National Park Service U.S. Department of the Interior

Grand Portage National Monument Minnesota



Grand Portage Maintenance Facility and Seasonal Housing

Environmental Assessment July 2009







Prepared for Grand Portage Reservation Tribal Council



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ACRONYMS, ABBREVIATIONS, AND SHORT FORMS

ATV all-terrain vehicle

Band Grand Portage Band of Minnesota Chippewa

BMP Best Management Practice

CEQ Council on Environmental Quality

CFR Code of Federal Regulations

DOI U.S. Department of the Interior

EA Environmental Assessment

EPA U.S. Environmental Protection Agency

et seq. et sequentia (and the following)

FR Federal Register

GRPO Grand Portage National Monument

LEED Leadership in Energy and Environmental Design

LUST leaking underground storage tank

Minn. 61 Minnesota State Highway 61

MnDNR Minnesota Department of Natural Resources

Monument Grand Portage National Monument

NAAQS National Ambient Air Quality Standards

NEPA National Environmental Policy Act of 1969

NPDES National Pollutant Discharge Elimination System

NPS National Park Service

NRHP National Register of Historic Places

PHMSA Pipeline and Hazardous Materials Safety Administration

Project Area the area in which the proposed facilities would be constructed

RTC Reservation Tribal Council

RV recreational vehicle

SHPO State Historic Preservation Office

USC United States Code

USFWS U.S. Fish and Wildlife Service

SUMMARY

S.1 DESCRIPTION OF THE PROJECT

The Grand Portage Band of Minnesota Chippewa (Ojibwe, also spelled Ojibwa) (the Band) and the U.S. Department of the Interior (DOI) National Park Service (NPS) are proposing to construct a maintenance facility, including an outdoor storage yard, and NPS-staff seasonal housing at Grand Portage National Monument (the Monument or GRPO) in Grand Portage, Minnesota. NPS has a unique relationship with the Band because the Monument is located entirely within the Grand Portage Reservation. The Monument is located at the site of a historic portage. Given its significance as "a fur trade site whose history is integrally related to Native Americans in the past and present," the Monument was designated a national historic site on September 15, 1951. On September 2, 1958 (72 Stat. 1751), it was established as a unit of the NPS to preserve an area containing unique historical values (NPS, 2003).

The purpose of this Environmental Assessment (EA) is to identify and evaluate the potential adverse environmental effects, or impacts, that the proposed action (the Project) would have on the environment. This EA has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), which requires that Federal agencies analyze the impacts of their actions on the environment.

The existing maintenance facility, the outdoor storage yard for equipment and supplies, and the seasonal housing for NPS staff support the Monument's varied recreational and educational uses. The current facilities have deficiencies that need to be addressed. Not only do they require upgrading, but they are separate from one another and are located on sites that are more suitable for other uses.

The maintenance facility, where NPS vehicles are serviced, has capacity issues and lacks a paved area on which to perform maintenance. The outdoor storage yard, which is used for parking equipment or storing supplies when not needed, is located on a lake-front site approximately 1,400 feet by road from the maintenance facility. The facility and storage vard are both located on Monument land.

The seasonal housing that provides living quarters for NPS staff is on Band land leased by the Monument. Its peak use is from late May to early October, when the reconstructed stockade and buildings are open to the public; there is also occasional winter use, with one or two occupants of the housing for a one-to-three-month duration, depending on the need. A few recreational vehicles (RVs) are parked at this site. The seasonal housing is in need of repairs and is located on lake-front property on Hat Point, across Grand Portage Bay from the current maintenance facility.

NEPA (42 United States Code [USC] 4321-4347) is the foundation of environmental policy making in the U.S. The NEPA process includes an environmental review early in the planning for proposed actions. The process is intended to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment.

S.2 PURPOSE AND NEED

The purpose of the proposed action is fourfold:

- To address the inadequacies of the current maintenance facility with respect to capacity and provisions for vehicle maintenance.
- To consolidate the maintenance facility and the outdoor storage on a single site.
- To improve the quality of the seasonal housing for the NPS staff.
- To centralize the seasonal housing closer to the Monument.

The proposed action is intended to address the need to correct existing operational issues involving the maintenance facility, the outdoor storage yard, and the seasonal housing.

The need for action is summarized as follows:

- Capacity issues and other inadequacies of the current maintenance facility The
 facility consists of four buildings, a gravel parking area, and a gravel-surfaced
 open area used for vehicle repairs. These buildings are overcrowded and
 somewhat rundown.
- Unconsolidated NPS resources Currently, the maintenance facility and the outdoor storage yard are located on separate sites, resulting in a loss of efficiency and inconvenience.
- Poor condition of seasonal housing The existing housing for NPS staff will soon need substantial repairs and updating, and the deck is likely to need replacement.
- Inappropriate locations of these operational facilities The maintenance facility is located at the approximate head of the historic Grand Portage Trail (and disturbs the viewshed from the trail). The outdoor storage yard is located in an area with high potential for archaeologically sensitive resources and on prime lake-front property that could be put to a more valuable use. The seasonal housing with RV parking are adjacent to the island boat tour dock (the Voyageur Dock) and are located on prime lake-front real estate that is leased from the Band. Additionally, the location of the housing is distant from NPS facilities, requiring a commute to and from work areas.

S.3 ALTERNATIVES CARRIED FORWARD IN THIS EA

Based on the evaluation of the build alternatives, the Store Road Site Alternative and the Stevens Road Site Alternative are carried forward for further consideration in this EA. In addition, the No-Action Alternative (representing the status quo) was carried forward to serve as a baseline for comparison with the build alternative as required by NEPA (42 USC 4321-4347). The No-Action Alternative and the two build alternatives are discussed below.

Alternative A – No-Action

The No-Action Alternative would continue operations without any changes. As discussed under Purpose and Need, current operations are hindered by inadequacies in the condition and locations of the existing maintenance facility, outdoor storage yard, and temporary housing for seasonal NPS employees:

Under the No-Action Alternative, the existing run-down buildings would continue to be used, and valuable lake-front property that could be put to better use by the Band and the Monument would continue to serve operational purposes rather than promote the Monument's educational and recreational goals.

S.3.2 Alternative B – Store Road Site (Preferred Alternative)

The Store Road Site Alternative was carried forward for further consideration in this EA because it is logistically feasible, meets the purpose of and need for the proposed action, and would have minimal environmental impacts.

Approximately 3 acres of land in the area proposed for the Store Road Site have been cleared, and approximately 2 acres of land are needed for the maintenance facility, storage yard, and seasonal housing. Consequently, it is not anticipated that clearing of previously undisturbed area would be required. A drainage ditch off the north edge of the site drains to Grand Portage Creek, and some wetland vegetation is present to the south of the proposed site. If the cleared area is not sufficient, additional archeological and wetland surveys would be needed. A tribal allotment southeast of the site would not be affected by development of this site. A historic cemetery and a farmstead are located near but outside the proposed site. A former groundwater well that was capped and properly closed is adjacent to the pole barn.

The site would include a maintenance facility with a shop and an office, an equipment/material storage yard for equipment and supplies, and a four-plex seasonal housing building for NPS employees, along with parking lots for staff, residents, and RVs. The access road to the seasonal housing would be limited to use by residents and visitors only. Gravel driveways and parking lots would be installed initially, with the potential for future asphalting of the driveways and parking lots.

The new maintenance facility constructed at this site would be approximately 6,300 square feet in area. The facility would include a storage area for RTC-audited material, vehicle storage, a maintenance garage with a vehicle lift, a wood shop with dust collection, multiple storage areas, a conference/lunch room, restrooms, and concrete aprons. The facility would have shared function by the Band and NPS.

The proposed seasonal housing, approximately 3,500 square feet in area, would consist of one building containing two two-bedroom units and two one-bedroom units. A laundry room and roofed decks would be included. The NPS standard four-plex design for housing units would be used and modified as needed to meet a variety of criteria. The housing would be designed and built according to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) gold or platinum standards, with attention given to its orientation on the site, energy efficiency, sustainability, and

other green building qualities. This would be the first such building constructed by the NPS in the region.

S.3.3 Alternative C – Stevens Road Site

The Stevens Road Site Alternative was carried forward for further consideration in this EA because it is on NPS land, is logistically feasible, and meets the Project objectives. However, the site would require construction of an access road on tribal lands and has limitations with respect to utility costs, water and wastewater access, geologic formations, road construction, and the need for clearing vegetation to connect to the necessary services. Although there is a cleared area with an abandoned power line corridor south of the Cemetery Access Road, access road construction would not be feasible because of the topography of this area. Access to the site from the east or southeast would also not be feasible because of natural stone outcroppings and slopes. The access road construction could have an impact footprint comparable in size to the site itself. The facilities constructed on the Stevens Road Site would be the same as those at the Store Road Site.

S.4 POTENTIAL IMPACTS

Potential impacts of Alternative A – No-Action, Alternative B – Store Road Site, and Alternative C – Stevens Road Site are summarized in Table S-1 for each impact topic retained for analysis.

Table S-1 Summary of Impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Public Health	Minor to Potentially	Minor Short-term	Minor Short-term
and Safety	Moderate Impact	Adverse Impact	Adverse Impact
Socioeconomics	Negligible Regional Impact	Minor Beneficial Impact	Minor Beneficial Impact
Environmental	No Disproportionate	No Disproportionate	No Disproportionate
Justice	Impact on Minority,	Impact on Minority,	Impact on Minority,
	Vulnerable Age, or	Vulnerable Age, or	Vulnerable Age, or
	Low-income Populations	Low-income Populations	Low-income Populations
Other Agency or	No Effect	Negligible Impact	Negligible Impact
Tribal Land Use			
Plans or Policies			
Cultural	No Effect/No Impact	No Effect/No Impact on	No Effect/No Impact on
Resources		Historic Properties	Historic Properties
Sacred Sites	No Effect or Cumulative	No Effect or Cumulative	Minor Long-term
	Impact	Impact	Adverse Impact
Indian Trust	Minor Long-term	Minor Long-term Impact	Minor Long-term
Resources	Adverse Impact	(potentially beneficial)	Adverse Impact
Wildlife and	No Impact	Negligible Adverse	Minor Adverse Impacts
Habitats	_	Impacts	_

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Endangered, Threatened, or Protected Species, and Critical Habitats	No Effect/No Impact	No Effect/No Impact	May Affect But Not Likely To Adversely Affect/Minor Negligible Impact
Vegetation	No Impact	Minor Beneficial Long- term Impacts	Minor to Moderate Long- term Adverse Impact
Air Quality	Negligible Adverse	Minor Adverse	Minor Adverse
Soundscape Management	Minor Impact	No Long-term Impact	Minor to Moderate Long- term Adverse Impact
Water Quality	Negligible Adverse	Minor Adverse	Minor Adverse

CHAPTER 1 PURPOSE AND NEED

1.1 INTRODUCTION

The Grand Portage Band of Minnesota Chippewa (Ojibwe, also spelled Ojibwa) (the Band) and the U.S. Department of the Interior (DOI) National Park Service (NPS) are proposing to construct a maintenance facility, including an outdoor storage yard, and NPS-staff seasonal housing at Grand Portage National Monument (the Monument or GRPO) in Grand Portage, Minnesota. NPS has a unique relationship with the Band because the Monument is located entirely within the Grand Portage Reservation. The Monument is located at the site of a historic portage. "As a portage, company headquarters, transshipment point, and trading post, Grand Portage has had a rich and important history" (White, 2004). Given its significance as "a fur trade site whose history is integrally related to Native Americans in the past and present," the Monument was designated a national historic site on September 15, 1951. On September 2, 1958 (72 Stat. 1751), it was established as a unit of the NPS to preserve an area containing unique historical values (NPS, 2003).

The purpose of this Environmental Assessment (EA) is to identify and evaluate the potential adverse environmental effects, or impacts, that the proposed action (the Project) would have on the environment. This EA has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), which requires that Federal agencies analyze the impacts of their actions on the environment.

The following includes a description of the Monument and the area in which the proposed facilities would be constructed (the Project Area) as well as background information on the Project.

1.1.1 Grand Portage National Monument

The Monument consists of nearly 710 acres within the 57,000-acre Grand Portage Indian Reservation located about 7 miles south of the border of the United States and Canada. Its boundaries are the Grand Portage Indian Reservation on the north and south, Lake Superior on the east, and the Pigeon River and Canada on the west (NPS, 2003).

The purpose of the Monument is "to delineate, commemorate, and preserve a premier site and route of the 18th century fur trade" as well as "to work with the ... Band in preserving and interpreting the heritage and lifeways of the Ojibwe people." The Monument tells the story of the trading between the North West company, "a pioneering, multinational business that exerted powerful political influence" and the ancestors of today's residents of the Grand Portage Indian Reservation 200 years ago or more. It marks the earliest of

NEPA (42 United States Code [USC] 4321-4347) is the foundation of environmental policy making in the U.S. The NEPA process includes an environmental review early in the planning for proposed actions. The process is intended to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment.

the fur trade sites in the national park system, "the only site concerned with the French and subsequent British colonial period," and ... the fur trade site most involved in western exploration" (NPS, 2003).

The Monument includes the entire length of the Grand Portage, an 8.5-mile footpath that was the most direct route from the Great Lakes into the interior of North America." Bypassing waterfalls and rapids on the last 20 miles of the Pigeon River before flowing into Lake Superior, the Grand Portage links Lake Superior with "westward systems of lakes, rivers and interior trading posts which eventually reached the Arctic Beaufort Sea and the Pacific Ocean." The portage served as a gateway for exploration, trade and commerce. Indian Nations referred to it as "the Great Carrying Place" and used it as early as 2,000 years ago to travel from the north shore of Lake Superior to their winter hunting grounds in the interior of what is now Minnesota and Ontario (NPS, 2003).

In keeping with its mission statement, the Monument "protects, commemorates, and interprets a reconstructed fur depot of the North West Company, a rendezvous site for international commerce and canoe route for transcontinental exploration, Native heritage, natural scene, and history of cross cultural contact and accommodation between traders, Ojibwa, and other participants in the fur trade" (NPS, 2003). Structures at the Monument (a palisade, a hand-hewn log great hall with adjoining kitchen, and a nearby canoe warehouse and Indian village) have been reconstructed based on archaeological excavations and research. These structures are located in the eastern, or lakeshore, district of the Monument. A Heritage Center, overlooking the reconstructed trading post, has also been constructed to house exhibit galleries, a bookstore, multi-media programs, park offices, archives, and a classroom. Interpretive programs as well as demonstrations of Ojibwe craft and the technology from the late 1700s recreate the history of the area. In addition to the regularly scheduled programs and activities, special events provide varied cultural experiences (NPS, April 19, 2006).

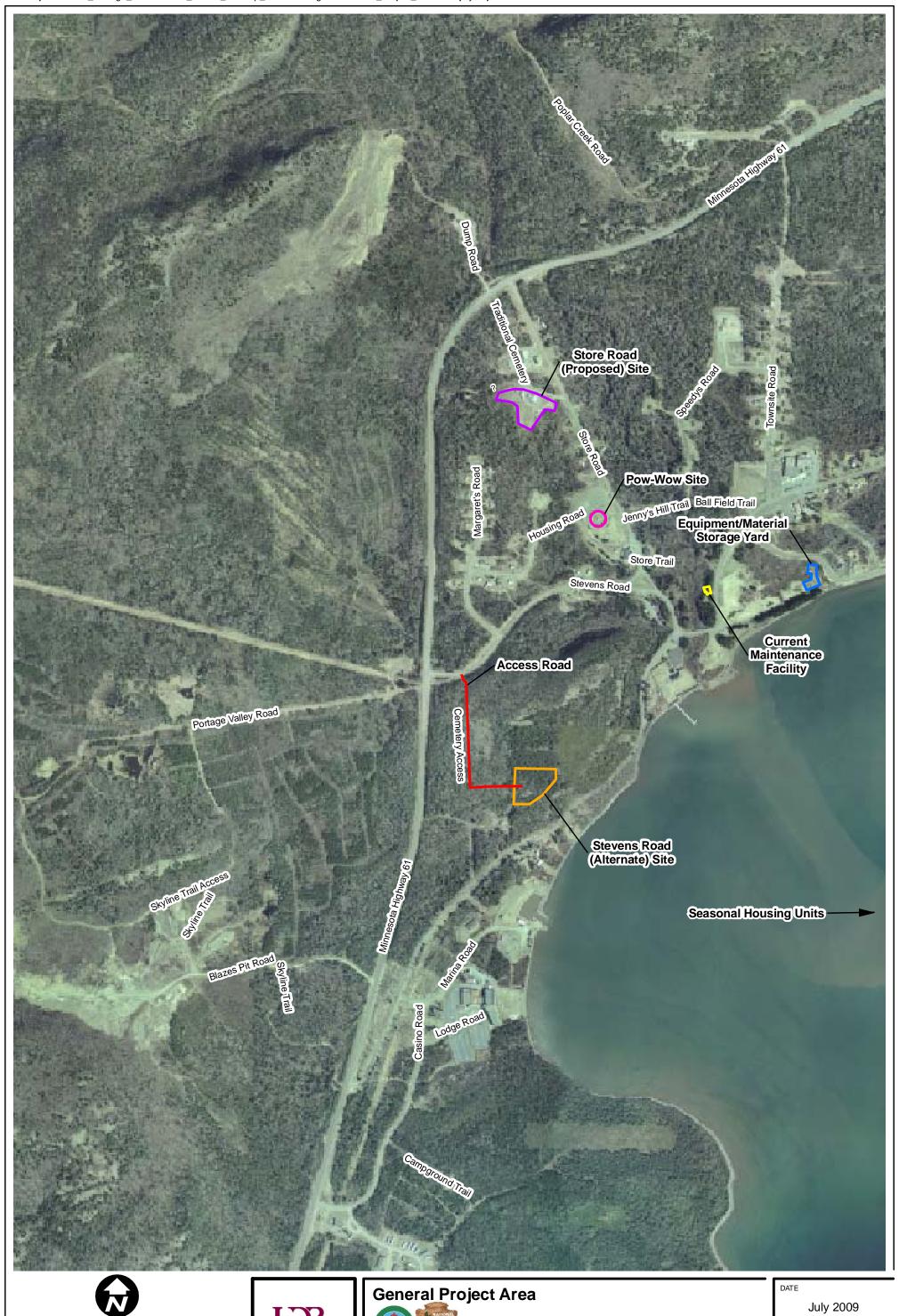
1.1.2 The Project Area

Located at the extreme northeast part of Minnesota (the "Tip of the Arrowhead"), in Cook County, the Monument is approximately 150 miles northeast of Duluth, Minnesota, and approximately 50 miles southwest of Thunder Bay, Ontario, Canada (see Figure 1-1, General Vicinity Map). The park entrance is 0.5 mile east of Minnesota State Highway 61 (Minn. 61), which traverses the Monument near Lake Superior in a northeasterly direction.

The ecosystem in this area is categorized as northern woodlands. The Monument is on the southern edge of the North American Boreal Forest, which stretches from interior Alaska across Canada to the Atlantic Ocean. The terrain includes old beach ridges and erosional bluffs near Lake Superior.

The eastern-most area of the Monument as it exists today is shown in Figure 1-2, General Project Area. Within this general area, two approximately 2-acre parcels have been identified as alternative sites of the proposed maintenance facility and seasonal housing building.





800 800 400 Feet Scale





FIGURE

1-2

One of the sites is located on tribal lands; the other is located on Monument lands but would require an approximately 300-foot-long access and utility corridor across tribal lands. (See Chapter 2, Alternatives, for a discussion and evaluation of the two alternative sites).

1.1.3 Project Background

The existing maintenance facility, the outdoor storage yard for equipment and supplies, and the seasonal housing for NPS staff support the Monument's varied recreational and educational uses. As addressed in Section 1.3, Need, below, the current facilities have deficiencies that need to be addressed. Not only do they require upgrading, but they are separate from one another and are located on sites that are more suitable for other uses (see Figure 1-2 for the locations of these facilities).

The maintenance facility, where NPS vehicles are serviced, has capacity issues and lacks a paved area on which to perform maintenance. The outdoor storage yard, which is used for parking equipment or storing supplies when not needed, is located on a lake-front site approximately 1,400 feet by road from the maintenance facility. The facility and storage yard are both located on Monument land.

The seasonal housing that provides living quarters for NPS staff is on Band land leased by the Monument. Its peak use is from late May to early October, when the reconstructed stockade and buildings are open to the public; there is also occasional winter use, with one or two occupants of the housing for a one-to-three-month duration, depending on the need. A few recreational vehicles (RVs) are parked at this site. The seasonal housing is in need of repairs and is located on lake-front property on Hat Point, across Grand Portage Bay from the current maintenance facility.

1.2 PURPOSE

The purpose of the proposed action is fourfold:

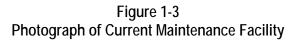
- To address the inadequacies of the current maintenance facility with respect to capacity and provisions for vehicle maintenance.
- To consolidate the maintenance facility and the outdoor storage on a single site.
- To improve the quality of the seasonal housing for the NPS staff.
- To centralize the seasonal housing closer to the Monument.

1.3 NEED

The proposed action is intended to address the need to correct existing operational issues involving the maintenance facility, the outdoor storage yard, and the seasonal housing (see Figure 1-2, General Project Area, for the current locations of these facilities as well as the two alternative sites for relocating these facilities).

The need for action is summarized as follows:

- Capacity issues and other inadequacies of the current maintenance facility The facility consists of four buildings, a gravel parking area, and a gravel-surfaced open area used for vehicle repairs. The four buildings (listed from south to north) are a small building for gas and oil storage, a slightly larger building for smaller tools and all-terrain vehicles (ATVs), a large building that hosts a shop used for maintenance and mechanical repairs and also includes office space, and a back building used for woodworking and storage. These buildings are overcrowded and somewhat rundown (see Figure 1-3, Photograph of Current Maintenance Facility). The foundation of the large maintenance building rests on exposed rock, and the maintenance building shop is not in compliance with current building code. The office space has been largely abandoned in favor of new space at the Heritage Center, and the current restroom facility is of extremely low quality. Although no obvious signs of contamination are present, the unpaved area for vehicle maintenance is not adequate to prevent pollutants such as motor oil from entering into the ground- and surface water.
- Unconsolidated NPS resources Currently, the maintenance facility and the outdoor storage yard (see Figure 1-4, Photograph of Current Outdoor Storage Yard) are located on separate sites, resulting in a loss of efficiency and inconvenience.
- Poor condition of seasonal housing The existing housing for NPS staff will soon need substantial repairs and updating, and the deck is likely to need replacement (see Figure 1-5, Photograph of Current Seasonal Housing).
- Inappropriate locations of these operational facilities The maintenance facility is located at the approximate head of the historic Grand Portage Trail (and disturbs the viewshed from the trail). The outdoor storage yard is located in an area with high potential for archaeologically sensitive resources and on prime lake-front property that could be put to a more valuable use. The seasonal housing with RV parking are adjacent to the island boat tour dock (the Voyageur Dock) and are located on prime lake-front real estate that is leased from the Band. Additionally, the location of the housing is distant from NPS facilities, requiring a commute to and from work areas.





Existing Maintenance Facility and Parking Lot, Looking North

Figure 1-4
Photograph of Current Outdoor Storage Yard



Existing Outdoor Storage Yard for Equipment, Vehicles, and Materials



Figure 1-5
Photograph of Current Seasonal Housing for NPS Staff

Rear of Existing Seasonal Residence, Looking North

1.4 PROJECT PLANNING AND SCOPING

To identify the range of actions, alternatives, and impacts to be considered during the environmental analysis for the Project, the Band and NPS held a public scoping meeting on June 4, 2009, at the Reservation Tribal Council (RTC) office in Grand Portage, Minnesota. The meeting provided information about the Project to the public and was a means of gathering public input to be considered during preparation of the EA. Notices were posted, inviting residents and other interested parties to attend and present relevant comments and questions. A second, informal scoping meeting was held on June 12, 2009 at the Elderly Nutrition Center in response to a request from a Band elder. For further information, see Chapter 4, Consultation and Coordination.

The meeting participants identified issues that were used to help determine which impact topics to retain for discussion in this EA (see Section 1.5.1) and which to dismiss from further analysis (see Section 1.5.2).

1.4.1 Relationship to Other Grand Portage National Monument Plans

The proposed construction of a new maintenance facility and NPS seasonal housing is a part of the NPS commitment to preserve Monument resources. The Project would not conflict with any other ongoing or planned projects within the Monument. There are no planned land-disturbing projects within the Monument, and the State of Minnesota is reducing its easements in the area.

1.5 IMPACT TOPICS

Impact topics are human and natural resources that have the potential to be affected by the Project. During early Project planning, impact topics for the Project were identified using guidance from legislative requirements, *Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS, January 8, 2001), and Monument-specific information. Impact topics retained for use in evaluating the Project and those dismissed from further analysis in this EA are discussed below.

1.5.1 Impact Topics Retained

The Project has the potential to impact the human environment, including public health and safety, socioeconomics, and cultural resources.

In addition to impacts on the human environment, the Project has the potential to impact the natural resources of the Monument, including wildlife and habitats; endangered, threatened, or protected species; vegetation; air quality; water quality; and waters of the U.S.

These and other relevant impact topics will be discussed in detail in Chapter 3, Affected Environment and Environmental Consequences, along with the regulations and policies that pertain to each impact topic.

1.5.2 Impact Topics Dismissed from Further Analysis

The impact topics discussed below have been dismissed from further analysis based on the rationale given for each impact topic. These impact topics will not be discussed further in this EA.

Land Use

The Store Road Site is currently being used by the Band for construction material storage, and construction vehicles continually travel through the site. Along with construction material storage, the Project Area is utilized as a multipurpose storage area; a pole barn is present on the site and stores a variety of materials. The site has been cleared and graded, but the grading is not to building standards. To the East of the Project Area is Store Road, to the south and west is forested terrain, and Grand Portage Trust Lands and Resources have their natural resources, forestry and maintenance facilities just north of the site. The Project area would require approximately 2 acres of land, and there is approximately 3 acres of cleared land on the site. Consequently, minimal clearing of existing vegetation would be required. With the proposed Project, the functions of the area would remain the same as they are today.

The existing Stevens Road Site is forested with no development. The proposed development of the maintenance and housing facilities would require clearing approximately 2 acres of forest, and additional clearing of another 2 acres would be necessary for the construction of the access road extending south from Stevens Road. There would be change in the current unused function of the area if the Project were constructed on this site.

The construction of the maintenance/garage facility and housing complex is not anticipated to result in any induced commercial development. While the Project would result in increased residence and traffic in the immediate area adjacent to the Store Road

and Stevens Road sites, it is located in the middle of a National Monument in an isolated area and thus development would be minimal. Consequently, any adverse impacts on land use would be negligible, and land use was dismissed as an impact topic.

Prime and Unique Farmland

On August 11, 1980, the Council on Environmental Quality (CEQ) directed that Federal agencies assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture, Natural Resources Conservation Service as prime or unique (45 Federal Register [FR] 59189). Prime farmland is defined as soil that particularly produces general crops such as common foods, feed, forage, fiber, and oilseed; unique farmland produces specialty crops such as fruits, vegetables, and nuts.

Upland soils (Quetico Series) are formed from glacial till and are shallow to bedrock. The Quetico Series can be found mostly in mixed deciduous and coniferous forests, and major resource uses include recreation, timber, watershed, and wildlife habitat. Lowland soils have deeper soils (Ontonagon Series) and can be characterized as silty clay loam. Native vegetation associated with the Ontonagon Series includes American basswood, eastern white pine, white spruce, and yellow birch. The primary use of the Ontonagon Series is timber and permanent pasture, with a small use in legume crop production. (Heritage Center EA 2009). The soil type at the Store Road and Stevens Road sites are predominately sandy loam and gravelly-sandy loam. Soils in the area tend to be shallow, stony, acidic, low in organic matter, and infertile. The soil characteristics of the proposed Store Road and Stevens Road sites are not consistent with typical prime and unique farmland soils. Consequently, any adverse impacts on prime and unique farmland would be negligible, and prime and unique farmland was dismissed as an impact topic.

Urban Quality and Gateway Communities

The Monument is located in a predominantly rural area. Therefore, the Project would have no effect on urban quality or gateway communities; as a result, urban quality and gateway communities was dismissed as an impact topic.

Visitor Use and Experience

Visitation at Grand Portage National Monument has steadily decreased in recent years. In 2000, annual visitation was approximately 90,000, and in 2003, visitation dropped to nearly 60,000; with an 11 percent decrease from 2000 to 2001 and a 12.5 percent decrease from 2001 to 2002 (GP Long-Range Interpretive Plan 2005). The Monument is open year round with peak visitation usually occurring during the months of May through October. Most visitors travel at least an hour to reach the Monument and a majority of the visitors come from Minnesota and visitors that are not from Minnesota are generally from the Mid-west region (GP Long-Range Interpretive Plan 2005).

Visitors to the Monument have the opportunity to partake in a wide range of both educational and entertainment experiences. Visitors have the opportunity to experience historic settings and cultural landscapes, participate in traditional cultural activities, participate in water-based activities (canoe programs), and enjoy a semi-wilderness experience on the portage trail (GP Long-Range Interpretive Plan 2005).

The average length of stay for visitors is 1-1.5 hours, and of that time, visitors have minimal interaction with the existing maintenance/garage facility and housing units. The proposed construction of a new maintenance/garage facility and seasonal housing will not impact visitors experience and thus, visitor use and experience has been dismissed as an impact topic.

Energy Requirements and Conservation Potential

CEQ's Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508) require examination of energy requirements and conservation potential as a possible impact topic in EAs.

NPS strives to incorporate the principles of sustainable design and development into all park facilities and operations. Sustainability is the result achieved by taking action in a manner that does not compromise the environment or its capacity to provide for present and future generations. Sustainable practices minimize the short- and long-term environmental impacts of developments and other activities through resource conservation, recycling, waste minimization, and the use of energy-efficient and ecologically responsible materials and techniques.

The NPS guidebook *Guiding Principles of Sustainable Design* (1993) provides a basis for achieving sustainability in facility planning and design, emphasizes the importance of biodiversity, and encourages responsible decisions. The guidebook describes principles to be used in the design and management of visitor facilities that emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The Project would reduce energy costs, eliminate waste, and conserve energy resources by using energy-efficient and cost-effective technology wherever possible.

Energy efficiency would also be incorporated into any decision-making process during the design or acquisition of facilities as well as into all decisions affecting operations at the Monument. NPS would encourage suppliers, permittees, and contractors to follow sustainable practices and address sustainable NPS and non-NPS practices in interpretive programs. Consequently, any adverse impacts relating to energy use, availability, or conservation would be negligible, and energy requirements and conservation potential was dismissed as an impact topic.

Geology and Geohazards

The proposed maintenance/garage facility and seasonal housing would require moderate sub-surface modifications primarily for the construction of foundation support, but the activities associated with the Project are primarily surface modifications. As a result, the Project would have a negligible effect on geology and geohazards; thus, geology and geohazards was dismissed as an impact topic.

Rare or Unusual Vegetation

The Project would not affect any known rare or unusual vegetation. Therefore, rare or unusual vegetation was dismissed as an impact topic.

Introduction or Promotion of Non-native Species (Plant or Animal)

The construction of the maintenance facility and seasonal housing is not likely to result in the introduction or promotion of non-native species, plant or animal, due to the implementation of standard practices for control on non-native species. Therefore, introduction or promotion of non-native species (plant or animal) was dismissed as an impact topic.

Marine or Estuarine Resources

Although there are no marine or estuarine resources in the area where Project construction would occur, the current storage yard and temporary seasonal housing are by lakefront property off Grand Portage Bay. However, Project activities in the area of the current facilities would only be related to moving of equipment and materials, which would be transported in accordance with applicable requirements. Therefore, the Project would have no effect on marine or estuarine resources, and marine or estuarine resources was dismissed as an impact topic.

Wetlands and Waters of the U.S.

There are no wetlands or waters of the U.S. located within the cleared area proposed for construction on the Store Road Site, and the Stevens Road Site does not have wetlands because of its slope. Both potential areas for the Project lack definable bed and bank, and no other Waters of the U.S. exist in the area of potential disturbance for the Project. Because the Project would have no effect on wetlands and other waters of the U.S., this impact topic was dismissed from further evaluation.

Streamflow Characteristics

There is no stream or water way associated with the Stevens Road Site. Thus, the proposed development of the Stevens Road Site would have no impact on streamflow characteristics. The proposed construction of the maintenance/garage facility and housing complex at the Store Road Site has the potential to indirectly impact an unnamed drainage ditch located north of the gravel road. The construction process and associated material run-off can alter the streams hydrologic features but Best Management Practices (BMPs) can minimize these impacts. Therefore, with the utilization of BMPs, the proposed construction would have negligible hydrologic impact on the unnamed drainage ditch which discharges to Grand Portage Creek approximately 200 feet east of the site. Additionally, the existing facilities have no impact on stream hydrology. As a result, streamflow characteristics was dismissed as an impact topic.

Floodplain

Regulatory floodplain mapping is currently not available for Cook County but information was made available to Cook County officials during the development of a 1991 EA and floodplains were not identified within the Monument. Although it is unlikely that floodplains would be impacted, the Project would adhere to NPS Director's Order No. 12 and Executive Order 11988. Consequently, floodplains was dismissed as an impact topic (GP GMP-EIS 2003).

Lightscape Management

In accordance with NPS *Management Policies 2006* (NPS, August 2006), NPS strives to preserve natural ambient lightscapes, which are natural resources and values that exist in the absence of human-produced light.

NPS would limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements. In addition, NPS would ensure that all outdoor lighting is shielded to the maximum extent possible to keep light on the intended subject and out of the night sky so that the contribution to surrounding light sources would be minimal. Therefore, lightscape management was dismissed as an impact topic.

Natural or Depletable Resource Requirements and Conservation Potential

A temporary unavoidable increase in the use of fossil fuels would occur from the use of machinery during construction. The Project would not cause a long-term increase in the use of natural or depletable resources but would result in a long-term reduction in the use of fossil fuels resulting from the consolidation of maintenance facilities and equipment and materials storage.

The Project would result in the removal of approximately 4 acres of forest area should the Stevens Road Site be selected. This impact is addressed in Sections 3.6, Wildlife and Habitats, and 3.8, Vegetation. It is not anticipated that any additional clearing would be needed for the Project at the Store Road Site. With the exception of this 4.0-acre reduction in forest area within the Monument with the Stevens Road site, the Project would not have an effect on resource conservation potential. Therefore, natural or depletable resource requirements and conservation potential was dismissed as an impact topic.

Long-term Management of Resources or Land/Resource Productivity

The Project would not have an adverse impact on the long-term management of resources within the Monument or land/resource productivity other than the 4.0-acre reduction in forest discussed above should the Stevens Road site be selected. It is not anticipated that any additional clearing would be needed for the Project at the Store Road Site. The Project would result in more efficient use of resources at the site and would have a negligible effect on the long-term management of resources or land/resource productivity. Therefore, long-term management of resources or land/resource productivity was dismissed as an impact topic.

CHAPTER 2 ALTERNATIVES

This chapter describes the range of alternatives developed to address the needs identified in Chapter 1, Purpose and Need. It also describes the screening process used to determine which alternatives to dismiss and which to carry forward for further review. The alternatives are analyzed and compared with respect to the purpose of the proposed action identified in Chapter 1. Then the resource protection measures to be incorporated into the Project are described. Finally, the environmentally preferred alternative is identified, and the impacts of the alternatives carried forward in this EA are summarized.

2.1 RANGE OF ALTERNATIVES

During the internal scoping phase of the Project, Band and Monument staff looked for sites near the Monument that were approximately 2 acres in size and identified six potential sites for the Project. Only two of the six sites, the Store Road and Stevens Road sites, were determined to be feasible alternatives. Table 2-1 lists all sites initially considered and indicates which were carried forward, which were dismissed, and what rationale was used to screen out unreasonable alternatives. Sections 2.3.2 and 2.3.3 provide the reasons for carrying forward the Store Road and Stevens Road sites for further evaluation, respectively.

Table 2-1
Range of Build Alternatives

Alternative	Disposition of Alternative
Store Road Site, on Band property	Carried forward for further consideration (See Section 2.3.2 for the rationale.)
Stevens Road Site, on NPS property	Carried forward for further consideration (See Section 2.3.3 for the rationale.)
Site North of Minn. 61, on Band property	Dismissed for safety reasons (The location would require frequent crossing of Minn. 61 by NPS vehicles.)
Site North of Mount Rose Trail, on NPS property	Dismissed because site is too small (Band and Monument staff have agreed to a site of about 2 acres for the maintenance facility, including the outdoor storage yard, and the seasonal housing)
Site by Outdoor Storage Yard, on NPS property	Dismissed because of archaeological sensitivity and wetlands that could not be avoided (Disturbance of these resources would cause environmental impacts and require complicated coordination with resource agencies.)
Site south of the Old Log School, on Band property	Dismissed because of wetlands and cultural resources that could not be avoided (Disturbance of these resources would cause environmental impacts and require complicated coordination with resource agencies.)

2.2 BUILD ALTERNATIVES CARRIED FORWARD FOR FURTHER REVIEW

Two build alternatives (potential sites for construction of the Project) were carried forward for further consideration and for more detailed environmental analysis: the Store Road Site, and Stevens Road Site, described in Sections 2.2.1 and 2.2.2, respectively. The locations of both potential sites are shown in Figure 1-2, General Project Area. Both alternatives would consolidate a new maintenance facility, outdoor storage yard, and seasonal housing for NPS staff on one site of approximately 2 acres in size.

2.2.1 Store Road Site Alternative

The Store Road Site is located northwest of the current maintenance facility on Band land. The entrance road branches to the west off Store Road and extends northwest to the Grand Portage Trust Lands and Resources facilities. A two-track road (tire tracks through vegetation) extends westward from the entrance road and provides access to a cemetery in the woods; this cemetery access route would remain. An area estimated to be almost 3 acres has been disturbed; the site has been cleared and graded by the Band, though the grading is currently not to building standards. A pole barn has been constructed on the site, which also contains a cluster of several trailers, construction materials, and an old truck topper. Because the Band currently uses the site for construction material storage, the site experiences backhoe and other vehicle traffic throughout the day. There is no visible evidence of staining that would indicate hazardous material spills. The Grand Portage Trust Lands¹ and Resources facilities for natural resources, forestry, and maintenance are just north of the site.

2.2.2 Stevens Road Site Alternative

The Stevens Road Site is located on Monument land south of Stevens Road, west of Country Road 17, and approximately 500 feet from Grand Portage Bay; it would be approximately 2,400 feet closer to the bay than the Store Road Site. The area is dominated by shallow bedrock; areas with soils of depth often contain large rocks. The site is wooded and has no utility service. A well previously drilled by NPS has been abandoned because it did not provide sufficient water to meet standards for fire suppression. An occupied home is west of the site.

This site would require an access and utility corridor, approximately 300 feet long, through a currently undisturbed area on tribal lands in order to connect the NPS facilities with utilities along Stevens Road. This access road and utility corridor would require the use of approximately 2 acres of tribal lands. Consequently, approximately 4 acres of land (2 acres for the site and 2 acres for the access road and utility corridor) would need to be disturbed for this alternative.

Trust lands are governed by the land management agency for the reservation.

2.3 ALTERNATIVES CARRIED FORWARD IN THIS EA

Based on the evaluation of the build alternatives, the Store Road Site Alternative and Stevens Road Site Alternative are carried forward for further consideration in this EA. In addition, the No-Action Alternative (representing the status quo) was carried forward to serve as a baseline for comparison with the build alternative as required by NEPA (42 USC 4321-4347). The No-Action Alternative and the two build alternatives are discussed below.

2.3.1 Alternative A – No-Action Alternative

The No-Action Alternative would continue operations without any changes. As discussed in Chapter 1, Purpose and Need, current operations are hindered by inadequacies in the condition and locations of the existing maintenance facility, outdoor storage yard, and temporary housing for seasonal NPS employees:

- Maintenance operations are adversely affected by the inadequate capacity and crowded conditions at the existing maintenance facility. The building is not in compliance with building code and lacks a paved area for vehicle maintenance.
- The maintenance facility is not integrated with the outdoor storage yard for equipment and supplies, which is located approximately 1,400 feet to the east on prime lake-front property along County Road 17.
- The housing for seasonal NPS employees is deteriorating and is located on prime lake-front property, owned by the Band, adjacent to the island boat tour docks at Voyageurs Marina. If no action were taken in the future, routine maintenance and repairs would continue and would possibly increase given the projected use of the housing, but there would be no improvements to the functionality of the site.
- The seasonal housing is not located near other NPS facilities, and requires seasonal employees to commute to their job sites.

Under the No-Action Alternative, the existing run-down buildings would continue to be used, and valuable lake-front property that could be put to better use by the Band and the Monument would continue to serve operational purposes rather than promote the Monument's educational and recreational goals.

Alternative B - Store Road Site Alternative 2.3.2

The Store Road Site Alternative, described in Section 2.2.1, above, was carried forward for further consideration in this EA because it is logistically feasible, meets the purpose of and need for the proposed action, and would have minimal environmental impacts.

Approximately 3 acres of land in the area proposed for the Store Road Site have been cleared, and approximately 2 acres of land are needed for the maintenance facility, storage yard, and seasonal housing. Consequently, it is not anticipated that clearing of previously undisturbed area would be required. A drainage ditch off the north edge of the site drains to Grand Portage Creek, and some wetland vegetation is present to the south of the proposed site. If the cleared area is not sufficient, additional archeological and wetland surveys would be needed. A tribal allotment southeast of the site would not be

affected by development of this site. A historic cemetery and a farmstead are located near but outside the proposed site. A former groundwater well that was capped and properly closed is adjacent to the pole barn.

The site would include a maintenance facility with a shop and an office, an equipment/material storage yard for equipment and supplies, and a four-plex seasonal housing building for NPS employees, along with parking lots for staff, residents, and RVs. The access road to the seasonal housing would be limited to use by residents and visitors only (see Figure 2-1, Store Road Site – Proposed Configuration). Gravel driveways and parking lots would be installed initially, with the potential for future asphalting of the driveways and parking lots.

The new maintenance facility constructed at this site would be approximately 6,300 square feet in area. The facility would include a storage area for RTC-audited material, vehicle storage, a maintenance garage with a vehicle lift, a wood shop with dust collection, multiple storage areas, a conference/lunch room, restrooms, and concrete aprons. The facility would have shared function by the Band and NPS.

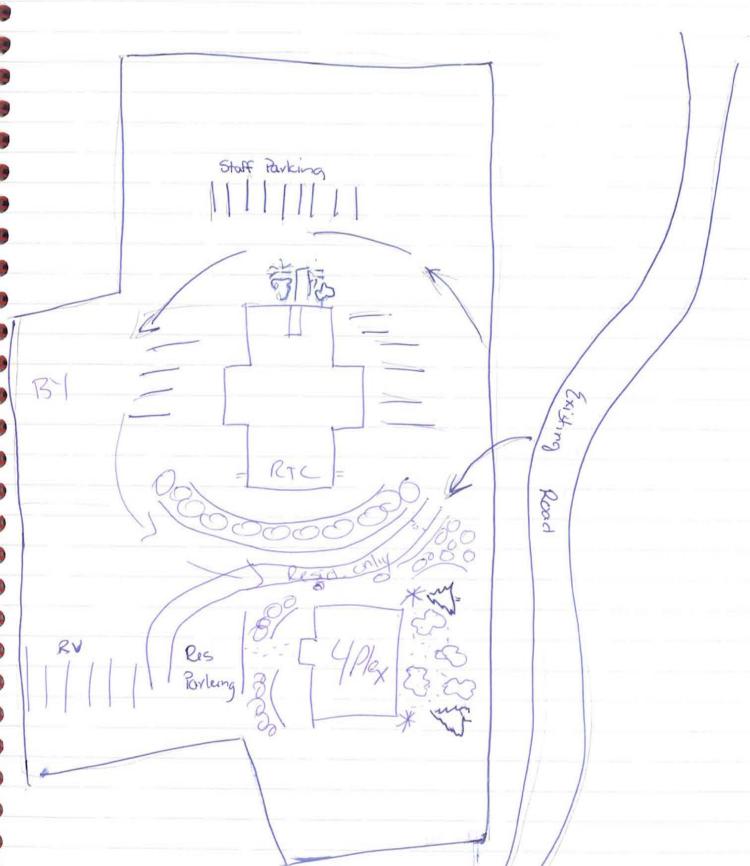
The proposed seasonal housing, approximately 3,500 square feet in area, would consist of one building containing two two-bedroom units and two one-bedroom units. A laundry room and roofed decks would be included. The NPS standard four-plex design for housing units would be used and modified as needed to meet a variety of criteria. The housing would be designed and built according to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) gold or platinum standards, with attention given to its orientation on the site, energy efficiency, sustainability, and other green building qualities. This would be the first such building constructed by the NPS in the region.

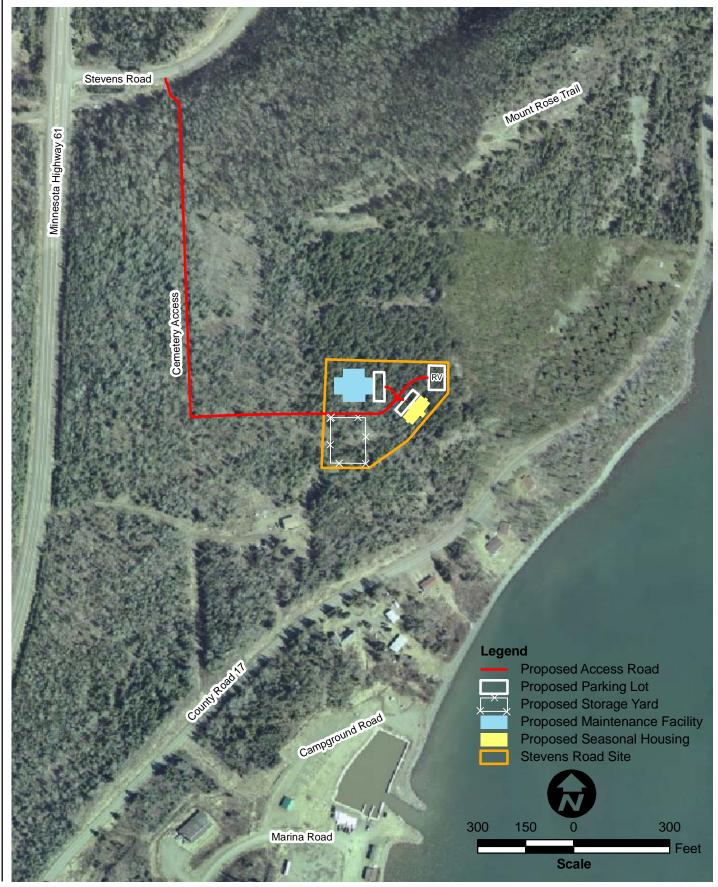
2.3.3 Alternative C – Stevens Road Site Alternative

The Stevens Road Site Alternative, described in Section 2.2.2, above, was carried forward for further consideration in this EA because it is on NPS land, is logistically feasible, meets the Project objectives, and would likely have fewer environmental impacts than the four alternatives considered but eliminated from further evaluation. However, the site would require construction of an access road on tribal lands and has limitations with respect to utility costs, water and wastewater access, geologic formations, road construction, and the need for clearing vegetation to connect to the necessary services. Although there is a cleared area with an abandoned power line corridor south of the Cemetery Access Road, access road construction would not be feasible because of the topography of this area. Access to the site from the east or southeast would also not be feasible because of natural stone outcroppings and slopes. The access road construction could have an impact footprint comparable in size to the site itself.

The facilities constructed on the Stevens Road Site would be the same as those at the Store Road Site (as described in Section 2.3.2) but in a somewhat different configuration (see Figure 2-2, Stevens Road Site – Proposed Configuration).

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Stevens Road Site - Proposed Configuration



Grand Portage Maintenance Facility and Seasonal Housing EA

DATE

July 2009

FIGURE

2-2

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2.4 **COMPARISON OF ALTERNATIVES**

The three alternatives carried forward in this EA, the No-Action Alternative and the two build alternatives, were reviewed to determine whether they meet the purpose of the proposed action, as summarized in Table 2-2.

Ability of the Alternatives to Meet the Purpose of the Proposed Action

Purpose of the Proposed Action	No-Action Alternative	Store Road Site Alternative	Stevens Road Site Alternative
To address inadequacies of the current maintenance facility	The current multiple inadequacies of the maintenance facility would continue, with further deterioration and obsolescence over time.	An adequate, new maintenance facility would be constructed on this site.	An adequate, new maintenance facility would be constructed on this site.
To consolidate the maintenance facility and the outdoor storage yard on a single site	The maintenance facility and outdoor storage yard would continue to be on separate sites, resulting in a loss of operational efficiency.	The maintenance facility and outdoor storage yard would be consolidated on one site, thus improving operational efficiency.	The maintenance facility and outdoor storage yard would be consolidated on one site, thus improving operational efficiency.
To improve the quality of the seasonal housing for the NPS staff	Seasonal housing would continue to be in poor condition and would become more outdated and rundown over time.	Adequate, new seasonal housing would be constructed on this site.	Adequate, new seasonal housing would be constructed on this site.
To centralize the seasonal housing closer to the Monument.	Seasonal housing would still be located on prime lake-front property leased from the Band.	Seasonal housing would be established near the Monument and facilitate a shorter commute, and free up lake front property for Band use.	Seasonal housing would be established near the Monument and facilitate a shorter commute, and free up lake front property for Band use.

The No-Action Alternative would result in the current situation continuing. The three facilities would continue to be located on or near County Road 17, which skirts Grand Portage Bay. The maintenance facility would still occupy a historic location approximately at the head of the Grand Portage Trail. The outdoor storage yard would still occupy a site on prime lake-front property, where there is potential for archeologically sensitive resources.

Although the two alternative sites both would meet the purpose of the proposed action, the Store Road Site has several advantages compared to the Stevens Road Site. The following is a summary of some of the advantages; Section 2.7 provides a resource-byresource comparison of impacts for the three alternatives carried forward for detailed analysis:

Less disturbance of trees and wildlife habitat would be required.

- There would be less probability of impacting archaeological resources.
- Maintenance and storage activities already occur at the site.
- The site is closer to the Monument, which reduces travel time.
- Fire protection is less complicated because of the open area and close proximity to other facilities and utilities.

2.5 RESOURCE PROTECTION MEASURES

Under the Project, measures would be taken to protect resources in the Project Area. With the implementation of best management practices and mitigation measures, impacts from the Project would be avoided or minimized. The best management practices and mitigation measures presented in Table 2-3, Resource Protection Measures, would be incorporated into Project construction documents.

Table 2-3
Resource Protection Measures

Resource Category/Action	Responsible Party	
Public Health and Safety		
An accident prevention plan, including a job hazard analysis for each Project	Construction	
component, would be required for construction. The plan would address the	contractor	
following:		
• Fires		
• Slides		
• Floods		
The nature of construction work		
• Site conditions		
Required Project inspections		
Safety meetings		
The use of hazardous materials would be approved in advance, including:	NPS and	
 Analysis of explosive, flammable, poisonous, corrosive, oxidizing, or 	construction	
irritating substances (relative to their safe storage and use)	contractor	
 Minimization of the use of hazardous chemicals 		
• Use of substances with low or no air quality impacts, and limited persistence		
or low potential to cause chemical sensitivity		
Cultural Resources		
A meeting would be held with the Monument archaeologist to discuss the area's	NPS and	
historic resources, clarify construction schedules, and establish a plan for	construction	
archaeological monitoring, if necessary, of ground-disturbing site work, including:	contractor	
• Clearing		
 Topsoil removal 		
• Excavation		
• Landscaping		
If prehistoric or historic archaeological resources are discovered during any portion	NPS and	
of the Project, work in the area associated with the find would cease until	construction	
evaluated by the Monument archaeologist or designated representative, and	contractor	
procedures outlined in 36 CFR 800, Protection of Historic Properties, would be		
followed, potentially including relocation of the work to a non-sensitive area to		
avoid further disturbance to the site until significance of the find can be evaluated.		

Resource Category/Action	Responsible Party
Discovered resources would be evaluated for their potential eligibility for listing on the National Register of Historic Places (NRHP), and if needed, mitigation measures would be developed in consultation with the Minnesota State Historic Preservation Office (SHPO). Mitigation measures would be commensurate with resource significance and preservation needs; measures could include such	NPS
provisions as changes in Project design and/or archaeological monitoring of the Project and data recovery conducted by an archaeologist meeting the Secretary of the Interior's standards.	
To reduce unauthorized collecting from areas, the following measures would be taken:	NPS and construction
Construction personnel would be educated about the need to protect any cultural resources encountered. We have the construction of the const	contractor
Work crews would be informed that it is illegal to collect artifacts on Federal lands (16 USC 470aa et seq., Archaeological Resources Protection Act of 1979).	
In advance of ground-disturbing activities, instructions would be given regarding respectful treatment of human remains and notification of the appropriate personnel in the event such remains are discovered.	
To minimize ground disturbance, all staging areas, materials stockpiling, vehicle storage, and other construction-related facilities and areas would be located in a previously disturbed area or on hardened surfaces to the extent practicable.	NPS and construction contractor
Revegetation efforts would include the following:	NPS and construction contractor
Wildlife and Fisheries	
NPS would schedule tree and ground vegetation clearing activities outside of the primary nesting season to avoid or minimize adverse impacts on nesting migratory birds. If clearing activities must occur during the nesting season, the trees to be removed and areas of disturbed ground cover would be surveyed for migratory birds prior to clearing. Should active nests be observed and should it be	NPS and construction contractor
determined that such nests cannot be avoided until after the birds have fledged (left the nest), and if no practicable or reasonable avoidance alternatives are identified, then the contractor would complete Federal Fish and Wildlife License/Permit Application Form 37 and submit it to the U.S. Fish and Wildlife Service (USFWS) Migratory Bird Program Office in Denver, Colorado. Any trees and ground vegetation providing habitat would be removed during a designated period that would minimize the impact on species.	
Construction workers would be educated about the following: The dangers of intentional or unintentional feeding of park wildlife Inadvertent harassment through observation or intentional pursuit The need for workers to remain within the construction perimeter	NPS
Best management practices would be implemented to minimize surface water runoff and sedimentation.	Construction contractor
Soils and Vegetation To minimize vegetation disturbance, the following measures would be taken: • Mature trees identified for removal would be flagged prior to the start of construction in consultation with a Monument plant ecologist. • Construction limits would be fenced prior to beginning any work under the	NPS and construction contractor
proposed contract and up to 20 feet around the construction site until completion of the contract to ensure no disturbance occurs outside of the construction limits.	

Resource Category/Action	Responsible Party
As appropriate, all salvageable vegetation, as determined by the Monument plant ecologist, within the limits of construction would be removed and relocated to temporary storage during construction.	NPS
 To protect the viability of the vegetation in the Project Area, the following measures would be taken: Plants to remain in place would be protected from cutting, breaking, and skinning of roots, branches, or bark. Imported soils and other fill materials would be certified sterile and weed free and are subject to inspection. Erosion control would be in the form of sterile matting to preclude the introduction of non-native species. 	NPS and construction contractor
Disturbed areas would be revegetated with native species, and the topsoil would be moved back into place following construction.	NPS and construction contractor
Air Quality	
Minnesota statutory regulations for air pollution control would be complied with.	Construction contractor
 To the degree possible, air quality impacts would be mitigated by the following: Reducing vehicle emissions by keeping equipment properly tuned and maintained in accordance with manufacturers' specifications and by not allowing engines to idle Using best management practices to reduce generation of dust Limiting the types of chemicals (low volatile organic compound ratings) used in new construction and rehabilitation work Reducing trip generation by encouraging carpooling and shipment of full loads only 	Construction contractor
Water Resources	
 To prevent soil from eroding and depositing into water sources, the following measures would be taken: Stored fill material would be surrounded by silt fencing and overtopped by semi-permeable matting anchored together to prevent siltation from heavy runoff during rainstorms or snow melt. Adequate erosion control or drainage structures would be installed and maintained. Stockpiling of materials would occur on pavement or in areas exhibiting signs of recent disturbance. 	Construction contractor
An adequate hydrocarbon spill containment system would be available on site in	Construction
case of unexpected spills in the Project Area.	contractor

2.6 ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with NPS *Management Policies 2006* (NPS, August 2006), the environmentally preferred alternative should meet the following six criteria, set forth in NEPA, Section 101(b) (42 USC 4321-4347):

- 1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2. Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

- 3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- 5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- 6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Because these criteria are broad, determining whether an alternative meets or does not meet a criterion is not always straightforward. Therefore, the three alternatives carried forward in this EA—the No-Action Alternative, the Store Road Site Alternative, and the Stevens Road Site Alternative—were evaluated based on components of the criteria specifically related to the Project purpose and need, as discussed below.

The No-Action Alternative would not consolidate seasonal housing and maintenance facilities and equipment because the existing facilities would continue to be used. The No-Action Alternative would not improve the efficiency of maintenance operations. The No-Action Alternative would preserve historic, cultural, and natural resources in the Project Area because it would not require the development of natural areas.

The Stevens Road Site Alternative would meet the purpose and needs of the Project but has the potential to adversely effect cultural and natural resources through the development of a previously undisturbed site. These effects would be of a greater magnitude than the effects of the Store Road Site Alternative.

The Store Road Site Alternative was selected as the Environmentally Preferred Alternative because it consolidates seasonal housing, and maintenance facilities and equipment, while minimizing the impacts on the environment. Throughout the remainder of this EA, the No-Action Alternative is referred to as Alternative A – No-Action, the Store Road Site Alternative is referred to as Alternative B – Store Road Site, and the Stevens Road Site Alternative is referred to as Alternative C – Stevens Road Site.

2.7 SUMMARY OF IMPACTS

Potential impacts of Alternative A – No-Action, Alternative B – Store Road Site, and Alternative C – Stevens Road Site are summarized in Table 2-4. For each impact topic, the underlined text represents the overall impact of the bulleted items that follow. These impacts are discussed in detail, along with a description of the affected environment, in Chapter 3, Affected Environment and Environmental Consequences.

Table 2-4 Summary of Impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Public Health and Safety	 Minor to Potentially Moderate Impact Continued inefficiencies of operating the maintenance and storage yard at separate locations, with trips between the sites Slight risk of accidents when traveling between sites Continued safety precautions associated with the outdoor storage yard No contribution to cumulative impacts in the area 	 Minor Short-term Adverse Impact Concerns in conjunction with transporting equipment and regulated materials along the direct route from the existing outdoor storage yard to the proposed Store Road maintenance facility Concerns in conjunction with constructing the maintenance facility and the seasonal housing Minor adverse cumulative impact due to potential redevelopment of the existing properties Long-term beneficial impact – reduced risk of accidents and hazardous material spills by separating conflicting uses (storage, use, and transportation of hazardous materials) at the Grand Portage Trail site and by the increased distance between the maintenance facility, the trail, other surrounding land uses 	 Minor Short-term Adverse Impact Concerns in conjunction with construction activities at the site Concerns in conjunction with transporting equipment along Stevens Road and the access road Concerns in conjunction with providing emergency services to the site Minor adverse impact from potential redevelopment of the existing maintenance and housing properties Minor adverse cumulative impact due to potential redevelopment of the existing properties Long-term beneficial cumulative impact – separation of incompatible land uses and potential redevelopment of the site with a more compatible use
Socioeconomics	Negligible Regional Impact No potential redevelopment of the existing maintenance and housing facilities Economic conditions unchanged Job opportunities and job loss unchanged	 Minor Beneficial Impact Minor, short-term and beneficial construction-related impacts Minor and beneficial overall cumulative impacts – potential redevelopment of lake-front properties 	 Minor Beneficial Impact Minor, short-term and beneficial construction-related impacts Minor and beneficial overall cumulative impacts – potential redevelopment of lake-front properties

Impact Topic	Alternative A - No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Environmental Justice	No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations Negligible to minor cumulative adverse impacts Potential effect on the income of the minority and low-income populations in the area from potentially not providing employment opportunities that could result from redevelopment of an area of the Monument important to tourism	No Disproportionate Impact on Minority. Vulnerable Age, or Low-income Populations Impacts from loss of developable land offset by short- and long-term minor beneficial impacts Beneficial cumulative short- and long-term impacts Beneficial minor impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region from enhanced visitor experience and tourism Employment opportunities in conjunction with construction of the proposed facilities and potential redevelopment of the existing sites	No Disproportionate Impact on Minority, Vulnerable Age, or Low-income Populations Impacts from loss of developable land offset by short- and long-term minor beneficial impacts Beneficial cumulative short- and long-term impacts Beneficial minor impact to employment, and thus, income to minority and low-income populations at the Reservation and in the Grand Portage region from enhanced visitor experience and tourism by potential redevelopment of the existing sites of the maintenance facility and the seasonal housing Employment opportunities in conjunction with construction of the proposed facilities and potential redevelopment of the existing sites

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Other Agency or Tribal Land Use Plans or Policies	No action subject to the Band's land use ordinance No contribution to cumulative impacts	Construction of an industrial structure in a residential land use district (currently used for nonresidential purposes) Negligible impact with approval of Grand Portage Trust Lands and Resources and the RTC to continue using the site for industrial purposes while adding a residential use to a portion of the site Negligible contribution to cumulative impacts	Construction of an industrial structure in a park and recreation land use district Negligible impact with approval of Grand Portage Trust Lands and Resources and the RTC to construct an access road, maintenance facility, and seasonal housing Minor contribution to cumulative impacts
Cultural Resources (Note: The wording used to summarize impacts on cultural resources is required by Section 106 of the National Historic Preservation Act of 1966 [16 USC 470f].)	 No Effect/No Impact No new disturbance in the Project Area No impairment of Monument resources No contributions to the potential for adverse effects on the region's cultural resources; thus, no cumulative impact 	No Effect/No Impact on Historic Properties No known historic resources present; little potential for intact archaeological resources because the site was previously cleared and grubbed No contribution to cumulative impacts	No Effect/No Impact on Historic Properties Based on current knowledge, no known historic resources present at the site If Alternative C is selected, an archaeological resources and standing structures survey should be completed along the proposed access prior to construction. No contribution to cumulative impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Sacred Sites	No new disturbance or change in typical operations	No Effect or Cumulative Impact No known sacred sites in the vicinity of the Project location for Alternative B	 Minor Long-term Adverse Impact Introduction of human activity in a previously undisturbed area potentially in or near the Ojibwe Midewiwin sacred site Potential to lead to additional development in the area, with increased likelihood of future impacts on the sacred site Further consultation with the Band is needed to determine the nature of any impact on this sacred site
Indian Trust Resources	Minor Long-term Adverse Impact Continued use of the current NPS seasonal housing site (located on Indian Trust Land), precluding potential redevelopment of this land by the Band to generate revenue	 Minor Long-term Impact (potentially beneficial) Loss of land available for the Band's use (approximately 2 acres of Indian Trust Land leased to the NPS) Shared use of the new maintenance facility by the NPS and the Band Improved functionality of the Store Road site Valuable lake-front Indian Trust Land (currently used for NPS seasonal housing) available for Band use 	Minor Long-term Adverse Impact Conversion of 2 acres of Indian Trust Lands from forest to a road for access to the new maintenance facility and seasonal housing on NPS lands
Wildlife and Habitats	 No Impact No new land disturbance or change in typical operations No impairment of resources No cumulative impacts 	Negligible Adverse Impacts No impairment of Monument resources Disturbance of habitat in Project Area as a result of construction activities Negligible cumulative impacts	 Minor Adverse Impacts No impairment of Monument resources and values Disturbance of habitat in Project Area as a result of construction activities Minor cumulative impacts

Impact Topic	Alternative A – No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Endangered, Threatened, or Protected Species and Critical Habitats (Note: The wording used to summarize impacts on endangered, threatened, or protected species and critical habitats is required by Section 7 of the Endangered Species Act of 1973 [16 USC 1531 et seq.].)	No Effect/No Impact No impairment of Monument resources No cumulative impact	 No Effect/No Impact No effect anticipated on any endangered, threatened, or protected species and critical habitats No impairment of Monument resources No cumulative impact If Alternative B is selected, a plant species survey should be conducted to verify that these species have not moved into the area during the intervening time. 	 May Affect But Not Likely To Adversely Affect/Minor Negligible Impact May affect but not likely to adversely affect the gray wolf and its critical habitat No effects on other endangered, threatened, or protected species and critical habitats No impairment of Park resources. Minor cumulative impact with construction on this site through clearing of native vegetation and introduction of human disturbance If Alternative C is selected, a plant species survey should be conducted to confirm that none of these species are present and that the trees do not meet the summer habitat requirements of the northern myotis.
Vegetation	No Impact No new land disturbance No cumulative impacts	 Minor Beneficial Long-term Impacts No impairment of Monument resources No additional land clearing needed in the Project Area Reseeding or replanting with native species in the area that is developed Minor and beneficial cumulative impact 	 Minor to Moderate Long-term Adverse Impact Presence of natural vegetation and rare jack pine stand in the vicinity of this site Minor to moderate and adverse cumulative impact

Impact Topic	Alternative A - No-Action	Alternative B – Store Road Site (Preferred Alternative)	Alternative C – Stevens Road Site
Air Quality	Negligible Adverse Continued negligible adverse impact on air quality from existing operations No contribution to cumulative impacts	Minor Adverse Short-term, minor, adverse, and local impacts during construction Short-term, minor, adverse cumulative impacts from potential redevelopment construction Negligible long-term impacts	Minor Adverse Short-term, minor, adverse, and local impacts during construction Short-term, minor, adverse cumulative impacts from potential redevelopment construction Negligible long-term impacts
Soundscape Management	Minor Impact Continued noise from maintenance facility near Grand Portage Trail No impairment of Monument resources No cumulative impacts	No Long-term Impact No impairment of Monument resources No cumulative impacts	Minor to Moderate Long-term Adverse Impact No impairment of Monument resources Minor to moderate long-term and adverse cumulative impact
Water Quality	Negligible Adverse Negligible impacts from current facilities Negligible to minor cumulative impacts from potential redevelopment.	Minor Adverse Short-term, minor, adverse impacts from land disturbance during construction Negligible beneficial long-term impact from relocation of facilities farther from Grand Portage Creek and Bay Short-term, minor, adverse cumulative impacts from potential redevelopment Negligible long-term cumulative impacts	Minor Adverse Short-term, minor, adverse impacts from land disturbance during construction Negligible beneficial long-term impact from relocation of facilities farther from Grand Portage Creek and Bay Short-term, minor, adverse cumulative impacts from potential redevelopment Negligible long-term cumulative impacts

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