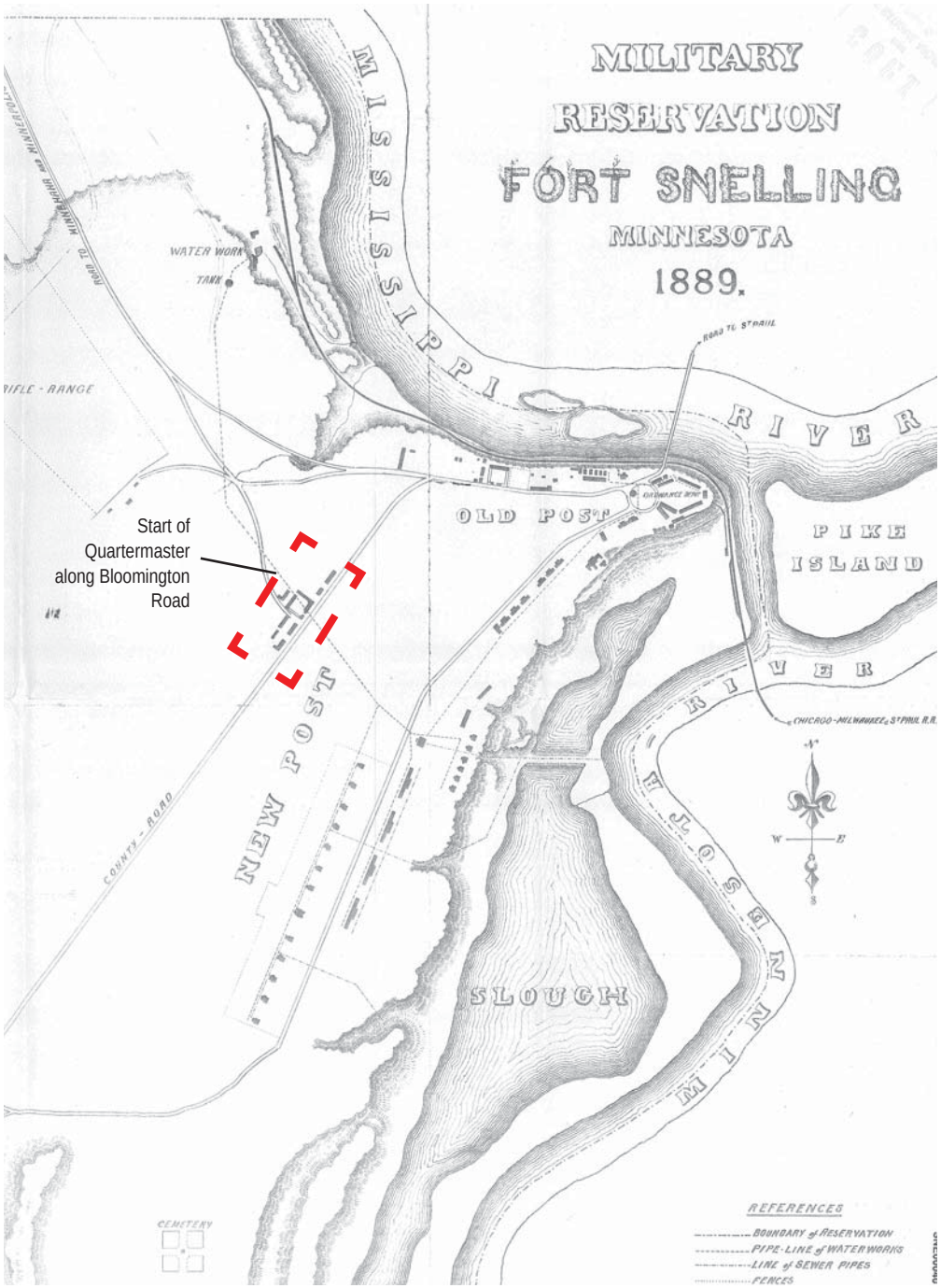
6 Roise, "Fort Snelling's Buildings 17, 18, 22, and 30," 6-7.

7 Clouse, "All that Remains," 89, 91, 93, 95, 97.

Five years later, a map shows these quartermaster buildings are gone and a new quartermaster's complex is further west, beyond an old cemetery. (The Minnesota Historical Society's Visitor Center is in the general vicinity of the cemetery; the bodies that had been interred there were moved to another location in the early twentieth century.) Other quartermaster buildings are along Bloomington Road at the intersection of Minnehaha Avenue. Quartermaster records indicate that a wood-frame storehouse, Building 217 (F-7), was erected at the corner of Minnehaha and Bloomington Road in 1879-1880. It seems unlikely that existing the building is from that date; if it is, it has been altered over time. In any event, the quartermaster definitely had facilities in that vicinity by the early 1880s. Other early structures include a forage house (Building 218/F-11), sawmill (Building 219/F-10), and mineral oil house (Building 239/F-15), all of stone.[8]

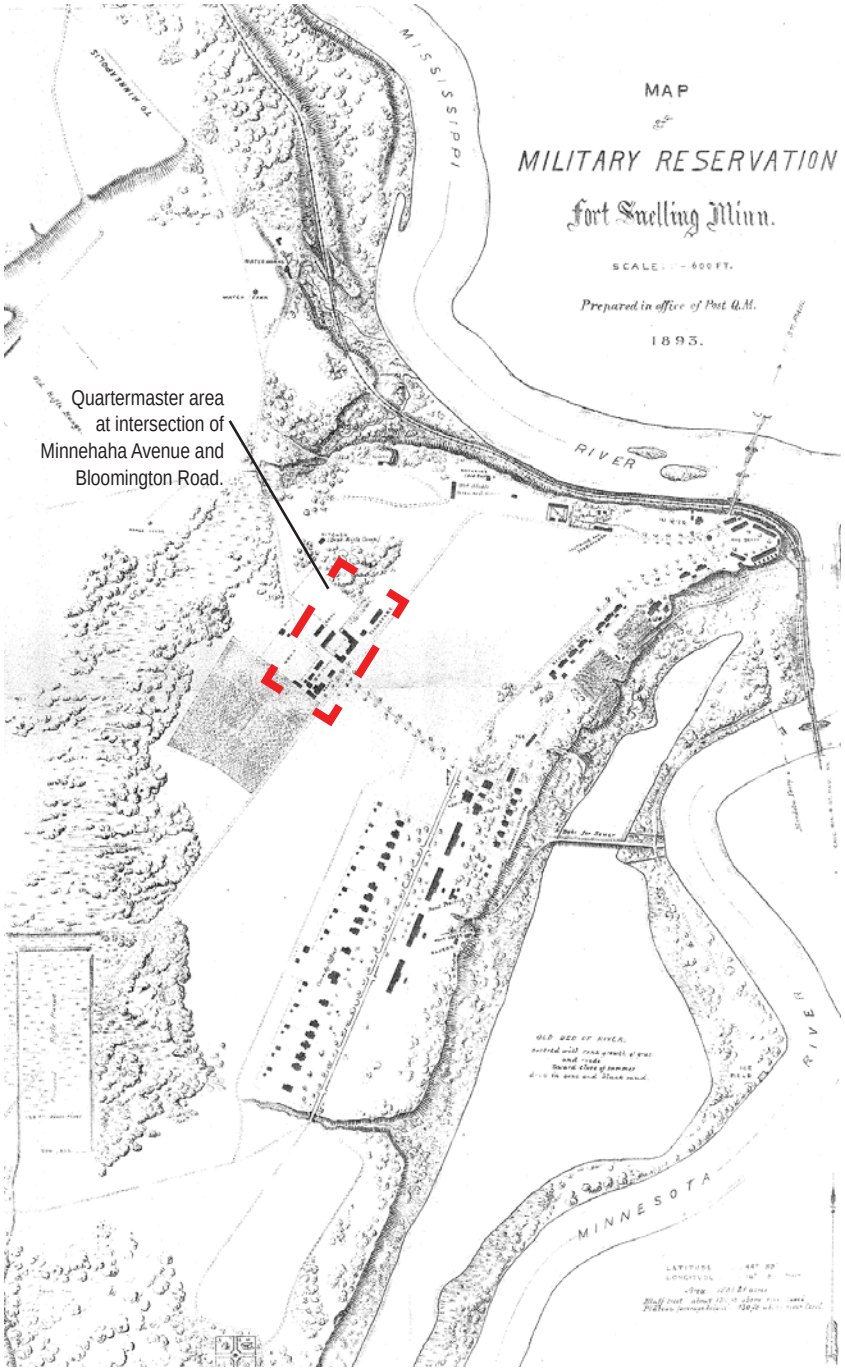
See the maps, Military Reservation Fort Snelling Minnesota, 1889, and Map of Military Reservation Fort Snelling Minn., 1893, for development of the new Quartermaster area west of the Lower Fort near the intersection of Bloomington Road and Minnehaha Avenue.

The Upper Post saw another expansion at the beginning of the twentieth century. During this period, the entire army was reorganized under the leadership of Secretary of War Elihu Root, who adopted a corporate model. His emphasis on efficiency resulted in the standardization of building plans, which had been introduced in the army in the 1860s but not used universally. The number and location of military posts was also under scrutiny, and Fort Snelling's future was in doubt. Saved by politics, the fort was ultimately expanded rather than closed.[9]



8 Roise, "Fort Snelling's Buildings 17, 18, 22, and 30," 7; "1878 Survey of Fort Snelling, drawn by Julius J. Durage, topographical assistant, Department of Dakota;" E. B. Summers, "Map of Fort Snelling Reservation, 1882;" "Map #1882-4," Plan View of Fort, E. B. Summers (Revised).

9 H. C. Steward, ed., *American Military History, The United States Army and the Forging of a Nation, 1775-1917* (Washington, D.C.: Center of Military History, 2005), 369-370; "Exceeds A Million," *Minneapolis Tribune*, August 16, 1903.



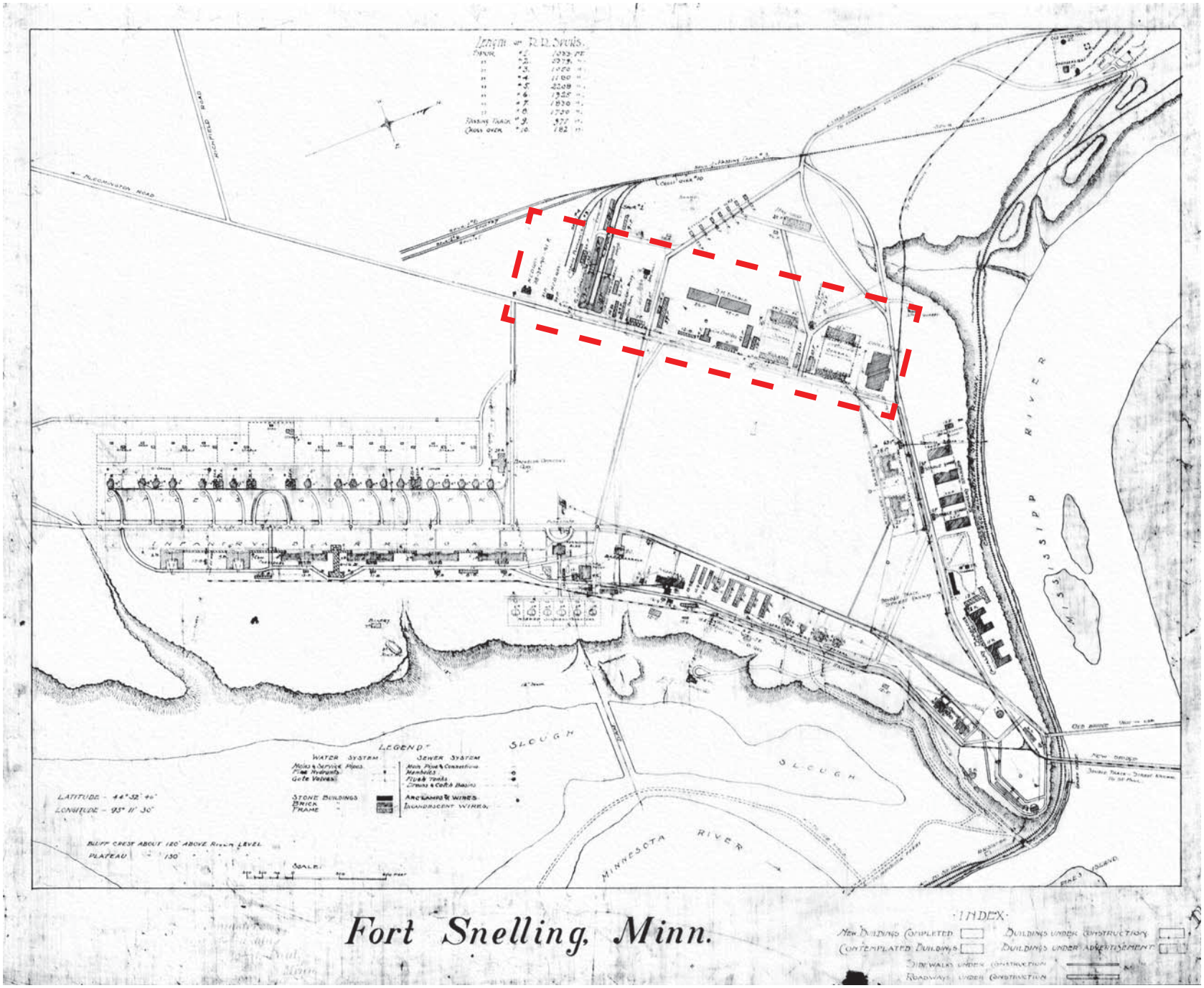
This brought cavalry and artillery units to the fort, which had been primarily an infantry post. New barracks, stables, and other buildings were erected north and west of the parade grounds to house these units. The upgrading of Highway 55 in the mid-twentieth century destroyed some of these buildings and severed most connections between the rest; subsequent demolition has removed more of these facilities. The most prominent survivor on the south side of the highway is Building 201 (F-42), the cavalry drill hall. Artillery stables, shops, and storehouses occupied the vacant land between the drill hall and Building 210.

More remains from another major component of the early twentieth-century expansion, the quartermaster's area. A larger fort needed more provisions, so improvements to the quartermaster's area were essential. Surviving examples from this era include a shops building (Building 210/F-43), two stables (Buildings 211/F-49 and 214/F-56), and storehouses (Building 222/F-14 and the original F-18), as well as two residences (Building 227/F-30 and F-31 and Building 229/F-38 through F-41). It was also during this period that a railroad spur was extended into the quartermaster area.

See the undated map, Fort Snelling Minn. for the arrival of the cavalry and infantry areas of the West District, as well as further development of the Quartermaster Area. This map shows Fort Snelling around 1917.

Yet another building campaign came in the late 1920s and the 1930s, in part because motorized vehicles usurped the role of horses for combat and transportation. An example of the impact of this change is illustrated in Building 211, which was erected as a stable for the quartermaster in 1909 and converted into a "tank and motor shed" housing forty-two vehicles in 1932. Some new buildings like the gas station (Building 215/F-57) and the Post Exchange oil and gas house (Building 220/F-58), both dating from 1932, also reflect the rise of motorized transportation. A deteriorating garage (Building T-228/F-45), which once had bays for ten cars, was moved here in 1920 from the cantonment that had been developed for World War I.

Work programs developed during the economic depression of the 1930s also shaped the quartermaster's area. A large WPA warehouse complex (Building 230; demolished) was west of Bloomington Road near where the light-rail tracks now run. The CCC commissary warehouse (Building 223/F-61), constructed in 1935, was cobbled together with an interesting collection of salvaged materials. WPA laborers replaced wood


Fort Snelling, Minn.
LEGEND
WATER SYSTEM
SEWER SYSTEM
STONE BUILDINGS
BRICK
FRAME
LATITUDE - 44° 52' 46"
LONGITUDE - 93° 11' 30"
BLUFF CREST ABOUT 120' ABOVE RIVER LEVEL
PLATEAU 130'
SCALE
SLOUGH
MINNESOTA RIVER
MISSISSIPPI RIVER
INDEX
NEW BUILDINGS COMPLETED
CONTEMPLATED BUILDINGS
BUILDINGS UNDER CONSTRUCTION
BUILDINGS UNDER ADVERTISEMENT
SIDEWALKS UNDER CONSTRUCTION
ROADWAYS UNDER CONSTRUCTION

porches on the two residences on Bloomington Road with brick porches on concrete foundations. A powder magazine was moved in behind Building 222 from an unknown location in 1931.[10]

World War II brought much activity to the fort, but no new construction in the quartermaster's area. The fort was decommissioned by the army in 1946, and the buildings have served a number of government and civilian uses since that time.

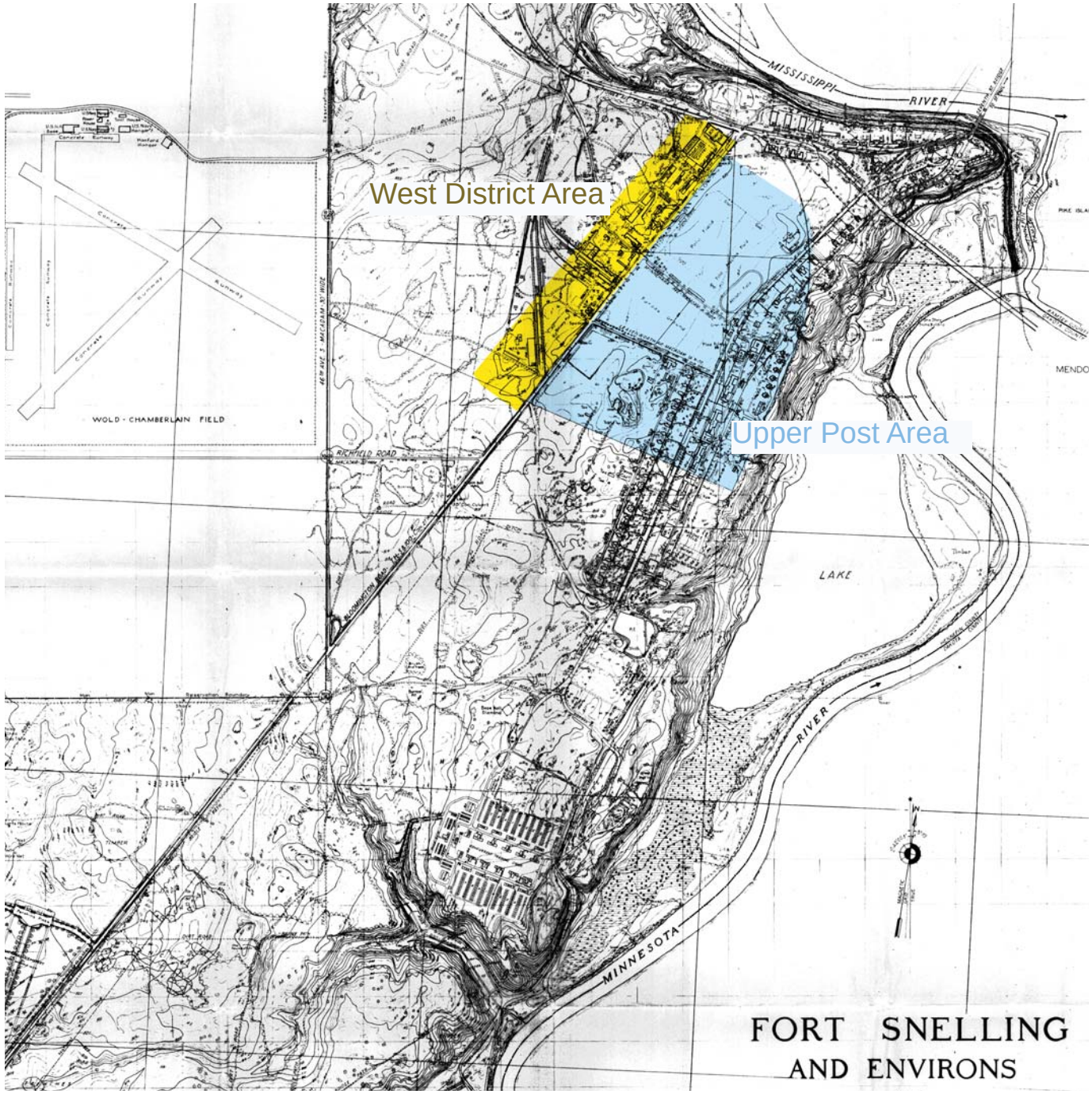
See the map, Fort Snelling and Environs, 1939, for a view of West District at the time that Fort Snelling was decommissioned.

See the 1939 map overlaying a current aerial for a reference for existing historic, demolished, and non-historic buildings in the West District.

See the chronological timeline, Fort Snelling West of Bloomington Road: A Timeline, in Appendix I for additional detailed information about the history of the West District.

10 Roise, "Fort Snelling's Buildings 17, 18, 22, and 30," 36.

1939 Fort Snelling Upper Post and West District Map



1939 Fort Snelling Upper Post Map

1939 map overlay

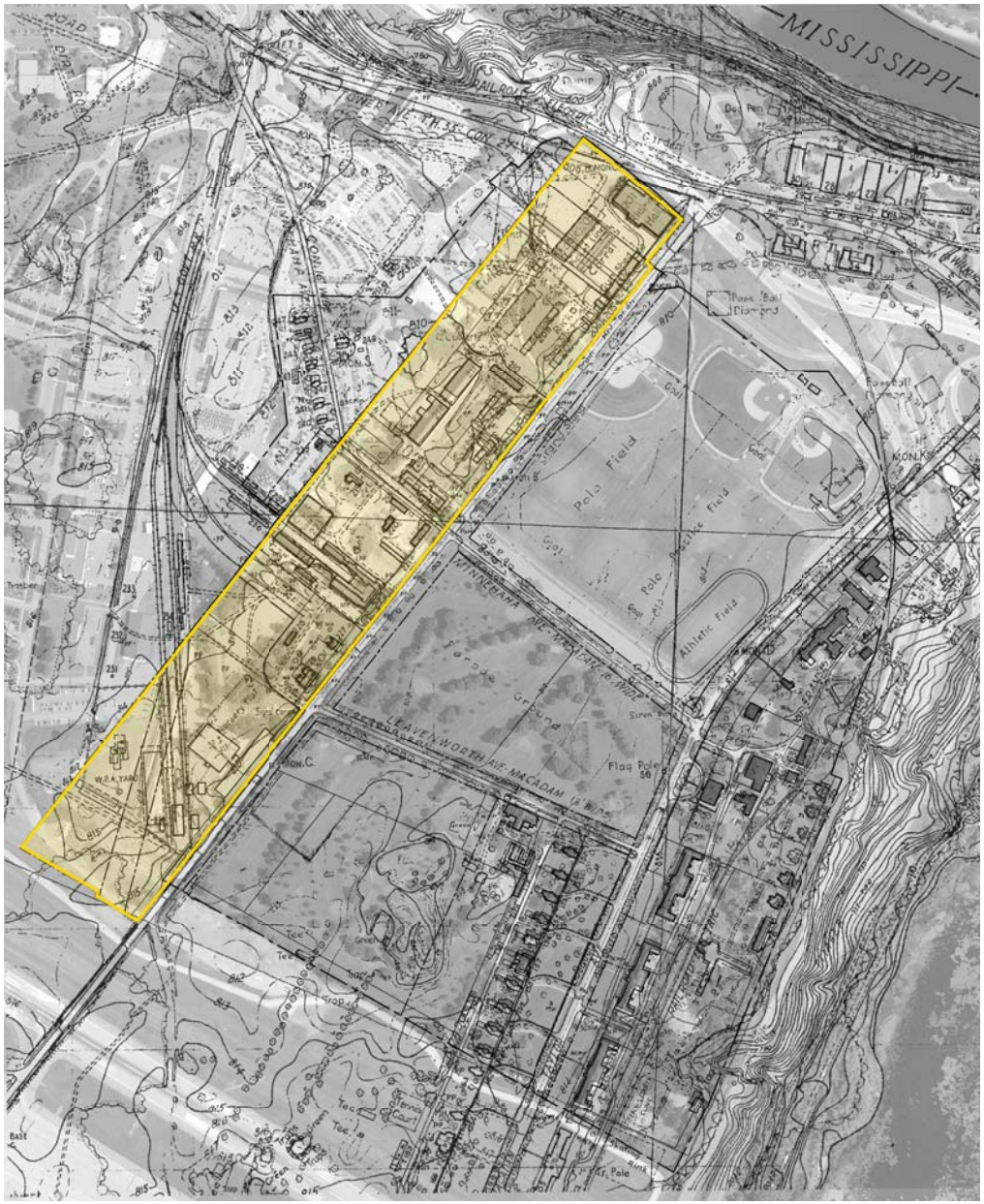
National Register and State Historic District - Study Area

LRT line

Minnehaha Avenue (past and present)

miller dunwiddie
ARCHITECTURE

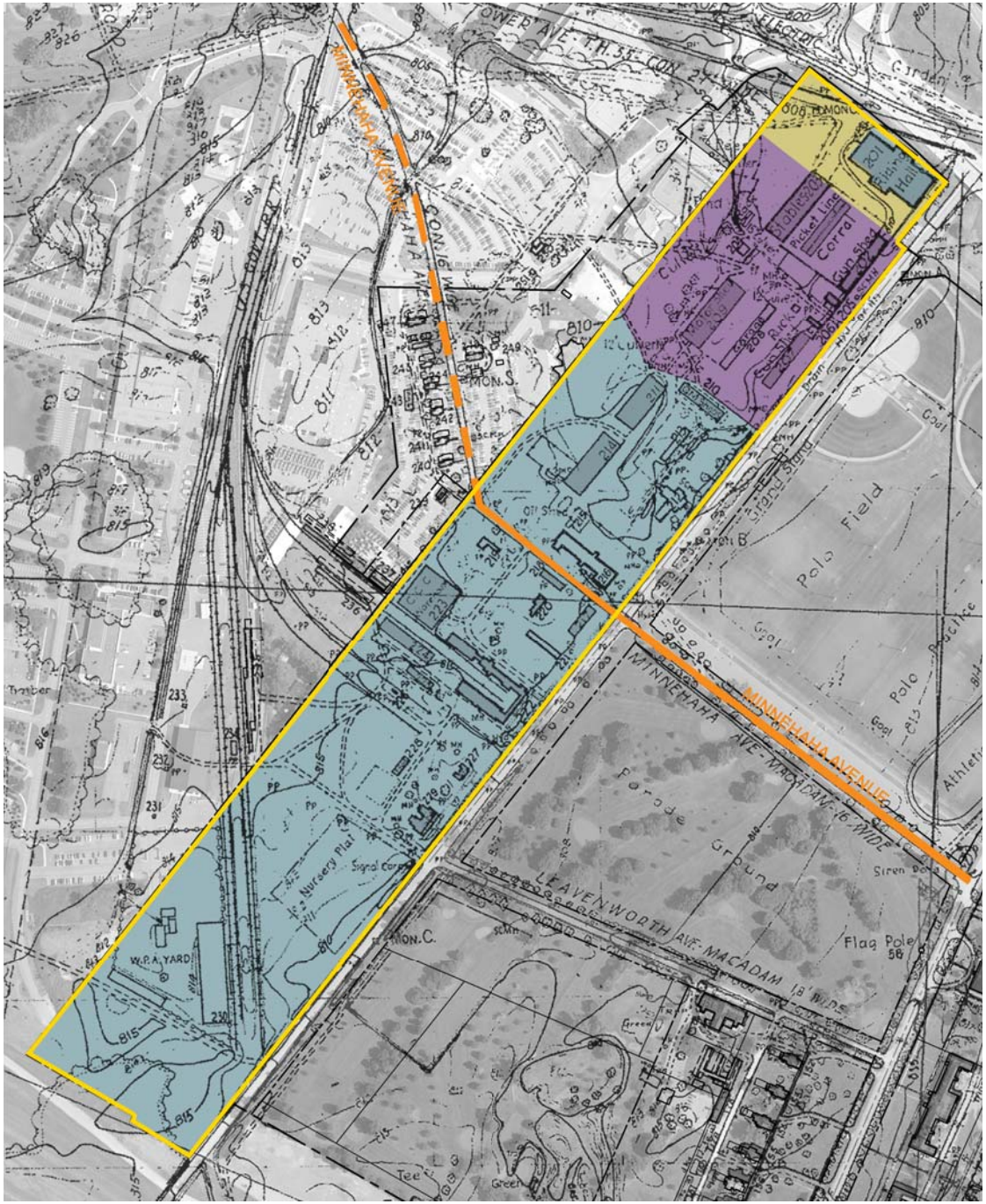
Historic Zones



The study area includes several zones that were historically distinguished by use and building type: quartermaster, artillery, and cavalry. The topography throughout the area is flat and devoid of water features, so these factors did not influence development patterns. Instead, those patterns generally responded to roads—Bloomington Road and Minnehaha Avenue—that were in place prior to building construction.

Extant buildings are generally of masonry construction—locally quarried limestone for the earlier structures and brick for those dating from the late nineteenth and early twentieth centuries, with concrete block appearing in the 1930s. The few wood-frame structures are of varying vintages, and at least one was moved in from another location. A large group of wood-frame structures associated with artillery units has been demolished; two small brick structures from that complex have been relocated to the edge of the Polo Grounds. A powder magazine sheathed in corrugated metal was also originally elsewhere. The buildings are small in scale, most rising only one or two stories. The exception is a 1935 addition to Building 222, which replaced an earlier structure destroyed by fire. Rising three stories on a high basement, this building is also distinguished by its flat roof, which deviates from the gable roofs that appear on most other buildings.

In addition to the buildings, a few small objects are scattered around the area. Several concrete light standards survive, some with their original faceted lamps. The exposed aggregate of the concrete is typical of the 1920s. The function of a couple of posts is less obvious. One on the west side of Bloomington Road seems aligned with the former route of Leavenworth Avenue to the east. Perhaps the post was associated with a traffic control function. Some of the concrete sidewalks edging the road were likely products of federal relief projects in the 1930s.



LEGEND

HISTORIC ZONES

- QUARTERMASTER ZONE
- ARTILLERY ZONE
- CAVALRY ZONE
- STUDY AREA
- 1939 SITE MAP OVERLAY
- MINNEHAHA AVENUE (PAST AND PRESENT)

Quartermaster Zone

The quartermaster was the first to establish a beachhead west of Bloomington Road, stimulated by the arrival of the Department of Dakota in the late 1870s. Quartermaster facilities soon flanked Minnehaha Avenue. Stables and a corral were on the north side of Minnehaha, and storehouses and other facilities, such as a sawmill, were to the south. The fort's early twentieth-century expansion upgraded and expanded the Quartermaster Zone. The stables were replaced by more modern facilities, but the same use continued. A limited amount of housing—two multifamily structures—was added, presumably for the convenience of those overseeing the quartermaster's operations. During the economic depression, this zone continued to supply activities at the fort and added federal relief programs, such as the Civilian Conservation Corps, to its scope. By this time, motorized transport had displaced horses, and buildings were adapted to serve this new function. Such changing needs, along with fires, tornadoes, routine maintenance, and other factors, resulted in some changes to buildings in this zone, but it still retains a sense of its early twentieth-century prime—far more than any other zone in this study.

Buildings: Most of the buildings changed names and uses and experienced some physical modification over time. For specific details, see the table, *Fort Snelling Upper Post: Properties West of Bloomington Road*, in the next section of this report. The buildings included in the Quartermaster Zone are:

- Building 210/F-43 (1907): Ordnance and Civil Works Service Office and Warehouse, Shops
- Building 211/F-49 (1909): Quartermaster Stable; Tank Park
- Building 214/F-56 (1910): Quartermaster Stable; Veterinary Hospital; Motor Repair Garage
- Building 215/F-57 (1932): Quartermaster Gas Station
- Building 217/F-7 (ca. 1915): Quartermaster Storehouse; Plumbing Shop
- Building 218/F-11 (1894): Forage House
- Building 219/F-10 (1895): Sawmill; Wheelwright and Other Shops
- Building 220/F-58 (1932): Post Exchange; Oil and Gas House; Auto Repair Shop
- Building 222/F-14, F-18, F-19 (1904/1914/1935): Subsistence/Quartermaster Storehouse
- Building 223/F-61 (1935): CCC Commissary Warehouse
- Building 224/F-16 (1902): Forage House; Shops and Warehouse
- Building 225/F-60 (1917): Storehouse
- Building 227/F-30, F-31 (1904): NCSO Quarters
- Building 228/T-228/F-45 (1917): Garage
- Building 229/F-38–F-41 (1907): NCO Quarters
- Building 237/F-2 (1904, 1931): Powder Magazine.
- Building 239/F-15 (1892): Mineral Oil House

Landscape: Before this area was occupied by the quartermaster, it held fields of crops tended by soldiers from the fort. A small remnant of that agricultural use was echoed in the 1930s by a "nursery plat" just south of Building 229. When the Quartermaster Zone was laid out, the arrangement was pragmatic, based on use. The buildings were aligned on a rectilinear grid, with the primary axes being Bloomington Road and Minnehaha Avenue. Other minor roads and paths generally paralleled these corridors. There were two main deviations from this pattern. Minnehaha was responsible for one, as it angled to the northwest at the west edge of the Quartermaster Zone. By the early twentieth century, it was lined by small wood-framed houses for civilian employees. These are no longer extant, and the road's path has been obliterated by a parking lot. The other deviation resulted from diagonal railroad spurs on the zone's southern edge. When the WPA established a warehouse complex along the spur line, paths fanned to it from the north. Today, a light-rail line follows close to the former alignment of the spur lines, the WPA warehouse complex has been demolished, and there is no trace of the radiating paths. A grove of pine trees in the vicinity appears to have been planted in the 1940s. The area was undeveloped and trees are not visible in a 1940 aerial, but by 1945 three distinct groves can be seen. The groves have thickened by 1953. By 1960, the grove closest to Bloomington Road appears to have thinned out, but the cluster nearest Building 229 is very dense. A 1969 aerial shows a building on part of the former Nursery Plat, but the grove nearest Building 229 remains. A small picnic area and sports field to the west of the grove appear to date from

after World War II.[1]

Artillery Zone

The area north of the Quartermaster Zone once held stables, gun sheds, and other utilitarian buildings erected for the artillery units that arrived at Fort Snelling in the early twentieth century.

Buildings: Two brick workshops (Buildings 205 and 206) were moved across Bloomington Road to the north end of the Polo Grounds. The other buildings were razed in the 1990s. A tennis center has been developed in this area in the past decade.

Landscape: The landscape today is not historic. It comprises vacant land, parking lots, and a relocated road.

Cavalry Zone

Like the Artillery Zone, the Cavalry Zone was created for new units that were assigned to Fort Snelling in the early twentieth century. The cavalry area was bifurcated by the expansion of Highway 55. Two barracks and one of four original stables survive on the north side, which is not part of this study.

Building: Only one structure remains on the south side of the highway:

- Building 201/F-42 (1907): Cavalry Drill Hall

Landscape: While the integrity of the drill hall is good, its setting has been compromised by the construction of roads and other modern developments. The relationship between the drill hall and the Polo Grounds is at least somewhat maintained.

1 Aerial photographs from Borchert Map Library, University of Minnesota.

Historic Materials and Massing

Materials and Massing: Introduction

Extant and demolished buildings in the West District fall into four basic types: one- to two-story brick structures (1894-1910), single-story stone structures (1890s), one- to two-story clapboard-sided wood-frame structures (ca. 1879-1917), and single-story concrete and concrete-block structures (1930s). Building types reflect a hierarchy of function. Brick is used for the buildings housing the most important activities: the main storehouse (222), drill hall (201), non-commissioned officers' quarters (227, 229), stables (211, 214), and shops (205, 206, 210, 218). Wood-frame buildings typically play a secondary and often more temporary role. Stone was a special-purpose material, used when a building's function had a high potential to cause fires. Finally, concrete was the material of choice in the 1930s, the area's last phase of construction.

In terms of both function and visual character, the early twentieth-century red-brick buildings dominate the area. Their understated Colonial Revival style should serve as the inspiration for the architectural form of major new construction northwest of Bloomington Road. The design of new ancillary structures could also be based on the red-brick buildings or could be influenced by the more modest wood-frame structures. Both structural types share a number of design elements—gable roofs, multiple-light double-hung sash windows, simple trim, rectangular forms— that should be considered for any new construction. Although slate or wood shingles may be prohibitively expensive or impractical, the color of modern roof materials should be related to slate (for brick buildings) or wood shingles (for wood-frame buildings).

One- to Two-Story Brick Buildings (1894 - 1910)

Walls of the early twentieth-century structures are red face brick. Brick walls of the 1894 forage house (218) are buff colored. Limestone ashlar foundations edge low to relatively high basements. Most of these buildings have gable roofs; in some cases, the original slate sheathing has been replaced by asphalt shingles. Building 201 had a tile roof, and Building 218 wood shingles. The gable roofs of the former barns (211, 214) are topped by monitors; the monitors originally held pairs of louvered shutters alternating with pairs of windows, perhaps casements. Parapet walls with a semicircular apex trim the gable ends of the drill hall (201).

The designs of these buildings are utilitarian, and presumably follow standard army plans. A few details hint at the influence of a popular early twentieth-century style, the Colonial Revival: the buildings fronting on Bloomington Road (205, 206, 222, 227, 229) have boxed eaves above a plain fascia, with returns on the gable ends. A fanlight pierces each gable end of the two-family non-commissioned officers' quarters (227). The Colonial Revival style was further expressed by the original colonnaded open porches of the quarters (212 [demolished], 227, 229), which were replaced by the current enclosed porches during the 1930s. A large addition to Building 222 also dates to the 1930s; while built of brick, its flat roof and streamlined design departs from the Colonial Revival spirit of the earlier structures.

Windows are mostly 6/6 or 8/8 wood sash. Sills are stone. Window and door lintels are segmental-arched or flat.

Single-Story Stone Buildings (1890's)

Stone, a durable but cumbersome building material, was used for two structures where the threat of fire was a major consideration. Building 239, dating from 1892, held the highly flammable oil that powered the post's lanterns, the major source of light before electricity was introduced. Building 219 was erected in 1895 as a sawmill and was later used as a wheelwright shop. The stone walls were not enough to prevent a fire in 1913, which partially demolished the structure; it was subsequently repaired.

The gable roof of Building 239 continues to be sheathed with corrugated metal as it has been since at least 1905. One window has been cut into each of the side walls, which were originally unbroken.

The metal roof of Building 219 has been replaced by modern asphalt shingles; the roof's hipped configuration has been retained. Windows were originally 4/4 wood sash. The doorway in the southwest end was once wider and held double doors.

Wood-Framed Buildings (1879 - 1917)

Wood was used to construct a complex of stables and gun sheds for the artillery in 1903. Another construction campaign in 1916-1917 produced several one- and two-story utilitarian service buildings in the quartermaster area, including two garages (216, T-228), an office building (221), and a paint shop (225). Of this cohort, only the paint shop, now a storehouse, and one of the garages (T-228) survive. These buildings look very similar to a wood-frame storehouse (217), which property records claim was built in 1879. The powder magazine (237), with walls and a roof of corrugated metal, matches the scale and form of the other wood-frame buildings but is otherwise an anomaly.

The wood-frame structures northwest of Bloomington Road, regardless of their function, share similar attributes. All except the shed-roofed garage have gable roofs. The roofs, originally covered with slate, tile, or wood shingles, are now protected by asphalt shingles. Exterior walls are sheathed in clapboard; windows are typically multiple-light double-hung sash. Ornamentation is virtually nonexistent.

Concrete and Concrete-Block Structures (1930's)

Fort Snelling was the focus of a number of federal relief projects during the Depression, and several buildings were produced as a result. The quartermaster oil station (215) is a small cast-concrete structure. The post exchange oil and gas house (220) is of rusticated concrete-block construction, while the CCC commissary warehouse (223) features smooth-faced concrete block. The latter building has a hipped roof; both oil stations have gable roofs. Concrete was also used for the stadium (demolished) on the parade grounds, a massive monolith with some Streamline Moderne detailing.

The design of these structures, particularly the CCC commissary warehouse and the stadium, is not sympathetic to the relatively homogeneous character of the other buildings developed in this area over a number of decades. Therefore, while the buildings produced during the Depression represent an important phase in Fort Snelling's history, these structures are less appropriate as models for new construction.

FORT SNELLING UPPER POST: PROPERTIES WEST OF BLOOMINGTON ROAD

Prepared by Penny Petersen, Hess, Roise and Company
March 2010

Sources:

- Quartermaster/War Department inventory forms.
- Robert A. Clouse and Elizabeth Knudson Steiner, "All That Remains: A Study of Historic Structures at Fort Snelling, Minnesota," draft, 1998, prepared for the Minnesota Department of Natural Resources.

EXTANT BUILDINGS

#	*Other #*	*Use*	*Built*	*Comments*	*Photograph*
201	F-42	Cavalry Drill Hall	1907	Original: 244'-4" x 107'-10", stone foundation, brick wall, tile roof. 1914: damaged by a tornado. 1922: spectators' platform inside the building was extended the entire length of the hall. 1931: 477 theater-style chairs installed 1931 or later: arched doorways at ends of building and high windows partially filled in; garage doors added on south facade, and one was later filled in with brick Sometime after 1946: roof reclad with modern shingles.	
210	F-43	Ordnance and CWS (Civil Works Service) Office and Warehouse, Shops The building is owned by the VA. The building is vacant, but used for storage of miscellaneous items.	1907	Original: 28' x 150'; stone foundation, brick walls, slate roof. 1936: several electric motors removed. Ca. 1936?: one double door on north has been in-filled with brick; gables have been added over doors on south side.	

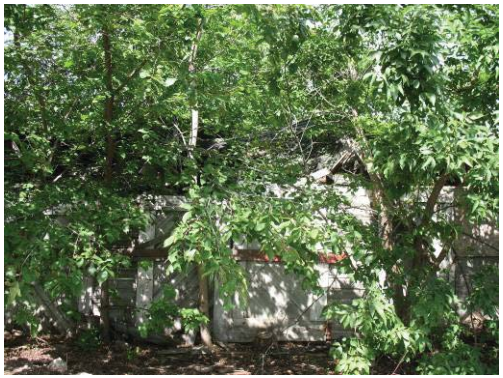
EXTANT BUILDINGS (Continued)

#	Other #	Use	Built	Comments	Photograph
211	F-49	Quartermaster Stable; Tank Park The building is owned by the VA. The building is vacant, but used for storage of miscellaneous items.	1909	Original: 67' x 195'; stone foundation, brick walls, slate roof. 1916: fire damaged building, but it was repaired. 1932: converted to tank and motor shed to house 42 vehicles; garage doors added. Ca. 1932?: small concrete-block addition attached to north end.	
214	F-56	Quartermaster Stable; Veterinary Hospital; Motor Repair Garage The building is owned by the VA. The building is vacant.	1910	Original: 67' x 195'; stone foundation, brick walls, slate roof. 1923: one-half of building converted to veterinary hospital. 1931: partially destroyed by fire. 1938: lab added for veterinarian. Ca. 1920s-1930s: a couple of single-story wings added to west side of building.	
215	F-57	Quartermaster Gas Station The building is owned by the VA. The building is vacant.	1932	Original: 12' x 24'; concrete foundation, stucco walls, slate wall. Ca. 1940s?: walls on north end of structure removed to create sheltered exterior space; double door on west side replaced by single door; metal smokestack added.	

#	Other #	Use	Built	Comments	Photograph
217	F-7	Quartermaster Storehouse; Plumbing Shop The building is owned by the VA. The building is vacant.	1879-1880, or ca. 1930s?	Original: 26' x 100'; stone foundation, wood walls, shingle roof. After WWI: dock along entire length of the front removed. Some researchers claim this is the oldest surviving wood structure at the fort, but photographic evidence suggests that this might not be true. While there was a building on this site by the 1880s, an early photograph appears to depict a shorter building with a window under a gable that is now gone. In various images, the number of chimneys varies from one to two. On the east facade, the number of doorways varies from three to one, and the number of windows from five to seven. The foundation now appears to be concrete. At the very least, this building was heavily modified at some point, perhaps in the 1930s.	
218	F-11	Forage House The building is owned by the VA. The building is vacant, but used for storage of miscellaneous items.	1894	Original: 22'-2" x 77'; stone foundation, brick walls, slate roof. Note: Quartermaster records list the original roof material as "shingle," but the existing slate may be original. Twentieth century: one window on the end of the building was enlarged.	

#	Other #	Use	Built	Comments	Photograph
219	F-10	Sawmill; Wheelwright and Other Shops The building is owned by the VA. The building is vacant, but used for storage of miscellaneous items.	1895	Original: 19' x 40'-6"; stone foundation, stone walls, shingle roof. Before 1913: converted to a wheelwright shop. 1913: partially destroyed by fire. 1914: damaged by tornado. 1922: boiler removed and part of building converted to blacksmith shop. 1936: shops installed here, equipped with motors removed from Bldg. 210.	
220	F-58	Post Exchange; Oil and Gas House; Auto Repair Shop The building is owned by the VA. The building is still operating as an auto repair shop.	1932	Original: 22'-6" x 60'; concrete foundation, concrete-block walls, shingle roof. (Replaced a very small gas station built in 1928.) Late 1930s: re-roofed by WPA. Rehab potential: The building is well suited to its current use.	
222	F-14, F-18, F-19	Subsistence/ Quartermaster Storehouse The building is owned by the VA. The building is currently in use as a warehouse as well as for storage of miscellaneous items.	1904	Original: two parallel buildings (F-18 north, F-19 south), each approx. 32' x 178'; stone/concrete foundation, brick walls, slate/tar-and-gravel roof. (Built on location of old post gardens.) 1905: Root House Building (32' x 97') is built on east wall of F-18. 1914: annex added connecting east (Bloomington Road) ends of F-18 and F-19. 1929: F-19 burns down. 1935: 4-story building with concrete foundation, red-brown brick walls and flat tar roof built on site of F-19.	

#	Other #	Use	Built	Comments	Photograph
223	F-61	CCC Commissary Warehouse The building is owned by the VA. This building is currently used to store large equipment and vehicles.	1935	Original: 130' x 135'; concrete foundation, concrete-block walls, asphalt shingles and built-up tar and gravel roof. (The first building labeled F-61, the Quartermaster Store House, was built in 1917 and salvaged in 1934.)	
224	F-16	Forage House; Shops and Warehouse The building is owned by the VA. The building is currently used for storage of medical equipment.	1902	Original: 35'-4" x 184'-11"; stone foundation, brick walls, slate roof. Between 1933-1936: the CCC converted the building to Utility Shops and the full-length loading platform on the south side was removed and replaced by four smaller platforms; apparently parts of the limestone foundation were replaced.	
225	F-60	Storehouse The building is owned by the VA. The building is currently used for storage of files.	1917	Original: 20'-6" x 77'-4"; concrete and concrete block foundation, wood walls, shingle roof.	

#	Other #	Use	Built	Comments	Photograph
227	F-30 & F-31	NCO Quarters (2 families) The building is owned by the Veterans Affairs Medical Center.	1904	Original: 27'-3" x 37'-5"; 2-story, stone foundation, brick walls, slate roof; 6/6 windows. 1938: original wood porch replaced by brick porch on concrete foundation by WPA labor.	
228 (T228)	F-45	Garage The building is owned by the Veterans Affairs Medical Center. The building is vacant and collapsing.	1917	Original: 100' x 20'; concrete foundation, wood walls, wood and paper roof. Bays for ten cars. 1920: moved here from WWI cantonment. Note: Probably served Buildings 227 and 229; is now overgrown by vegetation and collapsing.	
229	F-38 thru F-41	NCO Quarters (4 families) The building is owned by the Veterans Affairs Medical Center.	1907	Original: 27' x 76'; stone foundation, brick walls, slate roof; two-story. 1938: original wood porch replaced by brick porch on concrete foundation by WPA labor.	

EXTANT BUILDINGS (Continued)

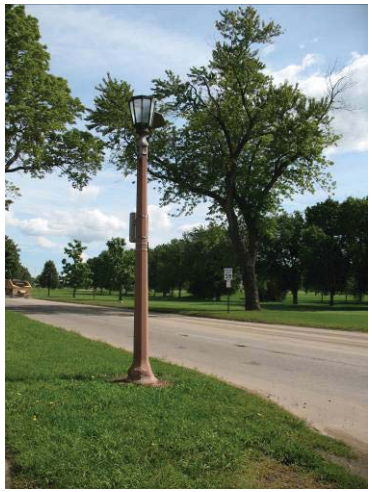
#	Other #	Use	Built	Comments	Photograph
237	F-2	Powder Magazine The building is on property leased by Metropolitan Council from the Veterans Affairs Medical Center. The building is vacant.	1904	Original: 30' x 60' stone foundation, corrugated-iron walls, corrugated-iron roof. Loading platform once ran along south side of building. Built on stone piers and raised above the ground. 1931: moved to this site; its original location is unknown.	
239	F-15	Mineral Oil House The building is on property leased by Metropolitan Council from the VA. The building is vacant.	1892	Original: 19' x 33' stone foundation, stone walls, corrugated-iron roof. 1914: damaged by tornado. Twentieth century: Window on south side is added.	

LANDSCAPE FEATURES AND OBJECTS

Copies of the maps that are referenced are available at the Minnesota Historical Society's Fort Snelling Visitor Center. The aerial photographs are at the John R. Borchert Map Library, University of Minnesota.

#	*Other #*	*Use*	*Built*	*Comments*	*Photograph*
		Nursery Plat	Ca. 1930s	The "Nursery Plat" labeled on the 1939 map appears to be in place in 1937 aerials.	
		Grove	Ca. 1940s	The diagonal paths in this vicinity are in place in 1937 aerials. Few, if any, remain.	
		Play Area, Ball field, Parking Lot		The diagonal paths in this vicinity are in place in 1937 aerials. Few, if any, remain, having been obliterated by the contemporary parking lot.	

#	Other #	Use	Built	Comments	Photograph
		Minnehaha Avenue		A road following the alignment of Minnehaha Avenue is apparent on maps by the 1880s. It is important to maintain the section that survives and, if possible, restore the alignment to the west that is now a parking lot.	
		Bloomington Road		A road following the alignment of Bloomington Road is apparent on maps by the 1880s. It is important to maintain.	
		Rail Corridors	Ca. 1902	1882-1885: map shows a railroad edging the Mississippi River bluff, but there is no apparent spur line. 1902: map shows a "proposed spur track". Ca. 1910: an updated 1890 base map shows rail spur lines to Quartermaster area. 1945: the spur lines are very clear in an aerial photograph. Note: the existing light-rail line (pictured) is near the alignment of the rail spur that was furthest to the south and served the WPA warehouse complex.	

#	Other #	Use	Built	Comments	Photograph
		Light Standards		Concrete light standards with original faceted lamps are typical of the 1910s-1920s.	
		Post		The function of this post/marker is not known.	

DEMOLISHED BUILDINGS (partial list)

#	Other #	Use	Built	Demolished	Comments	Photograph
202	F-24	Gun Shed	1903, 1914	After 1996	Site is now parking lot.	
203	F-22	Stables/Garage	1940	After 1996	Site is now occupied by sports field.	
205	F-27	Workshop	1903		Ca. 2000: moved to the east to serve sports fields on parade grounds.	
206	F-26	Workshop	1903		Ca. 2000: moved to the east to serve sports fields on parade grounds.	

DEMOLISHED BUILDINGS (Continued)

#	Other #	Use	Built	Demolished	Comments	Photograph
207	F-23	Gun Shed	1903, 1914	After 1996	Site is now part of Leonard H. Neiman Youth Athletic Complex (sports fields).	
208	F-6	Garage		Before 1996		
209	F-21	Artillery Stable/ Motor Shed	1903	After 1996	Original: 66' x 184', 102-horse capacity, stone foundation, wood walls, slate roof. 1910: addition of 32 new stalls for horses. 1914: damaged by a tornado. 1919: damaged by fire. 1926: Quartermaster authorized removal of side stalls, likely indicating that it was no longer used for horses. 1931: building converted to Motor Storage with capacity of 54 vehicles. 1934: remodeled as CCC clothing and equipage warehouse.	
212	F-44	Barracks	1907	Ca. 1990	Original: 27' x 112' with 26'-10" x 40' wings, stone foundation, brick walls, slate roof. 1938: addition of two squad rooms and day room in basement.	

DEMOLISHED BUILDINGS (Continued)

#	Other #	Use	Built	Demolished	Comments	Photograph
213		Garage	1933	Ca. 1995	Demolished.	
216	244	Garage (CCC)	1930s	Ca. 1990	Demolished.	
T-217	241	Garage		Ca. 2000	Demolished.	
221		Office Building	1917	1949	Materials salvaged.	

DEMOLISHED BUILDINGS (Continued)

#	Other #	Use	Built	Demolished	Comments	Photograph
226 or T226	F-3	Scale Office		Before 1996	Site is now empty.	
230	N/A	Office, Warehouse, Shops, WPA Warehouse	1938	After 1996	Original: 300' x 80', concrete foundation, concrete-block walls, built-up asphalt flat roof. Site is now part of the light-rail line tunnel.	
236		Quartermaster Shed		Before 1996		
240-242	F-53, F-50, F-48	NCO or Civilian Employee's Quarters	1910, 1909	After 1996	Original: three vernacular wood-frame houses, brick foundations, wood walls, shingle roofs. 2009: now light-rail line parking lot.	
243	F-62	Garage	1930	After 1996	Original: dirt foundation, wood walls, wood and paper roof, 7 car capacity 2009: now light-rail line parking lot	
244-247	F-51, F-52, F-54, F-55	NCO or Civilian Employee's Quarters	1909-1910	After 1996	Original: four vernacular wood-frame houses, stone or brick foundations, wood walls, shingle roofs. 2009: now light-rail line parking lot.	
T-257	N/A	Personnel Quarters	1938	After 1996	Original: concrete foundation, wood walls, shingle roof.	

Fort Snelling West District Interiors Conditions Survey

Introduction

During the course of preparing the Fort Snelling West District – Historical Context Survey and Treatment Guidelines the project team obtained a Minnesota Historical Society Legacy Grant to conduct an interior survey of the historic buildings of the West District. This survey is meant to supplement the Historical Context Study portion of the Station Area Plan. The survey was done on February 17th and 19th, 2010.

Interior surveys have been conducted at the adjacent Fort Snelling Upper Post and nearby Historic Fort Snelling, but up to this point, the West District has largely been ignored in previous studies. The intent of this interior survey was to bring the type of information available about the historic buildings within the West District up to a similar level as the rest of Fort Snelling. This information determined the Development Guidelines set by this report for the reuse of existing buildings, allowable additions, and allowable development on sites containing historic buildings to inform reviewers, planners, and future developers of the historic nature of the former Quartermaster's area.

Where interior historic and character defining elements remain, they should be protected and retained where feasible. All work should be in compliance with the Secretary of the Interior Standards.

A summary of the building conditions can be found in Appendix III.

201 – Cavalry Drill Hall

The interior of this building was not surveyed. The Northern Star Council of the Boy Scouts owns the building and they are currently rehabilitating it for use as an "urban base camp." This rehabilitation will go through the Federal Section 106 Review.

Building 201 - Exterior, south elevation

210 - Ordnance and CWS Office

Current Use:

The building is owned by the VA.
The building is vacant, but used for storage of miscellaneous items.

Structure:

Brick load-bearing walls with stone foundation walls. Roof structure not visible – assumed to be wood.
Unfinished basement contains boiler and storage space.
No usable attic space.

Condition of Interior:

Interior walls are gyp or plaster, or CMU. Most exterior brick walls are exposed, but painted. Paint is peeling.
Floor tiles (12x12±) in poor condition; loose and breaking.
Some areas have lay-in ceiling grid, others areas have panels attached to structure.
Double hung windows are in fair to poor condition, with broken glass.
Appears to be watertight - did not see evidence of water damage.

Interior Historic/Character Defining Elements:

No major features, but some unique artifacts remain: vault door; jail-style door in basement.

Rehabilitation Considerations:

The exterior retains good integrity. A number of original windows and the slate roof survive. The interior has been unsympathetically modernized. Most of the changes, however, appear reversible.

Building 210 - Exterior, south and east elevations

Building 210 - Interior, painted masonry exterior wall; boiler in basement

Building 210 - Interior, jail-style door in basement; vault door, first floor

Building 210 - Interior, underside of first floor

Building 210 - Interior, first floor

Building 210 - Interior, stair to basement

211 – Quartermaster Stable

Current Use:

The building is owned by the VA.
The building is vacant, but used for storage of miscellaneous items.

Structure:

Brick load-bearing walls and timbers support exposed wood structural framing.
Wood framing supporting mezzanine level has been strengthened with steel columns and beams. Concrete slab floor, no basement.

Condition of Interior:

Mezzanine is in fair to poor condition. Seems structurally sound, but floor is uneven with missing pieces; walls are in poor condition.
Wood framing appears to be in good condition; paint is peeling off.
Interior and exterior brick walls are in fair condition. They have been painted multiple times, and the paint is peeling off. Repointing is necessary.
Wood walls have been painted multiple times, and the paint is peeling.
Double hung windows are in poor condition, with rotted wood and broken glass.

Interior Historic/Character Defining Elements:

Exposed wood structural framing geometry and repetition is visually interesting.
Interior glass and wood office walls.
Hayloft.

Rehabilitation Considerations:

Reopening the windows in the roof monitor would enhance the interior. Although the horse stalls are gone, the interior retains a good deal of integrity. Finding an alternative for the garage doors would greatly help the building's appearance as would removing the concrete-block addition on the north end, which is in poor condition. The addition might date from the period of significance ,though, so its rehabilitation could be justified.

Building 211 - Exterior, east elevation

Building 211 - Exterior, CMU addition on north elevation

Building 211 - Interior, exposed wood structural framing, hayloft above

Building 211 - Interior, exposed wood structural framing, hayloft above

Building 211 - Interior, wood and glass office wall

Building 211 - Interior, masonry wall

214 – Quartermaster Stable:

(Due to hazardous materials, the building is considered a health risk and the survey team was not allowed to enter. Photos taken from doorway.)

Current Use:

The building is owned by the VA.
The building is vacant.

Structure:

Brick load-bearing walls with timber post and beam structure is visible.
Concrete slab floor, no basement.
Mezzanine or attic space may be present, but inaccessible during survey.

Condition of Interior:

Water damage is visible on the walls and ceiling.

Interior Historic/Character Defining Elements:

This building looks like 211 on the exterior, but the interior is very different. It was used most recently as a medical research area and it has a higher level of finish, with a full ceiling and acoustical tiles on the walls. It is assumed that the upper level once was similar to the hayloft of Building 211, but its condition is unknown.

Rehabilitation Considerations:

The interior has been modernized, but the wood columns are reminders of the original structure. A dropped ceiling hides the monitor level. Removing the ceiling and reopening the windows in the roof monitor would enhance the interior.

Building 214 - Exterior, east elevation

Building 214 - Exterior, south and west elevations

Building 214 - Interior, looking west

Building 214 - Interior, looking west

Building 214 - Interior, medical research cages

Building 214 - Interior, looking south

215 – Quartermaster Gas Station

Current Use:

The building is owned by the VA.
Building is vacant.

Structure:

Unknown. Concrete foundation, with no basement. No usable attic.

Condition of Interior:

Very small former gas station, consisting of one room, with two doors and windows.
Building is in generally poor condition, in need of cosmetic and structural repairs.
Concrete floor is severely cracked, possibly heaving.

Interior Historic/Character Defining Elements:

No major features except its small size.

Rehabilitation Considerations:

The small size of this structure might make finding a reuse challenging, but the gas station is an important representation of the military's shift in reliance from horses to motorized vehicles, and it should be retained in place.

Building 215 exterior, north and west elevations

Building 215 exterior, south elevation

Building 215 - Window

Building 215 - Exterior, roof overhang

Building 215 - Interior

217 – Quartermaster Storehouse

Current Use:

The building is owned by the VA.
The building is vacant.

Structure:

Wood frame, concrete foundation. No basement or usable attic.

Condition of Interior:

Floor tiles (9x9±) in poor condition; loose and breaking.
Large joints in flooring exposed.
Exterior walls appear to be painted wood paneling of an unknown era.
Wood walls appear to be in good condition.
High ceiling, with panels attached to structure, appear to be in good condition.
No visible evidence of water damage.
Double hung windows appear to be in relatively good condition.

Interior Historic/Character Defining Elements:

Defining features include the board and batten ceilings and the openness of the spaces.

Rehabilitation Considerations:

Rehabilitation Considerations: The exterior has been modified over time, but it still represents the quartermaster function of this area. The interior has been modernized, most recently around World War II.

Building 217 - Exterior, north and east elevations

Building 217 - Exterior, south elevation

Building 217 - Interior, toilet room

Building 217 - Interior, wood exterior wall

Building 217 - Interior, spaces are light and open

Building 217 - Interior, board and batten ceiling

Building 217 - Interior, flooring in poor condition

218 – Forage House

Current Use:

The building is owned by the VA.
The building is vacant, but used for storage of miscellaneous items.

Structure:

Building is small – one room. Brick load-bearing walls, wood roof truss, stone foundation. No basement or usable attic.

Condition of Interior:

Part of the room has a dark brown wood beadboard ceiling, the other part is exposed structure.
Exterior brick walls are painted white.
At some point a large opening was filled in with clay tiles, painted white.
Appears to be structurally sound, but cosmetic repairs are necessary.
No visible evidence of water damage.

Interior Historic/Character Defining Elements:

Defining construction elements include the exposed wood roof structure, the wood ceiling, and the brick walls.

Rehabilitation Considerations:

Both the interior and exterior are little altered. The roof framing and brick walls are exposed on the east half of the interior and could be attractive features for a new use.

Building 218 exterior, south and east elevations

Building 218 exterior, east elevation

Building 218 - Interior, wood ceiling at attic access door

Building 218 - Interior, wood ceiling

Building 218 - Interior, brick wall with clay tile infill

Building 218 - Interior, exposed roof structure

219 – Sawmill and Wheelwright

Current Use:

The building is owned by the VA.
The building is vacant, but used for storage of miscellaneous items.

Structure:

Stone load-bearing walls and foundation. Roof structure not visible – assumed to be wood. Building consists of two rooms.

Condition of Interior:

Plaster covering stone walls in extremely poor condition, with large cracks and large areas missing.
Double hung windows in fair to poor condition.
Wood ceiling is in fair condition.
Some areas of water damage are visible.
Many cosmetic repairs are necessary.

Interior Historic/Character Defining Elements:

Some of the windows have bars covering them – an indication that this building once held valuable items.
Defining construction elements include the wood ceiling.

Rehabilitation Considerations:

The exterior retains good integrity. This is also true on the interior, although some modern partitions have been added. The stone walls are exposed on the interior; there is an older wood-plank ceiling.

Building 219 - Exterior, south and east elevations

Building 219 - Exterior, east elevation

Building 219 - Interior, west room

Building 219 - Interior, east room

Building 219 - Interior, window with bars

Building 219 - Interior, west room

220 – Auto Repair Shop

Current Use:

The building is owned by the VA.
The building is still operating as an auto repair shop.

Structure:

Masonry load-bearing walls, concrete slab floor. Roof structure not visible – assumed to be wood.

Condition of Interior:

Building is in good condition, but dated.

Interior Historic/Character Defining Elements:

No major features except openness of service bays and arrangement of rooms: customer area; toilet; storage/office; and service.

Rehabilitation Considerations:

The building is well suited to its current use. It could also be rehabilitated for other uses appropriate to its size.

Building 220 - Exterior, north and west elevations

Building 220 - Exterior, east elevation

Building 220 - Interior, service bay

Building 220 - Interior, restroom

Building 220 - Interior, storage/office

Building 220 - Interior, service bay

Building 220 - Interior, service bay

222 – Subsistence/Quartermaster Storehouse

Rehabilitation Considerations:

A combination of buildings of several vintages, Building 222 has a variety of spaces offering many options for reuse. Original features—such as the cooler rooms—should be retained, although the use could be altered. Many original windows also survive and should be retained if feasible. If it is necessary to address the high window sills in the 1935 section, the floors should be raised rather than dropping the sills.

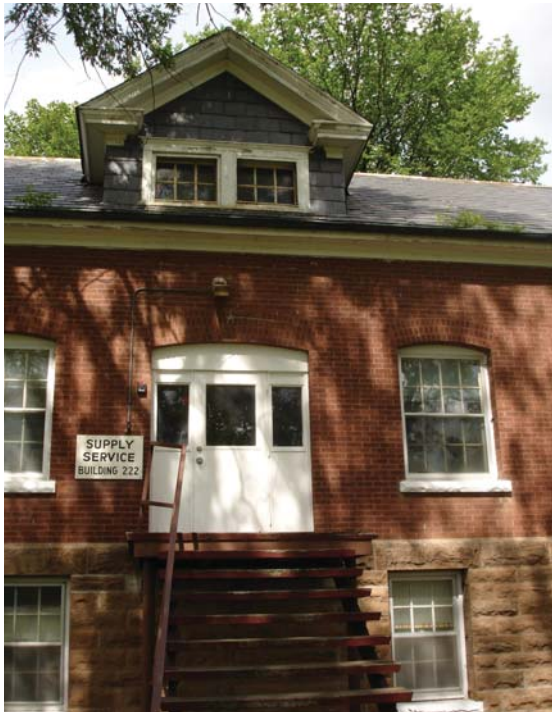
Because of the large size of this building, and the differences between additions, each addition will be analyzed individually.

Building 222 - Exterior, north elevation *1904 F19* *1905 Root House*

Building 222 - Exterior, 1935 Warehouse south elevation

Building 222 - Exterior, location of former railroad spur

Building 222: 1904 F-19 1914 Annex 1904 F-18



Building 222: 1914 Annex Bloomington Road entry

222 - 1904 "F18 and F19"

F18 and F19 were originally twin buildings running parallel to each other, and perpendicular to Bloomington Road. The majority of F19 was lost in a fire in 1929, however the east end is still in place. The 1935 Warehouse was built where the destroyed portion had been.

Current Use:

The building is owned by the VA.
Used for storage of miscellaneous items.

Structure:

Brick load-bearing walls with stone foundation.
Brick columns support timber beams in the basement. First floor has timber columns and beams. Usable attic with wood framed roof structure.
Basement level is half above grade, allowing for natural daylighting.

Condition of Interior:

Cosmetic repairs are necessary.
Double hung windows at basement, first floor and attic levels in fair condition.

Interior Historic/Character Defining Elements:

Building F19 first floor has a higher level of finish, including decorative metal ceilings and beam covers.
Building F19 has a board and batten ceiling in the attic level.
First floor of F18 has a number of walk-in coolers, with wood paneled doors and heavy-duty hardware.
Exposed wood roof structure in attic of F18.
Exposed brick columns and wood floor structure in basement of F18.
Some of the basement windows of F18 have bars covering them – an indication that this building once held valuable items.

Building 222 - Interior, 1904 F-18 attic

Building 222 - Interior, 1904 F-18 basement

Building 222 - Interior, 1904 F-19 ceiling

Building 222 - Interior, 1904 F-19 attic

Building 222 - Interior: 1904 F-18 first floor wood structure, cooler

Building 222 - Interior, 1904 F-18 first floor

222 - 1905 Root House

Current Use:

The building is owned by the VA.
The building is currently used for storage of cafeteria items.

Structure:

Brick load-bearing walls, concrete slab floor. Roof structure not visible – assumed to be wood. There is no basement or attic.
Building is entered at grade level on north elevation, which is several feet lower that adjacent 1904 Building F18.
Building consists of four main rooms, with several smaller rooms accessed through the main rooms.

Condition of Interior:

Portions of plaster walls have fallen, exposing exterior brick walls, and showing signs of water damage.
Paint is peeling from walls and ceiling throughout.
Cosmetic repairs are necessary.
Double hung windows on north elevation are in fair to poor condition.
South elevations windows appear to be awning, in fair to poor condition.

Interior Historic/Character Defining Elements:

Several historic light fixtures remain in one of the rooms – but interestingly, they do not match each other.
A terrazzo floor has been installed in one of the main rooms.
A beadboard-lined shaft extends from the ceiling to roof-top vent.
Some of the windows have bars covering them – an indication that this building once held valuable items.
Diagonal slat wood door connecting the Root House to F18.

Building 222 - Interior, 1905 Root House

Building 222 - Interior, Door to F-18

Building 222 - Interior, roof-top vent shaft

Building 222 - Interior, 1905 Root House

222 - 1914 Annex

Current Use:

The building is owned by the VA.
The building is vacant, but used for storage of miscellaneous items.

Structure:

Brick load bearing walls with stone foundation.
First floor has timber columns and beams. Usable attic with wood framed roof structure.
This building provides a link between original buildings F18 and F19.

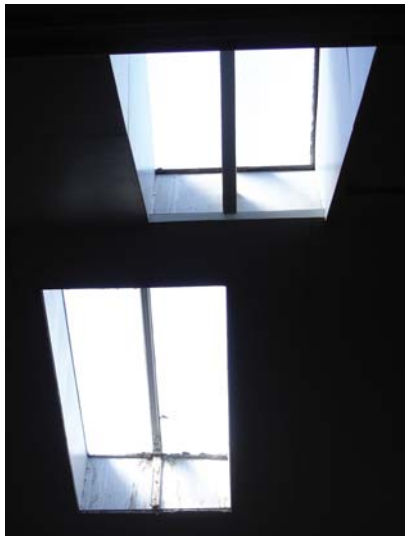
Condition of Interior:

Cosmetic repairs are necessary.

Interior Historic/Character Defining Elements:

It has the only two entrances facing Bloomington Road, one at the basement and one at the first floor.
Two skylights in the attic space add character to the space.
Office in basement with windows to interior areas.
Defining construction elements include wood columns and cast iron caps.

Building 222 - Interior, 1914 Annex, first floor



Building 222 - Interior, 1914 Annex, attic with wood ceiling and skylights

Building 222 - 1914 Annex, basement with ramp up to exterior door

222 - 1935 Warehouse

Current Use:

The building is owned by the VA.
The building is currently in use as a warehouse.

Structure:

Cast-in-place concrete structure.
Four levels of open storage area, including basement.

Condition of Interior:

Some water damage is visible on the third floor.
Has a freight elevator (elevator is new, but looks like the location is original)
Cosmetic repairs will be necessary.
Warehouse-style windows span between exterior concrete columns.
Many of the window panes have been painted, may need to be replaced to restore visibility.

Interior Historic/Character Defining Elements:

Cast-in-place concrete structure with spanning warehouse-style windows is unique for Fort Snelling West District.
The first floor has several offices with windows to the interior.
The openness of the warehouse is defining of its use and construction.

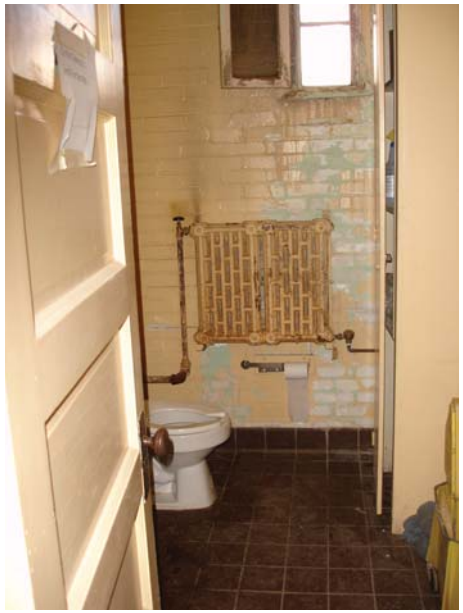
Building 222 - Interior, 1935 Warehouse, second floor

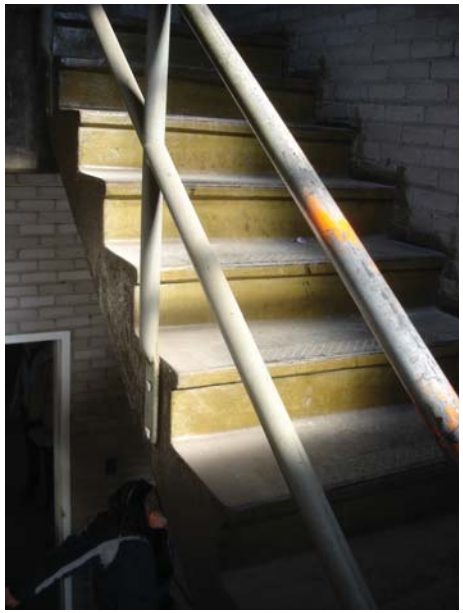
Building 222 - Interior, 1935 Warehouse, first floor

Building 222 - Interior, 1935 Warehouse, first floor

Building 222 - Interior, 1935 Warehouse, first floor, office with windows to interior

Building 222 - Interior, 1935 Warehouse, second floor





Building 222 - Interior, 1935 Warehouse restroom; stair

223 – CCC Commissary Warehouse

Current Use:

The building is owned by the VA.

This building is currently used to store large equipment and vehicles.

Structure:

A combination of wood, steel and iron trusses, supported by steel columns and CMU exterior walls. There is no basement. Roof structure is exposed with no attic.

Condition of Interior:

Building interior is very industrial – quantity of cosmetic work required is dependent upon what type of use the building will have in the future.

Interior Historic/Character Defining Elements:

The exposed curved iron truss roof structures of the northern and southern parts of this building are a wonderful surprise discovered upon entry. It is likely that the trusses were relocated from a demolished building elsewhere.

Rehabilitation Considerations:

The rather drab exterior hides a unique framing structure of salvaged steel that is exposed—and should remain exposed—on the interior. The large spaces offer an opportunity for a variety of uses.

Building 223 - Exterior, north elevation

Building 223 - Exterior, west elevation

Building 223 - Interior, exposed roof structure

Building 223 - Interior, exposed roof structure

Building 223 - Interior, exposed roof structure

224 – Forage House

Current Use:

The building is owned by the VA.
The building is currently used for storage of medical equipment.

Structure:

Brick load-bearing walls with stone foundation. First floor has timber columns and beams. Roof structure is not visible, assumed to be wood. No usable attic.
Long building has four main rooms: a small room at each end; and two larger rooms in the center. (We were unable to enter and survey small room at west end.)

Condition of Interior:

Exterior and interior brick walls have visible cracking/separating – some repointing will be necessary.
Many cosmetic repairs will be necessary.
Double hung windows at first floor are in fair to poor condition.
(We did not have access to basement for survey.)

Interior Historic/Character Defining Elements:

Regularly space suspended light fixtures hang from the ceiling of the two large rooms, with exposed light bulbs.
Defining construction elements include: board and batten ceiling; wood columns and beams; and exposed brick walls.

Rehabilitation Considerations:

Although the interior has a modern dropped ceiling and some modern partitions, the brick walls remain exposed and original windows are in place.

Building 224 - Exterior, east elevation

Building 224 - Exterior, south and west elevations

Building 224 - Interior, exterior door

Building 224 - Interior, board and batten ceiling, exposed brick walls

Building 224 - Interior, Exposed brick interior wall, with infill

Building 224 - Interior

Building 224 - Interior, wood columns and beams

225 - Storehouse

Current Use:

The building is owned by the VA.

The building is currently used for storage of files.

Structure:

Wood framed walls and roof, CMU foundation. No basement or usable attic.

The long building has four main rooms with plaster walls and ceilings.

Condition of Interior:

Water damage is visible.

Cosmetic repairs are necessary.

Interior Historic/Character Defining Elements:

No major features.

Rehabilitation Considerations:

The straightforward interior has plaster walls and an older dropped ceiling.

Building 225 - Exterior, south and east elevations

Building 225 - Interior, sliding fire door; plaster walls and ceiling

Building 225 - Interior, fan in exterior wall; swinging fire door

Building 225 - Interior, view through four main rooms

227 – NSO Quarters

Survey team was not allowed to enter this building due to safety concerns. It may have interior features similar to the home on Officer's Row in the Upper Post, including fireplaces, decorative stair balustrades, and decorative wood trim.

Current Use:

The building is owned by the VA.

Rehabilitation Considerations:

Although it was not possible to investigate the interior, the residential scale of this property could accommodate a variety of uses.

Building 227 - Exterior, east elevation

228 - Garage

Current Use:

The building is owned by the VA.
The building is vacant and collapsing.

Rehabilitation Considerations:

Given the poor condition of this building, rehabilitation is problematic. If the building is not able to be saved, it should be appropriately documented prior to demolition.

Building 228 - Exterior, east elevation

229 – NCO Quarters

Survey team was not allowed to enter this building due to safety concerns. It may have interior features similar to the home on Officer's Row in the Upper Post, including fireplaces, decorative stair balustrades, and decorative wood trim.

Current Use:

The building is owned by the VA.

Rehabilitation Considerations:

Although it was not possible to investigate the interior, the residential scale of this property could accommodate a variety of uses.

Building 229 - Exterior, east elevation

237 – Powder Magazine

This building currently outside of the National and State historic districts, but it is strongly recommended that the district boundaries be redrawn to include it.

Current Use:

The building is on property leased by Metropolitan Council from the VA.

The building is vacant.

Structure:

One room building with exposed wood structure – timber columns and beams, wood roof trusses.

Condition of Interior:

Interior is very basic - quantity of cosmetic work required is dependent upon what type of use the building will have in the future. Building is not conditioned and appears to have no insulation.

Interior Historic/Character Defining Elements:

Very simple, corrugated metal clad building unique to Fort Snelling West District.

Defining construction elements include the exposed wood structure and wood walls up to roof line.

Rehabilitation Considerations:

The interior is wide open with wood columns, beams, trusses, and walls, and could accommodate a number of uses other than cold storage, but the openness should be retained as much as possible.

Building 237 - Exterior, south and east elevations

Building 237 - Interior

239 – Mineral Oil House

The survey team did not have access to this building.

The building has recently been restored. It is currently outside of the National and State historic districts, but it is strongly recommended that the district boundaries be redrawn to include it.

Current Use:

The building is on property leased by Metropolitan Council from the VA.
The building is vacant.

Rehabilitation Considerations:

It was not possible to investigate the interior of this building, which appears to be in very good condition. The solid stone walls are character-defining features, so openings should not be enlarged or added.

Building 239 - Exterior, north and east elevations

Development Guidelines

Introduction

The West District's wide variety of buildings and outdoor spaces offer diverse opportunities for new activities and investment. The Development Guidelines begin by identifying the Treatment Zones of the West District, describing within each zone the location and extent of reuse, additions, and new construction allowed. The remaining sections of the Development Guidelines provide information about how the rehabilitation and new construction may occur. The Development Guidelines are divided into seven sections:

- Treatment Zones
- Rehabilitation Guidelines
- New Construction Guidelines
- Landscape Guidelines
- Health and Safety Guidelines
- Sustainable Design Strategies
- Property Management During Development

Relationship to Secretary of the Interior Standards

The existing West District buildings are located within the National Register and State Historic District, so all rehabilitation work and new construction must be consistent with the Secretary of the Interior Standards.

Definition of Primary and Secondary Elevations

All historic districts possess an architectural hierarchy which helps guide review and approval of modifications to exterior building elevations and the surrounding grounds. Usually building elevations most readily visible from the public right-of-way are considered "primary elevations" and those not visible from the street are considered "secondary". Generally in the West District, by design and placement, the elevations facing and/or visible from Bloomington Road and/or Minnehaha Avenue would be the primary elevations, and the backs of the buildings are the secondary elevations.

However, many buildings in the West District are unique in that they may have more than one primary elevation. This could be due to visibility from both Bloomington Road and Minnehaha Avenue , their small size, placement on their site, or a combination of these factors. Examples include buildings 201, 210, 215, 217, 218, 219, 220, 224, 225, 237, and 239. Therefore, building elevation treatments will need to be carefully considered on a building-by-building basis.

Primary Elevation Treatment

- The fenestration (window and door placement) should be retained as closely as possible.
- All repairs and/or replacement elements should replicate the original in material, design, scale, profile and (if appropriate) protective finish.
- All roof and roof elements, such as dormers, chimneys and roof ventilators should be retained as originally designed. New construction and ramping should be avoided whenever possible.

Secondary Elevation Treatment

- While the original fenestration should be retained, some modifications may be appropriate.
- All repairs and/or replacement elements should replicate the original in material, design, scale, profile and (if appropriate) protective finish.
- New primary entrances can be introduced on secondary elevations.
- Necessary new construction and accessibility ramping should be located on these facades when possible.

Street Naming - Tower Avenue

There is a one-block long segment of road running east-west between Federal Drive and Bloomington Road, separating Treatment Zone G Building Parcels G1 and G2. The actual name of this street is not clear. Hennepin County Property maps list it as "Unknown". Google Earth/Google Maps show it as "Airport Service Drive". Bing maps and Mapquest show it as "Tower Road". Tower Avenue was selected as the name to use for this report because historically a road named Tower Avenue followed a similar route.

Much of the information in the following Guidelines sections was based on the "Fort Snelling State Park – Area J and Officers' Row – Development Design Guidelines", Winter 2003, prepared by the Minnesota Department of Natural Resources, the Fort Snelling State Park Upper Bluff Consultation Team and Thomas R. Zahn & Associates.

Information was also gathered from "Design Guidelines For Minneapolis Park and Recreation Board Development at Fort Snelling, Including Parade Ground, Quartermaster Area, Artillery Complex, and Cavalry Drill Hall," April 1999; Prepared for the Minneapolis Park and Recreation Board by Charlene Roise; Hess, Roise and Company.

West District Treatment Zones

Introduction

This study identifies seven Treatment Zones in the West District:

- F - in the former Cavalry area
- G - in the former Artillery area
- H1 - in the former Quartermaster stables area
- H2 - in the former Quartermaster warehouses area
- H3 - in the former Quartermaster Non-Commissioned Officers Quarters (NCO) area
- J1 - in the former Nursery Plat and current Grove/Play Area/Ballfield areas
- J2 – in the former Nursery Plat and current Navy Reserve area
- K - in the former Works Progress Administration (WPA) yard

The series of Zones begins with "F" because they are intended to serve as a continuation of the Development Zones A-E identified at the Upper Post by the "Fort Snelling Upper Post Open Space & Landscape Development Guidelines", 2008.

Approach to the Future Level of Development

These guidelines recognize the fact that redevelopment of the historic buildings and open spaces in the West District may require some additional incentives to make that goal financially feasible. To that end, the buildings and open spaces of each Treatment Zone have been reviewed to determine how and where new development could appropriately take place to provide the additional density that may be necessary. Each of the development zones have areas identified as being favorable for new development, ranging from minimal changes limited to improving the accessibility of existing buildings to larger areas of open land available for new construction.

Areas available for new construction are identified as Building Parcels, and they are further defined in the Treatment Zone texts of this section of the study. A comparison of the historic and current aerial photographs and maps helped determine the level of development allowed in each treatment zone. Historic areas of the West District that are mostly intact, such as Treatment Zone H2, have more restricted development guidelines than areas with no remaining buildings or landscapes, such as Treatment Zone J1.

Allowable coverage of the building parcels was determined using a similar method of comparison. Historic building and hard surface coverage was calculated and for the purposes of determining allowable new coverage. Because the period of significance for the West District includes a time period when buildings were both added and demolished within the district, and changes within the last few decades have included additional demolition, determining appropriate building coverage for new structures within the West District Treatment Zones required the compilation of multiple reference sources. These sources included recent surveys and aerial photos, historic aerial photos (1937) and historic maps (1939). In addition, treatment zone boundaries from the Fort Snelling Upper Post Open Space & Landscape Development Guidelines (Favrot Guidelines) and proposed West District Treatment Zone Boundaries were referenced. Sources were imported into vector based software (AutoCAD), scaled relative to each other based on the most recent survey and existing buildings, and overlaid to form a composite. This composite presented an amalgam of building footprints, streets, curbs, hard-surface (pavements and other impervious surfaces) and property boundaries, which could be divided into distinct square foot areas for analysis.

Historic Building Coverage compared the area of historic building footprints, both existing and demolished within the boundaries of a proposed treatment zone, relative to the total area of the proposed treatment zone. Additional calculations compared historic building footprints relative to total treatment zone area minus no-build areas, such as boulevards and streets. The removal of no-build areas naturally yielded a higher historic coverage percentage however, this number was determined to be inconsistent with coverage calculations performed for Treatment Zones within the Upper Post (Favrot Guidelines), therefore, the lower percentage of historic building coverage was used as a basis for New Building Allowable Coverage.

Historic Hard Surface Coverage was determined utilizing the same composted vector document used for historic building coverage. In this case, the primary source was a 1937 aerial photo that illustrated pre- WWII conditions. Pavements were traced and vector lines created to allow area computation. These areas were then compared to total proposed treatment zone areas to determine the Historic Hard Surface Coverage percentage within that zone. These percentages were used as a basis for New Hard Surface Allowable Coverage.

Calculations are shown in Appendix II.

LEGEND

OPEN SPACE: NO BUILDING ALLOWED

OPEN SPACE: PARKING ALLOWED

BUILDING PARCEL: BUILDING ALLOWED

EXISTING BUILDING FOOTPRINT

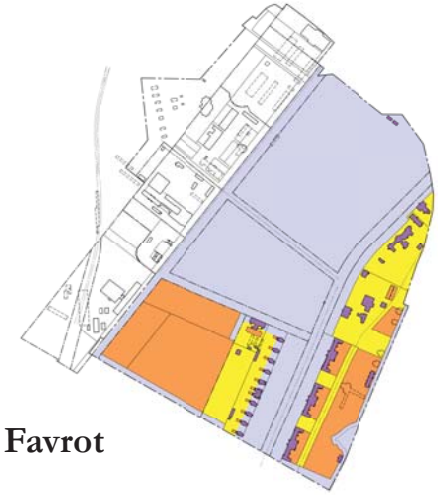
DEMOLISHED BUILDING FOOTPRINT

3B PRIMARY TREATMENT ZONE

TREATMENT ZONE BOUNDARY

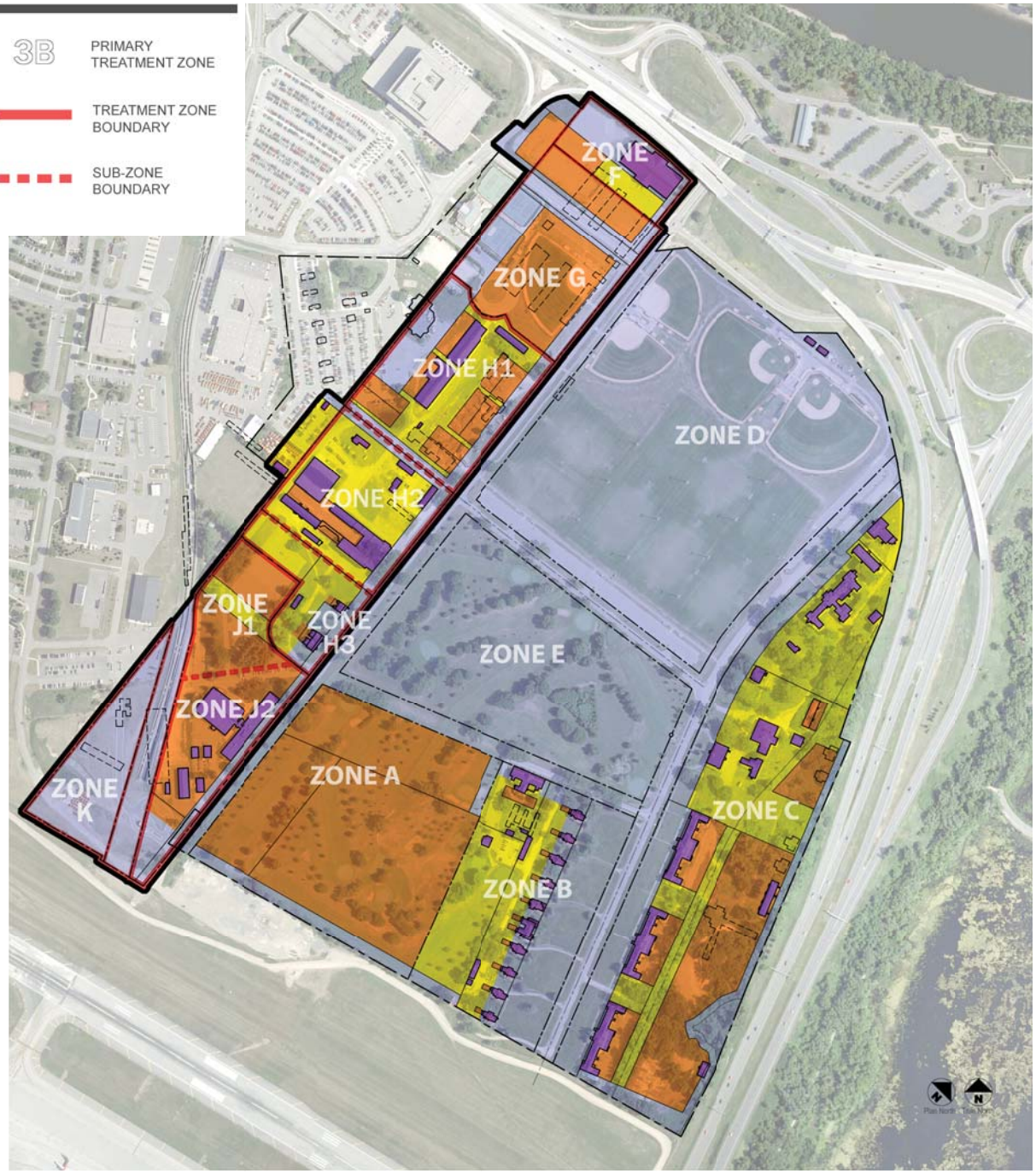
SUB-ZONE BOUNDARY

0' 400' 800'



Upper Post Favrot Study Area

West District Area



Treatment Zone F

Treatment Zone F is located at the northern-most end of the study area. It is bordered by Bloomington Road on the east, the National Register District boundary and State Trunk Highway 55 on the north, Federal Drive on the west, and the legal boundary established by GSA and Department of the Interior deeds on the south. A portion of Treatment Zone F is within the National Register and State Historic District, so all rehabilitation work and new construction must be consistent with the Secretary of the Interior Standards.
There is no visible physical separation between Zone F and G, because the designation exists in the language of the deed only. Tower Avenue provides a natural boundary, and currently separates property ownership, however, the deeds must be acknowledged because they establish specific development criteria for the individual properties. For this reason Treatment Zones F and G are separate but related. See the Treatment Zone map.
Two building parcels have been identified within Zone F for potential new development: F.1 and F.2.

Existing historic buildings: #201 Cavalry Drill Hall (28,000 SF footprint) (highly visible from Highway 55)

Current use of site: This site is under the ownership of the Northern Star Council of the Boy Scouts of America. It is the site of their future Twin Cities "Urban Base Camp" in Building #201 and eventual headquarters in a future, adjacent building. The Northern Star Council property ownership extends south into Treatment Zone G, as well as south and west beyond the National Register District boundary into the area containing Building Parcel F.2.

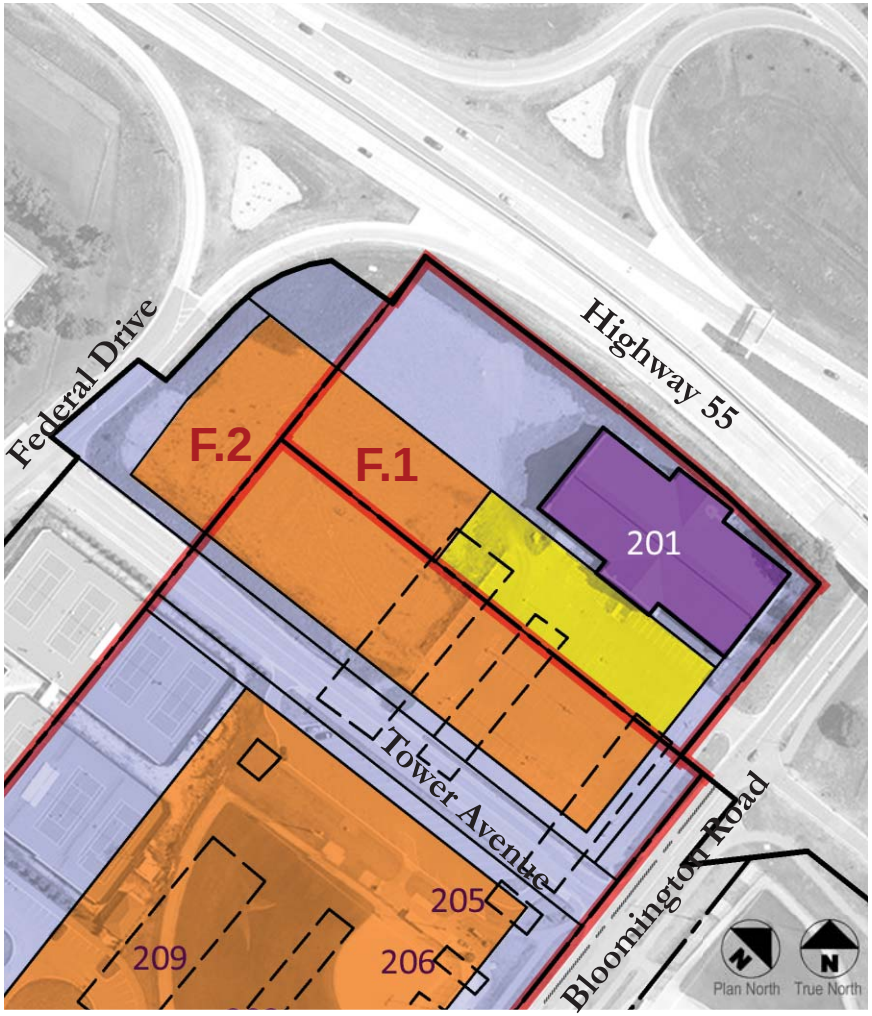
Allowable building re-use/additions: Reuse of Building #201 is encouraged for uses compatible with its size. Work altering the exterior appearance of the building should be minimized. Additions and alterations to provide accessibility into and throughout the building, upgrade life safety systems, and rehabilitate it for reuse may be allowed where necessary. All work shall be in compliance with the Secretary of the Interior Standards and will be subject to a Section 106 Review, as required by agreements prepared when the property was transferred from Federal ownership to the Minneapolis Park and Recreation Board (MPRB). The Northern Star Council subsequently purchased the property from the MPRB.

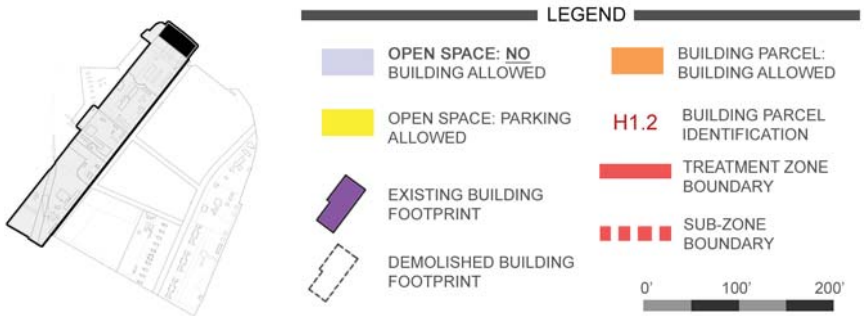
Allowable new construction, building placement, density, and setbacks:
Building Parcel F.1 (19,300 SF) would be available for limited development, most likely as an extension of development occurring in Zone G.1.

- One new building will be allowed north of Tower Avenue, similar in scale to #201 (approximately 28,000 SF footprint). This building will be allowed to be on Building Parcels F.1, F.2, and/or G.1.
- Sightlines from Highway 55 to Building #201 must be maintained.
- Buildings should align with the street grid, perpendicular or parallel to Tower Avenue.

Building Parcel F.2 (21,400 SF) would be available for development.

- One new building will be allowed north of Tower Avenue, similar in scale to #201 (approximately 28,000 SF footprint). This building will be allowed to be on Building Parcels F.1, F.2, and/or G.1.





- Sightlines from Highway 55 to Building #201 must be maintained.
- Buildings should align with the street grid, perpendicular or parallel to Tower Avenue.

Allowable building height and materials:

- A two story building will be allowed in this zone, but the building height may not exceed the height of Building #201.
- Building should have a similar roof shape and pitch as Building #201.
- Stylistically appropriate roof elements (monitors, dormers, etc) are encouraged.
- Brick, unglazed ceramic or a durable clapboard scale siding should be used.
- No metal or synthetic primary cladding materials should be used.
- New construction should be recognized as being of its time.

Street presence: Building 201's presence on Bloomington Road should be maintained and not be compromised.

Existing historic landscapes/features: NA

Allowable land uses: Zone F land and open space would be available for a wide range of uses compatible with its size and uses of adjacent properties within the West District and Upper Post.

Parking strategies: Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone G

Treatment Zone G is bordered by Bloomington Road on the east, the boundary established by the GSA and Department of the Interior deeds on the north, Treatment Zone H1 on the south, and the National Register District boundary on the west. Treatment Zone G is within the National Register and State Historic District, so all new construction must be consistent with the Secretary of the Interior Standards.

There is no visible separation between Zone F and G when at the site, because the designation exists in the language of the deed only. Tower Avenue seems to be a natural boundary, but actually runs through Zone G. For this reason Treatment Zones F and G are separate but related. Because Zone G is bisected by Tower Avenue, two building parcels have been identified for potential new development: G.1 and G.2. See the Treatment Zone map.

Existing historic buildings: Historic buildings no longer remain on site.

Current use of site: The area north of Tower Avenue is under the ownership of the Northern Star Council of the Boy Scouts of America. It is the site of their future Twin Cities base camp and headquarters building. The portion of the site south of Tower Avenue is under the ownership of MPRB and currently contains sports facilities, including portions of an indoor tennis facility and a baseball diamond. These guidelines do not call for removal of these facilities. They would only apply if or when the MPRB wishes to cease these uses and/or sell the site.

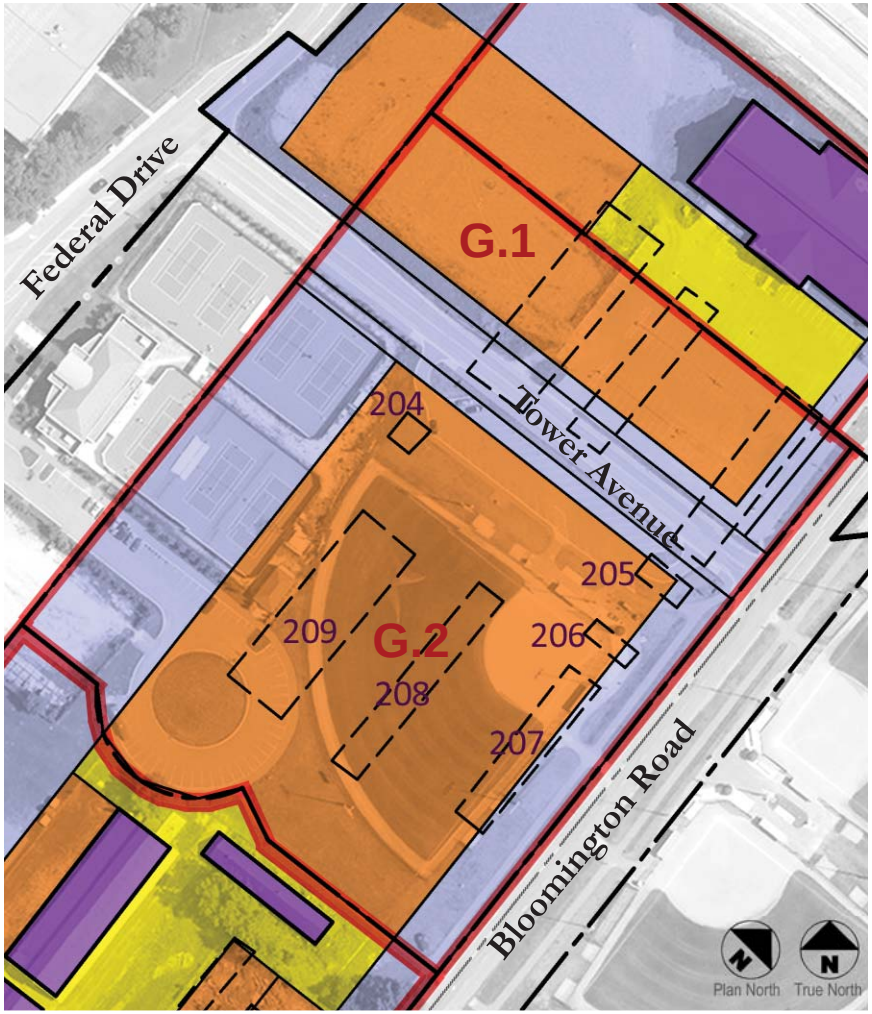
Allowable new construction, building placement, density, and setbacks:

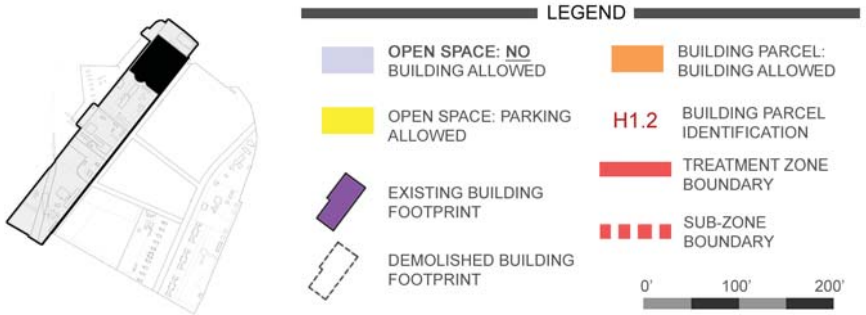
Building Parcel G.1 (62,600 SF) would be available for a range of potential uses compatible with its size and uses of adjacent properties within the West District and Upper Post.

- One new building will be allowed north of Tower Avenue, similar in scale to #201 (approximately 28,000 SF footprint). This building will be allowed to be on Building Parcels G.1, F.1 and/or F.2.
- Setbacks along Bloomington Road should match the setback at Building #201.
- Buildings should align with street grid (perpendicular or parallel to Bloomington Road)

Building Parcel G.2 (178,000 SF) would be available for a range of potential uses compatible with its size and uses of adjacent properties within the West District and Upper Post.

- Multiple new buildings will be allowed south of Tower Avenue, similar in scale to existing historic buildings #211 and #214 in Treatment Zone H1. Buildings arranged to create courtyards are encouraged.
- Allowable coverage of 17% would permit new building footprints to total 30,300 SF.
- Buildings should align with street grid (perpendicular or parallel to Bloomington Road)
- Setbacks along Bloomington Road should match the setback at Building #201.
- A buffer should be created between the historic West District and new development outside of the historic boundary. A no-build zone along the west National Register District boundary shall align with the west setbacks at building #211 and #214 (see Building Parcels H1.1 and H1.2).





Allowable building height and materials:

- Two story buildings will be allowed in this zone, but the building height may not exceed the height of Building #201.
- Buildings on Parcel G.1 should have a similar roof shape and pitch as Building #201. Buildings on Parcel G.2 should have a similar roof shape and pitch as Buildings #210 and #214. Stylistically appropriate roof elements (monitors, dormers, etc) are encouraged.
- Brick, unglazed ceramic or a durable clapboard scale siding should be used.
- No metal or synthetic primary cladding materials should be used.
- New construction should be recognized as being of its time.

Street presence: Buildings shall have pedestrian entrances facing Bloomington Road or Tower Avenue. Buildings shall be articulated with windows and/or architectural elements to complement other existing historic West District structures. First floor elevations should be slightly higher than the adjacent roadway but should not require a slope greater than 5% from the top of the curb elevation to the floor.

Existing historic landscapes/features: NA

Allowable land uses: Treatment Zone G land and open space would be available for a range of potential uses compatible with its size and uses of adjacent properties within the West District and Upper Post.

Parking strategies: Historically this zone contained a Motor Shed (#209), a Garage (#209), Stables (#203), and a corral. At one point Buildings #205 and #206 were used for tank storage. All of these buildings have since been demolished or moved, but a precedent for hard surface parking has been established and should be allowed in future development. Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone H1

Treatment Zone H1 is bordered by Treatment Zone G on the north, Bloomington Road on the east, Minnehaha Avenue on the south, and the National Register District boundary on the west. Treatment Zone H1 is within the National Register and State Historic District, so all rehabilitation work and new construction must be consistent with the Secretary of the Interior Standards. Six building parcels have been identified within Zone H1 for potential new development: H1.1, H1.2, H1.3, H1.4, H1.5, and H1.6.

Existing historic buildings:

- #210 Quartermaster Shops (4,300 SF footprint)
- #211 Quartermaster Stables (13,060 SF footprint)
- #214 Quartermaster Stables (14,870 SF footprint)
- #215 Quartermaster Gas Station (300 SF footprint)

Current use of site: This site is under the ownership of the VA and the Minneapolis Park and Recreation Board. Buildings are either vacant or used for storage.

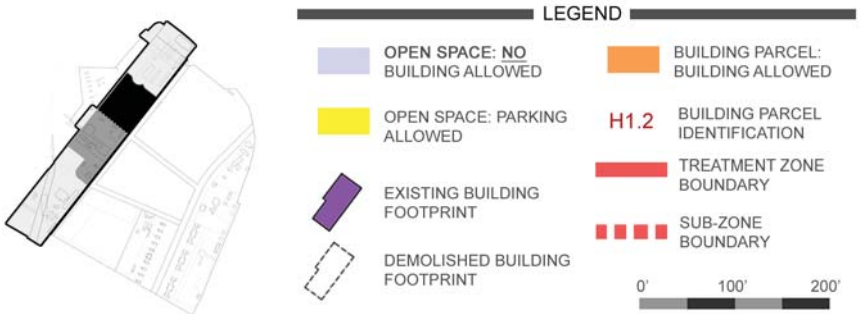
Allowable building re-use/additions:

- Reuse of Building #210 is encouraged for uses compatible with its size. Additions and alterations to provide accessibility into and throughout the building, upgrade life safety systems, and rehabilitate it for reuse will be allowed where necessary. Work altering the exterior appearance of the building should be minimized.
- Reuse of Buildings #211 and #214 is encouraged for uses compatible with their sizes. In addition to allowing necessary additions and alterations to provide accessibility into and throughout the building, upgrade life safety systems, and rehabilitate the building for reuse, sympathetic additions will be allowed on the west sides of both buildings, identified as Building Parcels H1.1 and H1.2 (see below). Additions should be in a style and scale similar to the additions at Building #214. Work altering the exterior appearance of the building should be minimized, although a link between the buildings should not be discouraged as long as it an appropriate scale, existing character-defining features are not adversely affected, and the buildings continue to be perceived as two separate buildings.
- Reuse of Building #215 is encouraged for uses compatible with its size. However, because of its small size and lack of amenities such as toilets, it may be best to have a seasonal use, used for an information kiosk, or be restored to its original condition for viewing and interpretation.

Allowable new construction, building placement, density, and setbacks:

Building Parcel H1.1 (12,000 SF) would be available for sympathetic additions to Building 211.

- Allowable coverage of 20% would permit new addition footprints to total 2,400 SF.
- A buffer should be created between Building Parcel H1.1 and new development west of the historic boundary.



Building Parcel H1.2 (12,000 SF) would be available for sympathetic additions to Building 214.

- Allowable coverage of 20% would permit new and existing addition footprints to total 2,400 SF. (Two existing additions currently total 1,600 SF)
- A buffer should be created between Building Parcel H1.2 and new development west of the historic boundary.

Building Parcel H1.3 (20,800 SF) would be available for a range of potential uses compatible with the size and uses of adjacent properties within the West District and Upper Post.

- New construction should be similar in scale and proportions to Buildings #211 and 214.
- The main portion of new construction should not exceed the length or width of Buildings #211 and 214.
    - Maximum width: 70 ft±
    - Maximum length: 160 ft± (This dimension is 40' less than the length of Buildings #211 and 214 to allow for a larger buffer space around existing Building #210.)
- "T"'s and "L"'s protruding from the main portion of the new construction may total to 2,400 SF. They should be on the west elevation and similar in size and scale to the existing additions on the west elevation of Building #214.
- New buildings should align with street grid, parallel to Bloomington Road.
- Setback along Bloomington Road should match the setback at Building #201.
- Construction on Parcel H1.3 may be linked to new construction on Parcel H1.4; however, the presence of the link should be minimized so that they each appear to be individual buildings when viewed from Bloomington Road or Minnehaha Avenue.

Building Parcel H1.4 (22,000 SF) would be available for a range of potential uses compatible with the size and uses of adjacent properties within the West District and Upper Post.

- New construction should be similar in scale and proportions to Buildings #211 and 214.

- The main portion of new construction should not exceed the length or width of Buildings #211 and 214.
    - Maximum width: 70 ft±
    - Maximum length: 200 ft±
- "T"'s and "L"'s protruding from the main portion of the new construction may total to 2,400 SF. They should be on the west elevation and similar in size and scale to the existing additions on the west elevation of Building #214.
- New buildings should align with street grid, parallel to Bloomington Road.
- Setback along Bloomington Road should match the setback at Building #201.
- Construction on Parcel H1.4 may be linked to new construction on Parcels H1.3 and/or H1.5 to increase area; however, the presence of the link should be minimized so that they each appear to be individual buildings when viewed from Bloomington Road or Minnehaha Avenue.

Building Parcel H1.5 (20,800 SF) would be available for a range of potential uses compatible with the size and uses of adjacent properties within the West District and Upper Post.

- New construction should be similar in scale and proportions to Buildings #211 and 214.
- The main portion of new construction should not exceed the length or width of Buildings #211 and 214.
    - Maximum width: 70 ft±
    - Maximum length: 160 ft± (This dimension is 40' less than the length of Buildings #211 and 214 to allow for a larger buffer space around existing Building #215.)
- "T"'s and "L"'s protruding from the main portion of the new construction may total to 2,400 SF. They should be on the north elevation and similar in size and scale to the existing additions on the west elevation of Building #214. New buildings should align with street grid, parallel to Minnehaha Avenue.
- Setback along Minnehaha Avenue should align with historic footprint of Building #216 (now demolished).
- Construction on Parcel H1.5 may be linked to new construction on Parcel H1.4 to increase area; however, the presence of the links should be minimized so that they each appear to be individual buildings when viewed from Bloomington Road or Minnehaha Avenue.

Building Parcel H1.6 (22,000 SF) would be available for a range of potential uses compatible with the size and uses of adjacent properties within the West District and Upper Post.

- New construction should be similar in scale and proportions to Buildings #211 and 214.
- The main portion of new construction should not exceed the length or width of Buildings #211 and 214.
    - Maximum width: 70 ft±
    - Maximum length: 200 ft±
- "T"'s and "L"'s protruding from the main portion of the new construction may total to 2,400 SF. They should be on the north elevation and similar in size and scale to the existing additions on the west elevation of Building #214.

- New buildings should align with street grid, parallel to Minnehaha Avenue.
- Setback along Minnehaha Avenue should match the setback at Building #216.

Allowable building height and materials:

- Buildings with partial second floors will be allowed in this zone, but the building height may not exceed the height of Buildings #211 and #214.
- Buildings should have a similar roof shape and pitch as Buildings #211 and #214.
- Stylistically appropriate roof elements (monitors, dormers, etc) are encouraged.
- Brick, unglazed ceramic or a durable clapboard scale siding should be used.
- No metal or synthetic primary cladding materials should be used.
- New construction should be recognized as being of its time.

Street presence: Buildings facing Bloomington Road or Minnehaha Avenue shall have pedestrian entrances facing the streets. Buildings shall be articulated with windows and/or architectural elements to complement other existing historic West District structures. First floor elevations should be slightly higher than the adjacent roadway but should not require a slope greater than 5% from the top of the curb elevation to the floor.

Existing historic landscapes/features: Existing canopy trees along Bloomington Road should be maintained.

Allowable land uses: Zone H1 land open space would be available for a limited range of potential uses, such as parking or plazas. Use of the open space must be compatible with the size and uses of adjacent properties within the West District and Upper Post.

Parking strategies: Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: Species appropriate boulevard trees should be planted along Bloomington Road and Minnehaha Avenue to be consistent with historical documents. Shrub plantings at foundations and at building entries are allowed. Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone H2

Treatment Zone H2 is bordered by Bloomington Road on the east, Minnehaha Avenue on the north, Treatment Zone H3 on the south, and the National Register District boundary on the west. Treatment Zone H2 is within the National Register and State Historic District, so all rehabilitation work and new construction must be consistent with the Secretary of the Interior Standards. One building parcel has been identified within Zone H2 for potential new development: H2.1.

Existing historic buildings:

- #217 Quartermaster Storehouse (2,740 SF footprint)
- #218 Forage House (1,740 SF footprint)
- #219 Sawmill (1,810 SF footprint)
- #220 Post Exchange (1,540 SF footprint)
- #222 Quartermaster Storehouse (19,000 SF footprint)
- #223 Commissary Warehouse (17,760 SF footprint)
- #224 Forage House (6,470 SF footprint)
- #225 Storehouse (1,620 SF footprint)

Two historic building are located outside of the Nation Register and State Historic District boundary:

- #237 Powder Magazine (1800 SF footprint)
- #239 Mineral Oil House (630 SF footprint)

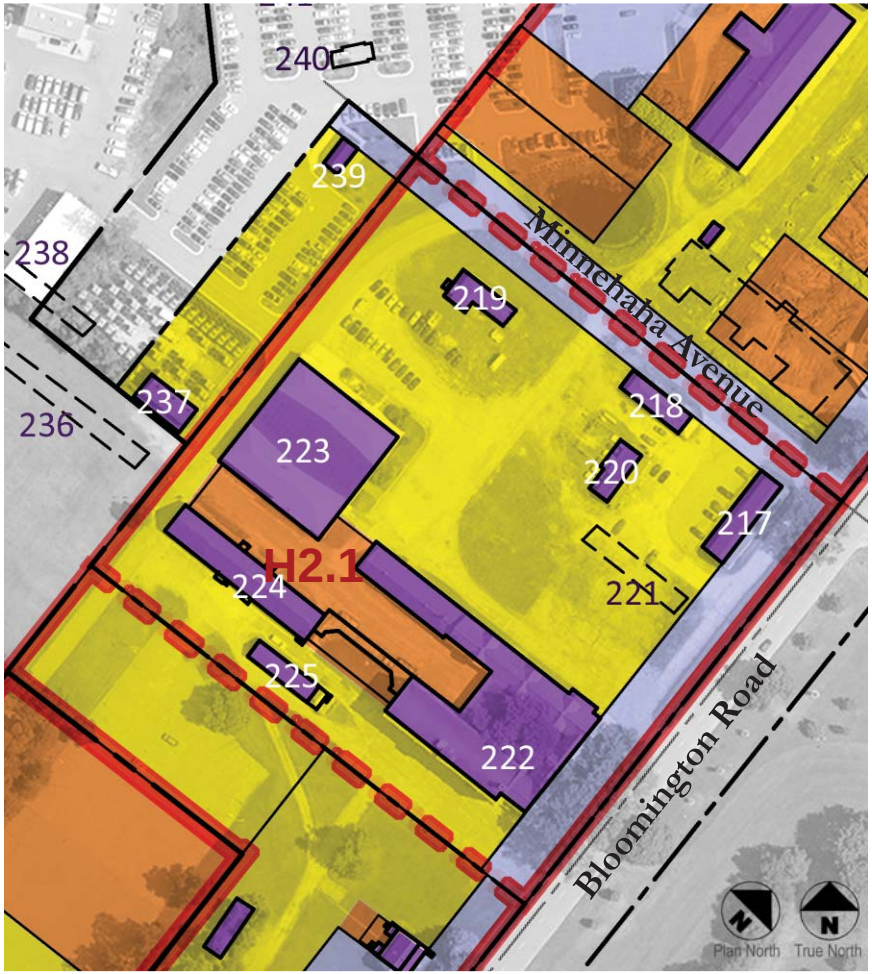
Current use of site: This site is under the ownership of the VA. Buildings are either vacant or used primarily for storage, except for Building #220, which is a vehicle service shop.

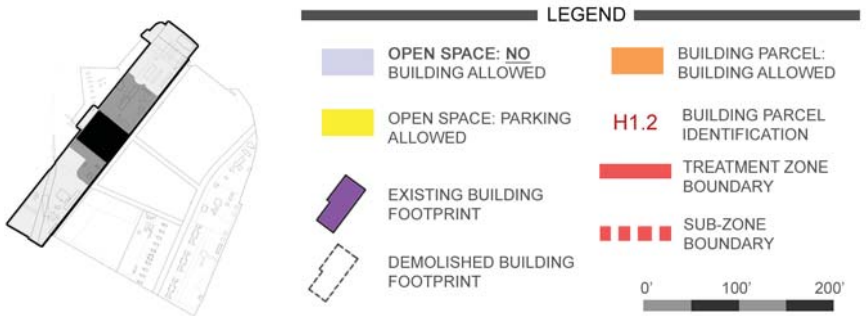
Allowable building re-use/additions: Reuse of all buildings in Zone H2 is encouraged for uses compatible with their sizes. Additions and alterations to provide accessibility into and throughout the buildings, upgrade life safety systems, and rehabilitate them for reuse will be allowed where necessary. Work altering the exterior appearance of the building should be minimized.

Allowable new construction, building placement, density, and setbacks: Zone H2 presents an accurate depiction of what the Quartermaster's area was like near the end of the Fort's period of significance. Only one historic building (#221) is missing from the site. New construction should be restricted to the open space between Buildings #222, 223 and 224 so as to create an atrium or commons area that connects them to allow for more enclosed area. However, the area's former use as rail spurs should be celebrated by any design, interior or exterior, in this area.

Building Parcel H2.1 (24,800 SF) would be available for infill between Buildings #222, 223, and 224.

- Allowable coverage of 100% would permit the infill footprint to total 24,800 SF.
- Any new construction should be held back a minimum of 4' from the existing building faces.





Allowable building height and materials:

- Height of new construction will be determined by the more restrictive of these two criteria: two stories; or less than the height of the adjacent existing building.
- Buildings should have pitched or flat roofs, depending on where they occur.
- Brick, unglazed ceramic or a durable clapboard scale siding should be used.
- Any infill should be recognized as being of its time. New construction may expand the materials palette to include contemporary items.

Street presence: Alterations to existing building should be minimized. Existing buildings face Bloomington Road and Minnehaha Avenue and their street presence should be maintained.

Existing historic landscapes/features: Multiple railroad spurs fed into the Quartermaster's Area between Buildings #222, 223, and 224. The railroad lines have since been removed, but the area still serves as a shipping/receiving point. Designs acknowledging this historic feature are encouraged.
Existing sidewalks and trees should be maintained.

Allowable land uses: Zone H2 land and open space uses would be limited to lawns and parking.

Parking strategies: Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: Species appropriate boulevard trees should be planted along Bloomington Road and Minnehaha Avenue to be consistent with historical documents. Shrub plantings at foundations and at building entries are allowed. Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone H3

Treatment Zone H3 is bordered by Bloomington Road on the east., Treatment Zone H2 on the north, Treatment Zone J on the south, and the Historic District boundary on the west. Treatment Zone H3 is within the National Register and State Historic District, so all rehabilitation work and new construction must be consistent with the Secretary of the Interior Standards. Two sub-zones have been identified within Zone H3 for potential new development: H3.1 and H3.2.

Existing historic buildings:

- #227 Non-Commissioned Officer (N.C.O.) Quarters (1,000 SF footprint)
- #228 Garage (2,000 SF footprint)
- #229 Non-Commissioned Officer (N.C.O.) Quarters (3,000 SF footprint)

Current use of site: This site is under the ownership of the VA. The buildings are vacant.

Allowable building re-use/additions:
Reuse of Buildings #227 and 229 is encouraged for uses compatible with their sizes. Historically these buildings were residential, however, due to the close proximity to the MSP Airport this should be discouraged. Offices could be an alternative use. Sympathetic additions to provide accessibility into and throughout the buildings and upgrade life safety systems should be allowed on the rear (west) sides of both buildings, identified as Building Parcels H3.1 and H3.2 (see below). Work altering the Bloomington Road facades of the buildings should be minimized.

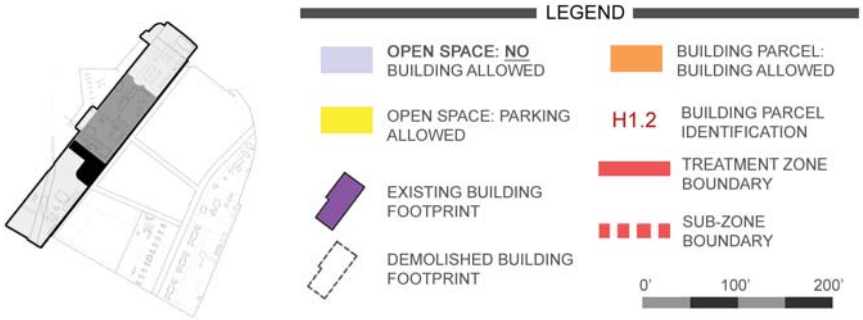
Building #228 is damaged beyond repair. Following thorough documentation, this building may be demolished.

Allowable new construction, building placement, density, and setbacks:
Building Parcel H3.1 (1000 SF) would be available for sympathetic additions to Building 227.

- Additions will only be allowed on the west (rear) side.
- Additions to Building #227 would be allowed up the same size as the original building footprint (1000 SF without porches).
- Existing north, east, and south setbacks should be maintained; and new construction should be held back 2' from the existing building faces.

Building Parcel H3.2 (3000 SF) would be available for sympathetic additions to Building 229.

- Additions will only be allowed on the west (rear) side.
- Additions to Building #229 would be allowed up the same size as the original building footprint (3000 SF without porches).
- Existing north, east, and south setbacks should be maintained; and new construction should be held back 2' from the existing building faces.



Allowable building height and materials:

- Two story additions will be allowed in this zone, but the building height may not exceed the height of Buildings #227 and #229.
- Additions should have a gabled roof.
- Brick or a durable clapboard siding will be allowed.
- New construction should be recognized as being of its time.

Street presence: The existing buildings face Bloomington Road and their street presence should be maintained.

Existing historic landscapes/features: Multiple railroad spurs fed into the north-west corner of Treatment Zone H3, near building #225. The railroad lines have since been removed. New open space design acknowledging this historic feature is encouraged.

Allowable land uses: Treatment Zone H3 land and open space uses would be limited to lawn along the front and sides of buildings #227 and 229, and lawn and parking in the rear.

Parking strategies: Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Parking shall be west of the drive behind the buildings and in open lot(s) or garage structures similar to Building #228. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: This zone to be treated similarly to Officer's Row in the Upper Post portion of Fort Snelling. Species appropriate boulevard trees will be planted along Bloomington Road to be consistent with historical documents. Front yard landscaping should be predominantly turf and relatively simple to be consistent with historical Upper Post landscape. Shrub plantings at foundations and at building entries are allowed, with coniferous tree massing between buildings. Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone J1

Treatment Zone J1 is bordered by Treatment Zone H3 on the north and east, Treatment Zone J2 on the southeast, the Hiawatha LRT on the southwest, and the National Register District boundary on the west. Treatment Zone J1 is within the National Register and State Historic District, so all new construction must be consistent with the Secretary of the Interior Standards. Two building parcels have been identified within Zone J for potential development: J1.1 and J1.2.

Existing historic buildings: No historic buildings exist on the site.

Current use of site: This site is under the ownership of the VA. A surface parking lot covers much of the zone.

Allowable building re-use: NA

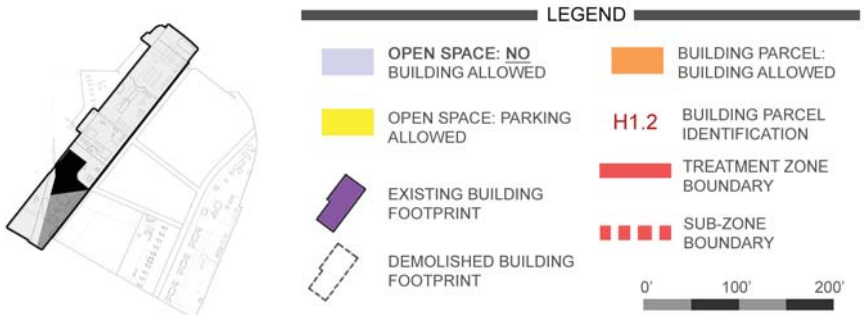
Allowable building additions: NA

Allowable new construction, building placement, density, and setbacks:
Building Parcel J1.1 (61,500 SF) would be available for a range of potential uses compatible with the sizes and uses of adjacent properties within the West District and Upper Post.

- Allowable coverage of 40% would permit new building footprints to total 24,600 SF.
- Buildings should align with the street grid (perpendicular or parallel to Bloomington Road)
- A buffer will be created between the historic West District buildings in Zones H2 and H3 and new development within Zone J.
- A buffer will be created between Building Parcels J.1 and J.2, acknowledging the historic route extending west from Leavenworth Avenue to the former railroad loading platform.

Building Parcel J1.2 (92,300 SF) This property would be available for a range of potential uses compatible with the sizes and uses of adjacent properties within the West District and Upper Post, and with the activities on the nearby MSP Airport property.

- Allowable coverage of 40% would permit new building footprints to total 36,900 SF.
- Buildings should align with street grid (perpendicular or parallel to Bloomington Road)
- A buffer will be created between Building Parcels J1.1 and J1.2, acknowledging the former route extending west from Leavenworth Avenue.



Allowable building height and materials:

- Two story buildings will be allowed in this zone, but the building height may not exceed the height of Building #201.
- Buildings should have a gabled or hipped roof.
- Brick or a durable clapboard siding will be allowed.
- New construction should be recognized as being of its time.

Street presence: Buildings shall be articulated with windows and/or architectural elements to complement other existing historic West District structures. First floor elevations should be slightly higher than the adjacent roadway but should not require a slope greater than 5% from the top of the curb elevation to the floor.

Existing historic landscapes/features: NA

Allowable land uses: Treatment Zone J1 land and open space would be available for a wide range of potential uses compatible with its size and uses of adjacent properties within the West District and Upper Post, and with the activities on the adjacent MSP Airport property.

Parking strategies: Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone J2

Treatment Zone J2 is a triangular area of land bordered by Bloomington Road on the east, Treatment Zone J1 on the northwest, and the Hiawatha LRT on the southwest. Treatment Zone J2 is within the National Register and State Historic District, so all new construction must be consistent with the Secretary of the Interior Standards. One building parcel has been identified within Zone J2 for potential development: J2.1.

Existing historic buildings: No historic buildings exist on the site.

Existing non-historic buildings: Existing Navy Reserve buildings on site.

Current use of site: This site is under the ownership of the US Navy.

Allowable building re-use: Reuse of existing buildings is encouraged. Demolition is also allowable.

Allowable building additions: Additions to the existing buildings are allowed.

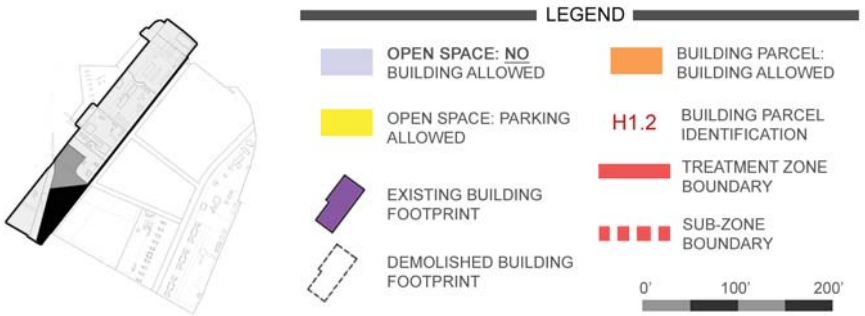
Allowable new construction, building placement, density, and setbacks:
Building Parcel J2.1 (197,500 SF) The Navy Reserve plans to continue its presence on this land. If in the future they decide to leave, their property would be available for a range of potential uses compatible with the sizes and uses of adjacent properties within the West District and Upper Post, and with the activities on the adjacent MSP Airport property.

- Allowable coverage of 40% would permit new building footprints to total 79,000 SF.
- Buildings should align with street grid (perpendicular or parallel to Bloomington Road) or zone boundaries.
- Setbacks along Bloomington Road should match the setback of existing buildings on the site.

Allowable building height and materials:

- Two story buildings will be allowed in this zone, but the building height may not exceed the height of Building #201.
- Buildings should have a gabled or hipped roof.
- Brick or a durable clapboard siding will be allowed.
- New construction should be recognized as being of its time.

Street presence: Buildings facing Bloomington Road shall have pedestrian entrances facing the street. Buildings shall be articulated with windows and/or architectural elements to complement other existing historic West District structures. First floor elevations should be slightly higher than the adjacent roadway but should not require a slope greater than 5% from the top of the curb elevation to the floor.



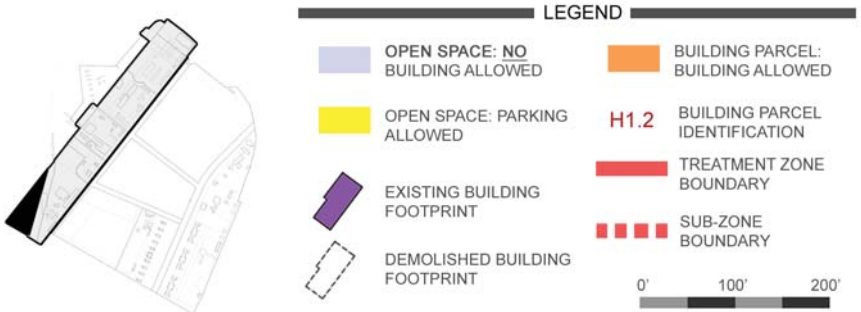
Existing historic landscapes/features: NA

Allowable land uses: Zone J land and open space would be available for a wide range of potential uses compatible with its size and uses of adjacent properties within the West District and Upper Post, and with the activities on the adjacent MSP Airport property.

Parking strategies: Parking, drive lanes, and other paved areas shall not comprise more than 60% of the site. Monolithic (asphalt, concrete) or modular (concrete, brick, etc.) semi-pervious/pervious paving surfaces are encouraged.

Streetscape/landscape standards: Site development of the West District should be based on historic Army post precedents, and this area should not resemble suburban or rural sites and landscaping. Heavily landscaped open areas are discouraged. Parking lot screening, if provided, should be low vegetation or fencing compatible with the historic use. No ponds or open water of any kind will be allowed. When possible, existing historic light posts should be restored. New light fixtures should be of a similar style.

Treatment Zone K



Treatment Zone K is bordered by the Hiawatha LRT on the east and the National Register District boundary on the south and west.

Treatment Zone 5 is within secured US Air Force property. Development guidelines for this area were not produced as part of this study.

Existing historic buildings: No historic buildings exist on the site.

Current use of site: This site is under the ownership of the US Air Force, currently leased to the MN Air National Guard.

Rehabilitation Guidelines

Introduction

The Rehabilitation Guidelines described in the following sections provides an overview of the maintenance, repair, and cleaning of historic materials and features, as well as suggested resources for additional information. Repair of existing features should always be the first choice; however, that is not always feasible, and recommendations for replacement are included in the following sections as well. The Rehabilitation Guidelines are divided into the following three parts: Materials, Exterior Features, and Interior Features.

Approach to Rehabilitation of West District Historic Buildings

It is anticipated that as new uses are introduced to the West District some modification to historic exteriors may be required to accommodate those new functions. To preserve the historical significance of the campus and its individual components, any modifications to the exterior of any building should be designed to minimize the adverse affect to a structure's appearance and original building fabric. Modifications to primary elevations should be avoided whenever possible.

Relationship to Secretary of the Interior Standards

The existing West District buildings are located within the National Register and State Historic District, so all rehabilitation work and new construction must be consistent with the Secretary of the Interior Standards.

Historic West District Materials

The existing construction materials present in the West District generally consist of limited types and colors of masonry, wood, or corrugated metal sidings; along with hip or gable roofs of red, green, black, or gray slate or asphalt shingles or corrugated metal roofing. The following sections of the Rehabiliation Guidelines will look at treatment methods for Masonry, Wood, and Metal.

Exterior Historic/Character Defining Elements

In a previous section of this study the interior historic and character defining features were identified for each building. The exterior features will not be broken down by building because the existing buildings have retained many of their exterior historical features. These include, but are not limited to: porches, loading platforms, doors, windows, roofs, chimneys, roof ventilators, and foundations.

Historic Materials: Masonry

Masonry is the most common construction material found in the structures of the West District. Brick, stone, and to a more limited extent, concrete block are used as structural and exterior finish materials. Brick itself is a very durable and attractive material ranging in color from dark red to pale cream. Most remaining brick construction in the West District is dark red, however Building #218 is a golden yellow. The strength and beauty of locally quarried limestone and granite made it a popular choice for foundations throughout Fort Snelling, as well as for exterior walls in Buildings #219 and #239 in the West District. Concrete block is a rare and recent addition to Fort Snelling; however it was used for the exterior walls of Buildings #220 and #223.

Maintenance

- Moisture can enter masonry through leaky roofs, gutters or downspouts, poor drainage, or condition known as rising damp. Rising damp occurs when moisture is drawn up from the ground through masonry by capillary action.
- Masonry should be checked regularly for moisture penetration.
- Regular maintenance will help prevent deterioration.
- To allow for proper air circulation, vegetation should not be planted against exterior building walls.
- Invasive vines such as ivy should not be allowed.

Joints/Repointing

- Repair masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration, such as disintegrating mortar, cracks in mortar joints, loose bricks, or damaged plaster work. Avoid total repointing if possible.
- Remove deteriorated mortar by carefully hand-raking the joints to avoid damaging the masonry. Harder mortars and other non-original materials may require mechanical cutting of the joints.
- New mortar joints should match the original in style, size, mortar composition, and color. It is especially important to repoint with a mortar of the same hardness as the original. Harder modern mortars with a high content of Portland cement can resist the warm weather expansion of the brick, causing cracking and spalling of the brick surface. In cold weather this same inflexibility may cause cracks to open up as the historic brick contracts.
- The mortar and masonry chemistry specifications should be determined by a masonry testing professional and should be included in the review submitted to the SHPO.

Cleaning

- Although cleaning masonry can have a dramatic impact on the appearance of a building,

it should nevertheless only be done to halt deterioration, and not merely to attain a "new" looking façade.

- Appropriate cleaning generally requires knowledgeable cleaning contractors who can demonstrate competence on a number of historic preservation projects over a number of years.
- Masonry should always be cleaned by the gentlest possible method.
- Based upon the type of surface, low pressure water washing together with natural bristle brush scrubbing may be sufficient. The pressure psi (pounds per square inch) should be specified in the review submittal to the SHPO.
- If painting or heavy grime must be removed, a chemical cleaner may be required. There are a wide range of chemical cleaners available and a qualified cleaning contractor should be consulted to evaluate the building and recommend a treatment.
- Whatever treatment is selected, a test patch should first be tried and allowed to weather for a few weeks or months. If the results of the test are satisfactory and no damage is observed, it should be safe to proceed.

Sandblasting

- Abrasive cleaning methods are strongly discouraged.
- Sandblasting is especially harmful to masonry surfaces, eroding the hard outer layer to expose a softer, more porous surface that will weather rapidly and possibly cause materials to crack and spall.

Painting

- In general, exposed masonry should never be painted – unless it can be determined the surface was painted from the beginning.
- Cleaning and repointing of the masonry is always preferable to painting.
- When attempting to remove paint from masonry surfaces, chemical strippers should be the preferred method. Only if chemical paint removal proves impractical (due to a cementitious paint coat, for example) should previously painted brick or stone be repainted.

Resources

The following National Park Service publications contain more detailed information about masonry.

Preservation Brief #1: The Cleaning and Waterproof Coating of Masonry Buildings.
Preservation Brief #2: Repointing Mortar Joints in Historic Brick Buildings.
Preservation Brief #6: Dangers of Abrasive Cleaning to Historic Buildings.
Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.

Historic Materials: Wood

Following masonry, wood is the most common exterior building material in the West District. Its broad use and universal popularity is due to its structural flexibility, economy, and strength. Window and door frames, doors, cornices, brackets, and other decorative façade elements were commonly made of wood. The exterior wood elements of the West District should, wherever possible, be retained and repaired rather than replaced. Only in cases of severe deterioration or structural inadequacy should replacement be used.

Maintenance

- Original exterior woodwork elements should be retained wherever possible.
- Regular maintenance will prevent deterioration.
- Check periodically for soft or rotted areas, splits, dampness and pest infestation.
- Vegetation that grows too closely to wood should be removed to allow for good air circulation.

Stripping

Aggressive paint removal techniques that would cause degradation and irregularities of the wood surface such as sandblasting, power driven mechanical strippers, or high-pressure water must be avoided.

- Hand scraping and sanding is recommended for removing damaged and deteriorating paint.
- Only in extreme cases should all paint (down to bare wood) be removed, such as where the paint has blistered and peeled.
- Use electrical hot air guns on decorative wood features and electric heat plates on flat wood surfaces when additional paint removal is required.
- Chemical strippers may be used to aid in the cleaning process – be certain to follow directions to thoroughly neutralize the chemicals after use, otherwise new paint will not adhere to the surface.
- It is generally not the goal to make the painted wood surface appear as it originally did. Solidly adhered but rough paint finishes are part of the history of the building.

Priming and Painting

Painting is the traditional method by which exterior wooden elements have been protected from moisture and other destructive environmental factors. It is more often thought of as a decorative element. Paint should provide the West District's buildings wood and metal features with both a strong protective and a decorative surface layer. Oil based paints have traditionally been used on the wooden trim elements, however recent developments have greatly improved the quality and durability of latex paints. Painting systems should be carefully researched.

- Keep all surfaces primed and painted to prevent wood deterioration from moisture.
- For all new wood and field cuts, preparation should include a water repellent preservative pre-treatment and completely priming all edges and front and back sides.
- If a new coat of paint is necessary, it is vitally important to clean the existing wood surface before any work is done.
- Scrape and sand to remove loose paint down to the bare wood.
- Prepare existing bare wood with a water repellent preservative pre-treatment.
- Repainting should occur at approximately 4-7 year intervals, or longer with proper preparation and painting systems.

Repair

- Damaged or decayed sections can usually be repaired by renailing, the use of a dutchman, caulking, and filling.
- Epoxy pastes and epoxy consolidants can also be very effective in repairing even seriously rotted wood.
- Do NOT caulk under individual siding boards or window sills – this action seals the building too tightly and does not allow the building to "breathe".
- Severely rotted or missing pieces may be reproduced by a good carpenter or millwork shop.
- Match the existing details when replacing woodwork.
- Adequately research appropriate wood replacement materials
- Use historic millwork specialists who can demonstrate competence on a number of historic preservation projects over a number of years.

Paint Colors

The buildings of the West District have a very limited palette of paint colors. The wood siding and trim colors are very muted or a simple white.

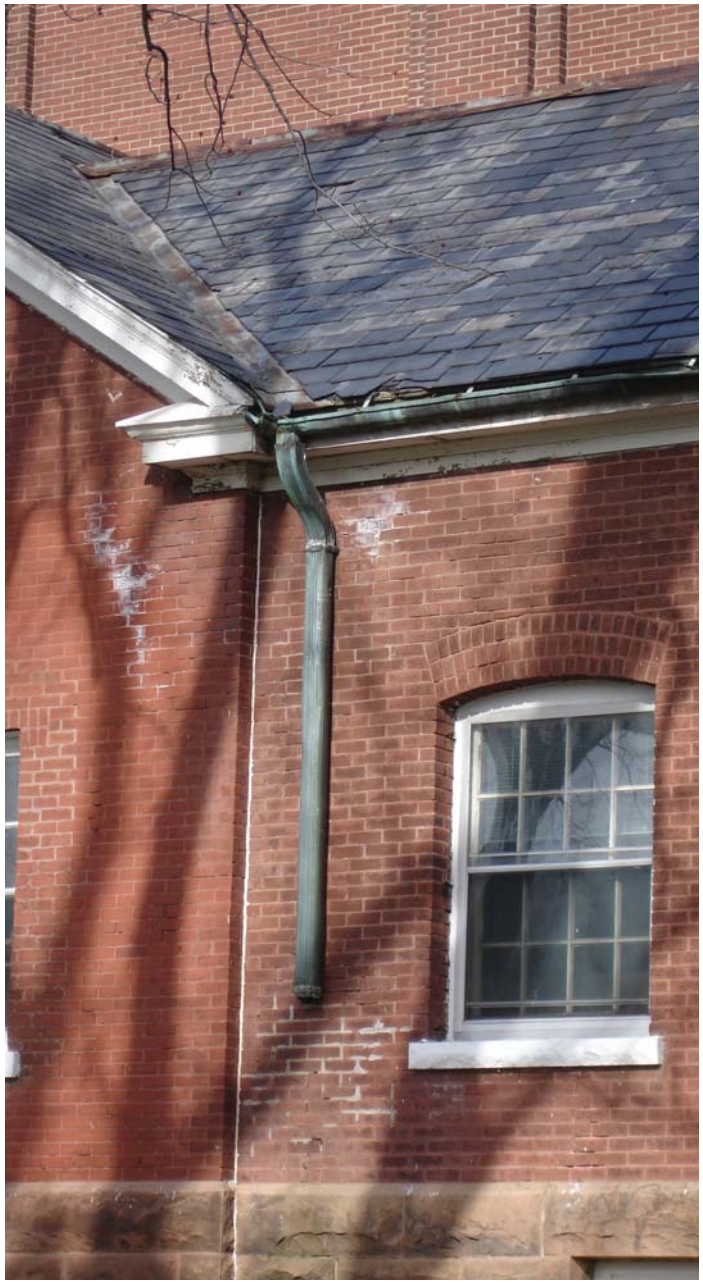
- Careful paint analysis or a paint conservator should be utilized to determine the building's original paint color(s).
- When repainting wood, the color selected should be the same for all trim elements, unless research indicates otherwise.
- The color should be compatible with the subdued palette found in the paint colors of the West District.
- All paint colors on the exterior of buildings should be specified in the SHPO review submittal.

Resources

The following National Park Service publications contain more detailed information about wood.

Preservation Brief #9: The Repair of Historic Wooden Windows.
Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.
Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.
Preservation Brief #32: Making Historic Properties Accessible.
Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing.
Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.

Historic Materials: Metal



Cast iron, bronze, copper, and sheet metal are used in ornamental and practical roles in Fort Snelling's historic buildings. Most of the examples of metal in the West District fall into the practical category - such as gutters, downspouts, structural supports, and corrugated siding and roofing. The decorative or utilitarian components in metal give buildings a human scale and liveliness. These architectural elements are essential to building character and appearance. They should not be removed unless absolutely necessary.

Gutters and Downspouts

Several buildings in the West District have exposed metal gutters and downspouts. These range from ornate copper, such as the warehouse of Building #222, to the simple utilitarian downspouts at 210, 224, and 222.

- Built-in gutters should be carefully evaluated in the context of an overall re-roofing design. In some cases they can be restored, but some buildings have roof edge designs that limit the ability of a built-in gutter's effectiveness. In those cases covering them and using exposed cutters should be considered.
- New downspouts should replicate the original design. Open-faced downspouts are discouraged.

Cleaning

- Rust or paint buildup may be removed from metal by chemical treatment, low pressure dry grit blasting, or hand sanding..
- The blasting pressure in psi should be specified in the review submittal to the SHPO.
- If stamped metal is to be cleaned, a chemical paint remover should be used.
- Dry grit blasting should never be used on thinner, more flexible pressed sheet metal.

Priming and Painting

- A sound paint coat is essential to prevent rust and corrosion.
- All metals requiring painting should first be primed with a commercial metal primer, followed by two finish coats of appropriate paint.
- Metals that have historically been painted should always be kept painted. Metals that have not been painted, such as copper or lead-coated copper, should remain unpainted unless historical research indicates otherwise.

Replacement

- Reproductions of missing pressed metal ornaments can often be made by a sheet metal shop.
- If parts are missing, they can be reproduced in fiberglass or aluminum using existing pieces to make a mold.
- If the missing pieces are relatively free of ornamental detail, wooden pieces might be substituted.
- As with most other historic structure elements, it is better to repair the existing features than to replace them.
- If an element is replaced, it must replicate the original in appearance, design, profile and finish.

Resources

The following National Park Service publications contain more detailed information about metals.

Preservation Brief #27: The Maintenance and Repair of Architectural Cast Iron.

Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.

Exterior Features

A building's architecture is made up of a variety of significant yet often subtle components. These include, but are not limited to: its massing; construction materials; fenestration (window and door placement); roof profile, including chimneys and roof ventilators; projecting porches and entries; and stylistic detailing of those components. This section of the guidelines addresses the exterior features of the buildings in the West District – important features that give the historic buildings individual identity and character.

Porches, Loading Platforms, etc.

Several of the buildings were designed with porches. Most of these have been modified (Buildings #227 and #229) or lost entirely over time. However, there is photographic documentation of most of the buildings during the period of significance.

- When repairing or reconstructing a porch, determine if there is a historic picture of the building to help guide the renovation.
- In any repair or replacement, retain as much of the original fabric as possible.
- In repainting a porch or similar features, follow the painting principles discussed in the other sections of these guidelines.

Doors and Windows

Doors and windows help to define the architecture of historic structures in the West District. Many of the original windows and doors remain, but most will require some degree or repair or replacement.

- If wood if found to be deteriorated it may be repaired or replaced, depending upon the severity. In-place repair is preferred to retain as much of the original material as possible.
- Modifications to building interiors should not modify the patterns of fenestration on the primary exterior elevations.

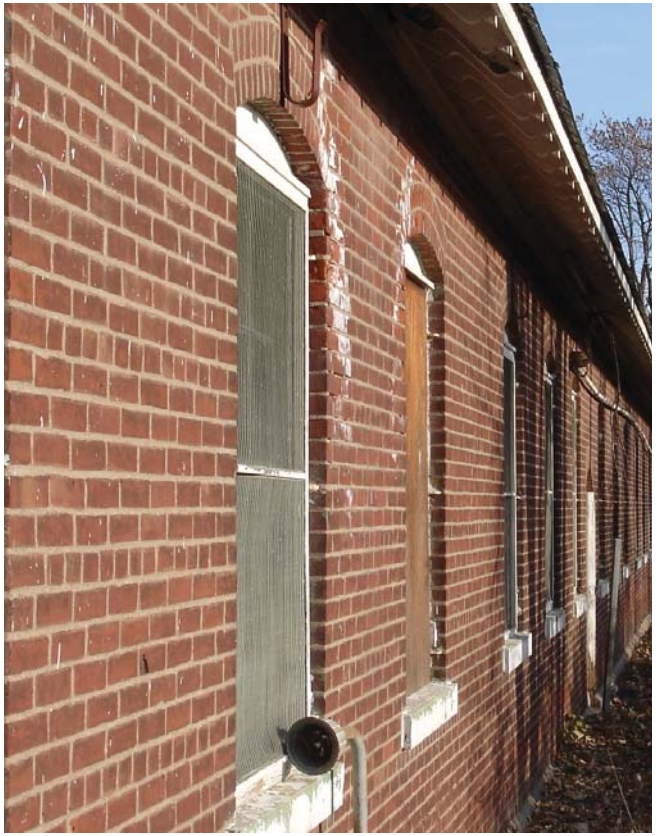
Replacement doors

- It is better to repair than replace existing original doors.
- If replacement is necessary, the new door should replicate the original in material, design, profile and finish.

Replacement glass and windows

As stated in the introduction, repair of historic elements is preferable to replacement, and this is especially true for historic windows. The measures listed below should only be taken if repair is not possible.

- All replacement glass should be clear. Some types of Low "E" glass are also permitted and should be researched.
- When more energy efficient double-glazed windows are to be used as replacements, they



should match the original windows in size, profile and design.

- If wood windows are being replaced, the use of wood replacement windows is preferred. However, metal or clad wood windows may be acceptable if the original size, profile and design is maintained.
- Never replace a multi-pane window with a single large pane of glass, or vice-versa.
- If a single pane needs replacement, the replacement glass should match the older, companion glass.
- The size and division of window sash should match the existing pattern or historic photographic documentation.
- If double glazed, window muntins must be on the exterior and interior surfaces, as well as having a spacer between the panes.
- Hardware is often a troublesome repair problem. Window and door hardware which reproduces turn-of-the-century and earlier 20th-century forms is readily available.
- Replacement hardware should match the original in size, type, finish and quality.

Storm Windows

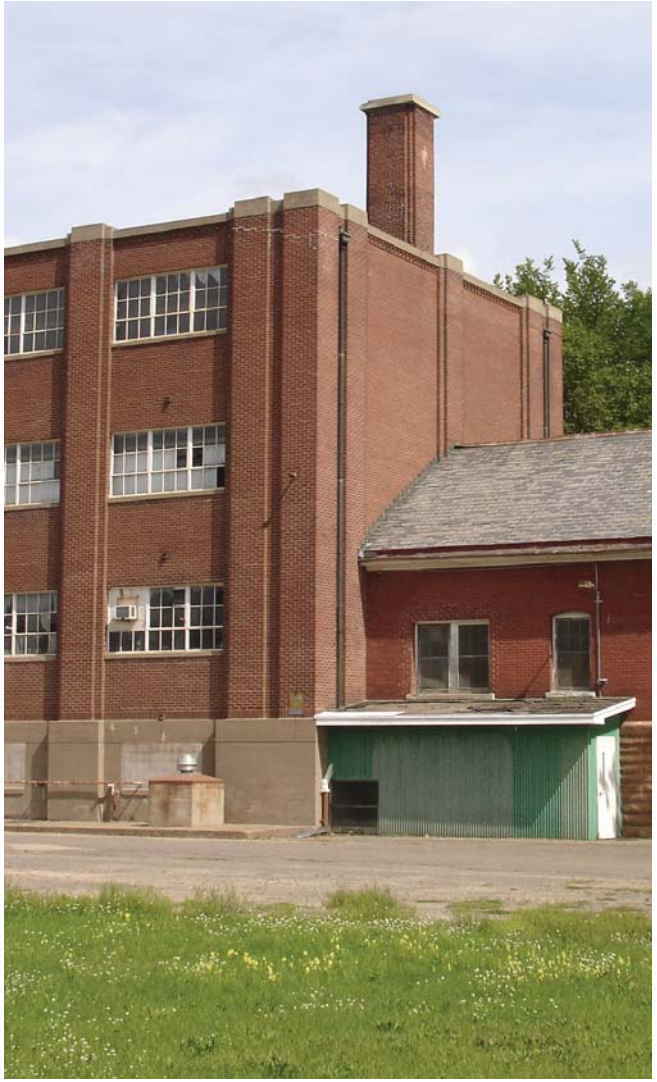
Is storm windows are existing, or their historical presence was documented, they should be repaired or replaced. The use of storm windows provides an opportunity to conserve energy, protect window finishes, and increase the soundproofing of the structure.

- Exterior storm windows should conform with the size and shape of the existing sash and be painted to match.
- Storm windows may be double-glazed to increase soundproofing. If double glazed, window muntins must be on the exterior and interior surfaces, as well as having a spacer between panes.

Roofs

The buildings of the West District have a variety of roof coverings, shapes and conditions. Roof coverings include slate, asphalt shingles, and corrugated metal. While most of the roofs are gabled or hipped in shape, there are also examples of flat roofs.

- In all cases the roof profiles should be preserved in any roof work. This includes the shape of the roof, dormers, chimneys, roof ventilators, and fire walls.
- All roofs should be examined for potential leakage and repaired or replaced with replicating materials as necessary.
- Slate roofs should be retained and repaired wherever possible.
- If a roof is to be replaced, the new roofing material should replicate the original covering. If this is not possible, suitable materials that have the appearance of the original material may be approved.



- Any hazardous asbestos roof tile should be removed and replaced with high-quality asphalt shingles matching the original in color, shape, and size.
- Skylights should not be added to the roofs on any primary elevation.
- Consultants that specialize in roofing should be utilized for particularly complex roof configurations.

Chimneys and Roof Ventilators

- Chimney stacks and roof ventilators should be inspected to determine condition and repaired where required.
- Chimneys and roof ventilators should not be removed, even if they are non-functioning.
- Any existing, non-functioning chimneys should be capped in an appropriate manner.
- In any exterior repair to existing chimneys, the brick and mortar mix should match the original brick and mortar mix in hardness, dimension, and color. See masonry guidelines.

Foundations

Foundations in the West District are made up of a variety of materials, including, but not limited to, granite blocks, limestone, brick, and concrete block. Repair and/or replacement of these materials and their related mortars will require professional analysis and approval.

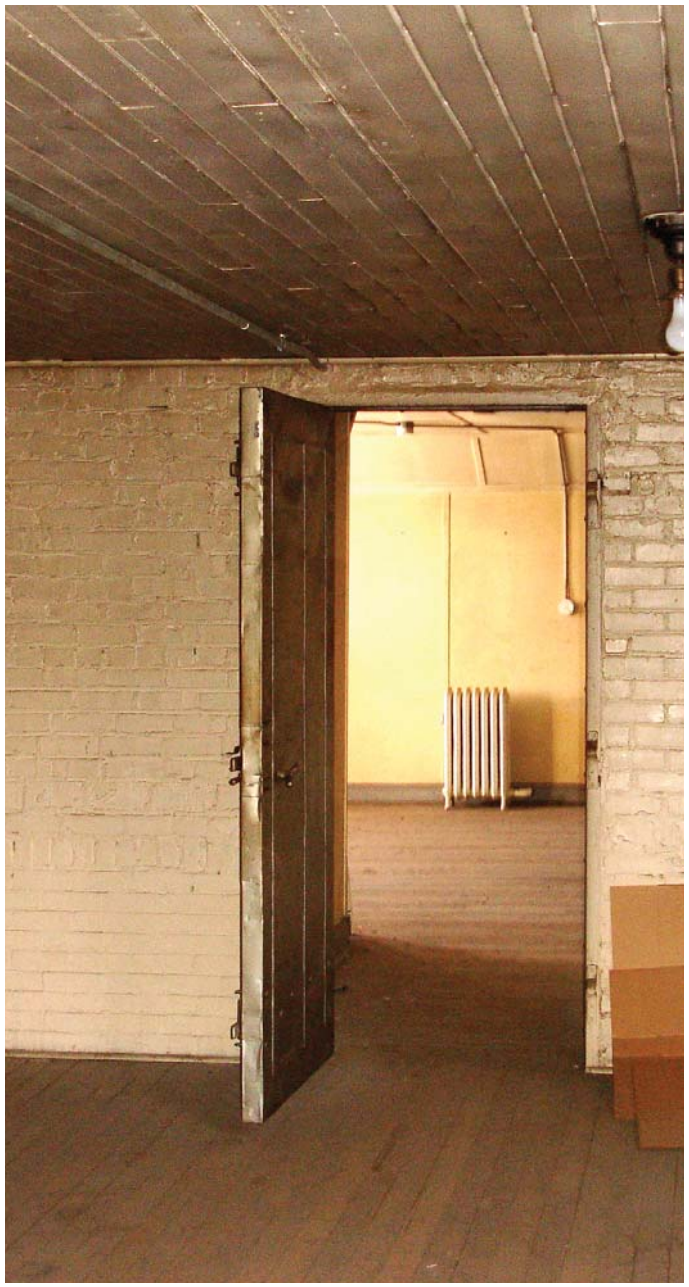
- All foundations should be inspected to determine condition and repaired where required.
- Masonry replacement, if required, and all mortar joints should replicate the original in color, profile, and size.

Resources

The following National Park Service publications contain more detailed information about masonry.

Preservation Brief #1: The Cleaning and Waterproof Coating of Masonry Buildings.
Preservation Brief #2: Repointing Mortar Joints in Historic Brick Buildings.
Preservation Brief #3: Conserving Energy in Historic Buildings.
Preservation Brief #4: Roofing for Historic Buildings.
Preservation Brief #6: Dangers of Abrasive Cleaning to Historic Buildings.
Preservation Brief #9: The Repair of Historic Wooden Windows.
Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.
Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.
Preservation Brief #29: The Repair, Replacement, and Maintenance of Historic Slate Roofs.
Preservation Brief #35: Understanding Old Buildings: The Process of Architectural Investigation.
Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.

Interior Features



Generally, the buildings of the West District are utilitarian on their interiors. Many have lost significant features through past remodeling projects or deterioration. Consequently, those remaining features such as ornamental wood doors and trim work need to be retained and restored as contributing elements of the historic importance of the structures.

Historic Interiors

While most of the interiors of the West District would not be considered highly significant, there are interiors that should be retained because of their architectural importance. An interior survey was conducted in Buildings #210, #211, #215, #217, #218, #219, #220, #222, #223, #224, and #225 in February 2010. See the "Fort Snelling West District Interiors Conditions Survey" in the Historical Context Study of this report for character defining features of each building.

Approach to Rehabilitation

While many of the buildings' interiors may be modified to adapt to a new use, wherever possible the integrity of the original floor plan should be retained. If a project requires a modification of the floor plan, those changes should be specified in the SHPO review submittal.

Interior Wood Elements

- Interior wood elements should be examined and repaired where required.
- All repairs should match the original in wood type, profile, dimension, and finish.
- Painted interior wood elements should be evaluated to determine their original finish.
- Existing lead-based paint that is in good condition can be "encapsulated" under layers of new paint.
- Wood elements that were originally varnished to retain a natural wood look should be cleaned, or where necessary, stripped and revarnished.

Resources

The following National Park Service publications contain more detailed information about interiors.

Preservation Brief #9: The Repair of Historic Wooden Windows.

Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.

Preservation Brief #18: Rehabilitating Interiors in Historic Buildings.

Preservation Brief #21: Repairing Historic Flat Plaster – Walls and Ceilings.

Preservation Brief #28: Painting Historic Interiors.

Preservation Brief #32: Making Historic Properties Accessible.

Preservation Brief #34: Applied Decoration for Historic Interiors Preserving Composition Ornament.
Preservation Brief #35: Understanding Old Buildings: The Process of Architectural Investigation.
Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing.

New Construction Guidelines

Introduction

The Treatment Zones section of the Development Guidelines identifies allowable density, setbacks, building heights and materials in specified areas of new construction, either as additions to existing buildings or building parcels. This section provides supplementary information about additions and new construction as well as suggested resources for additional information.

Relationship to Secretary of the Interior Standards

New development must follow the Secretary of the Interior's Standards for additions and new construction within an historic district so as to not compromise the existing historic integrity. New construction should be "of its time" so as to not lead someone to believe that it is part of the historic fabric of the site, while at the same time respecting the existing buildings on the site.

New Construction Guidelines

Materials

The Materials and Massing part of the Rehabilitation Guidelines identifies the existing materials present in West District - limited types and colors of masonry, wood, or corrugated metal sidings; along with hip or gable roofs of red, green, black, or gray slate or asphalt shingles or corrugated metal roofing. New development can creatively interpret how the existing materials palette may be used.

Additions

- Additions to existing buildings can be introduced to secondary elevations as long as the additions are not highly visible from the public right-of-way along Bloomington Road and/or Minnehaha Avenue.
- All additions should be compatible in design materials and detailing with the primary building.
- Additions should be designed and attached so as to clearly identify themselves as new construction and not part of the original building fabric.
- No addition should project above the roof of the primary building.

Elevators/Vertical Circulation Towers

- Elevators and vertical circulation towers can be attached to a secondary elevation, as long as the massing is not highly visible from the public right-of-way.
- Attached circulation towers cannot project above the roof ridge of the primary building.
- Interior elevator and vertical circulation towers should not project through the roof above the primary elevation.

Detached New Construction

- Limited new construction should be compatible with the surrounding buildings in massing, height, materials, and design detailing.
- New construction should be designed to clearly be defined as new construction and not original.
- Items like bus shelters, utility buildings, and other small structures should follow the Secretary of the Interior Standards. They should be of their time and compatible with their surroundings.
- Air supported structures, such as tennis domes, tend to be more permanent in nature and will need to follow the Development Guidelines.
- A precedent exists at the Fort Snelling for temporary structures, such as shelters for events at the athletics fields. These structures will continue to be allowed as long as they do not imact the existing historic structures.

Resources

The following National Park Service publication contains more detailed information about new construction.

Preservation Brief #14: New Exterior Additions to Historic Buildings: Preservations Concerns.

Landscape Guidelines

Introduction

The Treatment Zones section of the Development Guidelines identifies existing historic landscapes and features, as well as new allowable land uses for each specified zone. This section provides supplementary information about treatment of the West District historic and non-historic landscape.

Landscape Elements and Guidelines

Historic Landscape Elements

The West District does not have the same formal landscaping as the adjacent Upper Post of Fort Snelling. The buildings of the West District were used for receiving and storage of goods and supplies, as well as stables for cavalry horses, which were later replaced with motor vehicles.

The grounds of the West District include a number of historic elements that give meaning to the historic landscape. These elements include the building organization, topography, vegetation, circulation system, structures, exterior furnishings, and historic objects. These elements should be retained and preserved in any proposed rehabilitation of the grounds.

New uses may require some modification to the West District landscape; however, they should be designed to cause minimal change to the ground's distinctive materials, features and spatial relationships.

Spatial Organization/Land Patterns

Treatment Zone H2 is a good example of the West District spatial organization that has maintained many of the characteristics of the Quartermaster's area. In the northern part of the zone the buildings are small, spaced quite far apart, and organized parallel or perpendicular to the main streets – Bloomington Road and Minnehaha Avenue. In the southern portion of the zone warehouse and storage buildings are grouped together around railroad spurs that provided supplies to the fort. Buildings very often had gravel or paved areas on multiple sides, providing space for storage and vehicle maneuvering. See Views Map.

- In areas where the land use and buildings have remained in place the spatial organization should be retained and preserved in any proposed rehabilitation of the site.

Topography

The West District sits on a primarily flat table of land above the Minnesota and Mississippi River valleys.

- No permanent modifications should be made to the topography of the significant landscape features of the Bloomington Road corridor.
- No topographic changes like earth berming should be introduced to the site.

Views Map

LEGEND

VIEWS

- ENTRY VIEWS
- INTERIOR VIEWS
- PARADE AND POLO GROUND VIEWS
- STUDY AREA
- EXISTING BUILDING FOOTPRINT
- DEMOLISHED BUILDING FOOTPRINT

View #1: Bloomington Road

View #2: Minnehaha Avenue

View #3: Interior view of former railroad spur location

View #4: Panoramic view from Minnehaha Avenue, looking east towards the West District

Views #5-6: View of Upper Post Polo Grounds(now athletics fields) from West District

View #7: View of Minnehaha Avenue from West District

View #8: View of Upper Post Parade Grounds (now golf course) from West District

View #9: View of Upper Post Parade Grounds (now golf course) from West District

Bloomington Road boulevard trees

Street light

Concrete post

Vegetation

The original West District landscaping was primarily limited to boulevard trees along Bloomington Road, and groupings of trees around the residences at Buildings #227, #227, and #212 (demolished). Many of these trees remain in place. See Vegetation and Historic Features Map.

- Existing boulevard trees should remain and be protected.
- New tree plantings along Bloomington Road and Minnehaha Avenue should be of one species (similar to elm trees in shape).
- Decorative shrubs should not be planted around the foundations of the historic structures.
- Any new utility installation should consider the significant vegetation in the site.

Circulation and Parking

The West District retains much of its original vehicular circulation system. Although now terminating at the airport to the south, Bloomington Road continues to serve as a major internal arterial for Upper Post. See West District Existing Circulation Patterns Map.

- Bloomington Road and Minnehaha Avenue should be preserved.
- Vehicular access, movement, and parking has long played a role in the West District. Design of new parking should be sensitive to existing buildings and features, but screening of surface parking may not be necessary or advisable.
- Roadway Surfaces: By 1941 a majority of the fort's roads were concrete-surfaced. The rest had a bituminous coating or were covered with gravel. Roadway widths ranged from 40 to 15 feet, but were most often 27 feet or less.
- Walkways: Historically, the majority of Bloomington Road was edged by a 4-foot-wide concrete walkway. New sidewalks should comply with current codes.

Structures

- New exterior alterations or related new construction should not destroy historic materials or spatial relationships that characterize the property.
- All new structures should be compatible with the adjacent historic buildings and the West District's period of construction.

Furnishings

- Any new pedestrian furnishings (sidewalks, lights) should be based upon early photographic documentation of the site.
- All new furnishings should be compatible with the West District's period of construction and should be described in any SHPO review submittal.

Objects

From photographic documentation it appears that the West District grounds had few significant objects. These include, but are not limited to existing street lights and concrete posts along Bloomington Road.

- No original objects should be removed or relocated on the site unless absolutely necessary.
- All new objects should be compatible with the West District's period of construction and should be described in any SHPO review submittal.
- See Vegetation and Historic Features Map for concrete post locations.

Signage

The West District must balance the desire for visual appeal with the necessity to maintain safety and to effectively direct both vehicular and pedestrian traffic throughout the site. Informational signs include directions and announcements, public parking, and other directional information to guide people to key areas on the campus. They need to be professionally designed, clear, and uniform with the other signage in the park.

- Less is more. Using the least required signage will help keep the appearance from being cluttered or overpowering. Researching the minimum requirements is imperative for controlling the proliferation of public signage.
- All public signage in the West District needs to be uniform and of high quality design and construction.
- Signage can be effectively placed on existing decorative light posts and on well designed sign posts.
- Signage should be color coordinated with a limited palette of colors complimentary to those of the surrounding buildings.
- Uniform signage should be developed to identify all public parking lots. Signs should be large enough and prominently displayed, but not overpower the surroundings. An easily identifiable logo would help in wayfinding.

Archaeology

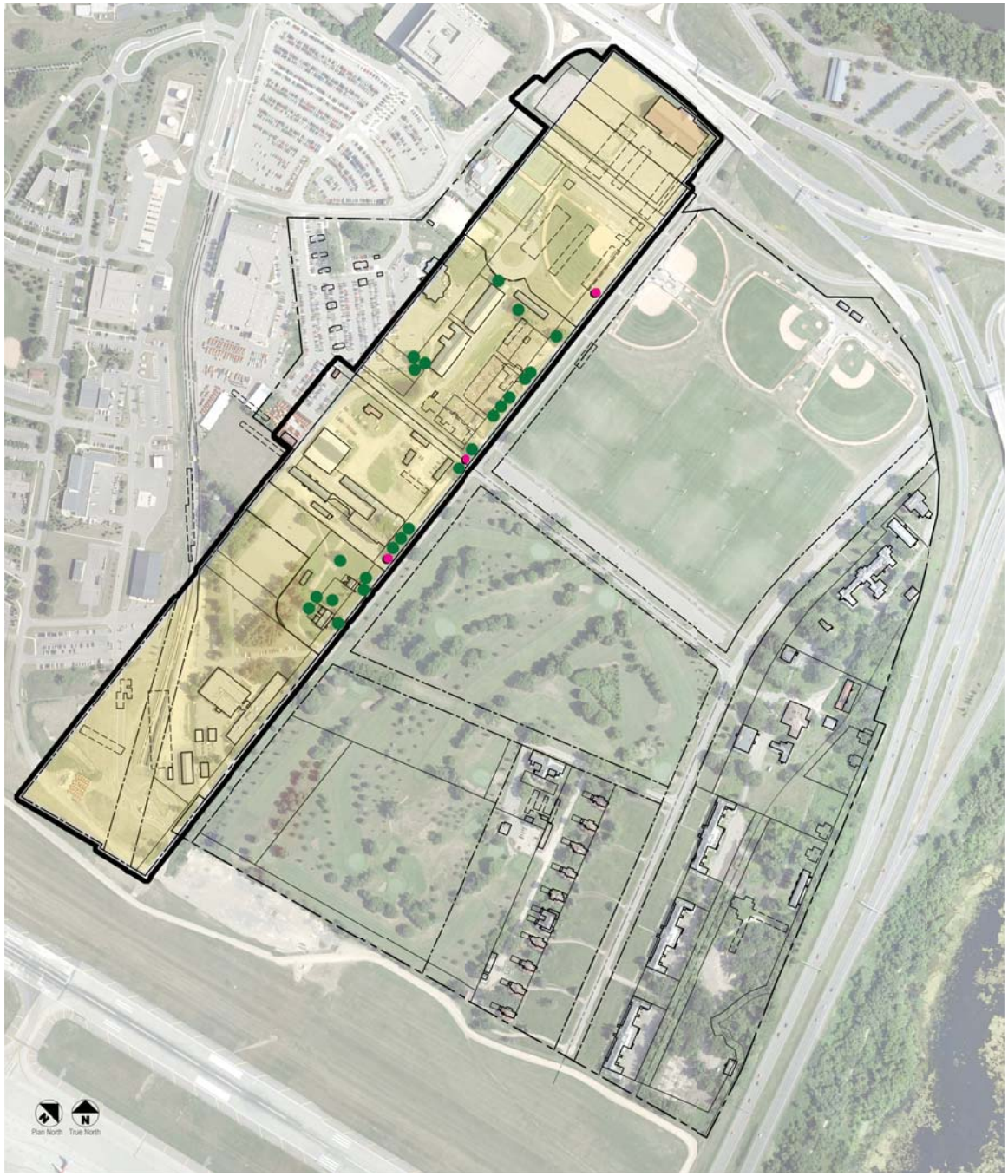
Archaeology should be considered when reuse activities are undertaken at the West District buildings and grounds. Any ground disturbing activity could impact archaeological deposits. The following is a listing of some rehabilitation tasks that could require archaeological assessments:

- Foundation work
- Building additions/demolition/detached new construction
- Utilities
- Landscaping
- Roads, parking lots, pedestrian walkways, and accessibility features
- Any type of redevelopment activity which disturbs the grounds around a building should be described in an y SHPO review submittal.

Resources

The following National Park Service publication contains more detailed information about new construction.
Preservation Brief #36: Protecting Cultural Landscapes.

Vegetation and Historic Features Map

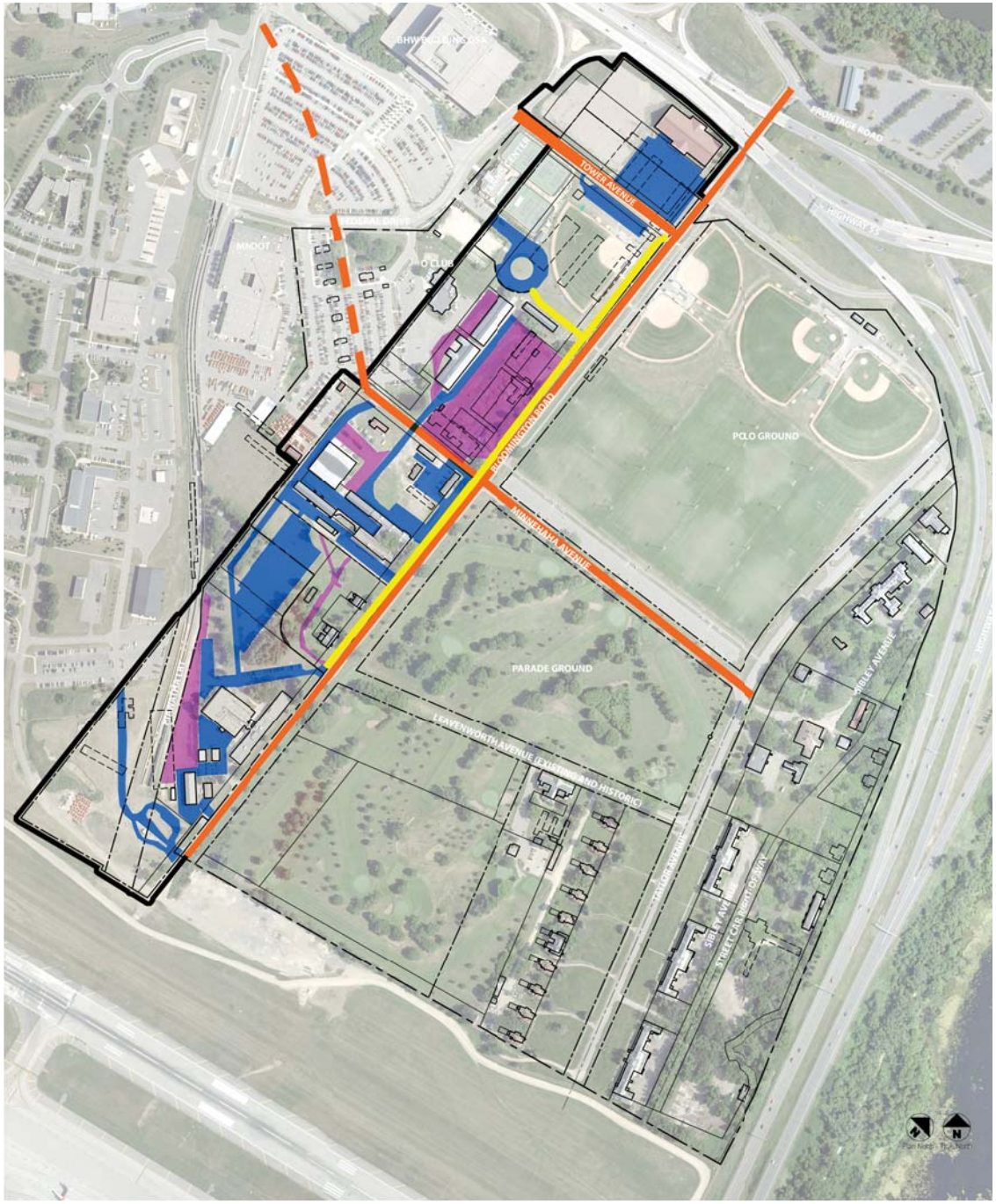


LEGEND

VEGETATION

- HISTORIC VEGETATION
- HISTORIC FEATURES (CONCRETE POSTS)
- EXISTING BUILDING FOOTPRINT
- STUDY AREA
- DEMOLISHED BUILDING FOOTPRINT

West District Existing Circulation Patterns Map



LEGEND

CIRCULATION

- PRIMARY ROAD
- PRIMARY ROAD LOST BUT RECOVERABLE
- INTERNAL ACCESS ROADS AND DRIVES (PAVED)
- SIDEWALK
- TERTIARY ROAD (GRAVEL)
- STUDY AREA

Health and Safety Guidelines

Hazardous Materials

Numerous buildings/areas in the West District have been determined to have hazardous materials:

- Asbestos-containing insulation and other materials (ACM) are present in many of the buildings.
- Lead-based paint likely is present in the buildings.
- One or more closed petroleum release sites.
- Drums and smaller container of miscellaneous building and equipment maintenance chemicals were stored in several buildings.

See Hennepin County memo dated March 10, 2010 in the Appendix IV for additional information.

Additional testing for hazardous materials should be undertaken to determine the complete extent of any contamination. Remediation of hazardous conditions (removal vs. encapsulation) should be based on the proposed use for a building, applicable regulatory requirements at the time the work is done, and the health risks and/or future costs to remove materials that may be only encapsulated initially.

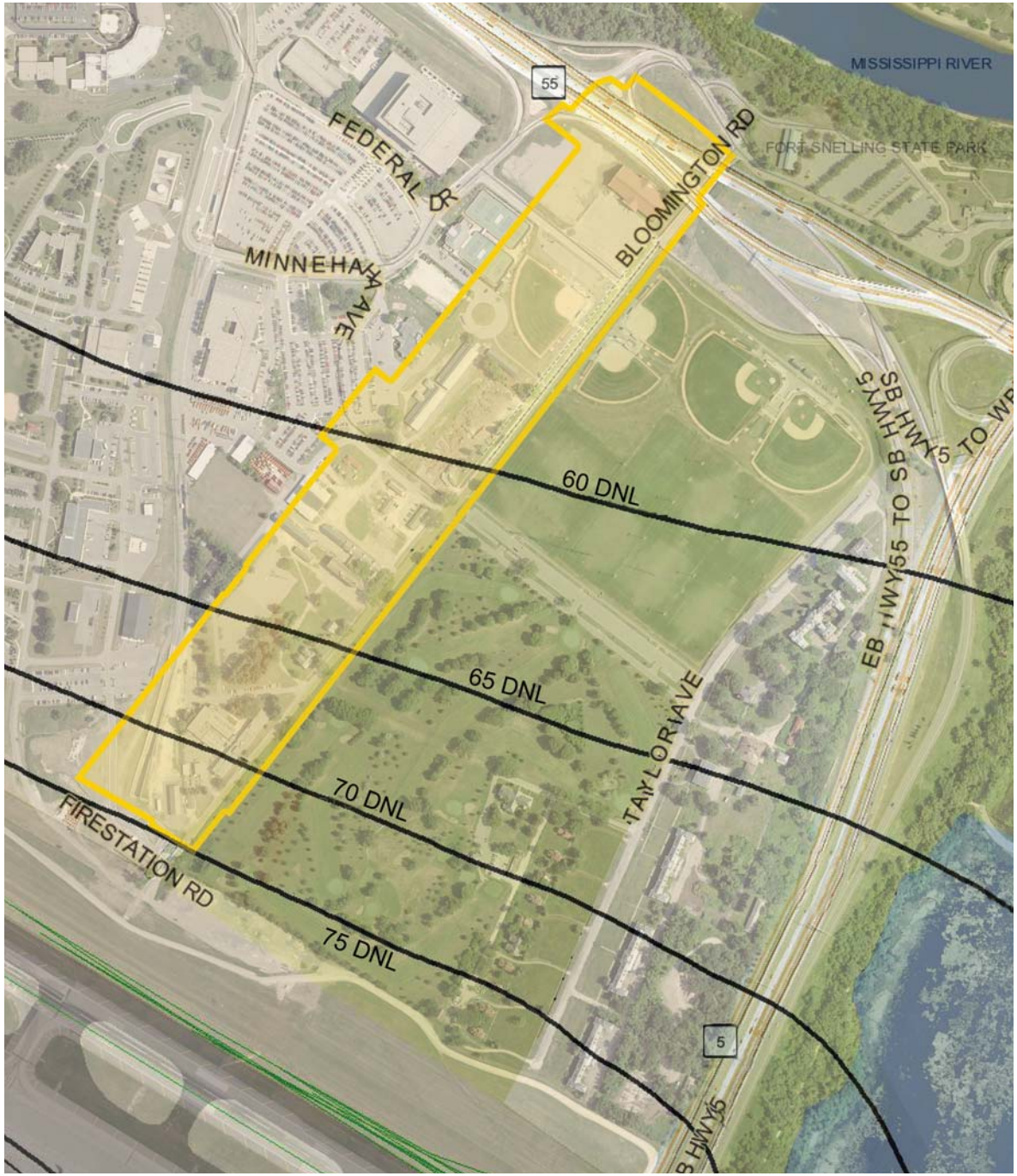
Sound Abatement

Noise generated by the adjacent MSP International Airport will have an impact on uses at the West District. A primary effect of aircraft noise is its tendency to drown out or "mask" speech, making it difficult to carry on a normal conversation. Speech interference associated with aircraft noise is a primary cause of annoyance to individuals on the ground. The disruption of routine activities, such as radio or television listening, telephone use, or family conversation, causes frustration and aggravation.

Research has shown that whenever intrusive noise exceeds approximately 60 dB indoors, there will be interference with speech communication. To help understand that impact, the aerial photograph shown here represents the DNL (Day-Night Level) Noise Contours measured outdoors in 2006. In the West District, noise levels in Treatment Zones H2, H3, J1, J2, and K are above the 60 dB DNL line. Building #229 and non-historic buildings on the Navy Reserve property in Treatment Zone J are above the 65 dB DNL line. Residential uses in areas above 60 dB DNL should be avoided, but all future buildings located within this area need to be designed accordingly.

MACNoise Sound Abatement Map

MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT - 14 CFR PART 150 STUDY UPDATE that addresses sound mitigation can be found at:
http://www.macnoise.com/part150doc



Sound mitigation will be an important aspect for the reuse of any of the available developable property. It is important to note that buildings at the Upper Post do not qualify for any noise mitigation funding programs from the Metropolitan Airports Commission. The primary issues that need to be dealt with in sound abatement are as follows:

Windows

- Multiple layers of glass and multiple air spaces help reduce the transmission of sound.
- If existing windows remain, they should be well weather-stripped and combined with historically appropriate storm windows on the exterior.
- Additional glazing can also be added to the interior, if needed.
- A better sound seal is achieved with non-operable windows. Assuming that most of the buildings will be air conditioned, using non-operable windows is a possibility.
- New windows should utilize triple glazing. This can be done using historically appropriate triple-glazed units, or using double-glazed units with an additional historically appropriate glazed panel either on the interior or exterior.

Wall Construction

- The existing buildings' masonry exterior walls appear to be well built and good sound insulators.
- Areas where stud walls occur should be well insulated for sound proofing.
- Additional methods of reducing sound transmission (sound board, resilient channels, sheet lead) can be used where critically necessary.

Attics

Good insulation at the roofs or in the attics will help reduce sound transmission. The pitched roofs of most of the buildings lend themselves to being able to provide good insulation coverage in the attics. The few flat roofed buildings will require more analysis, depending on their reuse.

Roof Penetrations

- Penetrations through the roof for elements such as pipes, ducts, stacked etc. should be well sealed where they go through the roof plane.
- Open penetrations such as attic vents should be designed in such a way that turns and/or baffles are introduced into the path of the air flow.
- Air flow paths can also be lined with acoustical insulation.
- Because of the proximity of the West District to the airport, it is recommended that an acoustical engineer be consulted to assess the sound issues related to a particular building's reuse.

Sustainable Design Strategies

Sustainable design principles should be used throughout any development in any zone within the Ft. Snelling Historic Districts. However, the sustainable strategies utilized must be sympathetic with the historic character of the site. For example, appropriate sustainable site design strategies might include porous pavements, rainwater harvesting and reuse, underground storage, infiltration systems, and similar methods that do not impose a design aesthetic that has never existed at the Upper Post, such as rain gardens, bioswales, storm water streetscaping, etc.

Likewise, new construction in the West District should be sympathetic to and in scale with the existing buildings at the site, yet "of its time". Sustainable strategies may include solar orientation; daylighting; small scale vertical wind generators; photovoltaics; ground source energy systems; thermal displacement ventilation; grey water recycling; carbon reduction; use of materials based on a first cost, life-cycle cost, long-term environmental impact, energy conservation and pre- and post-construction emissions basis; using materials based on their recycled content and/or recyclability in the future; specifying a strict recycling program during construction; etc.

Rehabilitation of the existing buildings should also utilize any of the sustainable design strategies that are appropriate to the particular building but sympathetic to its historic character. The act of rehabilitating the buildings and utilizing their embodied material, cultural, and historical energy is a significant sustainable act in itself. Remember, historic preservation is the "queen of green".

Property Management During Development

Introduction

Stewardship of historic properties may require implementing an effective means of protecting a building while planning for a property's future use. If a building or multiple buildings are to remain vacant during the development of the West District, "mothballing" measures should be taken to keep them from further deterioration.

Mothballing is the process of careful planning, implementing protective measures, including repairs, and monitoring the structure while it sits vacant. This process generally includes: documentation of significance and condition, stabilization of the building and its elements, securing the building through mothballing, and protecting the building from further damage by monitoring its condition during the interim.

Mothballing

Stabilization

- Buildings that remain vacant during the development phase need to be structurally stabilized. This measure needs to be based upon a professional condition assessment.
- If there is an indication of invasive damage by insects, birds, or rodents, extermination or pest control measures need to be introduced.
- The exterior envelope of the building needs to be secured from moisture penetration.

Mothballing

- A building needs to be secured from vandals and break-ins.
- Once a building is secure and weathertight, its interior should have good ventilation to prevent humidity buildup and the resulting mold, rot and potential insect infestations.

Monitoring Condition

- Once a building has been mothballed, it should be monitored to prevent further deterioration of materials from storms, undetected leaks, and unwanted intrusions.
- A regular schedule for surveillance, maintenance, and monitoring should be implemented.

Appendix I: Quartermaster Area Timeline

Fort Snelling West of Bloomington Road: A Timeline
Prepared by Penny Petersen and Charlene Roise, Hess, Roise and Company, March 2010

1878 A map surveyed and drawn up in November shows many Lower Post buildings along Tower Avenue. (Although the roads are not labeled, this discussion will use their commonly used names.) Several buildings are identified as Post Quartermaster Stables and Shops. There is also an Artillery Stable further west along Tower Avenue, past the intersection of Bloomington Road. Meanwhile, at the intersection of Bloomington Road and Minnehaha Avenue, another set of quartermaster stables and shops can be seen. The map was revised during the 1880s, so it is difficult to tell which buildings were in place by 1879 and which were added some years later. In any event, the map confirms that the quartermaster area was well established on the west side of Bloomington Road by the early 1880s.[1]

1879 Congress approves funds to construct new facilities at Fort Snelling. The $100,000 appropriation is for "headquarters' offices, a residence for the commanding officer, and twelve buildings to house his staff." This launches the development of the Upper Post.[2]

1879-1880 The Quartermaster Storehouse is erected at the intersection of Minnehaha Avenue and Bloomington Road. The footprint of a structure in this location appears on several maps from the 1880s. The quartermaster records indicate the original building has a stone foundation. Some writers believe this is Building 217/F-17 and claim that it is the oldest surviving wood-frame structure at the fort. If this is the case, it appears to have undergone significant alteration over the years. One photograph, probably from the late nineteenth century, shows a window tucked under the gable on the south end of the building, one chimney near the south end of the roof, and three doorways and five windows on the west facade. Another photograph, apparently from the 1930s, shows two doors and seven windows on the east facade and two brick chimneys. In a 1996 photograph there is only one door with a small hood in the center of the west facade; the door is flanked by three windows on one side and two on the other. The two brick chimneys are gone, apparently replaced by metal smokestacks, and the window beneath the gable is no longer visible. A recent site inspection failed to reveal any cuts or repairs of the shiplap siding that would indicate a window once existed beneath the south gable or that there had been different openings on the west facade. The foundation appears to be concrete, not stone. Based on this information and on the overall appearance of the building, it seems likely to date from the first decades of the twentieth century.[3]

1880 Congress approves another appropriation of $100,000 to erect more "buildings (probably fifteen) for quarters, mess-halls, kitchens &., for general service clerks, enlisted men, and civilian employees employed at department headquarters," as well as stables, a forage house, and other utilitarian buildings, and infrastructure such as sidewalks and a water supply.[4]

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1 E. B. Summers "Map # 1882-4, Plan View of Fort," revised, at Fort Snelling Visitor Center.

2 Charlene Roise, "Fort Snelling Buildings 17, 18, 22, and 30: Their Evolution and Context," prepared for the Minnesota Historical Society, February 2008, 6. Some of the officers' housing still exists on Taylor Avenue.

3 Robert Clouse and Elizabeth Knudson Steiner, "All that Remains: A Study of Historic Structures at Fort Snelling, Minnesota" draft, 1998, prepared for the Division of Parks and Recreation, Minnesota Department of Natural Resource, 116; Quartermaster Records, available in Fort Snelling collection at the Minnesota Historical Society, Saint Paul (hereafter, Quartermaster Records). Originally, Fort Snelling buildings were identified by a letter referring to specific zone, followed by a number. In 1937-1938, these designations were changed to a numeric system that applied to the entire fort (Clouse and Steiner, "All that Remains," 57). Both systems are referenced the first time a building is mentioned in this study; only the more recent numeric system is used thereafter.

4 Roise, "Fort Snelling Buildings," 6; "Letter from the Secretary of War Transmitting Report of Lieut. Col. T. H. Tompkins, Recommending Appropriation of $100,000 for Construction Buildings on the Fort Snelling Military Reservation," Senate Ex. Doc. No. 54, 46th Congress, 2nd sess.

Deputy Quartermaster-General Charles H. Tompkins makes a case for further expanding Fort Snelling in a report to the Senate: "The site selected for the headquarters' buildings, the associations and surroundings of the neighborhood combine to invest Fort Snelling with a peculiar charm." He notes the old fort, regarded with pride by pioneers, is midway between the cities of Saint Paul and Minneapolis, and is of interest to tourists. "I take the liberty of enlarging upon these facts, because I believe it will enhance the value of the many attractions of the place and heighten the interest felt by the people of Minnesota, if the establishment of the department headquarters, within sight of the famous old post, is made permanent, handsome, and complete in all details of structures and landscape culture."[5]

Construction of the Department of Dakota headquarters (Building 67/C-1) on Taylor Avenue is apparently begun this year.[6]

1881 In April, the *Minneapolis Tribune* briefly notes that a Saint Paul seed dealer was "awarded the contract for supplying 325 bushels of Central Park (mixed) lawn grass for headquarters' improvements at Fort Snelling." The new headquarters building is nearing completion.[7]

In May, the *Tribune* reports that "the chief commissary, department of Dakota, now has his office at Fort Snelling, with all the other headquarters offices."[8]

1882 A map of the Fort Snelling drawn by E. B. Summers depicts buildings grouped along the west side of Bloomington Road near the intersection of Minnehaha Avenue. Although none of the buildings are labeled, there is clearly a corral surrounded by stables. A contextual study of the army's quartermaster notes that "quartermaster stables and corrals for the animals used to transport provisions were standard components of nineteenth-century western posts."[9]

1883 The *Minneapolis Tribune* reports that the army will ask Congress to provide funding to enlarge Fort Snelling. The army's commanding general, Philip Sheridan, claims to be "familiar with the old post of Fort Snelling." He explains, "It is a very old place, built originally with the idea of defense against Indians, and, in my opinion, is too contracted for an increased garrison. Near by there is a beautiful commanding site on the reservation, offering every facility for such a garrison as is proposed." Sheridan thought the expenses required to refit the old post would be better spent on new facilities "constructed of brick and complete in all its appointments for 12 companies."[10]

1885 A group of structures is clustered around the intersection of Bloomington Road and Minnehaha Avenue. With the possible exception of Building 217, none of these buildings survive today. Cultivated fields are nearby.[11]

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5 "Letter from the Secretary of War Transmitting Report of Lieut. Col. T. H. Tompkins."

6 Clouse and Steiner, "All that Remains," 79.

7 "Fragments," *Minneapolis Tribune*, April 29, 1881.

8 "Fragments," *Minneapolis Tribune*, May 29, 1881.

9 E. B. Summers, "Map of Fort Snelling Reservation, 1882," at Fort Snelling Visitor Center; U. S. Army Corps of Engineers, Seattle District (hereafter USACE-Seattle, "Context Study of the United States Quartermaster General Standardized Plans, 1866-1942," 1997, 336, prepared for U.S. Army Environmental Center, Environmental Compliance Division, Aberdeen Proving Ground, Maryland.

10 "Fort Snelling," *Minneapolis Tribune,* August 11, 1883.

11 Map of Fort Snelling Reservation, 1885, at Fort Snelling Visitor Center. While these buildings are not numbered on the 1885 map, a 1904 map does show buildings in the same position with numbers.

The walls that surrounded old Fort Snelling have been completely removed. Probably much of the stone has been reused for new buildings.[12]

1886 As of November 1, the Department of Dakota headquarters is transferred back to Saint Paul, and the Lower Post becomes even more of a backwater: "The facilities duplicated at both posts were apparently consolidated at the Upper Post. The newer, improved quartermaster's compound on Bloomington Road at the intersection of Minnehaha Avenue, for example, seems to have absorbed the Lower Post facilities, which disappear from the maps of the late nineteenth century. Even the Lower Post cemetery was abandoned in the 1880s, at least for new burials"[13]

1892 The Mineral Oil Building (Building No. 239/F-15) is erected. Both the foundation and walls are made of stone, while the gable roof is sheathed with corrugated iron, which is less flammable than wood. The structure, measuring 19' by 33', has a capacity of 10,000 gallons. The window on the south side of the building was added at a later date. Although the structure was not built according to any standardized quartermaster plans, prototypes for this building date back to at least the eighteenth century. A history of United States ammunition and explosive storage describes the sturdily built "Hessian Magazine" at Carlisle Barracks, Pennsylvania, which has fieldstone walls and a gable roof and dates from 1777. While a national context study of quartermaster standard plans does not specifically mention mineral oil buildings, its description of typical nineteenth-century ordnance storage facilities—"isolated small, windowless, one-story masonry buildings"—could be applied to Fort Snelling's Mineral Oil Building as well.[14]

1894 The one-story, yellow-brick Forage House (Building 218/F-11) is erected. The hipped roof is shingled, the walls are brick, and the foundation is of stone. The building, which measures 22'-2" by 77', can store forty tons of hay. Quartermaster records identify it both as a forage house and a quartermaster storehouse. Its design does not appear to be based on a standard plan.[15]

1895 The one-story, rectangular Sawmill (Building 219/F-10), which measures 19' by 40'-6", was not the product of a standardized plan. The foundation and walls are stone. The hipped roof is covered with tin, but will later be shingled. In time, this building will be converted into a wheelwright shop.[16]

1898 The Spanish-American War, which begins in April and is concluded by August, is fought for Cuban independence from Spain.

Units assembled at Fort Snelling are sent to suppress an uprising of an Ojibwa band at Leech Lake, Minnesota, considered the final fight of the "Indian Wars."

1901 In August, the *Minneapolis Journal* notes that Major George E. Pond, chief quartermaster of the Department of Dakota, has been asked to prepare plans for improvements at Fort Snelling. His proposal, which will cost about $250,000 and take four years to complete, includes new barracks, officers' quarters, a

12 Roise, "Fort Snelling Buildings," 7.

13 "Army and Navy News," New York Times, October 8, 1886; Roise, "Fort Snelling Buildings 17, 18, 22, and 30," 9-10.

14 Clouse and Steiner, "All that Remains," 129; Quartermaster Records; Joseph Murphy, Dwight Packer, Cynthia Savage, Duane E. Peter, and Marsha Prior, "Army Ammunition and Explosives Storage in the United States: 1775-1945," 2000, 7-8; USACE-Seattle , "Context Study of the United States Quartermaster General," 178.

15 Clouse and Steiner, "All that Remains," 117; Quartermaster Records. The Clouse study lists the roof as slate.

16 Clouse and Steiner, "All that Remains," 118; Quartermaster Records.

drill hall, a railroad side track, roads, and a rifle range.[17]

Late in the year, there is an announcement from Washington that Fort Snelling will be expanded. In the words of one observer, "Persistent efforts on the part of the Minnesota senators and representatives in the matter of the enlargement of Fort Snelling are beginning to show results." Congress appropriates $15,000 to build a spur line from the existing Milwaukee Road tracks near Minnehaha Falls to the quartermaster's area, "and for the beginning of a general system of improvement which is to be carried out."[18]

1902 The plans for the fort's expansion are finalized "when William Carey Sanger, assistant secretary of war, affixed his signature to the general plan of the reconstruction and enlargement of this historic old army post." Nine new buildings are envisioned including a storehouse, offices, barracks, stables, a large coal shed, a warehouse, a new water and sewer system, railroad tracks, and road and landscape improvements through the fort. It was anticipated that more than $600,000 would be spent on the improvements. Congressman F. C. Stevens hoped that the expanded fort would accommodate 2,500 men and 1,000 horses.[19]

Another newspaper reports that Congressman Stevens "believes that the new artillery barracks, gun shed and stables can be constructed and the infantry quarters remodeled this season." Old infantry buildings near the original fort would be razed to make way for new artillery quarters. Deputy Quartermaster Pond, who by this time has been promoted to colonel, notes that a quarter of a million dollars is available for improvements at the fort, but this must be spent by June 30, 1903. The budget deadline is not the only catalyst for completing this work. Pond explains, "There is at present no accommodation at Snelling for the artillery that will be sent here," aside from a few outdated buildings that could serve as temporary officers' quarters. "We shall have to erect this year the stables for the artillery, the gun sheds, the corrals, the barracks, the guard house and the administration building." However, contracts were not let until the fall.[20]

A map of Fort Snelling dating from this year shows buildings labeled "Quartermaster Stables" at the northwest corner of Minnehaha Avenue and Bloomington Road that have the same footprint as those seen on earlier maps. There is a "proposed spur track" shown to the west of the extension of Minnehaha Avenue, and two proposed stables are where Buildings 211 and 214 will be built within several years.[21]

The Forage House (Building 224/F-16) is built. The one-story, brick building has a stone foundation, a slate gable roof, measures 35'-4" by 184'-11", and is apparently bisected by a firewall. It has a capacity of 285 tons of baled hay and 350 tons of oats. Originally, there were four venting cupolas along the roof ridge. At some point, a loading platform is added running the length of south side of the building.[22]

1903 Bids to construct a 6,740'-long railroad spur from near Minnehaha Falls to the fort are opened. M. J. Sheppard and Company of Minneapolis is the low bidder at $14,800.[23]

17 "Plans for Enlargement," *Minneapolis Journal*, August 3, 1901.

18 Carmody, "Tribune Washington Specials, *Minneapolis Tribune*, December 7, 1901; Carmody, "Enlarge Fort Snelling," *Minneapolis Tribune*, December 1, 1901; Carmody, "Congress Takes Care of Fort Snelling," *Minneapolis Tribune*, December 3, 1901.

19 Carmody, "To Erect Nine New Buildings," *Minneapolis Tribune*, May 14, 1902. The article noted that Congressman Stevens had been working on the expansion of Fort Snelling for four years.

20 "Make Snelling Accessible," *Minneapolis Journal*, May 14, 1902; "Rush—Snelling Work!" *Minneapolis Tribune*, July 30, 1902; "Draws Two Prizes," *Minneapolis Journal,* October 25, 1902.

21 George E. Pond, "Map 1902-2, Plan View of Fort Showing Proposed Scheme of Reconstruction and Enlargement to Accommodate One Regiment of Infantry and Two Batteries of Field Artillery," at Fort Snelling Visitor Center.

22 Clouse and Steiner, "All that Remains," 122; Quartermaster Records.

23 "Fort Snelling Spur," *Minneapolis Tribune*, March 27, 1903.

A series of buildings for the artillery are erected along Bloomington Road. One study notes, "Fort Snelling expanded after the Spanish-American War to serve as a brigade post for domestic and international missions. As part of this 1903 expansion, storage and maintenance facilities were constructed for field artillery, including a stable (Building 202), horseshoeing shop (206), and gun sheds (207 and 209)." The construction of these buildings is based on standardized plans produced by the Office of the Quartermaster General.[24]

The Artillery Gun Shed (Building 202/F-24) is built from standardized plan 104-D, according to the Quartermaster Records. Situated adjacent to the site of where the Cavalry Drill Hall (Building 201) will be erected in a few years, the one-story, wood-frame gun shed measures 34' by 191' 4" and has a stone foundation and a slate gable roof.[25]

The one-story Artillery Work Shop (Building 205/F-27) measures 20' by 45' and has a stone foundation, brick walls, and a slate roof. Built as a horseshoeing shop for field artillery horses, it has room for three workers. Originally, the middle door on the northeast side is flanked by two garage doors, but these are removed at some point and replaced by windows. The building has no plumbing at first, but a toilet and sink are added at an unknown date. The original masonry chimney is replaced by a metal smokestack at some point. One study places the building in the historic context of the fort's motor pool prior to World War II.[26]

Another Artillery Work Shop (Building 206/F-26) is erected south of Building 205 and is identical to it in size and materials.[27]

The one-story, wood-frame Artillery Gun Shed (Building 207/F-23) has a gabled slate roof and a stone foundation. It accommodates eighteen artillery guns. One study speculates that its plan is based standardized plan 104-D because it is very similar to Building 202, which does follow that plan. At some point the building was partitioned off to make an ordnance repair shop and some of the original overhead doors were replaced.[28]

The Artillery Stable (Building 209/F-21) measures 66' by 184', has a stone foundation, wood-frame walls, and a slate roof, and can hold 102 horses. Similar to other fort stables, this one-and-one-half-story building has a gable roof and clerestory that provides light to the hayloft. A HABS study notes that stable's design follows O. Q. M. G. Plan #139-C and this same plan number is noted in Quartermaster Records. A quartermaster context study notes that stables were not only important to nineteenth and early twentieth century posts with cavalry and artillery, but "also were associated with installation or regional quartermaster logistical and supply activities."[29]

Late in December a newspaper sums up progress at the fort, reporting that seventeen new buildings have been under construction and all but four are completed. The list includes barracks, artillery stables, gun sheds, a gymnasium, a guardhouse, a fire station, and workshops. The report predicts more buildings will be completed or remodeled by the end of 1904 including infantry barracks, bachelor officers' quarters, captains' quarters, a double set of

24 Clouse and Steiner, "All that Remains," 105; "Fort Snelling, Building 202," Historic American Building Survey No. MN-56-AA, 1992,1.

25 Ibid.; Quartermaster Records.

26 Clouse and Steiner, "All that Remains," 108; "Fort Snelling, Building 205," Historic American Buildings Survey No. MN-56-DD," 1992.

27 Clouse and Steiner, "All that Remains," 109; "Fort Snelling, Building 206," Historic American Buildings Survey No. MN-56-DD," 1992.

28 "Fort Snelling, Building 207," Historic American Buildings Survey No. MN-56-FF, 1992; Clouse and Steiner, "All That Remains," 110; Quartermaster Records. The Quartermaster document does not specifically indicate the building was built according a standardized plan.

29 Fort Snelling, Building 209," Historic American Buildings Survey No. MN-56-GG, 1992; Quartermaster Records; Clouse and Steiner, "All that Remains," 111; USACE-Seattle, "Context Study of the United States Quartermaster General," 336.

NCO quarters, a quartermaster storehouse, a subsistence storehouse, four cavalry stables, and two stable guard buildings.[30]

1904 The Subsistence/Quartermaster Storehouses (Building 222/F-18 and F-19) are built. Originally, there are two virtually identical buildings (F-18: Subsistence Storehouse; and F-19: Quartermaster Storehouse), aligned parallel to one another and the railroad spurs and perpendicular to Bloomington Road. Situated on the former location of post gardens, each of the three-story structures is approximately 32' wide and 178' long and has a stone foundation, brick walls, and a slate roof. [31]

The two-story double quarters (Building 227/F-30 and F-31) is erected on Bloomington Road just south of Building 222. The two-family residence is probably occupied initially by noncommissioned army officers (NCO) associated with the quartermaster's facilities, but is later used by naval control shipping officers (NCSO). A context study of quartermaster facilities observes that "duplexes were the most common housing types for NCOs from 1890 to World War I," and adds that "NCO housing was located next to the area where the resident NCO worked. For example, the hospital steward's house was built next to the hospital." The same study notes that beginning in the 1890s, the "Army began another effort to standardize officer housing for better cost control." The building has a stone foundation, brick walls, a slate roof, and six-over six windows, and measures 27'-3" by 37'-5". The porches were altered in the 1930s.[32]

Like many of the buildings at the fort from this era, the quarters exhibit the Colonial Revival style. The quartermaster study notes: "Following close on the boisterous Victorian era of the late 1800s, the Colonial Revival style gained popularity as a wave of patriotism, combined with increasingly mature national awareness and a desire to return to the 'good old days' swept the country. If the middle class was attracted to Colonial Revival buildings, new in the 1890s and 1900s, so were architects who designed them for the Army and members of congress who appropriated funds for their construction." The study added that during this period "Colonial Revival architecture dominated Army construction."[33]

The Powder Magazine (Building 237/F-2) is built at an unknown location; it was later moved to this site. The one-story structure measures 30' by 60'. Its walls and roof are corrugated iron, presumably to deter fires, and the three vents on the gable roof facilitated circulation and cooling. At one time, a loading platform ran along the south side of the building. One study notes, "Aboveground magazines built during the late eighteenth to early twentieth century follow no standardized plan. They vary in size, shape, construction material, and architectural/engineering features." Yet, this magazine exhibits some features that would later become standard to store smokeless powder, which was formulated in the 1880s. By World War I, "most aboveground magazines were rectangular in shape with flat or gabled roofs." Smokeless power or Class II magazines were of lighter construction than the Class 1 variety. "The construction of smokeless power magazines varied from other standard magazines because smokeless power required protection from moisture and high temperatures and the walls and ceilings had to be tightly constructed to eliminate any cracks. Magazines were built of frame construction on wooden or concrete piers. Outside walls, which extended to the ground level, were of corrugated sheet asbestos," and had roof ventilators. The standard Class II smokeless power magazine was 32' by 96', almost twice as large as the 1904 magazine.[34]

30 "Take Care of Boys," *Minneapolis Tribune*, December 28, 1903.

31 Clouse and Steiner, "All that Remains,"120; Quartermaster Records.

32 Clouse and Steiner, "All that Remains," 124; USACE-Seattle, "Context Study of the United States Quartermaster General," 270, 294,

33 Clouse and Steiner, "All that Remains," 112; Quartermaster Records; USACE-Seattle, "Context Study of the United States Quartermaster General," 31.

34 Clouse and Steiner, "All that Remains," 128; Quartermaster Records; Murphy et al., "Army Ammunition and Explosives Storage," 67–68.

In April, a newspaper lists all the buildings that have been completed since April 1903: a post exchange and gymnasium, fire station, commissary and quartermasters' storehouses and stable, guard building, hay shed, two artillery stables, two gun sheds, two artillery barracks, officers' quarters, and two non-commissioned staff officers' quarters. Sewer and water lines have been extended to the new buildings, and the utility system has been improved with an electrical plant and a pump house and water tank. The article also notes that "the parade grounds which were formerly rough, have been graded and seeded out, and shade trees have been set out throughout the reservation." Another article reports that the quartermaster's department is urging the construction of a cavalry drill hall because "after August there will be four squadrons of cavalry at the fort." [35]

1905 A 32' by 97' Root House (F-14) is erected along the north wall of Building 222/F-18. It has a slate gable roof, a stone foundation, and brick walls.[36]

1906 In July, bids are opened for the Cavalry Drill Hall (Building 201/F-42), which has received an appropriation of $50,000 from Congress. A newspaper publishes a sketch of the design and notes it is a new type of drill hall "evolved after careful study by the experts in the office of the quartermaster general of the army. One of its most important features is that most of the illumination comes from a huge skylight, by which arrangement it has been possible to avoid the shadows cast by wall windows. The side shadows often frighten horses and so lead to accidents."[37]

1907 The Cavalry Drill Hall is completed and officially opens in November. It has a stone foundation, red brick walls, a tile roof, and measures 244'-4" by 107'-10". A context study notes, "Drill and riding halls were constructed to provide indoor facilities for training activities. These buildings are large rectangular structures enclosing a great expanse of open interior space." The study explains the difference between the two types of halls: "Cavalry riding halls were located near stable complexes, while drill halls were located near barracks."[38]

A one-story Shops Building (Building 210/F-43) is constructed based on standard plan No. 182. The 28' by 150' structure contains five shops and has a stone foundation, brick walls, and a gabled slate roof. At some point, gables are placed over two of the doorways on the north side, and one opening with double doors is filled in with brick.

In November, the four-unit Non-Commissioned Officer (NCO) Quarters (Building 229/F-38–F-41) is completed. Fronting on Bloomington Road, it has a stone foundation, brick walls, and a gabled slate roof. One-story open porches extend across the front of the building; they are rebuilt in the 1930s. The main building measures 27' by 76'; wings projecting from the rear of the building are 18' by 27'-3". The four-unit quarters is built according to standard plan No. 85-B. Like its neighbor, Building 227, it features the Colonial Revival style.[39]

1909 The Quartermaster Stable (Building 211/F-49), erected to shelter 106 animals, is constructed from standard plan No. 139-L. The one-and-one-half-story, 67' by 195' structure has brick walls resting on a stone foundation. A clerestory in the gable roof provides light to the hayloft. A context study of quartermaster structures describes army stables in the early twentieth century: "Stables typically were long, rectangular, gable-roofed structures, with doors

35 "Making Snelling Over," *Minneapolis Journal,* April 6, 1904; W. W. Jermane, "Want Roads to Trade in Minne," *Minneapolis Journal,* April 29, 1904.

36 Clouse and Steiner, "All that Remains," 120; Quartermaster Records.

37 "Riding Hall Assured," *Minneapolis Journal,* June 8, 1906; "Cavalry and Artillery Drill Hall to Be Erected at Fort Snelling," *Minneapolis Journal,* June 12, 1906.

38 Clouse and Steiner, "All that Remains," 104; "Fort Snelling Notes," *Minneapolis Tribune,* November 24, 1907; USACE-Seattle, "Context Study of the United States Quartermaster General," 110. The Clouse study identifies this as the "Cavalry Drill Hall, while a 1939 map calls it the "Riding Hall."

39 Clouse and Steiner, "All that Remains," 126 Quartermaster Records.

at the end elevations and windows along side elevations." Most surviving examples are of brick or stone. The study continues, "The stables for different branches are located in distinct areas of the post. The quartermaster stables generally were one-and-a-half stories with the half story used as a hay loft; they typically display little architectural detailing." The Fort Snelling stable shows only minor variations, such as the number of windows, from the standard plan.[40]

A Civilian Employee's Quarters (Building 241/F-50) is moved from another location and placed on a brick foundation along Minnehaha Avenue. The single-family house measures 18'-3" by 26'-2". The walls are wood and the gabled roof is shingled. Originally, the porch was open, but at some point it was enclosed. Within a few years, this area will have a cluster of vernacular wood-frame houses including Building 242/F-48 and Building 244/F-51.[41]

1910 Another Quartermaster Stable (Building 214/F-56) is erected as a companion to Building 211. Its overall design, dimensions, materials, and capacity match its neighbor.[42]

The Artillery Stable (Building 209) receives a 41'-4" addition to its northeast end that holds thirty-two stalls.[43]

Several Civilian Employee's Quarters (Buildings 240/F-53, 245/F-52, 246/F-54, and 247/55) are added to the residential area along Minnehaha Avenue. They are joined by another house, Building 248, in the following year.[44] [45]

1913 The former Sawmill (Building 219) is damaged by fire. It has been converted into a Wheelwright Shop.[46]

1914 Many buildings at the Upper Post are damaged or demolished by a tornado that sweeps through the area. These buildings include the Shops Building (Building 210), Quartermaster Stable (Building 211), Mineral Oil House (Building 239), Sawmill/Wheelwright Shop (Building 219), Cavalry Drill Hall (Building 201), Artillery Stables (Buildings 203 and 209), and Artillery Work Shops (Buildings 205 and 206).[47]

An Artillery Gun Shed (Building 202) is completely demolished by the tornado and rebuilt. Apparently, the replacement building is virtually identical to the original, with a stone foundation, wood walls, and slate roof. It has eighteen bays for the storage of artillery guns. At some date, the building was portioned off to create an ordnance repair shop.[48]

Another Artillery Gun Shed (Building 207) is also demolished by the tornado and rebuilt. The new structure measures 34' by 191'-4", and has eighteen bays

40 Clouse and Steiner, "All that Remains," 113; USACE-Seattle, "Context Study of the United States Quartermaster General," 336, 343-344, 379. The example of plan No. 139-L from Fort McPherson measures 67' like the Fort Snelling stable, but is only 145' long.

41 Clouse and Steiner, "All that Remains," 131-132, 134.

42 Ibid., 114; Quartermaster Records; USACE-Seattle, "Context Study of the United States Quartermaster General," 343-344, 379.

43 "Fort Snelling, Building 209," Historic American Buildings Survey No. MN-56-GG, 1992.

44 Clouse and Steiner, "All that Remains," 130, 135, 136, 137.

45 Ibid., 138.

46 Ibid., 118.

47 Ibid., 112, 113, 129, 118, 104, 106, 108, 109, 111

48 Ibid., 105.

for the storage of artillery guns. A handwritten note in the quartermaster records notes that it is the "same as 202."[49]

An annex, measuring 21'-6" by 60', connects the south ends of the Subsistence and Quartermaster Storehouse (Buildings F-18 and F-19) to form a single building (now Building 222). The annex has a stone foundation, brick walls, and a slate roof that match the earlier structures.[50]

1916 On July 9, a Quartermaster Stable (Building 211) is damaged by fire, but is repaired at a cost of $12,000.[51]

A one-story wagon shed with a gable roof (Building 216/F-59) is built at the corner of Minnehaha Avenue and Bloomington Road. The foundation is concrete, the walls wood, the roof tile, and the floors dirt. The building measures 33' by 208' and accommodates forty-nine wagons. At some later date, a 12' by 40' wing is added to house truck drivers.[52]

1917 The wood-frame Quartermaster Storehouse (Building 225/F-60) is erected. The building measures 20'-6" by 77'-4". At some point, the original wood-pier foundation is replaced by a concrete blocks and a masonry chimney is installed.[53]

A one-story, ten-car garage (Building T-228/F-45) is built at the World War I cantonment. Measuring 100' by 20', it has a concrete foundation, wood walls, and a gabled roof of wood and paper.[54]

A Quartermaster Warehouse (Building 223/F-61) is erected. It will later be salvaged.[55]

A two-story Office Building (Building 221) fronting on Bloomington Road is erected. It measures 117'-8" by 19'. The foundation is concrete, the walls wood, and the gabled roof wood and paper.[56]

1920 Building T-228 is moved to its current location behind Buildings 227 and 229 and presumably serves as a garage for these residences. A context study of quartermaster plans supports this idea, observing that garages were often installed behind family quarters. The study concludes that while "garages are minor support buildings in housing complexes, . . . they are associated with the widespread use of the private automobile and incorporation of the car into domestic life."[57]

1922 The steam boiler in Building 219, which has served as a sawmill and wheelwright shop, is removed and the structure is converted into a blacksmith's shop.[58]

49 Ibid., 110; Quartermaster Records; HABS Study No. MN-56.
50 Clouse and Steiner, "All that Remains," 120; Quartermaster Records.
51 Clouse and Steiner, "All that Remains," 113; Quartermaster Records.
52 Quartermaster Records.
53 Clouse and Steiner, "All that Remains," 123; Quartermaster Records.
54 Clouse and Steiner, "All that Remains," 125.
55 Ibid., 121.
56 Quartermaster Records.
57 Clouse and Steiner, "All that Remains," 125; USACE-Seattle, "Context Study of the United States Quartermaster General," 321.
58 Clouse and Steiner, "All that Remains," 118.

A spectators' platform inside of the Calvary Drill Hall (Building 201) is extended the entire length of the hall.[59]

1923 This might be when one the of quartermaster stables, Building 214, is partially converted to a veterinary hospital for the fort's horses. The quartermaster records note the construction of a "veterinary wing" measuring 33'-6" by 80'-6".[60]

1926 The quartermaster authorizes the removal of some side stalls from the Artillery Stable (Building 209). This perhaps indicates that the building was no longer being used for horses.[61]

1928 The Post Exchange Oil and Gas House is built near the intersection of Bloomington Road and Minnehaha Avenue. It has wood walls, a concrete foundation, and measures 12'-4" by 8'-4". This building is replaced in 1932 by Building 220/F-58. A context study notes: "Gas station were constructed as minor support facilities during the wave of new construction of the late 1920s and 1930s when the Army modernized its posts and airfields."[62]

A report describes Building 225, a quartermaster storehouse, as "a temporary building, not in good condition."[63]

One half of the second Quartermaster Stable (Building 214) might have been converted into a veterinary hospital for the fort's horses in this year.[64]

1929 On November 13, the Root House that adjoins Building 222 burns down.[65]

1930 A four-bay garage (Building 243/F-62) is erected near the residential neighborhood along Minnehaha Avenue to serve the houses. It measures 40'-6" by 22' and has wood walls and a shed-style roof of wood and paper. Apparently, the foundation is concrete. At some point, three additional bays were built, bringing the capacity to seven automobiles.[66]

1931 The Powder Magazine, Building 237, is moved to its present location. At some point, the metal siding was extended to the ground and the three doors on the south side were converted to windows.[67]

A fire damages one of the quartermaster's stables (Building 214).[68]

59 Ibid., 104.

60 Ibid., 114; Quartermaster Records. The Quartermaster account gives two different years, 1923 and 1928, for this event.

61 "Fort Snelling, Building 209"; Clouse and Steiner, "All that Remains," 111; Quartermaster Records.

62 Clouse and Steiner, "All that Remains," 119; Quartermaster Records; USACE-Seattle, "Context Study of the United States Quartermaster General," 351.

63 Clouse and Steiner, "All that Remains," 123.

64 Quartermaster Records. The Clouse/Steiner study gives this date as 1923 (page 114), but the Quartermaster Records shows both April 5, 1923, and April 12, 1928, as conversion dates.

65 Clouse and Steiner, "All that Remains," 120; Quartermaster Records.

66 Clouse and Steiner, "All that Remains," 133. This study also describes the foundation as "dirt."

67 Ibid., 128.

68 Quartermaster Records.

The Cavalry Drill Hall (Building 201) has 477 theater-style chairs installed. At some point, arched doorways at the ends of the building, high windows are partially filled in, and garage doors are added along the south facade. One of the garage door openings is later filled in with brick.[69]

An Artillery Stable (Building 209) is converted to storage for fifty-four vehicles at a cost of $3,332 and its name is changed to Motor Storage Shed.[70]

1932 Garage doors are added to a Quartermaster Stable (Building 211) when it is converted to a tank and motor shed that accommodates 42 vehicles. At some point, a small, concrete-block addition with a gable roof is appended to the north end of the building.[71]

The Quartermaster Oil Station (Building 215/F-57) is erected. The one-story, rectangular building has a gable roof and rests on a concrete foundation. The exterior is covered with stucco. At some point, the double door on the west side is replaced a by single door and a metal smokestack is added. Although the Clouse study lists the roof as slate, it is now covered with hexagonal asphalt shingles. At some point, the north end of the building is remodeled into a porch, suggesting it followed examples cited by a quartermaster context study: "The typical gas station consisted of a small, one-story building with several gasoline pumps in front. In some examples, a roof extended over the pumps."[72]

The Post Exchange Oil and Gas House (Building 220/F-58) replaces the much smaller original building. The 22'-6" by 60' structure has concrete-block walls, asbestos shingles, and a concrete foundation. In the late 1930s, it was re-roofed by WPA workers. A context study observed that "gas stations are associated with automobiles as a major mode of transportation. They were constructed at military installations during the inter-war period, when the military began to provide many of the same services found in cities to installation residents. Pre-1940 gas stations are typically found at military installations with large resident populations."[73]

1933 Between 1933 and 1936, the Forage House (Building 224) is converted into the Utility Shops and Warehouse. The costs of labor for the conversion are largely provided by the Civilian Conservation Corps. A full-length loading platform on the south side is removed and four smaller docks are built. Eight double doors are changed into double windows.[74]

1934 The Artillery Stable/Motor Shed Storage Building (Building 209) is converted into the CCC Clothing and Equipage Warehouse. There are several alterations including the installation of asbestos siding and a smokestack.[75]

A wood-frame, one-car garage (Building 251) with a gabled roof sheathed with asphalt and felt is erected north of the Minnehaha Avenue residential area. It measures 14'-6" by 18'-8" and has a concrete foundation and floor.[76]

69 Clouse and Steiner, "All that Remains," 104.

70 "Fort Snelling, Building 209"; Quartermaster Records; Clouse and Steiner, "All That Remains, 111. The quartermaster account gives August 15, 1931, as the date completed.

71 Clouse and Steiner, "All that Remains,"113; Quartermaster Records. The Clouse study does not mention the concrete-block addition, but its dilapidated condition suggests it has been in place for several decades.

72 Clouse and Steiner, "All that Remains," 115.

73 Ibid., 119; Quartermaster Records; USACE-Seattle, "Context Study of the United States Quartermaster General," 351.

74 Clouse and Steiner, "All that Remains," 122.

75 "Fort Snelling, Building 209."

76 Quartermaster Records.

1935 A modern four-story building with red brick walls, a concrete foundation, and a flat, tar-and-gravel roof is erected on the site of a section of the Quartermaster Storehouse (Building F-19) that burned down in 1929. The new warehouse, based on standard plan No. 6142, measures 145' by 44'.[77]

The CCC Commissary Warehouse (Building 223) is erected on the site of the former Building F-61, which had been salvaged the previous year. The 130' by 135' concrete-block structure has a concrete foundation. The building's two hipped roof are covered with built-up tar and gravel. At some point, the windows are modified and double doors are added.[78]

By this year, but probably earlier, the Wagon Shed (Building 216) has become a garage with a capacity of forty-eight vehicles. Concrete covers the original dirt floors. A temporary lean-to, measuring 12' by 40'-6", is added to the north side of the building.[79]

1936 Several electric motors are removed from the Shops Building (Building 210), which perhaps no longer serves as a shop. At some point, one of the double doors on the north side is filled in with brick and small, gable-roofed porches are added to doors on the north side.[80]

The motors removed from Building 210 are installed in Building 219, which apparently becomes the shops building.[81]

In September, "a small addition of temporary nature for the purpose of painting Motor Vehicles" is built on the Post Garage (Building 216)[82]

1937 The section of Building 222 that was formerly a root house is converted into the Post Bakery with the help of WPA labor. In May, a new Bennett oven, furnished by the Quartermaster Depot at Jeffersonville, Indiana, is installed.[83]

Between 1937 and 1938, the former Shops Building (Building 210) is converted into the Ordinance and CWS Warehouse.[84]

A formerly undeveloped area south of the quarters on Bloomington Road is now labeled on a map as the "Nursery Plat."[85]

1938 The one-story Office, Warehouse, Shops (Building 230) is constructed of concrete blocks along a the railroad spur south of the quartermaster's complex. A tall brick chimney rises from the asphalt roof of the 300' by 80' structure. The quartermaster records describe it as the WPA Warehouse.[86]

WPA labor replaces the open, wood porches on the quarters along Bloomington Road (Buildings 227 and 229) with enclosed, brick porches on concrete-

77 Ibid.; Clouse and Steiner, "All that Remains," 120.
78 Clouse and Steiner, "All that Remains," 121.
79 Quartermaster Records.
80 Clouse and Steiner, "All that Remains," 112.
81 Ibid., 118.
82 Quartermaster Records.
83 Ibid.
84 Ibid.
85 Aerial photograph dated July 1, 1937, Borchert Map Library, University of Minnesota-Minneapolis.
86 Clouse and Steiner, "All that Remains," 127; Quartermaster Records. The Clouse study calls this the "Office, Warehouse, Shops" building.

block foundations.[87] [88]

A one-story residential structure (Building 257 or T-257) is erected in the vicinity of Building 230.[89]

A portion of a former Quartermaster Stable (Building 214) is converted to a lab to serve the veterinary hospital that occupies the building.[90]

1939 An Artillery Stable (Building 203) is destroyed by fire.[91]

1940 Two garages (Buildings T203 and T203A) are erected adjacent to the Cavalry Drill Hall.[92]

The Nursery Plat does not show any sign of trees.[93]

1941 On December 7, the United States enters World War II.

1945 World War II ends.

An aerial photograph reveals three groves of trees growing in the Nursery Plat.[94]

1946 Fort Snelling is decommissioned and turned over to the Veterans Administration.[95]

1948 The former wagon shed (Building 216), now known as the Post Garage, is salvaged for its materials.[96]

1949 The Office Building (Building 221) fronting Bloomington Road is razed and the materials salvaged.[97]

1960 Leavenworth Avenue still exists.[98]

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87 Clouse and Steiner, "All that Remains," 126; Quartermaster Records.

88 Quartermaster Records.

89 Clouse and Steiner, "All that Remains," 46, 141.

90 Quartermaster Records.

91 Clouse and Steiner, "All that Remains," 106. The Clouse study does not mention the year the stable was erected.

92 Ibid., 106; 107; Quartermaster Records; Quartermaster Map, "Plan View of Fort," 1946, Fort Snelling Visitor Center; Historic American Buildings Survey Nos. MN-56-AA, MN-56-BB, and MN-56-CC.

93 Aerial photograph dated June 15, 1940, Borchert Map Library, University of Minnesota-Minneapolis.

94 Aerial photograph dated 1945, Borchert Map Library, University of Minnesota-Minneapolis.

95 Roise, "Fort Snelling's Buildings 17, 18, 22, and 30," 56-57.

96 Quartermaster Records.

97 Ibid.

98 Aerial photograph dated May 8, 1960, Borchert Map Library, University of Minnesota-Minneapolis.

1969 An aerial photograph shows Leavenworth Avenue with a line of trees and a worn path, but it is unclear if it is still used as a road.[99]

A building now occupies a portion of the Nursery Plat, but two groves still exist. [100]

1995 Sometime before 1996 the following buildings are razed: Garage (Building 208), Scale Office (Building 226 or T226), Quartermaster Shed (Building 236), Quartermaster Warehouse (Building 238), Barracks (Building 212), Garage (Building 213), and Wagon Shed/Garage (Building 213).

1996 Building 230, the former WPA Warehouse, is now used by the United States Navy.[101]

Building 238, once located along the railroad spur tracks, has been razed by this time.[102]

The Post Exchange Oil and Gas House (Building 220), built in 1932, is now privately owned and operated.[103]

The former CCC Commissary (Building 223) was recently used by the Veterans Administration Fire Department.[104]

Around this time, the former artillery buildings and the later adjacent garages (T-203 and T-203A) are razed, as are the former WPA Warehouse (Building 230) and the civilian employees' quarters on Minnehaha Avenue. A tennis center is built on part of the artillery site.

2000 About this time, the Artillery Work Shops (Buildings 205 and 206) are moved to serve the sports fields developed on the Parade Grounds by the Minneapolis Park and Recreation Board.

2009 The former site of Building 230 is now crossed by a tunnel running beneath the airport for a light-rail transit line.

99 Aerial photograph dated October 28, 1969, Borchert Map Library, University of Minnesota-Minneapolis.

100 Ibid.

101 Clouse and Steiner, "All that Remains," 126.

102 Ibid. This building is not listed in the Clouse study, suggesting it was no longer extant in 1996.

103 Ibid., 119.

104 Ibid., 121.

Appendix II: Building Parcel Area, Coverage and Development Potential

Historic Building Coverage Calculation for West Treatment Zones

Building Parcel Area, Coverage and Development Potential for West District Treatment Zones

Treatment Zone	Building Parcel	Parcel Area	*Allowable Coverage % or Building Size	Coverage SF	Floors	*Total GSF*	Notes
F	F.1	19,300	One building similar in size to Bldg 201 to be located on F.1, F.2, and/or G.1	*see total*	2	*see total*	
	F.2	21,400		*see total*	2	*see total*	
G	G.1	62,600		*see total*	2	*see total*	
			total	***28,000***		***56,000***	
G	G.2	178,000	17%	*30,300*	2	*60,600*	
			total	***30,300***		***60,600***	
H1	H1.1	12,000	20%	*2,400*	1	*2,400*	*only additions*
	H1.2	12,000	20%	*2,400*	1	*2,400*	*only additions*
	H1.3	20,800	Similar to Bldg 211/214	*13,600*	1.5	*20,400*	
	H1.4	22,000	Similar to Bldg 211/214	*16,400*	1.5	*24,600*	
	H1.5	20,800	Similar to Bldg 211/214	*13,600*	1.5	*20,400*	
	H1.6	22,000	Similar to Bldg 211/214	*16,400*	1.5	*24,600*	
			total	***64,800***		***94,800***	
H2	H2.1	24,800	100%	***24,800***	1+	***24,800***	
H3	H3.1	1,000	Size of original Bldg 227	*1,000*	2	*2,000*	*only additions*
	H3.2	3,000	Size of original Bldg 229	*3,000*	2	*6,000*	*only additions*
			total	***4,000***		***8,000***	
J1	J1.1	61,500	40%	*24,600*	2	*49,200*	
	J1.2	92,300	40%	*36,920*	2	*73,840*	
J2	J2.1	197,500	40%	*79,000*	2	*158,000*	
			total	***140,520***		***281,040***	

525,240 **TOTAL WEST GSF**

Notes:

*Allowable coverage based on calculation of total treatment zone area, including street boulevards and yard areas (most conservative)

Zone H1 and Zone H3 have very restricted parcel locations that can be almost completely covered

Historic Building Coverage Calculation for West District Treatment Zones

Treatment Zone	Zone Area	Zone Area less no-build buffers*	Historic Building #	Building Footprint Area 1939	Historic Building Total 1939	Historic Coverage Calculation (Percentage of Total)	
F	128,700	N/A	201	28,000	**28,000**	**22%**	
G	393,346	62,614	*202*	9,000			
(-) street	**359,667**	177,683	*picket*	7,800			
		240,297	*203*	16,600			
			204	950			
			205	1,460			
			206	1,460			
			207	7,300			
			208	7,760			
			209	15,780	**68,110**	**28%**	**17%**
street	*33,679*					(Historic Building Total Area) divided by (**ZONE Area less STREET & BUFFER**)	(Historic Building Total Area) divided by (**Total ZONE Area**)
H1	**385,564**	**247,764**	210	4,300			
			211	13,060			
			212	5,260			
			213	2,960			
			214	14,870			
			215	300			
			216	10,400	**51,150**	**21%**	**13%**
						(Historic Building Total Area) divided by (ZONE Area less STREET & BUFFER)	(Historic Building Total Area) divided by (Total ZONE Area)
H2	**307,518**	**261,490**	217	2,740			
			218	1,740			
			219	1,810			
			220	1,540			
			221	2,540			
			222	19,000			
			223	17,760			
			224	6,470			
			225	1,620	**55,220**	**21%**	**18%**
						(Historic Building Total Area) divided by (ZONE Area less STREET & BUFFER)	(Historic Building Total Area) divided by (Total ZONE Area)
H3	149,749	**75,280**	227	1,000			
			228	2,000			
			229	3,000	**6,000**	**8%**	**4%**
						(Historic Building Total Area) divided by (ZONE Area less STREET & BUFFER)	(Historic Building Total Area) divided by (Total ZONE Area)

**no-build buffers include boulevard setbacks, yards, rail siding & viewsheds*
N/A = Treatment Zone Area and Parcel Area are same
221 Building Numbers in Gray have been demolished

Appendix III: West District Reuse Study – Building Summary Spreadsheet

West District Reuse Study - Building Summary

Exterior Condition:

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.

0 **Beyond Repair**

Interior Condition:

5 **Excellent:** With reestablishment of utilities (if necessary), the building could be immediately reused.

4 **Very Good:** With reestablishment of utilities (if necessary), 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.

0 **Beyond Repair**

West District Reuse Study - Building Summary

Building	Original Use	Year Built	Vacant?	Year Vacant	Number of Floors	Basement	Building Footprint	Gross Floor Area	Hazardous Materials	2010 Ext. Cond	2010 Int. Cond
201	**Cavalry Drill Hall**	1907	no*		1	No	28,000	28,000		5*	5*
210	**Ordnance and CWS Office**	1907	storage		1	yes	4,300	8,600		3	3
211	**Quartermaster Stable**	1909	storage		1.3	No	13,060	16,978		2	3
214	**Quartermaster Stable**	1910	yes		1.3	No	47,870	62,231		2	3
215	**Quartermaster Gas Station**	1932	yes		1	No	300	300		2	2
217	**Quartermaster Storehouse**	1879	yes		1	No	2,740	2,740		4	4
218	**Forage House**	1894	yes		1	No	1,740	1,740		3	3
219	**Sawmill; Wheelwright**	1895	yes		1	No	1,810	1,810		3	2
220	**Post Exchange; Auto Shop**	1928	no	na	1	No	1,540	1,540		3	4.5
222	**Quartermaster Storehouse**	1904	storage	na	1.5	Yes	10,000	25,000		3	3
222	**Quartermaster Storehouse**	1935	no	na	4	(incl)	9,000	36,000		4	4
223	**CCC Commissionary Warehouse**	1935	no	na	1	No	17,760	17,760		3	4
224	**Forage House**	1902	no	na	1	Yes	6,470	12,940		3	3
225	**Storehouse**	1917	yes		1	No	1,620	1,620		3	3
227	**NCO Quarters (2 families)**	1904	yes		2	Yes	1,000	3,000		2	NA
228	**Garage**	1917	yes		1	No	2,000	2,000		0	0
229	**NCO Quarters (4 families)**	1907	yes		2	Yes	3,000	9,000		2	NA
237	**Powder Magazine**	1904	yes		1	No	1,800	1,800		2	3
239	**Mineral Oil House**	1892	yes		1	No	630	630		5	5
							154,640	**233,689**			

*** = currently being rehabilitated by the Northern Star Council of Boy Scouts of America**

Appendix IV: Hennepin County Memo dated March 10, 2010

Date: March 10, 2010

To: Patrick Connoy, Hennepin County Housing, Community Works & Transit

From: John Evans, Hennepin County Environmental Services

Subject: Summary of Environmental Concerns Observed at Ft. Snelling, Upper Bluff, West District

---

On February 17th and 19th, I accompanied representatives of the Veteran's Administration (VA), the National Park Service, the Minnesota State Historical Society, Hess Roise, and Miller Dunwiddie as part of a team conducting historical building assessments at the VA-owned portion of Ft. Snelling Upper Bluff West District property (the "Property"). I've summarized below the environmental concerns that I saw during the visit.

At the time of my visit, a number of the buildings were in use by the VA for storage of office equipment, maintenance equipment and medical records. Some of the buildings were heated and most of the buildings appeared to be relatively well maintained.

- Asbestos-containing insulation and other materials (ACM) are present in many of the buildings. The ACM that I saw was in relatively good condition in most locations and was labeled as asbestos-containing. Based on the labeling, the VA likely has asbestos survey reports and operations and maintenance plans for the management of ACM in the buildings. I was able to walk-through all or at least parts of Buildings 210, 211, 215, 217, 218, 219, 220, 222, 223, 224 and 225 (see attached map). Building 214 (Veterinary Hospital & Garage) was placarded as being asbestos-contaminated and was not entered. We also did not enter the basement of Building 225 (Paint Shop), which was similarly placarded. Severely damaged suspect asbestos-containing insulation is present in the Building 210 (Shops & Warehouse) boiler room. Buildings 227, 228 and 229 (NCO Quarters and Garage) were not entered due to safety concerns (fall hazards due to damaged floors). Building 239 (Mineral Oil House) was not entered because the uncertainty regarding the building ownership. Crawlspaces beneath buildings were not entered.

- Lead-based paint likely is present in the buildings. While there were areas of severely-damaged paint, the majority of painted surfaces were in relatively good condition.

- Although it was not identified as a petroleum release site by the Minnesota Pollution Control Agency's (MPCA's) database, the owner of Neman's Auto Service (the former Post Exchange Gas Station-Building 220) stated that fuel pumps, underground gas and used oil tanks, and contaminated soil were removed in the 1980s from the west end of this building. Residual contaminated soil likely still is present at this location. A 250-gallon aboveground storage tank, labeled "used oil" was present to the northwest of this building. A privately-owned, auto servicing business still operates at this location; however, fuel no longer is dispensed. Miscellaneous vehicle maintenance chemicals were used in connection with this business and small spills were observed on the concrete floor.

- Building 215 (Gas Station/Quartermasters Oil House) is identified as a closed petroleum release site by the MPCA's database. No signs of tanks were observed at this location but presumably underground and/or aboveground petroleum storage tanks were present at one time.

- I observed cut-off piping penetrating the exterior wall of the boiler room as well as a manhole cover in the adjacent exterior area on the west side of Building 222 (Quartermasters Storehouse). These features suggest that an underground heating oil tank may be or have once been present in this location. According to VA maintenance staff, the boiler currently is natural gas-fired and they were not aware of the existence of a tank.

Drums and smaller container of miscellaneous building and equipment maintenance chemicals, including kerosene and Formalin (formaldehyde) were stored in several buildings with the largest quantities in Buildings 211 (Tank Park & Vehicle Shed) and Building 223 (CCC Warehouse). An emergency generator presumably with an attached tank and a portable petroleum storage tank were present in Building 223. However, I did not observe any signs of significant spills. The ground was covered with more than 1 foot of snow during my visit and, as a result, I was not able to directly view most of the ground surface for signs of spills or tank-related piping.

If Hennepin County's evaluation of the property continues, I recommend that a Phase I environmental site assessment (ESA) be completed. For a property of this size and with this number of buildings, a Phase I ESA will probably cost $5,000 or more. The Phase I ESA should include a review of MPCA files to obtain additional information regarding the known petroleum release. Based on the above-listed concerns, the Phase I ESA will recommend that a Phase II ESA investigation (soil borings) be completed to evaluate whether contamination is present in the various locations described above.

In addition to the Phase I and II ESAs, Hennepin County should contract with a consultant to review the VA's asbestos inspection reports and inventories that presumably exist for the buildings. Using this information, the consultant should complete field-checks of the buildings and complete an asbestos and lead-based paint survey/inventory for all of the buildings that are included with this property. Using this information, asbestos and lead-based paint management costs can be estimated.

c: Steve Tharaldson, Veteran's Administration
Chuck Liddy, Miller Dunwiddie

Appendix V: Secretary of the Interior's Standards

The Secretary of the Interior's Standards for Rehabilitation

The Standards (Department of Interior regulations, 36 CFR 67) pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and the interior, related landscape features and the building's site and environment as well as attached, adjacent, or related new construction. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Appendix E

Resumes

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ERIC D. KIESELBACH
President and CEO

Education

B.S. Environmental Resource Sciences: University of California, Davis, 1986
Emphasis: Water Sciences, Environmental Toxicology, Soil Sciences

Hazardous Waste Certificate Program: University of California, Davis
Additional classes in: Risk Assessment, Hazmat, Advanced Hazmat, Environmental Regulations, SARA Compliance

Licenses

- California State Registered Assessor, REA #02881
- Building Inspector #1607
- Management Planner #1680
- Project Designer #1839
- Contract Supervisor #2276

Special Qualifications

Mr. Kieselbach qualifies as an "Environmental Professional" in accordance with the US EPA's AAI (All Appropriate Inquires) 40 C.F.R. § 312.22. Mr. Kieselbach has performed numerous site investigation, assessment, and remediation of major commercial and industrial properties — in particular, large manufacturing plants requiring major remediation. Extensive knowledge of biotreatment of hydrocarbon-contaminated soils using engineered and endemic microbes. Designed, organized, and taught 40-hour SARA training program. Familiar with CFR 29, 40, and 49, SARA, CERCLA, TOSCA, RCRA, TITLE 22, Luft Manual. Significant general contractor experience, knowledgeable in all phases of commercial construction. Extensive experience in design, construction, and operation of all types and phases of remedial treatment systems.

Summary of Experience

1991 - Phase One, Inc., Tustin, California - Current

As President and Chief Executive Officer, Mr. Kieselbach oversees the entire environmental due diligence business conducted by Phase One, Inc., including orchestrating its rapid growth and success.

12 years - EDK Construction, Sacramento, California

Mr. Kieselbach owned and operated this company which constructed numerous custom homes, commercial and apartment projects. He managed and oversaw multi-million dollar projects with profitable results.

3 years - U.S. Geological Survey, California

As a Hydrogeological Technician, Mr. Kieselbach performed soil and groundwater sampling, helped set up and design soil testing and soils laboratory, and helped write procedures and perform field tests using sophisticated electronic equipment.

5 years - Exceltech Inc., a full-service environmental company, Irvine, California

As an officer and Vice President, Mr. Kieselbach ran the Southern California operations for Exceltech Inc., which included the Geoscience, Engineering, Remediation, and ACT (Assessments, Compliance, and Training) Departments. He undertook major work for such companies as Shell Oil, Conoco, and Kaiser Aluminum. He was also corporate safety officer for four of the five years.

ERIC EXTON
Operations Manager

Education

Numerous college courses focusing on science, computers, and business including: biology, micro-biology, environmental biology, chemistry, statistics, anatomy and physiology, programming in BASIC, Programming in C, programming in Pascal, advanced data structures, database programming, accounting and business law.

Licenses and Certifications

- California State Registered Assessor, REA I #08334
- State of California, Department of Health Services, Lead Related Construction Certificate, Inspector/Assessor ID#17704
- Certification in Mold Inspection & Sampling
- Microsoft Certified Systems Engineer (MCSE) #44842
- Microsoft Certified Professional in Microsoft Windows, Windows NT, Networking, SQL Server Administration, and SQL Server Implementation

Special Qualifications

Mr. Exton qualifies as an "Environmental Professional" in accordance with the US EPA's AAI (All Appropriate Inquires) 40 C.F.R. § 312.22. Mr. Exton has extensive experience in managing and supervising technical and administrative staff as well as in managing remote offices. Mr. Exton has also managed large, multi-site projects that have encompassed sites in multiple states. He has been involved with Phase II projects, prepared site characterization plans, and has worked in unison with governmental agencies and clients to achieve closure for contaminated properties. He has overseen soil cleanups and the installation of ground monitoring wells. In addition, he is an expert in computer programming, networking, databases, and systems administration.

Summary of Experiences

1992 – Phase One, Inc., Tustin, California – Current

Mr. Exton has written, researched, or performed the fieldwork for thousands of Phase I Environmental Site Assessments for various types of properties including manufacturing facilities, automotive repair facilities, and agricultural properties. In addition, he is the company's expert in the Federal Communications Commission's (FCC) responsibilities under the National Environmental Policy Act (NEPA). He has consulted on hundreds of NEPA compliance projects for various telecommunications companies. He has also consulted on NEPA compliance for several Department of Housing and Urban Development's (HUD) redevelopment projects as well as CEQA projects. He has made determinations and received concurrence from the State Historical Preservation Officer (SHPO) of many states for hundreds of Section 106 compliance projects. Mr. Exton has also managed special projects including Native American consultation, endangered species mitigation, consultation with the US Fish and Wildlife Service, wetlands surveys, flood plain hydrology studies, and archaeological testing. His archaeological projects have included the discovery of human remains. Mr. Exton has also written the majority of custom software utilized by Phase One, Inc; this software has increased the company's productivity and has improved the quality of reports compiled.

1 year – Valmer, Inc., Palo Alto, California

Mr. Exton managed and supported the computers and network for Valmer, Inc., a computer software company. He also managed the technical support of the company's contact management software, wrote several utilities to import data from other contact management and database programs, and merged data into popular word processing and fax programs.

REPORT SIGNATURE SHEET AND CERTIFICATION

The undersigned hereby certifies that:

The following people have prepared, written, and/or reviewed the Preliminary NEPA Report. All the below parties have, in good faith, conducted their respective project responsibilities using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields.

All parties have acted in good faith and have no known relationship with the subject site, owners, buyers, or any other entity associated with the subject site. All respective project responsibilities have been conducted independently, and with no conflict of interest.

The statements of fact contained in this report are true and correct based on materials reviewed.

The reported analyses, opinions, and conclusions are personal, unbiased, professional, and limited only by the assumptions and qualifications stated herein. Compensation is not contingent upon an action or an event resulting from the analyses, opinions, or conclusions included in this report. Nor is it contingent upon the use of this report.

The investigation has been performed in accordance with all applicable legal requirements and in accordance with accepted practices prevailing in the industry. The personnel who performed the investigation are properly licensed and certified in accordance with the requirements of all federal, state, and local laws, rules, and regulations.

I/We have the specific qualifications based on education, training, and experience to perform a Preliminary NEPA Assessment. The report is in substantial compliance with Title 38, C.F.R. Part 200.

We have no present or prospective interest in the subject property or the parties involved.

If necessary, expert testimony and other legal appearances will be provided for a reasonable fee to be arranged.

Eric Kieselbach
President, Technical Reviewer

Nadine Kieselbach
Copy Editor

Eric Exton
Operations Manager, Report Writer

REGISTERED ENVIRONMENTAL ASSESSOR
ERIC EXTON
No. REA I - 08334
Expires: 06/2012
STATE OF CALIFORNIA

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Appendix B

Phase I Archeological Resource Investigation
The 106 Group Ltd.
October 2013

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DEPARTMENT OF VETERANS AFFAIRS
Medical Center
One Veterans Drive
Minneapolis, MN 55417

October 21, 2013

Barbara Mitchell Howard
Deputy State Historic Preservation Officer
Minnesota Historical Society
State Historic Preservation Office
345 Kellogg Boulevard
St. Paul, MN 55102-1906

Re: Phase I Archaeology Survey
Fort Snelling West District Development Project
Fort Snelling, Hennepin County, Minnesota
SHPO No. 2012-0740
Veterans Affairs Project No. 618-12-305

Dear Ms. Howard:

In response to a request from your office in a letter dated November 2, 2012, the United States Department of Veterans Affairs (VA) has completed a Phase I archaeological survey for the above-reference project. As indicated in the survey report, the inconsistency in soil profiles along with the level of fill material observed indicates that there is a heavy amount of disturbance within the project area. Further investigation is not likely to yield any significant information that would contribute to our knowledge of the individual buildings or the broader Fort Snelling Historic District. Therefore, no further archaeological work is recommended prior to proceeding with the work as planned.

VA requests your concurrence with its finding that no historic archaeological properties will be affected by the project as currently proposed. A copy of the survey report is enclosed for your review. We look forward to continuing to work with your office to fulfill VA's obligations for the rest of this project as required by the NHPA.

Sincerely,

Steve Challeen
Facilities Engineering Director
Minneapolis VA Healthcare System

Enclosures

- Phase I Archaeology Survey Report

Cc: Carrie Pham, VA
Kathleen Schamel, VA
Pete Yakowicz, VA
Natascha Weiner, Minnesota SHPO
Andrew Michaelson, CommonBond
Jeremy Bork, Sand Companies
Peter Rauma, Anderson Engineering
Jennifer Bring, 106 Group

106GROUP

PHASE I ARCHAEOLOGICAL RESOURCES INVESTIGATION FOR THE FORT SNELLING WEST DISTRICT DEVELOPMENT PROJECT

Minneapolis, Hennepin County, Minnesota

October 2013

PHASE I ARCHAEOLOGICAL RESOURCES INVESTIGATION FOR THE FORT SNELLING WEST DISTRICT DEVELOPMENT PROJECT

Minneapolis, Hennepin County, Minnesota

SHPO File No. 2012-0740
Anderson Engineering No. VA263-P-1211, WO 1
MN Archaeological License No. 13-018
106 Group Project No. 1740-1398

Submitted to:
Anderson Engineering of Minnesota, LLC
13605 1st Ave N, Suite 100
Plymouth, MN 55441

Submitted by:
106 Group
The Dacotah Building
370 Selby Avenue
St. Paul, MN 55102

Report Author(s):
Peer Halvorsen, B.A.

October 2013

MANAGEMENT SUMMARY

During September of 2013, The 106 Group Ltd. (106 Group) conducted a Phase I archaeological resources survey for the Fort Snelling West District Development project. The survey was conducted under contract with the Department of Veterans Affairs (VA). The VA is currently performing due diligence to evaluate the lease of land and five buildings (Buildings 210, 211, 214, 227, and 229) to a private entity (CommonBond) for rehabilitation as housing for homeless veterans, the mothballing of one building (Building 215), and the demolition of one building (Building 228), all within the National Register listed Fort Snelling. As part of this due diligence, the VA must comply with Section 106 of the National Historic Preservation Act of 1966, as amended. The purpose of the archaeological resources investigation was to determine whether the project area contains previously recorded or unrecorded archaeological resources and whether those resources are contributing elements to the National Register of Historic Places (NRHP) listed Fort Snelling Historic District.

The project area is located in Sections 20 and 29, Township 28 North, Range 23 West, Hennepin County, Minnesota. The area of potential effect (APE) for archaeology is the same as the project area, and includes all areas of proposed construction activities or other potential ground disturbing activities associated with the rehabilitation of the five buildings, mothballing of one building, and demolition of one building within the project area. The archaeological investigation consisted of a review of documentation of previously recorded sites within one mile (1.6 kilometers [km]) of the project area and of surveys previously conducted within the project area, as well as a Phase I archaeological field survey to identify any intact archaeological sites within the construction limits of the project area. The archaeological survey area included approximately 6.4 acres (2.6 hectares [ha]) within the Central Lakes Deciduous South archaeological sub-region. Anne Ketz, M.A., RPA served as principal investigator for archaeology.

During the Phase I archaeological investigation, per the stipulations of a Memorandum of Understanding (MOU) prepared for this project, two monitors from the Santee Sioux Nation of Nebraska were onsite during survey. No previously recorded sites and no new sites were uncovered during field survey. Therefore, no additional archaeological work is recommended prior to moving forward to the project as currently planned.

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1.0 INTRODUCTION

During September of 2013, The 106 Group Ltd. (106 Group) conducted a Phase I archaeological resources survey for the Fort Snelling West District Development project. The survey was conducted under contract with the Department of Veterans Affairs (VA). The VA is currently performing due diligence to evaluate the lease of land and five buildings (Buildings 210, 211, 214, 227, and 229) to a private entity (CommonBond) for rehabilitation as housing for homeless veterans, the mothballing of one building (Building 215), and the demolition of one building (Building 228), all within the National Register listed Fort Snelling. As part of this due diligence the VA must comply with Section 106 of the National Historic Preservation Act of 1966, as amended. The purpose of the archaeological resources investigation was to determine whether the project area contains previously recorded or unrecorded archaeological resources and whether those resources are contributing elements to the National Register of Historic Places (NRHP) listed Fort Snelling Historic District.

The project area is located in Sections 20 and 29, Township 28 North, Range 23 West, Hennepin County, Minnesota. The area of potential effect (APE) for archaeology is the same as the project area, and it includes all areas of proposed construction activities or other potential ground disturbing activities associated with the rehabilitation of the five buildings, mothballing of one building, and demolition of one building within the project area. The archaeological investigation consisted of a review of documentation of previously recorded sites within one mile (1.6 kilometers [km]) of the project area and of surveys previously conducted within the project area, as well as a Phase I archaeological field survey to identify any intact archaeological sites within the construction limits of the project area. The archaeological survey area included approximately 6.4 acres (2.6 hectares [ha]) within the Central Lakes Deciduous South archaeological sub-region (Figure 1). The archaeological survey consisted of a thorough walkover of the entire project area to identify areas of high potential for containing intact archaeological sites, systematic pedestrian surface reconnaissance of high potential areas with adequate surface visibility, and shovel testing in high potential areas with poor ground surface visibility.

The following report describes project methodology, environmental setting, previous investigations, results, and recommendations for the Fort Snelling West District Development project area.

Source: MN SHPO; 106 Group

Map Produced by 106 Group 10/7/2013

Fort Snelling West District Development Project Phase I Archaeological Investigation

Hennepin County, Minnesota

- Project Area / Archaeology Area of Potential Effect
- One Mile Archaeology Study Area
- Previously Identified Archaeology Site
- NRHP Listed Architectural History Property

0 360 Meters
0 940 Feet
1:18,000

106GROUP

Project Location and Previous Investigations

Figure 1

2.0 METHODS

2.1 Objectives

The primary objectives of the archaeological resources investigation were to determine whether the area to be affected by the proposed project contains any archaeological resources and if those resources are contributing elements to the NRHP listed Fort Snelling Historic District. All work was conducted in accordance with the Minnesota State Historic Preservation Office (*SHPO) Manual for Archaeological Projects in Minnesota* (Anfinson 2005), *Guidelines for History/Architecture Projects in Minnesota* (SHPO 2005), and *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* [48 Federal Register 44716-44740] (National Park Service [NPS] 1983).

2.2 Area of Potential Effect

The APE for archaeology is the same as the project area and includes all areas of proposed construction activities or other potential ground disturbing activities associated with rehabilitation of the five buildings, mothballing of one building, and demolitions of one building within the project area (see Figure 1).

2.3 Background Research

During August of 2012, prior to the start of the field survey, staff from the 106 Group conducted a cultural resources literature review for the VA Fort Snelling West District Development project. This included background research at the SHPO for information on previously identified sites within one mile (1.6 km) of the project area and on surveys previously conducted within the project area. In addition, USGS topographic quadrangles, historical plat maps, aerial photographs, and data on project soils were reviewed in order to assess the portions of the project area that possessed a higher potential for containing archaeological sites.

2.4 Field Methods

During the archaeological investigation, per the stipulations of a Memorandum of Understanding (MOU) prepared for this project, two monitors from the Santee Sioux Nation of Nebraska were onsite during the field survey.

Intensive field investigation focused on areas assessed as having a greater probability to contain significant archaeological sites. These areas included undisturbed portions of the project area:

- within 500 feet (ft.) (150 meters [m]) of an existing or former water source of 40 acres (19 ha) or greater in extent, or within 500 ft. (150 m) of a former or existing perennial stream;
- located on topographically prominent landscape features;

- located within 300 ft. (100 m) of a previously reported site; or
- located within 300 ft. (100 m) of a former or existing historic structure or feature (such as a building foundation or cellar depression).

Areas assessed as having a relatively low potential for containing archaeological resources included inundated areas, former or existing wetland areas, poorly drained areas, and areas with a 20 percent or greater slope. Low potential areas and areas in which Holocene (less than 10,000 years old) deposits have been significantly disturbed were excluded from intensive field survey.

2.4.1 Systematic Surface Reconnaissance

Systematic pedestrian surface reconnaissance was conducted in areas exhibiting a greater potential to contain intact archaeological deposits where 25 percent or more of the ground surface was visible. Pedestrian reconnaissance was also employed to ascertain whether above-ground features, such as earthworks or abandoned structural foundations, were present within the survey area.

2.4.2 Shovel Testing

Fifty two shovel tests were excavated in areas exhibiting greater potential to contain intact archaeological deposits where less than 25 percent of the ground surface was visible. Tests were small, circular excavations, measuring approximately 35-45 centimeters (cm) in diameter. A 15-m (50-ft.) testing interval was employed for shovel tests, with test transects placed 15 m (50 ft.) apart whenever feasible.

All excavated soil matrices were passed through ¼-inch hardware mesh to ensure the consistent recovery of artifacts. Tests were excavated down to the C horizon, the level of culturally sterile subsoil.

Survey data were recorded through standardized forms and the field director's daily log. Recorded information included: test locations and methods of testing; the numbers, types and locations of recovered cultural materials; the depth of shovel tests and the thickness of excavated soil layers; soil textures and inclusions (both natural and cultural); and soil color according to Munsell® color charts.

2.5 Laboratory Methods

None of the artifacts identified in the field had any diagnostic characteristics that could tie them to a specific context, either chronologically or culturally, so a formal catalog of artifacts was not created for this report. See section "4.0 Results" for more detailed information on artifacts/collected observed.

The 106 Group will temporarily curate artifacts recovered during the investigations at its laboratory in St. Paul, pending review of the report by the VA and SHPO. The 106 Group will work with VA to determine an appropriate final repository for the artifacts recovered from federal VA property.

3.0 LITERATURE SEARCH

3.1 Previous Archaeological Studies

Research indicated that no archaeological studies have previously been conducted within the VA Fort Snelling West District Development project area.

No archaeological sites have been recorded (confirmed) and no sites have been reported (not field checked) within the project area itself. However, six archaeological sites have been recorded and no sites have been reported within the larger one-mile context area (Table; Figure 1).

Table 1. Previously Identified Archaeological Sites

Site No.	Site Name	T	R	S	¼ Section	Description
21DK0024	Cantonment New Hope	28N	23W	27	NW	1816-1820 Military Camp
21HE0099	Historic Fort Snelling	28N	23W	21	SW	Precontact Artifact Scatter and Foundation/Ruin
21HE0309	N/A	28N	23W	20	NW	Initial US Contact Artifact Scatter
21HE0337	Snelling Lake A	28N	23W	29	SE	Late Woodland Precontact Artifact Scatter
21HE0338	Snelling Lake B	28N	23W	29	SE	Transitional to Late Woodland Precontact Artifact Scatter
21HE0339	Snelling Lake C	28N	23W	29	SE	Precontact Single Artifact

3.2 Inventoried Architectural History Properties

Seven previously inventoried properties within the Fort Snelling West District Development project area are listed in the NRHP as contributing to the Fort Snelling Historic District (Table 2). The properties within the project area are all related to the military use of the fort.

Table 2. Previously Inventoried Architectural History Properties

Inventory No.	Property Name	Address	Description	NRHP Status
HE-FSR-0044	Building 210 (F-43)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District
HE-FSR-0045	Building 211 (F-49)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District

Table 2. Previously Inventoried Architectural History Properties

Inventory No.	Property Name	Address	Description	NRHP Status
HE-FSR-0047	Building 214 (F-56)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District
HE-FSR-0048	Building 215 (F-57)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District
HE-FSR-0057	Building 227a-b (F-30, 31)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District
HE-FSR-0058	Building T228a-f (F-45)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District
HE-FSR-0059	Building 229a-d (F-38, 41)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed (contributing to Fort Snelling Historic District

3.3 Environmental History Overview

The Fort Snelling West District Development project area is located in Sections 20 and 29, Township 28 North, Range 23 West, Hennepin County, Minnesota. The rehabilitation of the buildings will be conducted in urban surroundings.

Geologically, the project area lies within the Mississippi Valley Outwash geomorphic region. The project area lies within the SLWD soil landscape unit, described as loamy over sandy, well drained dark colored soils. The SLWD soil landscape unit makes up approximately 30 percent of the Mississippi Valley Outwash geomorphic region (Agricultural Experiment Station, 1973).

There are no soil associations for the project area as it is indicated in the county soil survey to be cut and fill land consisting of areas that have been leveled for buildings (USDA Soil Conservation Service 1974).

3.4 Cultural History Overview

As part of the federal legislative framework governing the treatment of cultural resources, the Minnesota SHPO has developed a series of historic and thematic contexts in which cultural properties may be interpreted and evaluated (Dobbs 1989a, 1989b; SHPO 1993). Minnesota's developmental sequence is divided into three broad contexts: precontact (ca. 12,000 years before present [B.P.] to A.D. 1700), contact (ca. A.D. 1630 to 1820) and post-contact (ca.1830 to the present). The precontact contexts emphasize patterns of regional adaptation or technological and cultural traditions, whereas the contact and

post-contact contexts are generally organized by themes addressing different interactions and industries. Since only post-contact materials were recovered during the survey, only the post-contact contexts are presented below.

3.4.1 Post-Contact Contexts

Contexts for Historic Fort Snelling have been well developed and what follows is a brief summary of the historical context for the project area. For a more detailed context consult *Fort Snelling West District - Historical Context Study and Development Guidelines* prepared by Miller Dunwiddie Architecture and Hess, Roise and Company.

The Fort Snelling Historic District has seen a long history of use as a military base since the original fort (Lower Post) was built in 1819. While the Upper Post was originally built in 1870 the portion of the fort where the project area is located did not see frequent use until the early twentieth century. The buildings within the project area were built under the leadership of Secretary of War Elihu Root, who emphasized efficiency resulting in standardized building plans. Four buildings within the project area were built during this time and include: a shops building (Building 210), two stables (Buildings 211 and 214), and two non-commissioned officer (NCO) residences (Buildings 227 and 229). In 1920, a deteriorating garage (Building 228) was moved behind buildings 227 and 229 from a cantonment developed for World War I. During World War II Buildings 211 and 214 were converted from stables into buildings that serviced tanks and motorized vehicles. Subsequently, a gas station (Building 215) was built nearby to service the vehicles. Eventually, the fort was decommissioned in 1946 and the buildings have been used by government as well as civilian interests since then (Miller Dunwiddie Architecture and Hess, Roise and Company, 2010)

4.0 RESULTS

Staff from the 106 Group conducted a Phase I archaeological survey of the Fort Snelling West District Development Project APE from September 10 to September 13, 2013. Anne Ketz, M.A., RPA served as principal investigator and Peer Halvorsen, B.A. served as Crew Leader (See Appendix A for a list of project personnel). In addition, during the archaeological investigation, per the stipulations of a Memorandum of Understanding (MOU) prepared for this project, two monitors from the Santee Sioux Nation of Nebraska, Rick Thomas and Clarence Campbell, were onsite during the field survey.

Field conditions were mostly favorable with no impediments delaying survey. Two main survey areas were investigated and are discussed here as the Houses Area and Stables Area respectively.

4.1 Houses Area (Buildings 227, 228, 229)

The Houses Area consists of the yard surrounding Buildings 227, 228, and 229 which are former NCO housing along with an associated garage. This area was surveyed in 15-m intervals with transects placed 15 meters apart. However, in some cases this interval was interrupted by the buildings themselves, so shovel tests were placed in 15-m intervals from either side of the structure. Most shovel tests had a final depth of 40 to 60 centimeters below surface (cmbs); however in some cases shovel tests reached 90 to 100 cmbs. Those shovel tests that had depths of approximately 1 m typically contained large layers of fill material. Additionally, soils exhibited a high level of compaction and in many cases a pick axe was required to start excavation of shovel tests. An example of a soil profile that potentially exhibits the least amount of disturbance consists of very dark grayish brown (10YR 3/2) silty loam 0 to 30 cmbs, dark brown (10YR 3/3) silty loam 30 to 50 cmbs, and brown (10YR 4/3) silty loam 50 to 60 cmbs. However, soil profiles ranged widely between shovel tests and this area seems to exhibit a significant degree of disturbance. In some shovel tests, a thin layer (1 to 2 cm in thickness) of gravel was observed and was consistently found at a depth of 20 to 25 cmbs. The soils around building 229 also consistently exhibited a yellowish brown (10YR 5/4) sand 30 to 100 cmbs, which likely represents fill material placed around the house to aid in drainage to prevent flooding of the basement.

Nineteen shovel tests were positive for potential historical artifacts and most artifacts were observed in the top 30 cm of soil. The artifact assemblage consisted of approximately 41 glass fragments (8 plate glass, 20 bottle glass, 13 undetermined), 23 nails (all wire nails except one cut nail), 2 screws, 12 ceramic fragments (8 undecorated whiteware/ironstone, 2 whiteware/ironstone possessing a gilded rim, 1 whiteware/ironstone possessing a fragment of a makers mark, 1 ceramic floor tile), 6 fragments of faunal bone (1 bird sternum, 5 unidentifiable elements), and 1 rusted jingle/sleigh bell. Lumps of coal were found in almost every shovel test and appeared to be ubiquitous throughout the survey area.

Two ashy features were observed in Shovel Tests 2 and 25 respectively. The feature in Shovel Test 2 contained large amounts of coal, ash, and clinkers between 20 and 54 cmbs; however, no artifacts were recovered from this feature. The feature in Shovel Test 25 consisted of what appeared to be two different dump episodes of clinkers, coal, and ash. The first layer was approximately 25 to 38 cmbs and the second

immediately below from 38 to 50 cmbs. Several whiteware or possibly ironstone ceramic fragments were found within these features, but it was not clear whether they were contained within one layer or both. One ceramic fragment exhibits a blue line and gilded rim and another contains a small portion of a maker's mark; however, the fragments are small and there is not enough of the maker's mark or patterning to make an identification. These ash features likely represent the clearing out of coal burning furnaces associated with Buildings 229 and 227 or the surrounding buildings, which are adjacent to the current project area (Buildings 222, 224, and 225) (see Figure 2).

Overall the artifact assemblage was relatively diffuse across the site and consisted of small, non-diagnostic fragments that indicate general association with twentieth century activities. As such, it is not possible to tie them to any specific context and, therefore, the assemblage cannot provide any significant information that would contribute to our understanding of the historic district itself.

4.2 Stables Area (Buildings 210, 211, 214, 215)

The Stables Area consists of the yard surrounding Buildings 210, 211, 214, and 215, which are former stables that were converted to motorized vehicle and tank workshops and an associated gas station, none of which are in current use. The first shovel test was placed on the southeastern side of Building 211; it contained a highly compact layer of gravel approximately 30 cmbs with a layer of oily black (10YR 2/1) clay loam underneath. The gravel layer was compacted to the point where a pick axe was required to dig through it and the entire yard to the southeast of Buildings 214 and 211 and the majority to the northwest of these buildings consisted of this compact gravel. This area has likely been compacted by the tanks and vehicles that these buildings serviced during World War II and the black oily soil beneath may be the result of motor oil leeching through the gravel to the soil underneath. No further shovel tests were attempted in those areas exhibiting compact gravel and this area was only subjected to pedestrian survey, with the exception of Shovel Test 2 on the southwestern end of the survey area, which was excavated down to a layer of impenetrable gravel at 42 cmbs. This shovel test contained one brick fragment found at 14-25 cmbs (see Figure 2).

Two areas within the Stables Area were found to have diggable soil and a total of five shovel tests were positive for historical artifacts. The diggable areas included a stand of trees on the northwest side of Building 214 and the area immediately surrounding Building 210. Shovel tests were placed in 15-m intervals where feasible (see Figure 2). The soils around Building 210 appeared to have a large degree of both modern and historical material mixed together indicating that much of it is disturbed and likely composed of fill material. Shovel Test 4 contained three brick fragments that were lying haphazardly within the shovel test and did not appear to be associated with any buried feature. This test was marked positive and one of the bricks was saved as it had a partial stamp with the letters "PAV." However, the yard behind Building 211 exhibited large amounts of fill material containing building materials from destroyed structures; it is likely that these bricks are from another portion of the fort. Moreover, conversation with a groundskeeper indicated that VA staff had uncovered large amounts of mixed up rubble when digging a ditch behind Building 211. Therefore, it is likely that the bricks in shovel test 4 are not in situ and are likely part of fill material used in the yard. Shovel Test 12 was marked positive as four

glass fragments, a piece of wire, a metal washer, and one square cut nail was found in the shovel test. However, the soil profile indicated heavy disturbance and plastics were found intermixed with the artifacts.

Two shovel tests were positive in the area shovel tested on the northwest side of Building 214 for historical artifacts and one was positive for a feature. Two clear glass fragments from a vessel (one body and one rim fragment) were recovered from Shovel Test 14 and one whiteware/ironstone ceramic fragment was recovered from Shovel Test 17. The ceramic fragment possesses a small portion of a maker's mark, but not enough to make an identification. Shovel test 16 contained a lens of ash, coal, and clinkers; however, this was to be expected as the coal storage bin for Building 214 was approximately 20 m to the northeast of the shovel test (see Figure 2).

Overall, none of the artifacts recovered in the Stables Area possess any diagnostic features that could tie them to a specific context. Moreover, this area seems to have a high degree of disturbance and much of the soil consists of fill material containing rubble from other locations at the fort. Therefore, the archaeological resources located in this area are not likely to provide any significant information that would contribute to our understanding of the historic district itself.

Source: 106 Group

Map Produced by 106 Group 10/7/2013

Fort Snelling West District Development Project Phase I Archaeological Investigation

Hennepin County, Minnesota

- Project Area / Archaeology Area Potential Effect
- One Mile Archaeology Study Area
- × Negative Shovel Test
- ⊕ Positive Shovel Test

0 30 Meters

0 90 Feet

1:1,800

106GROUP

Results

Figure 2

5.0 RECOMMENDATIONS

Throughout the project area, historical artifacts were observed. Approximately 85 artifacts were uncovered from the Houses Area and 10 artifacts from the Stables Area. Inspection of the artifacts indicated no significant diagnostic features that could tie the artifacts to a specific context. The assemblage in both areas appears to be diffusely scattered. Furthermore, the inconsistency in soil profiles along with the level of fill material observed in both areas indicates that there is a heavy amount of disturbance within the project area. Further investigation is not likely to yield any significant information that would contribute to our knowledge of these properties or the broader Fort Snelling Historic District. The 106 Group recommends that no archaeological resources exist that would be considered eligible for listing in the NRHP, or that would contribute to the historic district, and no further archaeological work is necessary.

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APPENDIX A: PROJECT PERSONNEL

LIST OF PERSONNEL

Project Manager	Jennifer Bring, B.A.
Principal Investigator	Anne Ketz, M.A., RPA
Field Archaeologists	
Crew Leader	Peer Halvorsen, B.A.
Field Technicians	Kelly Wolf, B.A.
Graphics and GIS	Matt Schillerberg

Appendix C

SHPO Letters

July 3, 2013
November 22, 2013
January 30, 2014

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Minnesota Historical Society

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STATE HISTORIC PRESERVATION OFFICE

July 3, 2013

Steve Challeen, Director of Facilities Engineering
Minneapolis VA Health Care System
One Veterans Drive
Minneapolis, MN 55417

RE: Rehabilitate 5 buildings at Fort Snelling Upper Post for use as Veterans Housing
This submittal: Mothballing Plan for Building 215 and Level II MHPR Documentation for Building 228
Minneapolis, Hennepin County
SHPO Number: 2012-0740

Dear Mr. Challeen:

We have received the Mothballing Plan for Building 215 and the Level II MHPR documentation for Building 228. Our comments are based on the responsibilities given the State Historic Preservation Office (SHPO) under Sec. 106 of the National Historic Preservation Act and implementing regulations, and on the Development Guidelines developed for Fort Snelling by Hennepin County and cooperating stakeholders.

Thanks for sending the photo documentation on Building 228, which we have previously agreed is no longer a contributing element within the Fort Snelling Historic District. The photos and archival materials were not required, but we very much appreciate the information, find it to be of appropriate MHPR format and quality, and we will add it to the property files. We look forward to seeing the archaeological survey, and then anticipate the demolition to occur later in the year.

Regarding the mothballing plans, our historical architect Natascha Wiener has a couple of comments, as follow:

1. The paint should not be removed with a wire brush. I recommend that a coat of linseed oil be applied and allowed to dry prior to the application of the oil/alkyd based primer.
2. I can accept the metal roof going over the asbestos shingles but would like to see the design for the proposed system prior to installation.

If you have questions on this review, I can be reached at (651) 259-3456 for any follow-up.

Sincerely,

Mary Ann Heidemann, Manager
Government Programs & Compliance

cc: Natascha Wiener, SHPO
Vaughn Baltzly, VA
Kathleen Schamel, VA
Andrew Michaelson, CommonBond
Peter Rauma, Anderson Engineering of Minnesota
Jeremy Bork, Sand Companies
Jennifer Bring, 106 Group

Minnesota Historical Society

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STATE HISTORIC PRESERVATION OFFICE

November 22, 2013

Steve Challeen
Facilities Engineering Director
Minneapolis VA Health Care System
One Veterans Drive
Minneapolis MN 55417

RE: CommonBond VA Housing Project: Rehabilitate Five (5) Buildings at Fort Snelling Upper Post for Use as Veterans Housing
Minneapolis, Hennepin County
SHPO Number: 2012-0740

Dear Mr. Challeen:

Thank you for the opportunity to comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and implementing federal regulations at 36 CFR 800.

We have completed our review of the archaeological survey report entitled *Phase I Archaeological Resources Investigation for the Fort Snelling West District Development Project, Minneapolis, Hennepin County, Minnesota* (106 Group, October 2013). We concur with your determination that no further archaeological work is needed prior to proceeding with the work as planned for this project.

As you know, the Part II federal tax credit application for this rehabilitation project is currently under review by our office. As long as the Part II tax credit application is approved by the National Park Service and the work is conducted per the approved Part II application, we can, at this time, conclude that this rehabilitation project will have **no adverse effect** on the Fort Snelling Historic District which is listed in the National Register of Historic Places.

Please note: If, for any reason, the developer for this project decides not to pursue the federal historic preservation tax credits, further consultation with our office will be needed under Section 106 of the National Historic Preservation Act.

Please contact our Compliance Section at (651) 259-3455 if you have any questions regarding our review of this project.

Sincerely,

Sarah J. Beimers

Sarah J. Beimers, Manager
Government Programs and Compliance

Cc: Natascha Wiener, SHPO
Vaughn Baltzly, VA
Kathleen Schamel, VA
Andrew Michaelson, CommonBond
Peter Rauma, Anderson Engineering of Minnesota
Jeremy Bork, Sand Companies
Jennifer Bring, 106 Group

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, DC 20240

January 30, 2014

Ellen Higgins
238 W. Kellogg Boulevard
Saint Paul, MN 55102

PROPERTY: **Ft. Snelling, Buildings 210, 211, 214, 227 & 229, Bloomington Road, Ft. Snelling, MN**
PROJECT NUMBER: **29033**
APPLICATION: **Part 2**
DECISION: **Hold**

Dear Ms. Higgins:

The National Park Service (NPS) has received your *Part 2, Description of Rehabilitation,* for this property and has determined that a considerable amount of the proposed work does not meet the Secretary of the Interior's Standards for Rehabilitation. As a result, the Part 2 has been placed on hold and cannot be approved without substantial revision to address the following issues:

1). Interior volume in buildings 210-214: Some area of public space in which the volume of the historic building is visible must be incorporated into the plans. Suggestions include, but are not limited to, lobbies or corridors that do not have dropped ceilings.

2). Retained historic character: Interior spaces in 210-214 must retain a significant amount of historic character. Building 214, for example, should retain visible or expressed columns in the corridors. It is unclear from the application where other features will be preserved and visible. Public corridors without expressed columns and dropped ceiling do not convey any of the historic character of the building; plans must be revised.

3). Roof: changes to the roof line and eaves as a result of added insulation cannot be approved.

4). Windows: Historic windows must be retained and repaired where possible; replacement windows must match original. The enclosed photographs of mock-up windows do not match the existing windows, and it is unclear where these are proposed to be installed. Proposed jamb liners alter the appearance of the historic window and should be eliminated.

5). Porches: The deteriorated rear porches on 227 & 229 must be re-built to match the existing. The porches on the front and rear must be consistent in regard to the era of construction. Replacing the enclosed rear porches with open porches while the front has enclosed porches will give the building an appearance it never had historically.

6). New systems: It is unclear where systems will be exposed and hidden. Please provide additional information.

7). The proposed connector additions: The connector between 211 and 214 as proposed does not meet the Standards because it is incompatible in design to the attached historic buildings. The connector must be redesigned to eliminate the stepped parapet on the first level. The second story should be pushed back to the maximum extent possible to clear the eave of the historic building. Additional details regarding the finish of both connectors must be submitted; this should include renderings in color, and the type of glass in the transom. The cement board must have a smooth finish. Also, there is a discrepancy in the elevation and detail drawings of the L-shaped connector. The detail drawing shows a trim piece that is not shown elsewhere. The addition should include this piece as drawn in the detail drawing.

Review of the reminder of the application is on hold until these issue are resolved satisfactorily.

Plans must be revised to meet requirements above in coordination with the MN State Historic Preservation Office (SHPO). **Failure to revise the plans to meet these requirements may result in project denial.** New information must be submitted to the National Park Service, through the MN SHPO**, prior to construction**.

Sincerely,

Karen Brandt

Karen Brandt
Technical Preservation Services, NPS

Cc: Charlene Roise, Hess, Roise and Company, 100 North First Street, Minneapolis, MN 55401

Appendix D

Public Participation Process for The Fort Snelling West District Development Project The 106 Group Ltd.
September 2012

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PUBLIC PARTICIPATION PROCESS FOR THE FORT SNELLING WEST DISTRICT DEVELOPMENT PROJECT, MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

Submitted to:
Anderson Engineering of MN, Inc.

Submitted by:
The 106 Group Ltd.

September 2012

PUBLIC PARTICIPATION PROCESS
FOR THE
FORT SNELLING WEST DISTRICT DEVELOPMENT PROJECT
MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

SHPO File No. 2012-0740
VA Project No. 618-12-305
106 Group Project No. 1740

Prepared by The 106 Group Ltd.

September 2012

1.0 INTRODUCTION

United States Department of Veterans Affairs (hereinafter "VA") is proposing an undertaking on VA owned land located within the boundaries of the Upper Post of Fort Snelling located near Minneapolis, in Hennepin County, Minnesota (Figure 1). The undertaking includes:

- An Enhanced Use Lease (EUL) for the development of permanent housing for homeless Veterans as part of the VA's Building Utilization Review and Repurposing (BURR) initiative that includes:
  - Leasing of land consisting of a four (4) acre parcel and a two (2) acre parcel to CommonBond Veterans Administration Minneapolis Limited Partnership (CBVAMLP), a subsidiary of CommonBond Communities Inc. (CommonBond) (private entity);
  - The lease of five (5) buildings on the two said parcels of land (Buildings 210, 211, 214, 227, and 229), to CBVAMLP for rehabilitation as housing for homeless veterans using federal low income housing credits and federal historic preservation tax credits;
- Mothballing of one building (Building 215) on the 4 acre parcel to be retained by the VA; and
- The demolition of one building (Building 228) on the 2 acre parcel by the VA.

All land to be leased and the seven (7) buildings that are part of this project are located within the boundaries of Fort Snelling, which was listed on the National Register of Historic Places (NRHP) in 1966 (National Register of Historic Places 2012) (see Figure 1; Table 1). The land and buildings subject to the proposed undertaking are all located within an area identified as the Quartermaster Zone of the West District of the Fort Snelling Upper Post (Miller Dunwiddie Architecture and Hess, Roise and Company 2010:19). The project area is

also located within the boundaries of the Old Fort Snelling Historic District, which was designated as a State Historic District in 1971 (Minnesota Statute 138.7, subd. 13). The properties are also within the Fort Snelling Historic District and adjacent to the Fort Snelling National Historic Landmark (NHL), which was designated a NHL in 1960 (National Historic Landmarks Program 2012).

TABLE 1. RESOURCES PART OF THE PROPOSED UNDERTAKING

Resource	SHPO No.	Date	Use/Name	NRHP Status
Fort Snelling Historic District	HE-FSR-0001		Fort	Contributing
Building 210/F-43	HE-FSR-0044	1907	Ordnance and Civil Works Service Office & Warehouse, Shops	Contributing
Building 211/F-49	HE-FSR-0045	1909	Quartermaster Stable; Tank Park	Contributing
Building 214/F-56	HE-FSR-0047	1910	Quartermaster Stable; Veterinary Hospital; Motor Repair Garage	Contributing
Building 215/F-57	HE-FSR-0048	1932	Quartermaster Gas Station	Contributing
Building 227/F-30, F-31	HE-FSR-0057	1904	NCSO Quarters	Contributing
Building 228/T-228/F-45	HE-FSR-0058	1917	Garage	Contributing
Building 229/F-38–F-41	HE-FSR-0059	1907	NCSO Quarters	Contributing
Landscape	No Number			Contributing

The VA currently maintains a transitional housing facility on the Minneapolis VA campus. However, in 2011, the VA determined a need for additional permanent affordable housing for homeless Veterans and Veterans at-risk of homelessness. The VA subsequently identified a 4-acre parcel with 3 underutilized buildings and a 2-acre parcel with 2 underutilized buildings on VA owned land located within the boundaries of the Upper Post of Fort Snelling and proposed an EUL for the development of permanent housing for homeless Veterans. The VA held a public hearing on this proposed undertaking on July 28, 2011, at the Minneapolis VA campus (see below). After considering public input from the hearing, the VA prepared and issued a Request for Proposals (RFP) for the project. Upon evaluating the proposals, the VA subsequently selected CommonBond as the developer for the proposed project on November 7, 2011.

On December 6, 2011, VA sent an email to Mary Ann Heidemann, Government Programs and Compliance Coordinator for the Minnesota State Historic Preservation Office (SHPO) to notify the SHPO of the project and to initiate formal consultation pursuant to 36 CFR 800.5 (see below). On December 16, 2011, VA, SHPO, and the CommonBond team had a conference call to initiate consultation; as a follow-up to this discussion, CommonBond hand-delivered its second-draft Development Plan to SHPO on December 22. In response, on January 20, 2012, the SHPO provided comments to CommonBond (see below). Among the comments provided, the SHPO specifically requested that a public outreach plan be submitted to the SHPO outlining the process for fulfilling the public participation process (as required by 36 CFR 800.2), along with a list of parties to be invited to participate in the consultation (Mary Ann Heidemann, personal communication 2012).

Source: ESRI; National Park Service; The 106 Group Ltd.

Map Produced by The 106 Group Ltd 8/27/2012

Fort Snelling West District Project
Public Participation Process

Project Location

- Project Area / Archaeology APE
- Architectural History APE
- NRHP Listed Architectural History Property
- Fort Snelling Historic District HE-FSR-0001 (approx. boundary)
- Fort Snelling NHL (approx. boundary)
- Old Fort Snelling State Historic District (approx. boundary)

0 70 140 210 280 Meters

0 250 500 750 1,000 Feet

1:6,089

N

Figure 1

TABLE 2. PREVIOUS PUBLIC PARTICIPATION EFFORTS TO DATE

Date	From	To	Correspondence Type	Communication Content
7/28/2011	VA	Public	Public Hearing	Present background and overview of the project to the public
11/29/2011	CommonBond	Boy Scouts, Scout Director/CEO John Andrews	Meeting	Discuss Fort Snelling project generally, BSA experience developing real estate in Upper Post, and questions/concerns about proposed development
12/2/2011	CommonBond	Minnesota Assistance Council for Veterans (MACV)	Open House	Met with MACV staff and residents, VA staff, Hennepin and Ramsey county staff, and interested parties to discuss Fort Snelling and St. Cloud projects in general
12/5/2011	CommonBond	United Veterans Legislative Council MN (UVLC)	Meeting	Presented project plan to UVLC members, veterans group representatives, VA staff, and legislative staffers
12/6/2011	VA	SHPO	Email	To initiate the formal consultation process
12/12/2011	CommonBond	Fort Snelling Consortium group (includes representatives from Upper Post landowners and stakeholders, including: VA, Minneapolis Park & Recreation Board, MN Historical Society, Hennepin County, Northern Star Council [Boy Scouts of America], and MN Dept. of Natural Resources)	Meeting	General discussion of plans for buildings and site, timing, necessary resources, etc.
12/16/2011	CommonBond	SHPO	Email	Project milestones schedules for the Fort Snelling and St. Cloud projects
12/16/2011	VA	SHPO, CommonBond	Email	Notice that CommonBond will submit 45-Day Draft Development Plan to SHPO on 12/22/2011
12/16/2011	VA, CommonBond, and Sand	SHPO	Conference Call	Overview of project and determining of next steps in the process

TABLE 3. PREVIOUS PUBLIC PARTICIPATION EFFORTS TO DATE (CONTINUED)

Date	From	To	Correspondence Type	Communication Content
12/19/2011	CommonBond	Patrick Connoy, Manager, Community and Workforce Development, Hennepin County	Meeting	Discussed Fort Snelling project generally, site infrastructure needs/availability, existing documentation, approvals, etc.
12/21/2011	CommonBond	Larry Shellito, MN VA Commissioner	Meeting	Facilitated by MN Housing Finance Agency – Discussed CommonBond mission and practices generally, VA projects specifically, as well as ways to work together moving forward
12/22/2011	CommonBond	SHPO	45-Day Draft Development Plan	45-Day Draft Development Plan outlining process for moving project forward in said time period
1/10/2012	CommonBond	Terri Smith, Metro HRA	Conference Call	Project plans and housing voucher needs (HUD-VASH)
1/20/2012	SHPO	CommonBond	Letter	Response to initiation of consultation – will need a public participation plan and reviews of the project plans at schematic design (30%) and at the 60% and 90% design development stages
2/22/2012	CommonBond	Fort Snelling Consortium Group	Meeting	General discussion of plans for buildings and site, timing, necessary resources, etc.
2/28/2012	CommonBond	Jon Gutzman, Executive Director, St. Paul Public Housing Authority	Meeting	Discuss project, funding sources, HUD-VASH vouchers, coordination of efforts, and homelessness resources
3/2/2012	CommonBond	MN Representative Erin Murphy	Meeting	Discuss project generally, funding bill then pending at MN state legislature
3/7/2012	CommonBond	U.S. Senator Al Franken's staff	Site Visit	Site Visit
3/9/2012	CommonBond	Terri Smith, Metro HRA	Conference Call	Project plans and housing voucher needs (HUD-VASH)
3/23/2012	CommonBond	VA	Development Plan	Development plan detailing the project and project schedule
3/26/2012	CommonBond	Commissioner Shellito and MACV representatives	CommonBond Board Meeting	Discussion of Fort Snelling and St. Cloud veterans projects, integration with MN VA efforts, MACV mission, and general efforts to ensure project success

TABLE 3. PREVIOUS PUBLIC PARTICIPATION EFFORTS TO DATE (CONTINUED)

Date	From	To	Correspondence Type	Communication Content
3/29/2012	CommonBond	Housing Advocacy at State Capitol	Meeting	Briefed MN representatives and senators on projects (including St. Cloud site), discussed veterans population to be served, need to combat homelessness, and financing through bonding bill
4/3/2012	CommonBond	Housing Advocacy at State Capitol	Meeting	Briefed MN representatives and senators on projects (including St. Cloud site), discussed veterans population to be served, need to combat homelessness, and financing through bonding bill
5/2/2012	Anderson Engineering	SHPO	Letter	Proposal to document and demolish two buildings (Buildings 215 and 228)
5/21/2012	VA	SHPO	Letter	Response to SHPO's 1/20/2012 letter – identified parties involved in the two parts of the project and initiated discussion of a meeting
5/31/2012	SHPO	VA	Letter	Response to additional information from VA; requested public outreach plan, APE designation, finding of effect for demolition, and opportunity for public comment, also that the proposal to demolish Buildings 215 and 228 cannot be separated from the larger redevelopment project
5/30/2012 - 6/1/2012	CommonBond	National Coalition for Homeless Veterans Annual Conference, Washington, D.C.	Conference	Meetings with VA, HUD, and related governmental staff, private foundations, banking and investor representatives, and industry professionals regarding Fort Snelling and St. Cloud projects generally, capital resources, service and operational funding, philanthropic efforts, and securing HUD-VASH vouchers
6/14/2012	VA, CommonBond/Sand, SHPO	VA, CommonBond/Sand, SHPO	Meeting	In response to SHPO's 5/13/12 letter to VA, all parties convened to clarify communication protocols, project-scoping (in light of addition of Bldgs 215 and 228, subsequent to initial 12/16/11 kick-off with SHPO), and next-steps.
6/29/2012	CommonBond/Sand	SHPO	Meeting	First meeting with SHPO to review proposed development plans for historic preservation tax credit 30% plan submittal

2.0 PREVIOUS CONSULTATION EFFORTS

Since initiating consultation with the SHPO in December 2011, the VA and CommonBond have continued to consult with the SHPO and other stakeholders. Consultation completed so far pursuant to 36 CFR 800.3 is summarized in Table 2.

3.0 PUBLIC OUTREACH PLAN

In its correspondence of January 20, 2012, and May 31, 2012, the SHPO requested the preparation of a public outreach plan for the project pursuant to 36CFR800.3(d). In addition to the previously completed measures to consult the public as identified in Table 2, moving forward, the following measures will be implemented for this project to engage the stakeholders and the general public and consider their input.

The first step was to identify a list of interested individuals and groups. Following 36CFR8003, the following categories of interested parties were identified:

- Parties required to be consulted;
- Groups and individuals known to have an interest in redevelopment activities at Fort Snelling; and
- Other potentially interested parties who should be notified and given the opportunity to participate in the consultation process.

A more detailed description of this process is included in Section 4.0 and a list of potential consulting parties is found in Appendix A.

Moving forward, the public participation process will include the following steps:

- The VA will submit schematic design (30%) plans for the proposed project, including the rehabilitation of Buildings 210, 211, 214, 227 and 229, and the mothballing plan for Building 215 to the SHPO for review and comment pursuant to Section 106 and to determine their compliance with *Secretary of the Interior's Standards for the Treatment of Historic Properties*.
- Upon receiving comments back from the SHPO on the 30% plans, 60% design development plans will be prepared for the rehabilitation of Buildings 210, 211, 214, 227 and 229, and the mothballing of Building 215. CommonBond will then submit the 60% design development plans for the rehabilitation of Buildings 210, 211, 214, 227, and 229 submitted to the SHPO for review to determine their compliance with the *Secretary of the Interior's Standards for Rehabilitation* pursuant to the development of the Part II application for historic preservation tax credits. If the SHPO identifies any potential concerns, the 60% plans will be modified accordingly.
- After the submission of the 30% plans to the SHPO, the VA will send a letter to the parties identified in Appendix A to inform them of the proposed undertaking and inviting them to participate in the consultation.
    - A copy of the letter will be provided to the SHPO.
    - Copies of any correspondence received by the VA in response to the letter will be forwarded to the SHPO.

- The VA will host one public meeting to provide interested individuals and groups an opportunity to comment on the proposed project. During the meeting the project will be presented and members of the public will be invited to provide comments on the project, including alternatives.
    - At least ten (10) calendar days prior to the meeting the VA will send an announcement to parties identified in Appendix A to notify them of the meeting.
        - A copy of the announcement will be provided to the SHPO.
    - At least ten (10) calendar days prior to the meeting the VA will publish a notice of the time, place, and purpose of the public meeting in a newspaper of general circulation.
        - A copy of the notice will be provided to the SHPO.
    - The SHPO will be invited to attend the meeting and help lead the discussion with the public.
    - At the conclusion of the meeting, the VA will prepare a meeting summary.
        - A copy of the meeting summary will be provided to the SHPO.
- After considering public input received during the public meeting, the VA will submit the 60% design development plans for the rehabilitation of Buildings 210, 211, 214, 227 and 229, and the mothballing plan for Building 215 to the SHPO for review and comment pursuant to Section 106 and to determine their compliance with *Secretary of the Interior's Standards for the Treatment of Historic Properties*. The submittal will also note any changes made to address public comment received.
    - In the event the public recommends other alternatives, the VA will consult with the SHPO to consider alternatives and the potential need for additional public consultation.
- Upon receiving comments back from the SHPO on the 60% plans, 90% design development plans will be prepared for the rehabilitation of Buildings 210, 211, 214, 227 and 229, and the mothballing of Building 215. CommonBond will then submit the 90% design development plans for the rehabilitation of Buildings 210, 211, 214, 227, and 229 submitted to the SHPO for review to determine their compliance with the *Secretary of the Interior's Standards for Rehabilitation* pursuant to the development of the Part II application for historic preservation tax credits. If the SHPO identifies any potential concerns, the 90% plans will be modified accordingly.
- Concurrently, the VA will then submit the 90% design development plans for the rehabilitation of Buildings 210, 211, 214, 227 and 229, and the mothballing plan for Building 215 to the SHPO for review and comment pursuant to Section 106 and to determine their compliance with *Secretary of the Interior's Standards for the Treatment of Historic Properties*; and CommonBond will submit its Part II application for historic preservation tax credits for Buildings 210, 211, 214, 227 and 229 to the SHPO for approval and submission to the National Park Service for approval.

CommonBond is proposing to utilize state and federal historic preservation tax credits to rehabilitate Buildings 210, 211, 214, 227 and 229; therefore, this work must comply with the *Secretary of the Interior's Standards for Rehabilitation*, so it is assumed that this portion of the project will not result in an adverse effect to any historic properties. In addition, since the

VA is proposing to mothball Building 215 in accordance with *Preservation Brief 31: Mothballing Historic Buildings*, it is assumed that this portion of the project will also not result in an adverse effect to any historic properties. Lastly, since the VA is proposing to prepare a Level II MHPR for the loss of Building 228, it is assumed that this action will mitigate any potential adverse effect related to the demolition of Building 228. Therefore, the VA does not anticipate the need to prepare a Memorandum of Agreement (MOA) or a Programmatic Agreement (PA) for the proposed undertaking. However, if consulting parties express significant concerns about the proposed project, or if any unforeseen adverse effects should arise, the VA will consult with the SHPO to determine the potential need for an MOA or PA.

While Building 228 has been identified as a contributing property to Fort Snelling, the *Fort Snelling West District – Historical Context Study and Development Guidelines*, which has been approved by the SHPO, notes that Building 228 is collapsing. Given poor condition of this building, the development guidelines state that "rehabilitation is problematic." They further recommend that "if the building is not able to be saved, it should be appropriately documented prior to demolition." The VA is proposing to document and demolish Building 228 per the design guidelines. The anticipated documentation would consist of the preparation of a Level II Minnesota Historic Property Record (MHPR). If during the consultation interested parties express concern with this action, or present a viable alternative, the VA will consult further with the SHPO to determine a course of action and the need for potential additional consultation with interested parties.

4.0 IDENTIFICATION OF CONSULTING PARTIES

In its letter of January 20, 2012 to CommonBond, the SHPO indicated that "plans for Fort Snelling redevelopment have been the subject of much interest by a number of groups and individuals." The SHPO also provided a list of organizations and property owners with a known interest in Fort Snelling and requested that an additional effort was required to identify other persons or groups who may want to participate in the consultation (Mary Ann Heidemann, personal communication 2012).

Following 36 CFR 800.2, efforts were made to identify other persons and groups who might be interested in participating in the consultation, to build upon the list provided by the SHPO. This effort include the identification of Native American tribes A list of potentially interested persons and groups who should be invited to participate in the consultation can be found in Appendix A.

5.0 REFERENCES CITED

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APPENDIX A: LIST OF POTENTIAL CONSULTING PARTIES

POTENTIAL SIGNATORIES

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(651) 296-2562

Other State/Local Agencies or Organizations

John Crippen, Director of Historic Sites and Museums
Minnesota Historical Society
345 Kellogg Blvd. W.
St. Paul, MN 55102

Tom Pfannenstiel, Site Manager
Historic Fort Snelling
200 Tower Ave., Fort Snelling History Center
St. Paul, MN 55111

Tom Landwehr, Commissioner
Minnesota Dept. of Natural Resources
500 Layfayette Road, Box 37
St. Paul, MN 55155

Larry Peterson, Park Manager and Fort Snelling Upper Post Project Manager
Fort Snelling State Park
101 Snelling Lake Road
St. Paul, MN 55111
(612) 725-2439
larry.peterson@state.mn.us

Jayne Miller, Superintendent
Minneapolis Park and Recreation Board
2117 West River Road
Minneapolis, MN 55411

Peter McLaughlin, Commissioner
Hennepin County
A-2400 Government Center
300 S. 6th St.
Minneapolis, MN 55487

Patrick Connoy
Hennepin County Housing, Community Works & Transit
417 N. 5th St., Suite 320
Minneapolis, MN 55410

Cheryl Jensen, Interim Executive Director
Preservation Alliance of Minnesota
416 Landmark Center
75 W. 5th St.
St. Paul, MN 55102

Stephanie Meeks, President
National Trust for Historic Preservation
1785 Massachusetts Ave. NW
Washington, DC 20036-2117
(202) 588-6000

Dorothy Waltz
Fort Snelling State Park Association
1078 Colne St.
St. Paul, MN 55103

John Andrews
Northern Star Council of the Boy Scouts of America
Hulings Scout Service Center
393 Marshall Ave.
St. Paul, MN 55102

Patrick Boylan
Land Use Planning
Metropolitan Council
390 Robert St. N.
St. Paul, MN 55101
(651) 602-1438
patrick.boylan@metc.state.mn.us

Mark Fuhrmann, Deputy General Manager for Rail
Metro Transit
Metropolitan Council
(651) 602-1720

Linda Milashius
Housing, Metropolitan Council
390 Robert St. N.
St. Paul, MN 55101

Pat Mosites, Airside Project Manager
Metropolitan Airports Commission
6040 28th Ave. S.
Minneapolis, MN 55450
(612) 713-7499
pat.mosites@mspmac.org

Jim Wentzlaf
Civil Engineering Unit
MN Air National Guard
(612) 713-2228

Terri Smith
HRA Manager, Metropolitan Council
390 Robert Street North
St. Paul, MN 55101
(651) 602-1187

Susu Jeffrey
Friends of Coldwater
200 Oliver Ave. S.
Minneapolis MN 55405
info@friendsofcoldwater.org

Tom Holtzleiter
Preserve Camp Coldwater Coalition
budtbum@mninter.net

Whitney Clark, Executive Director
Friends of the Mississippi River
360 N. Robert St., Suite 400
St. Paul, MN 55101
(651) 222-2193, ext. 13

Steve Osman, President
Friends of Fort Snelling
http://fortsnelling.org/index.php/about-us/contact-us

Bob Minish
Friends of the Sibley Historic Site
1357 Sibley Memorial Highway
P.O. Box 50772
Mendota, MN 55150
Info@sibley-friends.org

Kathleen Vitalis
President/CEO
Minnesota Assistance Council for Veterans
360 Robert Street N., Suite 306
St. Paul, MN 55101
(651) 222-0613

John Driscoll, President and CEO
National Coalition for Homeless Veterans
333 ½ Pennsylvania Ave. SE
Washington, DC 20003-1148
info@nchv.org
(202) 546-1969

Ralph Donais, Chairman
United Veterans Legislative Council MN
Veterans Service Building
20 W. 12th St., Room 200
St. Paul, MN 55155

Appendix E

Fort Snelling VA Housing Tax Credit Part 2
and
Minnesota Part A Application
Hess Royce
August 2013

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Historical Consultants

The Foster House
100 North First Street
Minneapolis MN 55401

612 338-1987 phone
612 338-2668 fax
www.hessroise.com

Hess Roise

August 7, 2013

Ellen Higgins
CBVA Minneapolis Limited Partnership
328 West Kellogg Boulevard
Saint Paul, Minnesota 55102

Re: Fort Snelling VA Housing Tax Credit Part 2 and Minnesota Part A application

Dear Ms. Higgins:

Attached please find a copy of the application form that was submitted to the Minnesota State Historic Preservation Office on CommonBond's behalf. It includes the federal Part 2 form with photo sheets and photo map and the state Part A form. We have also included the specifications, which were not included with the submission.

Thanks again for all of your assistance with the application process.

Sincerely,

Stephanie K. Atwood

Historical Consultants

The Foster House
100 North First Street
Minneapolis MN 55401

612 338-1987 phone
612 338-2668 fax
www.hessroise.com

Hess Roise

August 7, 2013

Natascha Wiener
Minnesota State Historic Preservation Office
345 Kellogg Boulevard West
Saint Paul, Minnesota 55102-1906

Re: Part 2 Tax Credit Application
Buildings 210, 211, 214, 227, and 229
Fort Snelling
Minneapolis, Hennepin County

Dear Natascha:

Please find enclosed two original Part 2 historic tax credit application forms, including plans and photo sheets. We also include Part A of the application for state historic tax credits. We include credit card information for the federal application fee and a check for $2,000 for the state application fee.

We submit this material on behalf of the owner, CommonBond Communities.

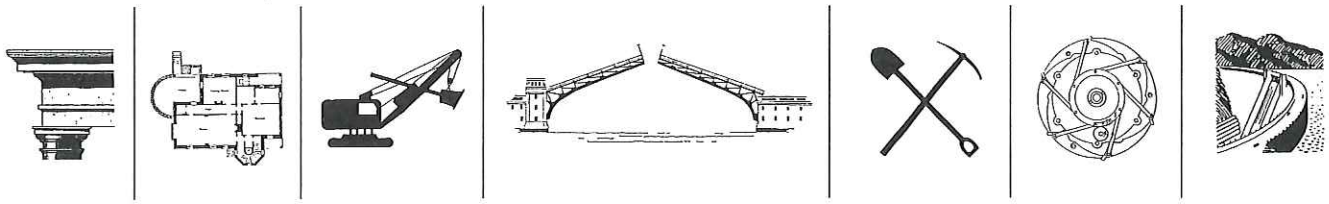
Please let me know if you have any questions about this submittal.

Sincerely,

Stephanie K. Atwood

Stephanie K. Atwood

cc: Ellen Higgins, CommonBond
328 Kellogg Boulevard West, Saint Paul, MN 55102



Minnesota Historical Society

State Historic Preservation Office

Historic Structure Rehabilitation State Tax Credit Application
Part A

For SHPO Use	
NPS Project Number: 29033	Received Part A processing fee _____
	Date of NPS Part 1 certification: _____

APPLICATION INFORMATION (CHECK ONE)

☐ This application is for a grant in lieu of credit

☐ This application is for a combination of a tax credit and a grant in lieu of credit

☒ This application is for a tax credit

PROJECT DEVELOPER INFORMATION:

Name: Ellen Higgins

E-mail: Ellen.Higgins@commonbond.org

Telephone number:

Office: (651) 310-9265

Cell: (612) 670-2548

PROPERTY NAME AND ADDRESS

Historic name of property: Quartermaster Shops, Quartermaster Stables, NCO Quarters (Two- and Four-Family)

Current name of property (if different): Buildings 210, 211, 214, 227, and 229

Street: Bloomington Road

City: Fort Snelling

County: Hennepin

Zip: 55111

PROPERTY INFORMATION

☐ Listed individually in the National Register of Historic Places

☒ Contributing resource in a Registered or Certified Historic District

Name of District: Fort Snelling Historic District

Original use of building: Shops, stables, officer's quarters

Date of construction: 1904, 1907, 1909, 1910

Current use(s) of building: Vacant/storage

Type of construction: Brick

If vacant, how long? Approx. 25 years

If partially vacant, what percentage? _____

Proposed use(s) after rehabilitation: Housing for homeless veterans

Assessed property value in tax year before rehabilitation: No assessed value (government property)

Is the building subject to review by a local heritage preservation commission? No

Is the building located in a re-development district? No

Minnesota Historical Society

State Historic Preservation Office

REHABILITATION PROJECT INFORMATION

Estimated construction start date: December 2013 Estimated completion date: December 2014

Estimated Qualified Rehabilitation Costs (costs eligible for tax credits): $15,199,509

ECONOMIC IMPACT INFORMATION

Estimated total project cost: $16.5M Estimated number of jobs created during rehabilitation: 200–250

Estimated total cost of materials: $5,400,000 Estimated total cost of labor: $6,600,000

Estimated amount of State Tax Credit: $3,039,902

AUTHORIZED SIGNATURE

I hereby attest that the information and estimates provided in this application are, to the best of my knowledge, true and correct.

Name: Ellen Higgins Title: Vice President for Business Development, CommonBond

Signature Date: 8/1/13

Submit completed Application Part A, along with the Federal Part 2 application and a check payable to the Minnesota Historical Society for the Part A processing fee to:

Minnesota Historical Society / State Historic Preservation Office
Historic Preservation Tax Credit Program
345 Kellogg Blvd. W.
St. Paul, MN 55102-1906

(Please see www.mnhs.org/historictaxcredit for new fee schedule, effective May 24, 2013.)

For questions about project eligibility, architectural review, or the application process:

Natascha Wiener
Senior Design Reviewer
651.259.3462
natascha.wiener@mnhs.org

Catherine Sandlund
Preservation Specialist
651.259.3463
catherine.sandlund@mnhs.org

Barbara Mitchell Howard
Deputy SHPO
651.259.3466
barbara.howard@mnhs.org

For questions about the administration of the tax credits by the MN Dept of Revenue:

Corps, SCorps, and Partnerships:
Mark Kvidera
651.556.6743
mark.kvidera@state.mn.us

Individuals:
Robin Feine
651.556.4893
robin.fiene@state.mn.us

Insurance:
Glen Olsen
651.556.4870
glen.j.olsen@state.mn.us

Applicants are encouraged to seek the advice of a qualified tax advisor with questions concerning specific tax consequences before proceeding with any tax credit rehabilitation project.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

OMB Approved
No. 1024-0009
Form 10-168
Rev. 2011

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

NPS Project Number
29033

Instructions: This page of the form must appear exactly as below and must bear the owner's original signature. Other sections may be expanded as needed or continued on blank pages. The National Park Service certification decision is based on the descriptions in this application form. In the event of any discrepancy between the application form and other, supplementary material submitted with it (such as architectural plans, drawings and specifications), the application form takes precedence. A copy of this form will be provided to the Internal Revenue Service.

1. **Property Name** Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family)

   Street Bloomington Road

   City Fort Snelling County Hennepin State MN Zip 55111

   Name of Historic District Fort Snelling Historic District

   ☐ Listed individually in the National Register of Historic Places; date of listing

   ☐ Located in a Registered Historic District; name of district

   ☒ Part 1 – Evaluation of Significance submitted? Date submitted 07/08/13 Date of certification

2. **Data on building and rehabilitation project**

   Date of construction 1904 (227); 1907 (210 and 229); 1909 (211); 1910 (214) Cost of rehabilitation (estimated) $16,500,000

   Type of construction Brick and stone stables, shops, and residences Floor area before / after rehabilitation 38,180 sq. ft. / 40,230 sq. ft.

   Start date (estimated) December 2013 Use(s) before / after rehabilitation Vacant/storage / Housing

   Completion date (estimated) December 2014 Number of housing units before / after rehabilitation 0 / 58

   This application covers phase number 1 of 1 phases Number of low-moderate income housing units before / after rehabilitation 0 / 58

3. **Project Contact (if different from Owner)**

   Name Charlene Roise, Hess, Roise and Company

   Street 100 North First Street City Minneapolis

   State MN Zip 55401 Telephone (612) 338-1987

4. **Owner**

I hereby attest that the information I have provided is, to the best of my knowledge, correct and that I own the property described above. I understand that falsification of factual representations in this application is subject to criminal sanctions of up to $10,000 in fines or imprisonment for up to five years pursuant to 18 USC 1001.

Name Ellen Higgins Signature Ellen Higgins Date 8/1/13

Organization CBVA Minneapolis Limited Partnership Social Security OR Taxpayer ID Number 46-0682981

Street 328 West Kellogg Boulevard City Saint Paul

State MN Zip 55102 Telephone (651) 291-1750

NPS Official Use Only

The National Park Service has reviewed the Historic Certification Application – Part 2 for the above-named property and has determined that:

☐ the rehabilitation described herein is consistent with the historic character of the property and, where applicable, with the district in which it is located and that the project meets the Secretary of the Interior's Standards for Rehabilitation. This letter is a preliminary determination only, since a formal certification of rehabilitation can be issued only to the owner of a "certified historic structure" after rehabilitation work is complete.

☐ the rehabilitation or proposed rehabilitation will meet the Secretary of the Interior's Standards for Rehabilitation if the attached conditions are met.

☐ the rehabilitation described herein is not consistent with the historic character of the property or the district in which it is located and that the project does not meet the Secretary of the Interior's Standards for Rehabilitation.

Date

National Park Service Authorized Signature

☑ See Attachments

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

Property address Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 1 **Feature** Rehabilitation of Buildings 210, 211, 214, 227, and 229 **Date of Feature** 1904–1910, additions c. 1923, 1931–1940, later alterations

Describe existing feature and its condition

These buildings were built for the Fort Snelling quartermaster and were owned by the U.S. Army until the fort was taken over by the Veterans Administration in 1946. Building 227 (2 units) and 229 (4 units) were quarters dating from 1904 and 1907, respectively. Building 210 was also erected in 1907 and held workshops. Buildings 211 (1909) and 214 (1910) were stables. All are of frame construction with exterior walls of red brick and roofs of slate shingles. The buildings, which are west of Bloomington Road, do not have official addresses.

Photo numbers All Drawing numbers All

Describe work and impact on feature

These buildings are being rehabilitated into housing for veterans as a joint project between the Veterans Administration, which current owns the properties, and CommonBond, a nonprofit provider of affordable housing, which will have a long-term lease. Most buildings have been out of use since the 1970s. The buildings are currently vacant or used for storage and have fallen into disrepair.

Buildings 201, 211, and 214 will be combined to function as a single facility with a mix of studio and one-bedroom apartments. A new secure, monitored, main entrance will be in a new link between Buildings 211 and 214. A community room will be in a link connecting Buildings 211 and 210. Office and meeting rooms will be built in the loft spaces of Buildings 211 and 214.

Buildings 227 and 229, originally NCO Quarters, will be reused for their historic residential function while updated and made accessible.

Number 2 **Feature** Buildings 210, 211 and 214, Masonry Walls and Chimneys **Date of Feature** 1907 (Building 210), (1909) Building 211, 1931 (overhead door openings), 1910 (Building 214), two additions on west facade of 210 (possibly 1923), later alterations

Describe existing feature and its condition

All buildings have walls of red brick set in a common bond. Building 210 has a low limestone foundation that has received a slick coat of concrete in some areas. Buildings 211 and 214 have stone foundations with some areas replaced with concrete.

On Building 210, wall and door openings have been altered in several locations. A non-original wood entry enclosure is attached to the north wall.

Much of the brick on the east (front) and west facades of Building 211 was removed to created large doorways fitted with non-historic overhead garage doors. Several bays on the south end remain solid walls holding single windows with segmental-arch lintels and masonry sills. A small poured-concrete box, possibly a coal bin, is at the north wall with a brick chimney adjacent.

On Building 214, two hipped-roof, one-story additions are attached near the north end of the building's west facade. South of the additions is a poured concrete box.

The walls of all three buildings show many damaged areas. Seam lines, changes in brickwork courses, and different colors of brick are evidence of repairs and alterations to window and door openings. There are also areas of damage caused by efflorescence, cracking/spalling, and biological growth. Masonry damage is detailed on Sheets A-7.3, A-7.7, and A-7.10.

Photo numbers 2–9, 20, 21, 24, 25–27, 47, 48, 51–57 Drawing numbers A-7.3, A-7.6, A-7.7, A-7.9, A-7.10, A-8.0, A-8.4

Describe work and impact on feature

The concrete boxes on the north facade of Building 211 and the west facade of Building 214 and the frame entrance enclosure on the north wall of Building 210 will be removed and adjacent walls will be repaired as necessary. A square, non-original opening on the east wall of Building 210 will be infilled with brick that matches the historic. Modern lights, conduits, and other nonhistoric attachments will be removed.

Missing, cracked, mismatched, and spalling bricks and damaged stone at the foundation will be replaced with materials matching the original. If staining, efflorescence, or biological growth has physically deteriorated the face of a masonry unit, it will be replaced. Hangers, metals anchors, and nails will be removed. Masonry will be cleaned using the gentlest means possible.

Mortar joints will be repointed as necessary. Areas that have been previously repointed will be evaluated to determine if the mortar has the correct compressive strength for the brick; if not, it will be replaced. Power tools will be used only as approved by the architect and only when they will not damage masonry units. Mortar joints will match the color, style, strength, dimensions, and profile of the historic mortar joints.

Masonry work will be performed in accordance with Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings and Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings. Test panels for the proposed materials and techniques will be prepared for SHPO review and approval.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

Property address Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 3 **Feature** Exterior-Buildings 210, 211, and 214, Window Openings **Date of Feature** 1907 (Buildings 210), 1909 (Building 211), 1910 (Building 214), later alterations

Describe existing feature and its condition

On the south and north facades, Building 210 is five bays wide. Each bay historically had three window openings with double segmental-arch lintels and masonry sills. The openings held six-over-six double-hung windows with wood frames. On the north facade, the five bays have been significantly altered. Some openings have been partially or completely infilled; others have been converted into entrances (Item 5). The east facade has a small window opening at its north side, while the west facade has an infilled area at the center of the facade with two windows. Both gable ends have a small segmental-arched window opening, which is filled with a wood panel.

While garage doors have replaced the original fenestration pattern on much of the east and west facades of Building 211, brick walls remain on the south ends of these facades, which hold several single windows with double-segmental-arch lintels and masonry sills. The same type of window openings appear on the south facade. Windows on the one-story addition on the north end are small three-light, wood-frame, awning-style units with stone sills and concrete lintels. Iron bars extend across the openings on the exterior.

The east (front) and west facades of Building 214 hold numerous window openings, which vary in size and shape due to alterations over time. Original openings have segmental-arch lintels, but many of the lintels have been modified and are now flat. The size of many openings has been enlarged by lowering the window sills. On the south facade, most historic openings on the first floor have been filled with brick. A pair of six-over-six double-hung windows is at the center of the facade and a small glass-block window is to the east. The one-story additions have twelve-light metal windows with pivoting central sashes. The window openings have straight lintels and masonry sills. Metal cages are attached to the exterior of some of the windows on the south addition.

There are multi-light, wood awning windows in the monitors.

Current window conditions are detailed on Sheets A-7.3, A-7.7, and A-7.10.

Photo numbers 2–7, 9, 12, 13, 20, 24, 25, 27, 47, 50, 53, 55–57 Drawing numbers EX-1.0, EX-1.2, EX-1.3, D-1.1, D-1.3, A-2.1, A-2.3, A-7.0, A-7.2, A-7.3, A-7.4, A-7.7, A-7.8, A-7.9, A-7.10, A-7.11, A-7.12, A-8.3, A-16.1

Describe work and impact on feature

Window openings will be restored to their original appearance noted otherwise. Steel lintels will be cleaned of rust and scaling.

Wood windows will be retained and rehabilitated. The double-hung sashes will be removed. Damaged or missing sections will be rebuilt in kind matching the historic profiles. The sashes will be scraped and repainted. Cracked, broken, or missing glazing will be replaced. In the openings, a void between the jamb and walls will be filled with low-expansion foam insulation. The exterior and interior trim and frames will be scraped and repainted. A new metal tilt-pac liner with wood veneer at its exposed edges will be installed at the jambs. An exterior metal combination storm with a wood frame will be installed.

The awning windows on the north addition on Building 211 be will be scraped and repainted. Cracked, broken, or missing glazing will be replaced The iron bars on the window openings will be removed.

An entranceway at the center of the west facade of Building 214 will be restored to an arched window opening. A wood-frame window matching the design of the historic windows will be installed. Smaller window openings on the west facade will be dropped so that all sills are at the same elevation to meet the code for egress. Double-hung windows salvaged from openings on the building's other facades will be reused in these openings and rehabilitated. Glass block will be replaced in the small window near the east end of the south facade.

See Item 21 for treatment of window openings on the north facade of Building 214 and south facade of Building 211.

Number 4 **Feature** Exterior-Building 214, Steel Windows/Openings **Date of Feature** c. 1923, later alterations

Describe existing feature and its condition

The one-story additions have twelve-light metal windows with pivoting central sashes. The window openings have straight lintels and masonry sills. Metal cages are attached to the exterior of some of the windows on the south addition. Window damage is detailed on Sheet A-7.10.

Photo numbers 48, 49 Drawing numbers A-7.8, A-7.10

Describe work and impact on feature

All openings will be restored to their original appearance unless otherwise noted.

The steel windows on the one-story additions will be retained and rehabilitated. Work will follow the guidelines found in Preservation Brief 13: The Repair and Thermal Upgrading of Historic Steel Windows. New metal grates will be installed at windows and missing steel grates and existing grates will be restored. Interior screens will be installed.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

Property address Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 5 **Feature** Exterior-Buildings 210, 211, and 214, Doors/Openings **Date of Feature** 1907 (Buildings 210), 1909 (Building 211), 1910 (Building 214), later alterations

Describe existing feature and its condition

At the center of the north and south facades of Building 210 are historic entrances. The entrance on the north facade has a small, non-original, wood-frame, front-gable enclosed porch. Two openings on the north facade have been infilled and converted into entrances. The east facade has a doorway with concrete steps at its south end.

Entrance doors are found at the south and west facades of Building 211. On both the north and east facades of the north addition there are wood double doors with a concrete lintel over the opening.

Building 214 has single entrance doors on its east, north, and west facades and on its south one-story addition, and a double-door entrance at the center of its east facade.

Photo numbers 4–6, 12, 13, 20, 24, 47–50, 53, 54 Drawing numbers EX-1.2, D-1.3, A-2.3, A-7.0, A-7.2–A-7.4, A-8.3

Describe work and impact on feature

All existing window openings will be restored to their original appearance other noted otherwise.

Unless noted otherwise, doors will be repaired, repainted, and fixed in place. Gypsum-board walls will be extended across the interior side, with door lites converted into windows.

On Building 210, a window opening on the east half of the south facade will be converted into a door opening with an exit door of the same width installed. Brick will be used to infill the area between the lintel and the top of the doorway. Concrete steps will be constructed at the doorway.

A door above the boiler pit on the north wall of Building 211 will be removed and the opening infilled with brick matching the historic wall.

Near the center of the south facade of Building 214, a new opening will be made in the brick wall for a required new exit door. On the east facade, the wood awning and brackets above the southernmost door will be repaired and repainted.

Number 6 **Feature** Exterior-Buildings 211 and 214, first floor, overhead doors **Date of Feature** 1931 (Building 211), c. 1923 (Building 214), later alterations

Describe existing feature and its condition

Brick was removed from the walls on approximately the north two-thirds of the east (front) and west facades of Building 211 to create large doorways that hold non-historic overhead doors. The doors are in a variety of styles and were installed at different times. Some are of plywood construction with a multi-light design; no glass is extant. Others are metal. The doors are separated by wood posts and have a continuous wood lintel.

On Building 214, the west ends of both one-story additions have automobile entrances with wood overhead doors and concrete ramps. The doors run on metal, overhead tracks attached to the ceiling on the interior. The doors have a six-panel design that is five rows high. The central panel contains windows. The south addition has a person door north of the automobile entrance.

Photo numbers 20–24, 32, 38, 48, 49 Drawing numbers EX-1.1, D-1.1, D-1.2, A-2.2, A-7.0, A-7.6, A-7.7, A-7.9, A-7.10, A-9.2

Describe work and impact on feature

The existing overhead doors and related hardware will be removed on both the east and west facades of Building 211. Damaged masonry will be repaired (Item 2).

The wood columns between the openings will be cleaned using the gentlest means possible and missing columns will be replaced. The openings will be filled with panels similar in appearance to the overhead doors, constructed of cement board with a twenty-panel design and painted in historically appropriate colors. For details of the installation, see 3, 4, 5/A-9.2. The central two horizontal rows of panels will be single-pane, fixed windows, following the placement of window panels on the garage doors. The interior side of the panels will be insulated and faced with gypsum board.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

Property address Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 7 **Feature** Interior-Buildings 210, 211, and 214, first floor, concrete floors **Date of Feature** later alterations

Describe existing feature and its condition

The concrete slab of Building 210 has an opening for a basement stairway. The floors of the stables (211 and 214) were originally dirt, but all floors are now concrete. Building 211's floors have some areas of damage and staining, and there is a boiler pit at the northwest corner.

The concrete floors in the south one-third of Building 214 have incised lines forming a grid. Discoloration indicates that the floor was previously covered with square tiles. Concrete steps at the northwest corner descend to a boiler room at a lower elevation. The concrete floors in the center and north have curbs and trenches associated with animal cages.

The date of the concrete floors is not known. The floors with the trenches in Building 214 were most likely installed by the VA, post-dating the period of significance.

Photo numbers 11–15, 27–34, 58–63 Drawing numbers D-1.1, D-1.2, D-1.3, A-4.1, A-9.2

Describe work and impact on feature

The concrete floors of all three buildings will be removed because they are not original, are in poor condition, and will be disturbed for the installation of in-floor plumbing and mechanical systems. The boiler room depressions in Buildings 211 and 214 and the basement stair opening in Building 210 will be infilled to create a level surface. Floors drains will be capped.

New concrete floors will be installed incorporating piping for the mechanical and plumbing systems (Items 23 and 24). The floors will be covered with a layer of self-leveling Gyp-Crete for fire and sound control after the installation of the drywall. Wood columns will be cut 2" at the floor line and ½" x 3" galvanized steel base plate straps painted black will be bolted to the base of the columns and anchored into footings set into the concrete. The area between the base of the wood columns and the floor will be filled solid with non-shrink grout (Detail 12/A-9.2). The floor surface will receive a normal steel trowel finish and a sealer.

Number 8 **Feature** Exterior-Building 210, roof **Date of Feature** 1907

Describe existing feature and its condition

Building 210 has a side-gable roof covered in dark-gray slate shingles with exposed decorative rafter ends and exposed purlins. A red-brick chimney is near the center of the roof to the north of the ridge. A round metal ventilator is at the west end of the roof. A modern gutter system runs along the north facade. The metal ridge is rusted and warped, and many of the slate shingles are damaged or missing. The remaining shingles have worn thin and are very brittle.

Photo numbers 2, 3, 5, 6 Drawing numbers A-3.0, A-7.2, A-9.0

Describe work and impact on feature

Because of their poor condition, the slate shingles on the roofs and monitor walls will be replaced in kind. The existing roofing shall be removed to the decking, along with any related non-historic materials, including flashing.

The decking will be covered with underlayment. Brass screws with lead washers will attach the new slate shingles. The slate shingles will overhang by 1" the roof edge, which will be protected by 1" stainless steel trim (Detail 4/A-9.0). The shingles will feature the same dimensions and color as the historic shingles. The ridge will be topped with a rounded copper cap.

The round metal ventilator at the west end of the roof will be retained and repaired. Fascia boards will be repaired or replaced as needed.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name: Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family)

NPS Project Number: 29033

Property address: Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 9 **Feature** Interior-Building 210, basement **Date of Feature** 1907, later alterations, new construction

Describe existing feature and its condition

Interior stairs descend to a partial basement with stone walls. Concrete-block walls partition its southeast corner into a small room.

Photo numbers 16–18 Drawing numbers A-2.3, A-7.0, A-7.2, A-8.3

Describe work and impact on feature

The basement will be abandoned. Any contents will be removed and the space will be infilled with compacted granular soil. The opening at the first floor will be sealed over with a 4" layer of concrete.

Number 10 **Feature** Interior-Building 210, first floor, apartments **Date of Feature** 1907, later alterations, new construction

Describe existing feature and its condition

The building's interior is divided by various partitions constructed of brick, concrete block, gypsum board, and other materials. The interior floors are concrete with some areas painted or covered with modern commercial tiles. Sheets of plywood attached with furring strips cover the ceiling, with acoustic tiles hanging below in some locations. Most exterior walls are painted brick.

Photo numbers 10–15 Drawing numbers EX-1.2, D-1.0, D-1.3, A-2.0, A-2.3, A-4.3, A-6.0, A-6.3, A-7.0, A-8.3, A-14.0, A-14.1

Describe work and impact on feature

The nonhistoric walls, ceiling materials, and wall and floor coverings will be removed. The ceiling structure will remain in place, but all existing ceiling finishes will be removed.

The brick wall at the center of the building will remain in place. A doorway will be cut into its south side for a new corridor. A doorway near its center will be infilled with a stud wall.

New wood-stud/gypsum board walls will be constructed to create five one-bedroom apartments. Apartment entry and interior doors will be solid-core wood with wood frames. The existing ceiling structure will be covered with two layers of 5/8" gypsum board and a 6-mil vapor barrier at 10' to 12' above the floor. The existing brick walls will be exposed. New walls and ceilings will be painted. Kitchen/dining and bathroom floors will have a vinyl covering; living rooms and bedrooms will be carpeted. All will have wood baseboards.

Bathrooms will be fitted with showers, toilets, vanities with integral counters and sinks, and built-in linen shelves or cabinets. Bedrooms will have walk-in closets. New appliances and cabinets will be in the kitchens. Cabinets and fixtures will be attached to the new interior walls.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

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Number 11 **Feature** Interior-Building 210, first floor, common areas **Date of Feature** 1907, later alterations, new construction

Describe existing feature and its condition

See description in Item 10.

Photo numbers 10–15 Drawing numbers EX-1.2, D-1.0, D-1.3, A-2.0, A-2.3, A-4.3, A-6.0, A-6.3, a-7.0, A-8.3, A-14.0, A-14.1

Describe work and impact on feature

A doorway will be cut into south end of the brick wall for the new corridor.

New wood-stud/gypsum-board walls will form a mechanical room and a corridor parallel to the building's south wall. The existing ceiling structure will be covered with two layers of 5/8" gypsum board and a 6-mil vapor barrier. New gypsum-board walls and ceilings will be painted. Existing walls will be remain brick.

An 22" x 30" panel in the mechanical room will provide access to the attic space (Detail 4/A-9.2). Fiberglass insulation will be laid on the attic floor.

The floors in both spaces will be sealed concrete. The corridor will have wood baseboards; the mechanical room will have vinyl baseboards.

Number 12 **Feature** Exterior-Buildings 211 and 214, first-floor roof, second-floor monitor and monitor roof **Date of Feature** 1909 (Building 211), 1910 (Building 214), later alterations

Describe existing feature and its condition

Buildings 211 and 214 have roofs that are almost identical in design. The first-floor roofs of both buildings, which extend to a clerestory monitors, are covered in slate and have exposed, curved rafter ends and exposed purlins. The central gable-roof monitors run the full length of each building with east and west facades faced in slate. The open eaves have exposed, curved rafter ends and exposed purlins. The one-story additions on Building 214 have hipped roofs. On all of the roofs, there are areas where the slate shingles are damaged or missing. The remaining shingles have worn thin and are very brittle.

Photo numbers 20–24, 47–50 Drawing numbers D-1.1, D-1.2, D-1.4, A-2.4, A-3.0, A-7.6, A-7.7, A-7.9, A-7.10, A-9.0, A-9.1

Describe work and impact on feature

Because of their poor condition, the slate shingles on the roofs and monitor walls will be replaced in kind. The existing roofing shall be removed to the decking, along with any related non-historic materials, including flashing and gutters. Fascia board will be repaired or replaced as needed.

To leave the historic rafters exposed on the interior, insulation will be installed on the exterior. The decking will be covered with self-adhering membrane underlayment, 1-1/2" to 2" ISO board insulation, ¾" plywood sheets, and a 2-ply underlayment. This built-up section will be tapered from 18" to 24" from the top of the main roofs to drop below the monitor window sills (3/A-9.0). Along the first-floor eaves, the insulated area will be setback from the roof edge (1/A-9.0). New slate shingles matching the dimensions and color of the historic shingles will cover the roof. A rounded copper cap will run along the ridge.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name: Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family)

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Number 13 **Feature** Interior-Building 211, first floor, apartments **Date of Feature** 1909, later alterations, new construction

Describe existing feature and its condition

At the interior, frame walls covered in clapboard partition the south one-third of the building into office spaces and a garage area. The dropped ceiling is painted plywood with furring strips. The north two-thirds of the building is a large open area with a loft above. A series of beams are set in a concrete floor. A cast-iron boiler in a sunken pit is at the northwest corner.

Photo numbers: 29–34, 38 Drawing numbers: EX-1.1, D-1.0, A-2.0, A-2.2, A-4.1, A-4.2, A-6.0, A-6.2, A-7.0, A-8.4, A-8.5, A-9.1, A-14.0, A-14.1

Describe work and impact on feature

The partitions, doors and door frames, and ceiling materials will be removed. Ceiling structures will remain in place and be patched as needed. A brick chimney located at the south wall will remain and be repaired as needed (Item 2). All structural columns will remain and be cleaned using the gentlest means possible.

The majority of the floor will be divided into twenty-four studio apartments by wood-stud/gypsum-board walls. Apartment entry and interior doors will be wood with solid-core construction with wood frames. Inside most units, the ceilings will be open to the historic rafters and decking. The existing ceiling is lower in the southwest corner. Bathrooms and closets will have painted gypsum-board ceilings. The existing brick walls will be exposed. New gypsum-board walls and ceilings will be painted. Kitchen and bathroom floors will have a vinyl covering; sleeping areas will be carpeted. All will have wood baseboards.

Bathrooms will be fitted with showers, toilets, vanities with integral counters and sinks, and built-in linen shelves or cabinets. New appliances and cabinets will furnish the kitchens. Cabinets and fixtures will be attached to the new interior walls.

Number 14 **Feature** Interior-Building 211, first floor, office and common areas **Date of Feature** 1909, later alterations, new construction

Describe existing feature and its condition

See description of first floor in Item 13.

A non-original, open, wood stair with a makeshift railing near the northwest corner of the building runs between the first floor and loft space.

Photo numbers: 27–34 Drawing numbers: EX-1.1, EX-1.3, D-1.0, D-1.2, A-2.0, A-4.1, A-7.0, A-8.3, A-8.6, A-8.7, A-9.1, A-14.0, A-14.1

Describe work and impact on feature

New wood-stud walls will create public spaces on the first floor. An office will be built at the southwest corner with a secure storage room and an attached restroom. A corridor running north-south will provide access to the apartments. Its approximately 10'-8"-high ceiling will be constructed of two layers of 5/8" gypsum board.

A small vestibule at the northeast corner of the building will hold a new staircase, Stair 325B, that will provide access to the north end of the loft space. The new metal stairs will be one flight with a 12' rise and 11"-deep concrete treads. Its 3'-6"-high balustrade will have painted, metal, 2"-mesh panels set in 1½"-square tube frames with a 1½" metal handrail attached. The space under the staircase will serve as storage.

All new partitions and ceilings will be painted. The corridor, office, and secure storage space will be carpeted and have wood baseboards. The under-stair storage will have vinyl flooring and baseboards. The new restroom will have tile floors and baseboards.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

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Number 15 **Feature** Interior-Building 211, one-story addition **Date of Feature** c. 1930s (one-story addition), later alterations

Describe existing feature and its condition

A one-story, concrete-block addition that is 30'-0" x 32'-0" in size is on the north facade of Building 211. The gable roof is covered with slate shingles with a metal ridge pole and holds a ventilator. The roof's structure is in very poor condition, with damaged and missing rafters and large holes; a structural engineer has determined that the roof trusses and rafters are unsafe and must be removed. The rafters are exposed on the interior, which has a concrete floor. A wall running north-south creates a room along the west wall.

Photo numbers 26, 35, 36 Drawing numbers EX-1.1, D-1.0, D-1.2, A-2.0, A-2.2, A-4.1, A-6.0, A-6.2, A-7.6, A-7.7, A-8.6, A-9.0, A-9.1, A-14.0, S1.0, S2.1, S5.1

Describe work and impact on feature

The one-story addition will house electrical and maintenance equipment.

The concrete-block walls will be repaired as needed using masonry units and mortar that match the original. The deteriorated roof structure will be removed. The new roof will have flat truss joists 12' to 18' on center. Batt insulation will be placed between the joists with a gypsum-board ceiling below and tapered rigid insulation above, topped by an EPDM roofing membrane. The vertical face of roof structure will be covered with cement board, trimmed with a 4"-high band where it intersects with the historic concrete-block wall below (Detail 14/A-9.0).

A door from Building 211 will provide access to a small mechanical room enclosure will be constructed with wood-stud, gypsum-board walls to create a mechanical room. The west room will be used for electrical equipment (Item 22) and be accessed by the double doors on the exterior wall and by a new person door cut into the north end of the interior wall. The remaining space in the addition will serve as a maintenance room accessible by the double doors on the east facade.

Number 16 **Feature** Interior-Building 211, loft floor, offices, common areas, and storage **Date of Feature** 1909, later alterations, new construction

Describe existing feature and its condition

An enclosed loft runs the length of the building at the center and is accessed by a small, open, wood staircase at the north end of the first floor. A doorway at the south end of the loft leads to a series of rooms with hardwood floors. One, labeled "Equipment Room," has a low ceiling accessed above by a ladder-style stair. The building's roof structure is visible in the southernmost room, which has a set of double doors and a chimney at its south wall.

Photo numbers 37, 39–42 Drawing numbers E-1.1, EX-1.3, D-1.4, A-2.4, A-6.0, A-6.4, A-7.0, A-8.4, A-8.5, A-9.1, A-9.2, A-14.0, A-14.1

Describe work and impact on feature

Non-original ceiling materials and the existing partitions and doors will be removed. The roof structure and decking will remain in place. The double doors at the south facade will be rehabilitated and reused for access from the elevator lobby.

To create a one-hour fire rating between the occupancy classifications, painted gypsum-board/wood-stud walls will be constructed to the roof structure on both sides of the loft. The south end of the loft will be divided into a waiting area, corridor, meeting rooms, offices, a kitchen area, and a workroom, with some built-in cabinets and counters. The north end of the loft will be used for storage.

Floors will be carpeted. New doors will be solid-core wood with pre-finished steel frames.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

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Number 17 **Feature** Interior-Building 214, first floor, apartments **Date of Feature** 1910, later alterations, new construction

Describe existing feature and its condition

The interior is divided into three main areas. The southernmost is a large, open room delineated by a wood post-and-beam system running north-south. The beams along the west side of the room are narrower and appear to predate the two rows of beams along the east side of the room, which are wider and have a short crossbeam at the top. The walls and ceiling are covered in modern acoustic tile, with some areas of exposed brick at the exterior walls. An enclosed boiler room with a sunken floor is at the northwest corner. A set of metal double doors leads to the building's central room. The historic wood beams have been cut off at ceiling height and are supported with steel I-beams. Rows of chain-link animal kennels are set into a non-historic concrete floor. Mechanical equipment for the HVAC system and a series of grates are suspended from the center of the ceiling. These are accessed from a narrow metal-grate catwalk. The walks are painted brick.

The northernmost room is also filled with chain-link animal kennels. Its earlier concrete floor has also been replaced with newer concrete and has deep trenches covered with cast-iron grates. It contains rows of steel I-beam posts supporting larger I-beams at ceiling level. The ceiling is covered in painted "Bildrite"-brand fiberboard. Two doorways on its west wall provide access to the hipped-roof additions, which maintain their historic concrete floors and have painted brick walls.

Photo numbers: 58–65 Drawing numbers: EX-1.0, D-1.1, A-2.0, A-2.1, A-4.2, A-4.3, A-6.0, A-6.1, A-7.0, A-8.0, A-8.1, A-8.2, A-8.3, A-9.1, A-14.0, A-14.1

Describe work and impact on feature

Non-historic partitions, floor and wall coverings, and other materials will be removed. The brick walls will be repointed as necessary (Item 2). The existing ceiling structures will remain in place and be patched as needed. Fiberglass insulation will be placed above the ceiling in some areas.

The majority of the floor will be divided into a total of twenty-one studio apartments, with a one-bedroom apartment in each one-story addition. A central corridor will run north-south and extend west to the additions. New wood-stud walls will be covered with gypsum board. Apartment entry and interior doors will be solid-core wood with wood frames.

In units at the center of the building, the ceilings will be open to the historic rafters. In the south section of the building, the existing ceiling (at a height of 11'-1") will be retained, repaired as needed, and covered with two layers of 5/8" gypsum board.

In the apartments, the existing brick walls will be exposed. New gypsum-board walls and ceilings will be painted. Kitchen and bathroom floors will have a vinyl covering; sleeping areas and bedrooms will be carpeted. All will have wood baseboard.

Bathrooms will be fitted with showers, toilets, vanities with integral counters and sinks, and built-in linen shelves or cabinets. New appliances and cabinets will furnish the kitchens. Cabinets and fixtures will be attached to the new interior walls.

Number 18 **Feature** Interior-Building 214, first floor, common areas **Date of Feature** 1910, later alterations, new construction

Describe existing feature and its condition

See description of first floor in Item 17.

Photo numbers: 58–65 Drawing numbers: EX-1.0, A-2.0, A-2.1, A-4.0, A-7.0, A-8.3, A-14.0, A-14.1

Describe work and impact on feature

A new rec room will be built at the floor's northwest corner. Its east wall will have three windows bracketed by two entrances. Two pairs of windows are on the room's south wall, looking into a corridor that provides access to the stairs to the second floor (Item 19) and to the north one-story addition. A window at the north wall, which would look into a trash room, will be infilled (see Item 21).

The corridor leading to the south one-story addition also serves a laundry room equipped with washers, dryers, utility sinks, and a vending machine. Its north wall will have two pairs of windows. A small mechanical room is to the east. A janitor's closet with a mop sink will be at the building's southeast corner.

Existing walls will be exposed brick. New partition walls will be wood-stud/gypsum-board construction. Doors will be solid-core wood with pre-finished steel frames. Floors will be sealed concrete with wood baseboards.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

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Number 19 **Feature** Interior-Building 214, loft floor, offices and common areas **Date of Feature** 1910, later alterations, new construction

Describe existing feature and its condition

A wood staircase at the northwest corner of the first floor leads to a loft. At the loft space, it is enclosed by modern Styrofoam insulation.
Above the north one-third of the first floor is an enclosed room with hardwood floors, wood posts and beams, wood rafters, and a door leading to the catwalk in the building's central room. The nine-light, wood-frame, awning windows in the monitor are visible in this room.

Photo numbers 66–70 Drawing numbers EX-1.0, EX-1.3, D-1.4, A-2.4, A-6.0, A-6.4, A-7.0, A-8.3, A-14.0, A-14.1

Describe work and impact on feature

Non-original ceiling materials will be removed. Roof rafters and decks will remain in place. The window at the north facade will be removed and a new opening for access to the elevator lobby will be created to the east.
At the loft's northwest corner, a section of the floor will be removed to reveal the full height of the interior. A second opening will be cut to the south for a new one-flight metal stair with a 12' rise and 11"-deep concrete treads. Its 3'-6"-high balustrade will have painted, metal, 2"-mesh panels set in 1½"-square tube frames with a 1½" metal handrail attached. The space under the staircase will serve as storage.
The access door in the south wall to the metal catwalk will be removed and the doorway infilled. New wood-stud walls with painted gypsum board will be constructed between the wood columns to create a computer room. A wrap-around, 24"-deep countertop will extend along the east wall to a corridor space that includes a built-in kitchen area with refrigerator, sink, and wall cabinets. A sitting area will be at the northeast corner. A community room with media area along the west wall and a restroom will be along the west wall.
Floors will be carpeted. New doors will be solid-core wood with pre-finished steel frames.

Number 20 **Feature** Exterior-Buildings 210 and 211, Building Link Addition **Date of Feature** New construction

Describe existing feature and its condition

A concrete pad covers part of the ground between Buildings 210 and 211.

Photo numbers 2, 21 (showing location of construction) Drawing numbers .: D-1.2, D-1.3, A-2.2, A-2.3, A-3.0, A-6.2, A-7.0, A-7.1, A-7.2, A-7.3, A-7.6, A-7.13, A-8.7, A-14.0, A-14.1

Describe work and impact on feature

A new link will connect Buildings 210 and 211 and serve as a community room. Its exterior will be an aluminum curtain wall system with a brick-veneer base. There will be exit doors on its north and south sides. Its flat roof will be covered with EPDM membrane and have a 2'-high parapet faced with cement board and topped with metal coping. Two layers of painted 5/8" gypsum board and a vapor barrier will conceal the 2" x 10" ceiling framing, which will also house mechanical ductwork. The floor will be a concrete slab.

The non-original infill and windows at the center of Building 210's north wall will be removed for a double-door entrance. A new doorway at the south end of Building 211's north wall will hold a single-door entrance to the link. New doors will be solid-core wood.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
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Number 21 **Feature** Exterior-Building 211 and 214, Building Link Addition **Date of Feature** New construction

Describe existing feature and its condition

Concrete covers the ground between Buildings 211 and 214.

Photo numbers: 24, 48 (showing location of construction) Drawing numbers: D-1.1, D-1.2, A-2.1, A-3.0, A-4.1, A-7.0, A-7.1, A-7.2, A-7.6, A-7.9, A-7.12, A-8.7, A-14.0, S1.0, S1.1, S2.0, S2.1, S3.0, S3.1, S5.0, S5.1

Describe work and impact on feature

A new addition will link Buildings 211 and 214, connecting their first floors and lofts. The two-story addition will be of frame construction on a concrete slab, with the second story stepped back from the east (front) facade. The exterior walls will be faced with cement-board panels. The east facade will be an aluminum curtain-wall system with a central entryway. The west facade will be sheathed with cement-board panel siding and have a person door and roll-up garage door. Both facades will have a brick-veneer base. A rectangular elevator penthouse extending above the second-floor roof will be faced with cement board. Parapets edging the roofs will be faced with cement board with metal flashing; the one above the main entry will hold building signage. The roofs will be covered with an EPDM membrane.

Inside the main entry, a small vestibule will have mailboxes at the north and south walls. A sliding door will lead to a small lobby with an elevator. The elevator shaft will have 8" CMU walls and a 4'-6"-deep elevator pit. An equipment room will be adjacent to the south side on the first floor. A corridor north of the elevator will extend west to provide access to an exterior door and a trash and recycling room. The link's second floor will hold an elevator lobby.

Ceilings and new walls will be painted gypsum board. The south facade of Building 211 and the north facade of Building 214 will form the north and south walls of the addition. The existing windows and door openings on these facades within the walls of the addition and facing the entrance door will be removed. Two archways will be cut into the center of the south facade of 211 and a single archway in the north facade of 214 for the new corridors. The remaining window openings will be infilled with brick that matches the existing and is recessed by 1" on both the interior and exterior sides (Detail 10/A-9.1). Stone sills will remain in place. The two westernmost windows on 211's wall will be restored (Item 3). The doorway at the west end of 214's facade will have its door and doorway repaired and repainted. The door will be fixed in place, with gypsum board placed across the opening at its interior side.

Number 22 **Feature** Interior-Buildings 210, 211, 214, electrical systems **Date of Feature** Later alterations

Describe existing feature and its condition

Buildings 210, 211, and 214 have modern electrical systems.

Photo numbers: 4, 7, 11–15, 29, 30, 34, 39, 59, 62, 65 Drawing numbers: D-1.1, D-1.2, D-1.3, A-6.0, E-1.00, E-1.01, E-1.02, E-2.00, E-3.00, E-3.01, E-6.00

Describe work and impact on feature

All components of the current electrical systems will be removed. The buildings will be rewired with modern electrical systems that meet current codes. Apartments will be wired for appliances in the kitchen areas. Bedrooms will have ceiling fans. Bathrooms, walk-in closets, kitchens, and vestibules will have ceiling lighting fixtures, which will be mounted to ceilings or beams/trusses, depending on the apartment style. Loft spaces will have 4' and 8'-long indirect light fixtures. In all areas, new electrical sockets will be installed.

Corridors will have sconces apartment doorways. Corridors and other common areas will have can and suspended ceiling lights, smoke detectors, exit signs, security cameras, and emergency lights. On the exterior, decorative and emergency lights will be at entrances, which will have electronic locks and openers.

A new electrical service riser for all three buildings will be installed in the electrical room in the one-story addition of Building 211.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
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Number 23 **Feature** Buildings 210, 211, 214, plumbing **Date of Feature** Later alterations

Describe existing feature and its condition

A plumbing system serves a restroom along the north wall of Building 210.

In Building 211, plumbing fittings for a bathroom are located at the southwest corner of the first floor. A sink with a faucet is attached to the wall.

In Building 214, two toilet areas are at the southwest corner of the first floor. Fixtures include porcelain urinals, sinks, and toilets. Some water pipes extend along the I-beams of the central area and extend to the exposed frame ceiling.

Photo numbers 14, 27, 59 Drawing numbers D-1.1, D-1.2, D-1.3, A-6.0, M-1.01, M-1.02, M-1.03, M-1.04, M-1.05, M-1.06

Describe work and impact on feature

Plumbing fixtures and components will be removed. Troughs in the new concrete floors (Item 7) will accommodate sanitary and fresh water lines. The sanitary lines will run from sinks and toilets and join at a common line running underneath the concrete floor of the corridor of each building before exiting into the city line. Fresh water lines will follow a similar layout.

Number 24 **Feature** Exterior-Buildings 210, 211, and 214, mechanical and HVAC **Date of Feature** Later alterations

Describe existing feature and its condition

Building 210's heating system includes standing metal pipe radiators and wall-mounted radiators under windows. A cast-iron boiler is located in the east side of the basement.

In Building 211, a cast-iron boiler is located in a pit near the northwest corner of the first floor. A small door on the wall at its north side leads to the concrete coal bit at the exterior.

In the south section of Building 214, box radiators are attached to the walls. In the boiler room at the northwest corner are two cast-iron boilers from which metal pipes run. In the central room, a system of sheet-metal ducts with vents and fans criss-cross the ceiling are and attached to the steel beams. Above them is a narrow cat-walk with a pipe railing that accesses HVAC machinery at the center of the ceiling. Vents are in the wall between the central and north rooms.

Photo numbers 12–14, 33, 60, 62, 69, 70 Drawing numbers D-1.1, D-1.2, D-1.3, EX-1.0, EX-1.1, EX-1.2, M-2.01, M-2.02, M-2.03

Describe work and impact on feature

The existing heating system will be removed. A new heating, cooling, and ventilation system will be installed for the three buildings. In-floor heating will be set into the concrete of the entire new floor (Item 7). In addition, all apartments will have fan coil units with individual thermostat control, which will be located above the bathroom ceilings. Cooling will be provided to all apartments by an exterior chiller located near the mechanical room at the north end of building 211.

A wall or ceiling exhaust fan will be installed in all unit and public bathrooms and the janitor's closet. A kitchen hood exhaust fan will be installed above oven ranges.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name: Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family)

NPS Project Number: 29033

Property address: Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 25 **Feature** Interior-Buildings 210, 211, and 214, fire suppression **Date of Feature** N/A

Describe existing feature and its condition

The buildings do not have any components of a modern fire suppression system.

Photo numbers: N/A Drawing numbers: N/A

Describe work and impact on feature

The buildings will be fitted with a modern fire suppression system. Detailed drawings will be included in an amendment.

Number 26 **Feature** Exterior-Buildings 227 and 229, masonry walls and chimneys **Date of Feature** 1904 (Building 229), 1907 (Building 227), 1938 (front porches)

Describe existing feature and its condition

The brick on Buildings 227 and 229 is in good condition in most areas. The front porches were added later, so the color of the brick and mortar do not match that on the original buildings. All brick is laid in a stretcher bond. Modern lights and conduits have been installed.

On 227, window openings have camber arches. Most damage is found on the front (east) and rear (west) sides where water damage appears around the main and porch roofs. Brick chimneys with modern concrete caps rise from the center of both sides of its roof.

On Building 229, window openings have segmental arches. Most damage is found on the front (east) and rear (west) sides where water damage appears around the main and porch roofs. Vines are growing on the north and west facades. Masonry damage is detailed on Sheets A-15.5, A-16.4, and A-16.5.

Photo numbers: 73–82, 101–117 Drawing numbers: A-15.5, A-16.4, A-16.5

Describe work and impact on feature

Modern lights, conduits, and other nonhistoric features will be removed.

Brick and stone will be cleaned using the gentlest means possible. Missing, cracked, mismatched, and spalling bricks will be replaced. If areas of staining, efflorescence, and biological growth have physically altered the face of a masonry unit, it will be replaced. Hangers, metals anchors, and nails will be removed.

Mortar joints will be repointed as necessary. Power tools will be used only as approved by the architect. Cutting of joints will not damage masonry units. Areas that have been previously repointed will be evaluated to determine if the mortar is the correct compressive strength for the brick.

Mortar will match the color, strength, and joint profile of the historic material. New mortar will be a mixture of hydrated lime, Portland cement that is gray in color, sand. Sealant applied to the mortar will have a polyurethane base, and be a multicomponent, chemical curing, Type 2, Class A product.

Test panels for the proposed materials and techniques will be prepared for SHPO review and approval. Masonry work will be performed in accordance with Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings and Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings.

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Number 27 **Feature** Exterior-Buildings 227 and 229, stone foundation **Date of Feature** 1904 (Building 227), 1907 (Building 229)

Describe existing feature and its condition

The tall foundations are buff-colored, rough-faced limestone, except for the top course with is smooth-faced with a beveled top. The stone appears to have discolored over time. Basement window openings have rough-faced, rectangular sills. The stones are set with light-colored mortar. A damaged area at the southeast corner shows that the stone at the base of the foundations, which is poorer quality and yellow in color, appears to have been covered with a slick-coat of mortar that is failing. Other areas of water damage have been caused by drainage from the roof's gutter system (Item 30).

Photo numbers 77–82, 110, 115–117 Drawing numbers A-15.5, A-16.5

Describe work and impact on feature

Spalling, cracked, and unstable units will be removed and replaced with units salvaged from repairs of the front porch (Item 29). Damaged stone at the foundation will be replaced. All masonry will be cleaned using the gentlest means possible. If areas of staining, efflorescence, and biological growth have physically altered the face of a masonry unit, it will be replaced.

Mortar joints will be repointed as necessary at the interior and exterior. Power tools will be used only as approved by the architect. Cutting of joints will not damage masonry units. Areas that have been previously repointed will be evaluated to determine if the mortar has the correct compressive strength for the brick or it will be replaced. New mortar will meet ASTM C270 standard with the color to be a mineral oxide pigment to match existing. Mortar joints will match the style, strength, and joint profile of the historic material.

Test panels for the proposed materials and techniques will be prepared for SHPO review and approval. Masonry work will be performed in accordance with Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings and Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings. Specifications and repointing samples will be reviewed and approved by SHPO before proceeding with this work. High-quality before-and-after photographs of general masonry conditions and details will be submitted with the Part 3.

Number 28 **Feature** Exterior-Buildings 227 and 229, window openings/openings **Date of Feature** 1904 (Building 227), 1907 (Building 229), later alterations

Describe existing feature and its condition

On Building 227, Most windows have a six-over-six, double-hung configuration with wood frames. Smaller window openings on the side and rear facade have three-over-three, double-hung windows. All historic window openings have brick jackcamber-arch lintels and smooth-faced, masonry sills that have traces of paint in many locations. There are four window openings on the front facade, eight on the rear facade. On the north and south facades are three full-size window openings as well as a single demi-lune opening in the gable end. Basement window openings in the foundation have been infilled with plywood, but retain wood-frame three-light awning windows.

On Building 229, the window openings on each facade of the building are identical in style, having jack-arch lintels and masonry sills. The second floor of the front facade is four bays wide, and each bay has three six-over-six double-hung windows with wood frames. Most of the windows on the second floor on the secondary facades are the same type, except at the north and south ends and between the ells, which have eight-over-eight, double-hung, wood-frame windows and the bathroom windows with are four-over-four in style.

Many of the window openings are fitted with modern two-part metal storms with screens.

Photo numbers 76, 90, 111–116 Drawing numbers A-7.4, A-7.5, A-15.6, A-16.4, A-16.5, A-16.6

Describe work and impact on feature

The wood windows will be retained. Damaged sections or missing sections of sashes will be rebuilt. Cracked, broken, or missed glass panes will be replaced. New components will match the historic in profile, size, and color.

To restore the double-hung windows, the existing sashes will be removed. A void between the jamb and walls will be filled with low-expansion foam insulation. The exterior and interior trim and frames will be scraped and repainted. A new metal tilt-pac liner with wood veneer at its exposed edges will be installed at the jamb sides. The sashes will be scraped, repainted, restored, and prepared for the installation of the new jamb liner. The sashes will be scraped, repainted, restored, prepared for the new jamb liners, and reinstalled. An exterior metal combination storm with a wood frame and screen will be installed.

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Number 29 **Feature** Exterior-Buildings 227 and 229, front porches **Date of Feature** 1904 (Building 227), 1907 (Building 229), 1938 (front porches enclosed)

Describe existing feature and its condition

On Building 227, the attached, enclosed, single-story front porch on its east (front) facade has a low-pitched hipped roof. Concrete steps lead to entrances on the north and south ends of the front of the porch. The wood-paneled doors have an upper glass panel and are topped by single-pane transoms. The porch has a raised foundation of concrete blocks designed to resemble the cut stone of the main foundation. The same blocks create short walls with concrete coping that flank the front steps; the concrete block is disintegrating and the walls are in poor condition. The porch walls have bands of windows with masonry sills and brick walls below. The eaves show areas of damage. A brick wall divides the two porch units but a doorway has been cut into it.

On Building 229, the attached, enclosed, single-story front porch extending along the length of its front (east) facade has a low-pitched hipped roof. It has four entrances, which are paired. Each has a single-pane transom over the door and is approached by a set of steps bracketed by knee walls constructed of deteriorating, rusticated, concrete block with a concrete cap. The same concrete block forms the foundation of the porch. The porch is divided between the four units by dividing brick walls, which are painted. The interior floor, which is concrete, is covered with non-historic materials.

Photo numbers 78–80, 83, 102, 105, 108 Drawing numbers A-14.0, A-15.2, A-15.3, A-15.4, A-15.5, A-16.2, A-16.4

Describe work and impact on feature

In Building 227, the doorway at the front porch's dividing wall will be infilled using brick to match the adjacent walls, inset on both sides to retain the impression of the opening, which will create two separate entry porches.

On both buildings, the front steps will be rebuilt with rock-face 8" CMUs topped a precast concrete cap. Both will match the size and appearance of the historic materials. The railings' footings will be set 4'-0" deep. Poured concrete steps (11" deep) and a concrete landing at the top of the stairs will be reinforced with rebar. A 2'-10"-high metal guardrail will be set into the landing and stairs. Its 1½" handrail will run the length of the stairs.

Concrete blocks salvaged from the steps will be used in the repair of the house's foundation (Item 27).

Wood windows will be retained and restored (Item 28). They will have full-height, wood-frame, fixed exterior screens with a self-storing sashes. The roofs will be repaired and covered with new standing-seam metal roofing. Half-round copper gutters will be installed above the doorways of Building 229 where gutters are currently located.

At the interior, any nonhistoric materials will be removed from the concrete floors, which will be cleaned. The brick walls will be repainted.

Number 30 **Feature** Exterior-Buildings 227 and 229, roofs **Date of Feature** 1904 (Building 227), 1907 (Building 229)

Describe existing feature and its condition

Building 227 has a side-gable roof with cornice returns. The roof is covered in slate shingles with metal flashing below. The roof is fitted with a gutter drainage system. Some slate shingles are missing or are damaged.

On Building 229, the main section of the house is side-gable in design and has two ells extending from its rear (west) facade. The roof is covered in gray-colored slate shingles. The gables ends at the north and south facades and at the ell's gable ends have cornice returns. The drainage system consists of a metal gutter set into the bottom edge of the roof and concealed by the eaves and draining into a decorative gutter spout at the corner of the building. The system has failed in numerous places, causing great deal of damage to the wood eaves and masonry.

On both buildings, the enclosed wood eaves are severely damaged in many areas with missing materials, holes, and evidence of water infiltration and rot.

Photo numbers 74, 76, 78, 82, 102, 105, 106, 107 Drawing numbers A-9.0, A-15.4, A-15.5, A-16.2, A-16.3, A-16.4

Describe work and impact on feature

The roofs will be repaired. The slate shingles, existing roof membrane and insulation will be removed to the decking, along with any related non-historic materials, including flashing and gutters. Fascia board will be repaired or replaced as needed. Existing metal ventilators and penetrations for plumbing vents will be maintained.

All roof surfaces will be covered with EPDM underlayment. An additional layer will run along the ridge, which will be topped with a rounded copper ridge cap. Brass screws with lead washers will attach the new slate shingles, which will be laid over two-ply felt underlayment. The shingles will match the dimensions and color of the historic shingles and will overhang by 1" the roof edge, which will be wrapped by stainless-steel trim (Detail 4/A-9.0).

A new gutter system will be installed. At the east facade, a prefinished metal gutter lining will be installed at the eaves and attached to plywood at its base and rear sides and framed in from below. Fascia board and crown molding matching the existing profile will conceal the new gutters. A prefinished metal drip edge at its intersection with the roof will prevent further water intrusion. Copper downspouts and water connections installed at the corners of the buildings will match the current configuration (Detail 9/A-9.1).

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Number 31 **Feature** Exterior-Building 227, rear porches **Date of Feature** 1904, later alterations (date unknown)

Describe existing feature and its condition

On the rear facade are two single-story, hipped-roof enclosed porches of frame construction, which are very deteriorated and contain non-historic materials.

Photo numbers 75, 77, 81, 88 Drawing numbers A-14.0, A-15.2, A-15.3, A-15.4, A-15.5

Describe work and impact on feature

Both rear porches will be removed. Points of connection with the masonry walls will be repaired as needed (Item 26). Wood-frame ramps will rise from the new rear concrete walk to each rear door, and stairs at the south walkway will provide access to the basement access doors.

Number 32 **Feature** Interior-Building 227, basement **Date of Feature** 1904, later alterations

Describe existing feature and its condition

In each unit, the basement's walls are stone and mortar, the floors are poured concrete, and the ceilings have a layer of plaster. A door at the rear wall provides egress. The stairs to from the north unit have been removed, leaving ghosting on the basement's north wall.

Photo numbers 97, 98 Drawing numbers A-14.0, A-15.3

Describe work and impact on feature

The door opening between the two units will be infilled with a wood-stud wall with painted gypsum-board. A storage area will be built underneath the stairs of each unit. The stairs from the first floor will be removed. New stairs will be constructed for both units.

Floors will be sealed concrete. Existing masonry walls will be left exposed. New HVAC systems and hot-water heaters will be installed (Items 45 and 47).

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Number 33 **Feature** Interior-Buildings 227 and 229, restrooms **Date of Feature** 1904, later alterations

Describe existing feature and its condition

The restrooms are located at the southwest and northwest corners of the units' second floor. In Building 227, the south bathroom has no extant fixtures. The walls are finished in beadboard to chair-rail height. The north bathroom has been remodeled with a bump-out into the adjacent bedroom.

In Building 229, the bathrooms are at the center of the second floor. Some have bathroom fixtures. Others have had all fixtures removed. Mirrored, recessed medicine cabinets are in place.

Photo numbers 92, 133, 137 Drawing numbers A-14.0, A-15.3, A-16.1, A-16.2

Describe work and impact on feature

In compliance with the Minnesota Housing Finance Agency, a restroom must be made available on the first floor for visitors who cannot access those on the second floor. Wood-stud walls with painted gypsum board will create a half-bath in each kitchen that will be furnished a toilet and wall-hung sink.

In the second-floor bathrooms, fixtures, floor and wall covering, and non-original cabinetry will be removed. In Building 227, the north wall of the south unit's bathroom will be bumped-out 1'-10", following the current wall configuration of the north unit, to provide room for a new counter with sink.

The walls of Building 229's second-floor restroom will be retained in the current existing footprint. All new plumbing fixtures and lighting will be installed. The recessed medicine chests will be repaired and retained.

In both restrooms, the walls and ceilings will be repainted. Hardwood floors and baseboard will be maintained.

Number 34 **Feature** Interior-Building 227, first floor, living rooms **Date of Feature** 1904, later alterations

Describe existing feature and its condition

The units' front entrances lead directly into the living rooms. The main stairs to the second floor are at the exterior wall and have a simple wood balustrade with a square newel-post. The railing continues at the second-floor corridor. Floors are hardwood; walls and ceiling are painted plaster. Historic wood trim, including a tall baseboard and front doors, are extant. The living room's west wall a doorway leads to the kitchen/dining room. In the north wall, a non-original archway has been cut into the west wall.

Photo numbers 84, 85 Drawing numbers A-14.0, A-15.3

Describe work and impact on feature

Nonhistoric materials will be removed. At the south unit, the door and doorframe entering the kitchen will be removed. The opening will be converted into an archway at the south side of the wall. The north unit's archway will be infilled with wood-stud wall and gypsum board to become the same size and located at the north end of the wall.

Plaster walls and ceilings will be repaired and painted. Hardwood floors and baseboard will be maintained. The wood trim, front door, and main staircase will be scraped, repaired, and repainted.

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Number 35 **Feature** Interior-Building 227, first floor, combination kitchen/dining rooms **Date of Feature** 1904, later alterations

Describe existing feature and its condition

In both units, a large room at the rear of the first floor serves as the combination kitchen and dining room. A doorway on its west wall leads to the enclosed rear porch. A door at the perimeter wall provides access to the basement stairs. A non-original at the northwest corner of the south unit connects the two kitchen rooms. The rooms have painted plaster walls and ceiling. Hardwood floors and much of the historic hardwood trim are also extant. The doorway leading to the basement in the north unit has been sealed off at floor level.

Photo numbers 86, 87, 89, 90 Drawing numbers A-14.0, A-15.3

Describe work and impact on feature

Nonhistoric wall and floor finishes, cabinetry, and fixtures will be removed. The doorway between the two kitchens will be infilled with wood studs and gypsum board.

Countertops with cabinets 3' in height and pantry cabinets will be installed at the front and side walls of the kitchens. Wall cabinets that are 2'-6" high will be attached above. New appliances and fixtures will be installed.

Plaster walls and ceilings will be repaired and painted. Hardwood floors and baseboard will be maintained.

Number 36 **Feature** Interior-Building 227, second floor, bedrooms and corridor **Date of Feature** 1904, later alterations

Describe existing feature and its condition

On the second floor, the rooms radiate from a small corridor at the top of the stairs. The smaller bedroom is adjacent to it to the north, along the rear of the house. The larger bedroom at the front (east side) of the house has a walk-in closet. Between the stair and the larger bedroom is a doorway with stairs to an attic. The bedrooms and corridor maintain their historic hardwood floors and wood trim. The walls and ceiling are painted plaster. One wall in the corridor is painted bead board. The floor in the north corridor appears to have water damage.

Photo numbers 93, 94, 95 Drawing numbers A-14.0, A-15.3

Describe work and impact on feature

Nonhistoric floor and wall coverings will be removed. The door opening between the two front bedrooms will be infilled with wood studs and gypsum board. A built-in cabinet/closet will be installed at the front walls of the rear bedrooms.

Plaster walls and ceilings will be repaired and painted. Hardwood floors and baseboard will be maintained.

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Number 37 **Feature** Interior-Building 227, attic **Date of Feature** 1904, later alterations

Describe existing feature and its condition

A doorway in the corridor opens to stairs leading to the attic. A brick wall running east-west divides the attic in half. It has been partially finished with wood studs and panels and finished hardwood floors at the south unit.

Photo numbers 96 Drawing numbers A-14.0, A-15.2

Describe work and impact on feature

The attic will be sealed off at its floor and an access door constructed in the new panel. Insulation will be blown into the attic space. The attic will be generally inaccessible to tenants but the panel will make the space accessible when necessary. Existing partitions and floors will remain and not altered.

Number 38 **Feature** Exterior-Building 229, rear porches **Date of Feature** 1907, later alterations (date unknown)

Describe existing feature and its condition

The west facade of each ell has a one-story, hipped-roof, enclosed frame porch with simple pilasters at the corners and a variety of windows and doors filling the walls. At the interior, each of the paired porches are divided by a non-original interior wall. Interior floors are painted or covered with nonhistoric materials. The building's north wall is painted.

At the exterior, the porches rest on brick or concrete pillars, most of which are failing. The exterior stairs consist of wood stairs ending at a concrete stair; all four sets of wood steps are failing. The exterior walls have various layers of flaking paint.

Photo numbers 109, 110, 127 Drawing numbers A-14.0, A-16.2, A-16.3, A-16.4, A-16.5

Describe work and impact on feature

The infill walls, roofing materials, and wood steps of the rear porches will be removed. The masonry porch supports will be removed and rebuilt.

New wood steps will be built at the rear south end of the south porch and the rear north end of the north porch. A wood "bridge" will connect the two porches to provide accessibility. The columns, floors, and roof structure will be repaired and repainted. New standing-seam metal roofing will be installed. The lattice under the porch will be removed and replaced with new treated wood lattice. New 3'-high aluminum railings will be installed at the fronts and sides of the porches. A gutter system will be installed on the roof (see description in Item 30).

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Number 39 **Feature** Interior-Building 229, first floor, living and dining rooms **Date of Feature** 1907, later alterations

Describe existing feature and its condition

The front door opens into a living room. Stairs with a square wood newel-post run up the wall shared with the paired unit to the second floor. An archway on the living room's west wall leads to a dining room. An eight-over-eight double-hung exterior window overlooking the space between the two units is at the corner opposite a small closet underneath the main staircase.

Photo numbers 120–124 Drawing numbers A-14.0, A-16.1, A-16.2

Describe work and impact on feature

Non-historic wall and floor coverings, cabinets, small closets, and fixtures will be removed. Plaster walls and ceilings will be repaired and painted. Wood trim and finishes will be scraped, repaired, and repainted. Hardwood floors will be refinished.

Number 40 **Feature** Interior-Building 229, first floor, kitchens and butler's pantries **Date of Feature** 1907, later alterations

Describe existing feature and its condition

On each unit's first floor, a wide corridor connects the dining room and kitchen. On one side of the corridor is a butler's pantry with built-in cabinetry. The opposite side holds a spiral stairway leading to the basement. Some of the units have a small closet or cabinet built on the landing in this area. The kitchen is a large, square room with windows on the rear (west) wall. A door on the kitchen's west wall opens into the back porch. Most kitchens have non-historic cabinetry, countertops, and floor finishes.

Photo numbers 125–126 Drawing numbers A-14.0, A-16.2

Describe work and impact on feature

Non-historic wall and floor coverings, cabinets, small closets, and fixtures will be removed. Plaster walls and ceilings will be repaired and painted. Hardwood floors and baseboard will be maintained and refinished.

New counters with cabinets 3'-0" in height, wall cabinets, and new appliances will be installed at the kitchens' shared wall. At its rear wall, a free-standing countertop will be mounted at 3'-0" height. New combination storm doors will be installed at the rear entrance.

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Number 41 **Feature** Interior-Building 229, second floor, bedrooms and corridor **Date of Feature** 1907, later alterations

Describe existing feature and its condition

The stairs in the living room lead to the second-floor landing, which opens onto a corridor that runs parallel to the stair. Some of the units have a non-historic closet built at the east end of the corridor that extends over the staircase. The master bedroom is at the front (east side) of the second floor. It has a large walk-in closet with a window and built-in shelves. The central bedroom has a small closet. The third bedroom does not have a closet but in some units has a built-in cabinet. A small panel on the corridor's ceiling provides access to the unit's attic space.

The walls and ceiling are painted plaster. Historic wood trim is retained, including tall baseboards and narrow, dropped crown molding. The wood bedroom doors have a vertical, five-panel design and single-pane, awning-style transom windows. Due to having been painted numerous times, the woodwork's paint is peeling in many areas.

Photo numbers 128–129 Drawing numbers A-14.0, A-16.2

Describe work and impact on feature

Non-historic wall and floor coverings will be removed. Plaster walls and ceilings will be repaired and painted. Hardwood floors and baseboard will be maintained. Wood doors and trims will be scraped and repainted. Built-in, 7'-0"-high wardrobe cabinets will be installed in the rear bedrooms.

Number 42 **Feature** Interior-Building 229, basement **Date of Feature** 1907, later alterations

Describe existing feature and its condition

The basement has stone masonry walls and a poured concrete floor. It is divided into two rooms: one encompasses the area underneath the living and dining rooms, and one is underneath the kitchen. A central, wood, floor joist and is held in place by a brick pillar. A door provides access to the exterior.

Photo numbers 136–138 Drawing numbers 16.1, 16.2

Describe work and impact on feature

Steel bulkhead doors and enclosures will be installed over the exterior access stairs at the rear of the building. Interior stairs will be repainted.

Floors will be sealed concrete. Existing masonry walls will be left exposed. New HVAC systems and hot-water heaters will be installed (Items 45 and 47).

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

Property address Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 43 **Feature** Exterior-Buildings 227 and 229, site work **Date of Feature** Later alterations

Describe existing feature and its condition

The site is bounded by Bloomington Road to the east, a large parking lot to the north, and a curved road to the west and south. The buildings are surrounded by a large, grassy lawn that is generally flat and open, with mature trees and some smaller shrubs. Small pathways lead from the curved road to the rear of both residences; Building 227's is abutted by a paved parking space. East of the residences, a concrete sidewalk runs along the west side of Bloomington Road.

Photo numbers 73, 75, 101–103 Drawing numbers T-0.1, A-15.0, A-15.1

Describe work and impact on feature

Small bituminous-covered parking lots will be constructed west of Building 229 (six stalls) and Building 227 (four stalls). These will front onto concrete sidewalks, with concrete sidewalks connecting to the rear entrances. The area between the porches and both parking lots will be graded into a gentle slope to facilitate accessibility without the need for a ramp. Concrete-block retaining walls will be constructed near the proches.

In front of both buildings, new 4'-wide walkways will run from the sidewalk along Bloomington Road to the front steps (Item 29).

Number 44 **Feature** Interior-Building 229, fire suppression **Date of Feature** N/A

Describe existing feature and its condition

The building does not have a fire protection system.

Photo numbers N/A Drawing numbers A-16.2

Describe work and impact on feature

Building 229 will have a modern fire suppression system. Detailed plans will be included in an amendment.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family) NPS Project Number 29033

Property address Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 45 **Feature** Interior-Buildings 227 and 229, plumbing **Date of Feature** Later alterations

Describe existing feature and its condition

The residences are fitted with a modern plumbing and sewage systems in their restrooms and kitchens. In Building 229, toilets are located in the basement.

Photo numbers 84–88, 93, 123, 124, 132, 137 Drawing numbers A-15.3, M-1.07, M-1.08

Describe work and impact on feature

Existing plumbing fixtures and related components will be removed. New sanitary sewer piping will be installed in both buildings. Pipes will be provided for a toilet and utility sink in both units of 227, as well as for the new half-bath on the first floor and the new fixtures on the second-floor bathroom.

Piping will be insulated. New water heaters will be installed in the basements of all units.

Number 46 **Feature** Interior-Buildings 227 and 229, electrical system **Date of Feature** Later alterations

Describe existing feature and its condition

Both buildings have modern electrical systems and fixtures, including exterior lights at the doorways and security lights in the gable ends.

Photo numbers 84–88, 93, 123, 124, 132, 137 Drawing numbers A-6.0, E-4.00, E-5.00, E-6.00

Describe work and impact on feature

The electrical systems will be removed and a new electrical system installed. Ceiling fans will be installed in all bedrooms, living rooms, dining rooms, and front porches. Ceiling fixtures will be installed in the kitchens, pantries, closets, attics, and corridors. Bathrooms will have wall-mounted light fixtures. New electrical sockets will be installed. Electrical risers will be installed in the basement of each building.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Property name: Building 210 (Quartermaster Shops), Buildings 211 and 214 (Quartermaster Stables), Buildings 227 and 229 (NCO Quarters, Two- and Four-Family)

NPS Project Number: 29033

Property address: Bloomington Road, Fort Snelling, MN 55111

5. Detailed description of rehabilitation work Reproduce this page as needed to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 47 **Feature** Interior-Buildings 227 and 229, HVAC **Date of Feature** Later alterations

Describe existing feature and its condition

Building 227 is heated by radiators. In the basement, a small coal room is at the rear corner and a cast-iron boiler is at the center of the floor.

Building 229 is also heated by radiators and metal grates are between some rooms. In the basement, a small coal room is at the rear corner and a cast-iron boiler is at the center of the floor. Modern HVAC equipment and hot water heaters have been installed.

Photo numbers: 98, 138 Drawing numbers: M-2.04, M-2.05

Describe work and impact on feature

The boiler and related components will be removed and forced-air HVAC systems installed. Ductwork will be concealed in the walls and ceilings and the first and second floors.

In Building 227, heaters will be installed in both basements. A 20" and a 16" duct will be attached at the ceiling with smaller ducts extending outwards. Four 12" x 3" ducts will be installed through the center wall to carry tempered air through the house while 12" x 6" vents will be installed at various places in the walls and floor.

The same ventilation system will be used in Building 229, with 8" ducts extending through the basement. The tempered air duct will be installed in the wall at the kitchen and second-floor bathroom.

Number 48 **Feature** Exterior-Buildings 210, 211, and 214, site work **Date of Feature** Later alterations

Describe existing feature and its condition

A rectangular parcel of land is bounded roughly to the northwest by 211 and 214, to the northeast by 210, to the southeast by Bloomington Road, and to the southwest by Minnehaha Road. The majority of the land, fronting along Bloomington and Minnehaha, is not included in this project. It is undergoing work. The land affiliated with the project that is adjacent to 211 and 214 is primarily large areas of grass with some scattered trees. Concrete pads extended along the east facades of and between the two buildings, continuing to the north facade of 210. The land around 210 is grown in, with bushes, tall grass, and undergrowth. A chain-link fence prevents access to the north facade of 210 and property northeast of the site.

A gravel driveway extending from Minnehaha Avenue runs along the east facade of 211 and 214. Adjacent to this is Building 215, a frame gas station building built in 1932.

Photo numbers: 5, 20, 47 Drawing numbers: T-0.1, A1.0, A1.1, A1.2

Describe work and impact on feature

The concrete pads will be demolished. A new 24'-wide asphalt drive will extend from Minnehaha Avenue to the northwest corner of 210. It will have thirty-six parking stalls (34 regular, 2 accessible) along the east facades of 211 and 214. These will abut a 6'-wide concrete sidewalk that wraps around the central-facing facades of all three buildings and continues to Minnehaha Avenue and all building entrances.

A concrete patio with benches and trash cans will be installed between the sidewalk and the central building link.

A 19'-6" concrete walk will extend from the rear of the new link additions between Buildings 211 and 214. A 16' x 11' recycling and trash enclosure at its north side will have a 6"-high vinyl enclosure fence with 6" x 6" steel posts and latching gates.

Photograph 1
View: Fort Snelling, **Building 210**, (l-r) east and north facades, looking southwest
Description: Undated historic photograph of Building 210 (Quartermaster's Records, Minnesota Historical Society)

Photograph 2
View: Fort Snelling, **Building 210**, looking northeast
Description: View (l-r) of west and south facades, April 2012.

Photograph 3
View: Fort Snelling, **Building 210**, looking northwest
Description: View (l-r) of south and east facades, April 2012.

Photograph 4
View: Fort Snelling, **Building 210**, looking west
Description: View of east facade, April 2012.

Photograph 5
View: Fort Snelling, **Building 210**, looking southwest
Description: View (l-r) of east and north facades, April 2012.

Photograph 6
View: Fort Snelling, **Building 210**, looking southeast
Description: View (l-r) of north and west facades, April 2012.

Photograph 7
View: Fort Snelling, **Building 210**, looking northeast
Description: View (l-r) of windows along south facade, April 2012.

Photograph 8
View: Fort Snelling, **Building 210**, looking northwest
Description: Detail view of decorative, curved rafter ends and segmental-window openings on south facade, April 2012.

Photograph 9
View: Fort Snelling, **Building 210**, looking north
Description: Detail view of decorative, curved rafter ends, segmental-window openings, and six-over-six wood-frame window with masonry sill on south facade, April 2012.

Photograph 10
View: Fort Snelling, **Building 210**, interior, looking east
Description: View of room at east end of building showing concrete-block partition walls, particle-board ceiling, and concrete floor, April 2012.

Photograph 11
View: Fort Snelling, **Building 210**, interior, looking south
Description: View of room at east end of building showing non-original partition walls (left and right) and brick exterior wall (center), April 2012.

Photograph 12
View: Fort Snelling, **Building 210**, interior, looking northeast
Description: View of room at east end of building showing particle board ceiling and brick exterior wall, April 2012.

Photograph 13
View: Fort Snelling, **Building 210**, interior, looking north
Description: View of room near center of building showing north wall with windows and entrance door. Chimney at is at right, April 2012.

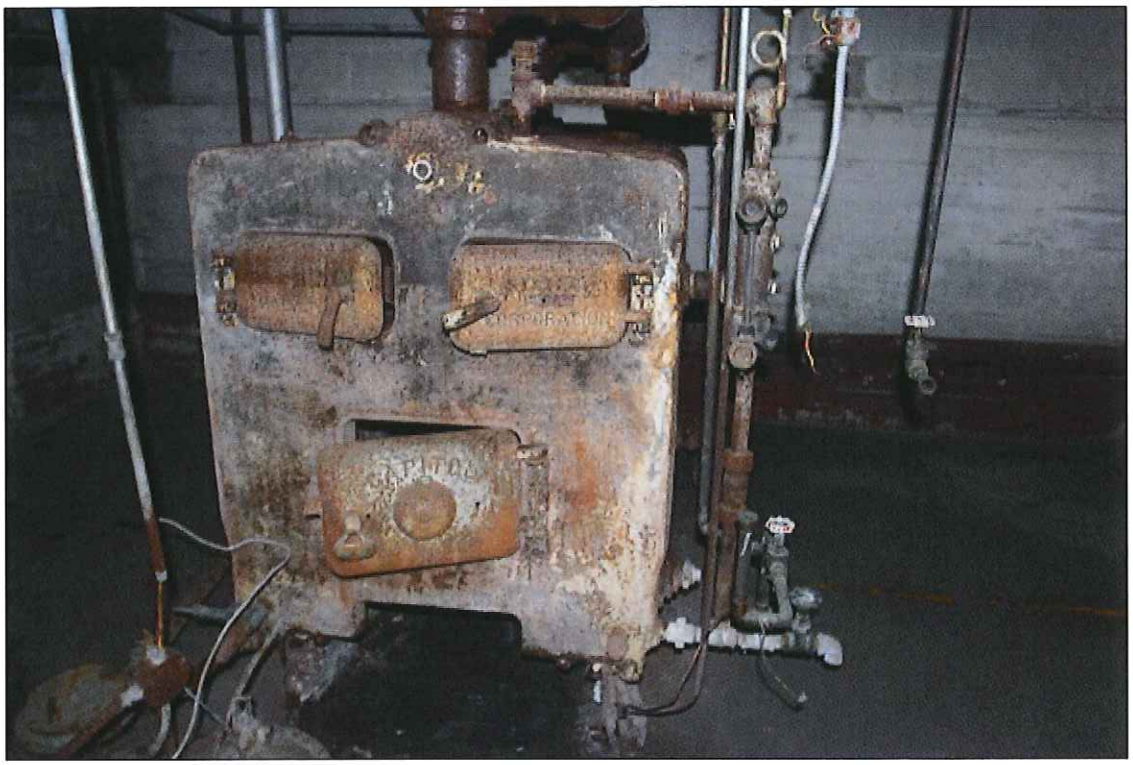
Photograph 14
View: Fort Snelling, **Building 210**, interior, looking north
Description: View of restroom along north wall with particle-board toilet stall at left, April 2012.

Photograph 15
View: Fort Snelling, **Building 210**, interior, looking northeast
Description: View of room near west side of building, showing non-historic partition wall with doorway, April 2012.

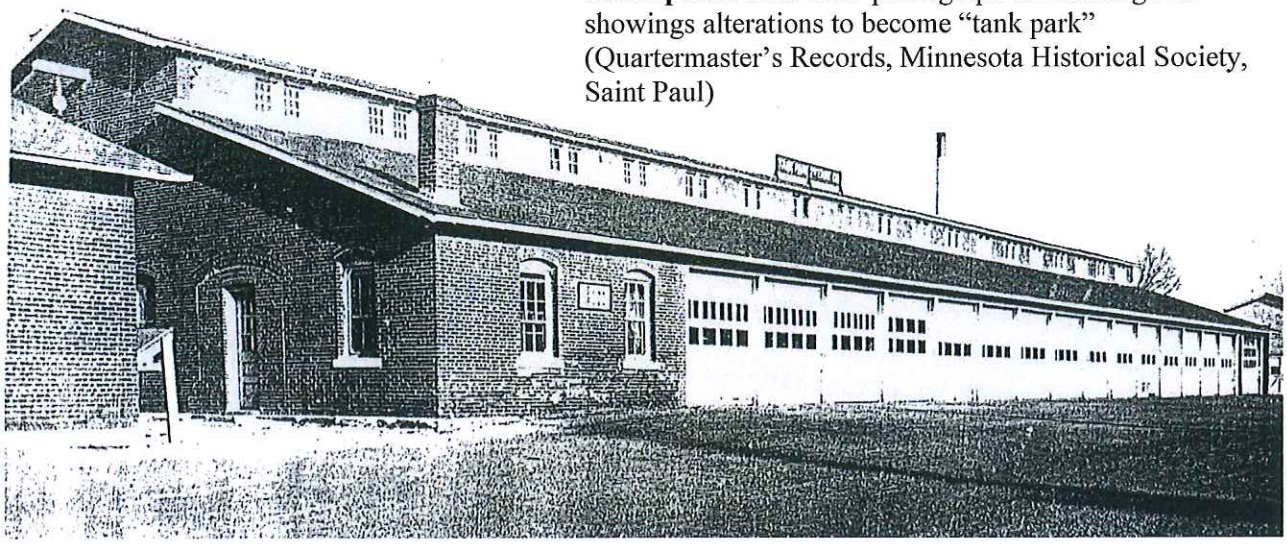
Photograph 16
View: Fort Snelling, **Building 210**, interior, looking north
Description: View of room near west side of building, showing stairs to basement, April 2012.

Photograph 17
View: Fort Snelling, **Building 210**, interior, looking southeast
Description: View of room at southeast corner of basement, April 2012.

Photograph 18
View: Fort Snelling, **Building 210**, interior, looking east
Description: View of boiler in basement, April 2012.



Photograph 19
View: Fort Snelling, **Building 211**, (l-r) south and east facades, looking northwest
Description: Post-1931 photograph of Building 211 showings alterations to become "tank park" (Quartermaster's Records, Minnesota Historical Society, Saint Paul)



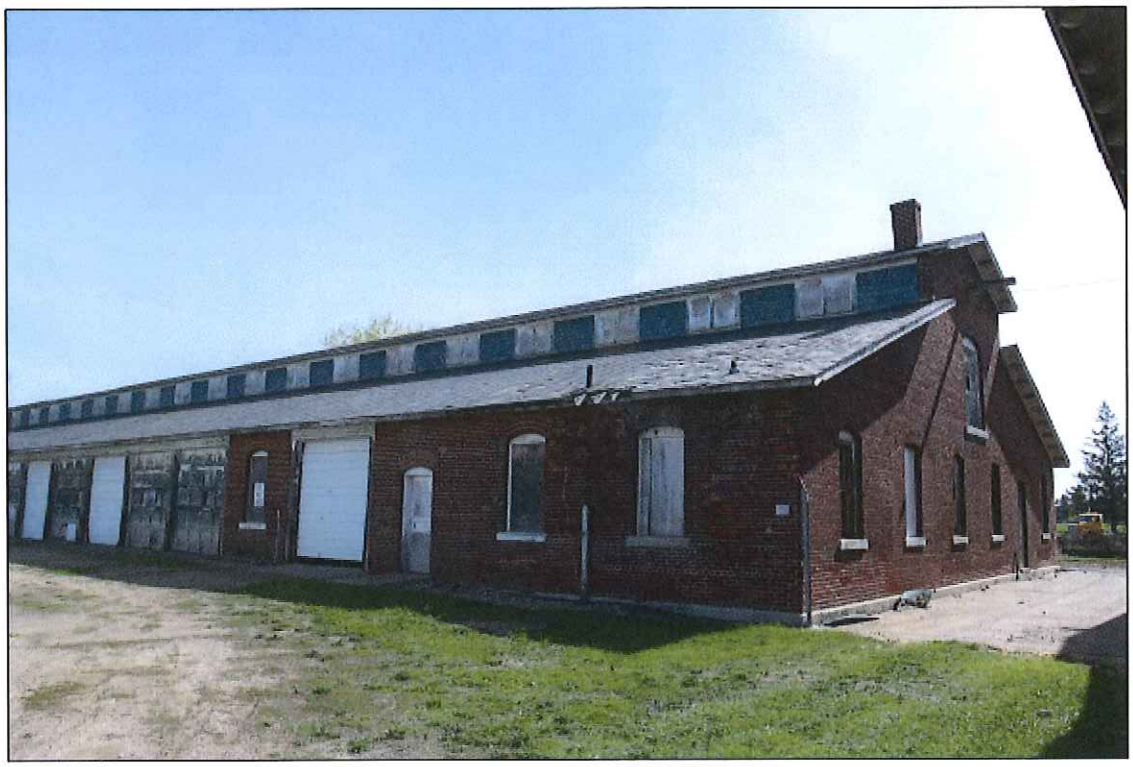
Photograph 20
View: Fort Snelling, **Building 211**, looking northwest
Description: View (l-r) of south and east facades, April 2012.

Photograph 21
View: Fort Snelling, **Building 211**, looking southwest
Description: View (l-r) of east and north facades with one-story concrete-block addition in foreground, April 2012.

Photograph 22
View: Fort Snelling, **Building 211**, looking southeast
Description: View (l-r) of north and west facades, April 2012.

Photograph 23
View: Fort Snelling, **Building 211**, looking southeast
Description: View (l-r) of north and west facades, August 2009.

Photograph 24
View: Fort Snelling, **Building 211**, looking northeast
Description: View (l-r) of west and south facade, April 2012.



Photograph 25
View: Fort Snelling, **Building 211**, looking west
Description: View of six-over-six double-hung windows

Photograph 26
View: Fort Snelling, **Building 211**, looking south
Description: View of awning-style windows in one-story addition

Photograph 27
View: Fort Snelling, **Building 211**, interior, looking southwest
Description: View of former restroom area at southwest corner of first floor, April 2012.

Photograph 28
View: Fort Snelling, **Building 211**, interior, looking northwest
Description: View (l-r) of enclosed rooms along south wall of first floor. Dropped ceiling and partition walls have a large amount of water damage and mold, April 2012.

Photograph 29
View: Fort Snelling, **Building 211**, interior, looking west
Description: View of south section of first floor showing wood posts, concrete floor, and single modern overhead door at rear, April 2012.

Photograph 30
View: Fort Snelling, **Building 211**, interior, looking southwest
Description: View of south section of first floor with office partition walls at rear and loft space at upper right and center, April 2012.

Photograph 31
View: Fort Snelling, **Building 211**, interior, looking northwest
Description: View of first floor, showing post-and-beam construction, concrete floor, and wall of overhead doors (right), April 2012.

Photograph 32
View: Fort Snelling, **Building 211**, interior, looking southeast
Description: View of northwest area of first floor, showing post-and-beam construction and floor of loft space (rear left), April 2012.

Photograph 33
View: Fort Snelling, **Building 211**, interior, looking west
Description: View of boiler in pit at northwest corner of first floor, April 2012.

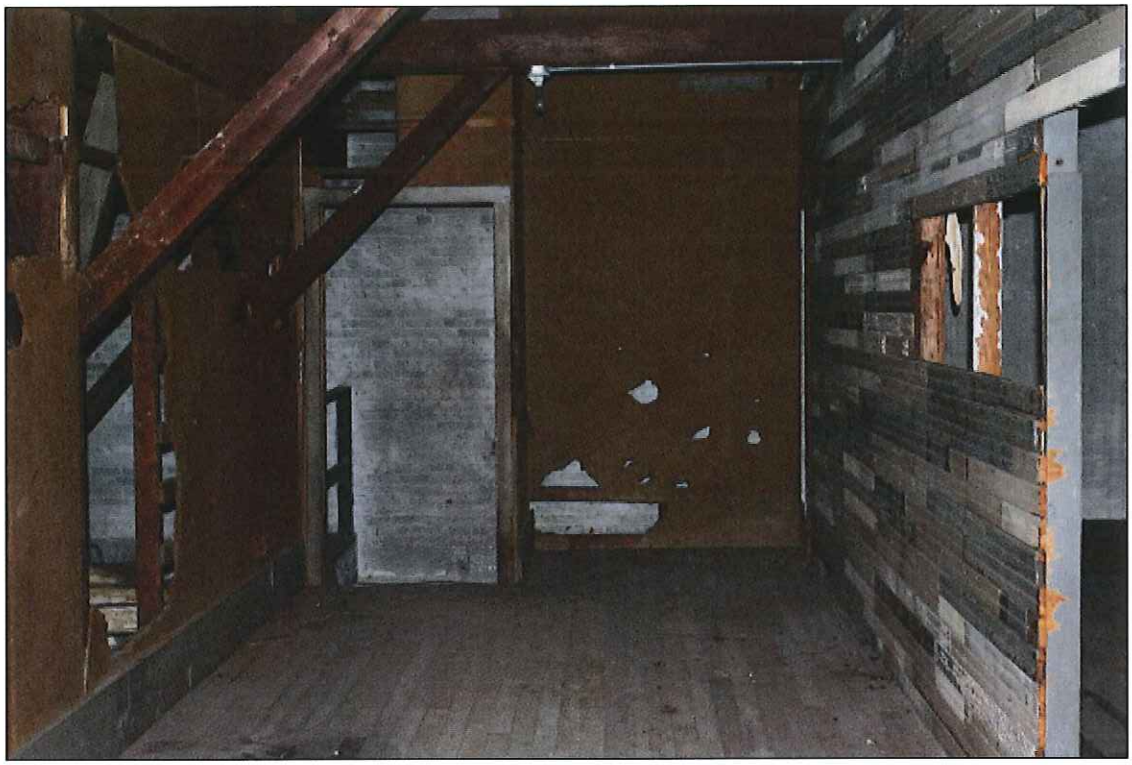
Photograph 34
View: Fort Snelling, **Building 211**, interior, looking northwest
Description: View of first floor's north wall showing loft space (upper left) and door to first-floor addition (left), April 2012.

Photograph 35
View: Fort Snelling, **Building 211**, interior, looking northwest
Description: View of north wall of one-story addition showing awning-style windows, concrete floor, and concrete-block wall, April 2012.

Photograph 36
View: Fort Snelling, **Building 211**, interior, looking west
Description: View of ceiling of one-story addition showing damage to joists and battens, April 2012.

Photograph 37
View: Fort Snelling, **Building 211**, interior, looking southwest
Description: View of east wall of loft space as seen from first floor, April 2012.

Photograph 38
View: Fort Snelling, **Building 211**, interior, looking southeast
Description: View of wood ceiling construction, including joists, rafters, and purlins, April 2012.

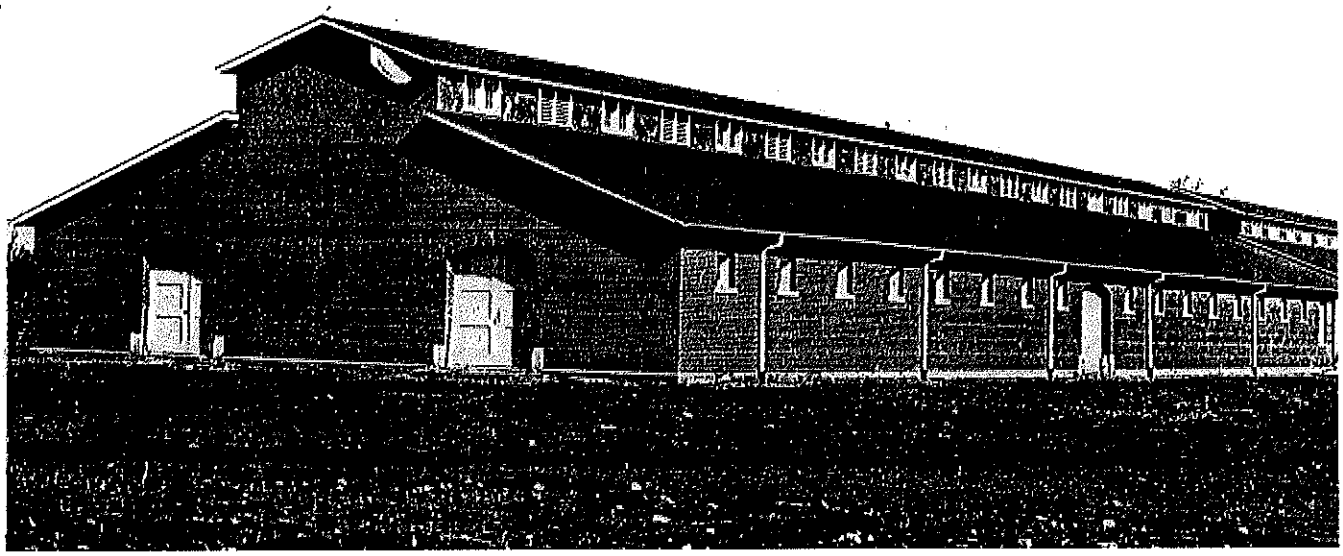


Photograph 39
View: Fort Snelling, **Building 211**, interior, looking north
Description: North section of loft space with stairs to first floor at left, April 2012.

Photograph 40
View: Fort Snelling, **Building 211**, interior, looking east
Description: View of nine-light, hopper-style, wood-frame windows located in monitor, April 2012.

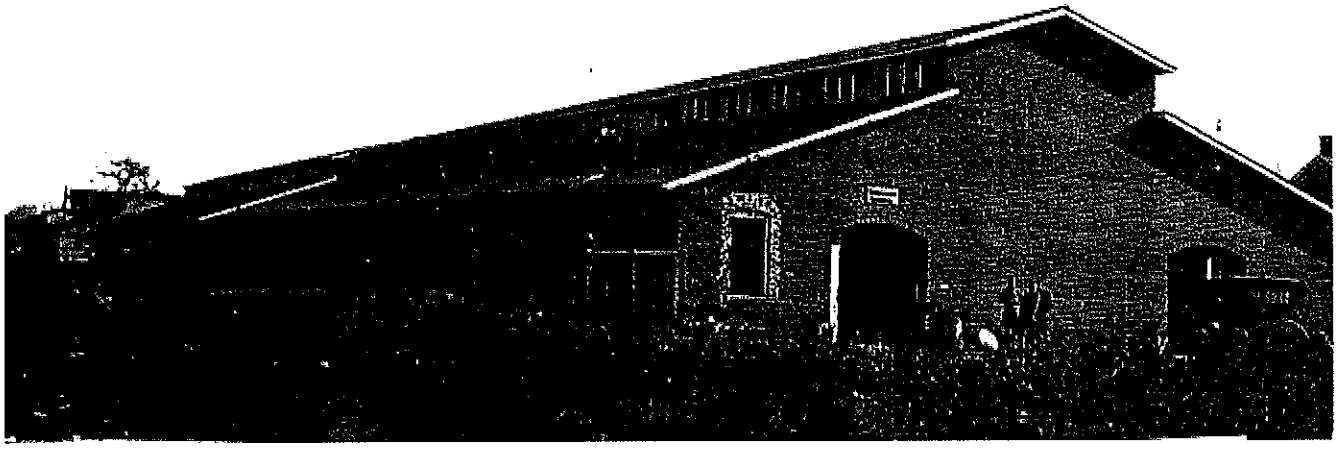
Photograph 41
View: Fort Snelling, **Building 211**, interior, looking south
Description: View of ceiling in room at south end of loft space showing raftering in ceiling, April 2012.

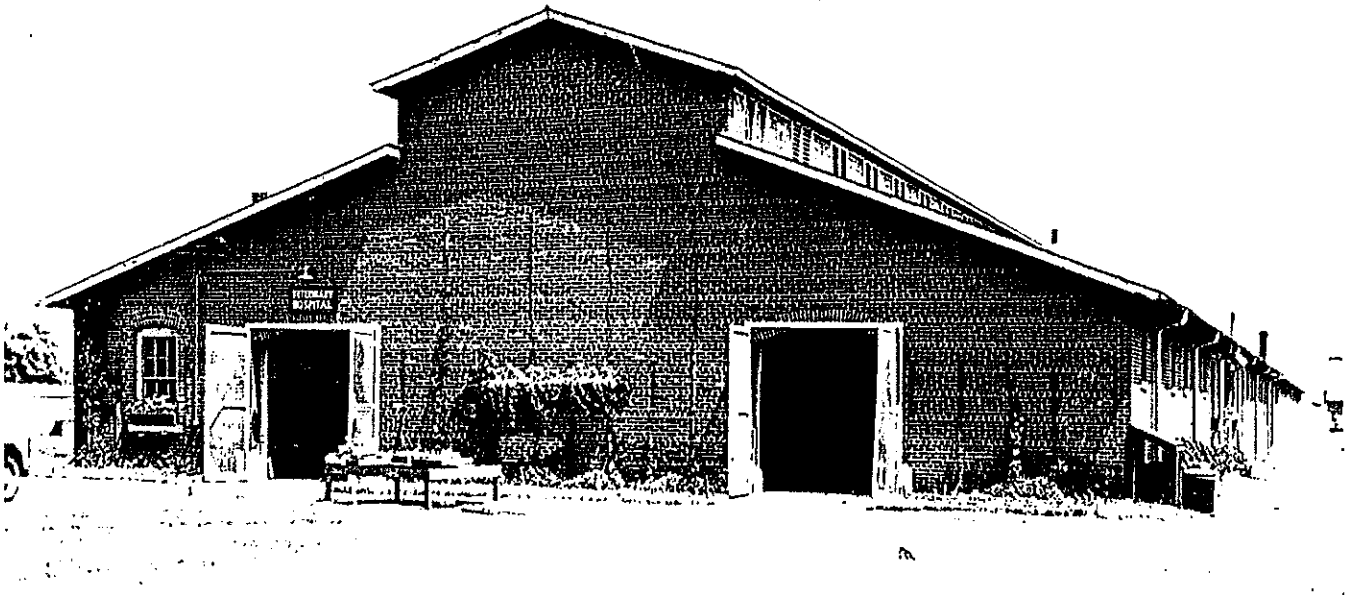
Photograph 42
View: Fort Snelling, **Building 211**, interior, looking south
Description: View of room at south end of loft space showing wood post-and-beam construction, brick exterior wall, and wood double door with segmental-arch lintel, April 2012.



Photograph 43
View: Fort Snelling, **Building 214**, (l-r) south and east facades, looking northwest
Description: Undated historic photograph of Building 214 showing building as a stable (Quartermaster's Records, Minnesota Historical Society, Saint Paul)

Photograph 44
View: Fort Snelling, **Building 214**, (l-r) west and south facades, looking northeast
Description: Undated historic photograph of Building 214 showing alterations on south facade and west facade prior to construction of one-story additions (Quartermaster's Records, Minnesota Historical Society, Saint Paul)



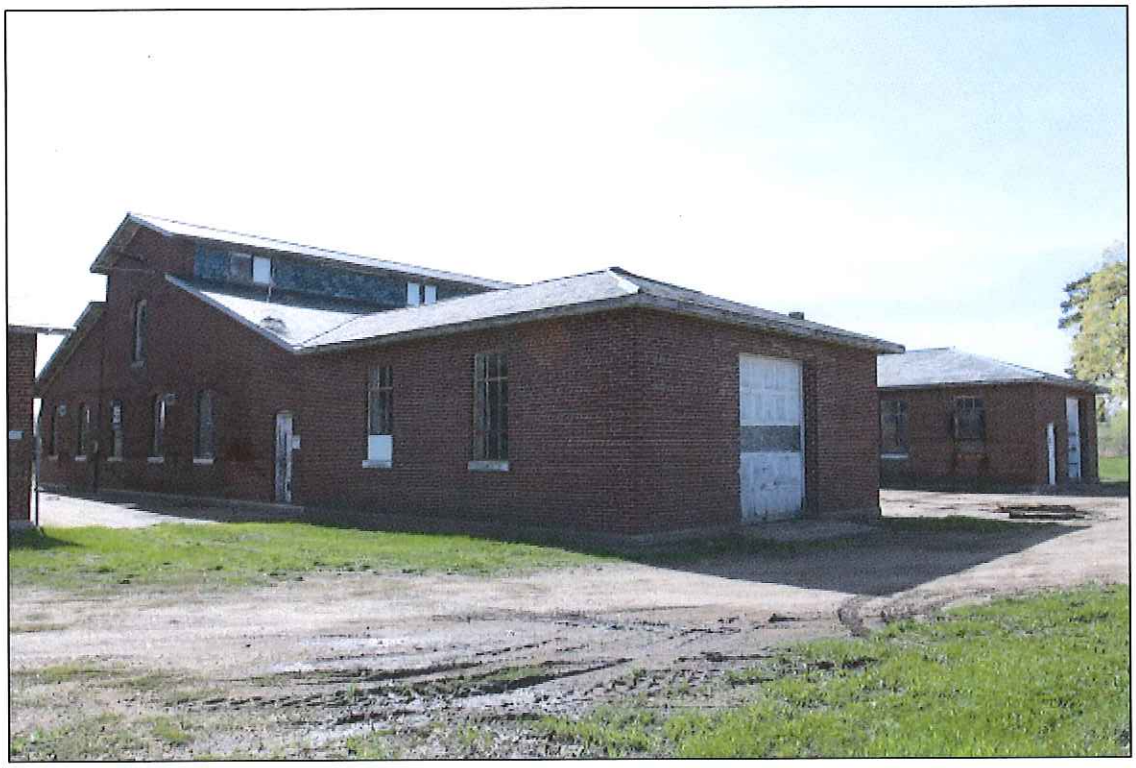


Photograph 45
View: Fort Snelling, **Building 214**, (l-r) south and east facades, looking northwest
Description: Post-1923 photograph of Building 214 showing building after its conversion to a veterinary hospital (Quartermaster's Records, Minnesota Historical Society, Saint Paul)

Photograph 46
View: Fort Snelling, **Building 214**, (l-r) south and east facades, looking northwest
Description: Undated historic photograph showing the west facade after the construction of the two one-story additions (Quartermaster's Records, Minnesota Historical Society, Saint Paul)

Photograph 47
View: Fort Snelling, **Building 214**, looking northwest
Description: View (l-r) of south and east facades, April 2012.

Photograph 48
View: Fort Snelling, **Building 214**, looking southeast
Description: View (l-r) of north and west facades showing one-story additions, April 2012.



Photograph 49
View: Fort Snelling, **Building 214**, looking east
Description: View of west facade showing one-story additions, April 2012.

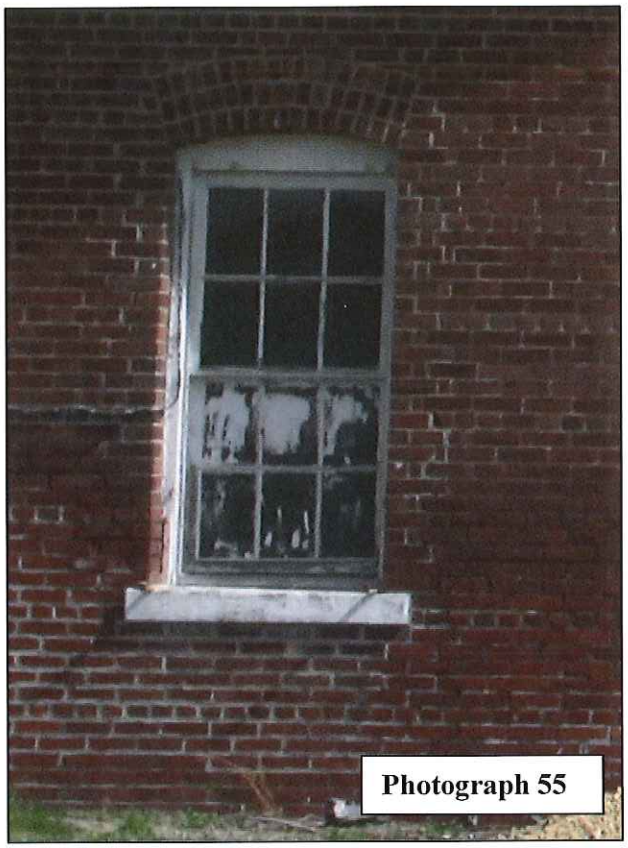
Photograph 50
View: Fort Snelling, **Building 214**, looking east
Description: View of south half of west facade, April 2012.

Photograph 51
View: Fort Snelling, **Building 214**, looking north
Description: View of south facade, April 2012.

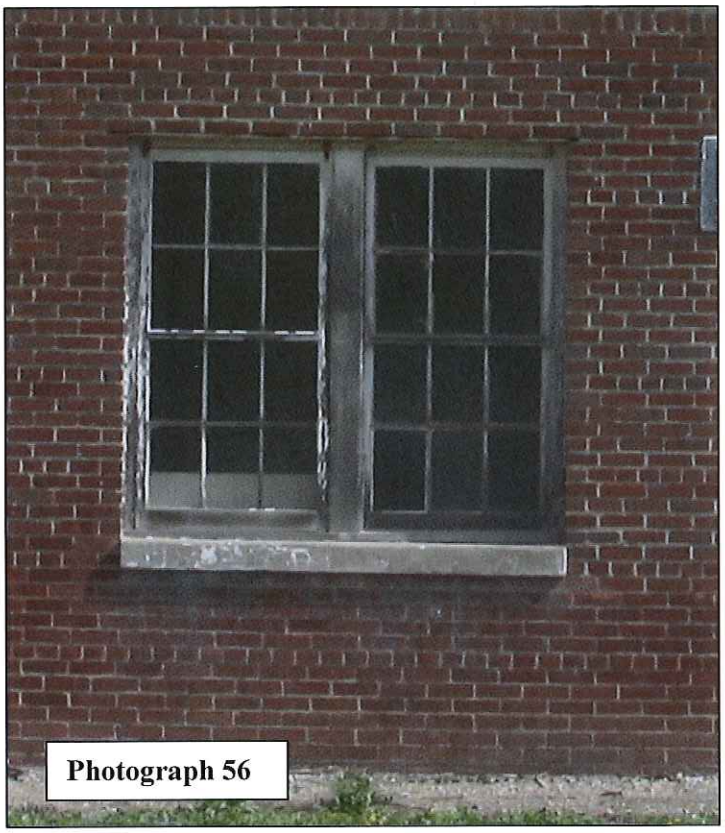
Photograph 52
View: Fort Snelling, **Building 214**, looking northwest
Description: View (l-r) of south and east facades showing decorative curved rafter ends, brick infill and masonry repair, and window openings with masonry sills, February 2010.

Photograph 53
View: Fort Snelling, **Building 214**, looking southwest
Description: View of east facade showing south entrance with frame awning, decorative curved rafter ends, and windo openings with flat lintels, February 2010.

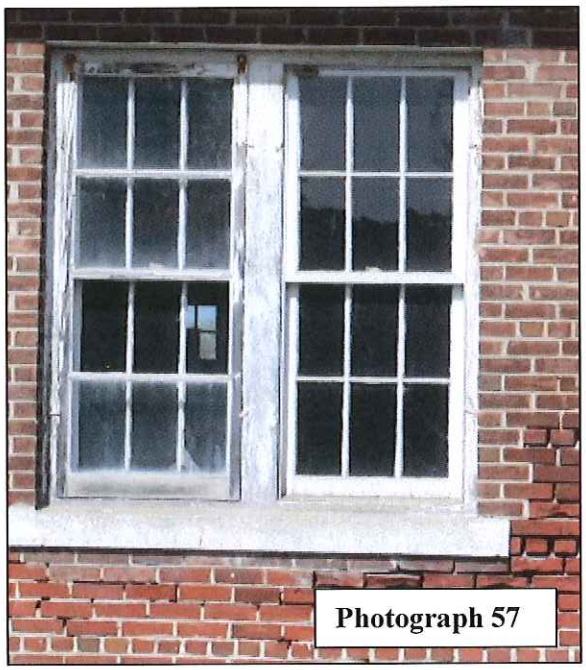
Photograph 54
View: Fort Snelling, **Building 214**, looking west
Description: View of entrance at center of east facade, April 2012.



Photograph 55



Photograph 56



Photograph 57

View: Fort Snelling, **Building 214**
Description: Detail views of various double-hung, wood-frame windows,
54. six-over-six design with segmental arch
55. six-over-six, paired (wide)
56 six-over-six, paired (narrow)

(All photographs, April 2012)

Photograph 58
View: Fort Snelling, **Building 214**, interior, looking northwest
Description: View of south room of first floor, showing wood post-and-beam construction, concrete floor, and ceiling covered with commercial tiles, April 2012.

Photograph 59
View: Fort Snelling, **Building 214**, interior, looking southwest
Description: View of restroom area at southwest corner of first floor, April 2012.

Photograph 60
View: Fort Snelling, **Building 214**, interior, looking southeast
Description: View of boiler room at northwest corner of south room of first floor. The room has brick walls, a sunken concrete floor, and two cast-iron boilers, April 2012.

Photograph 61
View: Fort Snelling, **Building 214**, interior, looking south
Description: View of chain-link cages and non-historic concrete floor in central room of first floor, April 2012.

Photograph 62
View: Fort Snelling, **Building 214**, interior, looking northeast
Description: View of chain-link cages and non-historic concrete floor in central room of first floor, April 2012.

Photograph 63
View: Fort Snelling, **Building 214**, interior, looking southeast
Description: View of chain-link cages and non-historic concrete floor in north room of first floor, April 2012.

Photograph 64
View: Fort Snelling, **Building 214**, interior, looking southeast
Description: View of ceiling in north room of first floor, April 2012.

Photograph 65
View: Fort Snelling, **Building 214**, interior, looking southwest
Description: View of interior of north one-story addition showing concrete floor, brick walls, and wood overhead door, April 2012.

Photograph 66
View: Fort Snelling, **Building 214**, interior, looking south
Description: View of loft space showing ceiling rafters, April 2012.

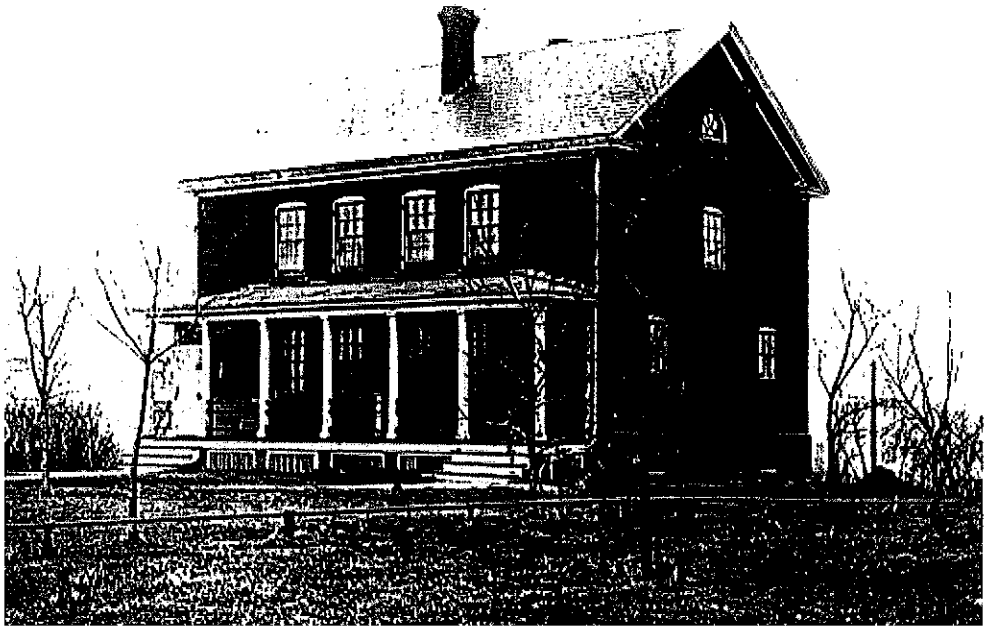
Photograph 67
View: Fort Snelling, **Building 214**, interior, looking east
Description: View of nine-light, wood-pane windows in monitor, April 2012.

Photograph 68
View: Fort Snelling, **Building 214**, interior, looking south
Description: View of loft space showing door to HVAC catwalk (rear), April 2012.

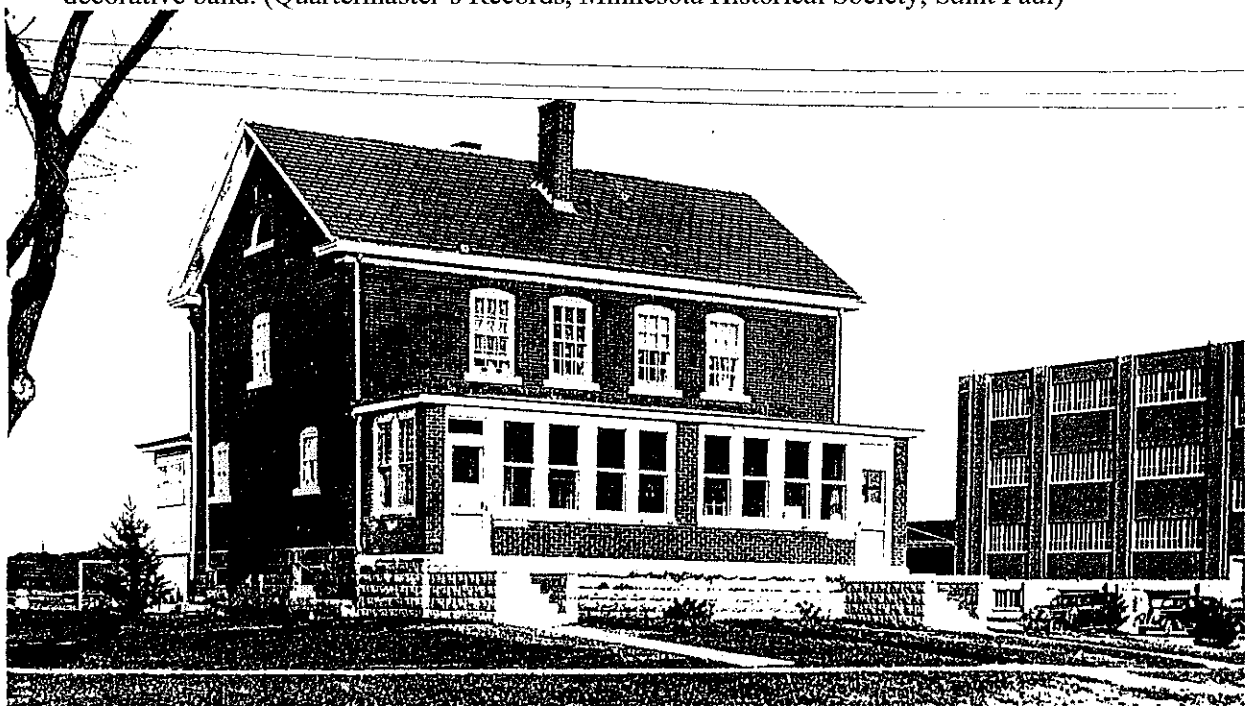
Photograph 69
View: Fort Snelling, **Building 214**, interior, looking south
Description: View of ductwork, equipment, and metal catwalk suspended from ceiling of center room, April 2012.

Photograph 70
View: Fort Snelling, **Building 214**, interior, looking southeast
Description: View towards inaccessible space above south room of first floor as seen from HVAC catwalk (center and right). Chain-link cages and steel beams of central room are visible (below), April 2012.

Photograph 71
View: Fort Snelling, **Building 227**, (l-r) east and north facades, looking southwest
Description: C. 1904 photograph of Building 227 showing original open front porch. Rear porches are not visible. The chimneys have a decorative cap. (Quartermaster's Records, Minnesota Historical Society, Saint Paul)



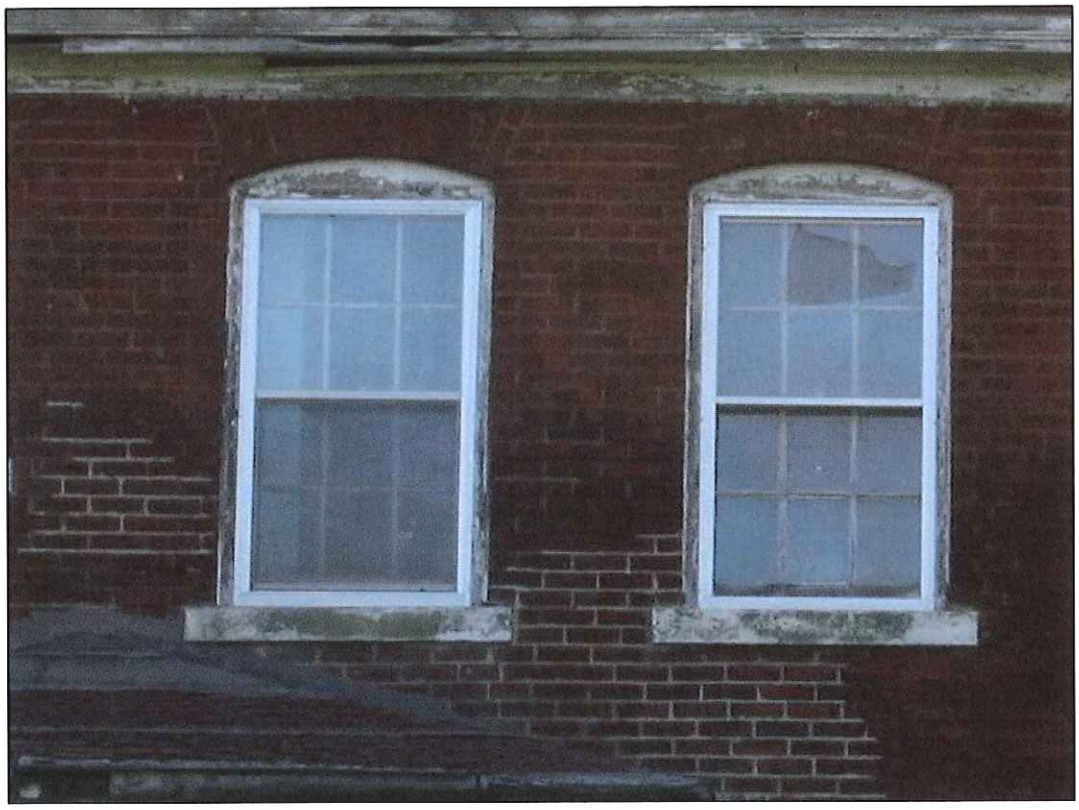
Photograph 72
View: Fort Snelling, **Building 227**, (l-r) east and north facades, looking southwest
Description: C. 1938 photograph of Building 227 showing newly enclosed front porches and concrete front steps. Enclosed rear porches are visible. The chimneys are narrower, with only a decorative band. (Quartermaster's Records, Minnesota Historical Society, Saint Paul)



Photograph 73
View: Fort Snelling, **Building 227**, looking northwest
Description: View (l-r) of south and east facades, April 2012.

Photograph 74
View: Fort Snelling, **Building 227**, looking west
Description: View of east (front) facade, April 2012.

Photograph 75
View: Fort Snelling, **Building 227**, looking southeast
Description: View (l-r) north and west (rear) facades, April 2012.



Photograph 76
View: Fort Snelling, **Building 227**, looking east
Description: Detail view of six-over-six, wood-frame, double-hung windows with metal-frame storms, west (rear) facade, April 2012.

Photograph 77
View: Fort Snelling, **Building 227**, looking northeast
Description: View (l-r) of west (rear) and south facades, April 2012.

Photograph 78
View: Fort Snelling, **Building 227**, looking west
Description: View of east (front) facade showing enclosed front porches, May 2012.

Photograph 79
View: Fort Snelling, **Building 227**, looking northwest
Description: View of enclosed front porch of north unit showing windows, concrete block foundation, and concrete steps with concrete-block knee walls, April 2012.

Photograph 80
View: Fort Snelling, **Building 227**, looking west
Description: Detail view of concrete front steps and concrete-block knee walls, April 2012.

Photograph 81
View: Fort Snelling, **Building 227**, looking east
Description: View of west (rear) facade showing enclosed rear porches (left and right), and entry doors to basement (center), April 2012.

Photograph 82
View: Fort Snelling, **Building 227**, looking southwest
Description: Detail view of water damage to masonry wall and stone foundation from gutter system on south facade, April 2012.

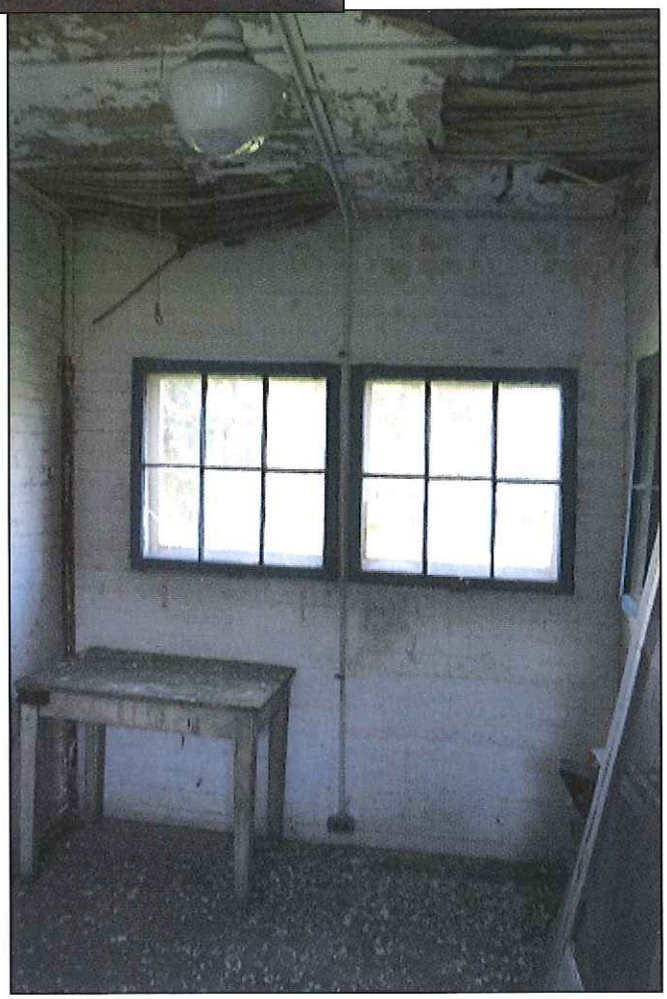
Photograph 83
View: Fort Snelling, **Building 227**, interior, looking north
Description: View of interior of front porch showing concrete floor and brick dividing wall (center) with cut doorway, April 2012.

Photograph 84
View: Fort Snelling, **Building 227**, interior, looking southwest
Description: View of south wall of living room of south unit showing (l-r) front door, staircase to second floor, and doorway to kitchen/dining area, April 2012.

Photograph 85
View: Fort Snelling, **Building 227**, interior, looking northwest
Description: View of (l-r) west and north walls of living room of south unit showing hardwood floor, baseboard, and painted plaster walls and ceiling, April 2012.

Photograph 86
View: Fort Snelling, **Building 227**, interior, looking southwest
Description: View of south wall of kitchen/dining area of south unit showing door to basement (left) and door to rear enclosed porch (right), April 2012.

Photograph 87
View: Fort Snelling, **Building 227**, interior, looking northeast
Description: View of north wall of kitchen/dining area of south unit showing door to north unit and chimney (left), April 2012.



Photograph 88
View: Fort Snelling, **Building 227**, interior, looking west
Description: View of interior of enclosed rear porch on south unit, April 2012.

Photograph 89
View: Fort Snelling, **Building 227**, interior, looking south
Description: View of south wall of kitchen/dining area of north unit showing door to south unit unit and chimney (right), April 2012.

Photograph 90
View: Fort Snelling, **Building 227**, interior, looking north
Description: View of north wall of kitchen/dining area of north unit with original basement door at right, April 2012.

Photograph 91
View: Fort Snelling, **Building 227**, interior, looking southeast
Description: View of east wall of living room of north unit showing six-over-six, double-hung windows, April 2012.

Photograph 92
View: Fort Snelling, **Building 227**, interior, looking southwest
Description: View of restroom on second floor of south unit, showing beadboard wainscoting and three-over-three, double-hung, wood-frame window. All bath fixtures have been removed, April 2012.

Photograph 93
View: Fort Snelling, **Building 227**, interior, looking northwest
Description: View of second bedroom at rear of south unit, showing hardwood floor, tall baseboard, painted plaster wall and ceiling, and six-over-six, double-hung, wood-frame window, April 2012.

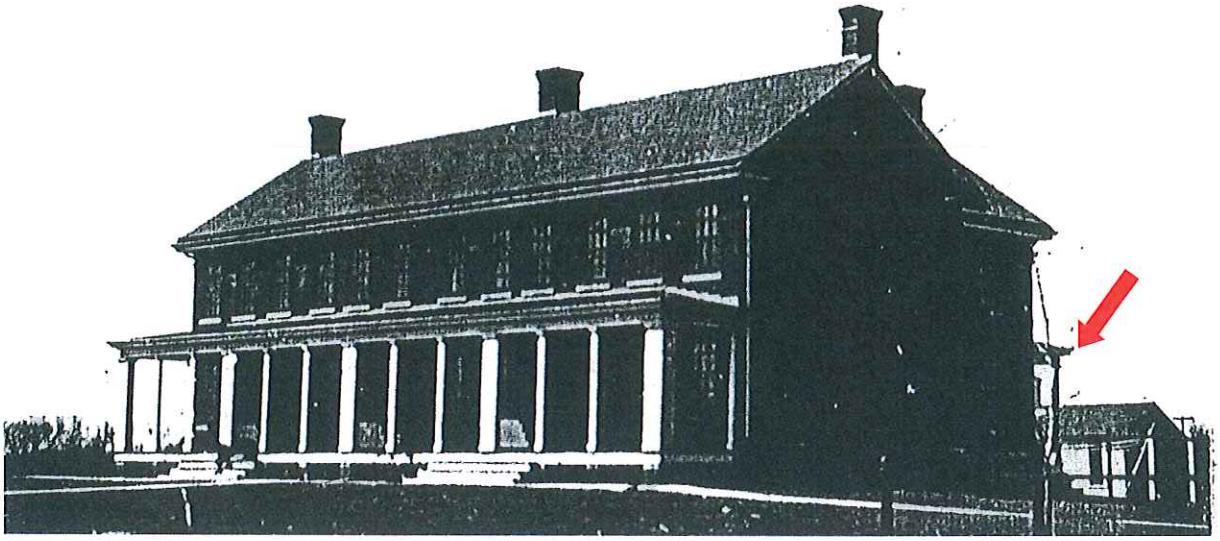
Photograph 94
View: Fort Snelling, **Building 227**, interior, looking northeast
Description: View of master bedroom at front of south unit showing hardwood floor, tall baseboard, painted plaster wall and ceiling, six-over-six, double-hung, wood-frame windows, and door to walk-in closet (right), April 2012.

Photograph 95
View: Fort Snelling, **Building 227**, interior, looking east
Description: View of second-floor corridor showing (l-r) door to master bedroom, stairs to attic, and railing overlooking main stairs, April 2012.

Photograph 96
View: Fort Snelling, **Building 227**, interior, looking northeast
Description: View of south half of attic which has been partially finished, April 2012.

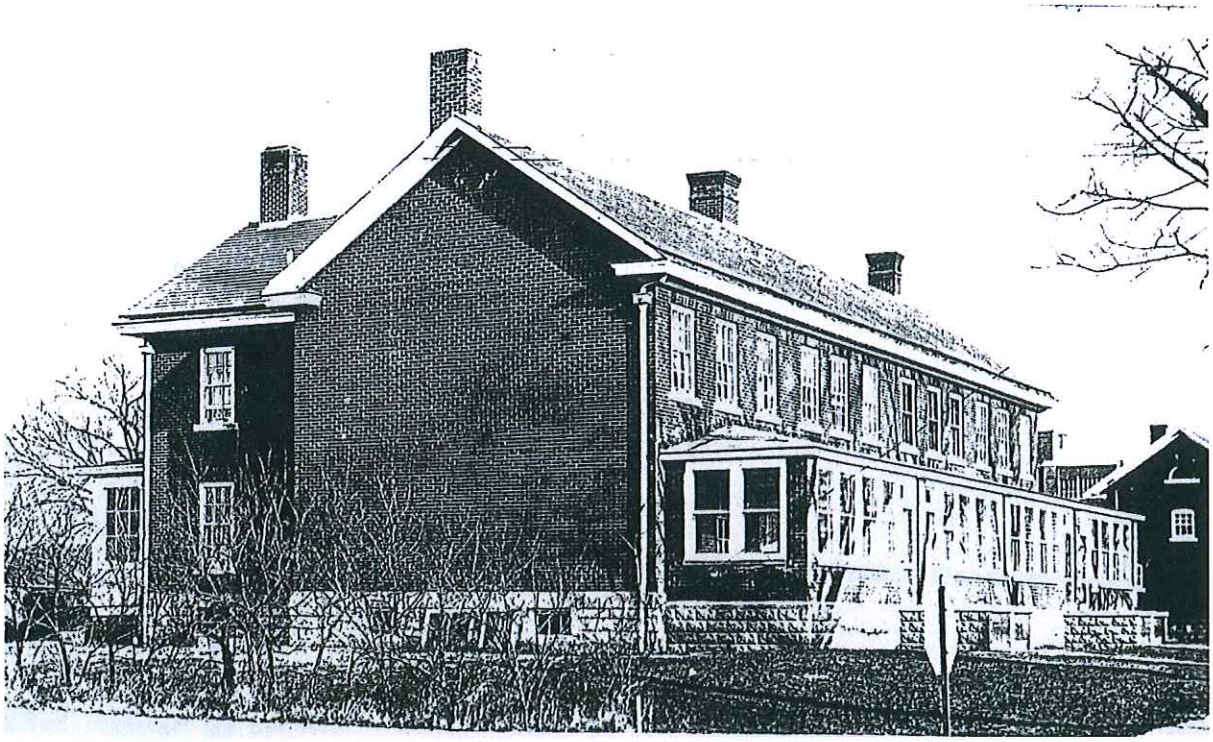
Photograph 97
View: Fort Snelling, **Building 227**, interior, looking west
Description: View of exit door on west wall in basement of north unit, April 2012.

Photograph 98
View: Fort Snelling, **Building 227**, interior, looking northwest
Description: View of north wall of basement showing ghosting from removed stairs, closed ceiling, and three-pane basement window, with boiler in foreground, April 2012.



Photograph 99 (above)
View: Fort Snelling, **Building 229**, (l-r) east and north facades, looking southwest
Description: C. 1907 photograph of Building 229 showing original open front porch. The rear porch (indicated with arrow), has a similar design and is also open. The chimneys have decorative caps with a flared design. (Quartermaster's Records, Minnesota Historical Society, Saint Paul)

Photograph 100 (below)
View: Fort Snelling, **Building 229**, (l-r) east and north facades, looking southwest
Description: C. 1938 photograph of Building 227 showing newly enclosed front porches and concrete front steps. Enclosed rear porches are visible. The southernmost chimney has been replaced with a chimney of simpler design. (Quartermaster's Records, Minnesota Historical Society, Saint Paul)



Photograph 101
View: Fort Snelling, **Building 210**, looking northwest
Description: View (l-r) of south and east (front) facades, April 2012.

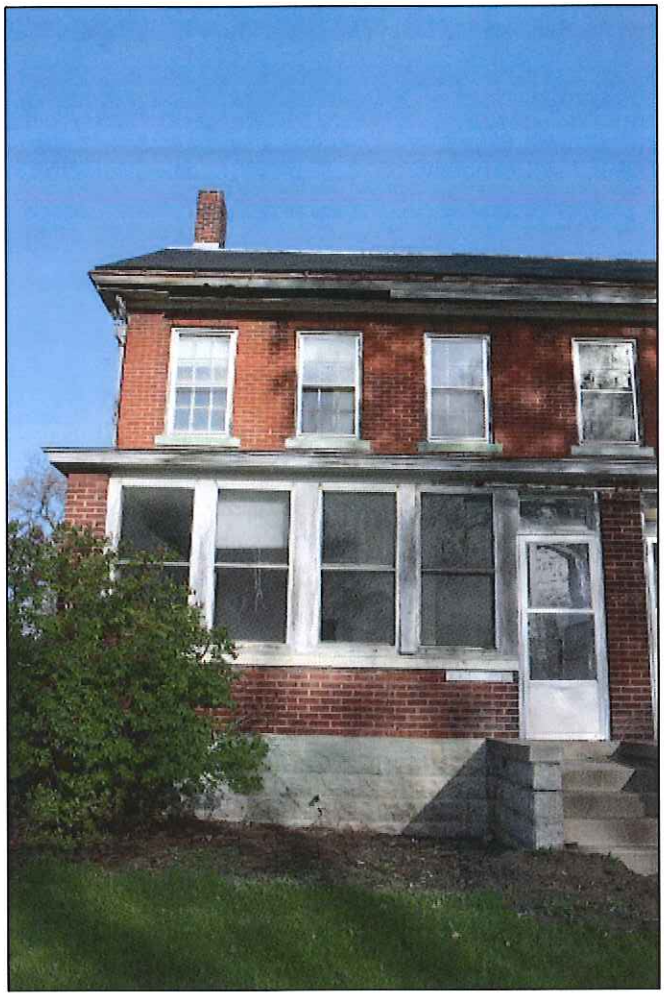
Photograph 102
View: Fort Snelling, **Building 229**, looking west
Description: View of east (front) facade showing units (l-r) 229-d, 229-c, 229-b, and 229-a, April 2012.

Photograph 103
View: Fort Snelling, **Building 229**, looking southeast
Description: View (l-r) of north and west (rear) facades, April 2012.

Photograph 104
View: Fort Snelling, **Building 229**, looking northeast
Description: View (l-r) of west (rear) and south facades, April 2012.

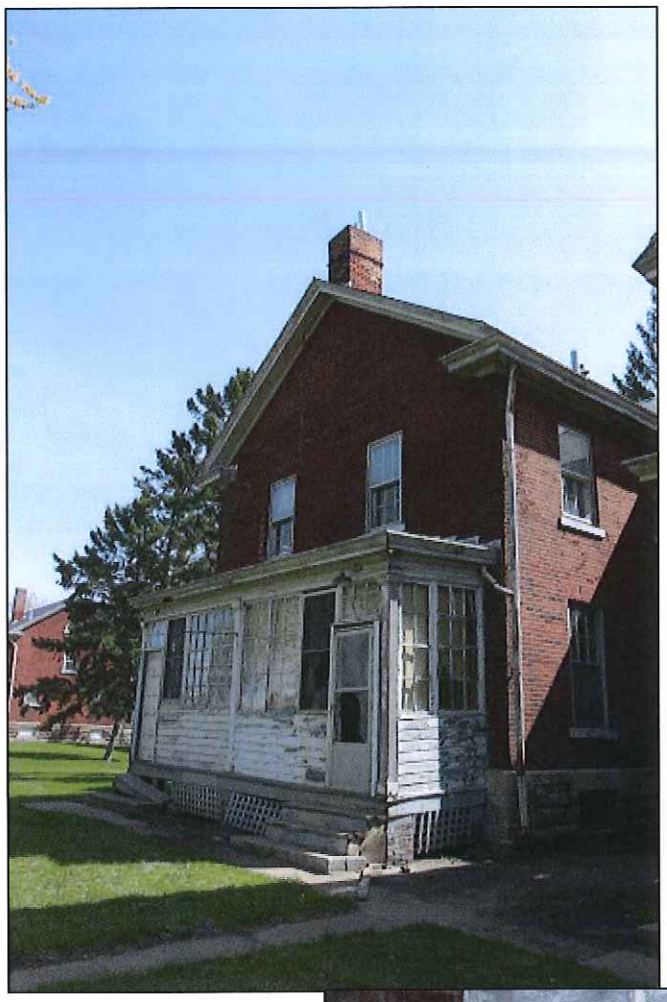
Photograph 105
View: Fort Snelling, **Building 229**, looking northwest
Description: View (l-r) south and east (front) facades, April 2012.

Photograph 106
View: Fort Snelling, **Building 229**, looking northwest
Description: Detail view of east (front) facade showing inset gutter system, water damage to eaves, and chimney with decorative cap, April 2012.



Photograph 107
View: Fort Snelling, **Building 229**, looking northwest
Description: View of enclosed front porch of south unit (229-d) showing windows, concrete block foundation, and concrete steps with concrete-block knee walls, April 2012.

Photograph 108
View: Fort Snelling, **Building 229**, looking northwest
Description: Detail view of concrete front steps and concrete-block knee walls of north unit (229-a), April 2012.



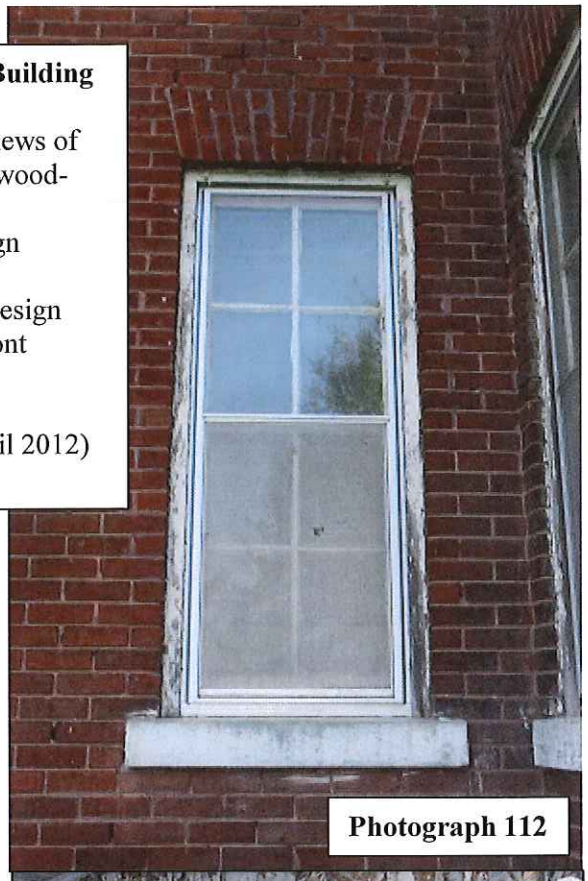
Photograph 109
View: Fort Snelling, **Building 229**, looking north east
Description: View of north rear ell showing enclosed rear porches of units 229-a and 229-b (l-r), April 2012.

Photograph 110
View: Fort Snelling, **Building 229**, looking southeast
Description: Detail view of damaged steps of enclosed rear porch of unit 229-b, April 2012.

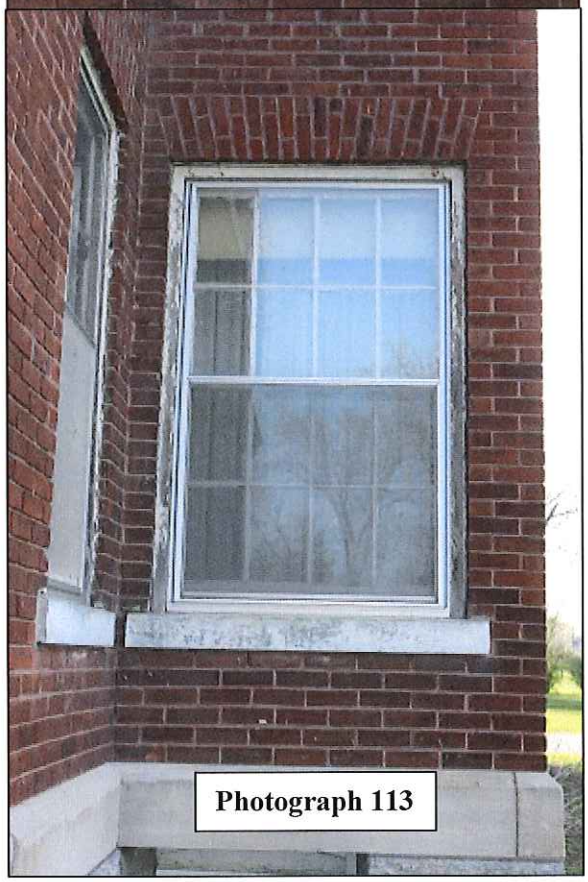
View: Fort Snelling, **Building 229**
Description: Detail views of various double-hung, wood-frame windows,
111. six-over-six design
112. four-over-four,
113 eight-over-eight design
114. one-over-one (front porch)

(All photographs, April 2012)

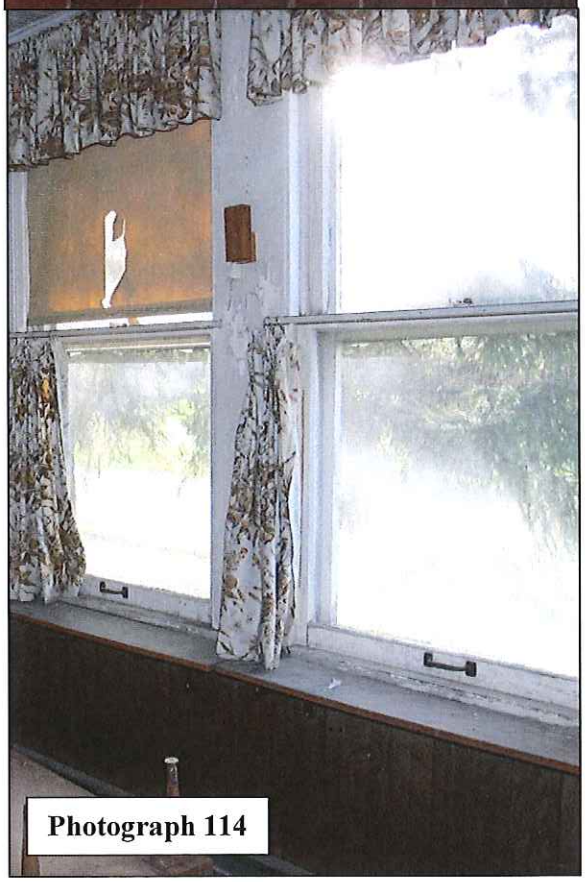
Photograph 111



Photograph 112



Photograph 113



Photograph 114

Right: Photograph 115
View: Fort Snelling, **Building 229**, looking north
Description: Detail view of three-light window in foundation wall of south facade, April 2012.

Below: Photograph 116
View: Fort Snelling, **Building 229**, looking south
Description: Detail view of two-light window in foundation wall of north facade, April 2012.

Photograph 117
View: Fort Snelling, **Building 229**, looking northeast
Description: View of exterior basement entries between rear ells, April 2012.

Photograph 118
View: Fort Snelling, **Building 229**, looking southeast
Description: Typical view of front wall of front porch of unit 229-a as seen from interior front door, April 2012.

Photograph 119
View: Fort Snelling, **Building 229**, looking northwest
Description: View of interior wall of front porch of unit 229-a, April 2012.

Photograph 120
View: Fort Snelling, **Building 229**, looking east
Description: Typical view of living room with main staircase at left and front porch at rear, April 2012.

Photograph 121
View: Fort Snelling, **Building 229**, looking north
Description: View of living room showing archway to dining room (left), main staircase (center), and front door (right), April 2012.

Photograph 122
View: Fort Snelling, **Building 229**, looking northwest
Description: Typical view of living room showing main staircase (right), archway to dining room (center), and doorway to butler's pantry (rear), April 2012.

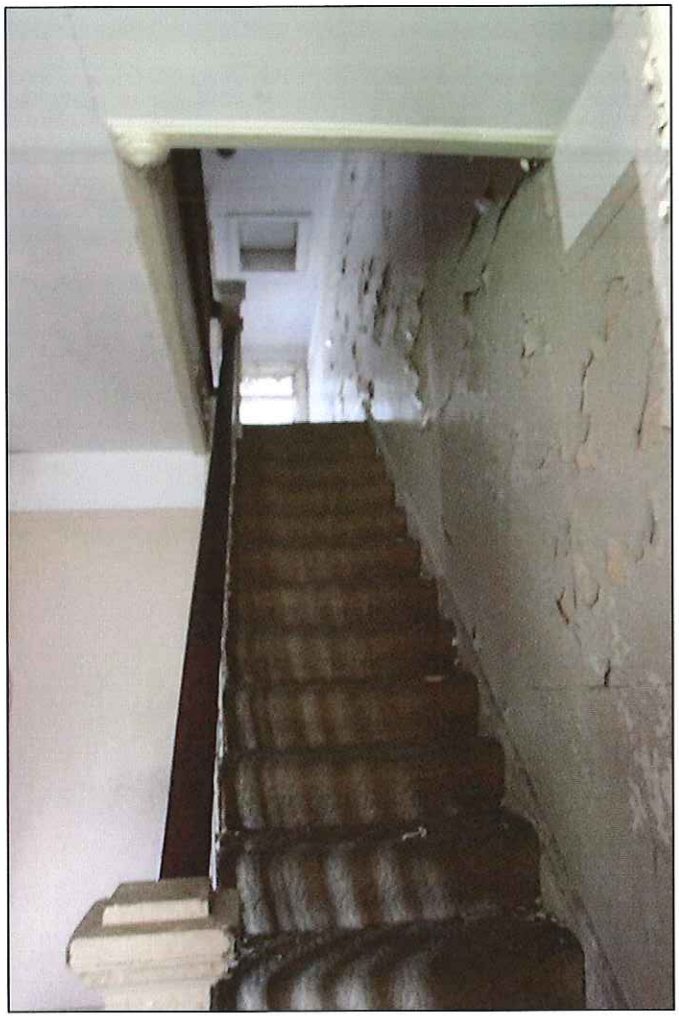
Photograph 123
View: Fort Snelling, **Building 229**, looking north
Description: Typical view of dining room showing closet under main stairs and archway to living room (left), April 2012.

Photograph 124
View: Fort Snelling, **Building 229**, looking northwest
Description: Typical view of dining room showing doorway to butler's pantry, April 2012.

Photograph 125
View: Fort Snelling, **Building 229**, looking northeast
Description: Typical view of butler's pantry showing built-in cabinetry, April 2012.

Photograph 126
View: Fort Snelling, **Building 229**, looking southwest
Description: Typical view of kitchen showing non-original cabinetry and fixtures (left), and doorway to rear porch (center), April 2012.

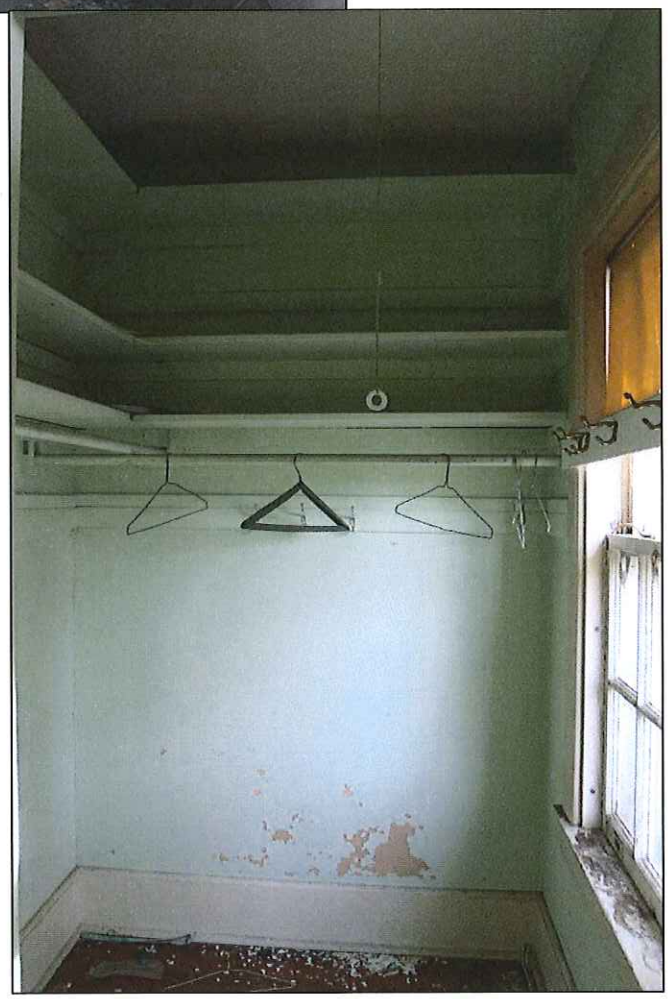
Photograph 127
View: Fort Snelling, **Building 229**, looking north
Description: Typical view of rear porch showing (r-l) rear wall of Building 229, non-original dividing wall between unit porches, and porch infill windows, April 2012.



Photograph 128
View: Fort Snelling, **Building 229**, looking west
Description: Typical view of main staircase looking towards second floor, April 2012.

Photograph 129
View: Fort Snelling, **Building 229**, looking east
Description: Typical view of second-floor corridor looking towards main staircase showing entrance hatch to attic space (above), April 2012.

Photograph 130
View: Fort Snelling, **Building 229**, looking east
Description: Typical view of master bedroom showing door to walk-in closet (left), April 2012.



Photograph 131
View: Fort Snelling, **Building 229**, looking north
Description: Typical view of master bedroom walk-in closet, April 2012.

Photograph 132
View: Fort Snelling, **Building 229**, looking northeast
Description: Typical view of center bedroom showing door with transom window, April 2012.

Photograph 133
View: Fort Snelling, **Building 229**, looking north
Description: Typical view of bathroom, April 2012.

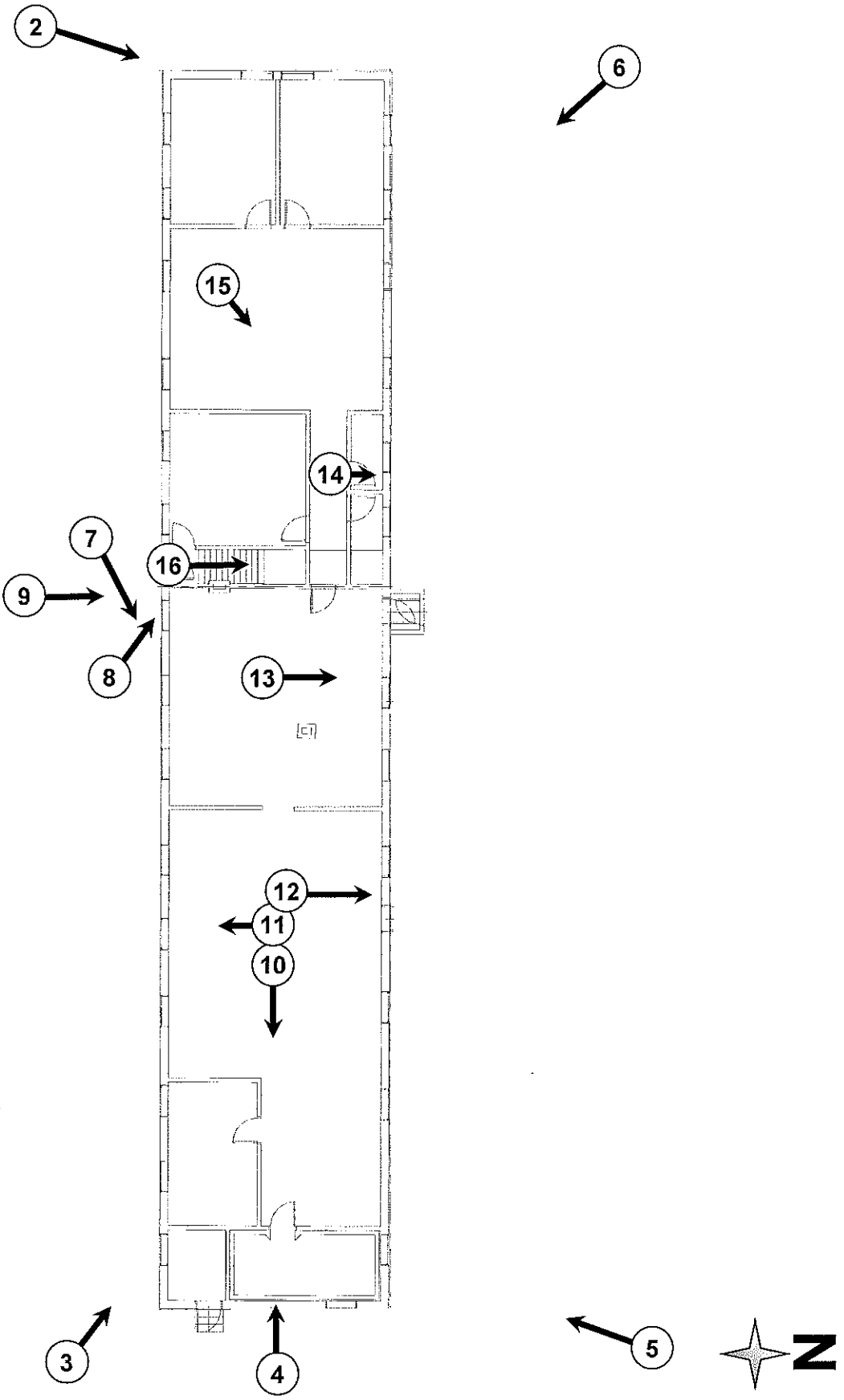
Photograph 134
View: Fort Snelling, **Building 229**, looking south
Description: Typical view of rear bedroom, April 2012.

Photograph 135
View: Fort Snelling, **Building 229**, looking southwest
Description: Typical view of rear bedroom showing built-in cabinet concealing plumbing, April 2012.

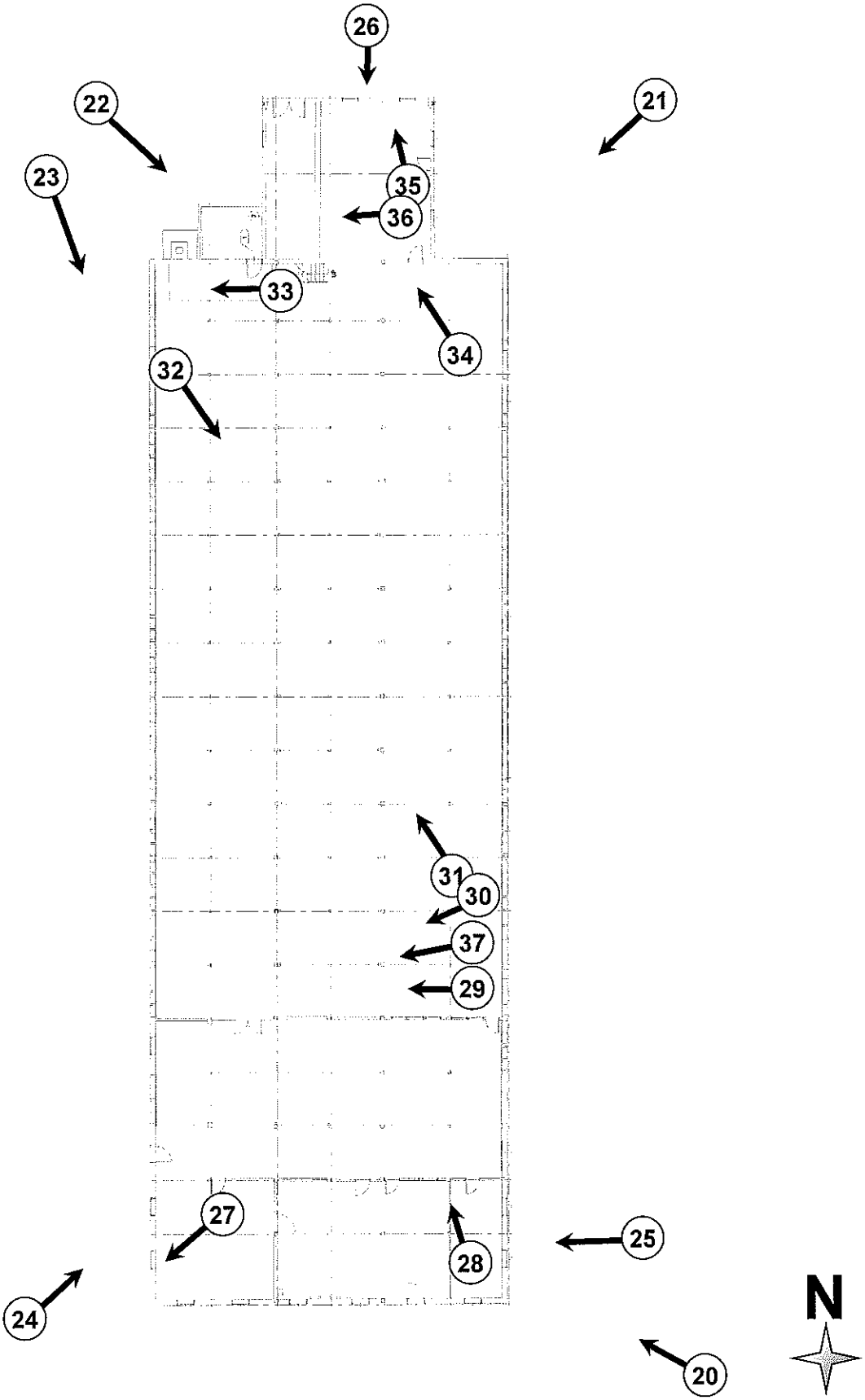
Photograph 136
View: Fort Snelling, **Building 229**, looking east
Description: Typical view of basement, showing brick column supporting floor beam, April 2012.

Photograph 137
View: Fort Snelling, **Building 229**, looking south
Description: Typical view of basement toilet, April 2012.

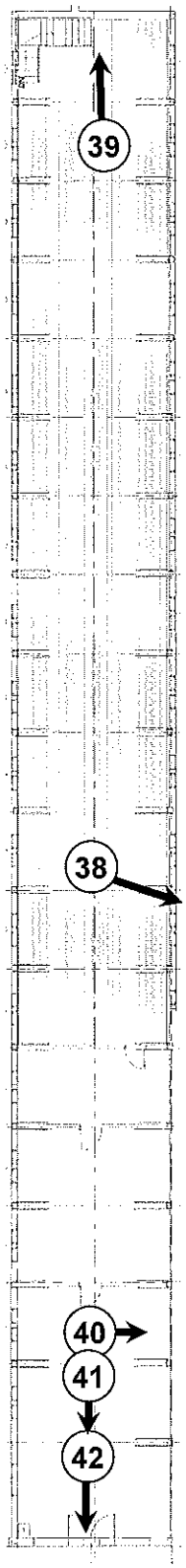
Photograph 138
View: Fort Snelling, **Building 229**, looking west
Description: View of water heater, heater, and ductwork in basement, April 2012.



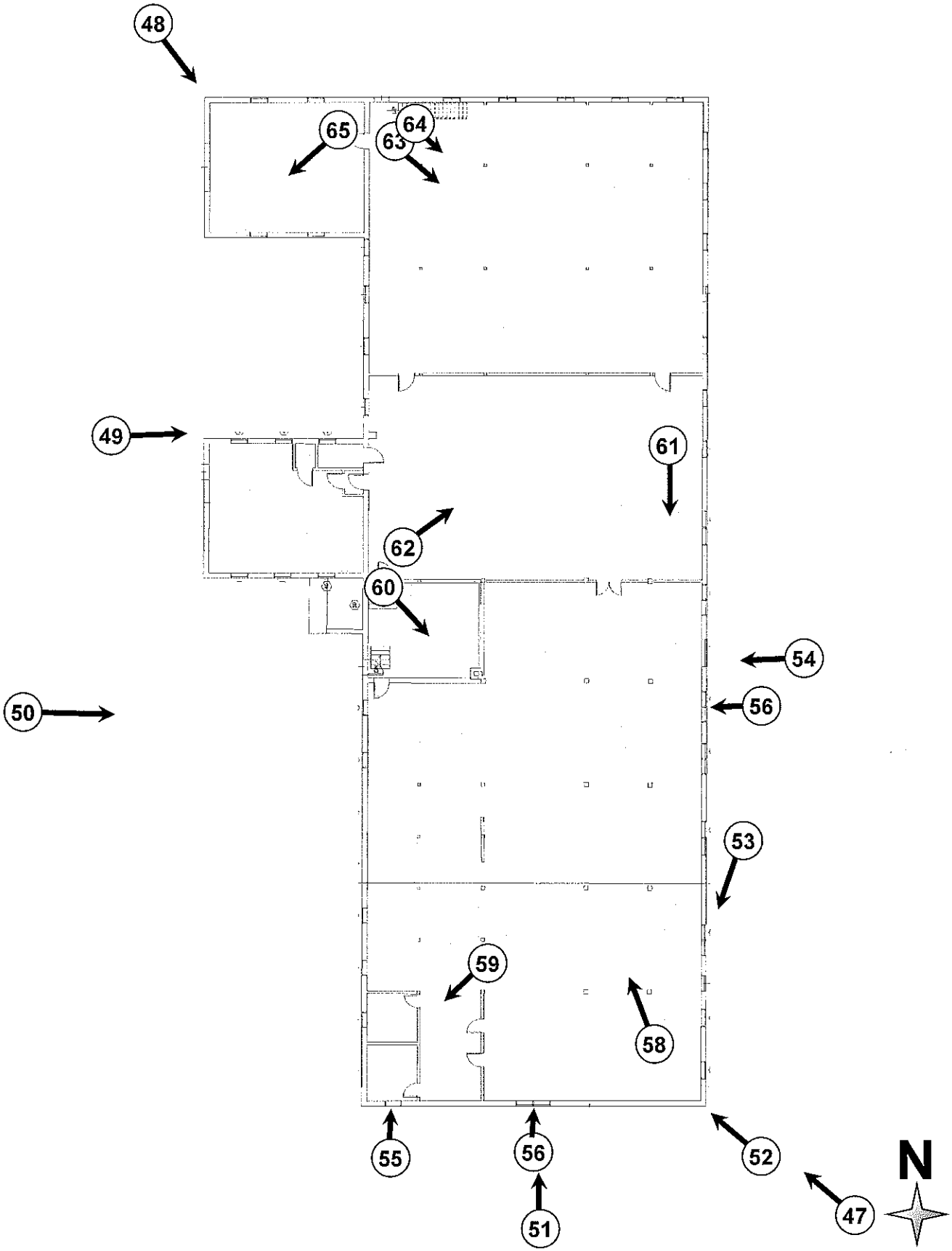
Building 210 (Exterior and Interior)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



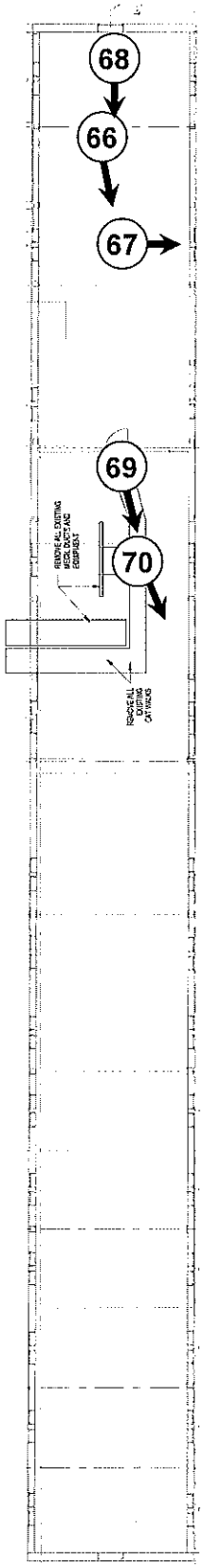
Building 211 (Exterior and Ground Floor)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood and Penny Petersen
February 2010 and April 2012



Building 211 (Loft)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012

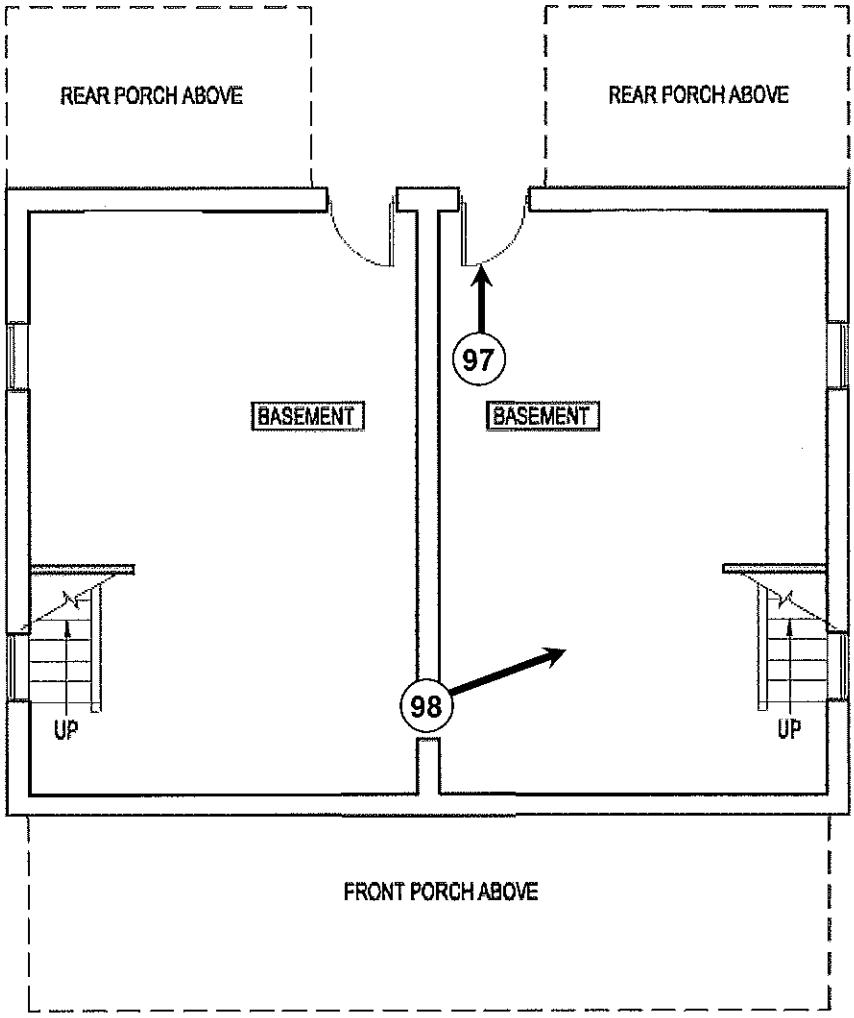


Building 214 (Exterior and Ground Floor)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood and Penny Peterson
February 2010 and April 2012

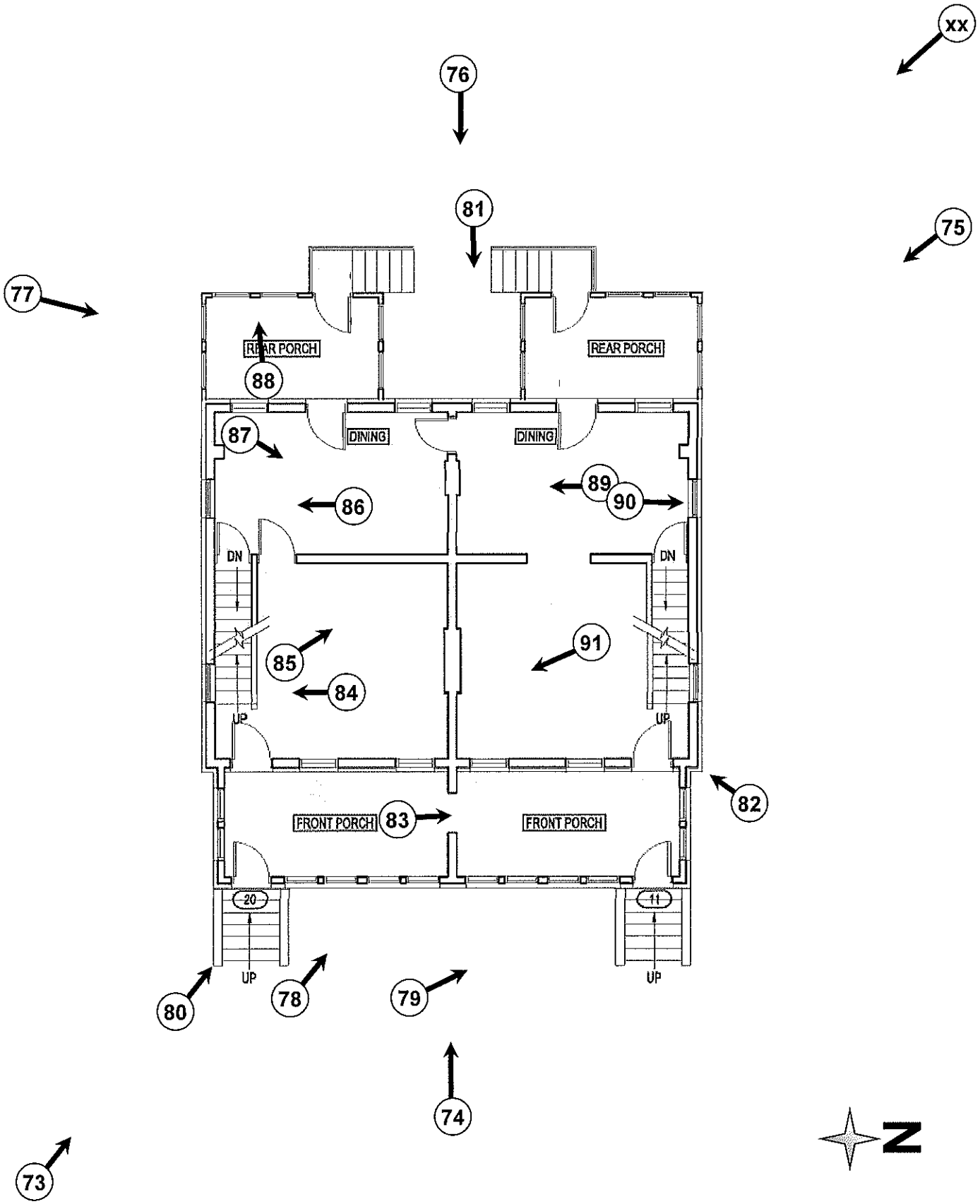


N

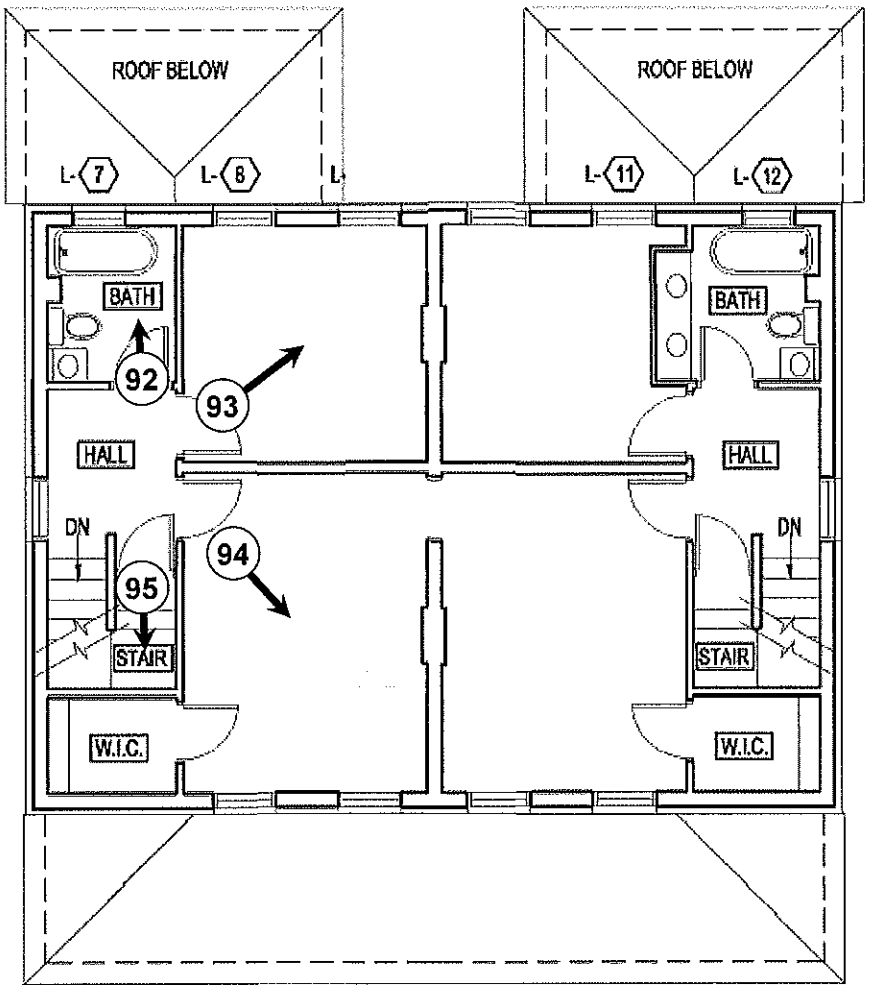
Building 214 (Loft)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



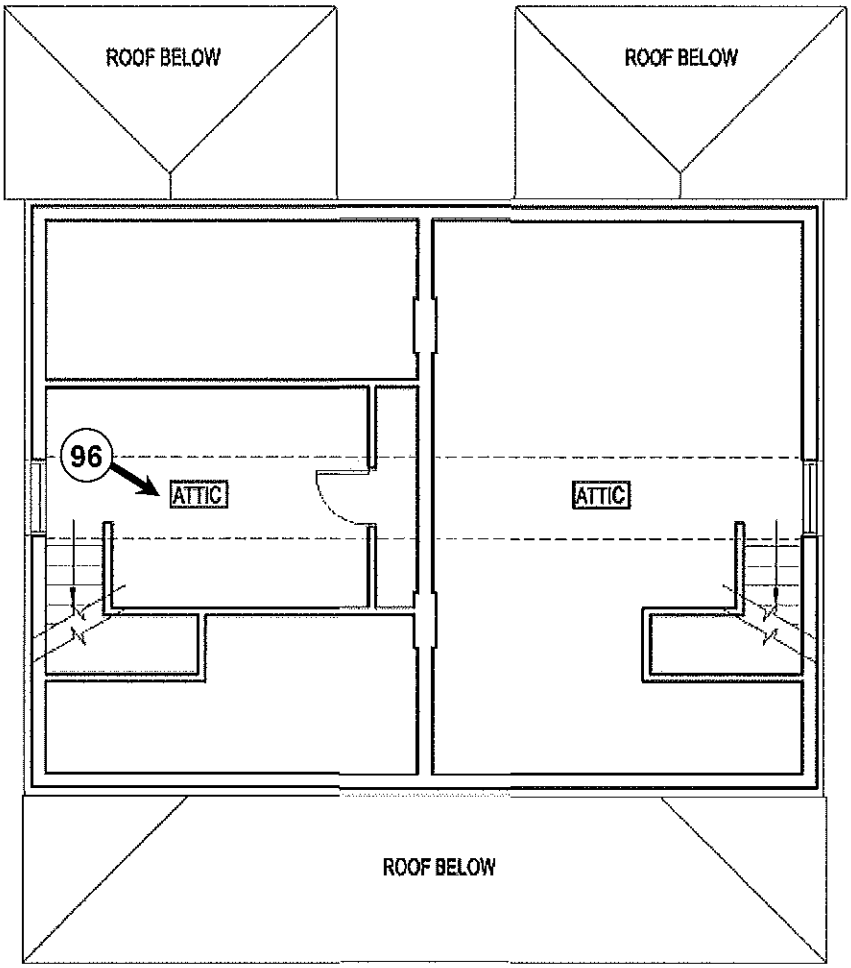
Building 227 (Basement)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



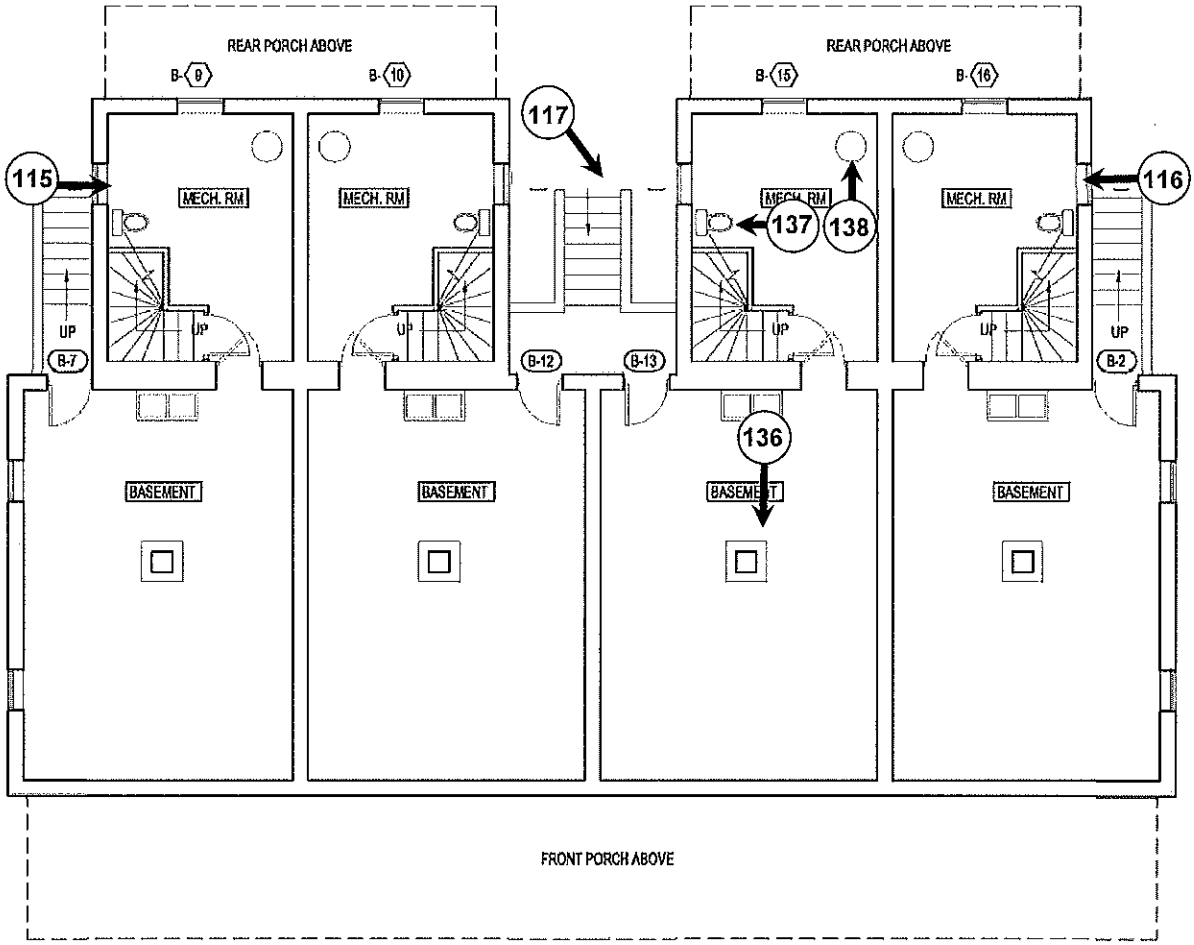
Building 227 (Exterior and First Floor)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



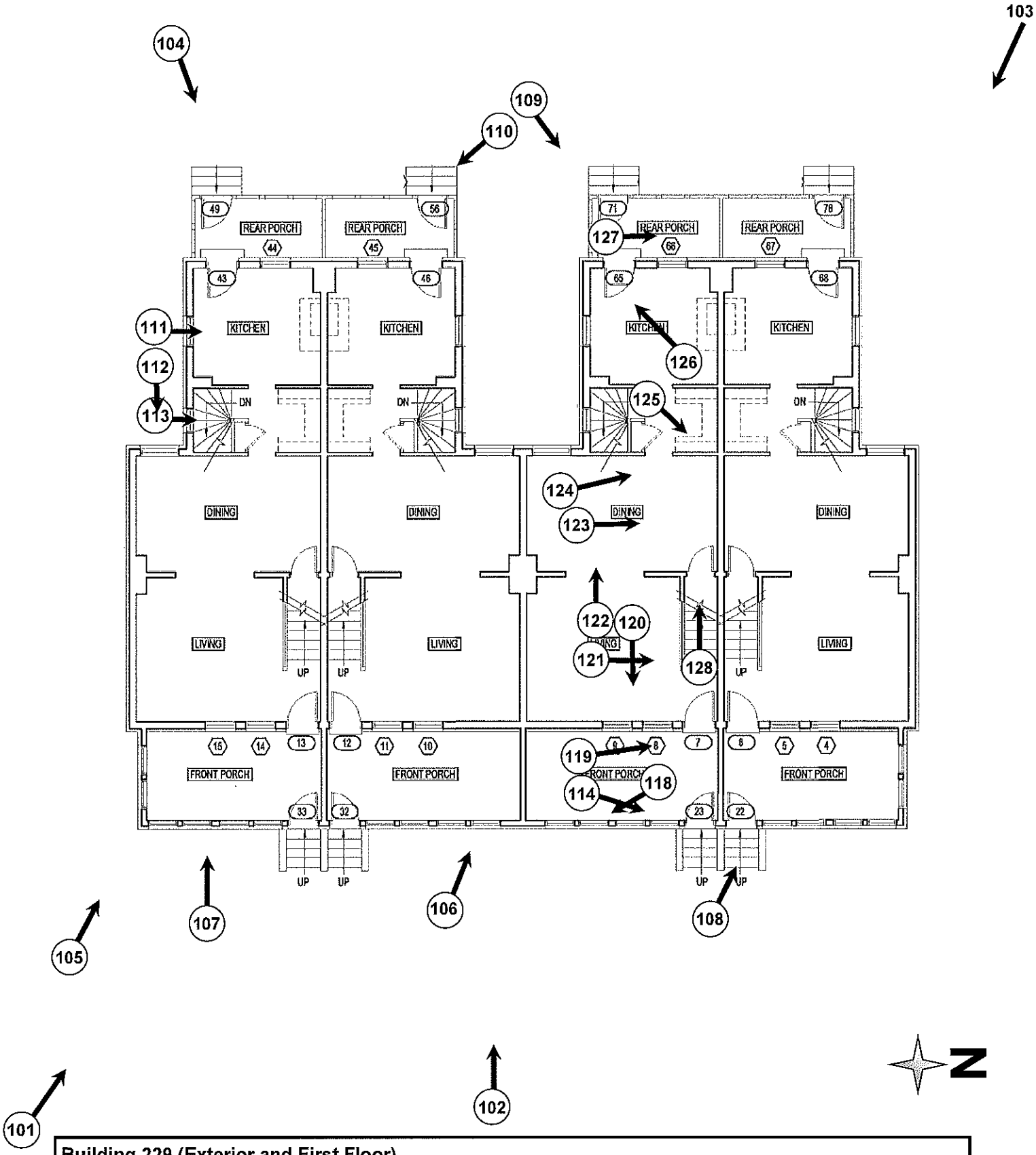
Building 227 (Second Floor)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



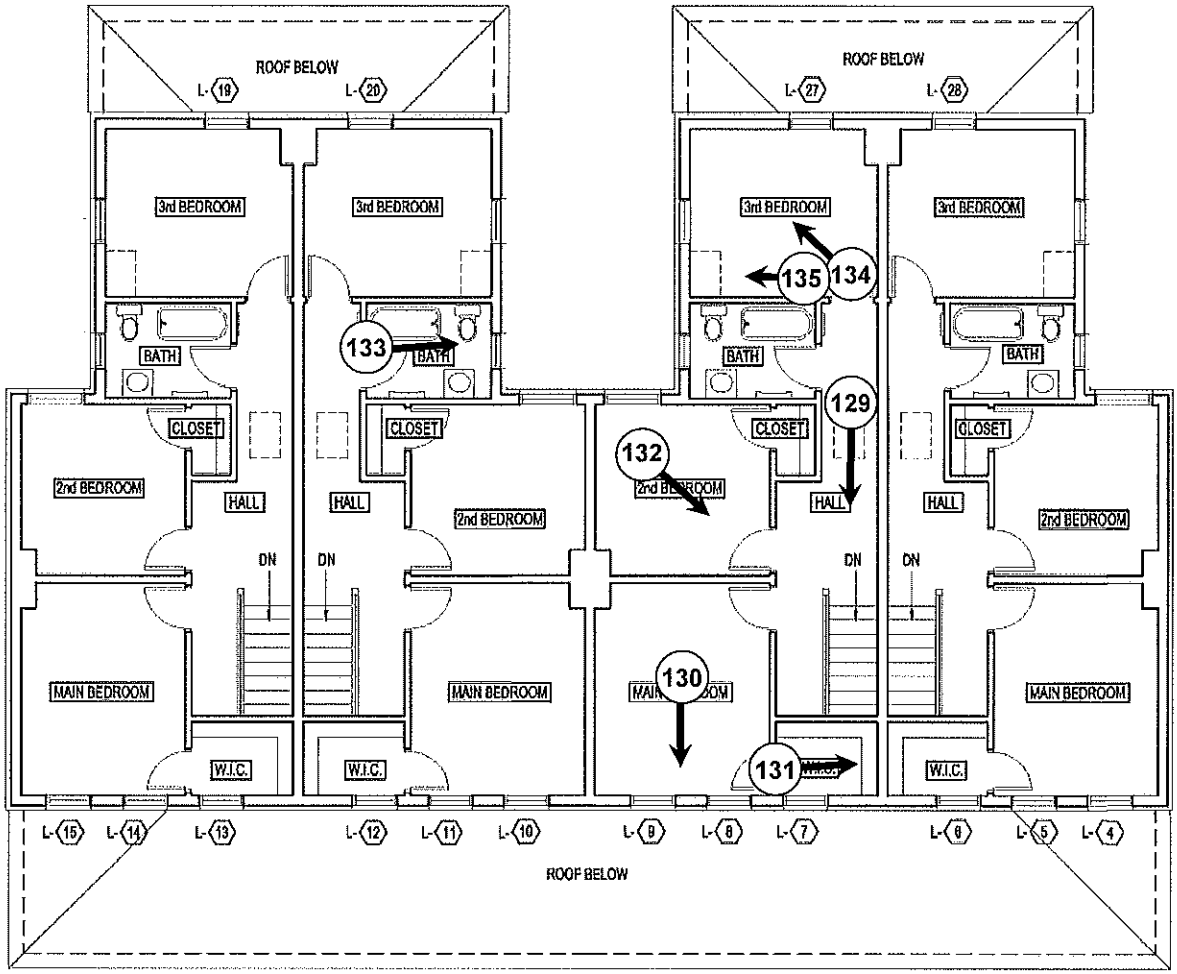
Building 227 (Attic)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



Building 229 (Basement)
Fort Snelling
Hennepin County
Minnesota
Photographers Stephanie K. Atwood
April 2012



Building 229 (Exterior and First Floor)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012



Building 229 (Second Floor)
Fort Snelling
Hennepin County
Minnesota
Photographer: Stephanie K. Atwood
April 2012

Appendix F

Tribal Consultation
Santee Sioux Nation
January 2013

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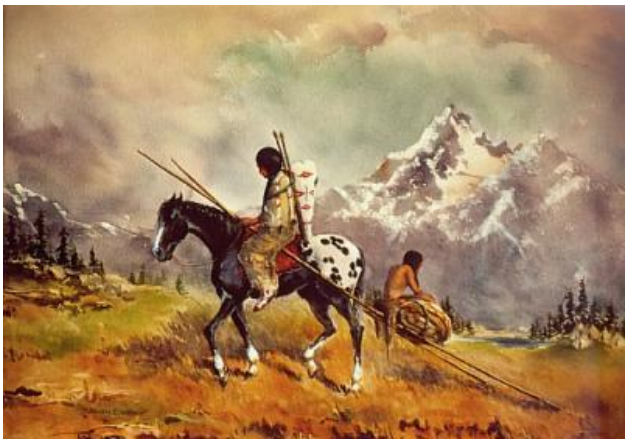

Rick Thomas, THPO
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Niobrara, Nebraska 68760-7047
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FAX # 1-402-857-2352
CELL # 1-402-640-9561
rick_thpo02@yahoo.com

SECTION 106 REVIEW
CONSULTATION & "TCP" CONDUCTED

PROPOSED PLAN TO DEVELOP HOUSING FOR HOMELESS VETERANS AT FORT SNELLING, MN.

The Santee Sioux Nation's THPO Director and Elder traveled to Minneapolis Minnesota to attend the Consultation hosted by the Minneapolis VA Medical Center in their auditorium on one Veterans Drive, Minneapolis Minnesota, on Thursday Jan. 24th, 2013.

Tribal Consultation, is clearly illustrated through the NHPA, of 1966, in order to consult with Indian Tribes early in the planning process, and to invite Indian Tribes to be cooperating agencies in preparing for a Section 106 requirement. Tribal consultation under under NEPA can include effects to Treaty, Trust, and other natural resources issues, as well as to cultural resources in general, whether or not they meet the specific definition of historic property under the NHPA. The NEPA review may also include the government's responsibilities under the Executive Order (EO) 12898.

The Santee Sioux ;Nation is a federally recognized tribe located in NorthEast Nebraska, exiled from the State of Minnesota in 1862, due to the Minnesota conflict. In the removal of the Dakota Band, we were in prison in Davenport Iowa where 95 died of starvation and freezing. The Dakota Nation consisted of four bands, Sisseton/Waphton, Wakpakute, and Mdewankaton. The Dakota Nation was drastically separated over the 1862 Minnesota uprising. The nomads of the plains and being of Woodland culture and design. The brief history, illustrates that our people scattered in all 4-directions, including Iowa, Illinois, Missouri, South Dakota, North Dakota, Montana, Canada and Nebraska. Through out history our people were buried in graves marked according to who they were, this how our Nation identifies our ancestors and we are the voice for them. The spiritual walk as we call it is done today as Tribal Monitors trained to recognize our Traditional Cultural Properties.

PAGE (2)
REPORT – CONTINUED

In 1862 after the hanging of 38 + 2 in Mankato Minnesota, our ancestors were marched to Ft. Snelling, where they were incarcerated in stables, and during the winter months. Our Nation today, looks back at the history of said up rising that led to exile to Nebraska. It was a tragedy for many of our relatives, and the reason why we had an invested History at Ft. Snelling.

The planning included rehabilitation of Buildings 210, 211, 214, 227, and 229. "Mothbaling" of Building 215 and demolition of Building 228. The Section 106 process was implemented through the Santee Sioux Nation's THPO, Office. We want to thank the VA's facilities Engineering Director of the Minneapolis VA Health Care System , of St. Paul Minnesota. We arrived on Monday September 9th, and met with Mr. Challeen, to arrange for an introduction and was met with very supportive staff . Mr. Challeen made arrangement to stay at the VA housing facility, free of charge, for basically two nights. On Tuesday September 10th, we were introduced to the site area, where there was construction of removing trees and grinding up the trees . We were introduce to two archaeologist whom were on site, where the construction was taking place. We walked 3-buildings upstairs and down, but the buildings were pretty well worn, due to the early 1900's when the buildings were built. Pictures were taken for our records, walked the grounds where the proposed facilities were going to be and no evidence, or therefore **NO ADVERSE EFFECTS,** do to the surveys conducted. We also walked the grounds where the proposed facilities were going to be and no evidence of Cultural properties. We also went and surveyed the officer's quarters, where two homes, two levels were walked through, along with an old building, storage area, but no evidence of Traditional Cultural Properties, (TCP). NOTE all sites were heavily disturbed, due to the historical site and back ground.

Site is cleared for Construction, with No Adverse Effects, for the newly proposed site for Homeless Veterans.

SUBMITTED BY: <u>Rick Thomas, THPO Director</u>
Santee Sioux Nation

Appendix G

Select Building Plans
Sand Architects, LLC
September 3, 2013

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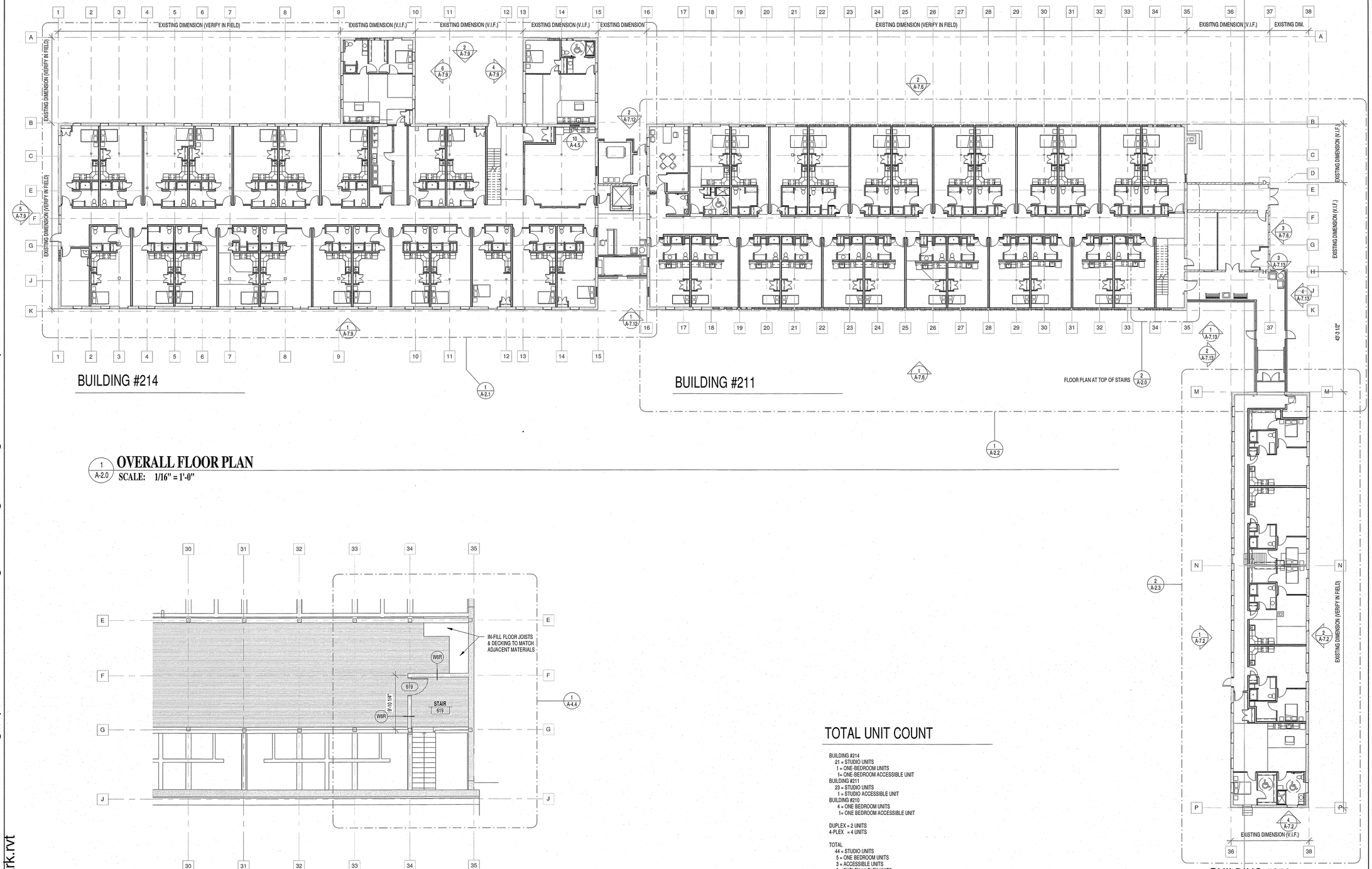

1 / A-2.0 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

2 / A-2.0 TOP OF LOFT FLOOR PLAN @ STAIR - BUILDING #211

SCALE: 1/8" = 1'-0"

TOTAL UNIT COUNT

BUILDING #214
- 21 = STUDIO UNITS
- 1 = ONE-BEDROOM UNITS
- 1= ONE-BEDROOM ACCESSIBLE UNIT

BUILDING #211
- 23 = STUDIO UNITS
- 1 = STUDIO ACCESSIBLE UNIT

BUILDING #210
- 4 = ONE BEDROOM UNITS
- 1= ONE BEDROOM ACCESSIBLE UNIT

DUPLEX = 2 UNITS
4-PLEX = 4 UNITS

TOTAL
- 44 = STUDIO UNITS
- 5 = ONE BEDROOM UNITS
- 3 = ACCESSIBLE UNITS
- 6 = DUPLEX / 4-PLEX UNITS
- 58 = TOTAL UNITS

Sand Architects, LLC
a Subsidiary of Sand Companies, Inc.
366 South Tenth Avenue
PO Box 727
Waite Park, MN 56387-0727
Office: (320) 202-3100
Fax: (320) 202-3139
Website: www.SandCompanies.com
E-Mail: SCI@SandCompanies.com

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION & THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF MINNESOTA

SIGNATURE:

SIGNED OR PRINTED NAME: JEREMY D. BORK

REGISTRATION NO.: 18023

DATE: 09/03/2013

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PROJECT NO.: 11-310
DRAWN BY: JAV
CHECKED BY: JDB
DATE: 09/03/2013
REVISED DATE:

VA Housing

Minneapolis, MN

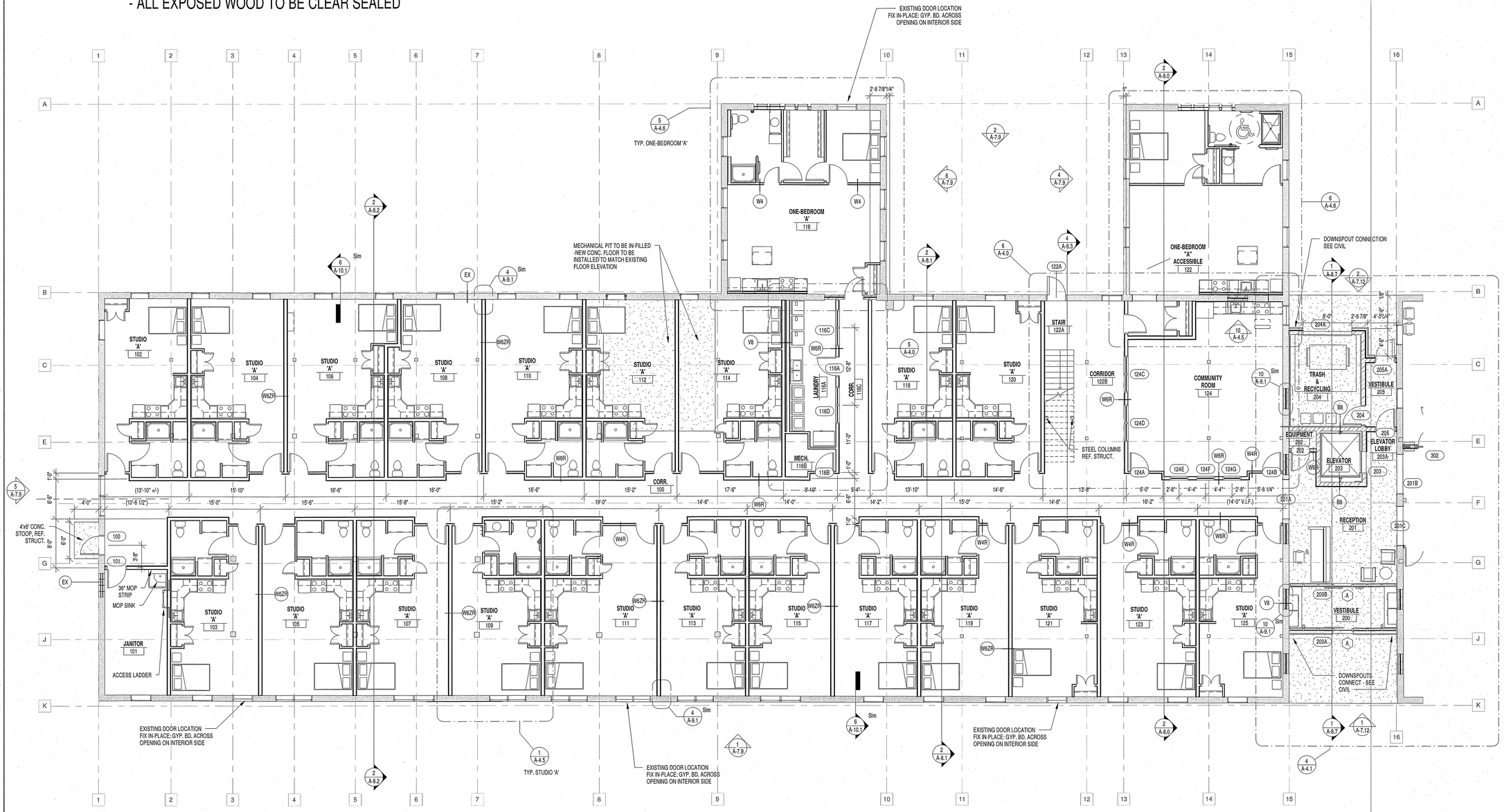
OVERALL FLOOR PLAN

A-2.0

No.	Description	Date

P:\Sand Architecture\VA Housing Mpls - #11-310\Drawings\Working Drawings\VA Minneapolis-New elevation mark.rvt

NOTE: - CUT ALL EXISTING WOOD COLUMNS AT FLOOR LINE AND
INSTALL BASE PLATE WITH 2" AIR GAP - SEE DETAIL 12/A-9.2
- REMOVE ALL BUFFALO BOARD AND SHIP LAP SIDING FROM ALL
FLOORS, WALLS, AND CEILINGS THRU OUT THE BUILDING 210, 211, AND 214
- CLEAN ALL EXPOSED WOOD COLUMNS, RAFTERS, BEAMS, BRACING, FLOOR DECKING
& ROOF DECKING w/ GENTLEST MEANS POSSIBLE
- ALL EXPOSED WOOD TO BE CLEAR SEALED



1 / A-2.1 BUILDING #214 - MAIN FLOOR PLAN

SCALE: 1/8" = 1'-0"

P:\Sand Architecture\VA Housing Mpls - #11-310\Drawings\Working Drawings\VA Minneapolis-New elevation mark.rvt

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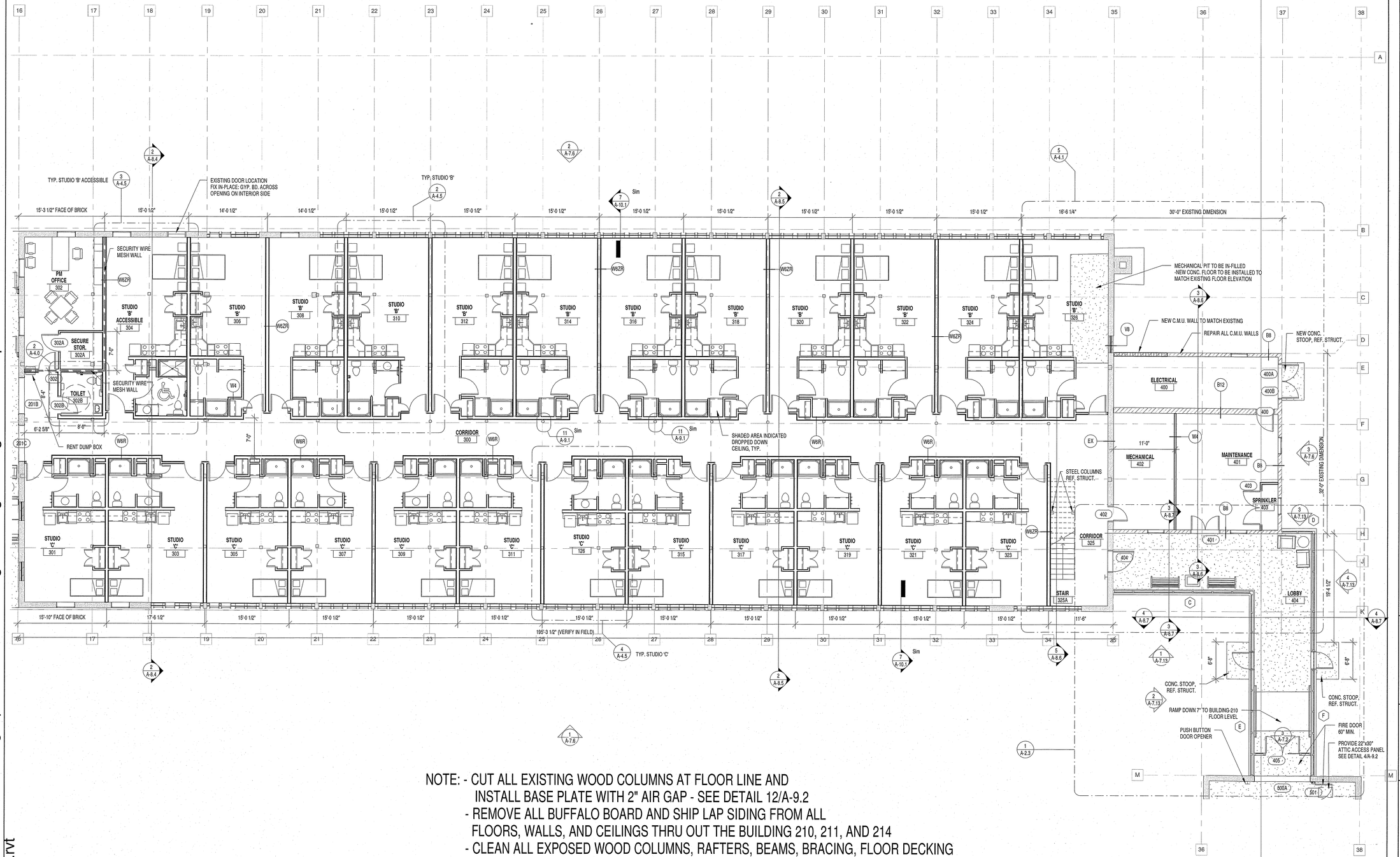
VA Housing

Minneapolis, MN

BUILDING #214 FLOOR PLAN

A-2.1

No.	Description	Date



NOTE: - CUT ALL EXISTING WOOD COLUMNS AT FLOOR LINE AND
INSTALL BASE PLATE WITH 2" AIR GAP - SEE DETAIL 12/A-9.2
- REMOVE ALL BUFFALO BOARD AND SHIP LAP SIDING FROM ALL
FLOORS, WALLS, AND CEILINGS THRU OUT THE BUILDING 210, 211, AND 214
- CLEAN ALL EXPOSED WOOD COLUMNS, RAFTERS, BEAMS, BRACING, FLOOR DECKING
& ROOF DECKING w/ GENTLEST MEANS POSSIBLE
- ALL EXPOSED WOOD TO BE CLEAR SEALED

1 / A-2.2 **BUILDING #211 - MAIN FLOOR PLAN**
SCALE: 1/8" = 1'-0"

TRUE NORTH
PLAN NORTH

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Minneapolis, MN

BUILDING #211 FLOOR PLAN

A-2.2

No.	Description	Date

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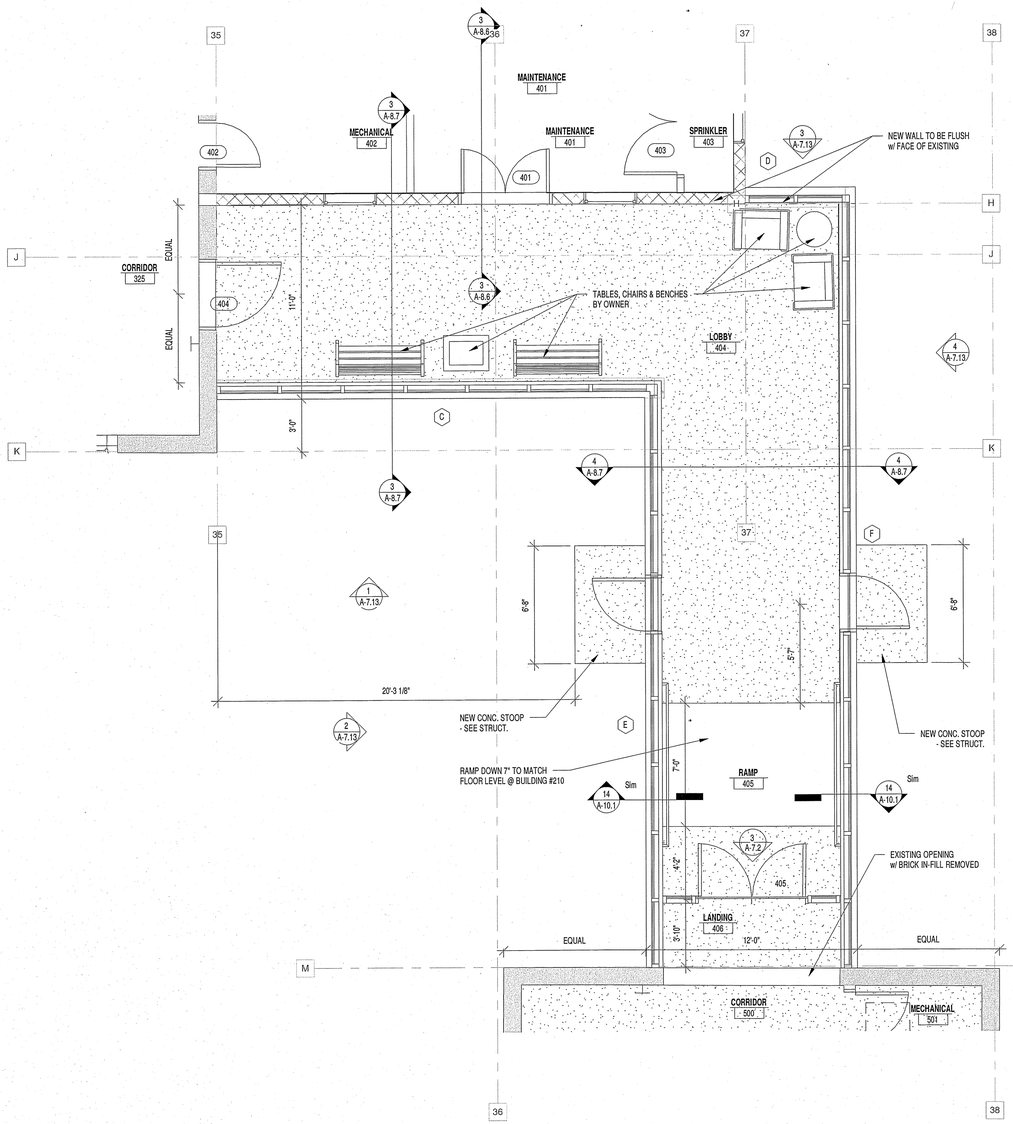
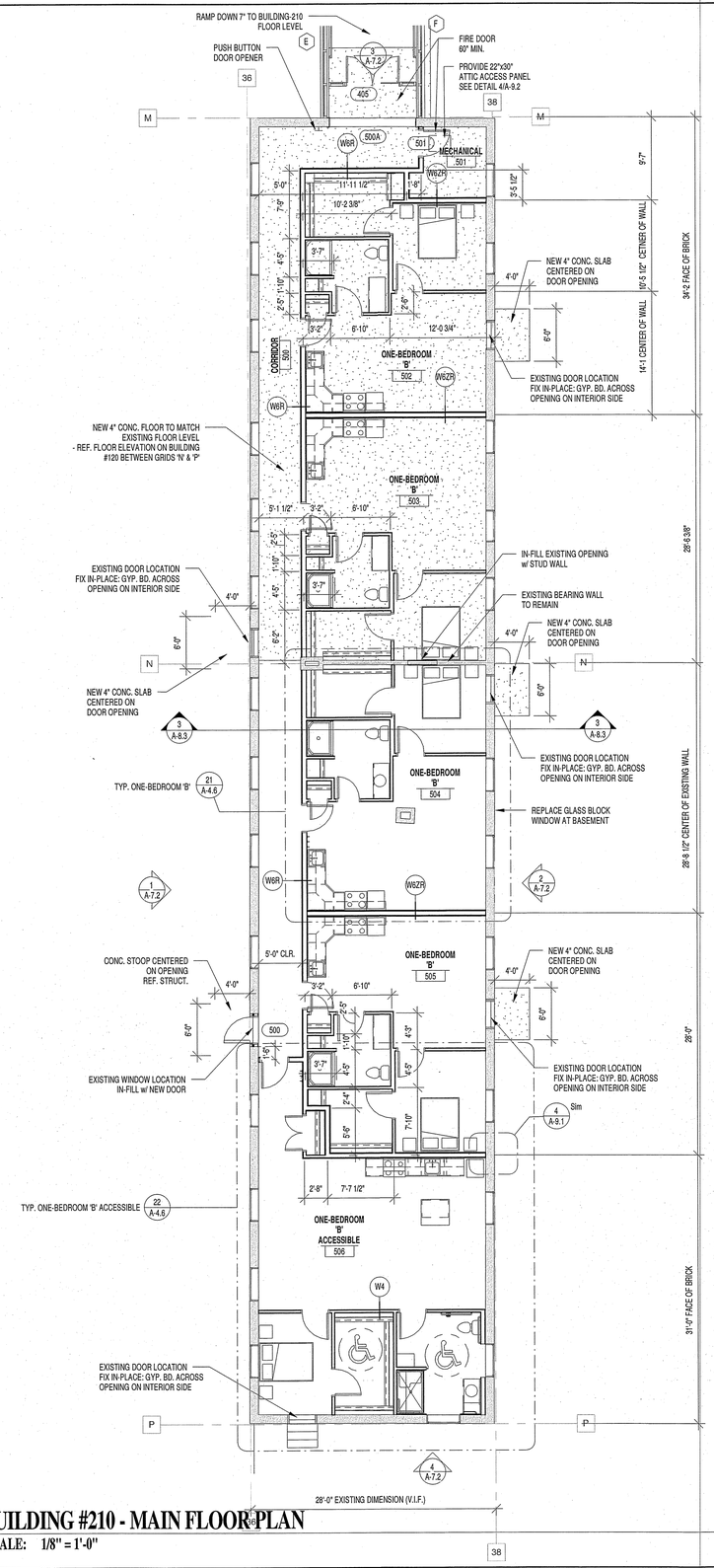


1 A-2.3 **NORTH LINK - FLOOR PLAN**
SCALE: 1/4" = 1'-0"

NOTE: - CUT ALL EXISTING WOOD COLUMNS AT FLOOR LINE AND INSTALL BASE PLATE WITH 2" AIR GAP - SEE DETAIL 12/A-9.2
- REMOVE ALL BUFFALO BOARD AND SHIP LAP SIDING FROM ALL FLOORS, WALLS, AND CEILINGS THRU OUT THE BUILDING 210, 211, AND 214
- CLEAN ALL EXPOSED WOOD COLUMNS, RAFTERS, BEAMS, BRACING, FLOOR DECKING & ROOF DECKING w/ GENTLEST MEANS POSSIBLE
- ALL EXPOSED WOOD TO BE CLEAR SEALED



2 A-2.3 **BUILDING #210 - MAIN FLOOR PLAN**
SCALE: 1/8" = 1'-0"

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BUILDING #210 FLOOR PLAN

A-2.3

No.	Description	Date

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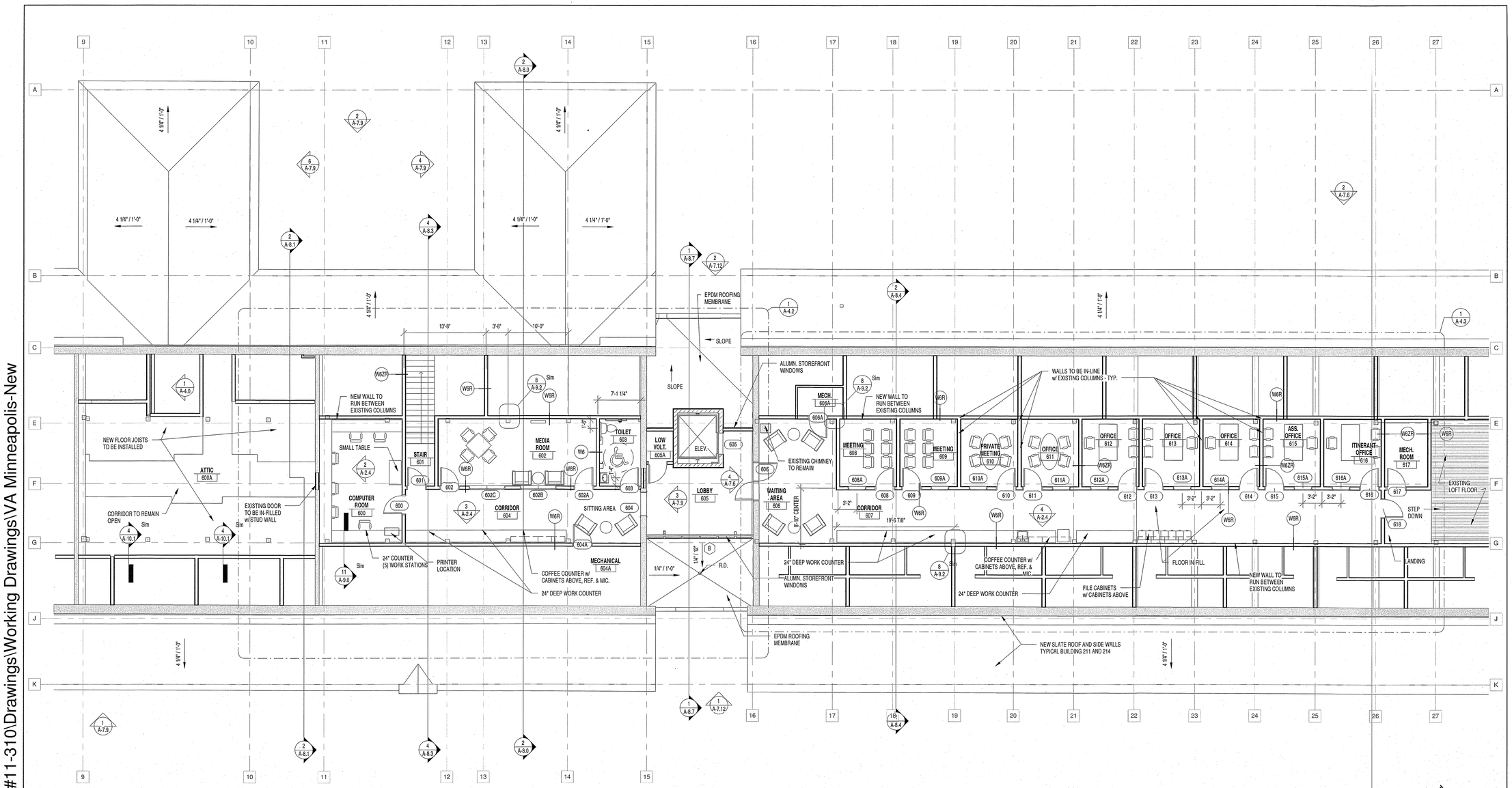
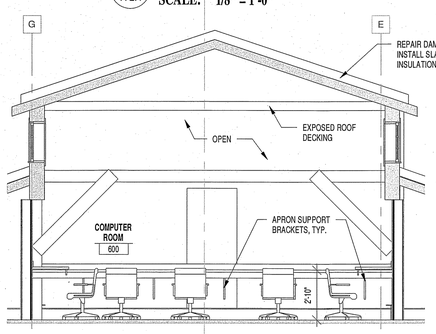
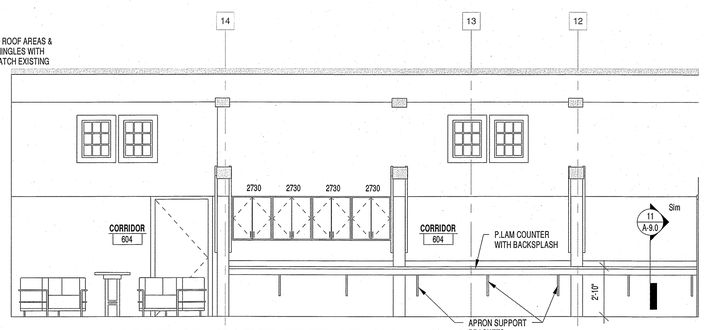


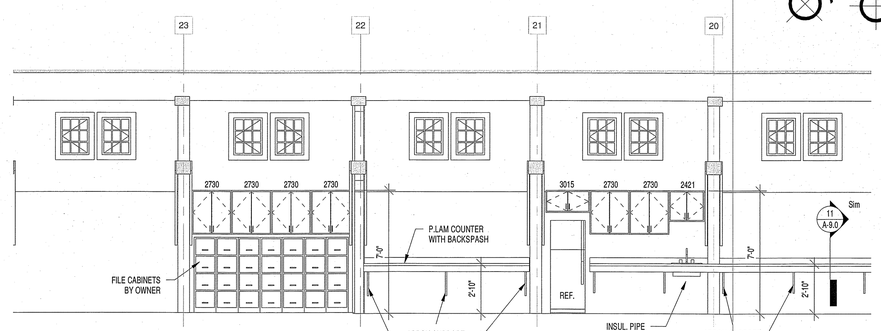
1 A-2.4 **LOFT FLOOR PLAN**
SCALE: 1/8" = 1'-0"



2 A-2.4 **COMPUTER ROOM INT. ELEVATION**
SCALE: 1/4" = 1'-0"



3 A-2.4 **CORRIDOR 604 INT. ELEVATION**
SCALE: 1/4" = 1'-0"



4 A-2.4 **WORK 617 INT. ELEVATION**
SCALE: 1/4" = 1'-0"

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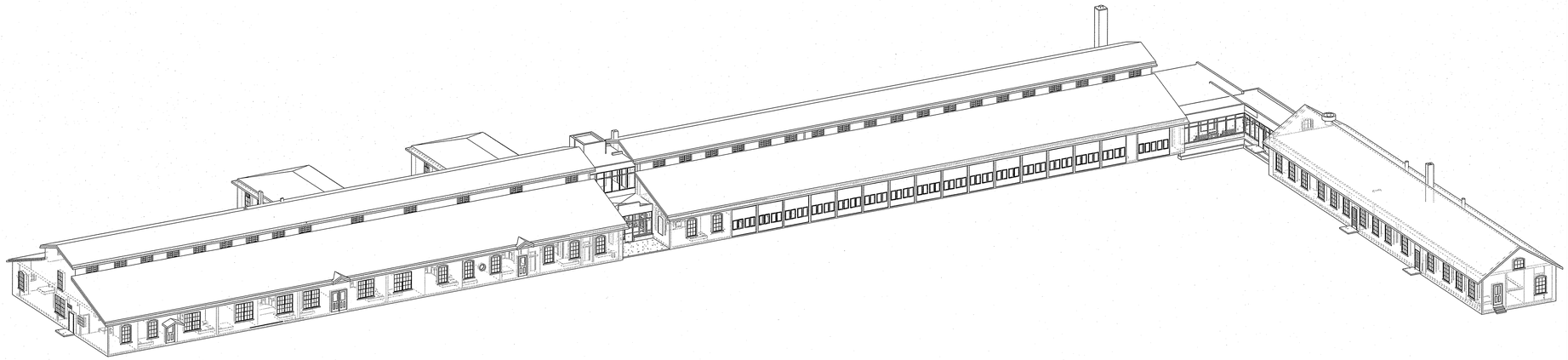
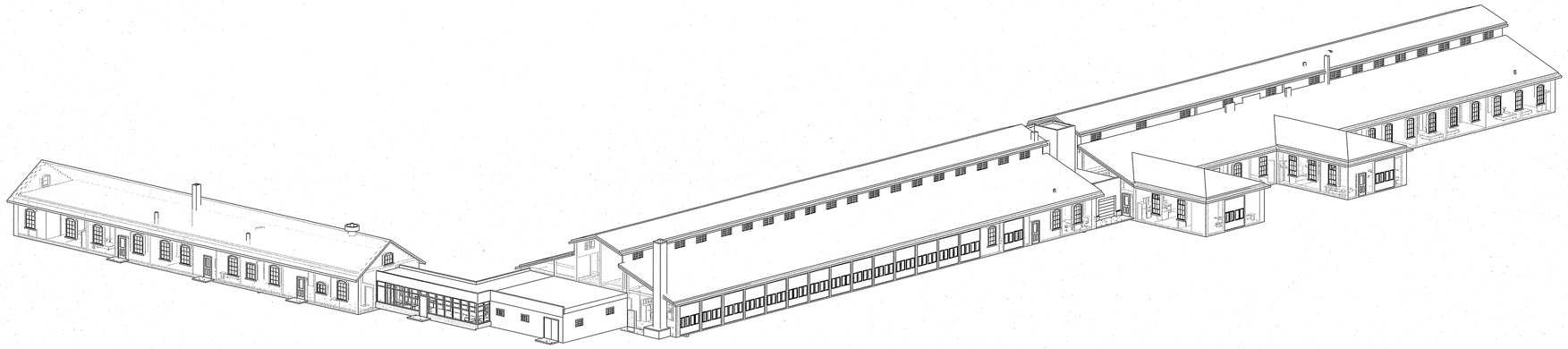
LOFT FLOOR PLAN

A-2.4

No.	Description	Date



1 / A-7.0 **SOUTH EXTERIOR PERSPECTIVE**
SCALE:



2 / A-7.0 **NORTH EXTERIOR PERSPECTIVE**
SCALE:

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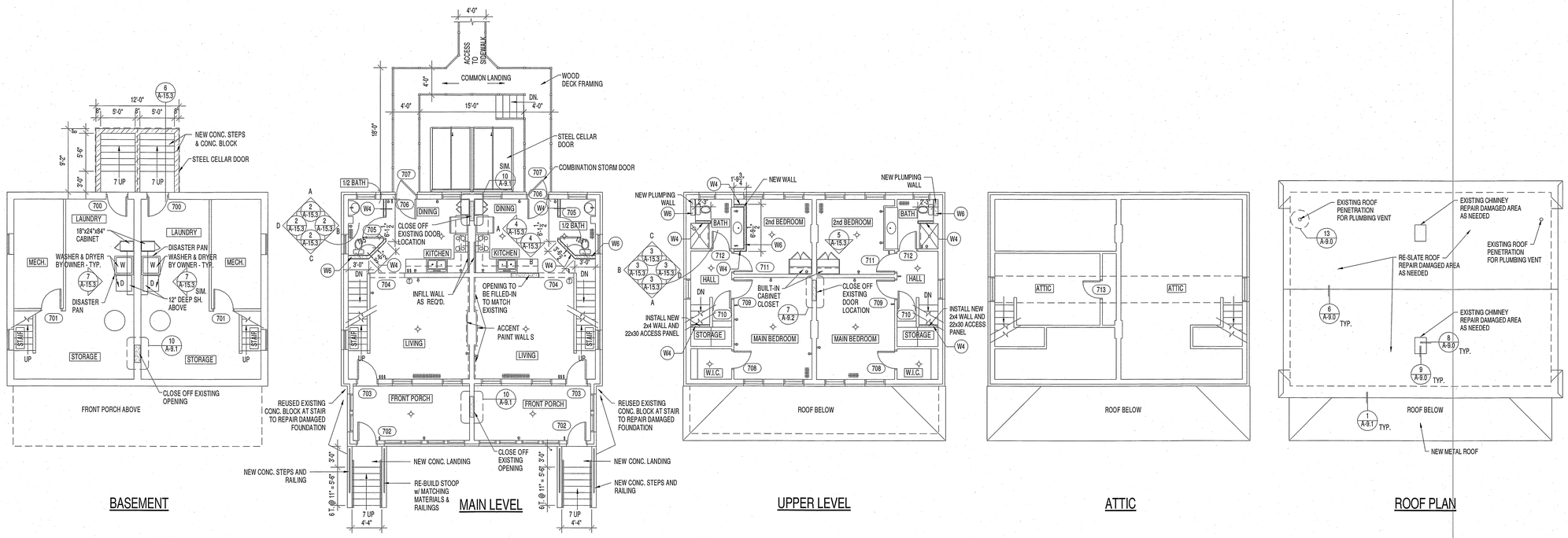
EXT. PERSPECTIVES

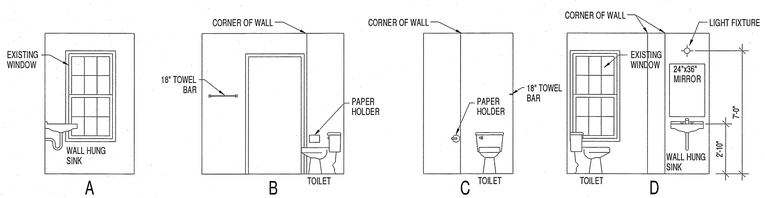
A-7.0

No.	Description	Date



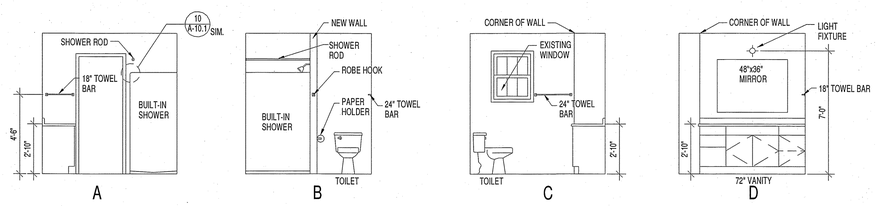
1 / A-15.3 BLDG. #227-RENVOVATION FLOOR PLANS

SCALE: 1/8" = 1'-0"



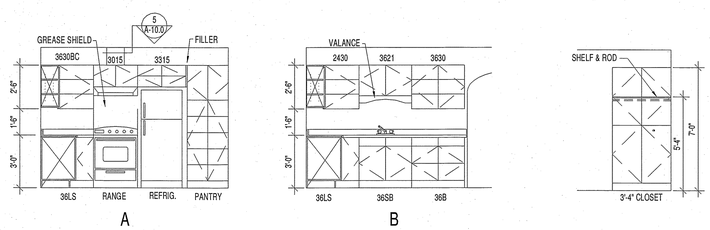
2 / A-15.3 BLDG. #227-1/2 BATH ELEVATIONS

SCALE: 1/4" = 1'-0"



3 / A-15.3 BLDG. #227-BATH ELEVATIONS

SCALE: 1/4" = 1'-0"

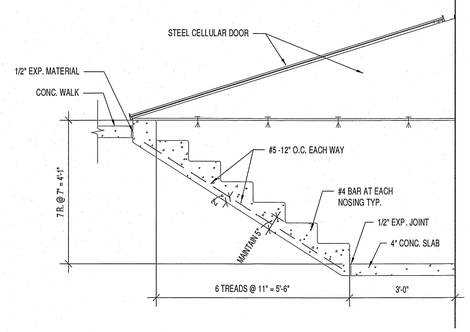


4 / A-15.3 BLDG. #227-KITCHEN ELEVATIONS

SCALE: 1/4" = 1'-0"

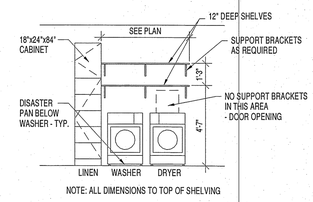
5 / A-15.3 BLDG. #227- 2ND BEDROOM ELEVATION

SCALE: 1/4" = 1'-0"



6 / A-15.3 BASEMENT STORM DOOR

SCALE: 1/2" = 1'-0"



7 / A-15.3 TYP. LAUNDRY ELEVATION

SCALE: 1/4" = 1'-0"

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BUILDING #227 FLOOR PLANS

A-15.3

No.	Description	Date

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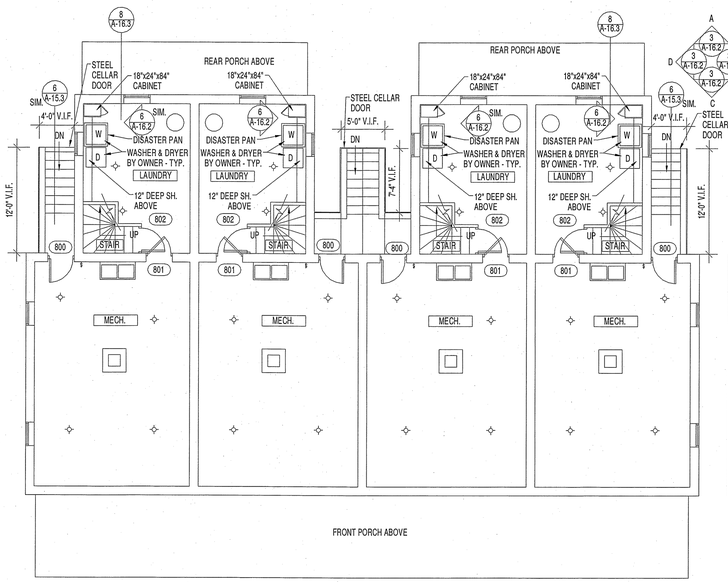
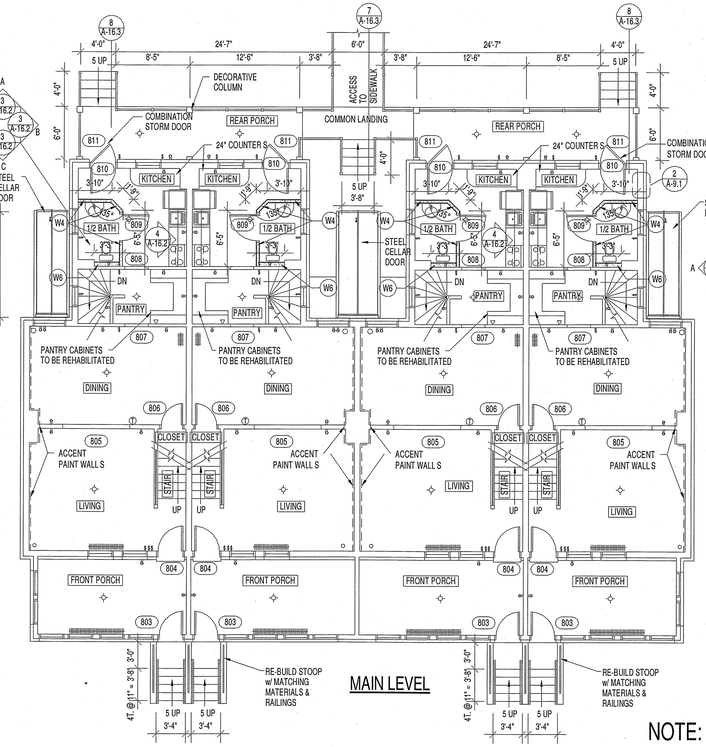
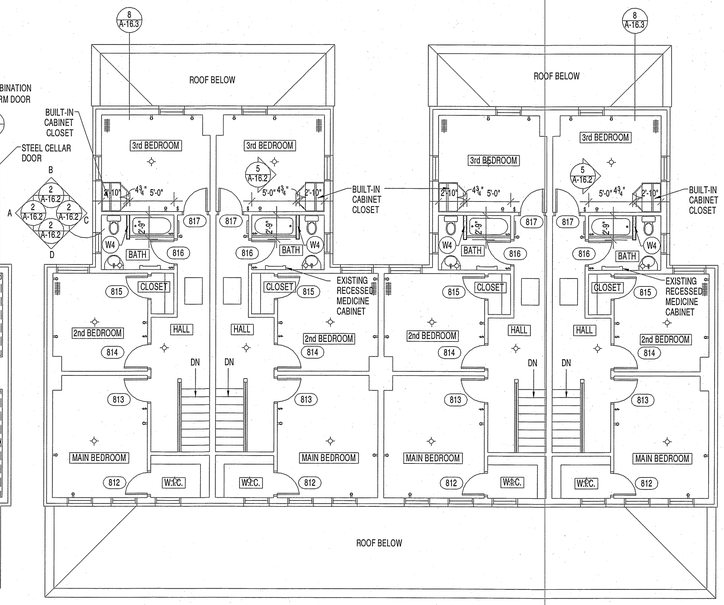


BASEMENT



MAIN LEVEL

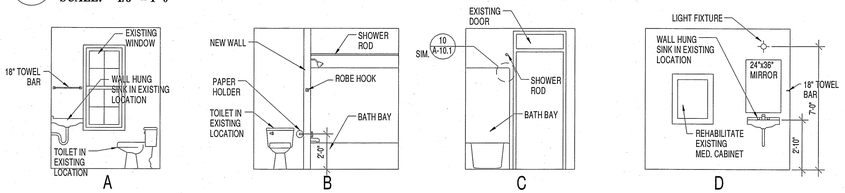


UPPER LEVEL

NOTE: BUILDING #229 TO BE SPRINKLED

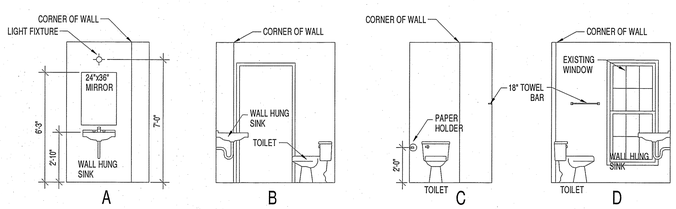
1 A-16.2 BLDG. #229 RENVOVATION FLOOR PLANS

SCALE: 1/8" = 1'-0"



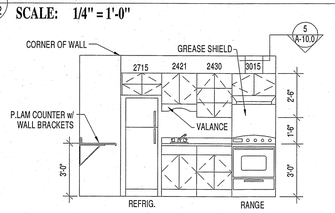
2 A-16.2 BLDG. #229 - BATH ELEVATIONS

SCALE: 1/4" = 1'-0"



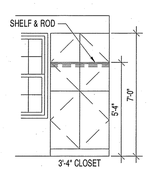
3 A-16.2 BLDG. #229 - 1/2 BATH ELEVATIONS

SCALE: 1/4" = 1'-0"



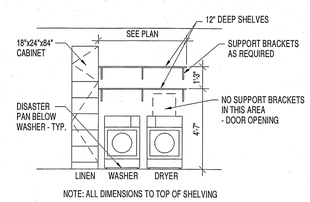
4 A-16.2 BLDG. #229 - KITCHEN

SCALE: 1/4" = 1'-0"



5 A-16.2 BLDG. #229- 3RD BEDROOM ELEVATION

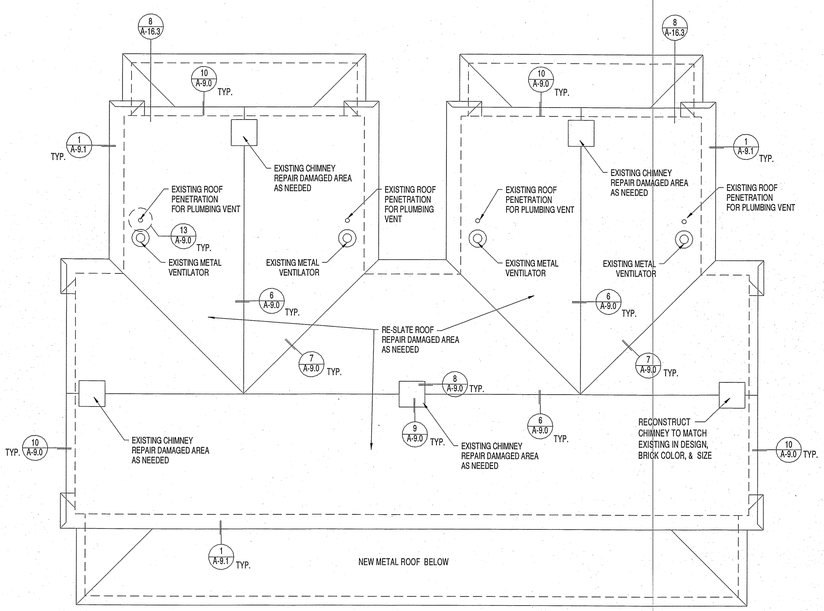
SCALE: 1/4" = 1'-0"



NOTE: ALL DIMENSIONS TO TOP OF SHELVING

6 A-16.2 TYP. LAUNDRY ELEV. BUILDING #229

SCALE: 1/4" = 1'-0"



7 A-16.2 BLDG. #229 - ROOF PLAN

SCALE: 1/8" = 1'-0"

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BUILDING #229 FLOOR PLANS

A-16.2

No.	Description	Date

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Appendix H

Cultural Resources Literature Review
for the
Fort Snelling West District Development Project
The 106 Group Ltd.
August 2012

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CULTURAL RESOURCES LITERATURE REVIEW FOR THE FORT SNELLING WEST DISTRICT DEVELOPMENT PROJECT, MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

Submitted to:
Anderson Engineering of MN, Inc.

Submitted by:
The 106 Group Ltd.

August 2012

CULTURAL RESOURCES LITERATURE REVIEW FOR THE VA FORT SNELLING WEST DISTRICT DEVELOPMENT, FORT SNELLING, HENNPIN COUNTY, MINNESOTA

SHPO File Number 2012-0740
The 106 Group Project No. 1740-1398
Prepared by The 106 Group Ltd. for Anderson Engineering of MN, Inc.

AUGUST 2012

Report Authors:

Greg Mathis, M.C.R.P.
and
Kelli Andre Kellerhals, M.S.

1.0 INTRODUCTION

During August of 2012, The 106 Group Ltd. (106 Group) conducted a cultural resources literature review for the Veterans Administration Fort Snelling West District Development project. The proposed project consists of the following undertakings:

- An Enhanced Use Lease (EUL) for the development of permanent housing for homeless Veterans as part of the United States Department of Veterans Affairs' (VA) Building Utilization Review and Repurposing (BURR) initiative that includes:
  - Leasing of land consisting of a four (4) acre parcel (North Site) and a two (2) acre parcel (South Site) to CommonBond Veterans Administration Minneapolis Limited Partnership (CBVAMLP), a subsidiary of CommonBond Communities Inc. (CommonBond) (private entity);
  - The lease of five (5) buildings, three on the North Site (Buildings 210, 211, and 214) and two buildings on the South Site (Buildings 227 and 229), to CBVAMLP for rehabilitation as housing for homeless veterans using federal low income housing credits and federal historic preservation tax credits;
- Mothballing of one (1) building on the North Site (Building 215) to be retained by the VA; and
- The demolition of one (1) building on the South Site (Building 228) by the VA.

The two parcels of land and the seven (7) buildings that are part of this project are all located within the boundaries of the National Register listed Fort Snelling.

This literature review was conducted under contract with Anderson Engineering on behalf of the Veterans Administration (VA). Since this project is an undertaking of the VA, it must therefore comply with Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106), as well as applicable state mandates governing cultural resources. To comply with these mandates, a cultural resources investigation is recommended to determine if there are any cultural resources located within or near the project areas that are listed or eligible for listing on the National Register of Historic Places (NRHP) that may be affected by the proposed undertaking. The VA Fort Snelling West District Development project area is located in Sections 20 and 29, Township 28 north, Range 23 west of Hennepin County, Minnesota.

This cultural resources literature review is intended to provide a preliminary understanding of what previously recorded cultural resources may be within the project area, and is a tool with which to inform further archaeological and architectural history surveys, if needed. The cultural resources literature review for this project consisted of background research to identify any known archaeological sites or architectural history properties within the project area, as well as determine if any portions of the project area have been previously surveyed.

2.0 METHODS

2.1 BACKGROUND RESEARCH

On August 2, 2012, background research was conducted using the State Historic Preservation Office (SHPO) site files for information on previously identified archaeological sites and architectural history properties, and on cultural resources surveys previously conducted within the project area. Previously identified archaeological sites and architectural history properties within a larger context area around the VA Fort Snelling West District Development project of one mile (1.6 kilometers [km]) for archaeology sites and one-half-mile for architectural history sites were also reviewed.

2.2 STUDY AREA

The study area for archaeology encompasses approximately 6.4 acres (2.6 hectares [ha]). The archaeology study area is the same as the project area and includes all areas that will be potentially directly affected by the proposed project. The study area for architectural history encompasses approximately 320 acres (129.49 hectares [ha]). The study area of architectural history is larger than the project area and encompasses area that will be either directly or indirectly affected by the proposed project. To provide a broader cultural context for the project area and guide future planning, previously identified archaeological sites within one mile and architectural history properties located within one-half mile of the project area were also identified, as part of a larger context area.

3.0 PREVIOUS INVESTIGATIONS

3.1 ARCHAEOLOGY

3.1.1 Previous Studies

Research indicated that no archaeological studies have previously been conducted within the VA Fort Snelling West District Development project area.

3.1.2 Previously Recorded Archaeological Sites

No archaeological sites have been recorded (confirmed) and no sites have been reported (not field checked) within the project area itself. However, six archaeological sites have been recorded and no sites have been reported within the larger one-mile context area (Table 1) (Figure 1).

Table 1. Previously Identified Archaeology Sites within One Mile of Project Area

Site No.	Site Name	T	R	S	¼ Section	Description
21-DK-0024	Cantonment New Hope	28N	23W	27	NW	1816-1820 Military Camp
21-HE-0099	Historic Fort Snelling	28N	23W	21	SW	Pre-contact Artifact Scatter and Foundation/Ruin
21-HE-0309	N/A	28N	23W	20	NW	Initial US Contact Artifact Scatter
21-HE-0337	Snelling Lake A	28N	23W	29	SE	Late Woodland Pre-Contact Artifact Scatter
21-HE-0338	Snelling Lake B	28N	23W	29	SE	Transitional to Late Woodland Pre-Contact Artifact Scatter
21-HE-0339	Snelling Lake C	28N	23W	29	SE	Pre-Contact Single Artifact

3.2 ARCHITECTURAL HISTORY

3.2.1 Previous Studies

Research indicated that eight architectural history surveys have been conducted within the VA Fort Snelling West District Development project area. The surveys within the project area include:

- National Historic Landmark listing of Fort Snelling, 1960;
- National Register listing of Fort Snelling, 1966;
- State Historic Site designation of Old Fort Snelling Historic District, 1971;
- Minneapolis-Saint Paul Airport Reconnaissance Survey, 1992;

- *All the Remains*: A Study of Historic Structures At Fort Snelling, 1996; report documented 99 buildings, structures, sites, and objects that survive from the period prior to Fort Snelling's closure as an active military post in 1946;
- Fort Snelling State Park Upper Bluff Reuse Study, 1998;
- Fort Snelling Upper Post Interpretive Plan, 2006; and
- Fort Snelling West District Historical Context Study and Development Guidelines report, 2010.

On December 19, 1960, Fort Snelling was listed as a National Historic Landmark (NHL) for its nineteenth and twentieth century significance in the areas of commerce, communication, military, political, and settlement of the frontier history. Fort Snelling played an integral role in the security and development of the northwest region, and in the transformation of the United States Army from a small frontier force to that of a major modern army. The NHL includes over 40 buildings and structures, and the associated landscapes, including parade grounds and golf course (National Historic Landmarks Program 2012). The areas contained within the NHL include the present-day Upper Post, including the golf course and polo grounds/ball fields, and the Historic Fort Snelling area operated today by the Minnesota Historical Society. The buildings north of Bloomington Road are not encompassed in the NHL designation (National Historic Landmarks Program 2012).

Fort Snelling was listed in the National Register of Historic Places in 1966. Like the NHL nomination, Fort Snelling was listed in the National Register for its military history and its integral role in the development of the northwest region. The boundaries of Fort Snelling are unclear in the National Register nomination, but have generally been interpreted to be inclusive of the Historic Fort, the Upper Post, and the area west of Bloomington Road (Miller Dunwiddie and Hess Roise 2010:4).

Enacted by the Minnesota Legislature in 1971, the Old Fort Snelling Historic District was designated as a state historic site as part of the Historic Sites; Historic District Act of 1971, as part of State Statute 138. The Act was an effort to preserve the outstanding geographical areas of Minnesota that possess historical, architectural, and aesthetic values. As defined in the Act, the Old Fort Snelling Historic District is (roughly) bound on the east by the Mississippi River, on the south the county line between Hennepin and Dakota Counties, on the east by the Metropolitan Airport Commission boundary line extended (Minneapolis-Saint Paul International Airport eastern boundary), and on the north by a line 600 feet north and parallel to Bloomington Road. The area enclosed by the boundaries is comprised of approximately 640 acres located in Section 29, Township 28 north, Range 23 west of Hennepin County, and Section 28, Township 28, Range 23 west in Dakota County (Minnesota Statute 138.664, subd. 73). This district aligns with the boundaries of the Fort Snelling Historic District in the National Register of Historic Places (Minnesota Statute 138.7, subd. 13).

The Minneapolis-Saint Paul Airport Reconnaissance Survey was prepared in 1992 by Hess, Rosie and Company for the Metropolitan Airports Commission. A small group of buildings along Taylor Avenue, immediately adjacent to the airport's eastern boundary were studied to determine if any cultural resources would be affected by runway expansion at the

Minneapolis-Saint Paul International Airport. Twelve buildings located within Fort Snelling were surveyed. These buildings are within the larger context area for this project and are Buildings 102, 103, 112, 154, 155, 156, 157, 158, 159, 160, and 161. The survey found that destruction of the buildings on Taylor Avenue would "undoubtedly cause significant damage to the district's integrity, particularly if the destruction of these buildings was compounded by the intrusion of aircraft traffic further east" (Roise 1992:1, 7).

In 1996, Robert Alan Clouse prepared the study, *All the Remains*, which is a study of the historic structures at Fort Snelling. A total of 99 buildings, structures, sites and objects were inventoried to provide a context for the understanding of the significance of the structures that comprise Fort Snelling. Each property was inventoried and ten historic landscape units were defined (Close and Steiner 1996).

The Fort Snelling State Park Upper Bluff Reuse Study was published in 1998. The reuse study was completed to assist the Minnesota Department of Natural Resources in determining the feasibility of reuse of the 28 buildings that comprise the Upper Post and the surrounding 141 acres. The study provides recommendations of the type of use for each building as well as the landscapes (Zahn 1998).

The Fort Snelling Upper Post Interpretive Plan was prepared in 2006 by Thomas R. Zahn & Associates for the Minneapolis Park and Recreation Board and the Fort Snelling Upper Post Review Team (HE-2006-10H). The report proposes a methodology to link the Upper Post's major historic themes with spaces that remain, including the landscape, the buildings, and the athletic facilities. The plan calls for building stabilization, improved site access, and interpretive elements, such as kiosks, walking trails, building plaques, displays within the buildings, and special tours and events (Zahn 2006).

In April 2010, Miller Dunwiddie Architecture and Hess, Roise and Company prepared the Fort Snelling West District – Historical Context Study and Development Guidelines document. As Fort Snelling currently is not subject to zoning and design guidelines, the report was intended to be a substitute for a zoning ordinance, planning guidelines, or similar documents. Its purpose was to provide historical preservation, restoration, rehabilitation, and development guidelines and information for the area the report authors call the "West District," so that developers interested in buildings or sites there understand the opportunities that exist as well as the parameters that will govern the work. The West District is the area of Fort Snelling west of Bloomington Road. This report also identified the contributing West District historic buildings, open spaces, and landscapes that should be retained, as well as potential areas for new development. The report was not meant to be an in-depth scholarly study, but rather, intended to provide an overview of the importance of the historic West District of Fort Snelling (Miller Dunwiddie and Hess Roise 2010:1-2).

3.2.2 Previously Recorded Architectural History Properties

Seven properties were previously inventoried within the VA Fort Snelling West District Development project area (Table 2). The properties within the project area range in type

from military, recreation and culture, to transportation. Additionally, 95 properties were identified within the larger context area (see Table 3) (Figure 2).

TABLE 2. PREVIOUSLY INVENTORIED ARCHITECTURAL HISTORY PROPERTIES WITHIN PROJECT AREA

Inventory No.	Property Name	Address	Description	NRHP Status
HE-FSR-0044	Building 210 (F-43)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0045	Building 211 (F-49)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0047	Building 214 (F-56)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0048	Building 215 (F-57)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0057	Building 227a-b (F-30, 31)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0058	Building T228a-f (F-45)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0059	Building 229a-d (F-38, 41)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed

4.0 RECOMMENDATIONS

4.1 AREA OF POTENTIAL EFFECT

The area of potential effect (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE accounts for any physical, auditory, visual, or other potential impacts to historic properties. The APE for archaeological resources is usually different from the APE for aboveground, architectural history properties. The definition of the APE is an initial step in the Section 106 process, and is generally undertaken by the federal agency in consultation with the SHPO. Should the VA Fort Snelling West District Development project be altered from the present proposal, the recommended APE for archaeological and architectural history resources may need to be adjusted, as appropriate.

4.2 ARCHAEOLOGY

The APE for archaeology should include all areas of proposed construction activities or other potential ground disturbing activities associated with the VA Fort Snelling West District Development. The project design is still being developed; however, all ground-disturbing impacts will be limited to the current lease area. Therefore, until more fined design plans are available, the recommended APE for archaeology is the same as the project area/lease area (see Figure 1).

4.3 ARCHITECTURAL HISTORY

The APE for architectural history should account for any physical, auditory, or visual impacts to historic properties, both direct and indirect.

Potential temporary effects may include intermittent noise, dust, minor vibrations, and slightly increased traffic levels associated with construction activities. These temporary effects will be limited to the construction phase and will be further limited to daytime hours. It is not expected that noise levels from construction equipment and trucks delivering construction supplies will exceed acceptable DNL levels. It is also anticipated that noise levels will not exceed those coming from jets taking off at the nearby Minneapolis-St. Paul International Airport. Therefore, the APE for noise can be limited to the project area. Since much of the area around the project area is open and subject to wind, it is anticipated that any dust generated from the project during construction will be quickly dissipated and will not have any significant effects on any historic properties. Since no pile driving is anticipated, vibrations will be limited to those produced by trucks coming into and out of the project area and by construction equipment inside the project area. Therefore, the potential impact from vibrations is minimal and it is not anticipated that vibrations will have any significant effect on historic resources. Increases in traffic during construction will be slight and will not cause any significant increase in overall traffic within the historic district. Based on these assumptions, the APE related to temporary effects during construction can be limited to the project area.

Permanent effects will include direct physical effects to the project area, including to the buildings and landscape, slight increases in traffic, and indirect visual effects. Direct physical effects will be limited to the project area and will result from the construction of new parking areas; the rehabilitation of Buildings 210, 211, 214, 227 and 229; additions to Buildings 210, 211 and 214; the mothballing of Building 215; and the demolition of Building 228. The increase in traffic will be slight, and will not significantly increase the overall level of traffic within Fort Snelling, so the potential for traffic to effect historic properties is negligible. The rehabilitation of Buildings 210, 211, 214, 227 and 229; additions to Buildings 210, 211 and 214; the mothballing of Building 215; and the demolition of Building 228 will result in visual effects on a much larger area. Since the area surrounding the project area is relatively flat and includes a number of wide open, flat spaces, the viewshed of the project area extends outward some distance in many areas. Therefore, visual effects are the primary potential effect from the proposed project on areas outside the project area. As a result, the APE for architectural history is based on indirect visual effects.

The APE for architectural history includes all areas from which the project area is visible (see Figure 2). The northeastern edge of the architectural history APE extends along Highway 55, which is located on a raised roadbed, thereby substantially blocking views of the project area from areas northeast of the highway, including the Old Post of Fort Snelling. On the southeast, the APE includes the first tier of buildings on the south side of Taylor Avenue. Views from areas further to the southeast are blocked by these buildings and heavy vegetation behind them. On the south, the APE extends through the Fort Snelling Golf Course, which includes densely planted rows of deciduous trees between fairways, thus blocking views of the project area from the south. The one exception is where a clearing

extends through the course, providing a direct visual connection between Building 229 and another on Leavenworth Avenue. The APE includes this view corridor. On the southwest and west, the APE includes the first tier of buildings that have direct views of the project area. These buildings substantially block views from areas further to the southwest and west. On the north, the APE is bounded by Minnehaha Avenue and Federal Drive. The area between the project area and these roads includes a number of buildings, trees and parking lots, all of which collectively provide a sufficient amount of visual clutter to substantially blocks of the project area from areas further north.

REFERENCES CITED

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2006 *Fort Snelling Upper Post Interpretive Plan*. Prepared for the Minneapolis Parks and Recreation Board and the Fort Snelling Upper Post Review Team. Prepared by Thomas R. Zahn & Associates. On file at the Minnesota State Historic Preservation Office, Saint Paul, Minnesota.

Source: National Park Service; ESRI; The 106 Group Ltd.

Map Produced by The 106 Group Ltd 8/13/2012

VA Fort Snelling West District Development
Cultural Resources Literature Review
Hennepin County, Minnesota

Previous Investigations and Recommended Archaeology APE

0 175 350 525 700 Meters

0 560 1,120 1,680 2,240 Feet

1:17,503

Project Area / Archaeology APE
One Mile Archaeology Study Area
Previously Identified Archaeology Site

N

Figure 1

Source: National Park Service; ESRI; The 106 Group Ltd.

Map Produced by The 106 Group Ltd 8/27/2012

VA Fort Snelling West District Development
Cultural Resources Literature Review
Hennepin County, Minnesota

Previous Investigations and Architectural History APE Recommendation

0 75 150 225 300 Meters
0 250 500 750 1,000 Feet
1:8,000

- Project Area
- One-Half Mile Architectural History Study Area
- Architectural History APE
- NRHP Listed Architectural History Property
- NRHP Eligible Architectural History Property
- Previously Inventoried Architectural History Property

N

Figure 2

TABLE 3. PREVIOUSLY INVENTORIED ARCHITECTURAL HISTORY SITES WITHIN THE LARGER ONE-HALF MILE CONTEXT AREA

Inventory Number	Property Name	Address	Description	NRHP Status
HE-FSR-0001	Fort Snelling Historic District	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0002	Building 53 (G-5)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0003	Building 54	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0004	Building 55 (G-3)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0005	Building 56 (G-4)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0006	Building 57 (C-9)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0007	Building 58 (C-11) (flagstaff)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0008	Building 62 (G-6)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0009	Building 63 (C-6) (vacant)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0010	Building 64 (C-10) (vacant)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0011	Building 65 (C-4)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0012	Building 66 (C-13)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0013	Building 67 (C-1)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0014	Building 76 (F-4) (vacant)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0015	Building 79 (vault)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0016	Building 99 (vault)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0017	Building 101 (B-1) (vacant)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0018	Barracks - Building 102 (B-2) (vacant)	102 Taylor Ave.	Military	Listed
HE-FSR-0019	Barracks - Building 103 (B-3) (vacant)	103 Taylor Ave.	Military	Listed
HE-FSR-0020	Building 108 (vacant)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed

TABLE 3. PREVIOUSLY INVENTORIED ARCHITECTURAL HISTORY SITES WITHIN THE LARGER ONE-HALF MILE CONTEXT AREA

Inventory Number	Property Name	Address	Description	NRHP Status
HE-FSR-0021	Post Bakery/NCO Housing - Building 112 (119) (C-7) (vacant)	112 Taylor Ave.	Military	Listed
HE-FSR-0022	Building 151 (A-20) (vacant)	xxx Taylor Ave.	Military	Listed
HE-FSR-0023	Building 152 (A-1) (vacant)	xxx Taylor Ave.	Military	Listed
HE-FSR-0024	Building 153 (A-2) (vacant)	xxx Taylor Ave.	Military	Listed
HE-FSR-0025	Officers' Quarters - Building 154 (A-3) (vacant)	154 Taylor Ave.	Military	Listed
HE-FSR-0026	Officers' Quarters - Building 155 (A-4) (vacant)	155 Taylor Ave.	Military	Listed
HE-FSR-0027	Officers' Quarters - Building 156 (A-5) (vacant)	156 Taylor Ave.	Military	Listed
HE-FSR-0028	Officers' Quarters - Building 157 (A-21 & 22) (vacant)	157 Taylor Ave.	Military	Listed
HE-FSR-0029	Officers' Quarters - Building 158 (A-6) (vacant)	158 Taylor Ave.	Military	Listed
HE-FSR-0030	Officers' Quarters - Building 159 (A-7) (vacant)	159 Taylor Ave.	Military	Listed
HE-FSR-0031	Officers' Quarters - Building 160 (A-8) (vacant)	160 Taylor Ave.	Military	Listed
HE-FSR-0033	Officers' Quarters - Building 161 (A-9) (vacant)	161 Taylor Ave.	Military	Listed
HE-FSR-0034	Garage - Building T-182 (A-30)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0035	Building T-178 (A-28)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0036	Building T-186 (vault)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0037	Building 201 (F-42) (Cavalry Drill Field)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0038	Building 202 (F-24)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed

TABLE 3. PREVIOUSLY INVENTORIED ARCHITECTURAL HISTORY SITES WITHIN THE LARGER ONE-HALF MILE CONTEXT AREA

Inventory Number	Property Name	Address	Description	NRHP Status
HE-FSR-0039	Building 203 (F-22)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0040	Building 205 (F-27)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0041	Building 206 (F-26)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0042	Building 207 (F-23)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0043	Building 209 (F-21)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0046	Building 212 (F-44)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0049	Building 217 (F-7)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0050	Building 218 (F-11)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0051	Building 219 (F-10)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0052	Building 220 (F-58)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0053	Building 222 (F-14, 18, 19)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0054	Building 223 (F-61)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0055	Building 224 (F-60)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0056	Building T-226 (F-3)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0060	Building 230	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0061	Building 237 (F-2)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0062	Building 239 (F-15)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0063	Building 240 (F-53)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0064	Building 241 (F-50)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0065	Building 242 (F-48)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0066	Building 243a-g (F-62)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0067	Building 244 (F-51)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed

TABLE 3. PREVIOUSLY INVENTORIED ARCHITECTURAL HISTORY SITES WITHIN THE LARGER ONE-HALF MILE CONTEXT AREA

Inventory Number	Property Name	Address	Description	NRHP Status
HE-FSR-0068	Building 245 (F-52)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0069	Building 246 (F-54)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0070	Building 247 (F-58)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0071	Building 248a-b (E-12)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0072	Building 249	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0074	Building 30 (F-37)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0075	Building 31	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0076	Building 18 (A-B)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0077	Building 17 (A-B)	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0078	Ft. Snelling Chapel	off Mn. Hwy. 55 & Mn. Hwy. 5	Military	Listed
HE-FSR-0083	Site of Fort Snelling Treaty of 1837	off Mn. Hwy. 55 & Mn. Hwy. 5	Landscape	Not Previously Evaluated
HE-FSR-0084	Chapel	668 B Ave.	Military	Not Previously Evaluated
HE-FSR-0108	Transformer Vault - Building Number 19	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0109	Ordnance Storehouse - Building Number 22	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0110	Transformer Vault	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0111	Recreation Building	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0112	Restroom - Building 188	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0113	Garage - Building T-203a	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0114	Quartermaster Storehouse - Building 225	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed
HE-FSR-0115	Quarters - Building 257	U.S. Hwy. 5 and Post Rd.	Recreation & Culture	Listed

TABLE 3. PREVIOUSLY INVENTORIED ARCHITECTURAL HISTORY SITES WITHIN THE LARGER ONE-HALF MILE CONTEXT AREA

Inventory Number	Property Name	Address	Description	NRHP Status
HE-FSR-0117	Artillery Drill Field	U.S. Hwy. 5 and Post Rd.	Landscape	Listed
HE-FSR-0118	Infantry Drill Field	U.S. Hwy. 5 and Post Rd.	Landscape	Listed
HE-FSR-0120	Bloomington Avenue	Bloomington Avenue	Transportation	Listed
HE-FSR-0121	Leavenworth Avenue	Leavenworth Avenue	Transportation	Listed
HE-FSR-0122	Minnehaha Avenue	Minnehaha Avenue	Transportation	Listed
HE-FSR-0123	Sibley Street	Sibley Street	Transportation	Listed
HE-FSR-0124	Taylor Avenue	Taylor Avenue	Transportation	Listed
HE-MPC-1623	Facility 617 Above Ground Storage Magazine Types A, B, and C	corner Minuteman and Milita Drive	Military	Considered Eligible for NRHP
HE-MPC-1624	Facility 618 Aircraft Corrosion Control Facility	Hercules and Airlist Dr.	Transportation	Not Previously Evaluated
HE-MPC-1629	Facility 752 Non-Air Force Administration	Mustang Ave. and Minuteman Dr.	Transportation	Not Previously Evaluated
HE-MPC-1630	Facility 668 Base Chapel	Hercules Ave. and Minutman Dr.	Military	Not Previously Evaluated
HE-MPC-1631	Facility 670 Deployment Processing Facility and Museum	Mustang Ave. and General Miller Dr.	Military	Considered Eligible for NRHP
HE-MPC-1632	Facility 660 Maintenance Hangar	Hercules Ave. and General Miller Dr.	Military	Not Previously Evaluated
HE-MPC-1633	Facility 683 Contact Club	Hercules Ave. and General Miller Dr.	Military	Not Previously Evaluated
HE-MPC-1635	Facility 686 Fire Station	Minuteman Dr. and Spitfire Ave.	Military	Not Previously Evaluated
HE-MPC-5064	Alert Hangar (#670)	670 General Mills Drive Area D	Military	Not Previously Evaluated

APPENDIX A: PROJECT PERSONNEL

LIST OF PERSONNEL

Principal-In-Charge	Anne Ketz, M.A., RPA
Project Manager	Jennifer Bring, B.A.
Principal Investigators	
Archaeology	Anne Ketz, M.A., RPA
Architectural History	Greg Mathis, M.C.R.P.
Researchers	Kelli Andre Kellerhals, M.S.
Graphics and GIS	Nathan Moe, B.A.

Appendix I

Resumes

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ERIC D. KIESELBACH
President and CEO

Education

B.S. Environmental Resource Sciences: University of California, Davis, 1986
Emphasis: Water Sciences, Environmental Toxicology, Soil Sciences

Hazardous Waste Certificate Program: University of California, Davis
Additional classes in: Risk Assessment, Hazmat, Advanced Hazmat, Environmental Regulations, SARA Compliance

Licenses

- California State Registered Assessor, REA #02881
- Building Inspector #1607
- Management Planner #1680
- Project Designer #1839
- Contract Supervisor #2276
- California General Contractor, Retired #372431

Special Qualifications

Mr. Kieselbach qualifies as an "Environmental Professional" in accordance with the US EPA's AAI (All Appropriate Inquires) 40 C.F.R. § 312.22. Mr. Kieselbach has performed numerous site investigation, assessment, and remediation of major commercial and industrial properties — in particular, large manufacturing plants requiring major remediation. Extensive knowledge of biotreatment of hydrocarbon-contaminated soils using engineered and endemic microbes. Designed, organized, and taught 40-hour SARA training program. Familiar with CFR 29, 40, and 49, SARA, CERCLA, TOSCA, RCRA, TITLE 22, Luft Manual. Significant general contractor experience, knowledgeable in all phases of commercial construction. Extensive experience in design, construction, and operation of all types and phases of remedial treatment systems.

Summary of Experience

1991 - Phase One, Inc., Tustin, California - Current

As President and Chief Executive Officer, Mr. Kieselbach oversees the entire environmental due diligence business conducted by Phase One, Inc., including orchestrating its rapid growth and success.

12 years - EDK Construction, Sacramento, California

Mr. Kieselbach owned, as general contractor, and operated this company which constructed numerous custom homes, commercial and apartment projects. He managed and oversaw multi-million dollar projects with profitable results.

3 years - U.S. Geological Survey, California

As a Hydrogeological Technician, Mr. Kieselbach performed soil and groundwater sampling, helped set up and design soil testing and soils laboratory, and helped write procedures and perform field tests using sophisticated electronic equipment.

5 years - Exceltech Inc., a full-service environmental company, Irvine, California

As an officer and Vice President, Mr. Kieselbach ran the Southern California operations for Exceltech Inc., which included the Geoscience, Engineering, Remediation, and ACT (Assessments, Compliance, and Training) Departments. He undertook major work for such companies as Shell Oil, Conoco, and Kaiser Aluminum. He was also corporate safety officer for four of the five years.

ERIC EXTON
Operations Manager

Education

Numerous college courses focusing on science, computers, and business including: biology, micro-biology, environmental biology, chemistry, statistics, anatomy and physiology, programming in BASIC, Programming in C, programming in Pascal, advanced data structures, database programming, accounting and business law.

Licenses and Certifications

- California State Registered Assessor, REA I #08334
- State of California, Department of Health Services, Lead Related Construction Certificate, Inspector/Assessor ID#17704
- Certification in Mold Inspection & Sampling
- Microsoft Certified Systems Engineer (MCSE) #44842
- Microsoft Certified Professional in Microsoft Windows, Windows NT, Networking, SQL Server Administration, and SQL Server Implementation

Special Qualifications

Mr. Exton qualifies as an "Environmental Professional" in accordance with the US EPA's AAI (All Appropriate Inquires) 40 C.F.R. § 312.22. Mr. Exton has extensive experience in managing and supervising technical and administrative staff as well as in managing remote offices. Mr. Exton has also managed large, multi-site projects that have encompassed sites in multiple states. He has been involved with Phase II projects, prepared site characterization plans, and has worked in unison with governmental agencies and clients to achieve closure for contaminated properties. He has overseen soil cleanups and the installation of ground monitoring wells. In addition, he is an expert in computer programming, networking, databases, and systems administration.

Summary of Experiences

1992 – Phase One, Inc., Tustin, California – Current

Mr. Exton has written, researched, or performed the fieldwork for thousands of Phase I Environmental Site Assessments for various types of properties including manufacturing facilities, automotive repair facilities, and agricultural properties. In addition, he is the company's expert in the Federal Communications Commission's (FCC) responsibilities under the National Environmental Policy Act (NEPA). He has consulted on hundreds of NEPA compliance projects for various telecommunications companies. He has also consulted on NEPA compliance for several Department of Housing and Urban Development's (HUD) redevelopment projects as well as CEQA projects. He has made determinations and received concurrence from the State Historical Preservation Officer (SHPO) of many states for hundreds of Section 106 compliance projects. Mr. Exton has also managed special projects including Native American consultation, endangered species mitigation, consultation with the US Fish and Wildlife Service, wetlands surveys, flood plain hydrology studies, and archaeological testing. His archaeological projects have included the discovery of human remains. Mr. Exton has also written the majority of custom software utilized by Phase One, Inc; this software has increased the company's productivity and has improved the quality of reports compiled.

1 year – Valmer, Inc., Palo Alto, California

Mr. Exton managed and supported the computers and network for Valmer, Inc., a computer software company. He also managed the technical support of the company's contact management software, wrote several utilities to import data from other contact management and database programs, and merged data into popular word processing and fax programs.

REPORT SIGNATURE SHEET AND CERTIFICATION

The undersigned hereby certifies that:

The following people have prepared, written, and/or reviewed the Draft Environmental Assessment. All the below parties have, in good faith, conducted their respective project responsibilities using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields.

All parties have acted in good faith and have no known relationship with the subject site, owners, buyers, or any other entity associated with the subject site. All respective project responsibilities have been conducted independently, and with no conflict of interest.

The statements of fact contained in this report are true and correct based on materials reviewed.

The reported analyses, opinions, and conclusions are personal, unbiased, professional, and limited only by the assumptions and qualifications stated herein. Compensation is not contingent upon an action or an event resulting from the analyses, opinions, or conclusions included in this report. Nor is it contingent upon the use of this report.

The investigation has been performed in accordance with all applicable legal requirements and in accordance with accepted practices prevailing in the industry. The personnel who performed the investigation are properly licensed and certified in accordance with the requirements of all federal, state, and local laws, rules, and regulations.

I/We have the specific qualifications based on education, training, and experience to perform a Draft Environmental Assessment. The report is in substantial compliance with Title 38, C.F.R. Part 200.

We have no present or prospective interest in the subject property or the parties involved.

If necessary, expert testimony and other legal appearances will be provided for a reasonable fee to be arranged.

Eric Kieselbach
President, Technical Reviewer

Nadine Kieselbach
Copy Editor

Eric Exton
Operations Manager, Report Writer

REGISTERED ENVIRONMENTAL ASSESSOR
ERIC EXTON
No. REA I - 08334
Expires: 06/2012
STATE OF CALIFORNIA

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