

DRAFT

**Environmental Impact Statement for the
Grand Portage Land Port of Entry Modernization and
Expansion Project
Grand Portage, MN**



October 2024

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COVER SHEET

Responsible Agency: Public Buildings Services (PBS), General Services Administration (GSA)

Title: Draft Environmental Impact Statement for the Grand Portage Land Port of Entry Modernization and Expansion Project in Grand Portage, Minnesota

The United States (U.S.) General Services Administration (GSA) proposes to expand and modernize the existing Grand Portage Land Port of Entry (LPOE), which exists within the Grand Portage Reservation of the Grand Portage Band of Lake Superior Chippewa (herein referred to as the Grand Portage Band). The existing Grand Portage LPOE is owned and managed by GSA and is operated by the U.S. Department of Homeland Security's Customs and Border Protection.

GSA has prepared this Draft Environmental Impact Statement (EIS), which examines the purpose of and need for this project; alternatives considered; the existing environment that could be affected; the potential impacts resulting from each of the alternatives; and proposed best management practices and/or mitigation measures. The Draft EIS addresses the potential environmental impacts of the proposed alternatives on environmental resources including geology, topography, and soils; water resources; biological resources; air quality and climate change; noise; traffic and transportation; land use and visual resources; infrastructure and utilities; socioeconomics; cultural resources; human health and safety; and environmental justice.

A feasibility study for this project was completed in 2019. A total of three build alternatives were considered, and a preferred build alternative was identified. This alternative would consist of demolishing the existing building, constructing new facilities at the existing LPOE, and expanding the LPOE to meet the required space standards and increased security requirements of the Federal Inspection Services (FIS). Following the feasibility study, a Program Development Study (PDS) was prepared as the next formal step to further refine the build alternatives so as to develop a facility plan that is respectful of the Grand Portage Reservation. GSA issued a 100% PDS in December 2023, with a revision in January 2024. This Draft EIS reflects the information available in the 100% PDS.

The identified build alternative is located on an approximately 10.4-acre operational footprint within the existing Grand Portage LPOE, and is located entirely within the Minnesota Department of Transportation (MnDOT) easement along Highway 61. Temporary, small, incursions outside of the easement would be necessary for construction. GSA would also install a 7.3-mile buried power line within an existing utility right-of-way along the western side of Highway 61 to provide three-phase power to the modernized and expanded Grand Portage LPOE. GSA also considered the No Action Alternative, which assumes that GSA would not expand or modernize the Grand Portage LPOE.

The Draft EIS has considered public comments provided during the scoping comment period. GSA is soliciting comments from interested persons and stakeholders on this Draft EIS during a 45-day comment period. The public was notified of Grand Portage LPOE Draft EIS public hearing through publication of a Notice of Availability in the *Federal Register*, as well as multiple other channels of communication, including newspaper ads, letters to interested parties, and social media posts. Comments received during the 45-day comment period will be considered in preparation of the Final EIS and will be made part of the Administrative Record.

Comments on this Draft EIS may be emailed to michael.gonczar@gsa.gov or sent to:

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SUMMARY

The United States (U.S.) General Services Administration (GSA) proposes to modernize and expand the Grand Portage Land Port of Entry (LPOE), which exists within the Grand Portage Reservation of the Grand Portage Band of Lake Superior Chippewa (herein referred to as the Grand Portage Band). The LPOE is a port of entry for vehicles and pedestrians crossing the U.S.-Canada border between the Grand Portage Reservation in the U.S. and Neebing, Ontario in Canada. The port is operated by the U.S. Department of Homeland Security's Customs and Border Protection (CBP) and is a full-service, multi-modal facility where CBP officers inspect commercially owned vehicles (COVs), privately owned vehicles (POVs), and pedestrians.

GSA's Public Buildings Service (PBS) assists federal agency customers housed in GSA facilities with their current and future workplace needs based on their specific mission requirements. As part of a nationwide effort, GSA conducted programmatic feasibility studies for LPOEs and their operational deficiencies based on the current version of U.S. LPOE Design Standards (GSA 2019a). These programmatic feasibility studies provide viable alternatives to modernize each port, correct deficiencies, and bring the facilities up to current standards. The *Feasibility Study for the Grand Portage LPOE* (Feasibility Study) was completed in 2019 to assess the existing Grand Portage LPOE facilities (GSA 2019a). The Feasibility Study determined that the existing structures do not contain the necessary square footage as specified by CBP's space and facility requirements (also referred to as Program of Requirements [POR]). In addition, the facility lacks outbound inspection capabilities.

The Feasibility Study identified three alternative layouts for modernizing and expanding the port. Following preparation of the Feasibility Study, a Program Development Study (PDS) was initiated as the next step in the design process to further refine potential alternatives under consideration. The PDS process is an iterative process that builds on prior phases, and documents are issued based on a percent completion of project design; the 100 percent PDS was issued in December 2023, with a revision in January 2024. From the PDS process, viable alternatives were refined into the Proposed Action analyzed within this Draft EIS, in collaboration with the Grand Portage Band, who is serving as a Cooperating Agency for this EIS.

ENVIRONMENTAL REVIEW PROCESS

GSA has prepared this Draft EIS for the purpose of analyzing the potential environmental impacts resulting from the Proposed Action to modernize and expand the existing Grand Portage LPOE. The EIS has been prepared in accordance with NEPA (42 United States Code [U.S.C.] 4321 *et seq.*), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 *Code of Federal Regulations* [CFR] 1500-1508), GSA Order ADM 1095.1F (*Environmental Consideration in Decision Making*), the GSA PBS *NEPA Desk Guide*, and other relevant laws, regulations, and Executive Orders (EOs), including the National Historic Preservation Act (NHPA).

GSA published a Notice of Intent (NOI) to prepare a Draft EIS in the *Federal Register* on September 22, 2023. After issuing the NOI, GSA conducted a scoping process that included hosting a hybrid virtual and in-person public scoping meeting and consultation with various interested governmental agencies and stakeholders. An advertisement was published in the *Cook County Herald* on September 29, 2023. Announcements were posted on GSA's social media accounts on September 26, 2023. GSA also coordinated with the Grand Portage Band to post announcements on their social media accounts on September 27, 2023 and distribute flyers within the community. A hybrid virtual and in-person public scoping meeting was held on October 5, 2023, from 5:00 p.m. to 7:00 p.m. Central Standard Time at the Grand Portage State Park Welcome Center at 9393 E, Highway 61, Grand Portage, MN 55605. The public also had the opportunity to attend the meeting virtually via Zoom. Outside of the public scoping meeting, GSA invited written comments to be submitted via mail or email throughout the scoping period (September 22 – October 22, 2023).

INTRODUCTION

The Grand Portage LPOE exists within the Grand Portage Reservation. The facility is located between the far northeast tip of the state and the Canadian Province of Ontario where the Pigeon River meets Lake Superior. The legal address of the facility is 9403 East Highway 61, Grand Portage, Minnesota 55605. Grand Portage is situated in Cook County, Minnesota 145 miles northeast of Duluth, Minnesota and 30 miles southwest of Thunder Bay, Ontario, Canada. The LPOE is across the U.S.-Canada border from the Canadian Port of Entry located in Neebing, Ontario. The operational footprint of the existing LPOE encompasses approximately 5.7 acres and is surrounded predominately by wooded area. The Grand Portage State Park is located to the north and west.

The LPOE was built in the early 1960s and contains a Main Building with primary and secondary inspection canopies, Commercial Inspection Building, Secondary Inspection Garage, GSA Garage, and public restroom facility located between the northbound and southbound lanes of Highway 61. There are three inbound primary inspection lanes at the Grand Portage LPOE: two for non-commercial vehicles and one for buses and commercial traffic. A commercial inspection dock and the GSA Garage lie to the north of the inbound lanes of Highway 61. There are currently no outbound inspection capabilities at the LPOE.

PURPOSE AND NEED

The purpose of the project is for GSA to support CBP's mission by modernizing and expanding the Grand Portage LPOE. The existing LPOE facilities and their configuration do not meet CBP's current needs and do not allow for expeditious and safe inspection of the traveling public. The LPOE facilities were constructed in the early 1960s, do not have the necessary usable square footage to satisfy the current POR, and are served by an inefficient road design (i.e., no outbound inspection). In addition, there have been operational challenges as a result of the deficient facilities during periods of high traffic volumes, including in the early 2010s when a strong Canadian dollar led to an increase in travelers coming to the U.S. to make purchases, as well as during weekends, holidays, and summer months (i.e., peak travel season). Wind turbine components from Canada are also periodically transported through the LPOE, and a temporary shutdown of some lanes is necessary when turbines pass through the port, due to the current configuration. This can create delays and additional operational challenges for the LPOE.

Therefore, in order to bring the Grand Portage LPOE operations in line with design standards and operational requirements, implementation of the Proposed Action is needed to:

- Address space constraints and inefficient traffic flows;
- Shorten and expedite vehicle processing time, to include improving daily commutes across the U.S.-Canada border;
- Decrease congestion and long wait times during the peak travel season;
- Allow CBP to process a higher volume of vehicles traveling to and from Canada, to include further accommodation of potential future spikes in travelers crossing the U.S.-Canada border; and
- Provide a wider single lane for large semi-trucks hauling wind turbine components from Canada.

In addition, GSA has identified a requirement to upgrade the power supply running to the LPOE via an existing utility right-of-way (ROW) that parallels Highway 61 to support operations of the modernized and expanded Grand Portage LPOE. The purpose of the electrical upgrades is to provide necessary electrical capacity to the modernized and expanded Grand Portage LPOE. The electrical upgrades are needed as the current electrical supply, which consists of one-phase power, does not provide sufficient electrical capacity needed to power the proposed new facilities.

SUMMARY OF THE PROPOSED ACTION AND ALTERNATIVES

GSA initially developed three alternatives as part of a Feasibility Study at the Grand Portage LPOE (GSA 2019a). The Feasibility Study considered two similar alternatives with different configurations of the proposed new Main Building and a third alternative that focused on realignment of the primary inspection lanes, reconfiguration of the visitor parking areas, and rearrangement of commercial vehicle staging areas. These alternatives considered a port expansion outside of the existing Minnesota Department of Transportation (MnDOT) Highway 61 easement (herein referred to as the MnDOT easement).

Following the Feasibility Study process, the PDS process was initiated and a 35 percent PDS was issued in December 2022 that considered three new alternatives at the Grand Portage LPOE within a smaller footprint (GSA 2022a). The revised PDS alternatives were considered to address concerns with site expansion and development on the Grand Portage Reservation. The intent of developing within the MnDOT easement is to limit ground disturbance in undisturbed areas and to minimize new construction while still addressing the agency's safety and security requirements.

Through the iterative PDS process, a 50 percent PDS was issued in May 2023 that identified a single action alternative to carry forward for further evaluation (GSA 2023a). The operational footprint of this alternative remained within the MnDOT easement, although a small, temporary incursion outside of the easement would be necessary for construction. A 90 percent PDS was issued in November 2023 and a 100 percent PDS was issued in December 2023 that continued to develop and refine the selected alternative. This Draft EIS reflects the information available in the 100 percent PDS, which was revised in January 2024 (GSA 2024), and assesses the single alternative described in the 100 percent PDS as the Proposed Action.

In addition to the Proposed Action, GSA also evaluated the No Action Alternative in this EIS. Under the No Action Alternative, GSA would not move forward with the Proposed Action. The No Action Alternative is included and analyzed to provide a baseline for comparison with impacts from the Proposed Action and to satisfy federal requirements for analyzing the "no action" scenario under NEPA (40 CFR 1502.14(d)).

Proposed Action

The Proposed Action includes removal of all existing Grand Portage LPOE buildings and replacement with new facilities in a new site configuration. Prior to initiating any demolition or construction activities, GSA would establish applicable agreements with the Grand Portage Band and in coordination with MnDOT. GSA would replace the Grand Portage LPOE with a modernized facility on an expanded footprint, expanding the existing 5.7-acre operational footprint to a total operational footprint of approximately 10.4 acres. Within the larger footprint, new facilities would be constructed, including:

- Main Building – approximately 21,294 gross square feet (gsf) of building and 10,692 gsf of canopy
- Commercial Inspection Building – approximately 6,608 gsf of building and 237 gsf of canopy
- Five primary inspection lanes
- Two tandem enclosed secondary inspection bays and two tandem outdoor secondary inspection bays
- Non-intrusive inspection (NII) building – approximately 10,984 gsf
- Commercial staging areas
- Commercial impound lot
- Parking areas for visitor, staff, and government-owned vehicles – total of 24 stalls and 8,400 gsf

Altogether, approximately 50,000 square feet of buildings and canopies and over 200,000 square feet of pavement would be constructed under the Proposed Action.

GSA also would upgrade utilities by increasing utility capacity for electrical; plumbing, water supply, and sanitary waste; stormwater detention; mechanical; and fire protection to accommodate the site reconfiguration. The Proposed Action may require the installation of temporary facilities to allow for the

Grand Portage LPOE to remain operational 24 hours per day, 7 days per week. Specifically, the following utility upgrades are planned to support the Proposed Action (GSA 2024):

- **Domestic water** – GSA would develop a new water source (e.g., new well) or treatment system in compliance with Clean Water Act (CWA) and Safe Drinking Water Act requirements and in coordination with the Grand Portage Band. This would include necessary service lines and connections.
- **Sanitary sewer** – The existing sewage treatment system would be modified and expanded. Upgrades to the septic system could include a new septic mound, toilet/urinal composting system in the Commercial Inspection Building, and a new 4-inch sanitary sewer line that would service each building and connect to the septic system. The actual location, size, and configuration would be determined later in the design process based on site and soil conditions but would remain within the limits of construction shown in Figure 2.2-2 in Chapter 2 of the EIS.
- **Storm sewer** – A new storm sewer system would be constructed to collect runoff from roofs and paved surfaces to convey runoff to stormwater detention or filtration basins. The design would consider winter conditions and the potential for issues with ice and frozen pipes or downspouts.
- **Fuel service** – Fuel may be provided by installing one 16,000-gallon fuel oil underground storage tank (UST).
- **Electricity** – An electrical demand of 1,032 kilowatts (kW) is anticipated, which would be accommodated by a 1,500-kilovolt utility transformer with a 3-phase 480-volt secondary. Two 600kW generators would supply backup power. Each generator would have a 1,200-gallon day tank, both of which would be supplied by a 16,000-gallon storage tank. The existing generator serving the existing Commercial Inspection Building and GSA Garage would be salvaged and returned to GSA for future reuse. In addition to electrical upgrades at the modernized and expanded Grand Portage LPOE, the Proposed Action would also include upgrades to the electrical distribution system leading to the LPOE.

In addition, the Proposed Action includes the redesign of stormwater infrastructure within the limits of construction. Approximately three stormwater basins would be sized to provide filtration for the 95th percentile annual rainfall event (i.e., 1.33 inches of rainfall, also known as the Energy Independence and Security Act [EISA] Section 438 design event). The three stormwater basins would provide detention to reduce the peak discharge rate from the 2-, 10-, and 300-year storm events to pre-development runoff rates. The existing metal culvert located in the northeast corner of the proposed limits of construction would be replaced and the drainage area around the culvert, which has experienced erosion, would be stabilized. The existing culvert is located to the north of the Pigeon River International Bridge and discharges stormwater into the Pigeon River. The planned repairs include replacement of the culvert, construction of a stilling basin at the culvert outlet to control erosion, and construction of upstream stormwater filtration/detention basins to trap pollutants and reduce peak discharge rates. Stormwater system redesign would increase efficiency and performance of stormwater conveyance and serve to reduce the potential impacts arising from construction of the modernized and expanded Grand Portage LPOE, as well as impacts from other existing stormwater discharges to the Pigeon River in this area. Selection of a culvert redesign approach is subject to final design and would be reviewed and approved in coordination with the Grand Portage Band.

The Proposed Action would incorporate sustainable, climate-resilient, cyber-secure, and operationally efficient design. GSA would strive to meet or exceed energy and sustainability goals established by Tribal and federal guidelines and policies, along with industry-standard building codes and best practices. Sustainability elements may include, but are not limited to:

- Implementation of the *Facilities Standard for the Public Buildings Service* (P100 Standards) in facilities design, which includes (GSA 2021):

- Establishment of standards and criteria for GSA-owned inventory and lease construction facilities; and
- Inclusion of mandatory standards for energy and sustainable design, historic preservation, accessibility, and other codes and standards.
- Diversion of at least 50 percent of nonhazardous construction and demolition waste from a landfill per Section 207 of EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. The project goal is to divert at least 75 percent of construction and demolition waste.
- Consideration of renewable energy sources for viability and feasibility.

All new and modernization construction would seek to achieve Leadership in Energy and Environmental Design (LEED) certification at the highest feasible level within reasonable cost, with Gold-level standards at a minimum. The new facilities would comply with the EISA of 2007. Between EISA and LEED, the project would adhere to whichever requirements are higher. Furthermore, the project would also adhere to the CEQ's *Guiding Principles for Sustainable Federal Buildings*. The design team would utilize GSA's *Guiding Principles Checklist* to track and report compliance.

Demolition and Construction

The Proposed Action includes constructing a new Main Building, auxiliary buildings, and inspection canopies in four phases:

- **Phase 1** – Construct new Commercial Inspection Building, new primary electrical infrastructure, new paving, and site prep work.
- **Phase 2** – Construct new Main Building, primary inspection canopy/booths to the east of the existing building, and additional site work.
- **Phase 3** – Construct new NII building, additional primary inspection canopy/booths, secondary hard inspection, and site work.
- **Phase 4** – Finalize paving and site work.

A construction phasing plan would be developed during design and implemented during demolition and construction to ensure continuity of operations of the LPOE. This proposed phasing approach would allow the Grand Portage LPOE to remain open and operational throughout the construction process.

At the time of this Draft EIS, demolition and construction activities are estimated to last approximately 36 months, beginning in 2026 with substantial completion in 2029. Due to weather conditions, it is anticipated that peak construction would occur during the months of April through October. From November through March, it is anticipated construction activities would primarily consist of interior building work. Peak construction would require a potential maximum of 100 construction workers and 120 trucks per day for deliveries and waste removal. During non-peak construction, it is anticipated there would be approximately 50 workers onsite. As non-peak construction would consist of interior building work, only periodic trips for supply delivery are expected. Demolition and construction would take place primarily during normal business hours; however, some nighttime construction may be required during the months of April through October depending on construction phasing. All construction and demolition waste would be disposed of and recycled at authorized facilities. It is expected that the LPOE would remain operational 24 hours per day, 7 days per week.

All construction activities would take place within the proposed limits of construction, which encompass approximately 10.4 acres at the Grand Portage LPOE (GSA 2024) and approximately 13.3 acres along the three-phase power line route.

Three-Phase Power Line

The Proposed Action would also include upgrades to the electrical distribution system leading to the LPOE. GSA, in coordination with the local utility provider Arrowhead Cooperative (Arrowhead), would install a 7.3-mile buried power line within Arrowhead's existing utility ROW along the western side of Highway 61 to provide three-phase power to the modernized and expanded Grand Portage LPOE.

The proposed three-phase power line would originate approximately 250 feet northwest of the intersection of Mineral Center Road and Highway 61 in an existing, disturbed, and maintained utility ROW. The route would then proceed east for approximately 180 feet along the western side of Highway 61 within the ROW; and then proceed north along Highway 61 within the ROW to where it would terminate at the Grand Portage LPOE, approximately 1,000 feet south of the U.S. – Canada border. The power line route would be located entirely within the existing utility ROW maintained by MnDOT. GSA would coordinate with the Grand Portage Band, MnDOT, and Arrowhead for use of this ROW.

The proposed power line would be installed using a vibratory plow within the ROW, which is approximately 15 feet wide and parallels Highway 61, with lines being buried up to 3 feet below ground surface (bgs). Groundcover would be stabilized and restored following installation. In areas of shallow rock build up where at least 3 feet of excavation is not possible (e.g., the route segment crossing over Mount Josephine), GSA and Arrowhead would excavate a trench to the ledge rock and would cover the power line with at least 4 inches of concrete, and then recover with the existing soil. Construction of the power line route is anticipated to be performed only during daylight hours and completed in approximately one month during the construction season. Approximately three to five construction workers would support construction activities. Additional equipment utilized could include a backhoe and bulldozer, as well as a few construction vehicles.

No road closures along Highway 61 are anticipated to occur during construction as all construction activities would be performed within the existing utility ROW. The proposed power line would cross multiple intersections with secondary roads along its route; utility crossings of paved roads would be bored underneath the road, and crossings of any gravel roads would be trenched and restored. Residents and businesses located off of the intersections crossed by the power line may experience temporary lane closures or intermittent service delays during construction at each location. GSA would follow all MnDOT safety protocols during construction, including use of appropriate signage, flaggers, cones, and signals. No tree clearing or removal is anticipated during construction as all construction activities would be located within existing, disturbed utility ROW or across existing paved surfaces. If tree clearing is required, such activities would occur between November 1 and March 31 in order to avoid potential impacts to federally protected species.

Renewable Energy Technologies

The Proposed Action would consider implementation of renewable energy technologies within the modernized and expanded LPOE. Renewable technologies that may be incorporated into the facility design include solar (photovoltaic [PV] or solar collectors) and certain types of geothermal heat pumps. Four electric vehicle charging stations are also proposed (two for government owned vehicles and two for POVs). Selection of each technology, to include final sizing, is dependent on final design. It is possible a combination of these technologies could be selected during final design. All associated infrastructure would be constructed within the operational footprint of the newly modernized and expanded LPOE.

No Action Alternative

Under the No Action Alternative, the existing Grand Portage LPOE would not be modernized or expanded. Any type of modification to the existing port would be limited to minor repairs and maintenance, as needed. The operation of the Grand Portage LPOE would generally remain similar to current conditions, but the capacity and efficiency of the port would likely degrade over time due to potential increased traffic demand.

Deficiencies in port operations would remain or worsen over time. This alternative would not meet the purpose of and need for the Proposed Action.

IMPACT COMPARISON MATRIX

This EIS evaluates the potential impact on the environmental conditions from implementing the Proposed Action and the No Action Alternative. For each resource area analyzed in this EIS, the expected consequences of the alternatives and impact reduction measures are summarized in Table S-1.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
Geological Resources		
<p>Construction: Direct, long-term, minor, adverse, site-specific impacts on geology and soils during demolition, clearing, and excavation for construction of new buildings and infrastructure. Total maximum disturbance of approximately 10.4 acres for the LPOE and 13.3 acres for the three-phase power line within the proposed limits of construction. Direct, long-term, negligible, adverse, site-specific impacts on topography.</p> <p>Operation: No impacts to geology or topography. Direct, long-term, minor, adverse local impacts to soils. Maximum net increase in impervious surface area of 0.5 acre.</p>	<p>No ground or subsurface disturbance from new facility or infrastructure construction would occur; therefore, there would be no impacts on existing geology, topography, and soils.</p>	<p>Measures to reduce construction impacts from soil erosion, loss, and instability, would be addressed in the project design plans, as well as through erosion and sedimentation controls and site stabilization measures as specified through applicable NPDES permit and tribal permitting requirements. Such measures would include setting up barriers and utilizing standard BMPs (e.g., earth walls, soil nails, riprap, turbidity barriers, revegetating areas where applicable, etc.). GSA would make a concerted effort to ensure as much soil remains on site as possible in consideration of Grand Portage Band requests and cultural practices.</p>
Water Resources		
<p>Construction: Direct, short-term, minor, local and regional impacts to surface waters resulting from land disturbance and altered drainage patterns, potentially leading to increased erosion, sedimentation, and pollutants to receiving waters. Direct, short- and long-term, minor to moderate, adverse, local impacts to wetlands. Approximately 1.5 acres of delineated wetlands occur within the limits of construction at the Grand Portage LPOE, of which approximately 0.9 acre would be permanently removed. Approximately 0.31 acres of wetlands along the three-phase power line route may experience temporary effects. Indirect, short-term, minor, adverse, local impacts to groundwater as construction could affect groundwater flow or degrade existing groundwater quality. No anticipated impacts to floodplains.</p> <p>Operation: No long-term adverse impacts to surface waters, floodplains, wetlands. Improvements in currently outdated stormwater infrastructure and the use of low impact development would result in a long-term, indirect, minor, beneficial impact to adjacent surface waters. Negligible impacts to</p>	<p>No ground or subsurface disturbance from new facility or infrastructure construction would occur; therefore, adverse impacts on existing water resources would primarily be associated with maintenance activities at the LPOE and would be negligible.</p>	<p>LEED Gold certification for the project would include objectives for reducing adverse impacts to water quality and minimizing risks from flooding hazards.</p> <p>In addition, GSA requires a minimum SITES silver rating. Regarding water, all major capital projects with a scope of site work exceeding 5,000 square feet must meet the equivalent of the following SITES certification credits:</p> <ul style="list-style-type: none"> • SITES credit 3.1, “Manage Precipitation on Site” to reduce adverse impacts to aquatic resources, channel morphology, and dry weather base flow by replicating natural hydrologic conditions and retaining precipitation onsite. • SITES credit 3.3, “Manage Precipitation Beyond Baseline” with the goal to capture and manage the equivalent of the 95th percentile precipitation event. <p>GSA would follow the impact reduction measures and BMPs outlined in the NPDES permit, such as infiltration or filtration, to reduce suspended solids, phosphorus, and salts. Additional methods for reducing phosphorus could include evaluating land application products for phosphorus content and limiting the use of these products. GSA would coordinate with the USACE and the Grand Portage Band during design</p>

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
<p>groundwater from slight increased potential for contamination of groundwater during use of drilled boreholes associated with a geothermal energy system.</p>		<p>to determine what types of permits are required for potential construction work in onsite wetlands.</p> <p>GSA additionally commits to:</p> <ul style="list-style-type: none"> • Developing in compliance with Section 438 of the EISA with the objective of restoring the hydrology to predevelopment conditions; • Considering green infrastructure and low impact development practices, such as reducing impervious surfaces, using vegetated swales and revegetation, and using porous pavements; • Developing an SPCC plan (dependent on the amount of aboveground oil storage on site); and • Following procedures consistent with Minnesota Rules, Chapter 4725 related to constructing boreholes and public water supply wells.
Biological Resources		
<p>Construction: Direct, short- and long-term, minor adverse, site-specific impacts on vegetation due to ground disturbance and removal of existing vegetation within the limits of construction (i.e., 10.4 acres at the LPOE and 13.3 acres along the three-phase power line). Direct and indirect, short-term, minor, adverse, local impacts on local wildlife due to noise and disturbance of vegetation. No adverse impacts on special status species with implementation of impact avoidance measures.</p> <p>Operation: No impacts to vegetation or terrestrial or aquatic wildlife.</p>	<p>No ground disturbance from new facility or infrastructure construction would occur. Negligible adverse impacts from maintenance activities.</p>	<p>General measures to reduce or avoid impacts on biological resources would include:</p> <ul style="list-style-type: none"> • MnDOT has developed native seed mixes specific to wet and dry areas of the Grand Portage Reservation; GSA would utilize these mixes to revegetate areas disturbed during construction. Disturbed areas would be promptly restored or revegetated to the extent practicable following construction. • Construction equipment would be washed before and after coming to the site to the extent practicable to limit the transport of invasive species. If non-native invasive species are present in the limits of construction, these plants would be eradicated and removed from the site before earthmoving activities begin. • If construction activities occur within the nesting periods of migratory birds that may be found within the ROI, surveys would be conducted for nests prior to initiating demolition or construction activities. Any further requirements would be

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
		<p>determined in coordination with applicable federal resource agencies pending survey results.</p> <ul style="list-style-type: none"> • If milkweed plants are observed within the proposed expansion area, they would be avoided as practicable to reduce potential impacts to the federal candidate monarch butterfly. If avoidance is not practicable, milkweed plants would be transplanted outside of the limits of construction. When transplanting milkweed plants, care would be taken to take as much of the tap root as possible. Digging 4 inches away from each side of the plant would help avoid cutting the tap root. Transplanting in early spring or in late summer/late fall may also increase success. • Landscaping would consider Minnesota’s insect pollinators by: <ul style="list-style-type: none"> ○ Planting a variety of native flowers that bloom in the spring, summer, and fall; ○ Providing nesting sites by allowing dead branches, stems, and logs to remain and leaving bare earth for ground-nesting insects; ○ Reducing the use of pesticides; ○ Allowing native flowering plants to grow along roadsides and drainage ditches; and ○ Development of pollinator gardens within the landscaping features of the LPOE. • To avoid impacts to northern long-eared bat and tricolored bat, tree-clearing activities would occur between November 1 through May 31. • Pre-construction presence/absence surveys for bald eagles would be completed to determine if there is a need to remove potentially suitable habitat within the limits of construction. Bald eagle surveys would be conducted pursuant to local USFWS field office requirements. The need for any restrictions around tree clearing, if any, will be determined in coordination with applicable federal resource agencies pending survey results. • If the project is determined to have potential to disturb or kill eagles, a permit under the BGEPA would be obtained.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
<i>Air Quality and Climate Change</i>		
<p>Construction: Direct, short-term, minor, adverse, local impacts to air quality from construction emissions and activities. Negligible, incremental contribution to GHG emissions and global climate change.</p> <p>Operation: Direct, long-term, minor, beneficial, local impacts on air quality from increased energy efficiency features. Anticipated beneficial impacts on air quality from a reduction in the wait time for POVs to be processed by a CBP officer. Negligible, incremental contribution to GHG emissions and global climate change.</p>	<p>No construction or changes to onsite operations would occur; therefore, there would be no changes to air quality and GHG emissions. Minor amounts of emissions would continue to be generated as a result of maintenance activities.</p>	<p>Precautions to prevent particulate matter from becoming airborne during construction could include:</p> <ul style="list-style-type: none"> • Using water for dust control when grading roads or clearing land; • Stabilizing open storage piles and disturbed areas by covering and/or applying water or organic dust palliative where appropriate. • Paving roadways and maintaining them in a clean condition; • Covering open equipment when conveying or transporting material likely to create objectionable air pollution when airborne; • Promptly removing spilled or tracked dirt or other materials from paved streets. • Installing wind fencing and phasing grading operations where appropriate and operating water trucks for stabilization of surfaces under windy conditions. • When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 mph. Limit speed of earth-moving equipment to 10 mph. <p>The following source-specific controls could be considered to minimize emissions during construction activities:</p> <ul style="list-style-type: none"> • Require specific idling time limits for construction trucks and heavy equipment. • Solicit bids that require zero-emission technologies or advanced emission control systems. • Require that all diesel engines in equipment and vehicles used during project construction be maintained regularly to keep exhaust emissions low, and that the manufacturers' recommended maintenance schedule and procedures be followed. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning). • Prohibit engine tampering to increase horsepower, except when meeting manufacturer's recommendations.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
		<ul style="list-style-type: none"> • Recommend contractors lease or buy newer, cleaner equipment using the best available emissions control technologies. • Use lower-emitting engines and fuels, including electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations, if feasible. • Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment. • Use electric starting aids such as block heaters with older vehicles to warm the engine. • Recommend that all on-highway vehicles used during project construction meet or exceed the USEPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., drayage trucks, long haul trucks, refuse haulers, shuttle buses, etc.). • Recommend that all non-road vehicles and equipment used during project construction meet or exceed the USEPA Tier 4 exhaust emissions standards for heavy-duty, non-road, compression-ignition engines (e.g., non-road trucks, construction equipment, cargo handlers, etc.). <p>Finally, the following administrative controls could be considered during construction:</p> <ul style="list-style-type: none"> • Coordinate with appropriate air quality agencies to identify a construction schedule that minimizes cumulative impacts from other planned projects in the region, if feasible. • Locate diesel engines, motors, and equipment staging areas as far as possible from residential areas and other sensitive receptors (e.g., schools, daycare centers, hospitals, senior centers, etc.). • Avoid routing truck traffic near sensitive land uses to the fullest extent feasible. • Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. • Reduce construction-related trips of workers and equipment, including trucks.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
		<ul style="list-style-type: none"> • Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow. • Consider implementing measures to minimize idling emissions from cars waiting to cross the U.S.-Canada border. • List all applicable protective measures for construction (such as idle time limits, speed limits for construction trucks, and dust suppression, among others) on a bulletin, and post the bulletin at easily visible locations near the project site. This would include a contact name and phone number for individuals to call if they have questions or observe protective measures not being followed. <p>Some of the mitigation measures for air quality identified above would also serve to reduce GHG emissions. GSA would take the following additional steps to minimize GHGs:</p> <ul style="list-style-type: none"> • Design the LPOE to be energy efficient, including achieving a minimum of LEED Gold certification, which would reduce energy use and the associated GHG emissions. • Project will strive to design onsite renewable energy generation, which could include solar PV, solar collectors, geothermal, or a combination of these technologies. • Use cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production. • GSA would consider using recycled plastic waste in the construction of alternative masonry systems for prefabricated structural systems. Strategies to reduce embodied carbon will include minimum levels of supplemental cementitious materials, which could include use of recycled aggregate. • Recycle construction debris to the maximum extent feasible. <p>GSA would also consider implementation of the following climate change adaptation measures:</p> <ul style="list-style-type: none"> • Incorporate shaded areas wherever possible, particularly along pedestrian routes through the LPOE. • Provide indoor cooling stations or waiting areas where pedestrians passing through the LPOE, and individuals being processed by CBP officials, can seek relief from heat and other adverse conditions such as poor air quality.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
		<ul style="list-style-type: none"> • Implement measures to maximize energy efficiency where possible, such as through automated building controls and the use of energy-efficient equipment. • Implement onsite solar renewable energy to reduce electrical demand and/or implement onsite renewable energy generation to minimize the use of fossil energy. • Implement measures to maximize water efficiency where possible, such as through native and drought-resistant plantings and the use of water-efficient fixtures and appliances.
Noise		
<p>Construction: Direct, short-term, minor to moderate, adverse, local and regional impacts to noise during construction activities. Construction noise would be detected by outdoor visitors at the Grand Portage State Park as well as by daycare users and residences along the proposed three-phase power line route and could result in a disturbance; however, construction noise is expected to remain within a level deemed safe.</p> <p>Operation: No long-term change to ambient noise levels would be expected as operations of the modernized and expanded LPOE would be similar to current operations. Direct, long-term, negligible, adverse, local impacts due to use and maintenance of renewable energy facilities.</p>	<p>Long-term, minor adverse impacts due to increase in noise levels during peak traffic periods.</p>	<p>Noise impacts would be minimized to the extent feasible through various measures, including:</p> <ul style="list-style-type: none"> • Implementation of noise control measures, such as project scheduling and using noise controls on equipment (e.g., mufflers). • Coordination with Grand Portage Band, Grand Portage State Park, and Ryden's Border Store regarding construction scheduling and noise management, including for nighttime construction. • Coordination with MnDOT District 1 as applicable to determine need for any potential mitigation measures to minimize vibration impacts to the Pigeon River International Bridge (e.g., pre- and post-construction bridge inspections, vibration monitoring during construction activities close to bridge).
Traffic and Transportation		
<p>Construction: Direct, short-term, minor, adverse, local impacts to roadways from increased traffic volumes during peak construction years. Negligible impacts to Grand Portage State Park. Negligible impacts due to construction of the three-phase power line. Residents and businesses located off of the intersections crossed by the power line may</p>	<p>Long-term, minor to moderate, adverse impacts due to continuation of and potential increase in queue delays during times of peak traffic.</p>	<p>Measures that would mitigate the impacts associated with transportation during construction and operations include:</p> <ul style="list-style-type: none"> • Minimize construction truck movement during peak traffic hours. • Place construction staging areas where they would least interfere with highway traffic and parking.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
<p>experience temporary lane closures or intermittent service delays during construction at each location.</p> <p>Operation: Direct, long-term, minor, beneficial, local impacts due to more efficient vehicle processing and additional queuing space.</p>		<ul style="list-style-type: none"> • Minimize impacts to pedestrians during construction activities by providing appropriate information and signage to pedestrians and motorists who are traveling throughout the area. • Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow and safety. • Coordinate with the utility providers and MnDOT on the phased construction plans to minimize traffic safety issues and potential disruptions. • Follow applicable planning guidelines and regulations when maintaining or upgrading roadway infrastructure
Land Use and Visual Resources		
<p>Construction: Direct, short-term, minor to moderate, adverse, local impacts to adjacent land uses, including the Grand Portage State Park and an existing boat launch. Minor impacts to residential properties near Ryden's Border Store. Direct, long-term, minor, adverse, and local impacts to visual resources due to clearing 0.8 acre of trees. Direct, short-term, minor, adverse, local impacts to the night sky, particularly for nighttime construction activities requiring lighting. Direct, short-term, negligible to minor, adverse, local impacts to adjacent land uses along the three-phase power line route.</p> <p>Operation: Operations of the modernized and expanded LPOE would not result in any land use conflicts with adjacent land uses. Direct, long-term, moderate, beneficial, local impacts to the overall local visual quality from the replacement of old facilities with improved facilities. Long-term, minor, local, adverse impacts to the night sky due to additional lighting for the modernized and expanded LPOE.</p>	<p>No changes in land use would occur. Long-term, minor, local and regional adverse impacts to visual resources as existing structures continue to deteriorate and degrade the aesthetic quality of the area surrounding the LPOE.</p>	<p>GSA would continue coordination efforts during the planning process with the Grand Portage Band, MnDOT, and other relevant stakeholders to ensure appropriate land use requirements are followed. Coordination would also be conducted during the design process regarding the incorporation of exterior design elements to reflect the unique character of the area, local culture, as well as emphasis on pedestrian circulation and amenities, such as landscaped plazas and walkways, to the extent practicable and consistent with GSA design standards.</p> <p>GSA and the construction contractor would strive to keep the boat launch area open during construction. If the access point needs to be closed on a temporary basis, the contractor would provide a temporary access point near the existing location. Construction activities in this location would be scheduled for night work to allow for daytime access. The GSA team would work with the Grand Portage Band and the Tribal Council representatives to coordinate any temporary closures if needed.</p> <p>GSA would implement the following measures to minimize impacts to visual resources:</p> <ul style="list-style-type: none"> • Consult with the Grand Portage Band regarding tribal requirements for new building construction. • The design for the LPOE would address the Grand Portage physical and cultural landscapes; history of the area, commerce, and significance of the Port; and local tribal community values and culture.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
		<ul style="list-style-type: none"> • Integrate its programs of design/architecture and construction excellence into the new facility in order to optimize building performance and aesthetics, including adherence to P100 Standards, which establish design criteria and standards for new government buildings, and U.S. LPOE Design Standards, which establish design criteria for LPOEs. • Design exterior lighting to meet physical security requirements but controlled to minimize light trespass (e.g., direct light downward and minimize glare). Fixtures for any security fencing would be of a similar style. • Incorporate landscaping and screening (trees and vegetation) into the exterior design to provide aesthetic benefits to the surrounding community. <p>To minimize night sky impacts, GSA would adhere to the International Dark Sky Model Lighting Ordinance and Illuminating Engineering Society recommendations that outline the recommended BUG ratings for the specific lighting zone within the project area. Specifically, GSA would require that exterior luminaires be full cutoff and utilize G2, U0 ratings as specified by the Illuminating Engineering Society, and be consistent with guidelines specified for those ratings. GSA would also consider warmer (i.e., cooler color temperature 3500K) and amber sources around the perimeter of the site, in order to address concerns with nighttime disturbances, including to wildlife. Transitions between areas of high illumination to low illumination areas on the site would be considered in gradual stages. Large contrasts in transition between high to low lighting levels on the site would be avoided with the ability to bi-level dim certain zones throughout the night.</p> <p>Current lighting design would be consistent with National Park Service sustainable lighting principles, which are as follows:</p> <ul style="list-style-type: none"> • Ensure the lighting is necessary; • Light only where and when needed; • Use recessed and fully shielded fixtures; • Use the minimum light level necessary; • Use LED lighting in warm colors; and • Minimize nighttime construction and lighting.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
Infrastructure and Utilities		
<p>Construction: Direct, short-term, minor, adverse, site-specific impacts on infrastructure. The addition of new inspection lanes would require the widening of Highway 61, resulting in direct, short-term, minor, adverse, local impacts on Highway 61 within the limits of construction. Direct, short-term, minor, adverse local impacts on GSA-owned utilities from increasing the demand on services.</p> <p>Operation: Direct, long-term, major, beneficial, site-specific impact on infrastructure. Direct, long-term, negligible, local impacts to water, wastewater, electricity, and telecommunication utilities due to the increased square footage of the expanded LPOE. Direct, long-term, major beneficial, site-specific impacts on utilities due to upgrading utilities or replacement with new, more modernized systems.</p>	<p>Current facilities and infrastructure at the existing LPOE would remain. The LPOE would not benefit from updated facilities and infrastructure with LEED certification that would be designed to accommodate renewable energy sources and achieve sustainable standards.</p>	<p>Impacts on infrastructure and utilities would be reduced through the following:</p> <ul style="list-style-type: none"> • Adherence to GSA P100 Standards, including new parking and road networks using low-embodied carbon concrete and environmentally preferable asphalt. • Coordinating with utility providers in advance to determine the best courses of action to avoid or minimize impacts, either by implementing measures to protect utility lines or by arranging for their temporary or permanent relocation. <p>The expanded and modernized LPOE would utilize energy- and water-efficient technologies, which would further reduce demands on utility providers. GSA would also seek a minimum of a LEED Gold certification for construction of new facilities, and steps to achieve this would likely include measures that would reduce demand for energy and water.</p>
Socioeconomics		
<p>Construction: Direct, short-term, minor to moderate, adverse, local impacts to housing as a result of an influx of construction workers. Direct, short-term, minor, adverse impacts on the local and regional population. Direct, short-term, negligible to minor, adverse, local and regional impacts on community services due to the temporary increase in residents. Direct, short-term, minor, adverse, local impacts on the economy due to potential for construction to discourage some tourists from traveling to the area. Direct, short-term, minor, beneficial, local impact on unemployment and income in areas to which construction workers temporarily relocate. Indirect, short-term, minor to moderate, beneficial, local and regional impacts from directly affected industries purchasing supplies and materials.</p> <p>Operation: No long-term impact to local population, housing, labor force, or community services. Direct and indirect, long-term, negligible to minor, beneficial,</p>	<p>No impacts on existing population and housing, labor and income, the local economy, or public service would be expected.</p>	<p>GSA would coordinate closely with the construction contractor and local governments (the Grand Portage Band, Cook County, and potentially communities in Canada) to manage impacts related to a potential lack of sufficient temporary housing. This could include allowing construction workers to seek housing across the U.S.-Canada border in and around Thunder Bay, Ontario where housing options are more plentiful. GSA would consider developing a housing plan with the contractor, and the aforementioned governments, to identify a plan to provide for sufficient housing in the region, including managing potential impacts to the Grand Portage Reservation. If construction workforce-related housing needs could impact tourist accommodation availability, the noted housing plan may need to include measures to mitigate impacts to tourists and businesses that rely on tourism.</p>

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
<p>local and regional impacts on earning and employment within Grand Portage Reservation and Cook County due to a potential increase in tourism spurred by shorter wait times at the LPOE.</p>		
Cultural Resources		
<p>Construction: No impacts to archaeological resources are anticipated as no known archaeological resources occur within the proposed area of ground disturbance. No adverse effect would be anticipated to the NRHP-eligible Pigeon River International Bridge as the Proposed Action would not impact the bridge’s integrity of setting, feeling, or association. In addition, the Proposed Action would not diminish the integrity of the bridge nor detract from its ability to display the characteristics that make it eligible for listing in the NRHP.</p> <p>Operation: No adverse effects under NHPA or impacts to archaeological resources under NEPA would be anticipated during operations. No additional effects would occur to aboveground historic-age resources during operation.</p>	<p>No adverse effects under NHPA and no adverse impacts under NEPA to cultural resources would be expected.</p>	<p>GSA is undergoing consultation under Section 106 of the National Historic Preservation Act with the Grand Portage Band Tribal Historic Preservation Officer. In addition, because the property lies within the Grand Portage Reservation, GSA would conduct archaeological monitoring in consultation with the Grand Portage Band during construction to identify, protect and document any archaeological resources that are discovered during ground disturbing activities.</p>
Human Health and Safety		
<p>Construction: Direct, short-term, negligible to minor, and local adverse impacts resulting from the risk to human health and safety during construction. Direct and indirect, short-term, minor, adverse, local and regional impacts from hazardous materials use and waste handling.</p> <p>Operation: Direct, long-term, negligible to minor, local adverse impacts to human health and safety during operations. Operations would be conducted in accordance with applicable building and safety codes. Direct and indirect, long-term, negligible to minor, adverse local and regional impacts related to hazardous materials and waste handling.</p>	<p>Long-term, negligible impacts would continue as there would be no change in risks to human safety, hazardous materials usage, or waste generation. Ongoing maintenance to the LPOE would continue, which would require negligible amounts of hazardous materials usage and generate negligible amounts of hazardous waste. Risks to health and safety associated with existing conditions and operations at</p>	<p>Measures that would limit impacts related to human health and safety during building construction and operations include:</p> <ul style="list-style-type: none"> • Prior to demolition, a thorough ACM inspection of the facilities to be demolished or renovated would be performed by a licensed asbestos inspector in accordance with all asbestos NESHAP regulations. The Asbestos NESHAP notification provisions generally require owners and operators of demolition and renovation activities to provide USEPA with written notification of a regulated operation at least 10 business days prior to commencement of work. Similarly, the Tribe would be notified of inspections, and other demolition/renovation activities within reasonable anticipation prior to commencement of work.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
	<p>the LPOE would remain unchanged from current conditions.</p>	<ul style="list-style-type: none"> • Divert at least 50 percent of nonhazardous construction and demolition waste from a landfill per Section 207 of EO 14057, <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>. The project goal is to divert at least 75 percent of construction and demolition waste. • All spills or releases of petroleum, oils, and lubricants; hazardous materials; pollutants; or contaminants would be handled in accordance with measures outlined in a Spill Prevention and Response Plan prepared for construction. • GSA would update the SPCC Plan during final design for operations of the facility, assuming the facility continues to meet the requirements to prepare a plan per 40 CFR 112. • A Soil Management Plan may be prepared to address the potential for encountering areas of environmental concern (e.g., contaminated soil) during grading, excavation, or other subsurface disturbance. The Soil Management Plan would identify specific measures to address hazardous waste and materials cleanup efforts, including monitoring, handling, stockpiling, characterization, onsite reuse, export, and disposal protocols for excavated soil. GSA would coordinate closely with the Grand Portage Band on all soil clean-up activities, including particularly prior to any hauling of soil offsite. • All personnel would follow federal regulations and standard handling procedures as specified in product safety data sheets for hazardous materials. • All potentially hazardous wastes generated would be properly characterized, segregated, and managed onsite prior to offsite disposal. • Potentially hazardous wastes generated during project-related construction activities would be disposed of or recycled at appropriate facilities in accordance with associated regulatory requirements. • If PCB-containing materials are identified onsite, appropriate abatement actions for their disposal would be implemented in accordance with regulatory requirements, and soils beneath transformers would be evaluated for evidence of releases. If present in underlying soils, appropriate actions for removal

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
		<p>and disposal would be implemented in accordance with applicable regulatory requirements.</p> <ul style="list-style-type: none"> • Any existing municipal (household) trash, construction debris, and other waste materials would be removed from the limits of construction and disposed of in accordance with applicable regulations. • Construction workers would adhere to safety standards promulgated in 29 CFR 17 to protect against workplace hazards. To minimize potential exposure or safety concerns to workers, appropriate personal protective equipment would be worn. • Signs, barriers, and traffic cones would be installed to direct vehicles and non-construction personnel away from the limits of construction. • Two permanent monitoring wells would be installed: one within the excavation area and one downgradient adjacent to the property line at the closest point to the former UST area. The well in the excavation would monitor the highest concentrations onsite while the downgradient well would provide assurance that the contamination is not migrating offsite. Regularly scheduled monitoring would become an ongoing action as a part of regular site operations. • A vapor barrier would be installed on any new enclosed buildings as a precaution to provide protection against vapor intrusion from any residual contamination in groundwater. • During construction of the three-phase power line, soils would be monitored using an organic vapor meter capable of detecting lower explosive limit, oxygen, carbon monoxide, hydrogen sulfide, and methane. • Any soil suspected of being contaminated, either by visual evidence (e.g., staining), olfactory evidence (soil odors), or vapor meter readings would be managed in accordance with federal regulations in and coordination with the Grand Portage Band.

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
<i>Environmental Justice and Protection of Children's Health and Safety</i>		
<p>Construction: No disproportionate and adverse impact on environmental justice during construction with implementation of impact reduction measures identified throughout EIS. Although minority and low-income populations living and working within 1 mile of the limits of construction may be disproportionately affected by activities during construction, impacts would either be of low intensity or would be managed or reduced such that they would not disproportionately affect a minority, low-income, or disabled population. Construction of the Proposed Action is not expected to impact any known sites that are culturally or artistically significant to tribal populations. The proposed limits of construction or immediately adjacent areas are not commonly used for hunting and gathering or other subsistence means (e.g., wild rice); therefore, the Proposed Action is not expected to adversely affect subsistence practices. GSA would make a concerted effort to ensure as much soil remain on site as possible in consideration of Grand Portage Band requests and cultural practices. Therefore, while overall impacts from land disturbance would fall disproportionately on the Grand Portage Band, GSA would implement measures such that the extent of any adverse impacts during construction would be diminished. The Proposed Action would not have a disproportionate and adverse impact on children's health and safety during construction. Adverse impacts would generally be negligible to minor because the most-affected child populations and facilities used regularly by children are at such distance and are physically separated from the proposed limits of construction by wooded areas, such that the extent of any adverse impacts during construction described above would be diminished.</p>	<p>No change in conditions related to environmental justice populations or children's health and safety.</p>	<p>Disproportionate impacts to environmental justice populations or children's health and safety would not occur from the Proposed Action. Therefore, no impact reduction measures are required.</p> <p>The contractor would develop a plan to ensure access to and throughout the site is provided during construction, including any necessary ADA accessibility areas. Buildings, parking areas, sidewalks, and other facilities would also be designed and constructed in compliance with ADA requirements to ensure full access to all visitors and workers.</p> <p>To prevent or reduce the occurrence of construction-related impacts to vulnerable populations, GSA may consider implementing an educational awareness plan with the companies and subcontractors it hires to construct the modernized and expanded LPOE. Additionally, construction workers would undergo security screenings and background checks to ensure workers with a history of violence or criminal activity prohibited from working on the project.</p>

Table S-1. Summary Comparison of Alternatives

Proposed Action	No Action Alternative	Impact Reduction Measures
<p>Operation: No disproportionate and adverse impact on environmental justice or disabled populations during operations. No disproportionate and adverse impact on children’s health and safety. No disproportionate impacts on environmental justice populations or children’s health related to climate risks.</p>		

ACM = asbestos-containing materials; ADA = Americans with Disabilities Act; BGEPA = Bald and Golden Eagle Protection Act; BMPs = best management practices; BUG = backlight, uplift, and glare; CBP = Customs and Border Protection; CFR = Code of Federal Regulations; EO = Executive Order; GHG = greenhouse gas; GSA = General Services Administration; LED = low emitting diode; LEED = Leadership in Energy and Environmental Design; LEL = lower explosive limit; LPOE = Land Port of Entry; MnDOT = Minnesota Department of Transportation; mph = miles per hour; NEPA = National Environmental Policy Act; NESHAP = National Emission Standards for Hazardous Air Pollutants; NPDES = National Pollutant Discharge Elimination System; NRHP = National Register of Historic Places; PCB = polychlorinated biphenyls; PFAS = per- and polyfluoroalkyl substances; PFOA = polyfluorooctanoic acid; POV = privately owned vehicle; PV = photovoltaic; ROI = Region of Influence; ROW = right-of-way; SITES = Sustainable Sites Initiative; SPCC = Spill Prevention, Control, and Countermeasure; SVOC = semi-volatile organic compound; U.S. = United States; USACE = U.S. Army Corps of Engineers; USEPA = U.S. Environmental Protection Agency; USFWS = U.S. Fish and Wildlife Service; UST = underground storage tank; VOC = volatile organic compound

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Acronyms and Abbreviations

Acronym	Definition
AADT	annual average daily traffic
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
AST	aboveground storage tank
ASTM	American Society of Testing and Materials
BGEPA	Bald and Golden Eagle Protection Act
BGHE	bored geothermal heat exchanger
bgs	below ground surface
BIL	Bipartisan Infrastructure Law
BMP	best management practice
BUG	backlight, uplight, and glare
CAA	Clean Air Act
CBP	Customs and Border Protection
CEF	Core Elements Framework
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	<i>Code of Federal Regulations</i>
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
COV	commercially owned vehicle
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DRO	diesel-range organic
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act of 2007
EO	Executive Order
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
gpd	gallons per day
gpm	gallons per minute
GSA	General Services Administration
gsf	gross square feet
GWP	global warming potential
HAP	Hazardous Air Pollutant
HREC	Historic Recognized Environmental Condition
HRL	Health Risk Limit
I	Interstate Highway
IDA	International Dark Sky Association
HIS	Indian Health Service

IJC	International Joint Commission
IJA	Infrastructure Investment and Jobs Act
IPaC	Information for Planning and Consultation
kVA	kilovolt ampere
kW	kilowatt
LBP	lead-based paint
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
LEL	lower explosive limit
LOS	Level of Service
LPOE	land port of entry
LSI	limited site investigation
LUST	leaking underground storage tank
LZ	Lighting Zone
MBTA	Migratory Bird Treaty Act
MCL	Maximum Contaminant Levels
MDH	Minnesota Department of Health
mg/kg	milligram per kilogram
MN	Minnesota
MnDOT	Minnesota Department of Transportation
MNDNR	Minnesota Department of Natural Resources
MOVES	Motor Vehicle Emissions Simulator
MPCA	Minnesota Pollution Control Agency
mph	miles per hour
MSL	mean sea level
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act of 1969
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NII	non-intrusive inspection
NO _x	nitrogen oxides
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPDWR	National Primary Drinking Water Regulations
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NWI	National Wetlands Inventory
O ₃	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PBS	Public Buildings Service
pCi/L	picocuries per liter
PCB	polychlorinated biphenyls
PCPI	per capita personal income
PDS	Program Development Study
PFAS	per- and polyfluoroalkyl substances
PFOA	polyfluorooctanoic acid

PID	photoionization detector
PM ₁₀	particulate matter with a diameter of 10 micrometers or less
PM _{2.5}	particulate matter with a diameter of 2.5 micrometers or less
POR	Program of Requirements
POV	privately owned vehicle
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PSD	Prevention of Significant Deterioration
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RO	reverse osmosis
ROI	region of influence
ROW	right-of-way
RSL	Regional Screening Level
SC-GHG	social costs of greenhouse gases
SHPO	State Historic Preservation Office
SIP	statewide implementation plan
SITES	Sustainable Sites Initiative
SO ₂	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasure
SQM	Sky Quality Management Surveys
SRV	Soil Reference Value
SSTS	subsurface sewage treatment system
SVOC	semi-volatile organic compound
SWPPP	stormwater pollution prevention plan
THPO	Tribal Historic Preservation Office
TIP	Tribal Implementation Plan
TMDL	total maximum daily load
TWP	temporary well point
U.S.	United States
U.S.C.	United States Code
µg	micrograms
µg/m ³	micrograms per cubic meter
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	underground storage tank
V/C	volume-to-capacity
VOC	volatile organic compound
WOTUS	waters of the United States
WSRA	Wild and Scenic Rivers Act

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CHAPTER 1 PURPOSE AND NEED

This chapter introduces the United States (U.S.) General Services Administration's (GSA) proposed Grand Portage Land Port of Entry (LPOE) Modernization and Expansion project and describes the purpose of and need for agency action and the scope of this Draft Environmental Impact Statement (EIS). This chapter also summarizes the National Environmental Policy Act (NEPA) of 1969 process and relevant regulations; and project background and objectives.

1.1 INTRODUCTION

GSA's mission includes the design, construction, management, maintenance, custody, and control of federal buildings, including 122 of the 167 U.S. LPOEs. The Grand Portage LPOE is a port of entry for vehicles and pedestrians crossing the U.S.-Canada border between the Grand Portage Reservation in the U.S. and Neebing, Ontario in Canada. The port is operated by the U.S. Department of Homeland Security's Customs and Border Protection (CBP) and is a full-service, multi-modal facility where CBP officers inspect commercially owned vehicles (COVs), privately owned vehicles (POVs), and pedestrians. GSA's Public Buildings Service (PBS) assists federal agency customers housed in GSA facilities with their current and future workplace needs based on their specific mission requirements.

As part of a nationwide effort, GSA conducted programmatic feasibility studies for LPOEs and their operational deficiencies based on the current version of U.S. LPOE Design Standards (GSA 2019a). These programmatic feasibility studies provide viable alternatives to modernize each port, correct deficiencies, and bring the facilities up to current standards. The *Feasibility Study for the Grand Portage LPOE* (Feasibility Study) was completed in 2019 to assess the existing Grand Portage LPOE facilities (GSA 2019a). The Feasibility Study determined that the existing structures do not contain the necessary square footage as specified by CBP's space and facility requirements (also referred to as Program of Requirements [POR]). In addition, the facility lacks outbound inspection capabilities.

The Feasibility Study identified three alternative layouts for modernizing and expanding the port. Following preparation of the Feasibility Study, a Program Development Study (PDS) was initiated as the next step in the design process to further refine potential alternatives under consideration. The PDS process is an iterative process that builds on prior phases, and documents are issued based on a percent completion of project design. A 35 percent PDS was issued in December 2022, a 50 percent PDS was issued in May 2023, a 90 percent PDS was issued in November 2023, and the 100 percent PDS was issued in December 2023. From the PDS process, viable alternatives were further refined into the Proposed Action analyzed within this Draft EIS, in collaboration with the Grand Portage Band of Lake Superior Chippewa (herein referred to as the Grand Portage Band), who is serving as a Cooperating Agency for this EIS.

GSA has prepared this Draft EIS for the purpose of analyzing the potential environmental impacts resulting from the Proposed Action to modernize and expand the existing Grand Portage LPOE. The EIS has been prepared in accordance with NEPA (42 United States Code [U.S.C.] 4321 *et seq.*), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 *Code of Federal Regulations* [CFR] 1500-1508, effective May 20, 2022¹), GSA Order ADM 1095.1F (*Environmental Consideration in Decision Making*), the GSA PBS *NEPA Desk Guide*, and other relevant laws, regulations, and Executive Orders (EOs), including the National Historic Preservation Act (NHPA).

1.1.1 Project Location and Background

The Grand Portage LPOE exists within the Grand Portage Reservation. The facility is located between the far northeast tip of the state and the Canadian Province of Ontario where the Pigeon River meets Lake

¹ As of the publication of this EIS, the CEQ has issued the updated Phase 2 NEPA rule, effective July 1, 2024, which updates 40 CFR 1500-1508. These updated regulations apply to new projects beginning on or after July 1, 2024. As the Notice of Intent for this EIS was issued on September 22, 2023, this EIS and all citations to 40 CFR 1500-1508 referenced within adhere to 40 CFR 1500-1508, effective May 20, 2022.

Superior (see Figures 1.1-1 and 1.1-2). The legal address of the facility is 9403 East Highway 61, Grand Portage, Minnesota 55605. Grand Portage is situated in Cook County 145 miles northeast of Duluth, Minnesota and 30 miles southwest of Thunder Bay, Ontario, Canada. The LPOE is across the U.S.-Canada border from the Canadian Port of Entry located in Neebing, Ontario.

The operational footprint of the existing LPOE encompasses approximately 5.7 acres and is surrounded predominately by wooded area. The Grand Portage State Park is located to the north and west. The LPOE was built in the early 1960s and contains a Main Building with primary and secondary inspection canopies, Commercial Inspection Building, Secondary Inspection Garage, GSA Garage, and public restroom facility located between the northbound and southbound lanes of Highway 61 (see Figure 1.1-2). There are three inbound primary inspection lanes at the Grand Portage LPOE: two for non-commercial vehicles and one for buses and commercial traffic. A commercial inspection dock and the GSA Garage lie north of the inbound lanes of Highway 61. There are currently no outbound inspection capabilities at the LPOE. The current layout of the LPOE is shown in Figure 1.1-2.

The U.S. Department of Homeland Security's CBP operates the LPOE 24 hours per day, 7 days per week. CBP officers inspect all types of commercial and non-commercial traffic, including pedestrians at the LPOE.

1.2 PURPOSE AND NEED

The Infrastructure Investment and Jobs Act (IIJA) (2021), also known as the Bipartisan Infrastructure Law (BIL), includes \$3.4 billion for GSA to undertake 26 construction and modernization projects at LPOEs nationwide. Many of the nation's LPOEs are outdated and long overdue for modernization. If constructed, the LPOE modernization projects would provide opportunities to incorporate sustainability features that would reduce greenhouse gas (GHG) emissions, reduce facilities' impacts on the environment, and at the same time increase the federal government's mission readiness by increasing its resilience to climate change.

The purpose of the project is for GSA to support CBP's mission by modernizing and expanding the Grand Portage LPOE. The existing LPOE facilities and their configuration do not meet CBP's current needs and do not allow for expeditious and safe inspection of the traveling public. The LPOE facilities were constructed in the early 1960s, do not have the necessary usable square footage to satisfy the current POR, and are served by an inefficient road design (i.e., no outbound inspection). In addition, there have been operational challenges as a result of the deficient facilities during periods of high traffic volumes, including in the early 2010s when a strong Canadian dollar led to an increase in travelers coming to the U.S. to make purchases, as well as during weekends, holidays, and summer months (i.e., peak travel season). Wind turbine components from Canada are also periodically transported through the LPOE, and a temporary shutdown of some lanes is necessary when turbines pass through the port, due to the current configuration. This can create delays and additional operational challenges for the LPOE.

Therefore, in order to bring the Grand Portage LPOE operations in line with design standards and operational requirements, implementation of the Proposed Action is needed to:

- Address space constraints and inefficient traffic flows;
- Shorten and expedite vehicle processing time, to include improving daily commutes across the U.S.-Canada border;
- Decrease congestion and long wait times during the peak travel season;
- Allow CBP to process a higher volume of vehicles traveling to and from Canada, to include further accommodation of potential future spikes in travelers crossing the U.S.-Canada border; and
- Provide a wider single lane for large semi-trucks hauling wind turbine components from Canada.

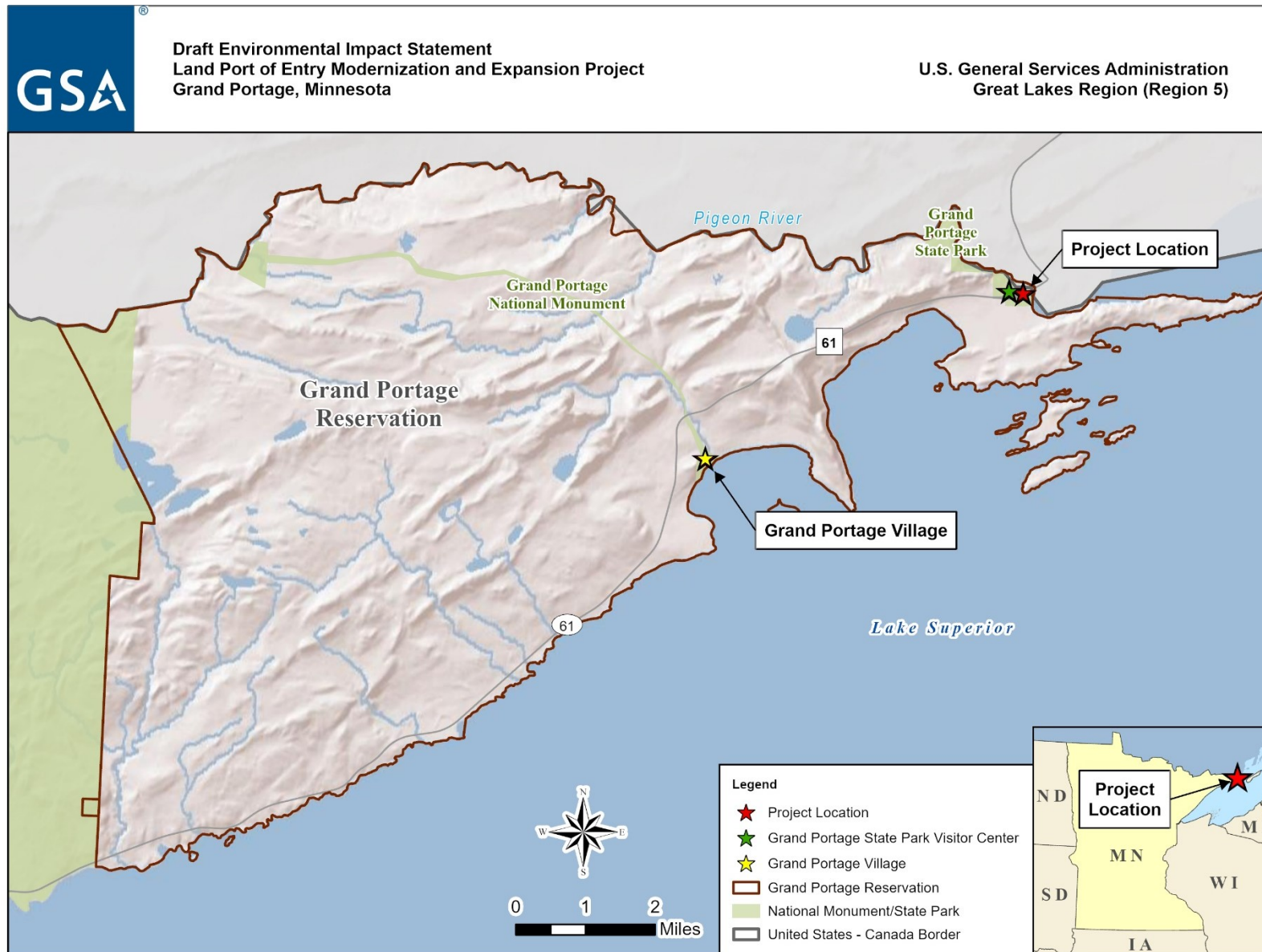


Figure 1.1-1. General Location of the Grand Portage Land Port of Entry



Figure 1.1-2. Layout of the Existing Grand Portage Land Port of Entry

In addition, GSA has identified a requirement to upgrade the power supply running to the LPOE via an existing utility right-of-way (ROW) that parallels Highway 61 to support operations of the modernized and expanded Grand Portage LPOE. The purpose of the electrical upgrades is to provide necessary electrical capacity to the modernized and expanded Grand Portage LPOE. The electrical upgrades are needed as the current electrical supply, which consists of one-phase power, does not provide sufficient electrical capacity to power the proposed new facilities.

1.3 RELEVANT ENVIRONMENTAL LAWS AND REGULATIONS

1.3.1 National Environmental Policy Act (NEPA) and NEPA Process

NEPA requires federal agencies to consider the potential impacts to the natural and human environment from their proposed actions and disclose the potential impacts in a document that is circulated for public review. The NEPA process is intended to help public officials make decisions based on an understanding of the environmental consequences and to take actions that protect, restore, and enhance the environment (40 CFR 1500.1). Therefore, in accordance with NEPA, GSA will take this EIS and related input from the public and other federal agencies into consideration as part of its decision-making process.

Federal agencies are required to provide meaningful opportunities for public participation in a proposed action. Opportunities for stakeholders and the public to become involved in the NEPA process occur when an agency begins scoping and when a NEPA document is published for public review and comment.

1.3.2 Section 106 of the National Historic Preservation Act (NHPA)

The NHPA of 1966 (16 U.S.C. 470), as amended, is the most comprehensive federal law pertaining to the protection of cultural resources and establishes a program for the preservation of historic properties (i.e., districts, sites, buildings, structures, and objects) throughout the nation. Section 106 of the NHPA requires federal agencies to consider the effects of their activities on such properties.

Implementing regulations for Section 106 are at 36 CFR 800 (*Protection of Historic Properties*), which requires the responsible federal agency, in consultation with the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), and federally recognized tribes, to determine the level of effort to identify historically significant cultural resources in the area of potential effects (APE) of the undertaking. The Grand Portage Band THPO is the primary consulting party for this project.

In accordance with 36 CFR 800, federal agencies are encouraged to coordinate studies and documents prepared under Section 106 with those done under NEPA. Section 800.8(a) of the regulations provides guidance on how NEPA and Section 106 processes can be coordinated. GSA will conform to the consultation, identification, and documentation standards set forth in 36 CFR 800.8(c), and will notify, in advance the THPO and Advisory Council on Historic Preservation (ACHP), as applicable, where it intends to use the NEPA process to comply with Section 106.

Further details on the Section 106 process that was conducted for this Draft EIS are discussed in Section 3.11, Cultural Resources and Chapter 6, Consultation and Coordination.

1.3.3 Section 7 of the Endangered Species Act

The Endangered Species Act provides a means for conserving the ecosystems upon which threatened and endangered species depend and a program for the conservation of such species. The Endangered Species Act directs all federal agencies to participate in conserving these species and to use their authorities to further the purposes of the Endangered Species Act. Section 7 of the Endangered Species Act outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Specifically, Section 7(a)(1) of the Endangered Species Act charges federal agencies to aid in the conservation of threatened and endangered species, and Section 7(a)(2) requires the agencies to ensure that their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. GSA Section 7 consultation activities for this Draft EIS are described in more detail in Section 3.4, Biological Resources, and Chapter 6, Consultation and Coordination.

1.3.4 Other Relevant Laws, Regulations, and Requirements

CEQ regulations for NEPA found in 40 CFR 1502.24 state that, to the fullest extent possible, agencies shall prepare draft EISs concurrently and integrated with environmental impact analyses and related surveys and studies required by environmental review laws and EOs. It also requires a draft EIS to list all federal permits, licenses, and other entitlements that must be obtained in implementing the proposed project. Table 1.3-1 provides a list of potentially relevant laws and regulations with which GSA must comply as part of the project planning and NEPA processes. As the Proposed Action would take place entirely within the Grand Portage Reservation, the State of Minnesota has no civil jurisdiction as it relates to the Proposed Action.

Table 1.3-1. Relevant Laws and Regulations

Statutes
Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa-mm)
Bald and Golden Eagle Protection Act (16 U.S.C. § 668-668d)
Clean Air Act of 1970 as amended (42 U.S.C. § 7401, <i>et seq.</i>)
Clean Water Act of 1977 as amended (33 U.S.C. § 1251, <i>et seq.</i>)
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601, <i>et seq.</i>)
Endangered Species Act of 1973 (16 U.S.C. § 1531-1544)
Energy Independence and Security Act (42 U.S.C. § 17001, <i>et seq.</i>)
Migratory Bird Treaty Act (16 U.S.C. § 703, <i>et seq.</i>)
National Energy Conservation Policy Act (42 U.S.C. § 8231, <i>et seq.</i>)
National Historic Preservation Act of 1966 (54 U.S.C. § 300101 <i>et seq.</i>) (89 Public Law 665 (1966))
North American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001 <i>et seq.</i>)
Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6901, <i>et seq.</i>)
Rivers and Harbors Act (33 U.S.C. Sec. 401, <i>et seq.</i>)
Safe Drinking Water Act (42 U.S.C. § 300, <i>et seq.</i>)
Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 28, <i>et seq.</i>)
Regulations
29 CFR 1910.95 – Occupational Noise Exposure
32 CFR 229 – Protection of Archaeological Resources: Uniform Regulations
33 CFR 320-330 – U.S. Army Corps of Engineers Regulations
36 CFR 800 – Protection of Historic Properties
40 CFR 300-399 – Hazardous Substance Regulations
40 CFR 6, 51, and 93 – Conformity of General Federal Actions to State or Federal Implementation Plans
CEQ Regulations (40 CFR 1500-1508)
Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716)
Executive Orders
EO 11593 – <i>Protection and Enhancement of the Cultural Environment</i>
EO 11988 – <i>Floodplain Management</i>
EO 11990 – <i>Protection of Wetlands</i>
EO 12088 – <i>Federal Compliance and Pollution Control</i>
EO 12898 – <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i>
EO 13007 – <i>Indian Sacred Sites</i>
EO 13045 – <i>Protection of Children from Environmental Health Risks and Safety Risks</i>
EO 13112 – <i>Invasive Species</i>
EO 13175 – <i>Consultation and Coordination with Indian Tribal Governments</i>

Table 1.3-1. Relevant Laws and Regulations

EO 13287 – <i>Preserve America</i>
EO 13327 – <i>Federal Real Property Asset Management</i>
EO 13589 – <i>Promoting Efficient Spending</i>
EO 13690 – <i>Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input.</i>
EO 13990 – <i>Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis</i>
EO 14008 – <i>Tackling the Climate Crisis at Home and Abroad</i>
EO 14030 – <i>Climate-Related Financial Risk</i>
EO 14057 – <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>
EO 14096 – <i>Revitalizing Our Nation’s Commitment to Environmental Justice for All</i>
Tribal Ordinances
Grand Portage Band of Lake Superior Chippewa Land Use Ordinance
Grand Portage Band of Lake Superior Chippewa Water Resources Ordinance
Grand Portage Band of Lake Superior Chippewa Water Quality Standards

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CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Chapter 2 describes the alternatives development process and GSA’s Proposed Action and alternatives that are analyzed in this Draft EIS. This chapter also discusses the alternatives that were considered and dismissed by GSA.

2.1 ALTERNATIVES DEVELOPMENT PROCESS

GSA initially developed three alternatives as part of a Feasibility Study at the Grand Portage LPOE (GSA 2019a). The Feasibility Study considered two similar alternatives with different configurations of the proposed new Main Building and a third alternative that focused on realignment of the primary inspection lanes, reconfiguration of the visitor parking areas, and rearrangement of commercial vehicle staging areas. These alternatives considered a port expansion outside of the existing Minnesota Department of Transportation (MnDOT) Highway 61 easement (herein referred to as the MnDOT easement).

Following the Feasibility Study process, the PDS process was initiated and a 35 percent PDS was issued in December 2022 that considered three new alternatives at the Grand Portage LPOE within a smaller footprint (GSA 2022a). The revised PDS alternatives were considered to address concerns with site expansion and development on the Grand Portage Reservation. The intent of developing within the MnDOT easement is to limit ground disturbance in undisturbed areas and to minimize new construction while still addressing the agency’s safety and security requirements.

Through the iterative PDS process, a 50 percent PDS was issued in May 2023 that identified a single action alternative to carry forward for further evaluation, following consideration of three build alternatives in the 35 percent PDS (GSA 2023a). The operational footprint of this alternative remained within the MnDOT easement, although a small, temporary incursion outside of the easement would be necessary for construction. This 50 percent PDS alternative would be constructed in four phases, allowing for operation of the Grand Portage LPOE to continue without interruption. A 90 percent PDS was issued in November 2023 and a 100 percent PDS was issued in December 2023 that continued to develop and refine the selected alternative. This Draft EIS reflects the information available in the 100 percent PDS, which was revised in January 2024 (GSA 2024).

2.2 PROPOSED ACTION

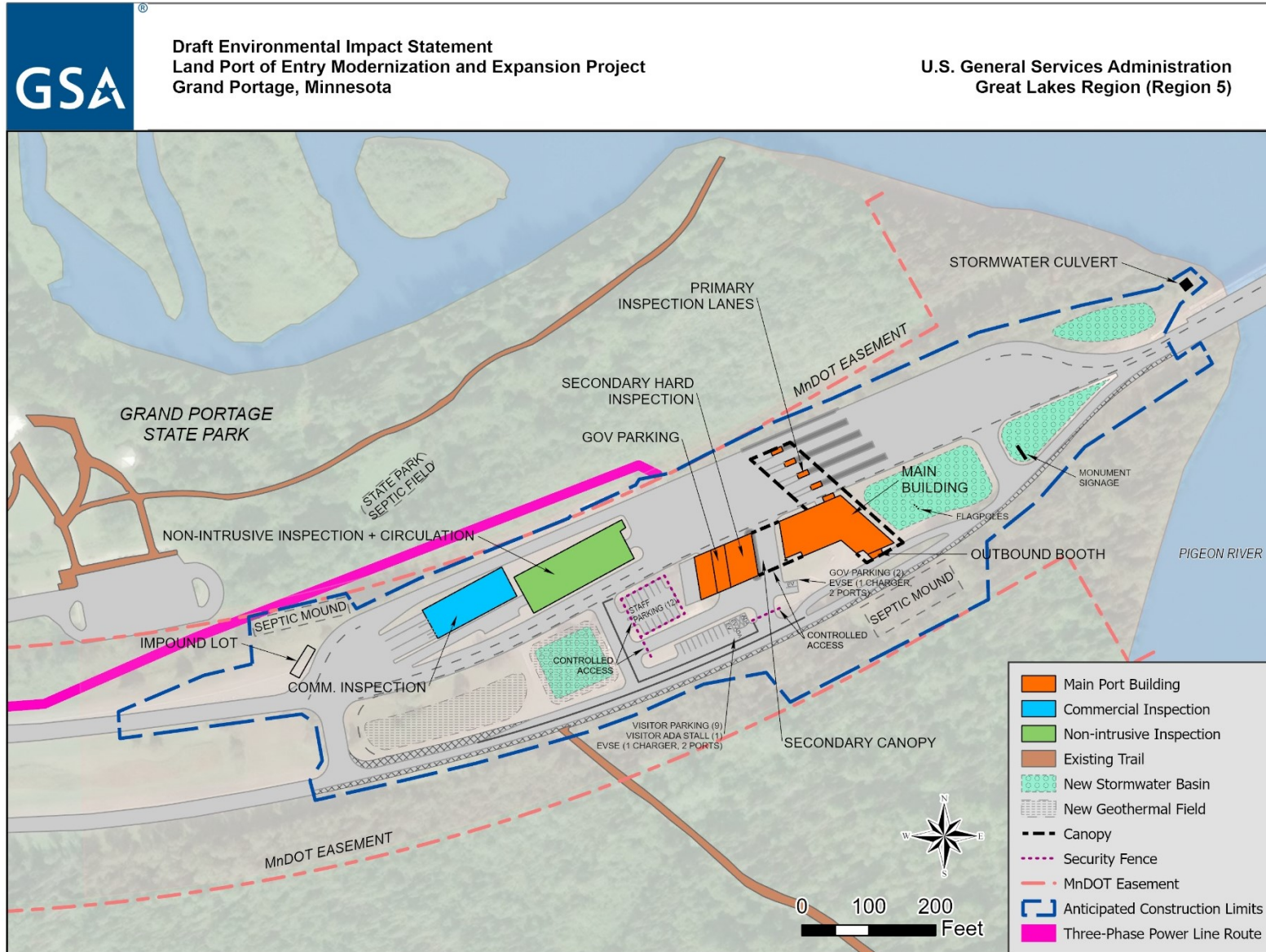
This Draft EIS assesses the single alternative described in the 100 percent PDS as the Proposed Action. Figures 2.2-1 and 2.2-2 depict the proposed limits of construction and the layout of the Proposed Action, respectively. All construction and operational activities would take place within the limits of construction (also referred to as the operational footprint throughout this EIS). A small, temporary incursion outside of the MnDOT easement would be required on the north end of the project footprint for construction, but the operational footprint would be entirely within the MnDOT easement. Prior to initiating any demolition or construction activities, GSA would establish applicable agreements with the Grand Portage Band and in coordination with MnDOT.

The Proposed Action includes removal of all existing Grand Portage LPOE buildings and replacement with new facilities in a new site configuration. GSA would replace the Grand Portage LPOE with a modernized facility on an expanded footprint, expanding the existing 5.7-acre operational footprint to a total operational footprint of approximately 10.4 acres. Within the larger footprint, new facilities would be constructed, including:

- Main Building – approximately 21,294 gross square feet (gsf) of building and 10,692 gsf of canopy
- Commercial Inspection Building – approximately 6,608 gsf of building and 237 gsf of canopy
- Five primary inspection lanes
- Two tandem enclosed secondary inspection bays and two tandem outdoor secondary inspection bays



Figure 2.2-1. Proposed Action Footprint



- Non-intrusive inspection (NII) building – approximately 10,984 gsf
- Commercial staging areas
- Commercial impound lot
- Parking areas for visitor, staff, and government-owned vehicles – total of 24 stalls and 8,400 gsf

Altogether, approximately 50,000 square feet of buildings and canopies and over 200,000 square feet of pavement would be constructed under the Proposed Action.

GSA also would upgrade utilities by increasing utility capacity for electrical; plumbing, water supply, and sanitary waste; stormwater detention; mechanical; and fire protection to accommodate the site reconfiguration. The Proposed Action may require the installation of temporary facilities to allow for the Grand Portage LPOE to remain operational 24 hours per day, 7 days per week. Specifically, the following utility upgrades are planned to support the Proposed Action (GSA 2024):

- **Domestic water** – GSA would develop a new water source (e.g., new well) or treatment system in compliance with Clean Water Act (CWA) and Safe Drinking Water Act requirements and in coordination with the Grand Portage Band. This would include necessary service lines and connections.
- **Sanitary sewer** – The existing sewage treatment system would be modified and expanded. Upgrades to the septic system could include a new septic mound, toilet/urinal composting system in the Commercial Inspection Building, and a new 4-inch sanitary sewer line that would service each building and connect to the septic system. The actual location, size, and configuration would be determined later in the design process based on site and soil conditions but would remain within the limits of construction shown in Figure 2.2-2.
- **Storm sewer** – A new storm sewer system would be constructed to collect runoff from roofs and paved surfaces to convey runoff to stormwater detention or filtration basins. The design would consider winter conditions and the potential for issues with ice and frozen pipes or downspouts.
- **Fuel service** – Fuel may be provided by installing one 16,000-gallon fuel oil underground storage tank (UST).
- **Electricity** – An electrical demand of 1,032 kilowatts (kW) is anticipated, which would be accommodated by a 1,500-kilovolt utility transformer with a 3-phase 480-volt secondary. Two 600kW generators would supply backup power. Each generator would have a 1,200-gallon day tank, both of which would be supplied by a 16,000-gallon storage tank. An associated distribution system would include a 1,600-amp, 277/480-volt switchboard for essential power and a 1,600-amp automatic transfer switch that would allow the entire LPOE to be operated by generator power. A 200-amp 277/240-volt panelboard would be available to supply critical power. This panelboard would be fed by a 150kW uninterrupted power supply with the battery capacity to operate for 1 hour. The existing generator serving the existing Commercial Inspection Building and GSA Garage would be salvaged and returned to GSA for future reuse. In addition to electrical upgrades at the modernized and expanded Grand Portage LPOE, the Proposed Action would also include upgrades to the electrical distribution system leading to the LPOE (see Section 2.2.2.1).

In addition, the Proposed Action includes the redesign of stormwater infrastructure within the limits of construction. Approximately three stormwater basins would be sized to provide filtration for the 95th percentile annual rainfall event (i.e., 1.33 inches of rainfall, also known as the Energy Independence and Security Act [EISA] Section 438 design event). The three stormwater basins would provide detention to reduce the peak discharge rate from the 2-, 10-, and 300-year storm events to pre-development runoff rates. The existing metal culvert located in the northeast corner of the proposed limits of construction would be replaced and the drainage area around the culvert, which has experienced erosion, would be stabilized.

The existing culvert is located to the north of the Pigeon River International Bridge and discharges stormwater into the Pigeon River. The planned repairs include replacement of the culvert, construction of a stilling basin at the culvert outlet to control erosion, and construction of upstream stormwater filtration/detention basins to trap pollutants and reduce peak discharge rates. Stormwater system redesign would increase efficiency and performance of stormwater conveyance and serve to reduce the potential impacts arising from construction of the modernized and expanded Grand Portage LPOE, as well as impacts from other existing stormwater discharges to the Pigeon River in this area. Selection of a culvert redesign approach is subject to final design and would be reviewed and approved in coordination with the Grand Portage Band.

The Proposed Action would incorporate sustainable, climate-resilient, cyber-secure, and operationally efficient design. GSA would strive to meet or exceed energy and sustainability goals established by Tribal and federal guidelines and policies, along with industry-standard building codes and best practices. Sustainability elements may include, but are not limited to:

- Implementation of the *Facilities Standard for the Public Buildings Service* (P100 Standards) in facilities design, which includes (GSA 2021):
 - Establishment of standards and criteria for GSA-owned inventory and lease construction facilities; and
 - Inclusion of mandatory standards for energy and sustainable design, historic preservation, accessibility, and other codes and standards.
- Diversion of at least 50 percent of nonhazardous construction and demolition waste from a landfill per Section 207 of EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. The project goal is to divert at least 75 percent of construction and demolition waste.
- Consideration of renewable energy sources for viability and feasibility (see Section 2.2.3).

All new and modernization construction would seek to achieve Leadership in Energy and Environmental Design (LEED) certification at the highest feasible level within reasonable cost, with Gold-level standards at a minimum. The new facilities would comply with the EISA of 2007. Between EISA and LEED, the project would adhere to whichever requirements are higher. Furthermore, the project would also adhere to the CEQ's *Guiding Principles for Sustainable Federal Buildings*. The design team would utilize GSA's *Guiding Principles Checklist* to track and report compliance.

Section 438 of the EISA specifies stormwater management requirements that would be incorporated into the final design of the Proposed Action. Relevant guidance includes:

- U.S. Environmental Protection Agency (USEPA) *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects Under Section 438 of the Energy Independence and Security Act*; and
- GSA PBS Chief Architect *Memorandum on Compliance with Section 438 (Stormwater) Requirements of the Energy Independence and Security Act of 2007*.

2.2.1 Demolition and Construction

The Proposed Action includes constructing a new Main Building, auxiliary buildings, and inspection canopies in four phases:

- **Phase 1** – Construct new Commercial Inspection Building, new primary electrical infrastructure, new paving, and site prep work.
- **Phase 2** – Construct new Main Building, primary inspection canopy/booths to the east of the existing building, and additional site work.

- **Phase 3** – Construct new NII building, additional primary inspection canopy/booths, secondary hard inspection, and site work.
- **Phase 4** – Finalize paving and site work.

A construction phasing plan would be developed during design and implemented during demolition and construction to ensure continuity of operations of the LPOE. This proposed phasing approach would allow the Grand Portage LPOE to remain open and operational throughout the construction process.

At the time of this Draft EIS, demolition and construction activities are estimated to last approximately 36 months, beginning in 2026 with substantial completion in 2029. Due to weather conditions, it is anticipated that peak construction would occur during the months of April through October. From November through March, it is anticipated construction activities would primarily consist of interior building work. Peak construction would require a potential maximum of 100 construction workers and 120 trucks per day for deliveries and waste removal. During non-peak construction, it is anticipated there would be approximately 50 workers onsite. As non-peak construction would consist of interior building work, only periodic trips for supply delivery are expected. Demolition and construction would take place primarily during normal business hours; however, some nighttime construction may be required during the months of April through October depending on construction phasing. All construction and demolition waste would be disposed of and recycled at authorized facilities. It is expected that the LPOE would remain operational 24 hours per day, 7 days per week.

All construction activities would take place within the proposed limits of construction, which encompass approximately 10.4 acres (GSA 2024).

2.2.1.1 Three-Phase Power Line

The Proposed Action would also include upgrades to the electrical distribution system leading to the LPOE. GSA, in coordination with the local utility provider Arrowhead Cooperative (Arrowhead), would install a 7.3-mile buried power line within Arrowhead's existing utility ROW along the western side of Highway 61 to provide three-phase power to the modernized and expanded Grand Portage LPOE (see Figure 2.2-3).

The proposed three-phase power line would originate approximately 250 feet northwest of the intersection of Mineral Center Road and Highway 61 in an existing, disturbed, and maintained utility ROW. The route would then proceed east for approximately 180 feet along the western side of Highway 61 within the ROW; and then proceed north along Highway 61 within the ROW to where it would terminate at the Grand Portage LPOE, approximately 1,000 feet south of the U.S. – Canada border. The power line route would be located entirely within the utility ROW maintained by MnDOT. GSA would coordinate with the Grand Portage Band, MnDOT, and Arrowhead for use of this ROW.

The proposed power line would be installed using a vibratory plow within the ROW, which is approximately 15 feet wide and parallels Highway 61, with lines being buried up to 3 feet below ground surface (bgs). Groundcover would be stabilized and restored following installation within approximately 1 week. In areas of shallow rock where at least 3 feet of excavation is not possible (e.g., the route segment crossing over Mount Josephine), GSA and Arrowhead would excavate a trench to the ledge rock and would cover the power line with at least 4 inches of concrete, and then recover with the existing soil. Construction of the power line route is anticipated to be performed only during daylight hours and completed in approximately one month during the construction season. Approximately three to five construction workers would support construction activities. Additional equipment utilized could include a backhoe and bulldozer, as well as a few construction vehicles. No soil removal from the site would be necessary.

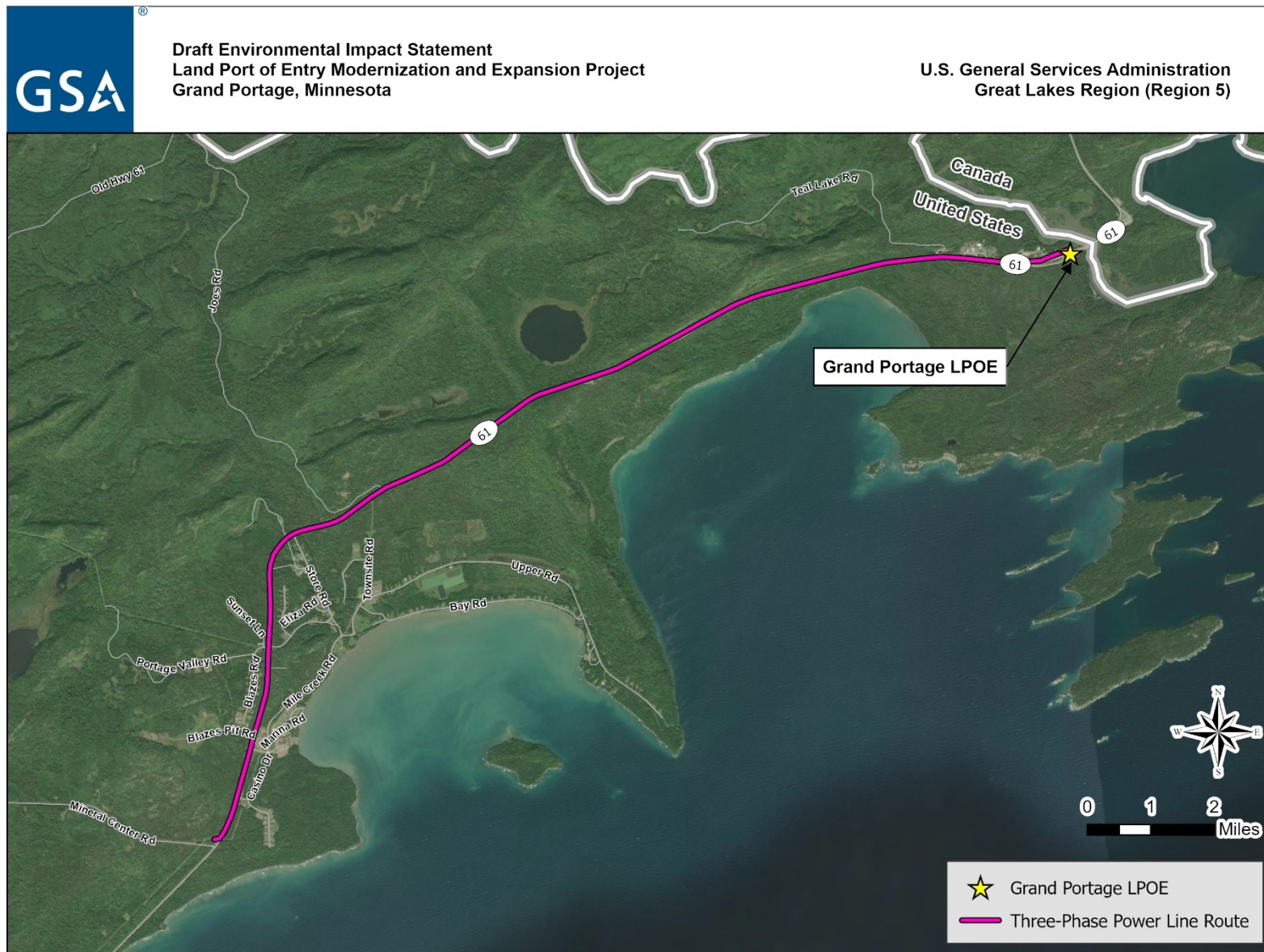


Figure 2.2-3. Proposed Three-Phase Power Line Route

No road closures along Highway 61 are anticipated to occur during construction as all construction activities would be performed within the existing ROW. The proposed power line would cross multiple intersections with secondary roads along its route; utility crossings of paved roads would be bored underneath the road, and crossings of any gravel roads would be trenched and restored. Residents and businesses located off of the intersections crossed by the power line may experience temporary lane closures or intermittent service delays during construction at each location. GSA would follow all MnDOT safety protocols during construction, including use of appropriate signage, flaggers, cones, and signals. No tree clearing or removal is anticipated during construction as all construction activities would be located within existing, disturbed utility ROW or across existing paved surfaces. If tree clearing is required, such activities would occur between November 1 and March 31 in order to avoid potential impacts to federally protected species.

2.2.2 Operations

Operations at the Grand Portage LPOE would be comparable to existing conditions but would be more efficient. Ongoing maintenance would be required for newly constructed facilities. A total of 25 employees operate the existing facility, and there are no current plans for an increase in staffing at the LPOE. The number of employees present onsite varies between 11 during peak hours to two during off-peak hours. CBP may experience operational changes due to new programs and new equipment and technologies being introduced during operations.

2.2.3 Renewable Energy Technologies

The Proposed Action would consider implementation of renewable energy technologies within the modernized and expanded LPOE. Renewable technologies that may be incorporated into the facility design include solar (photovoltaic [PV] or solar collectors) and certain types of geothermal heat pumps. Four electric vehicle charging stations are also proposed (two for government owned vehicles and two for POVs). Selection of each technology, to include final sizing, is dependent on final design. It is possible a combination of these technologies could be selected during final design. All associated infrastructure would be constructed within the operational footprint of the newly modernized and expanded LPOE.

2.2.3.1 Solar

Photovoltaic

PV panels are non-mechanical devices made of semiconductor material that convert sunlight directly into electricity (EIA 2022a). PV systems generally consist of either roof-mounted or ground-mounted panels (see Figure 2.2-4). Ground-mounted panels generally include standalone solar panels mounted on a pole or carport. The size of any array would be dependent on the amount of energy generated by the system. PV panels would require hard wiring connection to serviced buildings, which could require underground connections. Placement of panels would consider solar insolation (i.e., the measurement of solar radiation in a specific area at a given time), shading and southern exposure, space availability, and structural stability (as applicable). Occasional maintenance would be required in the form of panel washing, snow removal, and panel replacement.



Source: Freedom Solar 2023



Source: Polar Racking 2023

Figure 2.2-4. Representative Photovoltaic Systems

Solar Collection

Solar collectors absorb the sun’s light energy and convert it into heat energy, which can then be used to provide heated water, space heating or cooling, or other applications where fossil fuels might otherwise be used (EIA 2022b). These systems typically have two main parts: a solar collector and a storage tank. The most common collector is called a flatplate collector, which is typically roof-mounted and consists of a thin, flat, rectangular box with a transparent cover that faces the sun (see Figure 2.2-5). Small tubes run through the box and carry a liquid, either water or other fluid, such as an antifreeze solution, to be heated. Tubes are attached to an absorber plate, which is painted black to absorb the heat. As heat builds up in the collector, it heats the fluid passing through the tubes, and the storage tank then holds the hot liquid. Placement of solar collectors would have the same criteria as PV panels, (solar insolation, shading and southern exposure, space, and structural stability) and would also require periodic maintenance, similar to PV panels.



Source: SEF 2023

Figure 2.2-5. Image of Solar Thermal Collector System

2.2.3.2 Geothermal Heat Pumps

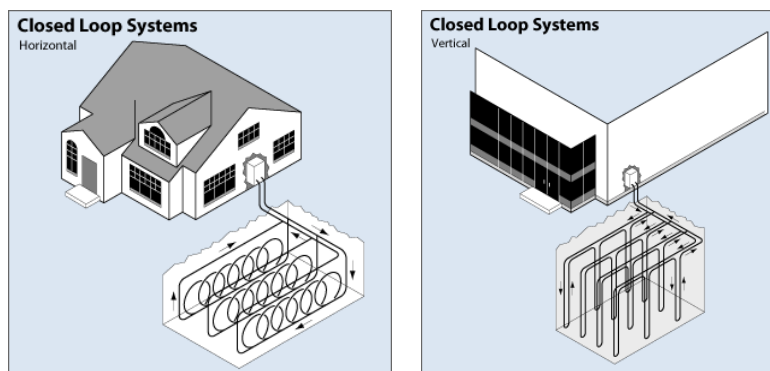
Geothermal heat pumps are a type of geothermal heating and cooling system that use the relatively constant temperature of the earth or nearby bodies of water as an exchange medium to heat and cool buildings. During warmer periods, heat pumps extract heat from buildings and transfer it to a circulating fluid in a cooler ground loop system. During cooler periods, fluid circulating in the ground loop system absorbs heat from the earth and transfers it to the heat pumps. The heat pumps extract the heat from the fluid, which is then used to increase the temperature of the air transported to the buildings (DOE 2023).

There are generally two types of heat pump systems: open-loop and closed-loop systems. Open-looped systems rely on water (i.e., groundwater or surface water) as the heat exchanging fluid. These types of systems are not considered in this EIS due to prohibitive environmental concerns. Closed-loop systems rely on a circulating fluid, such as propylene glycol or ethanol, as the heat exchange fluid. There are generally three types of closed-loop systems, including horizontal and vertical layouts, and systems that rely on a nearby body of water, such as a river (DOE 2023). Horizontal and vertical layouts in Minnesota function based on the fact that the earth below the frost line (usually about 6 feet deep or more in Minnesota) is a constant temperature of approximately 50 degrees Fahrenheit (°F) all year (GSA 2019b).

For a horizontal layout, a trench would be dug about 6 feet bgs. Typical layouts use two pipes, either with one buried at 6 feet, and the other at 4 feet, or two pipes placed side-by-side in a 2-foot-wide trench (DOE 2023). Trenches could be up to 150 feet long. Exact depths and details for these systems vary from project to project and would require engineering design services to determine required parameters for this project location following final project design.

A vertical layout, also known as a bored geothermal heat exchanger (BGHE) system, would require boring into the subsurface to install polyethylene piping in bore holes typically at depths that depend on the local geology (MDH 2022). Generally, wells have between 15- to 25-foot spacing between boreholes. While the designs for vertical closed loop systems vary widely, a general rule of thumb is to use one borehole per nominal ton of geothermal heat pump capacity (MNGHPA 2009).

See Figure 2.2-6 for an example schematic of horizontal and vertical installations, respectively. The third type of system, which relies on a body of water, is not considered in this EIS due to the lack of direct access from the LPOE to the nearest body of water and additional coordination required for nearby bodies being located along the international boundary.



Source: DOE 2023

Figure 2.2-6. Geothermal Systems

A test bore performed for the 100 percent PDS achieved 500 feet; this was found to be a viable design depth for a proposed ground source heat pump system. Approximately 90 bores would be needed to accommodate anticipated building loads under the Proposed Action. The 100 percent PDS considered a baseline scenario of installing a split direct-expansion heat pump and interior air handling unit as well as two alternatives, including the installation of a centralized geothermal system or the installation of a distributed geothermal system. In a centralized geothermal system, a single water-to-air heat pump module would be added to the air-handling unit. In a distributed geothermal system, each temperature control zone would be served by a dedicated water-to-air heat pump, and the ground source water loop would be piped directly to the heat pump above the occupied space it is serving. The 100 percent PDS included a life cycle cost analysis of all three scenarios; however, selection of the system to be installed, including system sizing, at the modernized and expanded Grand Portage LPOE would depend upon final site design (GSA 2024).

2.2.4 No Action Alternative

The No Action Alternative is analyzed in this EIS to provide a baseline for comparison with impacts from the Proposed Action and to satisfy federal requirements for analyzing “no action” under NEPA (40 CFR 1502.14(d)).

Under the No Action Alternative, the existing Grand Portage LPOE would not be modernized or expanded and the three-phase power line would not be installed. Any type of modification to the existing port would be limited to minor repairs and maintenance, as needed. The operation of the Grand Portage LPOE would generally remain similar to current conditions, but the capacity and efficiency of the port would likely degrade over time due to potential increased traffic demand. Deficiencies in port operations would remain or worsen over time. This alternative would not meet the purpose of and need for the Proposed Action, as identified in Section 1.2, Purpose and Need.

2.3 ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION

2.3.1 Modernize Existing Port Footprint Only

Under this alternative, GSA would modernize the Grand Portage LPOE within the facility’s existing footprint, and no expansion would occur. However, by limiting the Grand Portage LPOE to its existing footprint, there would be no expanded area in which to perform construction activities while allowing the LPOE to remain operational. The proposed modernization of the facility cannot impede the normal operation of the LPOE or limit the CBP from performing their mission. Additionally, more space is required to construct facilities that would meet the current POR. As such, this alternative would not meet GSA’s purpose of and need for the Proposed Action, and this alternative was not carried forward for further analysis in this Draft EIS.

2.3.2 Feasibility Study Alternatives

Under this alternative, GSA would modernize and expand the Grand Portage LPOE according to one of the three proposed footprints developed as part of the 2019 Feasibility Study. The three design alternatives presented in the Feasibility Study extended beyond the bounds of the existing MnDOT easement and would result in greater environmental consequences to undisturbed areas. GSA determined the extent of potential impacts to be unacceptable and therefore, these alternatives are not carried forward for further analysis in this Draft EIS.

2.3.3 35 Percent PDS Alternatives

Under this alternative, GSA would modernize and expand the Grand Portage LPOE according to one of the three proposed footprints developed as part of the 35 percent PDS. None of the three alternatives presented in the 35 percent PDS were deemed the most suitable layout for the modernized and expanded Grand Portage LPOE as they did not provide for an efficient layout of port operations. GSA did not carry forward the alternatives presented in the 35 percent PDS for further analysis in this Draft EIS.

2.3.4 50 Percent PDS Alternative

Under this alternative, GSA would modernize and expand the Grand Portage LPOE according to the single proposed footprint developed as part of the 50 percent PDS. This alternative was developed after GSA discussed the three alternatives presented in the 35 percent PDS with the Grand Portage Band. As none of those three alternatives were suitable, GSA revised and refined the three proposed footprints into a single alternative that would minimize disturbance of the MnDOT easement while best meeting the purpose of and need for the Proposed Action. GSA continued to refine and revise the potential layout of the modernized and expanded Grand Portage LPOE in the 90 percent PDS and 100 percent PDS, and the footprint presented in the 50 percent PDS was not carried forward for further analysis within this Draft EIS. Instead, the improved alternative that was assessed in the 100 percent PDS (i.e., the refined version of the 90 percent PDS) is analyzed as the Proposed Action assessed within this Draft EIS.

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CHAPTER 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 METHODOLOGIES

3.1.1 Affected Environment Methodology

The affected environment section summarizes the current physical, biological, social, and economic environments of the area within the region of influence (ROI) of the Proposed Action. The ROI defines the extent of the area where direct effects from project-related construction and operation may be experienced and encompasses the areas where indirect effects from the Proposed Action would most likely occur. As such, the extent of the ROI varies by environmental resource area depending upon the scope of potential impacts from the Proposed Action and No Action Alternative (i.e., site-specific versus regional baseline conditions). For example, the geographic area of analysis is limited to the proposed limits of construction for some resources (e.g., geological resources); however, for other resources it may extend beyond the limits of construction to include a specific buffer (e.g., biological resources, noise), or even further to encompass a county-level analysis (e.g., socioeconomics).

3.1.2 Environmental Consequences Methodology

The impacts analysis considers effects to a resource for each alternative and describes the types of impacts that would occur (Section 3.1.2.1) and assigns significance criteria (Section 3.1.2.2).

3.1.2.1 Types of Impacts

The terms “impacts” and “effects” are used interchangeably in this chapter. According to the CEQ NEPA Regulations at 40 CFR 1500-1508, direct and indirect effects are defined as:

- **Direct effects** – Effects, *which are caused by the action and occur at the same time and place* (1508.1(g)(1)). In other words, direct impacts are those that are caused directly and immediately from project-related activities, such as excavation of land during construction that could cause soil erosion. Most direct effects are confined to the proposed limits of construction (e.g., geology), but some may extend beyond the limits of construction (e.g., noise).
- **Indirect effects** – Effects, *which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable*. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (1508.1(g)(2)). Indirect effects are spatially removed from project-related activities and/or occur later in time but are reasonably certain to occur. For example, soil erosion could lead to adverse impacts on water quality, such as causing turbidity and sedimentation in streams during rain events. These types of impacts tend to be diffuse, resource-specific, and less amenable to quantification or mapping than direct effects.

3.1.2.2 Impact Intensity Thresholds

Potential impacts are described in terms of intensity, geographic context, and duration, as applicable. Definitions for intensity thresholds for the resources analyzed in this chapter are provided in Table 3.1-1. A discussion of measures that GSA would implement to reduce impacts is included at the end of each resource area section.

Criteria were defined as a means of measuring the size of the impact and its significance. The significance of impacts was determined systematically by assessing the magnitude (how much) and duration (how long) of an impact. Table 3.1-1 summarizes how each parameter is categorized. Significance thresholds are further defined for each resource within the respective sections.

Table 3.1-1. Summary of Environmental Impact Parameters

Intensity	
Negligible	The impact is not measurable or discernable from current conditions.
Minor	The impact is slight but detectable.
Moderate	The impact is readily apparent, and there would be a noticeable change from current conditions.
Major	The impact is severe, significant, and highly noticeable; major impacts may be above a threshold of significance.
Geographic Context	
Site-Specific	Impacts are limited to the Grand Portage LPOE and proposed limits of construction.
Local	Impacts extend beyond the Grand Portage LPOE and proposed limit of construction, affecting the area in the general vicinity.
Regional	Impacts affect a larger area such as Cook County or the Grand Portage Reservation.
Duration	
Short-term	Impacts would occur only during construction (temporary).
Long-term	Impacts would occur after construction.

3.2 GEOLOGICAL RESOURCES

This section describes the baseline conditions for geological resources in the ROI and potential geological impacts that could result from implementing the Proposed Action and No Action Alternative, as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Geological resources consist of the Earth's surface and subsurface materials and are typically described in terms of geology, topography, soils, and geologic hazards. Geology is the study of the Earth's physical structure and composition, as well as the configuration of the surface and subsurface features. Topography describes the general shape and arrangement of the natural and artificial physical features of a land surface. Soils are the unconsolidated material overlying bedrock, and are typically described in terms of type, slope, and physical characteristics, such as permeability, strength, and erosion potential. Geologic hazards are natural geologic events that can endanger human lives and threaten property, such as seismicity. The conditions described in the affected environment focus on geology, topography, and soils. Seismicity is not addressed in this section as the ROI is not considered as high risk for seismic activity (USGS 2023a).

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding geological resources:

- The Phase I Environmental Site Assessment (ESA) conducted in July 2023 for the project provides context on the existing conditions of geological resources at the existing Grand Portage LPOE (PHE 2023b).
- The wetland delineation conducted in July 2023 for the project provides context on existing hydric soils in the limits of construction (GSA 2023b).
- Information from boring logs conducted as part of the Phase II ESA and geotechnical investigation provides information on soil composition in the limits of construction (PHE 2023a).
- Text from the 100 percent PDS informs discussion about the environmental consequences (GSA 2024).

3.2.1 Affected Environment

3.2.1.1 *Region of Influence*

The ROI for geological resources focuses on the 10.4-acre area that comprises the limits of construction for the Grand Portage LPOE and 7.3-mile three-phase power line route.

3.2.1.2 *Regulatory Setting*

Stormwater runoff is regulated nationally through the National Pollutant Discharge Elimination System (NPDES), which is administered by the USEPA within the boundaries of the Grand Portage Reservation. Under the Proposed Action, GSA would be required to apply for a NPDES permit to authorize proposed discharges associated with construction. The USEPA would issue either the Construction General Permit (CGP), which includes requirements to implement erosion and sediment controls and pollution prevention practices, including development of appropriate documentation such as a Stormwater Pollution Prevention Plan (SWPPP), or an Individual Permit, which would include project-specific requirements to protect local water quality. Because the project is proposed within the boundaries of the Grand Portage Reservation, the NPDES permit (CGP or Individual Permit) would need to be certified by the Grand Portage Environmental Resources Board under Section 401 of the federal CWA prior to issuance. See Section 3.3, Water Resources, for additional details on the NPDES and Section 401 process and Section 3.3.2.2 for further discussion of SWPPPs and best management practices (BMPs).

3.2.1.3 *Existing Conditions*

The LPOE is located in northeast Minnesota along the U.S.-Canada border. The site consists of a 10.4-acre tract encompassing both previously disturbed and undisturbed areas, with some vegetation. The proposed

route for the three-phase power line is located within the existing utility ROW on the western side of Highway 61, which contains mostly disturbed, maintained grass and unpaved areas; however, there are portions along the route that include rocky outcrops and more dense vegetation.

Geology

The general geology of Cook County, in which the Grand Portage LPOE is located, is dominated by rock units developed ranging in age from the Archean (>2,500 million years ago) to the middle Proterozoic (approximately 1,100 million years ago) (MGS 1981).

Cook County covers a triangular-shaped area of approximately 1,680 square miles at the extreme northeastern tip of Minnesota between Lake Superior on the south and the province of Ontario, Canada on the north (MGS 1959). The area is hilly with a minimum elevation of 602 feet above mean sea level (MSL) at Lake Superior and up to 2,232 feet in the Misquah Hills. Much of the northern part of the county is characterized by long narrow lakes separated by prominent ridges. The geology is controlled, in a broad way, by its position on the north limb of the Lake Superior syncline. Except for glacial deposits, the rocks are all of Precambrian age, which is defined as the period beginning with the formation of the solar system 4.57 billion years ago and ending approximately 540 million years ago. The youngest of these Precambrian rocks in this area occur along the Shoreline of Lake Superior and the oldest northwest of the LPOE, near Saganaga Lake. Over two thirds of the county is underlain by rocks of Keweenawan age, a division of the late Precambrian age dating to approximately 1,120-1,140 million years ago. The rocks of Keweenawan age consist of a thin sandstone and conglomerate at the base overlain by an exceedingly thick series of magma flows. The magma flows consist mainly of somewhat variable basalt plus a much smaller percentage of rhyolite. The oldest flows crop out near Grand Portage Bay and trend inland.

A 2016 Limited Site Investigation (LSI) performed at the existing Grand Portage LPOE in 2016 indicates that depth-to-bedrock under the Grand Portage LPOE is generally between 8.5 and 15 feet bgs (NTS 2016).

Topography

The majority of the Grand Portage LPOE and adjacent area consists of undeveloped, forested landscape sloping north-northwest towards the Pigeon River. Based on available United States Geological Survey (USGS) information, the existing Grand Portage LPOE is at an approximate elevation of 624 feet above MSL. The center of the existing LPOE is located on a localized high point 30 feet above base flow elevation of the Pigeon River. The Highway 61 ridge slopes gradually west to east towards the Pigeon River International Bridge at an approximate 0.4 percent slope. Elevations along the proposed three-phase power line route range from 656 to 1,148 feet MSL.

Soils

The project is located in an area that has not been surveyed by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS); therefore, no information was available from the NRCS's Web Soil Survey, a web-based soil data clearinghouse. In July 2023, a wetland delineation was conducted within and around the proposed limits of construction of the LPOE that identified five areas where hydric soils were present (GSA 2023b). Of the five areas where hydric soils were present, 1.5 acres of delineated wetlands occur within the limits of construction. During the Phase II ESA conducted for the project, soil borings were installed across a portion of the site and borings consisted largely of shallow gravelly fill followed by generally coarse sands to approximately 4 feet bgs. Below the sands layer to boring termination at 20 feet was found to be typically soft, moist to wet brown and gray clay. Results of the geotechnical investigation for the entire project site conducted in January 2024 yielded comparable results (Braun Intertec 2024).

Regarding the three-phase power line route, approximately 0.3 acre of wetlands occur within the limits of construction within the delineated area near the LPOE. In addition, the National Wetlands Inventory (NWI) indicates that a riverine wetland crosses the proposed route north of the Store Road and Highway 61

intersection; this indicates the presence of 0.01 acre of potential hydric soils in this location. See Section 3.3, Water Resources, for a map of this area and further information regarding wetlands within the ROI.

Of the approximately 10.4 acres within the proposed limits of construction at the LPOE, 4.9 acres currently consist of impervious surfaces (i.e., building, roadways, parking lots). The three-phase power line route mostly consists of pervious surfaces except for some rocky hillsides and several paved secondary roadway intersections.

3.2.2 Environmental Consequences

3.2.2.1 Methodology

To evaluate the impacts on geological resources, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Modification of geologic features;
- Alteration of topography or grade of terrain; or
- Disturbance or displacement of soils.

A major adverse impact to geological resources would occur if the Proposed Action would result in:

- Altered geological structures that control groundwater quality;
- Exposure of people or structures to potential substantial adverse effects from a geologic hazard (i.e., on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse);
- Soil erosion that produces substantial gullyng, extensive damage to vegetation, or a sustained increase in sedimentation in streams;
- Substantial loss of soil, and/or a substantial decrease in soil stability and permeability; or
- Substantial disruption, displacement, compaction, or covering of soils.

Except when installing impermeable surfaces, generally adverse impacts on geological resources can be avoided or minimized if proper construction techniques and erosion-control measures are incorporated into project development.

3.2.2.2 Proposed Action

Construction

Geology

The Proposed Action would have direct, long-term, minor, adverse, site-specific impacts on geology during demolition and construction. Construction of the new facilities and infrastructure would require excavation; based on the results of the geotechnical report prepared for the project, excavation may be required down to approximately 10 feet bgs. For most of the new facilities and infrastructure, this could involve some disturbance or modification of the surficial geology, but impacts are anticipated to be within a depth comparable to past construction of the existing Grand Portage LPOE facilities. Installation of the three-phase power line would require burying the power line up to 3 feet bgs where possible and excavating to the ledge rock surface where areas of shallow rock build up occur and then covering the power line with at least 4 inches of concrete.

As stated in Section 2.2, GSA may drill a new well to replace the potable water supply well that currently serves the existing LPOE. GSA is also considering geothermal heat pumps as a heating and cooling system for the Grand Portage LPOE. Installation of a geothermal heat pump system would involve excavating the ground at depths below the frost line (around 6 feet in Minnesota) or drilling approximately 90 boreholes

into the subsurface (e.g., about 500 feet deep) to install wells (GSA 2024). The drilling of a new water supply well and boreholes and excavating of trenches would remove bedrock and some surficial material.

Generally, direct, long-term, minor, adverse, site-specific impacts to geology would be expected as any excavation work for a geothermal system is not anticipated to require the removal of any geologically unique or economically valuable resources. The installation and operation of a geothermal heat pump would not induce any seismic activity because of the relatively shallow depth of the wells and the fluid circulating through any well would be enclosed in a closed loop system. The type of geothermal system that could be constructed for this project is subject to final design and geotechnical evaluations. GSA would have to evaluate factors such as spatial requirements, geology, and system requirements to further determine the feasibility of implementing geothermal technology. If such technology were to be used, GSA would construct wells consistent with Minnesota Rules, Chapter 4725 (Wells and Borings) for geothermal boreholes (see Section 3.3, Water Resources).

Topography

The Proposed Action would have direct, long-term, negligible, adverse, site-specific impacts on topography. Within the limits of construction, existing vegetation would be removed, and the ground would be graded to the extent necessary. As most of the area within the limits of construction was previously graded and disturbed, the grading of soils would be minimal, and there would be not any substantial change to current topography.

Soils

Construction of the Proposed Action would disturb a maximum of approximately 10.4 acres within the proposed limits of construction of the LPOE. This area includes the 5.7-acre operational footprint of the existing Grand Portage LPOE; the remainder is currently undeveloped but has been previously disturbed. This EIS assumes disturbance of the entire limits of construction at the LPOE. However, it is likely that land preparation activities would require a lesser amount of disturbance. Installation of the proposed three-phase power line would disturb approximately 13.3 acres within the existing, disturbed, and maintained utility ROW that parallels Highway 61. Because surface disturbance would be limited to areas located on previously developed and/or disturbed surfaces, loss of topsoil and increased potential for erosion from Proposed Action would represent a direct, long-term, minor, adverse, site-specific impact on soils.

The use of heavy equipment for site preparation and construction of buildings, roads/walkways, parking areas, and other infrastructure would require removal of vegetation, grading, excavation, and filling. If any natural soil horizons exist, they would likely be lost during construction. Heavy equipment may compact or loosen and destroy the structure and function of organic and mineral soils over the long term, reducing soil moisture and most likely resulting in increased runoff and erosion. Some soils may need to be remediated, relocated, or hauled offsite due to historical contamination concerns (see Section 3.12, Human Health and Safety).

Soil erosion from use of heavy equipment could also occur because of ground disturbance, leading to detachment of soils and transport of disturbed surfaces in wind and stormwater runoff. Soil productivity (i.e., the capacity of the soil to produce vegetation) would be permanently impacted as the surface soils would be replaced with mostly paved development.

The project would be required to obtain a CGP or Individual Permit under the NPDES program from the USEPA and have it certified by the Grand Portage Band. The CGP would specify measures for stabilizing soils and minimizing soil loss during construction, which would limit impacts from soil erosion during construction. Likewise, an Individual Permit, if required, would include project-specific requirements to minimize impacts from soil erosion. Under the Grand Portage Land Use Ordinance, the project would also be required to obtain an excavation permit if there is movement, removal or fill of more than ten cubic yards of material (Grand Portage Band of Lake Superior Chippewa 1996). The permit specifies that topsoil must be removed prior to any excavation and saved for replacement in any re-vegetation efforts. Any material

set to be permanently removed from project sites would be properly disposed of at a location designated by the Land Use Committee. Protective measures would also be designed to prevent erosion and retain sediment on the site. Prior to approval by the Land Use Committee, a restoration plan must be developed (and subsequently approved).

Operations

No impacts to geology or topography are anticipated during operations of the Proposed Action. There would be an increase in impervious surfaces that could contribute to increased potential for water runoff and soil erosion, leading to direct, long-term, minor, adverse local impacts to soils adjacent to the ROI. Impervious surfaces cover approximately 4.9 acres of the operational footprint of the existing LPOE. Based on the current design of the modernized and expanded LPOE, impervious surfaces would cover approximately 5.4 acres of the 10.4-acre LPOE operational footprint. Installation of the three-phase power line would not result in additional impervious surfaces. Therefore, there would be a net increase in impervious surface area of approximately 0.5 acre associated with the Proposed Action.

Selection of stormwater management facilities is subject to final design but, based on other similar LPOE projects, may include street drainage connected to storm drains that lead to a bioretention basin system where stormwater would percolate into the ground. GSA would be required to meet or exceed Section 438 of the EISA requirements for stormwater runoff (see Section 3.3, Water Resources).

3.2.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. No ground or subsurface disturbance from new facility or infrastructure construction would occur; therefore, adverse impacts on geology, topography, and soils would primarily be associated with maintenance activities at the LPOE and would be negligible.

3.2.2.4 Impact Reduction Measures

Measures to reduce construction impacts on geology and soil-related concerns, such as soil erosion, loss, and stability, would be addressed in the project design plans, as well as through erosion and sediment controls and site stabilization measures as specified through applicable NPDES permit and tribal permitting requirements. Such measures would include setting up barriers and utilizing standard BMPs (e.g., earth walls, soil nails, riprap, turbidity barriers, revegetating areas where applicable, etc.) to reduce impacts to soils or from soil erosion. GSA would make a concerted effort to ensure as much soil remains on site as possible in consideration of Grand Portage Band requests and cultural practices. Refer to Section 3.3, Water Resources, for a discussion of additional measures that would limit impacts from soil loss as a result of erosion during construction and operations.

3.3 WATER RESOURCES

This section describes the baseline conditions for water resources and assesses the potential for local and regional water resources to be affected by implementing the Proposed Action and the No Action Alternative, as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Water resources may be grouped into four different areas: surface waters, including water quality and supply and consideration of the overall watershed; floodplains; wetlands; and groundwater, including water quality and supply.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding water resources:

- The 2019 Feasibility Study (GSA 2019a) and the 100 percent PDS (GSA 2024) provide information about ongoing operations and conditions at the existing Grand Portage LPOE and proposed activities that could affect water resources.
- The Federal Emergency Management Agency (FEMA) website (FEMA 2023) and the NWI website (USFWS 2023a) provide information on floodplains and wetlands near the existing Grand Portage LPOE and proposed three-phase power line.
- Various water-related reports by state and county agencies and the Grand Portage Band provide context on the conditions of nearby water resources, including:
 - Lake Superior North: One Watershed, One Plan, prepared by the Cook and Lake County Soil and Water Conservation Districts, May 23, 2017 (Cook and Lake County SWCDs 2017)
 - Lake Superior-North Watershed Monitoring and Assessment Report (MPCA 2017a)
 - Grand Portage Band of Lake Superior Chippewa Wetland Program Plan 2021-2025 (Wilson 2021)
 - Grand Portage Band of Lake Superior Chippewa Water Quality Standards
 - Grand Portage Band of Lake Superior Chippewa Water Resources Ordinance (Grand Portage Band of Chippewa 2004)
 - Grand Portage Band of Lake Superior Chippewa Land Use Ordinance (Grand Portage Band of Lake Superior Chippewa 1996)
 - Grand Portage Band of Lake Superior Chippewa Water Quality Monitoring and Assessment Report April 2021-March 2022 (Grand Portage Band of Lake Superior Chippewa 2022)
 - Grand Portage Band of Lake Superior Chippewa 2023 Water Quality Monitoring and Assessment Report

3.3.1 Affected Environment

3.3.1.1 *Region of Influence*

The ROI for surface waters, floodplains, and wetlands includes those resources that exist within and downgradient of the existing Grand Portage LPOE and three-phase power line route and their proposed limits of construction. Areas located downgradient represent any surface waters and wetlands that may receive runoff during construction and operation of the Proposed Action. The ROI for groundwater resources includes any underlying aquifer.

3.3.1.2 Regulatory Setting

Watershed Governance

The International Joint Commission (IJC) is a binational organization established by the U.S. and Canada through the signing of the Boundary Waters Treaty of 1909. The IJC oversees and protects the shared waters between the two countries through the approval and regulation of projects that affect transboundary waters (IJC 2023a). The IJC has established several international boards to manage water levels and flows within the waterbodies comprising the Great Lakes region. Within the Great Lakes-St. Lawrence River Drainage Area, in which the ROI occurs, the International Lake Superior Board of Control regulates Lake Superior outflows and advises the IJC on matters related to hydrologic conditions and the status of various control works (IJC 2023b). Finally, under the 2012 Great Lakes Water Quality Agreement between the U.S. and Canada, the Great Lakes Water Quality Board advises the IJC on water quality and is therefore discussed in greater detail in the *Water Quality* subsection below (IJC 2023c).

Water Quality

At the international level, the Great Lakes Water Quality Board advises the IJC on water quality under the 2012 Great Lakes Water Quality Agreement between the U.S. and Canada (IJC 2023c). Within the U.S., water quality is regulated within the context of meeting standards established for compliance with the federal CWA. Under the CWA, states, territories, and authorized tribes are required to adopt water quality standards to protect their water resources and the designated uses for these waters (e.g., drinking water, recreation, and aquatic life). Because the Grand Portage LPOE occurs within the Grand Portage Reservation and the Grand Portage Band is a sovereign Indian nation, water resources within the ROI are subject to the Grand Portage Band Water Quality Standards, that were federally approved and became effective in 2005. The Grand Portage Environmental Resources Board, with advisement from the Grand Portage Environmental Department, is responsible for establishing, reviewing, and revising water quality standards, as well as compiling and analyzing water quality data for the Waters of the Reservation. Waters of the Reservation are defined as all waters, including wetlands, upon, under, flowing through, or bordering upon the Grand Portage Reservation (Grand Portage Band of Chippewa 2004).

Grand Portage Reservation water quality and CWA requirements relevant to this project include:

- **Grand Portage Band of Lake Superior Chippewa Water Quality Standards Regulations** – These regulations provide the Grand Portage Band’s Water Quality Standards for all Waters of the Reservation. Eight designated uses are identified:
 - A. Public Water Supply
 - B. Aquatic Life
 - 1. Cold Water Fisheries
 - 2. Warm Water Fisheries
 - 3. Subsistence Fishing (Netting Area)
 - 4. Wetland
 - C. Wildlife
 - D. Recreation
 - 1. Primary Contact Recreational: Lake Superior Coastal Waters – high intensity use
 - 2. Primary Contact Recreational: Inland waters – moderate intensity use
 - 3. Primary Contact Recreational: Inland waters – infrequent use

- E. Cultural
 - 1. Wild Rice Areas
 - 2. Aesthetics
- F. Forestry Water Supply
- G. Industrial Water Supply
- H. Navigation
- **CWA Sections 303(d) and 305(b)** – Section 303(d) requires states, territories, and authorized Tribes to identify and develop a list of “impaired” waterbodies for which water quality standards for at least one designated use are not met and to develop total maximum daily load (TMDL) studies for those impaired waterbodies. A TMDL establishes the maximum amount of a pollutant allowed in a waterbody and serves as a planning tool to restore a waterbody so that it can support its intended designated use. States, territories, and authorized Tribes are also required to submit a Section 305(b) water quality assessment report that provides information on the water quality status of all waters under their jurisdiction. Both the 303(d) list and 305(b) report are typically integrated into a single watershed assessment report.
- **CWA Section 404 Permit Program** – Regarding protection of waters of the U.S. (WOTUS), USEPA Section 404(b)(1) guidelines state that “no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” The 404 Permit Program authorizes U.S. Army Corps of Engineers (USACE) to determine the Least Environmentally Damaging Practicable Alternative and to issue permits under this program. Depending on the extent and intensity of impacts, USACE issues either an Individual Permit (more than minimal individual or cumulative impacts), a General Permit (only minimal adverse effects), or a Letter of Permission (a more streamlined Individual Permit) under Section 404. In September 2023, USEPA and USACE issued a final rulemaking, revising the definition of WOTUS to include (FR 2023):
 - 1. Traditional navigable waters, the territorial seas, and interstate waters (together referred to as paragraph (a)(1) waters);
 - 2. Impoundments of “waters of the United States” (together referred to as paragraph (a)(2) impoundments);
 - 3. Tributaries to traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments when the tributaries meet the relatively permanent standard (together referred to as paragraph (a)(3) waters);
 - 4. Wetlands adjacent to paragraph (a)(1) waters or wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or paragraph (a)(3) waters (together referred to as paragraph (a)(4) waters); and
 - 5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) that meet the relatively permanent standard and have a continuous surface connection to waters identified in paragraph (a)(1) or (a)(3).
- **Rivers and Harbors Act** – Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 *et seq.*) requires authorization from USACE for work or structures in, over, or under any navigable WOTUS. Furthermore, work outside the limits of navigable waters may require a Section 10 permit if the structure or work affects the course, location, condition, or capacity of the waterbody. CWA Section 404 jurisdiction encompasses more waters than Section 10 jurisdiction (i.e., all Section 10 waters are considered Section 404 waters, but not all Section 404 waters are considered Section 10 waters).

- **Wild and Scenic Rivers Act of 1968.** The Wild and Scenic Rivers Act (WSRA) established the Wild and Scenic Rivers system, which authorizes Congress to preserve certain rivers with outstanding natural, cultural, and recreational values (USFWS 2023b). Section 5(d)(1) of the WSRA and related guidance require federal agencies to seek to avoid or mitigate actions that would adversely affect river segments included in the Nationwide Rivers Inventory. The Pigeon River is included in the Nationwide Rivers Inventory and is also considered a navigable WOTUS. As such, it is under the jurisdiction of Section 404 of the CWA, Section 10 of the Rivers and Harbors Act, and the WSRA (NPS 2023).
- **CWA Section 402, NPDES** – Section 402 establishes the federal NPDES program, which is administered by the USEPA within the boundaries of the Grand Portage Reservation. The NPDES permit regulates a treatment and disposal system that discharges a specified amount of a pollutant into a surface water and is required for sewer discharges and stormwater discharges from developments, construction sites, or other areas of soil disturbance. Depending on the extent and intensity of risk to water quality anticipated by the proposed discharges, the USEPA would issue the CGP or an Individual Permit, as introduced in Section 3.2.1.2, which would authorize stormwater discharges from construction activities under the NPDES program. The CGP requires the implementation of erosion and sediment controls and pollution prevention practices throughout the entirety of construction, including the development of a SWPPP. The CGP further requires documentation of site inspections, which must be conducted by a qualified person who has either completed the appropriate training (provided by the USEPA) or holds a current certification or license from a program that covers the same core material as the USEPA training. The CGP also states that the applicant must comply with any state, tribal, or territory-specific requirements listed in Part 9 of the permit (including those outlined by CWA Section 401, described below). An Individual Permit would include project-specific requirements to protect water quality, and like the CGP would need to be certified by the Grand Portage Environmental Resources Board, as required by CWA Section 401.
- **CWA Section 401, Water Quality Certification** – Section 401 requires that before a federal permit or license may be issued for an activity with potential to discharge into a WOTUS, the state or authorized Tribe with authority over the area in which the activity will occur must certify that the activity will not violate applicable water quality standards set under the CWA. Federal permits subject to Section 401 include CWA Section 402 and 404 permits and permits under Section 10 of the Rivers and Harbors Act. As this project would occur within the boundaries of the Grand Portage Reservation, the Grand Portage Environmental Resources Board would be responsible for issuing the water quality certification, in accordance with the Grand Portage Band Water Quality Standards (Grand Portage Band of Chippewa 2004).

Section 438 of the EISA provides stormwater management guidance for federal development or redevelopment projects with more than 5,000 square feet of land disturbance in any manner that diverges from the area's present-day use and composition. Section 438 requires federal projects maintain or restore the "pre-development hydrology" of the area affected by construction or operation of a proposed project. "Pre-development hydrology" is defined as the stormwater runoff characteristics of the site in its natural state, prior to human development; it does not pertain to the current state of the site (e.g., a parking lot) (GSA 2019b).

Wetlands

Wetlands in the ROI are included in the Waters of the Reservation definition detailed in the Grand Portage Band Water Quality Standards, discussed above. The Grand Portage Band Water Resources Ordinance outlines the role and scope of authority of the Grand Portage Environmental Resources Board, which serves as the central unit to protect, maintain, and improve Waters of the Reservation, with advisement from the Grand Portage Environmental Department (Grand Portage Band of Chippewa 2004). The Grand Portage

Reservation Land Use Ordinance provides basic protections for wetlands, and the Grand Portage Band Wetlands Program Plan for 2021-2025 reinforces the CWA (Grand Portage Band of Lake Superior Chippewa 1996; Wilson 2021).

EO 11990, *Protection of Wetlands*, requires that federal agencies take measures to not only minimize the destruction, loss, or degradation of wetlands, but also to enhance wetland habitats. Wetlands are included in the definition of a WOTUS and, therefore, are also protected under the Section 404 Permit Program, overseen by USACE (see previous *Water Quality* discussion).

Floodplains

FEMA defines a floodplain as being any land area susceptible to inundation by water from any source (FEMA 2023). From a management standpoint, floodplains are usually low-lying land adjacent to a stream or a body of standing water. Furthermore, FEMA categorizes floodplains by the frequency of flooding. For example, the 1-percent-annual-chance floodplain (also referred to as the base flood or 100-year flood) and 0.2-percent-annual-chance floodplain (also referred to as the 500-year flood) floodplains are land areas that have a 1 percent and 0.2 percent chance, respectively, of experiencing a flood each year. Another often-used FEMA term is the regulatory floodway, which is the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood (i.e., 1-percent-annual-chance floodplain, 100-year flood) without cumulatively increasing the water surface elevation more than a designated height. In a flood event, the floodway functions as part of the waterway and is filled with flowing water. FEMA prepares Flood Insurance Rate Maps that delineate floodways and flood hazard areas for regulators, developers, and communities. These maps are used to administer floodplain regulations and to reduce flood damage.

Federal activities within floodplains must comply with EO 11988, *Floodplain Management*, and EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*. Per EO 11988 and EO 13690, federal agencies are required to take action to reduce the risk of flood loss and to avoid, to the extent possible, long- and short-term adverse impacts associated with the occupancy and modification of floodplains and the direct or indirect support of floodplain development wherever there is a practicable alternative. An eight-step decision-making process for floodplain management is outlined in 44 CFR 9.6. In accordance with EO 13690, GSA issued the *Floodplain Management Desk Guide*, which provides procedures and guidance to implement GSA Order PBS 1095.8A, *Floodplain Management* (GSA 2023c). Based on coordination with CBP, it has been determined that the proposed use of the Grand Portage LPOE by CBP would be considered a critical action, meaning that even a slight chance of flooding would be too great (see Appendix B).

Groundwater

The Grand Portage Band includes waters beneath the Grand Portage Reservation in their definition of Waters of the Reservation and regulates groundwater in this area. With respect to quality standards, the Tribe uses USEPA's Primary Drinking Water Standards Maximum Contaminant Levels (MCLs) for comparison as regulatory criteria. For analytes that do not have a corresponding MCL, comparable Minnesota Department of Health (MDH) Health Risk Limits (HRLs) are used. Additional groundwater quality requirements and regulations are set within the Grand Portage Water Quality Standards described above under *Water Quality*.

Minnesota Rules, Chapter 4725 (Wells and Borings), as regulated by MDH, establishes requirements for the location, design, construction, testing, repair, and sealing of water supply wells and wells and borings associated with BGHE systems. These requirements include standards for piping materials, heat transfer fluids, and grout mixes. Well construction on the Grand Portage Reservation is not subject to Minnesota Rules, Chapter 4725 as MDH does not have jurisdiction within the Reservation; however, the Grand Portage Band does adhere to these regulations voluntarily.

3.3.1.3 Existing Conditions

Geographic and Hydrologic Setting

The ROI is located in the Great Lakes-St. Lawrence River Drainage Area, which comprises both U.S. and Canadian territories. The Great Lakes and St. Lawrence River hold 20 percent of Earth's fresh surface water and cover a total area of 95,160 square miles (IJC 2023d). The Proposed Action also occurs within the USGS 8-digit Hydrologic Unit Code Baptism-Brule (04010101) (USGS 2023b).

Climate data collected from 1991 to 2020 in Grand Portage (approximately 5 miles southwest of the existing Grand Portage LPOE) indicates that the region typically experiences short, warm summers and long, severe winters (NOAA 2023a). In the last century, increases in extreme rainfall events and flooding have been observed in this region. It is anticipated that moving forward, more intense, less-frequent rainfall events will occur alongside longer periods of dry conditions. Such changes to historic precipitation patterns are anticipated to increase the risk of soil erosion and subsequent degradation of water quality. Higher water temperatures and a decrease in ice within the Great Lakes can also result in increased algae, harming water quality and fisheries. Additionally, lower lake levels resulting from changes from historic precipitation patterns have implications for coastal wetlands and shoreline erosion/flooding (Cook and Lake County SWCDs 2017).

Surface Water

Watershed

Dominant land cover types in the watershed surrounding the ROI include forest and wetland, with development and agricultural land comprising a very small portion. Very little hydrologic alteration has occurred in this region in the form of dams or channelized streams. The largest tributary in this area is the Pigeon River, which originates from a chain of lakes along the U.S.-Canada border and forms the international border for its entire length, draining 610 square miles (MPCA 2017a). The Pigeon River occurs both north and east of the existing Grand Portage LPOE.

The nearest USGS gauging station to the Grand Portage LPOE is Station 04010500 (referred to as the "Pigeon River at Middle Falls NR Grand Portage MN" station), which is upstream of the LPOE. Peak streamflow at this location in 2023 was 5,970 cubic feet per second (USGS 2024a). Station 04010510 ("Grand Portage River at Grand Portage MN") is located in the Grand Portage Creek near its outlet to the Grand Portage Bay, near the southern extent of the proposed three-phase power line route. Peak streamflow at this location in 2023 was 285 cubic feet per second (USGS 2024b). The Grand Portage Band monitors three water quality sampling locations within the Pigeon River in close proximity to the ROI: one upstream of the ROI and two downstream (Grand Portage Band of Lake Superior Chippewa 2022).

Water Quality

As described above, the Grand Portage Band Water Quality Standards assign uses to Waters of the Reservation. The Grand Portage Band assigns the Pigeon River the following uses: B1 (Aquatic Life – Cold Water Fisheries), B2 (Aquatic Life – Warm Water Fisheries), C (Wildlife), D2 (Recreation – Inland Waters), E1 (Cultural – Wild Rice Areas), F (Forestry Water Supply), G (Industrial Water Supply), and H (Navigation). Grand Portage Creek is assigned the following uses: B1, C, D1 (Recreation – Lake Superior Coastal Waters), D2, F, G, H (Grand Portage Band of Lake Superior Chippewa 2005).

The *Grand Portage Band of Lake Superior Chippewa Clean Water Act Section 106 Surface Water Quality Monitoring and Assessment Report for April 2021 to March 2022* determined that, for the 23 miles that it traverses the Reservation, the Pigeon River was fully supporting its recreational uses but only partially supporting aquatic life, cultural, and fish consumption uses, with fish consumption advisories in effect due to the presence of mercury. The report identifies air deposition as the source of mercury impairment. Lake Superior, likewise, was determined to be fully supporting its aquatic life, recreational, and public water supply uses but only partially supporting cultural and fish consumption uses due to the presence of mercury.

The Grand Portage Creek traverses 3.75 miles within the Reservation and was determined to be fully supporting its aquatic life, recreation, and cultural uses but only partially supporting fish consumption, with fish consumption advisories in effect due to the presence of mercury (Grand Portage Band of Lake Superior Chippewa 2022).

A 2015 assessment within the Grand Portage National Monument (entirely within the bounds of the Grand Portage Reservation) that identified high traces of mercury in fish suggested that the increased enrichment of mercury in this area may have resulted from historic anthropogenic activity related to the fur trade that occurred in the 18th century, in addition to some atmospheric deposition (Rolfhus et al. 2015). Mercury contamination is further discussed in Section 3.12, Human Health and Safety.

Surface Water Resources In ROI

No surface water features occur within the proposed limits of construction for the Grand Portage LPOE. As discussed above, the Pigeon River, a navigable river by definition of Section 10 of the Rivers and Harbors Act, is located approximately 390 feet from the northernmost extent and 930 feet from the westernmost extent of the existing Grand Portage LPOE. The Pigeon River is listed in the Nationwide Rivers Inventory (outstandingly remarkable values include geologic, recreational, and scenic) (NPS 2023).

The proposed route for the three-phase power line would cross Grand Portage Creek, which currently flows beneath Highway 61 at a point north of the Grand Portage National Monument.

Stormwater in the area of the LPOE flows across the ground surface north and south away from the proposed limits of construction, following steeper slopes to the Pigeon River. At present, the only existing stormwater feature onsite is a stormwater culvert between the existing Main Building and the Pigeon River International Bridge (GSA 2019a). Stormwater along the three-phase power line route flows in varying directions along the route depending on changes in slope and ground condition. In addition to the Pigeon River, potential receiving waterways for stormwater flow include Grand Portage Creek.

Floodplains

The ROI occurs within a region unmapped by FEMA for floodplains and floodways. As such, the minimum floodplain of concern would be calculated following a floodplain determination study to be conducted by GSA, in accordance with the GSA *Floodplain Management Desk Guide* (GSA 2023c). The existing Grand Portage LPOE is situated on a ridge approximately 30 feet above the base flow elevation of the Pigeon River, at a distance of 390 feet at the closest point between the facility and the river. At the northeastern extent of the facility, Highway 61 slopes gradually west to east towards the Pigeon River International Bridge, at approximately a 0.4 percent slope (GSA 2019a).

The USGS has monitored Pigeon River flow rates in this area for over 100 years and has not recorded any flooding event at the existing Grand Portage LPOE. USACE records for water levels at Lake Superior (located approximately 0.6 mile from the existing LPOE) indicate a variation in water levels between 599.5 and 603.3 feet, considerably lower than the existing Main Building, with an elevation of 629.8 feet (GSA 2024).

Wetlands

USFWS NWI data does not indicate the presence of wetlands within the proposed limits of construction for the Grand Portage LPOE; however, a large, 165-acre palustrine forested wetland complex occurs directly south of the existing facility (USFWS 2023a). GSA conducted a wetland delineation on July 25, 26, and 27, 2023 in accordance with the *Corps of Engineers Wetland Delineation Manual* (commonly referred to as the 1987 Manual) along with supplemental guidance by the USACE. The purpose of the wetland delineation was to identify wetland areas within and adjacent to the ROI and delineate their boundaries. Five wetland areas were delineated within the area examined, as presented in Figure 3.3-1. The edge of the Pigeon River was not delineated due to the presence of steep slopes and because the waterway edge was within the ordinary high water mark elevation marked by the line of vegetation. A brief description

of each wetland area identified during the wetland delineation is provided below, and Figure 3.3-1 presents their locations in relation to the proposed limits of construction (GSA 2023b).

- **Basin 1** was identified as a palustrine, forested (broad-leaved deciduous/needle-leaved evergreen), saturated wetland. Observed plant species included black ash (*Fraxinus nigra*), balsam fir (*Abies balsamea*), and black spruce (*Picea mariana*) trees; speckled alder (*Alnus incana*), pussy willow (*Salix discolor*), sandbar willow (*Salix interior*), red-osier dogwood (*Cornus sericea* L.), black ash, and balsam fir shrubs/saplings; and reed canary grass (*Phalaris arundinacea*), Canada goldenrod (*Solidago canadensis*), lake sedge (*Carex lacustris*), bladder sedge (*Carex intumescens*), interior sedge (*Carex interior*), jewelweed (*Impatiens capensis*), meadow horsetail (*Equisetum pratense*), lady fern (*Athyrium filix-femina*), and woolgrass (*Scirpus cyperinus*) ground cover.
- **Basin 2** was identified as a palustrine, emergent, persistent, saturated wetland that functions as a stormwater ponding area in between the directional travel lanes on Highway 61. Observed plant species included reed canary grass, Canada bluejoint grass (*Calamagrostis canadensis*), woolgrass, common cattail (*Typha latifolia*), lake sedge, speckled alder, and red-osier dogwood.
- **Basin Ditched Drainageway (D) 1** was identified partially as a palustrine, forested (broad-leaved deciduous/needle-leaved evergreen), saturated wetland and partially as a palustrine, scrub-shrub (broad-leaved deciduous), saturated wetland. Observed plant species included black ash, black spruce, and balsam fir trees; speckled alder, pussy willow, balsam fir, and black ash shrubs/saplings; and jewelweed, lady fern, woolgrass, bladder sedge, interior sedge, meadow horsetail, and marsh marigold (*Caltha palustris*) ground cover.
- **Basin D2** was identified partially as a palustrine, forested (broad-leaved deciduous/needle-leaved evergreen), saturated wetland and partially as a palustrine, scrub-shrub (broad-leaved deciduous), saturated wetland. Observed plant species included black ash, black spruce, and balsam fir trees; speckled alder, pussy willow, balsam fir, and black ash shrub/saplings; and jewelweed, lady fern, woolgrass, bladder sedge, interior sedge, meadow horsetail, and marsh marigold ground cover.
- **Basin D3** was identified partially as a palustrine, forested (broad-leaved deciduous/needle-leaved evergreen), saturated wetland and partially as a palustrine, scrub-shrub (broad-leaved deciduous), saturated wetland. Observed plant species included Canada bluegrass, reed canary grass, woolgrass, common cattail, lake sedge, bladder sedge, interior sedge, red-osier dogwood, balsam fir, black ash, and black spruce. Ditched drainageways were observed to convey runoff water from hard surfaces toward a culvert at the northeast end where water flows downslope to the Pigeon River. The culvert exit was observed to be clogged with sediment that would have backed up water in this area and slowed the outflow.

The delineation was submitted to USACE St. Paul District for concurrence on August 11, 2023. USACE St. Paul District responded on August 13, 2024 (see Appendix B) concurring that the delineation presented a reasonable approximation of the location and boundaries of aquatic resources on the property and that a further jurisdictional determination is not required to support future permitting efforts.

Based on review of NWI data, a riverine wetland is associated with Grand Portage Creek; this wetland would also be crossed by the proposed route for the three-phase power line. Additional palustrine forested wetlands are located north and south of the proposed power line route, as shown in Figure 3.3-2 (USFWS 2023a). GSA is conducting a wetland delineation of the three-phase power line route, and results will be included in the Final EIS.

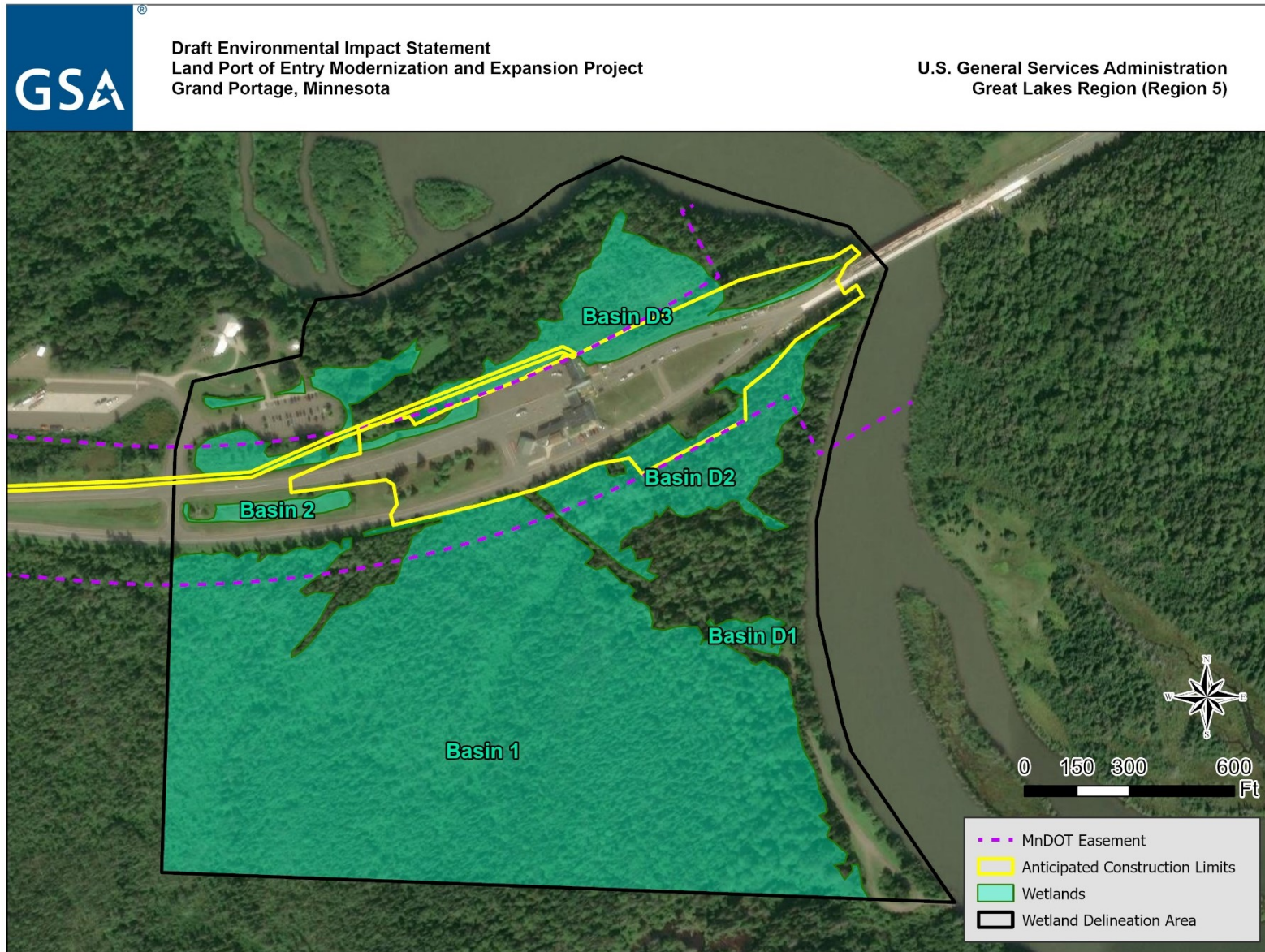


Figure 3.3-1. Wetlands Near the Existing Grand Portage LPOE

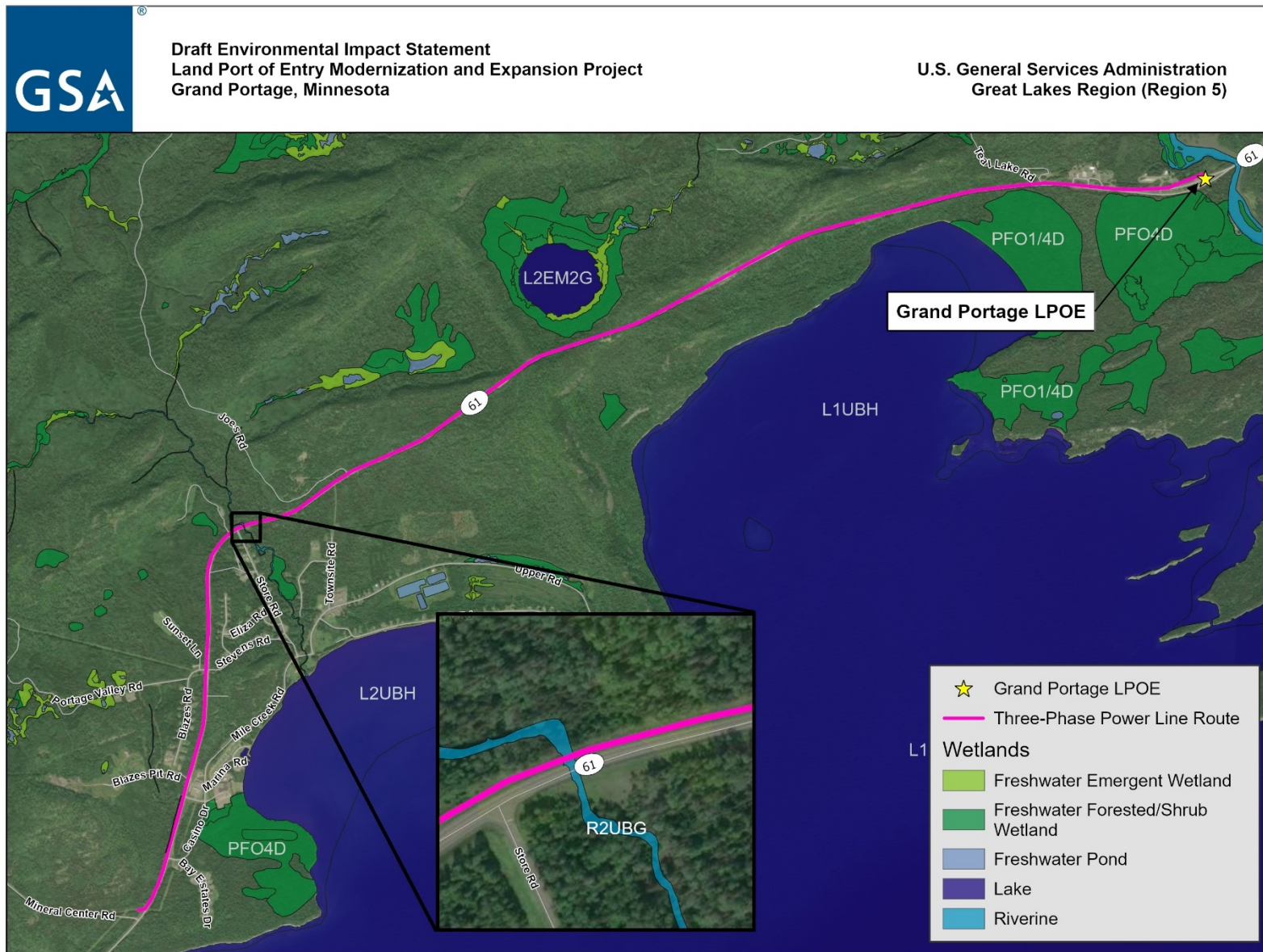


Figure 3.3-2. Wetlands Along Proposed Three-Phase Power Line Route

The Grand Portage Band adopted a Wetland Program Plan in 2021 to protect and enhance wetlands within the boundaries of the Grand Portage Reservation, using the USEPA Core Elements Framework (CEF). The CEF defines four core elements of a comprehensive wetland program: monitoring and assessment; water quality standards for wetlands; voluntary restoration and protection; and regulatory activities. The Wetland Program Plan identifies 7,238 acres of wetlands occurring within the Reservation's boundaries. The nearest monitored wetlands to the existing Grand Portage LPOE that are identified in the Wetland Program Plan are located approximately 1.2 miles southeast and approximately 1.4 miles south of the LPOE. Additionally, several wetlands north and south of the proposed power line route are monitored, consistent with the locations identified by the NWI (Wilson 2021).

While the 2023 and 2024 Phase II ESAs conducted in support of the project (PHE 2023a, PHE 2024) did not find elevated levels of concern for mercury in shallow samples or when assessing deeper soil samples between 5 and 13.5 bgs at the LPOE, previous assessments have identified elevated levels of mercury in shallow soils and sediments within the Grand Portage Reservation, possibly related to the fur trade that occurred in the 18th century, in addition to atmospheric deposition. Any undisturbed, native soils within the three-phase power line route may contain native surface soils potentially impacted by historic mercury contamination. This is especially true for wetlands, as wetlands readily absorb contaminants. See Section 3.12, Human Health and Safety, for more information on mercury contamination.

Groundwater

The project is located within the Arrowhead Groundwater Province and is underlain by crystalline bedrock that typically has limited groundwater available for use except in major river valleys where there is a thicker sediment layer (MNDNR 2021). Groundwater is typically found locally within faults and fractures. In the Arrowhead Groundwater Province, Precambrian rocks are exposed at the surface or overlying drift is thin, at less than 30 feet (MPCA 2017a).

Water for the existing Grand Portage LPOE is provided to the site by two wells owned and operated by GSA, although three wells exist onsite. Well No. 1 is the original potable well but has had low-flow issues for many years. In 2020, the well was capped. Well No. 2 serves toilets and urinals in the Toilet Building. Well No. 3 is the only source of potable water for the facility (GSA 2024). There are no public or private supply wells within the ROI listed on the Minnesota Well Index. The nearest listed active domestic water supply well on the Minnesota Well Index is approximately 1,600 feet west of the existing Grand Portage LPOE and is 165 feet in depth (MDH 2023).

The Minnesota Pollution Control Agency (MPCA) utilizes the Ambient Groundwater Monitoring Program to sample groundwater for the presence of nutrients, metals, volatile organic compounds (VOCs), and other chemicals, to identify trends in statewide groundwater quality. A 1989 statewide evaluation of groundwater contamination susceptibility found that the ROI occurs within an area of low susceptibility (MPCA 2017a).

3.3.2 Environmental Consequences

3.3.2.1 Methodology

To evaluate the impacts on water resources, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Alteration of stormwater discharges or infiltration rates;
- Alteration of groundwater recharge rates;
- Discharge to or modification of surface waters or groundwater;
- Use of surface water or groundwater;
- Disturbance to wetlands; or
- Disturbance to floodplains.

A major adverse impact to water resources would occur if the Proposed Action would result in:

- Substantial alteration of stormwater discharges or infiltration rates, which could adversely affect drainage patterns, flooding, erosion, and sedimentation;
- Substantial alteration of groundwater recharge rates, which could adversely affect availability of groundwater;
- Violation of any federal or tribal water quality standards or discharge limitations;
- Modification of surface waters such that water quality no longer meets water quality criteria or standards established in accordance with the CWA or permits (including downgrades of surface water use classification or listing on the Nationwide Rivers Inventory);
- Changes to the availability of surface water or groundwater resources for current or future uses;
- Change in stream channel morphology (i.e., slope and stability);
- Loss of wetlands from the placement of dredge or fill material;
- Alteration or conversion of wetland function caused by the removal of vegetation or contamination from an accidental release of petroleum, oils, or lubricants or hazardous materials; or
- Increased flooding (flooding risk to nearby properties) through altered land uses (e.g., development in floodplain areas) that change current flooding levels or patterns.

3.3.2.2 Proposed Action

Construction

The operational footprint of the modernized and expanded Grand Portage LPOE would expand east and west, with a total increase in functional area of 2.5 acres and an increase in impervious area of 0.5 acre beyond the operational footprint of the existing LPOE. Construction activities would result in up to approximately 10.4 acres of ground disturbance at the site of the proposed LPOE and approximately 13.3 acres of disturbance along the proposed three-phase power line route. GSA may implement a geothermal energy system, which could require construction of horizontal trenches or vertical borings within the proposed limits of construction, depending on the type and final design of the system.

Surface Waters

Direct, short-term, minor, adverse, local and regional impacts could occur to water resources resulting from land disturbance and altered drainage patterns, potentially leading to increased erosion, sedimentation, and pollutants to receiving waters. The potential clearing and excavation to build roads and structures within a short distance of the Pigeon River could cause slope instabilities and additional erosion and sedimentation if construction stormwater is not appropriately managed. Additionally, these activities could degrade the water quality of the Pigeon River and other downstream waterbodies, adversely impacting other users, such as recreational users and aquatic resources (see Section 3.4, Biological Resources). Historic mercury contamination (discussed in more detail in Section 3.12, Human Health and Safety) in native soils within the three-phase power line route would be disturbed under the Proposed Action and could pollute receiving waters if stormwater is not appropriately managed. The potential for runoff to contaminate receiving waters is considered low as disturbed soil is not expected to be exposed for long periods of time and would be stabilized shortly after disturbance, within approximately 1 week.

Conditions under applicable stormwater permits and the consideration of tribal ordinances would be expected to minimize potential adverse impacts to water resources resulting from the potential construction in close proximity to the Pigeon River and Grand Portage Creek. Section 3.3.2.4 and Section 3.2, Geological Resources, discuss the implementation of BMPs to prevent soil runoff that would avoid or mitigate the potential for sedimentation or contamination of receiving waters, including from any mercury or other

contaminants in soils. The design as proposed includes replacement of an existing culvert located at the northeastern extent of the proposed limits of construction that discharges to the Pigeon River; however, replacement of the culvert would not result in construction activities occurring directly in the river. Because construction activities are not expected to occur directly within the Pigeon River, the Proposed Action would have no effect to the navigability of the river under Section 10 of the Rivers and Harbors Act. If any work is required within the Pigeon River, a Section 10 permit would be required.

Under the Proposed Action, GSA would be required to apply for a CGP or Individual Permit from the USEPA under the NPDES Program, and have it certified by the Grand Portage Band. As discussed in Section 3.3.1.2, conditions of the CGP would require the development of appropriate documentation, including a SWPPP, implementation of erosion and sediment controls and pollution prevention practices, routine inspections conducted by a qualified person, and compliance with any additional tribal requirements listed in Part 9 of the permit. A SWPPP is required to address control of pollutant discharges using BMPs selected for the project and to address stormwater monitoring. These BMPs include, but are not limited to, the measures outlined in Section 3.3.2.4. If required, an Individual Permit would include project-specific requirements to protect local water quality. Post-construction, GSA would be required to meet the conditions of the Notice of Termination, which involves a closeout process to certify that: the site has been stabilized with vegetation; the drainage system is stable; temporary BMPs have been removed; and final housekeeping tasks are completed.

Per the Grand Portage Band Land Use Ordinance, GSA would also be required to apply for an excavation permit prior to construction, which authorizes the movement, removal, or fill of more than ten cubic yards of material. Prior to approval by the Land Use Committee, a restoration plan must be developed (and subsequently approved). Requirements of the excavation permit are discussed in Section 3.2, Geological Resources. Proposed new utilities would adhere to conditions outlined in the Land Use Ordinance with respect to water resources (i.e., onsite sewage treatment systems would be set back at least 100 feet from any waterbody or watercourse).

With adherence to the conditions of all applicable permits and tribal ordinances, overall impacts to surface waters from construction activities are anticipated to be short-term and minor.

Floodplains

As discussed above, the ROI occurs within a region unmapped by FEMA for floodplains and floodways. GSA would conduct a floodplain determination study prior to implementation of the Proposed Action to map the floodplain (GSA 2024). Based on water levels measured at both the Pigeon River and Lake Superior by USGS and USACE, respectively, and a lack of records indicating that flooding has occurred at the LPOE site in the past, it is unlikely that the Proposed Action would result in impacts to floodplains or increase the risk of flooding downstream of the LPOE. Construction of the three-phase powerline would not introduce new structures or facilities that would decrease flood storage capacity along the three-phase power line route or otherwise increase flood risk.

The Proposed Action would qualify as a critical action as defined by GSA's *Desk Guide For Floodplain Management*, meaning even a slight chance of flooding would be too great (see Appendix B for the critical action determination letter). If the results of the floodplain determination study indicate the project is within a mapped floodplain, GSA would comply with the eight-step decision-making process for floodplain management as outlined in 44 CFR 9.6 and the *Floodplain Management Desk Guide*. Further, critical infrastructure (e.g., electrical and mechanical equipment) would be elevated above either the base flood elevation with an additional 3 feet (i.e., the elevation of the 1-percent-annual-chance floodplain plus 3 feet) or the elevation of the 0.2-percent-annual-chance floodplain (i.e., elevation of the 0.2-percent-chance flood), whichever is higher. Final design of the Grand Portage LPOE would incorporate standard measures, including those specified in P100 Standards, to reduce or manage stormwater flows as well as any potential impacts to the floodplain if present.

Wetlands

Construction of the Proposed Action would result in direct, short- and long-term, minor to moderate, adverse, local impacts to wetlands as the area of impact is relatively small. Areas of temporary impact disturbed during construction would be returned to pre-construction conditions at project completion. Based on the July 2023 wetland delineation, approximately 1.5 acres of delineated wetlands occur within the limits of construction for the Grand Portage LPOE and 0.3 acres are within the limits of construction for the three-phase power line near the LPOE (GSA 2024). Of that total, approximately 0.9 acre would be permanently removed under the Proposed Action. The remaining 0.9 acre would be temporarily disturbed as a result of construction activities but would be returned to pre-construction conditions at project completion. Figure 3.3-3 shows the wetlands anticipated to remain following construction.

Outside of the delineated area, an additional 0.01 acre of a riverine wetland is located within the three-phase power line route based on a review of NWI data (see Figure 3.3-2), which would experience similar, temporary impacts and would be returned to pre-construction conditions at project completion. GSA is conducting a wetland delineation of the three-phase power line route, and results will be included in the Final EIS.

The completed wetland delineations (to include the wetlands delineation for the three-phase power line route that would be completed prior construction) would support the Section 404 permitting process with USACE and Section 401 Certification process with the Grand Portage Band. Depending on the acreage of wetlands disturbed and coordination with USACE, GSA would be required to obtain a General Permit (less than 0.5 acre disturbed), a Letter of Permission (between 0.5 and 3 acres disturbed), or an Individual Permit (over 3 acres disturbed). Depending on the extent of wetlands impacts, GSA would consider options to minimize, avoid, or mitigate potential impacts.

If a Section 404 permit is required from USACE, GSA would need to apply using a joint application form, which also includes applying for a Section 401 Water Quality Certification from the Grand Portage Band to ensure that construction activities would not violate any water quality standards. As part of the joint application process, GSA must also complete an Antidegradation Assessment Form and submit it with the application. USACE and the Grand Portage Band would then review the application for a Section 404 Permit and Section 401 Certification, respectively. Once the USACE receives and reviews an application, USACE would issue a public notice. Any required environmental review must be completed prior to the 401 Certification process, meaning the Record of Decision for this EIS would have to be complete prior to the Grand Portage Band making any certification decision.

Groundwater

Indirect, short-term, minor, adverse, local impacts to groundwater could occur depending on groundwater depth-to-water since construction could affect groundwater flow or degrade existing groundwater quality. Construction of a trench or boreholes could occur if GSA decides to implement a geothermal energy system (see Section 2.2.3). GSA would follow procedures consistent with Minnesota Rules, part 4725.7050 in constructing boreholes, and would grout any boreholes to prevent contamination of groundwater. Furthermore, to minimize the risks related to potential contamination of drinking water, heat transfer fluids used in BGHE systems would be food grade propylene glycol as specified in Minnesota Rules, part 4725.7050. GSA is also considering drilling a new water supply well to replace the one currently serving the existing LPOE (see Section 2.2.1). GSA would follow procedures consistent with Minnesota Rules, part 4725.5825 in constructing public water supply wells. Potential contamination to groundwater from construction of a geothermal system or a water supply well would be direct, short term, minor, and local with adherence to specifications of applicable regulations. GSA would submit required documentation in accordance with Minnesota Rules, Chapter 4725 to the Grand Portage Band. In January 2024, a geotechnical investigation was completed to determine subsurface conditions and depth to groundwater. The report found that groundwater was encountered at 5 out of the 12 borings, at depths between 7.5 and 30.0 feet (Braun Intertec 2024). For further discussion of subsurface conditions, refer to Section 3.2, Geological Resources.

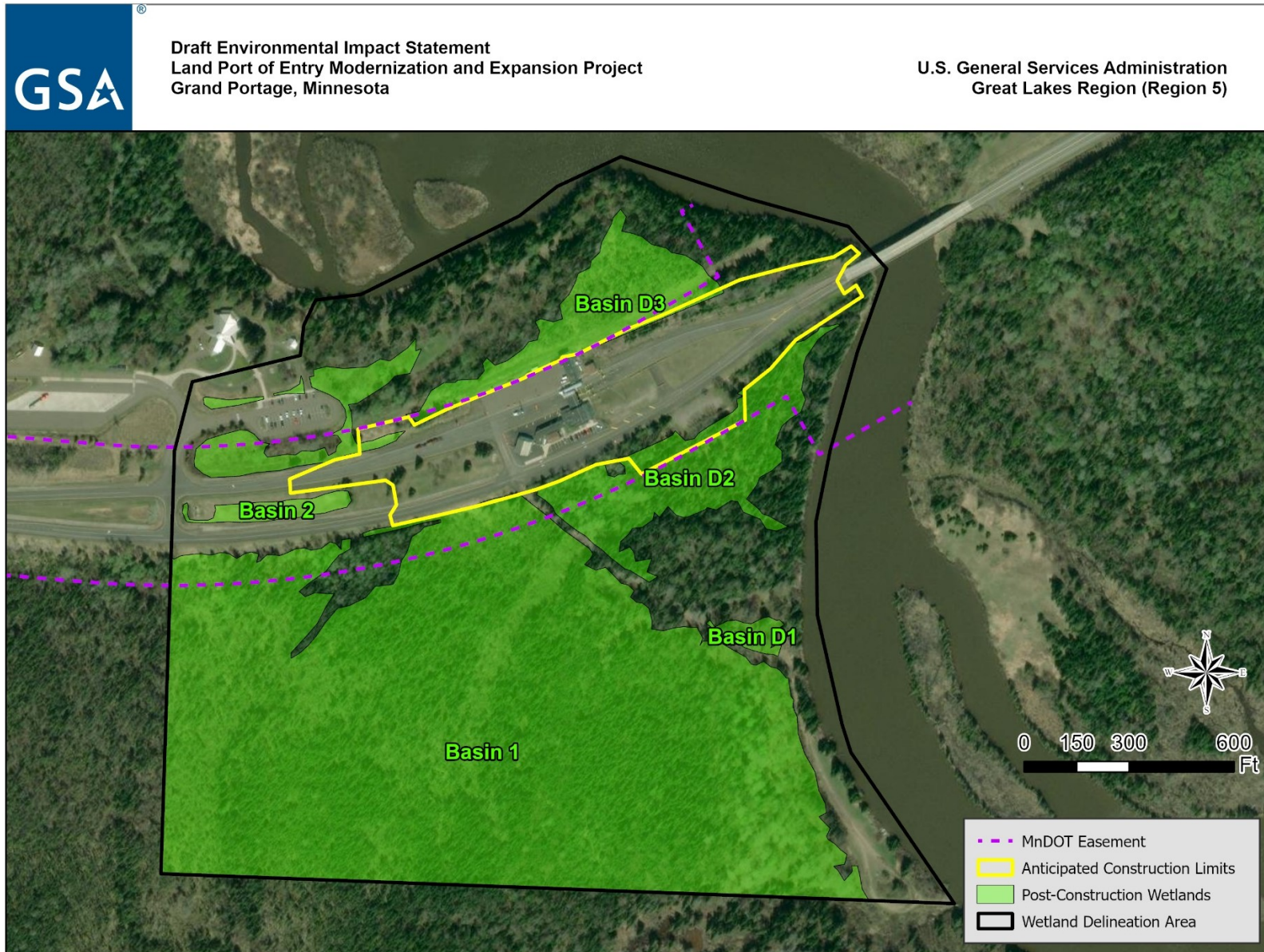


Figure 3.3-3. Post-Construction Wetlands

Impacts to groundwater from construction of the three-phase power line are not expected as construction would not exceed 3 feet bgs and would not likely encounter groundwater at such shallow depths.

GSA would implement appropriate measures to prevent any groundwater contamination, such as that arising from hazardous materials used during construction or accidental releases of petroleum from construction equipment (see Section 3.12, Human Health and Safety). Depth to groundwater in sampled locations found that depth is relatively shallow, not deeper than the surface elevation of the Pigeon River (PHE 2023a). Should dewatering be required during construction, GSA would obtain appropriate permits as needed for any groundwater dewatering discharge (i.e., NPDES permit).

Operations

Surface Waters

A net increase in impervious area under the Proposed Action would result in an increase in surface runoff volume. This in turn would lead to increased potential for pollutants to degrade receiving waters and an increase in the risk of flooding. The intensity and extent of the impact depend largely on the final amount of impervious area and proposed onsite drainage features, as well as miscellaneous climate factors that may shift over time, such as severity and frequency of storms. Based on a conservative assumption, the project could add up to 0.5 acre of new impervious area under the Proposed Action (see Section 3.2, Geological Resources). This acreage of impervious area conservatively assumes that the entire operational footprint of the modernized and expanded LPOE would be converted to hard surfaces and does not account for proposed sustainable site features that GSA would incorporate into the final design. No additional impervious surface would occur from operation of the three-phase power line.

According to requirements outlined under the NPDES program, permittees must design and construct a permanent stormwater treatment system to treat the water quality volume if the Proposed Action replaces vegetation and/or other pervious surfaces creating a net increase of one or more acres of cumulative impervious surface. Further, Section 438 of the EISA specifies that federal agencies are required to reduce stormwater runoff from federal development and redevelopment projects to protect water resources. Therefore, it is expected that a permanent stormwater treatment system would be required for the project and would be designed such that all stormwater discharged from the modernized and expanded LPOE would not result in a violation of tribal water quality standards, including nuisance conditions, or cause erosion in receiving channels or on downslope properties.

GSA would consider the Minnesota Stormwater Manual when designing the permanent stormwater management system for the modernized and expanded LPOE. This manual provides specific stormwater management objectives and associated design considerations, as well as landscape designs to enhance stormwater treatment. It also provides a framework for addressing stormwater sizing based on the following criteria: recharge, water quality, channel protection, over bank flooding, and extreme storms. Recent trends and projections of climate change in Minnesota indicate more extreme weather events and greater annual precipitation with faster melting snowpack (MPCA 2015). New stormwater lines and features would be sized based on criteria as outlined in the Minnesota Stormwater Manual and considering regional climate trends. Updates to the stormwater management system near the existing culvert located at the northeastern extent of the proposed limits of construction would result in indirect, long-term, beneficial, local and regional impacts to surface waters due to the improvement of stormwater infrastructure and stormwater management approaches locally.

The increase in impervious area could also result in an increase in salt usage for snow/ice removal. Increased salt usage can end up in receiving waters, which could lead to increased chloride concentrations in surrounding waterways. This could adversely affect drinking water resources as well as surface water resources that serve as aquatic wildlife habitat (see Section 3.4, Biological Resources). GSA would work closely with MnDOT and the Grand Portage Band, as applicable, to determine maintenance requirements for the removal of snow and address the reduction of potential pollutants, including salts, in its final stormwater system.

Depending on the amount of aboveground oil storage on site, GSA would develop a spill prevention, control, and countermeasures (SPCC) plan to minimize the risks of a potential discharge of oil into a stormwater system or receiving waterbody.

With impact minimization measures described above and compliance with NPDES permits, it is not anticipated that long-term, adverse impacts to surface waters would occur as a result of operation of the modernized and expanded LPOE. Under the Proposed Action, existing stormwater utility systems would be updated. Improvements in currently outdated stormwater infrastructure and the use of low impact development would result in a long-term, indirect, minor, beneficial impact to adjacent surface waters.

Floodplains

As discussed above, the ROI occurs within a region unmapped by FEMA for floodplains and floodways; however, monitoring of water levels within the Pigeon River and Lake Superior demonstrate that the area around the existing Grand Portage LPOE has not flooded in the past. Operations at the modernized and expanded Grand Portage LPOE or the three-phase power line would not involve additional ground disturbance or the installation of permanent structures that would result in changes to the floodplain in this area or increase the chances of flooding downstream.

Wetlands

No impacts to wetlands are anticipated during operations.

Groundwater

Impacts to groundwater during operations would be negligible. The potential for adverse impacts from contamination of groundwater during use of a well or drilled boreholes associated with a geothermal energy system would be minimal as the construction, maintenance, and sealing would follow procedures consistent with Minnesota Rules, Chapter 4725 for BGHE systems. GSA may operate a new water supply well; this proposed well would replace the existing Well No. 3. As there is no anticipated increase in staff, anticipated water usage during operations of the modernized and expanded Grand Portage LPOE is expected to remain consistent with current conditions. A new domestic water service line would extend from the existing Well No. 3, which would supply water to the site during operations. Operation of the three-phase power line is not anticipated to have any impact on groundwater.

3.3.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. No ground or subsurface disturbance from new facility or infrastructure construction would occur; therefore, adverse impacts on existing water resources would primarily be associated with maintenance activities at the LPOE and would be negligible.

3.3.2.4 Impact Reduction Measures

GSA requires that new construction and substantial renovation of its facilities obtain a LEED Gold certification (GSA 2021). The LEED certification for the project is based on an accumulation of several scored green building features that include objectives for reducing adverse impacts to water quality and minimizing risks from flooding hazards. In addition, GSA requires a minimum Sustainable Sites Initiative (SITES) silver rating. Regarding water, all major capital projects with a scope of site work exceeding 5,000 square feet must meet the equivalent of the following SITES certification credits:

- SITES credit 3.1, “Manage Precipitation on Site” to reduce adverse impacts to aquatic resources, channel morphology, and dry weather base flow by replicating natural hydrologic conditions and retaining precipitation onsite.
- SITES credit 3.3, “Manage Precipitation Beyond Baseline” with the goal to capture and manage the equivalent of the 95th percentile precipitation event.

GSA would follow the impact reduction measures and BMPs outlined in the NPDES permit, such as infiltration or filtration, to reduce suspended solids, phosphorus, and salts. Additional methods for reducing phosphorus could include evaluating land application products for phosphorus content and limiting the use of these products.

GSA would coordinate with the USACE and the Grand Portage Band during design to determine what types of permits are required for potential construction work in onsite wetlands.

GSA additionally commits to:

- Developing in compliance with Section 438 of the EISA with the objective of restoring the hydrology to predevelopment conditions;
- Considering green infrastructure and low impact development practices, such as reducing impervious surfaces, using vegetated swales and revegetation, and using porous pavements;
- Developing an SPCC plan (dependent on the amount of aboveground oil storage on site); and
- Following procedures consistent with Minnesota Rules, Chapter 4725 related to constructing boreholes and public water supply wells.

3.4 BIOLOGICAL RESOURCES

This section describes the baseline conditions for biological resources within the ROI and potential impacts that could result from implementing the Proposed Action and No Action Alternative as defined in Chapter 2, Description of the Proposed Action and Alternatives. The biological resources that have been identified for consideration in this EIS are vegetation, wildlife, and special-status species (including federally listed threatened and endangered species and migratory birds).

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding biological resources:

- The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system provides information on special-status species potentially occurring within the proposed limits of construction (USFWS 2023c).

3.4.1 Affected Environment

3.4.1.1 *Region of Influence*

The ROI for biological resources includes vegetation, wildlife, and special-status species found within 1,000 feet of the 10.4-acre area that comprises the limits of construction for the Grand Portage LPOE as well as those found within 1,000 feet of the 7.3-mile three-phase power line route.

3.4.1.2 *Regulatory Setting*

Endangered Species Act. The Endangered Species Act (16 U.S.C. 1531 *et seq.*) establishes a national policy for conserving threatened and endangered species of fish, wildlife, and plants, and the habitat on which they depend. Under Section 3 of the Endangered Species Act:

- An endangered species is defined as any species in danger of extinction throughout all or a significant portion of its range.
- A threatened species is any species likely to become an endangered species within the near future throughout all or a significant portion of its range.
- A proposed species is a species found to warrant listing as either threatened or endangered, and for which listing has been officially proposed in the *Federal Register*.
- A candidate species is any species that has been announced in the *Federal Register* as undergoing a status review but has not yet been listed. Candidate species do not receive federal protection under the Endangered Species Act until officially listed as a threatened or endangered species.

Critical habitat for federally listed threatened and endangered species is a specific geographic area (or areas) that contain physical or biological features essential to the conservation of the threatened or endangered species and may require management or protection.

Under Section 7 of the Endangered Species Act, federal agencies must consult with the USFWS when any action the agency carries out, funds, or authorizes may affect either a species listed as threatened or endangered under the Endangered Species Act, or any critical habitat designated for it.

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act (BGEPA; 16 U.S.C. 668-668d) prohibits taking without a permit, or taking with wanton disregard, any bald or golden eagle or their body parts, nests, chicks, or eggs, which includes collection, molestation, disturbance, or killing. The BGEPA includes provisions for the protection of unoccupied nests and a prohibition on disturbing eagles. The BGEPA includes limited exceptions to its prohibitions through a permitting process, including exceptions to take bald or golden eagle nests that interfere with resource development or recovery operations.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 *et seq.*) protects birds that have common migration patterns between the U.S. and Canada, Mexico, Japan, and Russia. The MBTA makes it unlawful to pursue, hunt, take, capture, kill, or sell birds (including any parts, dead or alive, feathers, eggs, and nests) that are listed in the statute. Currently there are approximately 1,100 species on the list nationwide.

Invasive Species. EO 13112, *Invasive Species*, as amended in 2016, states the national policy is to prevent the introduction and spread of invasive species or to control and eradicate populations of invasive species that have already become established. In this context, an invasive species is “a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health.”

3.4.1.3 Existing Conditions

Vegetation

The Minnesota Department of Natural Resources (MNDNR) and the U.S. Forest Service have developed an Ecological Classification System that is used to “identify, describe, and map progressively smaller areas of land with increasingly uniform ecological features” (i.e., climate, geology, topography, soils, hydrology, and vegetation) (MNDNR 2023a). There are six levels to the classification system; these levels include provinces, sections, subsections, land type associations, land types, and land type phases. The ROI is located within the North Shore Highlands subsection, which is generally forested and dominated by quaking aspen (*Populus tremuloides*) and paper birch (*Betula papyrifera*) (MNDNR 2023b). Approximately 0.8 acre of wooded areas are within the limits of construction identified for the proposed LPOE; however, much of the limits of construction is currently developed, supporting the existing Grand Portage LPOE and roadways. The remaining vegetation within the limits of construction generally is comprised of maintained grass and landscaping. Outside of the limits of construction, the remainder of the ROI is generally forested.

The proposed three-phase power line would be constructed within an existing, disturbed utility ROW alongside Highway 61. Low-quality and edge habitat exists within this 13.3-acre corridor, generally consisting of grasses and small trees.

Wildlife

While very little high-quality wildlife habitat exists directly within the proposed limits of construction for the LPOE or the three-phase power line route, portions of the ROI and the surrounding area contain mature forest. Due to the presence of human activity and operation of the Grand Portage LPOE, species most likely to be encountered within the ROI include those highly adaptable species common to disturbed areas, including small mammals, such as squirrels, and birds that tolerate human activity.

Special-Status Species

The USFWS’s IPaC was queried for federally listed, proposed, or candidate threatened and endangered species and designated critical habitats potentially occurring within the ROI. The species list generated by the database search includes a total of five species (four mammals and one insect; see Table 3.4-1). The federally threatened wolverine (*Gulo gulo*) was not included in the IPaC report; however, the species has been observed within the Grand Portage Reservation and is therefore considered within the EIS. Table 3.4-1 also includes a brief assessment of each species’ likelihood of occurrence in the ROI based on the species’ range/distribution and habitat requirements.

Table 3.4-1. Federal Special-Status Species with Potential to Occur within ROI

Species	Federal Status	Habitat	Expected to Occur in ROI?
Mammals			
Canada lynx (<i>Lynx canadensis</i>)	Threatened	Dense forested areas characterized by deep snow and an adequate prey population of snowshoe hares.	Unlikely. While the ROI exists within this species' range, Canada lynx typically avoid humans. It would be unlikely to encounter this species within the ROI due to the human presence, vehicle noise, and disturbance associated with ongoing operation of the existing Grand Portage LPOE and Highway 61.
Gray wolf (<i>Canis lupus</i>)	Threatened	Highly adaptable species able to inhabit a range of areas including temperate forests, mountains, tundra, taiga, grasslands, and deserts. In Minnesota, usually occurs in areas with few roads.	Unlikely. While the ROI exists within designated gray wolf critical habitat, this species typically avoids humans. It would be unlikely to encounter this species within the ROI due to the human presence, vehicle noise, and disturbance associated with ongoing operation of the existing Grand Portage LPOE and Highway 61.
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Endangered	Generally associated with old-growth forests and relies on intact interior forest habitat. Forages within forests and along forest edges. Hibernates in caves, mines, and tunnels in areas with temperatures above freezing and with low risk of disturbance. During the daytime, may roost in crevices, under loose bark on trees, or in small spaces associated with buildings or under bridges.	Potentially. While this species is not anticipated to hibernate within the ROI, there is potential for northern long-eared bats to forage within the ROI or utilize nearby trees or structures as daytime roosting sites.
Tricolored bat (<i>Perimyotis subflavus</i>)	Proposed Endangered	Associated with forests, where they forage near trees and along waterways. Roosts may be found in tree foliage, while maternity colonies may utilize structures such as buildings or bridges. Hibernation usually occurs in caves, mines, or tunnels.	Potentially. While this species is not anticipated to hibernate within the ROI, there is potential for tricolored bats to forage within the ROI or utilize nearby trees or structures as daytime roosting sites.
Wolverine (<i>Gulo gulo</i>)	Threatened	Inhabit alpine and arctic tundra, and boreal and mountain forests. Associated with areas that experience snow cover during the winter. Dens are located in areas including caves, rock crevices, and under fallen trees.	Unlikely. While this species has been observed within the Grand Portage Reservation, wolverines typically avoid humans. It would be unlikely to encounter this species within the ROI due to the human presence, vehicle noise, and disturbance associated with ongoing operation of the existing Grand Portage LPOE and Highway 61.

Table 3.4-1. Federal Special-Status Species with Potential to Occur within ROI

Species	Federal Status	Habitat	Expected to Occur in ROI?
Insects			
Monarch butterfly (<i>Danaus plexippus</i>)	Candidate	Suitable breeding habitat associated with presence of milkweed plants, which grow in sunny areas with soils ranging from well-drained to those occurring near water. Migrates south to overwinter in Mexico.	Potentially. Potentially suitable habitat may exist within the ROI.

Source: Goodwin and Kirschbaum 2021, NatureServe 2023, USFWS 2023c, Wild Ones 2023
LPOE = land port of entry; ROI = Region of Influence

Migratory Birds

Per the USFWS IPaC results, eight migratory birds protected under the MBTA may occur within the ROI; these eight species are also identified as birds of conservation concern throughout their ranges in the continental U.S. and Alaska. The bald eagle also may be found in the ROI but is not a bird of conservation concern in this area; this species instead warrants special attention under the BGEPA. Table 3.4-2 identifies the migratory birds identified by IPaC for the ROI.

Table 3.4-2. Migratory Bird Species with Potential to Occur within ROI

Species	Breeding Season in Area	Breeding Habitat	Expected to Occur in ROI?
Canada warbler (<i>Cardellina canadensis</i>)	May 20 – August 10	Moist thickets of woodland undergrowth (especially aspen-poplar), bogs, tall shrubbery along streams or near swamps, and deciduous second growth. Nests found on or near the ground.	Possibly. The MNDNR lists this as an uncommon species within Grand Portage State Park ^a ; however, the ROI does support woodland habitat, including aspen, and is adjacent to water. Suitable habitat may exist within the ROI.
Connecticut warbler (<i>Oporornis agilis</i>)	June 15 – August 10	Spruce and tamarack bogs, dry ridges, poplar and aspen woods, moist areas with low shrubby growth, thick undergrowth, or sapling thickets. Nests found on the ground.	Unlikely. The extant native vegetation within the ROI is dominated by aspen and birch trees. As the ROI does not support preferred habitat and the MNDNR does not list this species on the Grand Portage State Park Bird Checklist ^a , this species is not likely to be encountered within the ROI.
Evening grosbeak (<i>Coccothraustes vespertinus</i>)	May 15 – August 10	Coniferous (primarily spruce and fir) and mixed coniferous-deciduous woodland, second growth, and occasionally parks. Nests found in dense foliage of trees.	Unlikely. The MNDNR lists this as an occasional species within Grand Portage State Park ^a , defined as infrequent and may not return each year. The extant native vegetation within the ROI is dominated by aspen and birch trees and does not support preferred coniferous habitat. As such, it is considered unlikely to encounter this species within the ROI.

Table 3.4-2. Migratory Bird Species with Potential to Occur within ROI

Species	Breeding Season in Area	Breeding Habitat	Expected to Occur in ROI?
Lesser yellowlegs (<i>Tringa flavipes</i>)	Breeds elsewhere		Unlikely. Breeds in Canada and spends winters in South America. This species may be encountered within the ROI on stopovers during migration. However, the low-quality habitat existing within the proposed limits of construction is unlikely to support suitable foraging or resting habitat during migration stopovers.
Olive-sided flycatcher (<i>Contopus cooperi</i>)	May 20 – August 31	Forests and woodlands (usually coniferous or mixed with deciduous trees), especially in burned-over areas with standing dead trees.	Unlikely. The extant native vegetation within the ROI is dominated by aspen and birch trees rather than the preferred coniferous species. As the ROI does not support preferred habitat and the MNDNR lists this species as uncommon on the Grand Portage State Park Bird Checklist ^a , this species is not likely to be encountered within the ROI.
Pectoral sandpiper (<i>Calidris melanotos</i>)	Breeds elsewhere		Unlikely. Breeds in Alaska and along the Arctic coast of Siberia. The Alaska-breeding population spends winters in southern South America, while those that breed in Siberia may winter in Australia and New Zealand. This species may be encountered within the ROI on stopovers during migration. However, the low-quality habitat existing within the proposed limits of construction is unlikely to support suitable foraging or resting habitat during migration stopovers.
Veery (<i>Catharus fuscescens fuscescens</i>)	May 15 – July 15	Swampy forest, especially in more open areas with shrubby understory. Preferred habitat consists of large tracts of forest.	Possibly. The MNDNR lists this as a common species within the Grand Portage State Park during the spring and summer and an uncommon species during the fall ^a . Suitable habitat may exist within the ROI.
Wood thrush (<i>Hylocichla mustelina</i>)	May 10 – August 31	Deciduous or mixed forest with a dense tree canopy and a well-developed deciduous understory, especially where moist. Prime habitats include bottomlands and other rich hardwood forests, though also frequents pine forests with a deciduous understory and well-wooded residential areas.	Unlikely. The MNDNR does not list this species on the Grand Portage State Park Bird Checklist ^a . Therefore, it can be assumed that this species is not likely to be encountered within Grand Portage State Park or, therefore, the ROI.

Source: MNDNR 2019, NatureServe 2023, USFWS 2023c

LPOE = land port of entry; MNDNR = Minnesota Department of Natural Resources; ROI = Region of Influence

^a The Grand Portage State Park Welcome Center is located approximately 400 feet northwest of the existing Grand Portage LPOE. Therefore, species presence, absence, or abundance within the Grand Portage State Park serves as a good indicator of the potential to encounter the species within the ROI.

Invasive Species

The MNDNR maintains a list of infested waters that contain an aquatic invasive species that could spread to other waters. The stretch of the Pigeon River downstream of South Fowl Lake, which includes the river segment directly adjacent to the existing Grand Portage LPOE, was listed as infested for spiny waterflea in 2010 (MNDNR 2023c). The spiny waterflea is native to Europe and Asia and was introduced to the U.S. through discharge of ballast water, first arriving in Lake Superior around 1987. The primary concerns related to this species are impacts to fishing by clogging the eyelets of fishing rods and to native species by preying on native zooplankton that serve as important food sources for native fish species. Once established, populations of spiny waterflea are difficult to control. Their long tail and spines make them difficult for native species to eat, and there are currently no known effective population controls for this species in natural waters (MNDNR 2023c).

3.4.2 Environmental Consequences

3.4.2.1 Methodology

To evaluate the impacts on biological resources, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Displacement of terrestrial or aquatic communities or loss of habitat;
- Diminished value of habitat for wildlife, plants, or aquatic species;
- Interference with the movement of native resident or migratory wildlife species;
- Conflict with management plans for terrestrial, avian, and aquatic species and their habitat;
- Introduction of noxious or invasive plant species;
- Decline in native fish populations;
- Impacts on or displacement of endangered, threatened, or other protected status species; or
- Encroachment or impacts on designated critical habitat for a federally listed species.

A major adverse impact to biological resources would occur if the Proposed Action would result in:

- Long-term loss, degradation, or loss of diversity within unique or high-quality plant communities;
- Unpermitted “take” of federally listed species;
- Local extirpation of rare or sensitive species not currently listed under the Endangered Species Act;
- Unacceptable loss of critical habitat, as determined by the USFWS; or
- Violation of the MBTA or BGEPA.

3.4.2.2 Proposed Action

Construction

Vegetation

The Proposed Action would have direct, short- and long-term, minor, adverse, site-specific impacts on vegetation during demolition and construction activities within the proposed limits of construction of the Grand Portage LPOE and the three-phase power line route. Construction of the new facilities and infrastructure at the site of the proposed LPOE would require ground disturbance and removal of existing vegetation within the 10.4-acre limits of construction. Per the 100 percent PDS, construction of the

Proposed Action would require the removal of approximately 0.8 acre of trees. The removal of these trees would represent a direct, long-term, minor, adverse, site-specific impact. Grass and other landscaping would be replaced following construction using native species and seed mixes. MnDOT has developed native seed mixes specific to wet and dry areas of the Grand Portage Reservation; GSA would use these mixes to revegetate disturbed areas following construction.

Construction of the buried three-phase power line route would disturb approximately 13.3 acres of vegetation. However, this vegetation exists within an established, previously disturbed utility ROW along Highway 61. The grasses and small trees that may be removed during construction would not represent high-quality habitat for local wildlife. Due to the location within a ROW, construction is not anticipated to require removal of mature trees. All areas disturbed during construction would be revegetated using native seed mixes specific to wet and dry areas of the Grand Portage Reservation.

Wildlife and Migratory Birds

The Proposed Action would have direct, short-term, minor, adverse, local impacts on wildlife and migratory birds. Construction within the proposed limits of construction of the Grand Portage LPOE and the three-phase power line route would remove existing vegetation and disturb species inhabiting the ROI. However, the vegetation currently present within these areas of potential disturbance generally consists of maintained grass and a few trees and does not represent high-quality habitat for wildlife or migratory birds. Wildlife, including birds, may utilize the trees within the ROI, especially to the south of Highway 61, or in the surrounding area. However, due to the close proximity to the existing Grand Portage LPOE and Highway 61 and the associated presence of humans and vehicle traffic associated with operations, any species within or in close proximity to the ROI would be accustomed to human activity. Noise generated during construction may result in the temporary avoidance of the area by mobile species, but this is expected to be a minor impact. Those species that currently utilize the area are likely to return following the construction period and would not be permanently displaced by human activity.

Proposed construction activities along the Pigeon River and near the Grand Portage Creek would have indirect, short-term, minor, adverse, local impacts on aquatic species. These minor adverse impacts would include short-term direct effects from increased turbidity and disturbance during construction. Indirect effects to aquatic species and associated habitat could also occur from increased stormwater runoff and erosion from construction activities; these effects could be avoided or reduced through implementation of appropriate BMPs to prevent soil runoff (see Section 3.2, Geological Resources, and Section 3.3, Water Resources).

Special-Status Species

Table 3.4-3 summarizes the potential impacts to the Canada lynx, gray wolf, northern long-eared bat, tricolored bat, wolverine, and monarch butterfly. With implementation of impact avoidance measures specified in Section 3.4.2.4, no adverse effects to federally protected species are anticipated under the Endangered Species Act. No other federally protected species are expected to be encountered within the ROI; as such, they would not be affected by construction of the Proposed Action.

Operations

No impacts to vegetation or terrestrial or aquatic wildlife habitat are anticipated during operations of the Proposed Action. The change in noise associated with operation would be negligible in relation to the current nature of the area as an existing LPOE and the proposed location along an existing highway. The noise and human activity associated with operation of the modernized and expanded Grand Portage LPOE and the three-phase power line is not expected to result in measurable indirect effects to vegetation, wildlife, or special-status species within the ROI.

Table 3.4-3. Potential Effects to Federal Special-Status Species with Potential to Occur within the ROI

Species	Effect Determination	Rationale
Canada lynx (<i>Lynx canadensis</i>)	May affect, not likely to adversely affect	<p>While this species is expected to avoid the development and human activity associated with operation of the existing Grand Portage LPOE and Highway 61, as well as the location near the village of Grand Portage, the ROI is located in an otherwise undeveloped area within the Grand Portage Reservation and near a state park. Therefore, Canada lynx may be present within the region, and the potential exists to encounter the species as it moves through territory or searches for prey. Negligible indirect impacts may be expected from noise, disturbance of existing vegetation, or displacement of prey species during construction.</p> <p>Direct impacts to this species are not anticipated. However, if signs indicating the presence of Canada lynx within the ROI are observed, surveys may be performed and further impact reduction measures implemented as appropriate.</p>
Gray wolf (<i>Canis lupus</i>)	May affect, not likely to adversely affect	<p>While this species is expected to avoid the development and human activity associated with operation of the existing Grand Portage LPOE and Highway 61, as well as the location near the village of Grand Portage, the ROI is located in an otherwise undeveloped area within the Grand Portage Reservation and near a state park. Therefore, gray wolves may be present within the region, and the potential exists to encounter the species as it moves through territory or searches for prey. Negligible indirect impacts may be expected from noise, disturbance of existing vegetation, or displacement of prey species during construction.</p> <p>Direct impacts to this species are not anticipated. However, if signs indicating the presence of gray wolves within the ROI are observed, surveys may be performed and further impact reduction measures implemented as appropriate.</p>
Northern long-eared bat (<i>Myotis septentrionalis</i>)	May affect, not likely to adversely affect	<p>While this species is not anticipated to hibernate within the ROI, there is potential for northern long-eared bats to forage within the ROI or utilize nearby trees or structures as daytime roosting sites. Negligible indirect impacts may be expected from noise, disturbance of existing vegetation, or displacement of prey species during construction.</p> <p>To minimize or avoid the potential for direct impacts, GSA would avoid removing trees during April 1 through October 31 when this species is active. Tree clearing would only occur November 1 through March 31 while these bats are hibernating.</p> <p>GSA completed the USFWS Northern Long-eared Bat Rangewide Determination Key and received a determination of may affect – not likely to adversely affect for this Proposed Action, which is included in Appendix B.</p>
Tricolored bat (<i>Perimyotis subflavus</i>)	May affect, not likely to adversely affect	<p>While this species is not anticipated to hibernate within the ROI, there is potential for tricolored bats to forage within the ROI or utilize nearby trees or structures as daytime roosting sites. Negligible indirect impacts may be expected from noise, disturbance of existing vegetation, or displacement of prey species during construction.</p> <p>To minimize or avoid the potential for direct impacts, GSA would avoid removing trees during April 1 through October 31 when this species is active. Tree clearing would only occur November 1 through March 31 while these bats are hibernating.</p>

Table 3.4-3. Potential Effects to Federal Special-Status Species with Potential to Occur within the ROI

Species	Effect Determination	Rationale
Wolverine (<i>Gulo gulo</i>)	May affect, not likely to adversely affect	While this species is expected to avoid the development and human activity associated with operation of the existing Grand Portage LPOE and Highway 61, as well as the location near the village of Grand Portage, the ROI is located in an otherwise undeveloped area within the Grand Portage Reservation and near a state park. Wolverines have been observed within the Grand Portage Reservation, and the potential exists to encounter the species as it moves through territory or searches for food. Negligible indirect impacts could occur from noise, disturbance of existing vegetation, or displacement of prey species during construction. Direct impacts to this species are not anticipated. However, if signs indicating the presence of wolverine within the ROI are observed, surveys may be performed and further impact reduction measures implemented as appropriate.
Monarch butterfly (<i>Danaus plexippus</i>)	May affect, not likely to adversely affect	This species may experience indirect impacts from increased human activity, noise, or disturbance of vegetation (specifically milkweed, if present). As a best practice, GSA would consider conducting a survey for milkweed within the area of potential disturbance. If present and if avoidance of milkweed is not practicable, milkweed plants could be transplanted outside of the proposed limits of construction. Therefore, overall available habitat would not change under the Proposed Action.

GSA = General Services Administration; LPOE = land port of entry; ROI = Region of Influence; USFWS = U.S. Fish and Wildlife Service

3.4.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. No ground disturbance from new facility or infrastructure construction would occur. Therefore, adverse impacts on biological resources would primarily be associated with maintenance activities at the LPOE and would be negligible.

3.4.2.4 Impact Reduction Measures

General measures to reduce or avoid construction impacts on biological resources would include:

- MnDOT has developed native seed mixes specific to wet and dry areas of the Grand Portage Reservation; GSA would utilize these mixes to revegetate areas disturbed during construction. Disturbed areas would be promptly restored or revegetated to the extent practicable following construction.
- Construction equipment would be washed before and after coming to the site to the extent practicable to limit the transport of invasive species. If non-native invasive species are present within the proposed limits of construction, these plants would be eradicated and removed from the site before earthmoving activities begin.
- If construction activities occur within the nesting periods of migratory birds that may be found within the ROI (see Table 3.4-2), surveys would be conducted for nests prior to initiating demolition or construction activities. Any further requirements would be determined in coordination with applicable federal resource agencies pending survey results.

- If milkweed plants are observed within the proposed limits of construction, they would be avoided to the extent practicable to reduce potential impacts to the federal candidate monarch butterfly.
 - If avoidance is not practicable, milkweed plants would be transplanted outside of the proposed limits of construction. When transplanting milkweed plants, care would be taken to retain as much of the tap root as possible. Digging 4 inches away from each side of the plant would help avoid cutting the tap root. Transplanting in early spring or in late summer/late fall may also increase success (Gomez 2018).
- Landscaping would consider Minnesota's insect pollinators by (MNDNR 2023d):
 - Planting a variety of native flowers that bloom in the spring, summer, and fall;
 - Providing nesting sites by allowing dead branches, stems, and logs to remain and leaving bare earth for ground-nesting insects;
 - Reducing the use of pesticides;
 - Allowing native flowering plants to grow along roadsides and drainage ditches; and
 - Development of pollinator gardens within the landscaping features of the LPOE.
- To avoid impacts to the federally endangered northern long-eared bat and the federally proposed endangered tricolored bat, tree-clearing activities would occur between November 1 through March 31.
- Pre-construction presence/absence surveys for bald eagles would be completed to determine if there is a need to remove potentially suitable habitat within the proposed limits of construction. Bald eagle surveys would be conducted pursuant to local USFWS field office requirements. The need for any restrictions around tree clearing, if any, would be determined in coordination with applicable federal resource agencies pending survey results.
- If the project is determined to have potential to disturb or kill eagles, a permit under the BGEPA would be obtained.

Refer to Section 3.3, Water Resources, for a discussion of measures that would limit impacts to wetland habitats and associated species during construction and operations.

3.5 AIR QUALITY AND CLIMATE CHANGE

This section describes the baseline conditions for air quality and climate change within the region and assesses the potential for air quality or climate change to affect, or be affected by, implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives.

Air quality is the measure of the atmospheric concentration of defined pollutants in a specific area. An air pollutant is any substance in the air that can cause harm to humans or the environment. Pollutants may be natural or human-made and may take the form of solid particles, liquid droplets, or gases. Natural sources of air pollution include smoke from wildfires, dust, and wind erosion. Human-made sources of air pollution include emissions from vehicles; dust from unpaved roads, agriculture, or construction sites; industrial processes; and smoke from human-caused fires. Air quality is affected by pollutant emission sources, as well as the movement of pollutants in the air via wind and other weather patterns.

GHG emissions released into the atmosphere from human-induced fossil fuel combustion are widely believed to be contributing to changes in global climate. GHGs, which include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), water vapor, and several trace gases, trap radiant heat reflected from the Earth in the atmosphere, causing the Earth's average surface temperature to rise. Although GHG levels have varied for millennia (along with corresponding variations in climate conditions), increases driven by human activity have contributed significantly to recent climatic changes.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding air quality and climate change:

- *Updated Emission Factors of Air Pollutants from Vehicle Operations* in Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation using the Motor Vehicle Emissions Simulator (MOVES) (Argonne National Laboratory 2013), and associated User Guide provides emissions factors for on-road vehicles.
- *Technical Source Documentation for Emissions Calculations* from California Emissions Estimator Model (CalEEMod) includes equipment lists and equipment hours (CalEEMod 2022).
- *USEPA GHG Emission Factors Hub* provides yearly default emission factors for a wide variety of GHG reporting (USEPA 2023c).
- *USEPA AP-42, Compilation of Emission Factors* provides total suspended particulate matter emissions factors for the environmental consequences discussion (USEPA 1995).
- *The Fifth National Climate Assessment: Impact, Risk, and Adaptation in the United States, 2023* provides an in-depth assessment of projected climate change impacts in the U.S., as well as adaptation measures to prepare for those impacts. Chapter 24 of the document discusses projected impacts and potential adaptation options for the Midwest region (USGCRP 2023).
- CEQ's interim *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* includes recommendations for agencies on how to analyze and present information related to GHGs and climate change within NEPA documents (CEQ 2023).

3.5.1 Affected Environment

3.5.1.1 Region of Influence

Air Quality

Air quality is measured and regulated on a regional level, and this EIS utilizes air quality data from the MPCA. The Proposed Action would take place within the Grand Portage Reservation. Therefore, for purposes of this analysis, the ROI for air quality is defined as Grand Portage Reservation.

Greenhouse Gases

The ROI for GHGs differs from other resource areas considered in this EIS since the concerns about GHG emissions are primarily related to climate change, which is global and cumulative in nature. Therefore, the affected environment is discussed broadly using a global, national, and regional framework to provide context for the analysis of potential GHG impacts from the Proposed Action. Recent scientific evidence indicates a correlation between increasing global temperatures over the past century and the worldwide increase in anthropogenic GHG emissions (IPCC 2018). Climate change associated with global warming is predicted to produce environmental, economic, and social consequences across the globe in the coming years.

3.5.1.2 Regulatory Setting

Air Quality

The Clean Air Act (CAA) requires USEPA to set National Ambient Air Quality Standards (NAAQS) (40 CFR 50) for six principal pollutants ("criteria" air pollutants) that can be harmful to public health and the environment (USEPA 2023a). The CAA identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The primary NAAQS are used as the basis for determining whether a region is complying with CAA requirements and are therefore the focus of this analysis.

USEPA Region 5 and the Grand Portage Band regulate air quality within the Grand Portage Reservation. The CAA (42 U.S.C. 7401-7671q), as amended, gives USEPA the responsibility to establish the primary and secondary NAAQS (40 CFR 50) that set acceptable concentration levels for six criteria pollutants, compounds that cause or contribute to air pollution and which could endanger public health and the environment. The six criteria pollutants are particulate matter (fine particulate matter [10 micrometers or smaller, PM₁₀] and very fine particulate matter [2.5 micrometers or smaller, PM_{2.5}]), sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O₃), and lead (Pb). O₃ is a strong photochemical oxidant that is formed when nitric oxide reacts with VOCs and oxygen in the presence of sunlight. O₃ is considered a secondary pollutant because it is not directly emitted from pollution sources but is formed in the ambient air.

Short-term standards (1-, 8-, and 24-hour periods) have been established by the USEPA for criteria pollutants that contribute to acute health effects, while long-term standards (annual averages) have been established for pollutants that contribute to chronic health effects. Areas that exceed the NAAQS are designated as nonattainment areas, and those in accordance with the standards are designated as attainment areas. Air quality control regions that have been redesignated from nonattainment to attainment are called maintenance areas (see Table 3.5-1).

The CAA mandates that states develop and implement a State Implementation Plan (SIP) to comply with the CAA and achieve and maintain attainment with the NAAQS. Tribes also have the option to develop a Tribal Implementation Plan (TIP). A TIP has not been developed by the Grand Portage Band. Regulation occurs primarily through a process of reviewing engineering documents and other technical information, applying emission standards and regulations in the issuance of permits, performing field inspections, and assisting industries in determining their compliance status.

Table 3.5-1. National Ambient Air Quality Standards

Pollutant	Primary/ Secondary	Averaging Time	Standard	Form
CO	Primary	1 hour	35 ppm	Not to be exceeded more than once per year
		8 hours	9 ppm	
NO ₂	Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Primary and secondary	1 year	53 ppb	Annual mean
O ₃	Primary and secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
SO ₂	Primary	1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year
PM _{2.5}	Primary	1 year	12 µg/m ³	Annual mean, averaged over 3 years
	Secondary	1 year	15 µg/m ³	Annual mean, averaged over 3 years
	Primary and secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
PM ₁₀	Primary and secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Pb	Primary and secondary	Rolling 3-month average	0.15 µg/m ³	Not to be exceeded

Source: USEPA 2023a.

µg = micrograms; CO = carbon monoxide; m³ = cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; Pb = lead; PM_{2.5} = particulate matter of diameter 2.5 microns or less; PM₁₀ = particulate matter of diameter 10 microns or less; ppb = parts per billion; SO₂ = sulfur dioxide

In 1977, the CAA was amended to include a national visibility goal of restoring pristine conditions in national parks and wilderness areas, which were designated as Class I areas (MPCA 2023a). To achieve these goals, in 1999 the USEPA established the Regional Haze Rule to improve visibility in Class I areas, which requires states to develop a Regional Haze SIP. Minnesota has two Class I areas within its borders, the Boundary Waters Canoe Area Wilderness and Voyageurs National Park. Another Class I area is Isle Royale National Park in Michigan. Voyageurs National Park is located approximately 120 miles from the existing Grand Portage LPOE. The Boundary Waters Canoe Area Wilderness is located approximately 80 miles from the existing Grand Portage LPOE, and Isle Royale National Park is approximately 30 miles away.

USEPA Region 5 air permits are required for any facility that will emit or currently emits regulated pollutants and must comply with the following regulations of the CAA: New Source Review, Prevention of Significant Deterioration, Title V Permitting, National Emission Standards for Hazardous Air Pollutants (NESHAP), and New Source Performance Standards. These regulations typically apply to emissions sources that have the potential to emit more than 100 tons per year of criteria pollutants, 10 tons per year or more of any hazardous air pollutant (HAP), or 25 tons or more of all HAPs combined. An asbestos-specific NESHAP (40 CFR 61, Subpart M) has been developed for demolition. Facilities must comply with all notification and emissions control procedures if there are at least 260 linear feet of asbestos on pipes, 160 square feet of asbestos on other facility components, or 35 cubic feet of asbestos off facility components where the length could not be measured previously.

Greenhouse Gases

GHGs are regulated under the CAA via regulations discussed above for air quality. New sources or modifications to existing sources that have the potential to increase GHG emissions by more than 100,000 tons CO₂ equivalent per year may be subject to New Source Review or Prevention of Significant Deterioration requirements, as well as Title V requirements for operational permits, provided they are also otherwise subject to these requirements. Additionally, the USEPA's Mandatory Greenhouse Gas Reporting Rule (40 CFR 98) requires sources in specific industrial sectors to report their GHG emissions if they emit more than 25,000 metric tons CO₂ equivalent per year. The Proposed Action would not meet this threshold and would not be subject to these permitting and reporting requirements.

Several EOs also require federal agencies to estimate and report their GHG emissions and set goals to reducing these emissions. These EOs include:

- EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*
- EO 14008, *Tackling the Climate Crisis at Home and Abroad*
- EO 14030, *Climate-Related Financial Risk*

The White House has established national GHG reduction goals, including a goal to lower emissions by 50 percent to 52 percent below 2005 levels by 2030, and achieve net zero GHG emissions by 2050 (United States Department of State and the United States Executive Office of the President 2021). Potential strategies to achieve these goals include transitioning the energy sector to renewable and other carbon-free energy sources, promoting electric and other zero-emission vehicles, and improving building efficiency.

In 2023, the CEQ issued interim *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* (CEQ 2023). The guidance includes recommendations for agencies on how to analyze and present information related to GHGs and climate change within NEPA documents. At the time the interim guidance was issued, CEQ also announced a public comment period and may revise the guidance in response to comments received.

The 1854 Ceded Territory including the Bois Forte, Fond du lac, and Grand Portage Reservations have developed a Climate Change Vulnerability Assessment and Adaptation Plan to identify how changing climate conditions are affecting landscape as well as strategies to create more climate resilient systems. The Plan includes air quality as a focus topic, where it identifies wildfires and extreme heat events as specific concerns (Stults et al. 2016). The Plan proposes multiple adaptation strategies to mitigate the impacts to air quality, which include but are not limited to education about air quality and ways to reduce emissions, increasing coordination with local, state, and federal agencies to regulate and enforce air quality standards, and strengthening long-term air quality planning. The Grand Portage Band also has developed multiple assessments and plans addressing impacts to the environment from climate change with topics such as air quality, water resources, forestry and wildlife, nonpoint source pollution, alternative energy, biodiversity and adaptive management (Grand Portage Trust Band of Lake Superior Chippewa 2014; Grand Portage Band of Lake Superior Chippewa 2012).

3.5.1.3 Existing Conditions

Air Quality

There are no designated non-attainment or maintenance areas within the Grand Portage Reservation. Therefore, General Conformity Rule requirements do not apply to the Proposed Action. The General Conformity Rule states that, if a project would result in a total net increase in direct and indirect emissions of nonattainment or maintenance pollutants that are less than the applicable *de minimis* (i.e., negligible) thresholds established in 40 CFR 93.153(b), detailed conformity analyses are not required pursuant to 40 CFR 93.153(c).

The USEPA and the MPCA monitor levels of criteria pollutants at representative sites throughout Minnesota. There is one MPCA air quality monitoring location within the Grand Portage Reservation (MPCA 2023b). The pollutant monitored at this location is PM_{2.5}. The next closest monitoring stations are located outside the ROI, at Virginia City Hall and Fernberg, although it should be noted these monitoring stations are approximately 140 and 90 miles respectively from the existing Grand Portage LPOE. Table 3.5-2 shows the primary NAAQS, monitored concentrations, and air monitor location for each criteria pollutant.

Table 3.5-2. Primary Ambient Air Quality Standards and Measured Concentrations

Pollutant	Averaging Time	NAAQS ^a	Monitoring Data (2023)	Monitor Location ^b
CO ₂	1-hour	35 ppm	–	–
	8-hour	9 ppm	–	–
NO ₂	1-hour	100 ppb	37.2 ppb	Virginia City Hall
	Annual arithmetic mean	53 ppb	5.03 ppb	Virginia City Hall
O ₃	8-hour	0.070 ppm	0.049 ppm	Fernberg
SO ₂	1-hour	75 ppb	2.1 ppb	Virginia City Hall
PM _{2.5}	24-hour	35 µg/m ³	30.1 µg/m ³ 20.2 µg/m ³ 27.9 µg/m ³	Fernberg Grand Portage Reservation Virginia City Hall
	Annual arithmetic mean	12 µg/m ³	6.5 µg/m ³ 3.0 µg/m ³ 8.0 µg/m ³	Fernberg Grand Portage Reservation Virginia City Hall
PM ₁₀	24-hour	150 µg/m ³	16 µg/m ³	Virginia City Hall
Pb ^a	3-month average	0.15 µg/m ³	0.016 µg/m ³	Virginia City Hall

Source: USEPA 2023b.

µg = micrograms; CO = carbon monoxide; m³ = cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; Pb = lead; PM_{2.5} = particulate matter of diameter 2.5 microns or less; PM₁₀ = particulate matter of diameter 10 microns or less; ppb = parts per billion; SO₂ = sulfur dioxide

^a Only the primary NAAQS are listed.

^b Fernberg and Virginia City are located outside of the ROI.

Populations that are more susceptible to the adverse effects of air pollution include children, the elderly, and asthmatics. The locations where these sensitive receptors congregate are considered sensitive receptor locations for air pollutants. As such, sensitive receptor locations for air impacts analyses typically include schools, daycares, hospitals, nursing home facilities, and public recreational areas. Sensitive receptor locations for air pollutants and their distance from the limits of construction are listed in Table 3.5-3.

Table 3.5-3. Sensitive Receptor Locations for Air Pollutants Within 0.25 mile of the Grand Portage LPOE

Receptor Type	Receptor	Direction from LPOE	Distance (feet)
Grand Portage LPOE			
Park	Grand Portage State Park Trail	North	200
Park	Grand Portage Welcome Center	Northwest	400
Three-Phase Power line			
Residence	Residential properties	East	220 – 750
	Residential properties	West	200 – 220
	Residential properties	East	210 – 410
Daycare	Grand Portage Daycare Center	West	450

LPOE = land port of entry

Greenhouse Gases and Climate Change

GHGs are gases that trap heat in the atmosphere by absorbing outgoing infrared radiation (USEPA 2022). GHG emissions occur from both natural processes as well as human activities. Water vapor is the most important and abundant GHG in the atmosphere; however, human activities produce only a small amount of the total atmospheric water vapor. The most common GHGs emitted from natural processes and human activities include CO₂, CH₄, and N₂O. The main source of GHGs from human activities is the combustion of fossil fuels such as oil, coal, and natural gas. Other examples of GHGs created and emitted primarily through human activities include fluorinated gases (e.g., perfluorocarbons) and sulfur hexafluoride. The main sources of these man-made GHGs are refrigerants and electrical transformers.

Numerous studies document the recent trend of rising atmospheric concentrations of CO₂. One of the longest continuous records of atmospheric CO₂ monitoring extends back to 1958 (NOAA 2023b). This data shows that atmospheric CO₂ levels have risen an average of 1.5 parts per million (ppm) per year over the last 60 years, with the growth rate accelerating from around 1 ppm per year in the 1960s to 2 ppm per year in the 2000s (NOAA 2023b). The global atmospheric CO₂ concentration has now passed 412 ppm, around a level that last occurred about 3 million years ago when both global average temperature and sea level were significantly higher than today (USGCRP 2023; NOAA 2013; NASA 2013). Rising atmospheric concentrations of CO₂ and other GHGs have been identified as the primary driver behind significant changes to global climate patterns. Observed changes to global climate include loss of glaciers, ice sheet mass, and sea ice; ocean warming, acidification, and deoxygenation; increases in ocean heat content and marine heatwaves; increases in atmospheric humidity; shifting rainfall patterns and more frequent heavy precipitation; seasonal shifts including shorter winters and earlier spring and summer seasons; and changes in the biosphere (such as land and ocean species shifting poleward). International and national organizations independently confirm these findings and predict that these trends are likely to continue into the foreseeable future unless action is taken to reduce global GHG emissions (IPCC 2018; USGCRP 2023).

Each GHG has been assigned a global warming potential (GWP) by the USEPA (USEPA 2022). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO₂, which is given a value of one. For example, CH₄ has a GWP of 25, which means that it has a global warming effect 25 times greater than CO₂ on an equal-mass basis. To simplify GHG analyses, total GHG emissions from a source are often expressed as a CO₂ equivalent, which is calculated by multiplying the emissions of each GHG by its GWP and adding the results together to produce a single, combined emission rate representing all GHGs. While CH₄ and N₂O have much higher GWPs than CO₂, CO₂ is emitted in such large quantities that it is the predominant contributor to global CO₂ equivalent emissions from both natural processes and human activities.

Increasing GHG concentrations in the atmosphere have been linked to a range of ongoing and potential changes to global climate including rising surface temperatures, changes in precipitation, rising sea levels and an increase in extreme weather events. However, these changes are not geographically uniform across the planet, and some regions are likely to experience greater change than others (IPCC 2018). Further, projections of future climate change are strongly related to predicted trends in GHG emissions, which in turn depend on policy and other actions to reduce GHG emissions.

The Midwest region of the U.S. has already experienced a number of climate change-related impacts and these trends are likely to continue in the foreseeable future, as described below (USGCRP 2023):

- The Midwest is among the most intensive agricultural regions globally. Rapid transitions between precipitation extremes, timing of snowmelt, and early-spring rainfall are expected to increase across the entirety of the Midwest. The increased variability exacerbates the risks of transient drought and harm to crops.
- Climate change accelerates the loss of species, access, and connection to the land for Indigenous Peoples. Wild rice is one of the most vulnerable culturally significant species to Midwest Tribes, and harvest rates have decreased due to warming and altered hydrology. Seasonal and habitat changes can impact traditional knowledge, language, and physical and mental well-being by altering timing of cultural ceremonies and availability of beings needed for ceremonies.
- Midwestern aquatic ecosystems are being harmed by rising temperatures and increased flooding events. Mass fish die-offs due to extreme summer heat are projected to double by midcentury. Extreme precipitation events degrade riparian ecosystems, disperse contaminants, disrupt plant and animal cycles, and alter hydrology and flow. Increases in cumulative annual runoff, which elevate risk of nonpoint source pollutants, increase the likelihood of harmful algal blooms.
- The health of Midwestern populations is at risk from increased extreme heat, precipitation, drought, flooding, reduction in air quality and increased incidence of vector- and waterborne diseases. Future warming is projected to increase exposure to extreme heat events and ground-level O₃. These effects are felt disproportionately in low-income and disadvantaged communities.
- Climate change, specifically changes in precipitation and temperature, is adversely impacting aging infrastructure by increasing risk of failure and cost of repairs. Significant repairs are needed in the failing infrastructure of surface transportation, wastewater, stormwater, dams, ports, and the energy grid.

Northeast Minnesota and the Grand Portage Reservation specifically have seen impacts such as (Stults et al. 2016; Grand Portage Band of Lake Superior Chippewa 2014):

- Warming of annual temperatures by 3.7°F;
- Warming of the minimum wintertime temperature by 6.8°F;
- A 14.7 percent increase in precipitation occurring in the fall with significant decreases occurring in winter (-12 percent) and spring (-11 percent);
- Ice out dates occurring 2-5 days earlier on inland lakes;
- Longer freeze-free season;
- Warming water temperatures affecting growing and reproductive systems of aquatic life; and
- Decreased wildlife populations, most notably moose.

3.5.2 Environmental Consequences

3.5.2.1 Methodology

To evaluate air quality impacts and GHG emissions, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Increase in direct or indirect emissions from fixed and mobile sources such as stationary fuel combustion, construction equipment, and employee vehicles; or
- Increase in indirect offsite GHG emissions associated with electricity generation.

A major adverse impact to air quality or GHG emissions would occur if the Proposed Action would:

- Result in emissions of criteria pollutants or HAPs that would exceed relevant air quality or health standards including the NAAQS;
- Violate any federal permits; or
- Conflict with local or regional air quality management plans to attain or maintain compliance with the federal air quality regulations.

3.5.2.2 Proposed Action

Construction

Air Quality

The Proposed Action would generate air pollutant emissions during construction activities, and would represent a direct, short-term, minor, adverse, local impact to air quality. Construction emissions were estimated for on-road vehicles and non-road construction equipment. Since a detailed construction plan has not yet been developed for the project, the number and types of construction equipment needed were estimated based on available data for other, similar projects, and in coordination with appropriate GSA staff. Emissions rates from on-road vehicles such as POVs were estimated using industry standard emission rates (Argonne National Laboratory 2013). Emission rates for non-road vehicles such as excavators, cranes, graders, backhoes, and bulldozers were estimated using the USEPA's MOVES model. Fugitive dust emissions factors for PM₁₀ and PM_{2.5} were derived from USEPA's AP-42, *Compilation of Emission Factors*.

For purposes of analysis and to provide a conservative estimate of potential air emissions, the following assumptions were made:

- Fugitive dust emissions were primarily assumed to occur during demolition, grading, and site preparation activities.
- PM₁₀ and PM_{2.5} emissions estimates presented in Table 3.5-4 assume uncontrolled emissions of fugitive dust; in practice, these emissions would likely be lower because GSA would take steps to minimize fugitive dust.
- On-road vehicles would travel various distances. Worker vehicles were assumed to travel 20 miles per day, while vendor and waste trucks were assumed to travel 50 miles per day.
- Construction activities would mainly be limited to the 7-month period from April through October for each year of construction.

Estimated criteria air pollutant emissions are presented in Table 3.5-4. As discussed in Chapter 2, Description of the Proposed Action and Alternatives, construction activities would occur over a 3-year period from 2026 to 2029. Construction of the 7.3-mile, three-phase power line was assumed to occur over a span of 1 month in 2027. Therefore, the emissions presented in Table 3.5-4 would also occur over this 3-year period.

Table 3.5-4. Construction Air Emissions for Proposed Action

Source	Criteria Pollutant Emissions (tons)					
	CO	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	VOCs
Construction Equipment	1.40	1.02	0.08	0.08	0.01	0.11
Worker Vehicles	3.10	0.17	0.03	0.02	0.01	0.18
Delivery and Waste Trucks	2.38	2.34	0.24	0.12	0.02	0.18
Fugitive Dust	--	--	7.61	4.11	--	--
Total	6.88	3.53	8.06	4.38	0.03	0.47

Source: Argonne National Laboratory 2013; CalEEMod 2022; CalEEMod 2016; USEPA 2015; USEPA 2020

CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter of diameter 2.5 microns or less; PM₁₀ = particulate matter of diameter 10 microns or less; SO₂ = sulfur dioxide; VOC = volatile organic compounds

Note: Individual numbers may not sum to totals due to rounding.

Overall, construction and demolition activities would cause direct, short-term, minor, adverse, local impacts to air quality. Individuals living, working, or recreating in close proximity to the LPOE would be most affected. These impacts would occur during the estimated 3-year construction period and would end once construction is completed. Note that the estimates shown above include impacts from the three-phase power line construction.

Activities under Proposed Action would comply with all applicable federal regulations relating to air quality, including any permitting and registration requirements. Table 3.5-5 provides an overview of the applicability of the federal CAA air regulations to the Proposed Action.

Table 3.5-5. CAA Regulatory Review for the Proposed Action

CAA Regulation	Description of the Regulation	Applicability to Proposed Action
New Source Review	New Source Review permitting protects air quality when air emissions sources are built or modified.	If new emergency generators are installed under the Proposed Action, they would need to undergo the New Source Review permitting process.
PSD	PSD applies to new major sources or modifications at existing sources of air pollutants where the area the source is located is in attainment or unclassifiable.	PSD review would be required if new emergency generators are installed under the Proposed Action.
Title V permitting requirements	A Title V Permit requires sources of air pollutants to obtain and operate in compliance with an operating permit. A permit is required if a source has actual or potential emissions greater than or equal to 100 tons per year.	A Title V Permit would likely not be required because any new emergency generators installed under the Proposed Action would be below the threshold of 100 tons per year.
NESHAP	NESHAP are stationary source standards for HAPs. HAPs are those pollutants that are known or suspected to cause cancer or other serious health effects.	The use of Maximum Available Control Technology would not be required because the potential HAP emissions would likely not exceed NESHAP thresholds under the Proposed Action.
NSPS	NSPS are technology-based emission standards which apply to new, modified, and reconstructed facilities in specific source categories such as manufacturers of glass, cement, rubber tires, and wool fiberglass.	The project would be exempt from NSPS permitting requirements because the Proposed Action would not involve construction or operation of any of these types of facilities.

Source: USEPA 2022

CAA = Clean Air Act; HAP = Hazardous Air Pollutants; NESHAP = National Emission Standards for Hazardous Air Pollutants; NSPS = New Source Performance Standards; PSD = Prevention of Significant Deterioration

Greenhouse Gases

The Proposed Action would generate GHG emissions during construction activities and would represent a negligible, incremental contribution to global GHG emissions and climate change. Short-term GHG emissions associated with the Proposed Action would primarily result from the use of fuel in construction equipment, worker vehicles, and delivery and refuse trucks. GHG emissions were estimated using USEPA emission factors (USEPA 2023c) and are presented in Table 3.5-6. Additionally, Table 3.5-7 provides estimates of annual construction GHG emissions for the Proposed Action. Overall adverse impacts from increased GHGs would be negligible.

Table 3.5-6. Construction GHG Emissions under the Proposed Action

Source	GHG Emissions (metric tons)			
	CO ₂	CH ₄	N ₂ O	CO ₂ -eq
Construction Equipment	476	0.03	0.01	480
Worker Vehicles	306	0.02	0.00	307
Delivery and Waste Trucks	2,850	0.02	0.09	2877
Total	3,631	0.07	0.10	3,664

Source: Argonne National Laboratory 2013; CalEEMod 2022; CalEEMod 2016; USEPA 2015; USEPA 2020
CH₄ = methane, CO₂ = carbon dioxide; CO₂-eq = carbon dioxide equivalent; GHG = greenhouse gas; N₂O = nitrous oxide
Note: Individual numbers may not sum to totals due to rounding.

Table 3.5-7. Annual Construction GHG Emissions under the Proposed Action

Year	GHG Emissions (metric tons)			
	CO ₂	CH ₄	N ₂ O	CO ₂ -eq
2026	820	0.02	0.02	827
2027	1,000	0.02	0.03	1,009
2028	992	0.02	0.03	1,001
2029	820	0.02	0.02	827
Total	3,631	0.07	0.10	3,664

Source: Argonne National Laboratory 2013; CalEEMod 2022; CalEEMod 2016; USEPA 2015; USEPA 2020
CH₄ = methane, CO₂ = carbon dioxide; CO₂-eq = carbon dioxide equivalent; GHG = greenhouse gas; N₂O = nitrous oxide
Note: Individual numbers may not sum to totals due to rounding.

The CEQ’s interim guidance on NEPA and climate change also directs agencies to provide estimates of the social cost of GHGs (SC-GHG) associated with agency actions. Estimates of SC-GHG provide an aggregated monetary measure (in U.S. dollars) of the net harm to society associated with an incremental metric ton of emissions in a given year. These estimates include, but are not limited to, climate change impacts associated with net agricultural productivity, human health effects, property damage from increased risk of natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services. In this way, SC-GHG estimates can help the public and federal agencies understand or contextualize the potential impacts of GHG emissions and, along with information on other potential environmental impacts, can inform the comparison of alternatives. GSA used data from the *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under EO 13990* (IWG 2021) to estimate SC-GHG for this EIS.

Table 3.5-8 provides estimates of annual SC-GHG values for a range of discount rates, as recommended by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG 2021). Discount rates provide a range of options for valuing future climate damages; higher discount rates lead to a lower

SC-GHG value for damages occurring further in the future. The first three discount rates presented below are based on the average SC-GHG from three integrated assessment models. The fourth rate, the 95th percentile at 3 percent, is included to represent higher-than-expected economic impacts from climate change.

Table 3.5-8. Social Cost of Construction GHG Emissions under Proposed Action

Year	Discount Rate			
	3%	2.5%	5%	3% (95 th percentile)
2026	\$47,239	\$69,588	\$14,111	\$143,180
2027	\$59,626	\$86,918	\$18,219	\$177,698
2028	\$60,201	\$87,287	\$18,089	\$180,362
2029	\$50,543	\$72,917	\$15,765	\$151,453

Source: IWG 2021

GHG = greenhouse gas

Note: Individual numbers may not sum to totals due to rounding. SC-GHG values (in \$) were calculated by multiplying annual emissions by the SC-GHG cost (\$/metric ton) provided in IWG 2021.

Operations

Air Quality

Under the Proposed Action, operations of the modernized and expanded Grand Portage LPOE could have a direct, long-term, minor, beneficial, local impact on air quality. Operation of the three-phase power line would not be anticipated to have any impact on air quality. Energy demand at the modernized and expanded LPOE would likely be higher than the existing facilities, due to the expansion of the facility by approximately 20,000 square feet of building space. However, as discussed in Chapter 2, Description of the Proposed Action and Alternatives, GSA would consider sustainable building design features and technologies to offset this increase, including:

- Designing the facility to meet a minimum of LEED Gold certification, and/or complying with the EISA requirements, whichever are more stringent; and
- Using onsite renewable energy generation including solar PV arrays and/or solar hot water collectors; and/or
- Using geothermal systems to provide a portion of building heating and cooling needs.

The actual change in air emissions would depend on the extent to which these technologies are implemented in the final modernized and expanded LPOE. Direct (onsite) sources of air emissions would include:

- Onsite emergency generators, which would likely be fired by fuel oil. If the number of emergency generators onsite increases, there could be a small, but long-term increase in air emissions from periodic testing and maintenance and during emergency situations, if they arise.
- Boilers for building heat and domestic hot water that would be fired by oil or gas, depending on final design.

Indirect (offsite) sources of air emissions associated LPOE operations would include:

- Offsite generation of electricity used at the modernized and expanded LPOE, which could result in more emissions than are currently associated with the existing LPOE facility due to increased facility size. As discussed above, however, some or all of this increase would likely be offset by improved building efficiency and onsite renewable energy generation.

- Employee commuting would result in tailpipe emissions from employee POVs. The existing LPOE has 25 employees. GSA anticipates that no additional employees would be hired. Because the number of employees would not change, there would be no change in air emissions from employee commuting.

Operations under Proposed Action would also likely have some beneficial impacts on air quality from a reduction in the wait time for POVs to be processed by a CBP officer, particularly during peak travel season. The reduction in wait time would lower vehicle idling emissions, which would partially offset the potential increase in emissions from employee commuting and increased building energy usage.

Greenhouse Gases

Under the Proposed Action, operations of the LPOE would have a negligible, incremental contribution to GHG emissions. Operation of the three-phase power line would not be anticipated to have any impact on GHG emissions. As discussed above, the new buildings at the LPOE would likely require more energy due to the larger building footprint. However, this increase would be minimized by using energy-efficient building design and technologies as part of LEED certification and compliance with the EISA requirements, and the use of energy derived from fossil fuels would be minimized by onsite renewable energy generation.

Similar to air emissions, onsite sources of GHGs include fuel use for building operations and emergency generators. Other sources of onsite GHGs include fugitive leaks of refrigerants from cooling and refrigeration equipment. Because of their larger size, the new buildings would likely require a larger-sized cooling system; therefore, fugitive GHG emissions could increase.

Operations of the new building would also require more purchased electricity since there would be considerably more gsf of building space. Therefore, indirect (offsite) GHG emissions may be higher than current conditions, but this increase would be minimized through onsite renewable energy generation.

GHG emissions from employee commutes would likely not increase from baseline conditions as there is no expected increase in personnel. Table 3.5-9 presents the estimated GHG emissions due to continued employee commuting. This assumes the stated 25 LPOE staff and an average 40-mile one-way commuting distance, or 80 miles round trip. There may be a marginal decrease in idling emissions from vehicles crossing the U.S.-Canada border through the LPOE due to the expanded inspection capacity, but any change is expected to be insignificant with respect to GHG emissions.

Table 3.5-9. Annual GHG Emissions from Employee Commuting (round-trip)

Source	GHG Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ -eq
Employee POVs	318	0.02	0.00	320

Source: Argonne National Laboratory 2013; CalEEMod 2022; CalEEMod 2016; USEPA 2015; USEPA 2020
 CH₄ = methane; CO₂ = carbon dioxide; CO₂-eq = carbon dioxide equivalent; GHG = greenhouse gas; N₂O = nitrous oxide;
 POV = personally owned vehicle

Table 3.5-10 summarizes the associated annual SC-GHG values from 2030 to 2050 for operational GHG emissions. For simplicity, the table shows SC-GHG values at 5-year intervals. These SC-GHG values are associated with continued GHG emissions and would not change significantly from baseline conditions.

Table 3.5-10. Social Cost of Annual GHG Emissions from Operations

Year	Discount Rate			
	3%	2.5%	5%	3% (95 th percentile)
2030	\$9,907	\$14,216	\$3,041	\$29,856
2035	\$10,706	\$15,336	\$3,521	\$32,894
2040	\$11,667	\$16,456	\$4,002	\$35,931
2045	\$12,627	\$17,578	\$4,484	\$38,652
2050	\$13,588	\$18,539	\$5,123	\$41,530

Source: IWG 2021

CH₄ = methane, CO₂ = carbon dioxide; CO₂-eq = carbon dioxide equivalent; GHG = greenhouse gas; N₂O = nitrous oxide

Overall, construction and operation of Proposed Action would support U.S. climate change and GHG reduction goals. Under the Proposed Action, the existing facility would be replaced by a more energy-efficient building. Additionally, GSA would further reduce the facility’s carbon footprint by implementing onsite renewable energy generation and capture through solar PV, solar capture, and/or geothermal technologies.

3.5.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. No construction or changes to onsite operations would occur; therefore, there would be no changes to air quality and GHG emissions. Minor amounts of emissions would continue to be generated as a result of maintenance activities.

3.5.2.4 Impacts of Climate Change on the Proposed Action

CEQ requires federal agencies to consider the potential impacts of climate change on proposed projects as part of NEPA analysis (CEQ 2023). Accordingly, this section discusses the potential for projected climate change impacts to affect LPOE operations over the next several decades. Section 3.5.1.3 discusses the potential impacts of climate change in the Midwest. Of those impacts, the ones that have a reasonably foreseeable potential to affect operations at the LPOE are discussed below in Table 3.5-11. Proposed mitigation measures to reduce these impacts are discussed under Section 3.5.2.5. Note that these climate change-related impacts would affect LPOE operations in the future regardless of whether the Proposed Action is approved and implemented.

Table 3.5-11. Potential Impacts of Climate Change on the Proposed Action

Climate Change Impact	Description of Impact
Human Health and Safety	Climate change has the potential to adversely affect human health through increased risk of exposure to extreme heat and by contributing to an increase in ground-level ozone, particulate pollution, and airborne allergens. Personnel working at the LPOE, as well as individuals crossing the U.S.-Canada border, would be exposed to these conditions. Individuals crossing through the LPOE on foot may be more exposed to higher temperatures and other adverse conditions, when compared to individuals inside vehicles and LPOE personnel working primarily within buildings.
Water Resources	Climate change is likely to lead to decreasing water availability and makes droughts more likely in the future. Drought conditions could affect the availability of water for personnel (i.e., domestic uses) and for building operations. Increased precipitation and storm events may also more quickly degrade LPOE infrastructure.
Energy	Many fossil fuel power plants rely on water for cooling; and cooler water results in greater operating efficiency. Therefore, rising temperatures, which result in warmer water, are decreasing the efficiency of fossil fuel energy generation. Storms and precipitation events intensified by climate change also have the potential to damage energy infrastructure and operations, which may affect the LPOE's access to energy.

Source: USGCRP 2023, USEPA 2017
 LPOE = land port of entry

3.5.2.5 Impact Reduction Measures

Air Quality

Construction activities within the ROI would generate fugitive dust (non-toxic particulate matter) emissions. Precautions to prevent particulate matter from becoming airborne could include:

- Using water for dust control when grading roads or clearing land;
- Stabilizing open storage piles and disturbed areas by covering and/or applying water or organic dust palliative where appropriate. This applies to both active and inactive sites during workdays, weekends, holidays, and windy conditions;
- Paving roadways and maintaining them in a clean condition;
- Covering open equipment when conveying or transporting material likely to create objectionable air pollution when airborne;
- Promptly removing spilled or tracked dirt or other materials from paved streets;
- Installing wind fencing and phase grading operations where appropriate and operating water trucks for stabilization of surfaces under windy conditions; and
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

The following source-specific controls could be considered to minimize emissions during construction activities:

- Require specific idling time limits for construction trucks and heavy equipment.
- Solicit bids that require zero-emission technologies or advanced emission control systems.

- Require that all diesel engines in equipment and vehicles used during project construction be maintained regularly to keep exhaust emissions low, and that the manufacturers' recommended maintenance schedule and procedures be followed. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Prohibit engine tampering to increase horsepower, except when meeting manufacturer's recommendations.
- Recommend contractors lease or buy newer, cleaner equipment using the best available emissions control technologies.
- Use lower-emitting engines and fuels, including electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations, if feasible.
- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Recommend that all on-highway vehicles used during project construction meet or exceed the USEPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., drayage trucks, long haul trucks, refuse haulers, shuttle buses, etc.).
- Recommend that all non-road vehicles and equipment used during project construction meet or exceed the USEPA Tier 4 exhaust emissions standards for heavy-duty, non-road, compression-ignition engines (e.g., non-road trucks, construction equipment, cargo handlers, etc.).

Finally, the following administrative controls could be considered during construction:

- Coordinate with appropriate air quality agencies to identify a construction schedule that minimizes cumulative impacts from other planned projects in the region, if feasible.
- Locate diesel engines, motors, and equipment staging areas as far as possible from residential areas and other sensitive receptors (e.g., schools, daycare centers, hospitals, senior centers, etc.).
- Avoid routing truck traffic near sensitive land uses to the fullest extent feasible.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking.
- Reduce construction-related trips of workers and equipment, including trucks.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Consider implementing measures to minimize idling emissions from cars waiting to cross the U.S.-Canada border.
- List all applicable protective measures for construction (such as idle time limits, speed limits for construction trucks, and dust suppression, among others) on a bulletin, and post the bulletin at easily visible locations near the project site. This would include a contact name and phone number for individuals to call if they have questions or observe protective measures not being followed.

Greenhouse Gases

Some of the mitigation measures for air quality identified above would also serve to reduce GHG emissions. GSA would take the following additional steps to minimize GHGs:

- Design the LPOE to be energy efficient, including achieving a minimum of LEED Gold certification, which would reduce energy use and the associated GHG emissions.
- Project will strive to design onsite renewable energy generation, which could include solar PV, solar collectors, geothermal, or a combination of these technologies.
- Use cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production.
- GSA would consider using recycled plastic waste in the construction of alternative masonry systems for prefabricated structural systems. Strategies to reduce embodied carbon will include minimum levels of supplemental cementitious materials, which could include use of recycled aggregate.
- Recycle construction debris to the maximum extent feasible.

Climate Change Adaptation Measures

To minimize impacts of climate change on human health and safety, GSA would consider the following measures:

- Incorporate shaded areas wherever possible, particularly along pedestrian routes through the LPOE.
- Provide indoor cooling stations or waiting areas where pedestrians passing through the LPOE, and individuals being processed by CBP officials, can seek relief from heat and other adverse conditions such as poor air quality.

To minimize impacts of climate change on energy resources, GSA would:

- Seek a minimum of LEED Gold certification for the proposed facilities, which would include energy conservation and efficiency measures.
- Implement measures to maximize energy efficiency where possible, such as through automated building controls and the use of energy-efficient equipment.
- Project will strive to implement onsite solar renewable energy to reduce electrical demand and/or implement onsite renewable energy generation, including solar PV systems and solar collectors, to reduce electrical demand, and/or implement a geothermal heating and cooling system to minimize the use of fossil energy.

To minimize impacts of climate change on water resources, GSA would seek a minimum of LEED Gold certification for the proposed facilities, which would incorporate water conservation and efficiency measures. GSA would implement measures to maximize water efficiency where possible, such as through native and drought-resistant plantings and the use of water-efficient fixtures and appliances. See Section 3.3, Water Resources, for more discussion on measures to reduce impacts to water resources, including stormwater impacts.

3.6 NOISE

This section describes the baseline conditions for noise levels and potential impacts from increased noise and vibration that could result from implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Excessive noise can lead to harm or annoyance to receptors or result in conflict with nearby land uses. These areas are referred to as noise-sensitive receptors and include residences, schools, daycare facilities, libraries, hospitals, nursing home facilities, and public recreational areas. Vibration can lead to disturbance or structural damage to nearby existing facilities.

This EIS primarily uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding noise and vibration:

- Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) provides general guidelines for assessing noise and vibration and includes noise and vibration principles, analysis methodologies, and noise and vibration data of construction equipment.
- Federal Highway Administration's *Noise Measurement Handbook* (FHWA 2018) provides guidance and data on noise assessment methodologies.
- California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020) provides guidance and data on vibration assessment of construction equipment.
- The 100 percent PDS provides information on the design layout and includes the proposed limits of construction (GSA 2024).

3.6.1 Affected Environment

3.6.1.1 Region of Influence

The ROI for the noise analysis includes areas within 0.5 mile of the proposed limits of construction, which encompasses the existing Grand Portage LPOE and the three-phase power line route.

3.6.1.2 Regulatory Setting

Noise

Because the human ear can hear such a wide range of sound levels, noise levels are described on a logarithmic scale and are quantified in terms of decibels (dB), which is typically adjusted to dBA (decibels on an A-weighted scale to account for the sensitivity of the human ear). The threshold of perception of the human ear is approximately 3 dBA, and changes of less than 3 dBA are often imperceptible. A 5-dBA change is clearly noticeable to the ear, and a 10-dBA change is perceived as an approximate doubling (or halving) of the noise level (CDOT 2005). Sounds at or below 70 dBA are generally considered safe, though are considered intrusive around this noise level. The USEPA and the World Health Organization recommend maintaining environmental noises below 70 dBA over 24 hours and 75 dBA over 8 hours to prevent noise-induced hearing loss. Over 2 hours of continuous noise levels between 80 dBA to 85 dBA can lead to hearing damage (CDC 2022). Table 3.6-1 presents some common sounds and how they rank in perceived human response.

Table 3.6-1. Sound Levels and Human Response

Sound Level (dBA)	Common Sounds	Effect
30	Library, Soft whisper (at 15 feet)	Very quiet
40	Living room, Bedroom, Quiet Office	Quiet
50	Light auto traffic (at 100 feet)	Moderately quiet
60	Air conditioning unit, Conversational speech	Intrusive
70 ^a	Freeway traffic, Noisy restaurant, Business Office	Phone use difficult
80 ^b	Alarm clock (at 2 feet), Hair dryer	Annoying
90	Heavy truck (at 50 feet), City traffic	Very annoying
100	Garbage truck, Firecrackers	Very loud
110	Pile driver, Rock concert	Extremely loud
120	Jet takeoff (at 200 feet), Auto horn (at 3 feet)	Maximum vocal effort
130	Thunderclap	(not provided)
140	Carrier deck jet operation, Air raid siren	Painfully loud
180	Rocket launching pad (no ear protection)	Irreversible hearing loss

Source: NPC 1997

dBA = A-weighted decibel

^a Sounds at or below 70 dBA are generally considered safe, though are considered intrusive around this noise level (CDC 2022).

^b Over 2 hours of continuous noise levels between 80 dBA to 85 dBA can potentially lead to damage of hearing (CDC 2022).

Noise sources can be characterized broadly as point sources or line sources. Point sources are associated with a source that remains generally in one place for extended periods of time, for example most construction site activities. Noise from line sources is generated by moving objects along a linear corridor, for example highway traffic noise.

Potential noise levels at sensitive receptor locations resulting from stationary sources are usually evaluated for construction and normal operations by identifying sound levels from dominant noise-producing equipment, summing (using a logarithmic scale) anticipated equipment noise contributions, and applying fundamental noise attenuation principles. The standard reduction for point source noise is 6 dB per doubling of distance from the source.

Barriers, both manmade (e.g., sound walls) and natural (e.g., forested areas, hills, etc.), as well as other natural factors, such as temperature and climate, may reduce noise levels and vibration. A 200-foot width of dense vegetation can reduce noise by approximately 10 dB, which can decrease noise levels by half (NPC 1980). Standard buildings typically provide approximately 10 dB of noise reduction between exterior and interior noise levels for buildings with windows open and 20 dB with windows closed (FHWA 2018).

Regarding traffic noise, the change in noise level generally depends on the traffic volume, traffic speed, and number of trucks. Generally, traffic volumes would need to triple to result in a readily noticeable increase in noise (CDOT 2005).

The Noise Control Act of 1972 (PL 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. In 1982, the USEPA transferred the primary responsibility of regulating noise to state and local governments. For this project, the Grand Portage Band would be the responsible entity for regulating noise standards.

The LPOE property and immediate surrounding area are designated as “Parks and Recreation” under the Grand Portage Band Land Use Ordinance. No specific noise metrics are specified for this land use designation; however, Section 10.04 of the ordinance, which discusses noise as it relates to commercial and industrial performance standards, may apply at the LPOE. Section 10.04 states that noise at the property line shall not be objectionable in frequency or intensity, in which the surrounding properties shall serve as a guide in judging this standard. Furthermore, Section 8.10 of the ordinance notes that any proposed development activities must be reviewed and approved by the Grand Portage Land Use Committee, which ensures that any impacts to resources from new development is kept to a minimum. The three-phase power line travels through areas designated as “Commercial”, “Forestry”, “Residential”, and “Preservation”. Similar to “Parks and Recreation”, there are no specific noise metrics specified in the Grand Portage Band Land Use Ordinance for these land use designations, though Section 8.10 would also apply to these designations. Additionally, for “Preservation” areas, Section 8.03 of the ordinance states that “If the use is determined by the Land Use Administrator and Land Use Committee to be inconsistent with the Grand Portage Ojibwe value system, then that use shall not be allowed.”

The Occupational Safety and Health Administration’s (OSHA) noise standard (29 CFR 1910.95) establishes workplace standards for noise. The minimum requirement states that constant noise exposure must not exceed 90 dBA over an 8-hour period. The highest allowable sound level to which workers can be constantly exposed is 115 dBA; exposure to this level must not exceed 15 minutes within an 8-hour period. The standards limit instantaneous exposure, such as impact noise, to 140 dBA. If noise levels exceed these standards, employers are required to provide hearing protection equipment that reduces sound levels to acceptable limits (OSHA 2008).

Vibration

Vibration can be caused by operating heavy construction machinery and ground-breaking construction activities (e.g., drilling or excavating). Typically, the effects of vibration range from feeling the floor shake and rumbling sounds to minor structural damage. Vibration is often expressed in terms of the peak particle velocity (PPV), as inches per second or millimeters per second, when used to evaluate human annoyance and building damage impacts. Vibration levels are highest closest to the source and dissipate with increasing distance generally at a rate of D_{ref}/D , where D is the distance from the source in feet, and D_{ref} is the reference distance of 25 feet. Other factors that influence the level of vibrations include soil conditions and distance from the equipment.

There are no federal standards for vibrations; however, various researchers and organizations have published guidelines. Table 3.6-2 presents standard thresholds commonly used to assess human perception and effects on buildings. Other factors that affect the level of vibration include soil conditions and the type of equipment and vibration (i.e., continuous or transient).

For structures not designated as historic, typical PPV thresholds used as vibration limits include 0.5 inch per second for buildings structurally sound and designed to modern engineering standards and 0.3 inch per second for buildings that are found to be structurally sound but where structural damage is a major concern (Wilson Ihrig et al. 2012). Generally, conservative vibration limits for structural damage can be set initially with some flexibility in modifying those limits based on detailed engineering investigation and analysis done on a case-by-case basis prior to construction. For purposes of this EIS, a PPV standard of 0.3 inch per second is used to conservatively determine potential vibration impacts to structures.

Humans are generally considered to be less sensitive to transient (impulsive) vibration, than to similar vibration from continuous (steady-state) sources. For continuous vibration (e.g., vibratory compaction or pile driving), human responses usually result from each of the PPV limits as follows: 0.10 inches per second is generally strongly perceptible; 0.2 inches per second is definitely annoying and can cause a disturbance; and values between 0.4 and 0.6 inches per second would be unpleasant (Wilson Ihrig et al. 2012). For purposes of this EIS, a PPV limit of 0.2 inches per second was used to determine potential human response to vibration.

Table 3.6-2. Human Response and Damage to Buildings from Vibration

Velocity Level, PPV ^a (inches per second)	Human Response	Effect on Buildings
0.01	Barely Perceptible	No effect.
0.04	Distinctly Perceptible	Vibration is unlikely to cause damage of any type to any structure.
0.08	Distinctly Perceptible to Strongly Perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected.
0.1	Strongly Perceptible	Virtually no risk of damage to normal buildings.
0.2 – 0.3	Strongly Perceptible to Severe	0.20 or 0.25 PPV are thresholds at which there is a risk of damage to historic and some old buildings; 0.3 PPV is threshold at which there is a risk of damage to older residential dwellings (e.g., plastered walls or ceilings).
0.5	Severe	Threshold at which there is a risk of damage to newer residential structures.

Source: Caltrans 2020; FTA 2018

PPV = peak particle velocity

^a Continuous or frequent intermittent vibration levels

No specific vibration metrics are specified for the “Parks and Recreation” land use designation in the Grand Portage Band Land Use Ordinance; however, Section 10.06 of the ordinance, which discusses vibration as it relates to commercial and industrial performance standards, may apply at the LPOE. Section 10.06 states that vibration shall not be discernible to human sense of feeling at any property line.

3.6.1.3 Existing Conditions

The area surrounding the existing Grand Portage LPOE and the proposed three-phase power line is characterized as predominantly natural and forested. The topography consists of generally rugged terrain with hilly slopes and moderately dense vegetation. These factors greatly reduce how far noise and vibration can travel from the LPOE operations. As such, baseline noise levels in the natural landscape surrounding the ROI are relatively low. Noise levels of natural sounds (i.e., without the influence of human activity) in the region are generally in the range of 30 dBA and, with human activity, noise levels range from 45 dBA to 55 dBA (NPS 2021). Manmade sources of noise in the project region are mainly generated by vehicles on Highway 61, activities at the LPOE, and visitors at the Grand Portage State Park.

As the Grand Portage State Park immediately surrounds the LPOE, the closest noise-sensitive receptors are visitors to the park. The closest receptor to the limits of construction is located on the trail 200 feet north of the LPOE. The Grand Portage State Park Welcome Center is located about 400 feet northwest of the proposed limits of construction, which includes picnic areas and from which trails extend generally north and east along the Pigeon River. The closest residential property is located approximately 1,500 feet west of the proposed limits of construction, on Ryden Road. A trail that is located immediately to the south of the LPOE, leads to boat launch and picnic areas along the Pigeon River, approximately 1,600 feet southeast of the LPOE.

The three-phase power line route parallels the western side of Highway 61 and is located within the existing utility ROW. The closest noise sensitive receptors to the power line’s limits of construction are a daycare center and residential properties. The Grand Portage Daycare Center is located approximately 450 feet west of the limits of construction. There are several residential properties located along the power line route. Residential properties along Casino Road and Bay Estates Drive are located between 220 and 750 feet to the east; residential properties along Blazes Road are located between 220 and 240 feet to the west; and residential properties along Eliza Road and Margarets Road are located between 210 and 410 feet to the east of the proposed limits of construction.

Table 3.6-3 lists the nearby receptors and their respective distances to the closest point from the proposed limits of construction.

Table 3.6-3. Noise-Sensitive Receptors Within 0.5 Mile of Proposed Limits of Construction

Receptor Type	Receptor	Direction from Limits of Construction	Distance ^a (feet)
Grand Portage LPOE			
Park	Trail on the Grand Portage State Park ^b	North	200
Park	Grand Portage State Park Welcome Center	Northwest	400
Residence	Residential properties ^c	West	1,500 – 2,600
Park	Recreational area ^d	Southeast	1,600
Three-Phase Power line			
Residence	Residential properties ^e	East	220 – 750
	Residential properties ^f	West	200 – 220
	Residential properties ^g	East	210 – 410
Daycare	Grand Portage Daycare Center ^h	West	450

- ^a. Distance is between location of receptor and closest boundary of the proposed limits of construction.
- ^b. Closest point on the trail within Grand Portage State Park.
- ^c. Several residences are located on Ryden Road between 1,500 feet and 2,600 feet west of the proposed limits of construction of the LPOE.
- ^d. Recreational area along Pigeon River, which includes boat launch and picnic areas.
- ^e. Several residences are located on Casino Road and Bay Estates Drive between 220 feet and 750 feet east of the proposed limits of construction of the three-phase power line.
- ^f. Several residences are located on Blazes Road between 200 feet and 220 feet west of the proposed limits of construction of the three-phase power line.
- ^g. Several residences are located on Eliza Road and Margarets Road between 210 feet and 410 feet east of the proposed limits of construction of the three-phase power line.
- ^h. A daycare is located on Blazes Road approximately 450 feet west of the proposed limits of construction of the three-phase power line.

The closest existing structures that could be potentially impacted by vibration from construction activities associated with the LPOE include the Grand Portage State Park Welcome Center (400 feet northwest of the proposed limits of construction) and the Pigeon River International Bridge (adjacent to the eastern limit of the proposed limits of construction). Nearby vibration-sensitive receptors that could be disturbed by construction equipment include the visitors at the Grand Portage State Park.

3.6.2 Environmental Consequences

3.6.2.1 Methodology

To evaluate the potential impacts from noise, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Addition of new point or line noise sources;
- Conflict with any federal or tribal noise ordinances;
- Long-term perceptible increases in ambient noise levels above regulatory thresholds at sensitive receptors during operations; or
- Cause excessive ground-borne vibration to persons or existing structures.

A major adverse impact resulting from projected-related noise or vibration would occur if the Proposed Action would result in:

- Harm or injury to adjacent communities or noise- and vibration-sensitive receptors;

- Exceedance of applicable environmental noise limit guidelines; or
- Structural damage from ground-borne vibration.

3.6.2.2 Proposed Action

Construction

Generally, the Proposed Action would have direct, short-term, minor to moderate, adverse, local and regional noise impacts during construction. Under the Proposed Action, ambient noise levels within the vicinity of the Grand Portage LPOE and three-phase power line would temporarily increase due to demolition or construction activities. Peak construction would occur during the months of April through October. Demolition and construction would take place primarily during normal business hours; however, some demolition and construction activities related to the LPOE could be required during nighttime hours from April through October depending on construction phasing. Installation of the three-phase power line would only occur during daylight hours over a 1-month period. Increased noise levels are expected to be greatest during demolition and excavation activities, when heavy machinery would be used for demolishing existing structures and earthmoving. The specific types of construction equipment and methods are anticipated to be typical of standard building construction activities. Table 3.6-4 presents common construction equipment and corresponding noise levels at various distances.

Table 3.6-4. Noise Levels of Common Construction Equipment

Equipment	Typical Noise Level at 50 feet (dBA)	Typical Noise Level at 500 feet (dBA)	Typical Noise Level at 1,000 feet (dBA)	Typical Noise Level at 1,500 feet (dBA)
Backhoe	80	60	54	50
Concrete mixer	85	65	59	55
Dozer	85	65	59	55
Grader	85	65	59	55
Loader	80	60	54	50
Roller	85	65	59	55
Scraper	85	65	59	55
Truck	84	64	58	54
Combined^b	90	70	64	60

dBA = A-weighted decibel

^a. Source: FTA 2018

^b. Calculated by assuming simultaneous operation of several pieces of construction equipment.

To estimate noise levels at receptors, it was conservatively assumed that several of the construction equipment listed in Table 3.6-5 could be operating simultaneously, which would result in a combined noise level of approximately 90 dBA at 50 feet. Based on this overall noise level, potential noise levels were estimated at the noise-sensitive receptor locations with the project ROI as presented in Table 3.6-5.

Table 3.6-5. Potential Noise Levels at Noise-Sensitive Receptors Within 0.5 Mile of Proposed Limits of Construction

Receptor Type	Receptor	Distance ^a (feet)	Noise Level ^b (dBA)
Grand Portage LPOE			
Park	Grand Portage State Park ^c	200	78
Park	Grand Portage Welcome Center	400	72 ^d
Residence	Residential properties ^e	1,500 – 2,600	60 – 56
Park	Recreational area ^f	1,600	60
Three-Phase Power Line Route			
Residence	Residential properties ^g	220-750	77-66
	Residential properties ^h	200-220	78-77
	Residential properties ⁱ	210-410	78-72
Daycare	Grand Portage Daycare Center ^j	450	71

dBA = A-weighted decibel

- ^a. Distance is between location of receptor and closest boundary of the proposed limits of construction.
- ^b. Noise level estimates based on overall construction noise of 90 dBA at 50 feet (assumes simultaneous operation of several construction equipment).
- ^c. Closest point on trail within Grand Portage State Park.
- ^d. This estimate represents noise level at the exterior of the building. Interior noise levels would be approximately 62 dBA with windows open and 52 dBA with windows shut.
- ^e. Several residences are located on Ryden Road between 1,500 feet and 2,600 feet west of the proposed limits of construction. These values represent exterior noise levels. Interior noise levels would be approximately 46-50 dBA with windows open and 36-40 dBA with windows shut.
- ^f. Recreational area along Pigeon River, which includes boat launch and picnic areas.
- ^g. Several residences are located on Casino Road and Bay Estates Drive between 220 feet and 750 feet east of the proposed limits of construction of the three-phase power line.
- ^h. Several residences are located on Blazes Road between 200 feet and 220 feet west of the proposed limits of construction of the three-phase power line.
- ⁱ. Several residences are located on Eliza Road and Margarets Road between 210 feet and 410 feet east of the proposed limits of construction of the three-phase power line.
- ^j. A daycare is located on Blazes Road approximately 450 feet west of the proposed limits of construction of the three-phase power line.

Construction noise would be detected by outdoor visitors at the Grand Portage State Park, as well as by daycare users and residences along the proposed three-phase power line route, and could result in a disturbance; however, actual construction noise levels would likely be lower than the estimates listed in Table 3.6-5 and is expected to be within levels deemed safe (i.e., noise levels should be below 70 dBA over 24 hours and 75 dBA over eight hours to prevent noise-induced hearing loss [CDC 2022]). Construction noise would greatly dissipate with increased distance from the LPOE and proposed three-phase power line limits of construction due to the muffling effect of the surrounding vegetation and the varying topography. High noise levels would generally be experienced by construction workers. OSHA regulations (i.e., wearing hearing protection and limiting exposure) would be followed to reduce the impact of noise on construction workers.

Potential noise impacts would be minimized to the extent possible by standard noise control measures, such as project scheduling and using noise controls on equipment (e.g., mufflers). The majority of activities would be consistent with normal construction activities. However, depending on the project schedule, some construction activities may occur during nighttime and weekends, which could cause an annoyance or disturbance to visitors at the Grand Portage State Park or users of nearby recreational areas (e.g., nearby picnic or boat launch areas), especially at nighttime. Therefore, construction activities would result in short-term, local, and minor to moderate adverse noise impacts. It is expected that review of the proposed

development activities by the Grand Portage Land Use Committee would determine any impact reduction measures or limitations on noise levels, based on construction plans, to ensure impacts from noise are kept to a minimum.

Intermittent and temporary increases in noise levels would occur from traffic associated with trucks and commuting construction workers. Increases in traffic noise would occur mainly during peak morning and afternoon commute hours. In comparing the number and type of vehicles that could be generated from the project against recent existing traffic data (see Section 3.7, Traffic and Transportation), it is estimated that the increase in noise level during a peak traffic hour would be up to 5 dBA, which represents a noticeable change but substantially less than a doubling of noise level. Additionally, this increase would be limited to the peak construction months (April through October); off-peak traffic noise levels would be less than 5 dBA. As such, it is expected that short-term, minor, and regional adverse traffic noise impacts would occur along primary transportation corridors (e.g., Highway 61).

Primary construction activities that could result in vibration impacts include site clearing and removal, site grading and soil compaction, and installation of building foundations. Table 3.6-6 presents average source PPVs for various types of construction equipment and provides reasonable estimates for a wide range of soil conditions (FTA 2018). These values are compared to the PPV limits established in Section 3.6.1.2 to evaluate the potential to cause structural damage and the effects of human response from vibration.

Table 3.6-6. Vibration Levels for Construction Equipment at Various Distances from the Source

Construction Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)	PPV at 70 feet (in/sec)	PPV at 100 feet (in/sec)	PPV at 150 feet (in/sec)	PPV at 200 feet (in/sec)
Pile driver (impact) (upper range)	1.518	0.759	0.542	0.380	0.253	0.190
Pile driver (sonic) (upper range)	0.734	0.367	0.262	0.184	0.122	0.092
Vibratory roll	0.210	0.105	0.075	0.053	0.035	0.026
Hoe ram	0.089	0.045	0.032	0.022	0.015	0.011
Large bulldozer	0.089	0.045	0.032	0.022	0.015	0.011
Caisson drilling	0.089	0.045	0.032	0.022	0.015	0.011
Loaded trucks	0.076	0.038	0.027	0.019	0.013	0.010
Jackhammer	0.035	0.018	0.013	0.009	0.006	0.004
Small bulldozer	0.003	0.002	0.001	0.001	0.001	0.0004

Source: FTA 2018

in/sec = inches per second; PPV = peak particle velocity

PPV values in Table 3.6-6 that are greater than 0.3 inch per second indicate the potential for structural damage to occur at existing structures at a given distance. As such, no damage to structures would be expected at 150 feet and beyond. The Pigeon River International Bridge could be adversely impacted by construction vibration as it is located within 150 feet of the limits of construction. If a construction activity is expected to create vibration levels beyond a PPV threshold that could cause structural damage to the bridge, the design build contractor must notify MnDOT District 1 prior to such activities taking place. To ensure the integrity of the bridge is not adversely affected, MnDOT may conduct a survey to document the existing condition of the bridge prior to the construction activity or may conduct vibration monitoring and intermediate inspections of the bridge while substantial vibration-causing activities are occurring. As such, it is expected that adverse vibration impacts would be short-term, local, and negligible during construction.

PPV values in Table 3.6-6 that are greater than 0.2 inches per second indicate the potential for disturbance to human receptors. As such, none of the listed equipment would cause a disturbance at approximately 200 feet and beyond. The closest receptor to the construction limits are the users of the trail on the Grand Portage State Park (200 feet north) and several residences along the proposed three-phase power line (nearest residence located 200 feet west). Trail users may detect temporary, intermittent vibrations during construction; however, it is expected that because of the distance and varying topography between the construction limits and the trail, actual vibration levels would be substantially lower than the values shown for a pile driver and, therefore, adverse impacts from construction vibration on receptors would be considered short-term and minor. Construction of the proposed power line would primarily consist of site clearing, plowing, and finishing work. These activities would require the use of heavy-duty construction equipment (e.g., vibratory plow and grader) and trucks. No adverse impacts from vibration are anticipated to residences located along the proposed three-phase power line due to their distance from construction activities (200 feet or more) and the presence of existing wooded areas and vegetation between the properties and the proposed power line, which reduces vibratory effects.

Operations

Under the Proposed Action, ambient noise levels within the vicinity of the Grand Portage LPOE would generally remain unchanged since operations of the modernized and expanded LPOE would be similar to current operations. Operation of the three-phase power line would not be anticipated to have any impact on noise. Use and maintenance of renewable energy facilities could result in small additional increases in noise that could be detected by the LPOE workers and result in direct, long-term, negligible, adverse, local noise impacts. However, the improved operations of the facility, which could result in reduced idling of vehicles and better traffic flow through the LPOE, may reduce localized noise levels. The effect of improved operations and traffic flow would likely offset any negligible increases in noise from operation of generators and other components or maintenance required for the renewable energy sources. No vibration impacts would occur during operation of the modernized and expanded LPOE or the three-phase power line.

3.6.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. Congestion and other traffic impediments would continue (see Section 3.7, Traffic and Transportation), especially during peak seasonal use, as there would be no improvement in operations. Therefore, slight increases in noise levels could result during peak traffic periods resulting in long-term, minor adverse noise impacts.

3.6.2.4 Impact Reduction Measures

Noise impacts would be minimized to the extent possible through various measures, including:

- Implementation of noise control measures, such as project scheduling and using noise controls on equipment (e.g., mufflers).
- Coordination with Grand Portage Band, Grand Portage State Park, and Ryden's Border Store regarding construction scheduling and noise management, including for nighttime construction.
- Coordination with MnDOT District 1 as applicable to determine need for any potential mitigation measures to minimize vibration impacts to the Pigeon River International Bridge (e.g., pre- and post-construction bridge inspections, vibration monitoring during construction activities close to bridge).

3.7 TRAFFIC AND TRANSPORTATION

This section describes the baseline conditions and potential impacts for traffic and transportation resources in the ROI that could result from implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Traffic refers to vehicular traffic volumes on key roadways serving the ROI. Roadway hazards and safety are also evaluated.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts:

- The 100 percent PDS (GSA 2024) provides information on the design layout, including construction details and number of traffic lanes at the proposed LPOE.
- The 2019 Final Feasibility Study (GSA 2019a) provides context on existing conditions.
- MnDOT's Traffic Mapping Application (MnDOT 2023) provides traffic volume data on public roadways.
- Bureau of Transportation Statistics – Border Crossing Data (BTS 2023) provides annual POV and COV crossings at the Grand Portage LPOE.

3.7.1 Affected Environment

3.7.1.1 *Region of Influence*

As the singular route leading to the Grand Portage LPOE, Highway 61 in the general vicinity of the LPOE has been analyzed to assess the potential impacts of commercial and non-commercial traffic. The Grand Portage LPOE is directly served by Highway 61 and would be used with implementation of the Proposed Action. In addition, the proposed three-phase power line would be located within the existing utility ROW along the western side of Highway 61.

3.7.1.2 *Regulatory Setting*

MnDOT is responsible for planning, designing, constructing, operating, and maintaining all state-owned roadways, which include interstate highways, U.S. highways, and state highways. Any construction work done on U.S., state, and county highways would require coordination with MnDOT and Cook County.

3.7.1.3 *Existing Conditions*

Roadway Network

Highway 61 travels in a northwest direction from Duluth, Minnesota, passing through Grand Portage and the Grand Portage LPOE, then into Canada, and ending at its northern terminus in Thunder Bay, Ontario. It is primarily a two-lane highway, functionally classified as a Principal Arterial roadway according to MnDOT's Functional Classification Map (MnDOT 2022). This route connects the LPOE with Grand Portage 5 miles to the south, Duluth 150 miles to the south, and Thunder Bay 30 miles to the north via Canada Highway 61. The route south of the Grand Portage LPOE, starting at the Grand Portage and extending south to Duluth, follows along the North Shore of Lake Superior and is designated an All-American Road scenic byway, referred to as the North Shore Scenic Drive. The speed limit along Highway 61 near the LPOE is 55 mph.

At the LPOE, inbound traffic from Canada is directed to the single primary commercial inspection lane or to one of the two primary non-commercial inspection lanes. As described in Chapter 1, Purpose and Need, queues exist during the peak periods (e.g., the summer months) due to the lack of adequate inspection lanes. Wind turbine components from Canada are also periodically transported through the LPOE; due to the size and length of the components and vehicles carrying them, a temporary shutdown of some lanes is necessary. For traffic traveling outbound from the LPOE into Canada, there are no inspection booths or canopies.

If outbound inspection is needed, CBP officers set up a temporary roadblock in the northbound lane of Highway 61 (GSA 2019a).

There are multiple secondary roads intersecting Highway 61 along the three-phase power line route including Blazes Pit Road, Stevens Road, Joes Road, Ryden Road, and the Grand Portage State Park Welcome Center entrance.

Pedestrian/Bike

The Grand Portage State Park is located directly adjacent to the LPOE and includes several trails. There are pedestrian and bike activities along these trails within the state park, but there is no activity reported along the study corridor of Highway 61.

Railway

There are no railroad facilities within the vicinity of the Grand Portage LPOE.

Roadways and Vehicular Traffic Volumes

Historical traffic counts referenced from the MnDOT Traffic Mapping Application database were used to evaluate traffic trends in annual average daily traffic (AADT) volumes in the ROI and are presented in Table 3.7-1. The AADT data was also used to evaluate the historic traffic average growth rates for Highway 61. The AADT volumes for years 2020 through 2022 were not used due to atypical traffic conditions resulting from travel restrictions imposed by the U.S. Department of Homeland Security related to COVID-19. Overall, the traffic volumes in this area of Minnesota have experienced negative growth over the past 20 years.

Table 3.7-1. Grand Portage LPOE Historical AADT Volumes (2000 – 2018)

Roadway	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018	Average Bi-annual Growth Rate (percent)
Highway 61	1,850	1,950	1,550	1,550	1,650	1,550	1,450	1,500	1,350	1,500	-1.8%

Source: MnDOT 2023

% = percent; AADT = annual average daily traffic; Highway 61 = Minnesota Highway 61; LPOE = land port of entry

Note: 2020-2022 AADT data omitted due to influences from COVID-19 pandemic.

A review of annual total vehicular crossings at the Grand Portage LPOE from 2012 through 2018 also confirms this downward trend in traffic volumes (BTS 2023). Table 3.7-2 presents the total annual vehicular crossings and percentage of the annual crossings that were due to COVs during this timeframe. As indicated in the table, COV traffic crossings represent up to 6 percent of the total annual vehicular crossings at the LPOE. Therefore, it is conservatively assumed that the truck traffic volumes are generally 6 percent of AADT volumes.

Table 3.7-2. Total Annual POV and COV Crossings at Grand Portage LPOE (2012 – 2018)

Traffic Type	2012	2014	2016	2018
POV	333,317	324,896	259,353	206,806
COV	15,071	16,460	16,044	12,634
Percent of Total Vehicular Crossings Attributed to COVs	5%	5%	6%	6%

Source: BTS 2023

% = percent; COV = commercially owned vehicle; LPOE = land port of entry; POV = privately owned vehicle

Note: 2020-2022 AADT data omitted due to influences from COVID-19 pandemic.

Similar with AADT data from MnDOT, total crossing volume data at the Grand Portage LPOE for the years 2020, 2021, and 2022 were not evaluated as these years are not considered representative of normal operating conditions of the LPOE due to travel restrictions imposed by the U.S. Department of Homeland Security related to COVID-19.

Although the historical AADT data shown in Table 3.7-1 indicates mainly negative growth during the past 20 years, a conservative annual growth rate of 0.5 percent was established for the purposes of predicting traffic volumes along Highway 61 for the years 2023 and beyond.

Table 3.7-3 displays the estimated AADT volumes for the year 2023, which represent existing conditions.

Table 3.7-3. Grand Portage LPOE AADT for 2023

Roadway	Classification	Latest Available AADT (2018)	Existing AADT (2023) ^a
Highway 61	Principal Arterial	1,500	1,538

Source: MnDOT 2023

AADT = annual average daily traffic; Highway 61 = Minnesota Highway 61; LPOE = land port of entry

^a Projected based on 0.5 percent average annual growth rate.

Highway 61 was evaluated for operational deficiencies by determining a Level of Service (LOS) rating for each segment. To calculate the LOS ratings, volume-to-capacity (V/C) ratios were estimated by calculating hourly volumes as “V” and assuming a capacity volume as “C”:

- **Hourly volume (V)** – The AADT volume for 2023 shown in Table 3.7-3 was converted into an hourly volume by multiplying the AADT volume by a conservative peak hour factor, referred to as “K.” K is the proportion of an AADT volume on a roadway segment occurring during the peak hour of traffic. For this analysis, a conservative value of 10 percent was used for K.
- **Capacity (C)** – The capacity volume was determined based on the functional classification and number of through-lanes for a road segment. According to the *Highway Capacity Manual*, the base capacity is 1,700 passenger cars per hour per one-direction lane for a two-lane roadway. Since Highway 61 is a two-lane facility near the LPOE, 1,700 passenger cars per hour was used as “C” (HCM 2016).

The 2023 hourly volume was divided by the capacity volume of 1,700 passenger cars per hour to determine the roadway segment’s V/C ratio. LOS ratings were then determined based on the V/C thresholds. LOS for a roadway segment is graded from A to F, with LOS A through D generally representing adequate operating conditions and LOS E or F representing unacceptable operating conditions, as shown in Table 3.7-4. The segments were then classified by their LOS as a measurement of congestion and operation. The LOS estimates for each roadway segment are summarized in Table 3.7-5.

Table 3.7-4. Level of Service Definitions and Correlated V/C Ratios

LOS	Traffic Condition	V/C Ratio
A	Free Flow	<0.60
B	Light congestion	0.61-0.70
C	Stable flow with lower speeds	0.71-0.80
D	High density with stable flow	0.81-0.90
E	Severe congestion	0.91-1.00
F	Total breakdown	>1.00

Source: Afrin and Yodo 2020

LOS = Level of Service; C = capacity volume; V = hourly volume

Table 3.7-5. Level of Service for 2023 AADT at Grand Portage LPOE

Roadway	# Thru Lanes	Classification	Two-Lane Highway Hourly Capacity	AADT	Hourly Volume	V/C Ratio	LOS
Highway 61	2	Principal Arterial	1,700	1,538	154	0.09	A

AADT = annual average daily traffic; C = capacity volume; LOS = Level of Service; LPOE = land port of entry; Highway 61 = Minnesota Highway 61; V = hourly volume

The results shown in Table 3.7-5 indicate that the highway is operating well below capacity, with vehicles able to operate at free-flow speeds without congestion or delay. Note that this is presenting “free-flow highway” conditions, without consideration of the delay caused by inspection lanes. While the highway itself is operating at LOS A, having only two primary inspection lanes for POVs and one for COVs causes delays (congestion) during peak traffic periods (e.g., summer).

3.7.2 Environmental Consequences

3.7.2.1 Methodology

To evaluate the impacts on transportation resources, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Change in vehicular traffic congestion, delays, or safety risks on roadways or intersections;
- Change in the LOS on roadways or intersections; or
- Change the capacity of the Grand Portage LPOE.

A major adverse impact to transportation resources would occur if the Proposed Action would result in:

- An increase in traffic volumes that would exceed the capacity of key roadways or intersections within the study area (i.e., significant degradation of LOS);
- An increase in traffic volumes resulting in deficient operations and reduced capacity at the Grand Portage LPOE;
- An increase in traffic volumes resulting in traffic hazards to workers and users at the Grand Portage LPOE; or
- A disruption or interference with existing pedestrian and bicycle facilities.

3.7.2.2 Proposed Action

Construction

Since the proposed LPOE facilities would be constructed east of the existing Main Building, and because GSA would conduct construction in phases, the existing LPOE facilities would remain open during construction. During the initial phase of construction, the existing Main Building may utilize temporary inspection booths to maintain operations. The Proposed Action would improve the transportation deficiencies associated with the existing LPOE by providing five new primary inspection lanes for inbound traffic, a secondary hard inspection area, a building dedicated to NII, commercial staging areas, and a commercial impound lot.

Demolition and construction are anticipated to begin in 2026 with substantial completion in 2029. Peak construction is expected to occur during the months of April to October each year with approximately 100 construction workers and 120 trucks on a daily basis. Regular (non-peak) construction is expected to result in 50 construction workers and only periodic trips for supply deliveries.

The AADT and hourly volumes (V) for the peak construction months for years 2026 and 2029 were estimated using the same growth rates (i.e., 0.5 percent) established to previously calculate the 2023 volume. Approximately 400 new daily vehicle trips could be generated on Highway 61 (i.e., 200 trips entering and 200 trips exiting the limits of construction) during peak construction conditions. Therefore, an additional 110 traffic trips were added to the hourly volumes to conservatively account for commuters and truck traffic during a peak traffic hour (assuming 20 percent of workers may carpool, resulting in 80 vehicular trips, and assuming eight working hours for trucks, resulting in 30 truck trips that could occur within a peak hour). Based on the hourly volumes, V/C ratios and LOS ratings for the peak construction years were estimated (assuming a capacity volume, C, of 1,700 vehicles per hour) and are summarized in Table 3.7-6.

Table 3.7-6. 2026 and 2029 LOS Results for Proposed Action During Peak Construction Months

Roadway	2026				2029			
	AADT	Hourly Volume ^a (V)	V/C	LOS	AADT	Hourly Volume ^a (V)	V/C	LOS
Highway 61	1,561	266	0.16	A	1,585	268	0.16	A

AADT = annual average daily traffic; C = capacity volume; LOS = Level of Service; LPOE = land port of entry; Highway 61 = Minnesota Highway 61; V = hourly volume

^a Includes 110 vehicular trips due to commuters and trucks.

An increase in traffic volumes due to an increase in onsite staff and truck deliveries is not expected to adversely impact operations during construction. As a result of increased traffic volumes during the peak construction years, there could be some degradation to the operating conditions of Highway 61 approaching the LPOE. However, Table 3.7-6 indicates that the LOS would remain at a level of A as the facility would continue to operate well under capacity to handle the additional traffic demand resulting from the construction activities. Additionally, most commuter traffic would be limited to the peak morning and afternoon commuting hours, near the start and end of the construction workday. As such, construction traffic is anticipated to result in direct, short-term, minor, adverse, local impacts to roadways within the ROI.

Impacts to the Grand Portage State Park would be negligible during construction. Despite the proximity to the LPOE site, the access point to the park is outside of the construction limits for the Proposed Action.

Impacts to traffic on Highway 61 and to residents and businesses along the proposed three-phase power line route would be negligible during construction. No traffic impacts are anticipated to users of Highway 61 from installation of the power line because all construction work would be completed within existing utility ROW and no road closures would be required. Residents and businesses located off of the intersections crossed by the power line may experience temporary lane closures or intermittent service delays during construction at those locations. GSA would repair all traffic intersections after the power line has been installed. GSA would follow all MnDOT safety protocols during construction, including use of appropriate signage, flaggers, cones, and signals.

Operations

Under the Proposed Action, the modernized and expanded LPOE is anticipated to be fully operational by Fall 2028, with the final completion of the project targeted for Spring 2029. The site currently has 25 employees, and GSA has no plans for additional hires based on the 100 percent PDS. During operations, traffic levels ratios are expected to return to pre-construction levels and Highway 61 near the Grand Portage LPOE would remain at LOS A.

The Proposed Action would result in direct, long-term, minor, beneficial, local impacts by providing more queuing space from the additional inspection lanes and allowing for more efficient vehicle processing, thus improving traffic flow, reducing delays, and improving traffic safety at the modernized and expanded LPOE. Operation of the three-phase power line would not be anticipated to have any impact on traffic and transportation.

3.7.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line. Therefore, traffic volumes on Highway 61 would remain unchanged from baseline conditions and would be similar to those discussed in Section 3.7.1.3. No increase in the number of inspection lanes would mean that current queue delays would continue or possibly extend further during times of peak/seasonal traffic resulting in continued long-term, minor to moderate, adverse impacts.

3.7.2.4 Impact Reduction Measures

Measures that would mitigate the impacts associated with transportation during construction and operations include:

- Minimize construction truck movement during peak traffic hours.
- Place construction staging areas where they would least interfere with highway traffic and parking.
- Minimize impacts to pedestrians during construction activities by providing appropriate information and signage to pedestrians and motorists who are traveling throughout the area.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow and safety.
- Coordinate with the utility providers and MnDOT on the phased construction plans to minimize traffic safety issues and potential disruptions.
- Follow applicable planning guidelines and regulations when maintaining or upgrading roadway infrastructure.

3.8 LAND USE AND VISUAL RESOURCES

This section describes the baseline conditions for land use and visual resources and potential impacts that could result from implementing the Proposed Action and the No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Land use is described by land activities, ownership, and the governing entities' management plans. Local land use designations prescribe land use types and regulate development patterns. This section also describes the visual landscape within the project ROI. Visual resources consist of all visible features (natural and man-made, moving, and stationary) that give a particular environment its aesthetic characteristics and can influence the visual appeal of that landscape for a viewer.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding land use and visual resources:

- The Grand Portage Band Land Use Ordinance provides a discussion of land use designations as well as determined uses for each designation (Grand Portage Band of Lake Superior Chippewa 1996).
- The Phase I ESA conducted in July 2023 (PHE 2023b) and the 2019 Feasibility Study (GSA 2019a) provide context on existing structures at the LPOE for the existing conditions discussion.
- The 100 percent PDS informs lighting and design standards in the environmental consequences discussion (GSA 2024).
- Cook County Comprehensive Trails Plan provides background on the Grand Portage State Park as well as trails within Cook County for the existing conditions discussion (Cook County 2016).

3.8.1 Affected Environment

3.8.1.1 *Region of Influence*

The ROI for land use and visual resources focuses on the existing Grand Portage LPOE and the existing utility ROW along the entire length of the three-phase power line route, and their proposed limits of construction. The ROI also includes adjacent properties to the existing LPOE (within 0.5 mile).

3.8.1.2 *Regulatory Setting*

Land Use

The existing Grand Portage LPOE and proposed operational footprint of the modernized and expanded Grand Portage LPOE are located within an MnDOT easement on the Grand Portage Reservation, although a small, temporary incursion outside of the easement would be necessary during construction. GSA leases property from MnDOT for the LPOE, who in turn holds an easement from the U.S. government in Trust for the Grand Portage Band. In addition, Arrowhead maintains a 15-foot-wide utility ROW that largely parallels Highway 61. The ROW agreement is maintained with the Grand Portage Band and MnDOT. The ROW falls primarily within the MnDOT easement along the three-phase power line route, although the ROW travels slightly outside of the easement as it approaches the Grand Portage LPOE.

The Grand Portage Band Land Use Ordinance regulates land use usage designations within the Grand Portage Reservation (Grand Portage Band of Lake Superior Chippewa 1996). The Grand Portage Band Land Use Ordinance divides the Grand Portage Reservation into eight districts, including:

- Preservation
- Wildlife Habitat
- Forestry

- Single-Family Residential
- Multi-Family Residential
- Commercial
- Industrial
- Parks and Recreation

In addition, the Land Use Ordinance specifies requirements for development projects, including facility and utility development. All development projects generally require approval by the Land Use Administrator.

GSA has a series of policy guides that address a variety of planning issues for federal facilities, including site security, site selection, project planning, and facility design standards. This includes GSA's mandatory P100 Standards, which apply to the design and construction of new federal facilities (as well as major repairs and alterations of existing buildings) (GSA 2021), the *Whole Building Design Guide* (GSA 2022b), and U.S. LPOE Design Standards, which specifically applies to LPOE designs (Conway 2021).

Visual Resources

The Federal National Scenic Byways Program establishes All-American Roads and National Scenic Byways. Additionally, the Minnesota Scenic Byways Commission was established to oversee Minnesota's Scenic Byway Program. A scenic byway is typically recognized through legislation as a unique resource worth preserving.

With respect to the aesthetics, GSA considers the following design objectives when designing a LPOE (Conway 2021):

- Welcoming, but formal;
- Compatible with regional and local styles;
- Integrated with GSA's Art-in-Architecture program;
- Sensitive to existing historic structures; and
- Respectful of local landscape and climate considerations.

Night Sky

The National Park Service (NPS) Natural Sounds and Night Skies Division conducts Sky Quality Measurement Surveys (SQM) in accordance with International Dark Sky Association (IDA) recommendations. One of three methods recommended by the IDA to conduct an SQM is through the Bortle Scale. The Bortle Dark Sky Scale is a qualitative assessment that groups the visibility of stars, galaxies, and zodiacal light into nine classes. It quantifies observability of celestial objects and the interference caused by light pollution and skyglow.

The Joint IDA and Illuminating Engineering Society Model Lighting Ordinance provides recommendations to help communities reduce light pollution and glare and to lower excessive light levels. These include the use of Lighting Zones (LZ), which allows for variation in the stringency of lighting restrictions based on the sensitivity of an area. There are five different LZs, ranging from LZ0, designed for pristine natural environments with limited or no outdoor lighting, to LZ4, for limited application in areas of extensive development in large cities. Additionally, the Lighting Ordinance includes backlight, uplight, and glare (BUG) system classifications for outdoor lighting fixtures to ensure that only well-shielded fixtures are used. The BUG system classifies appropriate lighting classifications based on purpose or function of a location. The 2023 GSA *LED Lighting and Controls Guidance* states that exterior lighting must comply with BUG ratings (GSA 2023d).

GSA P100 Standards are structured such that a baseline standard is set for the various requirements, and facilities that achieve higher levels of performance are set into three additional tiers (Tiers 1, 2, or 3), with Tier 3 being the highest level of performance. With regards to lighting, GSA P100 standards specify that Tier 1 projects must meet the BUG rating per LZ2. Tier 2 or 3 projects must comply with LZ1 per P100 Standards. LZ1 is the recommended default LZ for rural and low-density residential areas, as it pertains to areas that desire low ambient lighting levels. These typically include single- and two-family residential communities, rural town centers, and commercial or industrial/storage areas with limited nighttime activity. Additionally, LZ1 often pertains to developed areas in parks and other natural settings.

3.8.1.3 Existing Conditions

Land Use

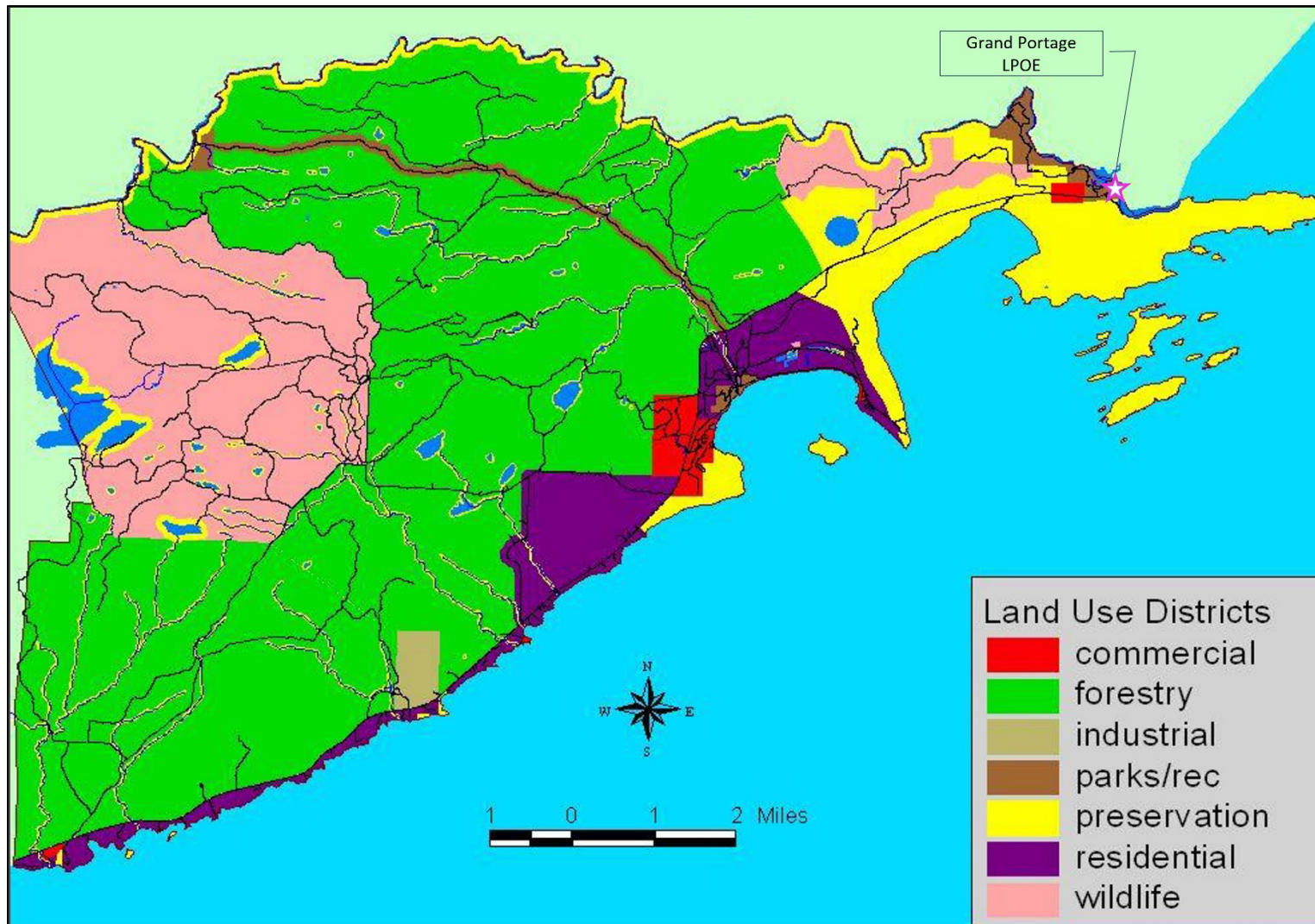
The ROI of the Grand Portage LPOE is bordered to the north by Grand Portage State Park (i.e., primarily undeveloped forested areas and a trail), to the south by undeveloped forested areas, to the east by the Pigeon River (U.S.-Canada border), and to the west by Highway 61. The Grand Portage State Park Welcome Center is located approximately 400 feet to the northwest, and a small commercial development (Ryden's Border Store) and a few residences are located approximately 1,500 feet from the Grand Portage LPOE. Across the U.S.-Canada border is the Canadian Port of Entry located in Neebing, Ontario.

The Grand Portage Band Land Use Ordinance designates the Grand Portage LPOE as "Parks and Recreation." This area falls within the larger district that corresponds with the Grand Portage State Park, which is located entirely with the Grand Portage Reservation. The purpose of a "Parks and Recreation" designation is to provide areas, operated by tribal, federal, or state government, for preservation and management of natural, scenic, and cultural resources for present and future generations while providing appropriate recreational and educational opportunities.

Within the Grand Portage State Park there are 4 miles of hiking trails. There is also a 0.5-mile boardwalk to overlook the park's main attraction, High Falls Waterfall, which, at 120 feet, is the highest in Minnesota. Grand Portage State Park does not include any campsites (Cook County 2016). The 0.2-mile Picnic Trail is the closest trail to the LPOE. The park features a welcome center, a gift shop, and picnic areas overlooking the Pigeon River, all located approximately 400 feet northwest of the LPOE. To the southeast of the LPOE there is a boat launch area used by members of the Grand Portage Band. The Grand Portage State Park is cooperatively managed by the State of Minnesota and the Grand Portage Band under a lease agreement as specified in the Laws of Minnesota (MN) for 1989, Chap 359, Subd 27a, Sect 7-11.

Areas with the land use designation "Preservation" are located just south of the Grand Portage LPOE, beyond the Grand Portage State Park boundary. A district designated as "Preservation" is done so to sustain areas which have historical, cultural, religious, geographic, or environmental significance to the people of the Grand Portage Reservation. It also serves to preserve the natural environment and to provide a place for quiet enjoyment. This "Preservation" area near the LPOE is predominantly undeveloped, forest land. To the west of the LPOE is an area designated as "Commercial", which is generally associated with Ryden's Border Store. Figure 3.8-1 presents the land uses for the Grand Portage Reservation.

There is one major roadway into Grand Portage, Highway 61, which runs along the coast of Lake Superior in the eastern part of the Reservation. Highway 61 is part of the North Shore Scenic Drive All-American Road, as designated under the Federal National Scenic Byways Program. The All-American Road designation begins in Duluth and continues all the way to Grand Portage (to the south of the LPOE), including along the three-phase power line route. Highway 61 through the LPOE is not part of the All-American Road designation.



Source: Grand Portage Band of Lake Superior Chippewa 1996.

Figure 3.8-1. Land Uses in the Grand Portage Reservation

The ROI for the three-phase power line runs parallel to Highway 61 in Arrowhead's existing and maintained utility ROW. This ROW crosses through the village of Grand Portage and passes by many of the facilities of the greater Grand Portage Reservation, including government facilities, stores, trails, camping and recreational opportunities, a marina, a daycare, a lodge-casino, and residences. In addition, the ROI crosses the Grand Portage National Monument, which is located approximately 6 miles southwest of the LPOE. The three-phase power line crosses through areas designated as "Commercial", "Forestry", "Residential", and "Preservation", in addition to "Parks and Recreation". Highway 61 along the three-phase power line route is part of the Federal National Scenic Byways Program's All-American Road designation.

Visual Resources

The visual landscape of the ROI at the LPOE can be characterized by natural features due to the proximity of the Pigeon River and Grand Portage State Park. The natural features are broken up mainly by the Pigeon River International Bridge, which is a steel stringer bridge constructed in 1962. The Grand Portage LPOE was constructed in the early 1960s in conjunction with the construction of the Pigeon River International Bridge, which carries Highway 61 into Canada. The Grand Portage LPOE was originally a one-story building with a canopy (GSA 2019a). The Main Building and Commercial Inspection Building were constructed in 1965 and have had multiple alterations since then, including replacement of exterior siding and roofing system. For motorists approaching the LPOE, the viewshed of the proposed limits of construction consists mainly of forested area.

The visual landscape of the ROI along the three-phase power line route is characterized by natural features in some areas due to the proximity of wooded areas, although passes by the village of Grand Portage which is characterized by various residential, commercial, and institutional facilities. The power line route parallels Highway 61 for nearly its entire length and the visual landscape is in turn influenced by the presence of vehicular traffic.

The State of Minnesota is home to two mandatory Class I federal areas: the Voyageurs National Park and Boundary Waters Canoe Area Wilderness, located along the state's border with Canada and approximately 150 miles and 20 miles west of the Grand Portage LPOE, respectively. See Section 3.5, Air Quality and Climate Change, for further discussion of Class I federal areas.

Night Sky

The sky in the area of the ROI has a class rating of 4 on the Bortle Dark Sky Scale (Stare 2023). A Class 4 rating describes a rural/suburban transition where there is fairly obvious light pollution over population centers in several directions (Bortle 2006).

The LPOE would be defined as LZ1 on the BUG Rating system, which are areas where lighting might adversely affect flora and fauna or disturb the character of the area (IDA 2011). Lighting may typically be used for safety and convenience, but it is not necessarily uniform or continuous. In the event lighting restrictions relative to time of day are established by local ordinances, lighting may be extinguished or reduced as activity levels decline.

3.8.2 Environmental Consequences

3.8.2.1 Methodology

To evaluate the impacts to land use and visual resources, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Changes in land use and zoning;
- Changes in land ownership;
- Changes in public use of recreational areas or special interest areas;
- Changes in the scenic view or character of the landscape; or

- Changes in the amount of open space in an undeveloped area.

A major adverse impact to land use would occur if the Proposed Action would result in:

- A conflict with land use or a land use restriction on adjacent properties;
- Conflicts with regional or local land use plans and zoning;
- A major alteration of the aesthetic character and use of the land in relation to surrounding uses;
- Degradation of the visual appeal of an area, especially an area that most observers would consider a scenic view; or
- Elimination of a large area of undeveloped open space.

3.8.2.2 Proposed Action

Construction

Under the Proposed Action, GSA would establish applicable agreements with the Grand Portage Band and in coordination with MnDOT to expand the LPOE to an operational footprint of 10.4 acres. The buildings and structures within the existing LPOE would be demolished and replaced with new facilities and infrastructure, to include renewable energy technologies (i.e., solar and/or geothermal energy).

The Proposed Action would result in overall, direct, short-term, minor to moderate, adverse, local impacts to adjacent land uses. Demolition and construction are estimated to begin in 2026, with substantial completion anticipated in 2029. Depending on the project schedule, some construction activities may occur during nighttime and weekends. Construction activities could temporarily disturb travelers through the LPOE, as well as nearby users of the Grand Portage State Park and cause annoyance from increased dust, noise levels, and traffic conflicts, particularly near the welcome center and along the Picnic Trail and High Falls Trails (see Section 3.5, Air Quality and Climate Change; Section 3.6, Noise; and Section 3.7, Traffic and Transportation). The boat launch area would remain accessible during construction; however, users of the boat launch area would experience similar disturbances from construction activities. Temporary re-routing of the access point to the boat launch may be required during construction. Construction may also result in minor land use disturbances to residential properties near Ryden's Border Store, although impacts would be lesser due to distance from the proposed limits of construction. Highway 61 through the LPOE is not part of the Federal National Scenic Byways Program's All-American Road designation; therefore, no impacts to the scenic byway would occur.

GSA would coordinate with the Grand Portage Band, MnDOT, and Arrowhead to construct the three-phase power line within the existing utility ROW. Construction of the three-phase power line would result in overall, direct, short-term, negligible to minor, adverse, local impacts to adjacent land uses along the power line route. Construction would last for 1 month and would cause annoyance from increased dust and noise levels, including near some residential properties (see Section 3.5, Air Quality and Climate Change and Section 3.6, Noise). Construction would not be expected to affect other adjacent land users as all activities would occur within an existing, disturbed utility ROW and access to adjacent users would remain during construction. Highway 61 along the three-phase power line route is part of the Federal National Scenic Byways Program's All-American Road designation; however, installation of the three-phase power line is not anticipated to impact this designation as construction would occur within an existing, disturbed, and maintained utility ROW adjacent to the roadway.

Since most of the proposed limits of construction has been previously cleared within the MnDOT easement or the existing utility ROW, construction activities would not result in a substantial contrast to the surrounding viewshed. Approximately 0.8 acre of tree clearing would be required, although this would occur entirely within the MnDOT easement along the edge of the forested area near the LPOE, and would result in direct, long-term, minor, adverse, and local impacts to visual resources. No tree clearing is

anticipated to be required for construction of the three-phase power line. Direct, short-term, minor, adverse, local impacts to the night sky may also occur during construction of the LPOE, particularly for any nighttime construction activities requiring lighting. GSA would implement lighting procedures to minimize impacts to the night sky as described in Section 3.8.2.4.

Operations

Under the Proposed Action, the operational footprint of the existing Grand Portage LPOE would expand by approximately 2.5 acres. As such, approximately 2.5 acres of the existing MnDOT easement would be converted from forested or open landscaped area to support the modernized and expanded LPOE facility with proposed buildings, roadways, parking lots, and landscaped areas. This change in land use would be consistent with current uses as the proposed operational footprint of the modernized and expanded LPOE is entirely within the MnDOT easement, which already supports the existing LPOE. Therefore, operation of new facilities would not result in any land use conflicts with adjacent land uses. Additionally, no change in land use or access would occur within the Grand Portage State Park. As such, operations of the modernized and expanded LPOE are not expected to conflict with the Grand Portage Band Land Use Ordinance under the Proposed Action and there would be no long-term land use impacts.

The modernized and expanded LPOE would be constructed to be consistent with GSA design standards as noted in Section 3.8.1.2. As part of the Proposed Action, GSA would also engage directly with the Grand Portage Band throughout the design to develop an LPOE that considers and integrates feedback and respects local culture. As such, operations of the modernized and expanded LPOE would result in a direct, long-term, moderate, beneficial, local impact to the overall local visual quality from the replacement of old facilities with improved facilities.

Indirect, long-term, negligible to minor, beneficial, regional impacts to regional haze conditions are expected as the modernized and expanded LPOE facility would operate more efficiently, thereby reducing vehicle emissions, which can contribute to haze and degrade scenic vistas. Long-term, minor, local, adverse impacts to the night sky are anticipated as additional lighting is likely required for the modernized and expanded LPOE. Night sky impacts would be reduced using the measures discussed in Section 3.8.2.4.

Operation of the three-phase power line would not be anticipated to have any impact on land use or visual resources.

3.8.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line. Therefore, no impacts to land use would occur. Current facilities and infrastructure at the existing LPOE would remain, and long-term, minor, local, and regional adverse impacts to visual resources would be expected as existing structures would continue to deteriorate and degrade the aesthetic quality of the area surrounding the LPOE.

3.8.2.4 Impact Reduction Measures

Measures to reduce construction impacts on land use-related concerns, such as increased fugitive dust, noise levels, and traffic volumes are discussed in Section 3.5, Air Quality and Climate Change; Section 3.6, Noise; and Section 3.7, Traffic and Transportation, respectively.

To ensure minimal conflicts with land use, GSA would continue coordination efforts during the planning process with the Grand Portage Band, MnDOT, Arrowhead, and other relevant stakeholders to ensure appropriate land use requirements are followed. Coordination would also be conducted during the design process regarding the incorporation of exterior design elements to reflect the unique character of the area, local culture, as well as emphasis on pedestrian circulation and amenities, such as landscaped plazas and walkways, to the extent practicable and consistent with GSA design standards.

GSA and the construction contractor would strive to keep the boat launch area open during construction. If the access point needs to be closed on a temporary basis, the contractor would provide a temporary access

point near the existing location. Construction activities in this location would be scheduled for night work to allow for daytime access. The GSA team would work with the Grand Portage Band and the Tribal Council representatives to coordinate any temporary closures if needed.

GSA would implement the following measures to minimize impacts to visual resources:

- Consult with the Grand Portage Band regarding tribal requirements for new building construction.
- The design for the LPOE would address the Grand Portage physical and cultural landscapes; history of the area, commerce, and significance of the Port; and local tribal community values and culture.
- Integrate its programs of design/architecture and construction excellence into the new facility in order to optimize building performance and aesthetics, including adherence to P100 Standards, which establish design criteria and standards for new government buildings, and U.S. LPOE Design Standards, which establish design criteria for LPOEs.
- Design exterior lighting to meet physical security requirements but controlled to minimize light trespass (e.g., direct light downward and minimize glare). Fixtures for any security fencing would be of a similar style.
- Incorporate landscaping and screening (trees and vegetation) into the exterior design to provide aesthetic benefits to the surrounding community.

To minimize night sky impacts, GSA would adhere to the International Dark Sky Model Lighting Ordinance and Illuminating Engineering Society recommendations that outline the recommended BUG ratings for the specific lighting zone within the ROI. Specifically, GSA would require that exterior luminaires be full cutoff and utilize G2, U0 ratings as specified by the Illuminating Engineering Society, and be consistent with guidelines specified for those ratings. GSA would also consider warmer (i.e., cooler color temperature 3500K) and amber sources around the perimeter of the site, in order to address concerns with nighttime disturbances, including to wildlife. Transitions between areas of high illumination to low illumination areas on the site would be considered in gradual stages. Large contrasts in transition between high to low lighting levels on the site would be avoided with the ability to bi-level dim certain zones throughout the night.

Current lighting design within the 100 percent PDS is consistent with NPS sustainable lighting principles, which are as follows:

- Ensure the lighting is necessary;
- Light only where and when needed;
- Use recessed and fully shielded fixtures;
- Use the minimum light level necessary;
- Use light-emitting diode (commonly known to as LEDs) in warm colors; and
- Minimize nighttime construction and lighting.

3.9 INFRASTRUCTURE AND UTILITIES

This section describes the baseline conditions for infrastructure and utility resources and assesses the potential impacts that could result from implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Infrastructure refers to the roadway network and facilities at the Grand Portage LPOE; utilities refer to the water and sewer, electricity, heating and cooling systems, stormwater systems, and communication systems that serve the facility.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding infrastructure and utilities:

- The 2019 Feasibility Study provides an overview of the project and a description of the existing conditions within the ROI (GSA 2019a).
- The 100 percent PDS provides information on existing utilities at the LPOE and the proposed utility upgrades and additions (GSA 2024).
- The Phase I ESA conducted in July 2023 provides information regarding existing utilities at the LPOE (PHE 2023b).
- Internal utility consumption data of the existing LPOE provided by GSA.

3.9.1 Affected Environment

3.9.1.1 *Region of Influence*

The ROI includes infrastructure and utilities utilized by the Grand Portage LPOE or located within the 10.4-acre area potentially disturbed during construction and operation of the Proposed Action. The ROI also includes the existing utility ROW along the entire length of the proposed three-phase power line route.

3.9.1.2 *Regulatory Setting*

Section 438 of the EISA. Section 438 of the EISA specifies that federal agencies are required to reduce stormwater runoff from federal development and redevelopment projects to protect water resources. Federal agencies can comply using a variety of stormwater management practices often referred to as "green infrastructure" or "low impact development" practices, including reducing impervious surfaces and using vegetative practices, porous pavements, cisterns, and green roofs.

GSA Facilities Standards. GSA's P100 Standards outline criteria for the following: general requirements; urban development and landscape design; architecture and interior design; structural and civil engineering; mechanical engineering; electrical engineering; fire protection; and design standards for specialty spaces. GSA has adopted the technical requirements of the International Codes published by the International Code Council. GSA recognizes that the national building codes are typically the foundation of state and local building codes, and that state and local codes represent important regional interests and conditions. In keeping with federal law (including the Public Buildings Amendments of 1988 and the Federal Urban Land Use Act of 1949), it is GSA's policy to comply with state and local building codes to the maximum extent practicable.

LEED Certification. LEED certification is a third-party green building certification program and the globally recognized standard for the design, construction, and operation of high-performance green buildings and neighborhoods. To achieve LEED certification, a project must earn points by adhering to any combination of credits that address carbon, energy, water, waste, transportation, materials, health, and indoor environmental quality. The number of points a project earns determines what level of certification it would receive. LEED Gold certification requires at least 60 points in the *LEED Green Building Rating System for New Construction & Major Renovations, Version 4* (U.S. Green Building Council 2023).

The Indian Sanitation Facilities Act (Public Law 86-121). Public Law 86-121 gives the Indian Health Service (IHS) the authority to construct, improve, extend, or otherwise provide and maintain essential sanitation facilities for tribal homes, communities, and lands. Septic systems constructed on tribal lands must comply with specifications required by the IHS.

Criteria for the Sanitation Facilities Construction Program. The IHS outlines the policies, procedures, and legal requirements for the Sanitation Facilities Construction Program, which is responsible for providing tribal communities with essential water supply, sewage disposal, and solid waste disposal facilities. Compliance with any applicable local standards and the recognized industry or national standards is required. Plans and specifications for all community-type facilities shall be prepared under the direction of, reviewed by, and stamped and signed by a registered professional engineer.

Minnesota Rules, Chapter 4725 (Wells and Borings). Minnesota Rules, Chapter 4725 specifies that wells must be constructed, repaired, modified, or abandoned by a licensed well contractor. The statute also establishes setback requirements to wells from gas pipes, electric lines, buildings, and other items. Geothermal well construction on the Grand Portage Reservation is not subject to Minnesota Rules, Chapter 4725 as MDH does not have jurisdiction within the Reservation; however, the Grand Portage Band does adhere to these regulations voluntarily.

CEQ Standards. CEQ's *Guiding Principles for Sustainable Federal Buildings* provides guidance for federal building construction to ensure federal buildings (CEQ 2020):

- Employ integrated design principles;
- Optimize energy performance;
- Protect and conserve water;
- Enhance the indoor environment;
- Reduce the environmental impact of materials; and
- Assess and consider building resilience.

3.9.1.3 Existing Conditions

Facilities

The Grand Portage LPOE consists of five existing buildings that include the Main Building with primary and secondary inspection canopies, the Secondary Inspection Garage, the Commercial Inspection Building, the GSA Garage, and the public restroom building. The Main Building was originally constructed in 1961 as a one-story building. It is currently a two-story structure with a wood-framed exterior that supports a single-ply membrane roof (GSA 2019a). As described in Chapter 1, Purpose and Need, based on the 2019 Feasibility Study conducted for the Grand Portage LPOE, the existing LPOE facilities do not currently meet GSA's minimum requirements for LPOEs and do not allow for expeditious and safe inspection of the traveling public (GSA 2019a).

Because the Main Building was constructed in 1961, it is likely that hazardous construction materials such as asbestos-containing materials (ACMs) and lead-based paint (LBP) are present. Further information on ACMs and LBP is provided in Section 3.12, Human Health and Safety.

Roadways

The primary roadway that serves the ROI is Highway 61, which passes directly through the LPOE. Additional details on the major thoroughfares serving the ROI are discussed in Section 3.7, Traffic and Transportation. The existing LPOE includes three inbound primary inspection lanes: two for non-commercial vehicles and one for buses and commercial traffic. The current road design serving the LPOE

is inefficient, as it lacks outbound inspection capabilities. Aerial imagery indicates that large cracks are visible in the pavement (GSA 2019a).

The Pigeon River International Bridge is a steel stringer structure with two lanes for inbound/outbound vehicle traffic that crosses the U.S.-Canada border. The bridge connects to Highway 61 on both sides of the border. Generally, traffic is low at the Grand Portage LPOE; however, facility deficiencies can cause congestion and long wait times during periods of high traffic volume, especially when the transport of wind turbine components from Canada requires the temporary shutdown of some lanes in order for the turbines to pass.

Water and Sewer

Water is supplied by two existing onsite wells (Wells No. 2 and 3) owned and operated by GSA. A third well, Well No. 1, was the original potable water well before it failed in 2020 and was capped (GSA 2024). Recent water samples from Well No. 2 indicate arsenic at levels exceeding allowable USEPA limits for potable water. Additionally, the water samples indicated bacterial contamination. This system is currently untreated, and GSA would prefer not to use this well water due to health concerns related to the elevated arsenic levels and total coliform present in the water. Well No. 3 was drilled in 2020, and the flow rate was found to be sufficient for the LPOE's current demand. However, water sample testing from this well indicated high levels of chloride. To address this issue, a point-of-entry RO system with a capacity of 4,400 gallons per day (gpd) was previously installed but is no longer in service due to the volume of untreated wastewater discharge, up to 10,266 gallons of effluent per day, and concentration of chloride in the wastewater being discharged to the Pigeon River without treatment or an NPDES permit. Currently, water from Well No. 3 is utilized for non-potable uses and potable water is trucked to the LPOE. Upgrades to the water, septic, and sewage treatment systems included in the Proposed Action (see Section 2.2) would increase capacity to meet LPOE needs.

Plumbing repairs occurred in 2018, and a well repair project was conducted in 2019 to upgrade Well No. 2. In the Main Building and the public restroom building, plumbing fixtures have exceeded their useful life and do not comply with the current water reduction standards (GSA 2024).

The onsite sanitary sewer collection system consists of a lift station, several manholes, a SSTS, and a leach field. The system flows from the Main Building and the public restroom building east to a location south of the outbound lanes of Highway 61 (GSA 2019a). The SSTS serves the existing LPOE and was installed in November 2019. The new system is designated to have a capacity of 1,942 gpd and consists of sewer pipes, two 3,000-gallon septic tanks, a dosing tank, duplex effluent pumps, a force-main, cleanouts, and a soil treatment and dispersal mound.

Electrical and Heating

Electrical service to the Grand Portage LPOE is provided by Arrowhead Electric Cooperative, Inc. from one-phase power lines running along Highway 61 from a substation near Mineral Center. The main power feed runs underground to a 167-kilovolt ampere (kVA) 14,400V primary, 120/240V secondary pad-mounted transformer located northeast of the Commercial Inspection Building. Existing electric service lines run underground to each of the facilities. Electrical service requires approximately 688kW (GSA 2024).

The Main Building is heated by baseboard and hydronic unit heaters that are fed by two boilers. A 10,000-gallon fuel oil UST is located to the southeast of the Main Building and serves this building's heating system. The UST was installed in 2015, replacing a previous tank that was installed in 1965. Heating in the Secondary Inspection Garage is provided by overhead gas fired unit heaters and a makeup air unit. The Commercial Inspection Building is heated by two boilers and hydronic unit heaters. Two 1,000-gallon above-ground propane tanks, one located on the north side of the Commercial Inspection Building and the other between the public restroom building and the Secondary Inspection Garage, serve the Commercial

Inspection Building's heating system. The public restroom utilizes baseboard heaters and a unit heater. Natural gas is not available in the vicinity of the Grand Portage LPOE (GSA 2024).

Stormwater Drainage

The existing Grand Portage LPOE is situated on a ridge approximately 30 feet above the base flow elevation of the Pigeon River. The Highway 61 ridge slopes gradually west to east towards the Pigeon River International Bridge, at approximately a 0.4 percent slope. Stormwater flows north and south from the LPOE, following the much steeper slopes down to the Pigeon River. The only existing stormwater feature onsite is a stormwater culvert between the Main Building and the Pigeon River International Bridge (GSA 2019a).

Communications Systems

Lumen Technologies, Inc., (formerly Century Link) provides telecommunications services to the existing Grand Portage LPOE via underground cables routed to each building (GSA 2024).

Miscellaneous Utilities

A 1,000-gallon No. 2 fuel oil aboveground storage tank (AST) and a 50-gallon gasoline AST are located on the east side of the GSA Garage. Approximately 8 to 10 feet of double-walled underground piping is part of the connection from the 1,000-gallon AST to the boiler room. An emergency generator with a 1,125-gallon belly tank was installed east of the GSA Garage in 2023 (PHE 2023b).

3.9.2 Environmental Consequences

3.9.2.1 Methodology

To evaluate the impacts on infrastructure and utilities, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Alteration of intended use and/or placement of facilities;
- Disruption to utility operations during construction activities; or
- An increase or decrease in demand for utility services during construction or operations.

A major adverse impact to infrastructure and utilities would occur if the Proposed Action would result in:

- Substantial damage to nearby facilities;
- Long-term disruption of utility operations;
- Negative effect on local and regional utility supplier's ability to meet customer demands; or
- A need for substantial public utility system updates.

3.9.2.2 Proposed Action

Construction

Under the Proposed Action, modernization and expansion of the Grand Portage LPOE would result in direct, short-term, minor, adverse, site-specific impacts on infrastructure during construction to meet the LPOE's design and operation needs. The proposed LPOE design layout would have new, improved roadway and facility layouts. Roadway widening would be required for Highway 61 at the modernized and expanded LPOE's inbound and outbound access point due to the addition of new inspection lanes. This would result in direct, short-term, minor, adverse, local impacts on Highway 61 within the limits of construction and would require coordination with MnDOT. The modernized and expanded LPOE would be constructed to meet GSA and CBP standards, and construction would occur in a phased approach while the existing LPOE continues to operate. As different phases of construction are completed, existing LPOE

facilities would be demolished, which could adversely affect facility functioning; however, the same phased approach would also minimize overall adverse impacts on service capabilities, vehicle and pedestrian wait times, and traffic compared to intermittent closure/disruption of the LPOE operations. The Pigeon River International Bridge is not located within the proposed limits of construction and would not be affected by construction of the Proposed Action.

Construction at the Grand Portage LPOE would have direct, short-term, minor, adverse, local impacts on GSA-owned utilities from increasing the demand on services. Onsite water demands may include use from construction workers for restroom and potable water purposes. In addition, water usage would be required for construction-related activities such as dust suppression, soil compaction, concrete work, or equipment washing, resulting in an increased demand on GSA-owned water utilities. There would also be an increase in demand for wastewater services from the hauling of portable toilets.

New utilities built during early construction phases would serve new facilities, ensuring that these structures are able to become operational once their construction is complete. Temporary utilities may be required to ensure facilities are able to operate during the entire construction process. Newly constructed transformers and generators would provide temporary overhead power to the existing Main Building, public restroom building, and Secondary Inspection Garage while they remain operating. Existing utilities adjacent to and associated with the existing structures would be demolished during different phases of construction once new utilities have been put in place. The existing 200kW generator serving the existing Main Building would be salvaged and returned to GSA for future reuse (GSA 2024). Proposed new utilities would adhere to conditions outlined in the Grand Portage Band Land Use Ordinance that specify setback requirements. Notably, onsite sewage treatment systems would be set back at least 100 feet from any waterbody or watercourse.

In general, the addition and removal of utilities, including connection of any renewable energy utilities built as part of the Proposed Action, would require temporary or intermittent shut offs. Impacts to service in other areas are not anticipated. Coordination with Arrowhead Electric Cooperative, Inc. would be required for additional electrical service and any possible relocation of existing lines located on the existing GSA-owned properties (GSA 2019a), as well as for construction of the new three-phase power line. Temporary communications and security cabling would be required during the construction phases of the project to maintain the existing and new telecommunications and security systems. Coordination with the local communications service providers would be required to relocate and maintain the existing underground communications cables on the site (GSA 2024). Geothermal wells may be installed for the geothermal system and would be constructed to be consistent with Minnesota Rules, Chapter 4725, which specify setbacks for wells from other nearby utilities or infrastructure. Construction of any new septic system components would be conducted in accordance with IHS requirements as applicable, in coordination with the Grand Portage Band Tribal Council.

Operations

The Proposed Action would result in a direct, long-term, major, beneficial, site-specific impact on infrastructure at the Grand Portage LPOE. Newly constructed facilities would provide new infrastructure and utilities built and maintained to GSA standards that would support CBP's updated operational needs. The new facilities and updated layout, improved inspection lanes, and roadway designs would improve the efficiency of the processing of pedestrians, COVs, and POVs and relieve traffic congestion during periods of high traffic volumes. The creation of additional, well-marked parking would provide improved conditions for CBP personnel as well as enhancing traveler comfort.

There would be direct, long-term, negligible, local impacts to water, wastewater, electricity, and telecommunication utilities from the operation of the modernized and expanded LPOE resulting from the increase in square footage of the buildings. The increased demand on most of these utility services from larger facilities would be offset by a more-efficient, sustainable facility design. New buildings would be designed to comply with current building codes and P100 Standards and would have LEED Gold certification at a minimum. The extent of impacts on utilities would depend on overall usage and extent of

efficiency improvements, but operations of the Grand Portage LPOE are not anticipated to noticeably affect the ability of utility providers or onsite systems to provide service.

Onsite utilities (i.e., potable water, wastewater, stormwater, heating, electrical) would be upgraded or replaced with newer, more modernized systems, resulting in direct, long-term, major, beneficial, site-specific impacts on utilities. This would include the construction of approximately three stormwater basins and replacement of the existing stormwater culvert that discharges to the Pigeon River, construction of a stilling basin at the culvert outlet to control erosion, and construction of upstream stormwater filtration/detention basins to trap pollutants and reduce peak discharge rates. GSA would develop a new water source (e.g., new well) or treatment system in compliance with CWA and Safe Drinking Water Act requirements and in coordination with the Grand Portage Band. This would include necessary service lines and connections. A 4-inch sanitary sewer line would serve each building and extend 5 feet out before connecting to the septic system. In addition, a new septic mound would be installed, and a toilet/urinal composting system may be installed in the Commercial Inspection Building. A 1500kVA utility transformer with a 3-phase 480V secondary and two 600kW generators would be installed to meet electricity demands and provide backup power for the entire site. Furthermore, a 16,000-gallon fuel oil UST would be installed to serve as backup fuel sources for building heating and emergency generator systems. In addition, the new three-phase power line would address insufficient electrical capacity issues associated with the current one-phase power line, which does not provide necessary power requirements to the LPOE. New construction would provide the infrastructure needed to meet power requirements for the proposed modernized and expanded LPOE and its facilities.

Additionally, GSA is considering the use of renewable energy technology, including solar technology and geothermal systems, which would further reduce the LPOE's energy demand. Solar panels or solar hot water collectors would require some water use for the cleaning of the panels, but the volume is expected to be small. Generally, solar power technologies use a modest amount of water for cleaning solar collection and reflection surfaces (approximately 26 gallons per megawatt hour) (Fort Carson and U.S. Army Environmental Command 2012).

3.9.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain unchanged. Therefore, no construction, renovation, or demolition activities would occur. Additionally, the LPOE would not benefit from updated facilities and infrastructure with LEED certification and other sustainable standards or from installation of renewable energy sources.

3.9.2.4 Impact Reduction Measures

Impacts on infrastructure and utilities would be reduced through the following:

- Adherence to GSA P100 Standards (GSA 2021) including:
 - New parking and road networks must use low-embodied carbon concrete and environmentally preferable asphalt.
- Coordinating with utility providers in advance of such activities to determine the best course of action to avoid or minimize impacts, either by implementing measures to protect utility lines or by arranging for their temporary or permanent relocation.

The modernized and expanded Grand Portage LPOE would utilize energy- and water-efficient technology, which would further reduce demands on utility providers and systems. GSA would also seek a minimum of a LEED Gold certification for construction of new facilities, and steps to achieve this would likely include measures that would reduce demand for energy and water.

3.10 SOCIOECONOMICS

This section describes the baseline conditions for the social and economic environment within the ROI and assesses the potential for socioeconomic impacts from implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Socioeconomics encompasses a range of aspects of the human environment. Socioeconomics analysis looks at conditions such as population, housing, employment, and public services and informs the relationship between these factors. Socioeconomics analysis uses historical and current data trends and takes into consideration future projections and plans for the area.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding socioeconomic conditions:

- Federal agencies such as the U.S. Census Bureau, Bureau of Labor Statistics, and Bureau of Economic Analysis provide data regarding population, housing, labor force participation, unemployment, and personal income.
- State agencies such as the Minnesota State Demographic Center and Minnesota Department of Employment and Economic Development provide projected population growth and employment data.
- Local agencies such as the Cook County Housing Redevelopment Authority provide information regarding housing trends in the area.

3.10.1 Affected Environment

3.10.1.1 Region of Influence

The ROI for socioeconomic analysis focuses on the county (i.e., Cook County) in which the existing Grand Portage LPOE and the proposed limits of construction are located. Socioeconomic impacts would be felt most by individuals, residents, and workers in Cook County, particularly on the Grand Portage Reservation.

3.10.1.2 Existing Conditions

Population

Table 3.10-1 shows population data from 2000 through 2022, and future population estimates for 2030 through 2050 for the Grand Portage Reservation, Cook County, and the State of Minnesota. The population in all areas experienced slight increases from 2000 to 2022.

Table 3.10-1. Population Growth for Grand Portage Reservation, Cook County, and Minnesota

Metric	Grand Portage Reservation	Cook County	Minnesota
Historical and Current Population			
2000	538	5,168	4,919,479
2010	565	5,176	5,303,925
2022	616	5,611	5,695,292
Average Annual Growth Rate (2010-2022)	0.75%	0.70%	0.61%
Average Annual Growth Rate (2000-2022)	0.66%	0.39%	0.72%
Projected Population^a			
2030	N/A ^b	5,633	6,034,892
2040	N/A ^b	5,678	6,288,522

Table 3.10-1. Population Growth for Grand Portage Reservation, Cook County, and Minnesota

Metric	Grand Portage Reservation	Cook County	Minnesota
2050	N/A ^b	5,582	6,462,700
Average Annual Growth Rate (2030-2050)	N/A ^b	-0.05%	0.35%

Source: USCB 2000; USCB 2010a; USCB 2022a; Minnesota State Demographic Center 2021

N/A = not applicable

^a Population projections are from the Minnesota State Demographic Center and are based on 2017 Census projections that are not entirely consistent with the 2021 American Community Survey Results.

^b Population projections are not available for the Grand Portage Reservation because the Minnesota State Demographic Center only prepares projections for the state and designated regions such as by county.

Cook County was the 11th fastest growing county in the state from 2010 to 2022 and was the only county in the northeast region to see population growth that was above the state average (Minnesota Department of Employment and Economic Development 2023a). From 2010 to 2022, the county's population increased at an average rate of approximately 0.7 percent per year, which is slightly higher than Minnesota's annual population growth rate of approximately 0.6 percent per year during the same period. The population of the Grand Portage Reservation also increased at an average rate of approximately 0.8 percent per year between 2010 and 2022.

From 2030 to 2050, Cook County's population is projected to increase for two decades before beginning to decline by 2050, resulting in an overall population decrease at a rate of 0.05 percent per year. The State of Minnesota's population growth is expected to slow to a rate of approximately 0.4 percent per year. Cook County has experienced a negative natural increase, experiencing more deaths than births from 2020 to 2022, which can likely be attributed to its aging population. The number of people aged 75 years and older in Cook County is expected to increase over the next decade, especially as the Baby Boomer generation increases in age. Cook County's population already has an older median age than the state and a larger percentage of people aged 65 years and older; however, Cook County experienced net in-migration from 2020 to 2022, both domestically and internationally, with more people moving in than moving out. Furthermore, Cook County's foreign-born population increased at a faster rate than the State of Minnesota's from 2010 to 2021 (Minnesota Department of Employment and Economic Development 2023b).

Housing

A housing unit refers to a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters or, if vacant, intended to be occupied as separate living quarters. The total housing unit inventory includes both occupied and vacant housing units. The rental vacancy rate is the percentage of available rental inventory that is vacant (USCB 2020a). The total housing units, occupied housing units, rental vacancy rates, and homeowner vacancy rates for the Grand Portage Reservation, Cook County, and Minnesota are shown in Table 3.10-2.

Table 3.10-2. Housing Characteristics for Grand Portage Reservation, Cook County, and Minnesota, 2022

Location	Total Housing Units	Occupied Housing Units	Rental Vacancy Rate (%) ^a	Homeowner Vacancy Rate (%)
Grand Portage Reservation	388	297	10.9	0.0
Cook County	5,982	2,672	7.8	0.6
Minnesota	2,493,956	2,256,126	4.8	0.6

Source: USCB 2022b

^a The rental vacancy rate is computed by dividing the number of vacant units for rent by the sum of the number of renter-occupied units, the number of vacant units for rent, and the number of rented not yet occupied units, and then multiplying by 100 (USCB 2020a).

As shown in Table 3.10-2, rental vacancy rates on the Grand Portage Reservation and in Cook County are high compared to the State of Minnesota. However, homeowner vacancies on the Grand Portage Reservation are low, with virtually no vacant units available to buy. Historically, Cook County's tourism industry has required more seasonal housing than year-round for employees. However, tourism during the spring, fall, and winter has increased in Cook County, resulting in a greater demand for year-round housing. This trend has been increasing since the COVID-19 pandemic, as tourism in the area remained strong and more people not from Cook County sought to purchase homes in the area. These pressures on supply created a historically low inventory of housing units, resulting in significant increases in the median selling price by more than 80 percent from the spring of 2020 to the spring of 2022 (Cook County Housing Redevelopment Authority 2022).

This trend, in addition to limited rental options, has resulted in employers experiencing difficulty attracting and keeping employees, as they are unable to find appropriate housing in the area. These housing trends are similar to the ones occurring on a national level, with lower interest rates in 2020 and 2021 increasing demand for housing at a time when supply-chain issues created shortages and higher construction costs. Homebuilders have stated that they are already booked for work years in advance. Furthermore, Cook County faces additional unique challenges, as the area's abundant natural areas and isolation make it attractive to retirees and hybrid workers, further amplifying housing demand. This same isolation makes it even more difficult to attract construction workers and contractors to the area. Nearly all of the new for-sale home development currently taking place is occurring on lots purchased by homeowners and built by custom builders. Because of the construction and land costs, it is difficult to build new units that can be sold at prices that are affordable to the majority of interested buyers (LOCi Consulting 2022).

A Comprehensive Housing Needs Analysis for Cook County was released in 2022, which estimates a housing demand ranging from 210 to 230 units of for-sale housing, 180 to 210 units of rental housing, 70 to 100 units of market rate senior housing, and 10 to 15 units of affordable senior housing between 2021 and 2026. The Housing Needs Analysis recommends focusing on addressing the housing needs of the workforce by developing additional rental housing as opposed to for-sale housing due to the difficulty of supplying the latter at affordable prices that are feasible to develop (LOCi Consulting 2022).

Within a 50-mile radius of the LPOE, which includes the proposed three-phase power line, there are approximately 52 hotels. Fifteen of these hotels are in the Grand Portage and Grand Marais area in Minnesota, while 37 of them are in the Thunder Bay and Kakabeka Falls area in Canada. Combined, these hotels have approximately 2,784 rooms available for rent. The nearest hotel in Minnesota is the Grand Portage Lodge & Casino, which is located approximately 7 miles away and offers 95 rooms. The nearest hotel in Canada is the Best Western Plus NorWester Hotel & Conference Centre, which is located approximately 30 miles away and offers 89 rooms.

Labor Force

The size of a county's civilian labor force is measured as the sum of those currently employed and unemployed. People are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work (BLS 2023a). As shown in Table 3.10-3, from 2000 to 2022 Cook County's labor force declined at an average of 0.4 percent per year, while the state's labor force grew at an average of 0.5 percent per year. There was a slightly greater decline in Cook County's labor force between 2010 and 2022 at a rate of about 0.6 percent per year, while the state's labor force grew at a slightly slower rate of 0.4 percent in the same time period. The Bureau of Labor Statistics does not provide data specific to tribal lands; however, the U.S. Census Bureau tracks existing labor force data, which has been included in Table 3.10-3 for comparison purposes. Similar to the rest of the U.S., economic growth in Minnesota slowed as a result of the COVID-19 pandemic recession.

Table 3.10-3. Civilian Labor Force Trends for Cook County and Minnesota

Metric	Grand Portage Reservation	Cook County	Minnesota
Historical and Current Labor Force			
2000	N/A ^b	3,122	2,799,111
2010	227	3,059	2,940,696
2022	355	2,850	3,077,500
Average Annual Growth Rate (2010-2022)	4.7%	-0.6%	0.4%
Average Annual Growth Rate (2000-2022)	N/A ^b	-0.4%	0.5%
Projected Labor Force^a			
2030	N/A ^b	2,652	3,132,697
Average Annual Growth Rate (2022-2030)	N/A ^b	-0.9%	0.2%

Source: BLS 2000; BLS 2010; BLS 2022; BLS 2023a; Minnesota State Demographic Center 2017a, b; USCB 2010b; USCB 2022c
 N/A = not applicable

^a Projected labor force estimates are based on Census 2017 population projections using the Census 2010 results. The county-level analysis is an extrapolation of current labor force participation rates measured with the American Community Survey 2011-2015 dataset.

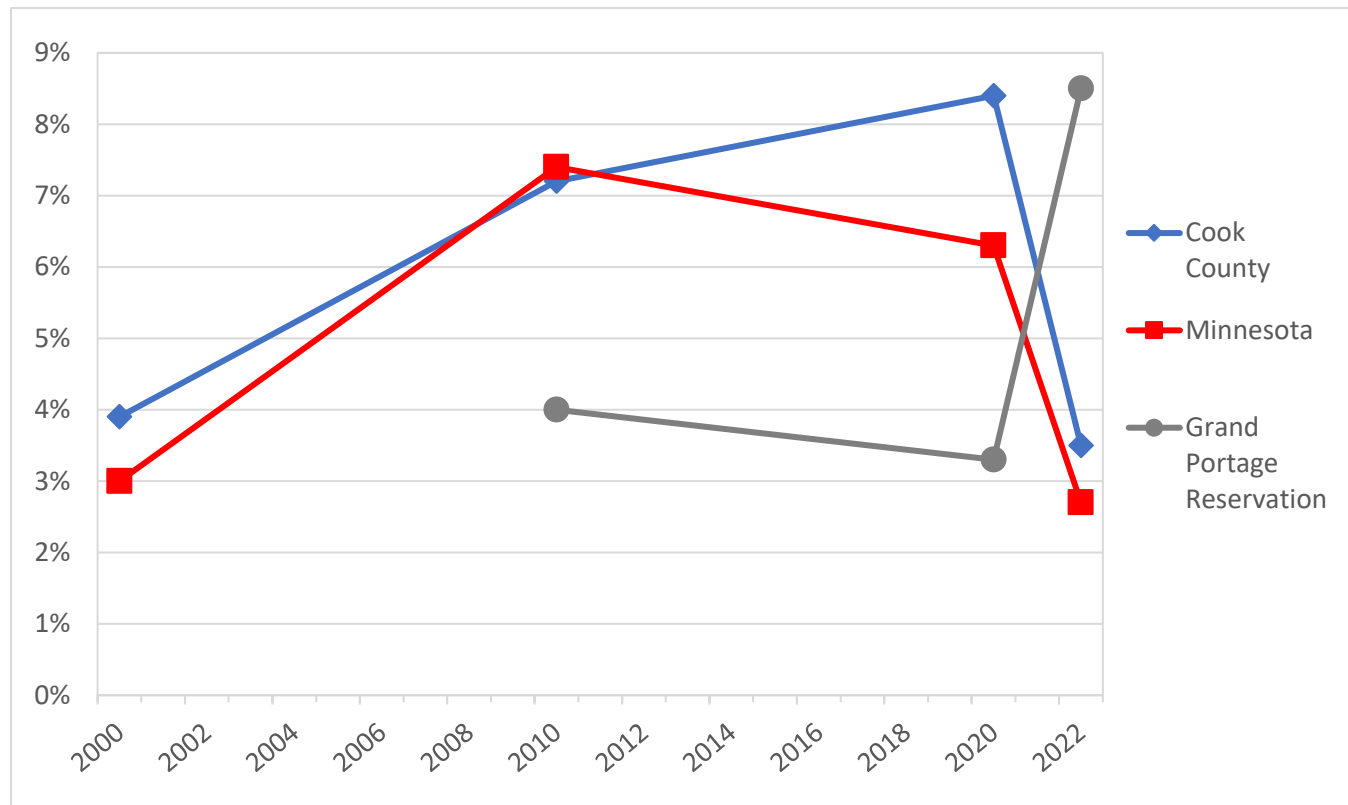
^b Labor force data for the Grand Portage Reservation is derived from the U.S. Census Bureau and is not available prior to 2010. Furthermore, the U.S. Census Bureau does not provide estimates for a projected labor force, therefore, this data is not available for the Grand Portage Reservation.

Unemployment

The unemployment rate is calculated based on the number of unemployed persons divided by the labor force. Figure 3.10-1 shows the annual unemployment rates for Cook County and Minnesota in 2000, 2010, 2020, and 2022. Throughout this time, unemployment rates were typically higher in Cook County than in the State of Minnesota, the exception to this being in 2010 when Minnesota’s was slightly higher. The sharp increase between 2000 and 2010 can be attributed to the 2008 economic crisis, which was part of the global financial downturn. Cook County had a pre-pandemic unemployment rate of 4.6 percent in 2019, which rose to 8.5 percent in 2020 during the pandemic (Minnesota Department of Employment and Economic Development 2023b). As of 2022, unemployment rates decreased after the pandemic recession, with Cook County experiencing among its lowest unemployment rates in the past two decades (BLS 2022).

Cook County’s historically low unemployment rate may in part be attributed to a shrinking labor force, as there are less civilians to account for in calculating the rate. In conjunction with a smaller labor force and lower unemployed percentage of Cook County’s population, there have also been fewer unemployed workers actively seeking employment (Minnesota Department of Employment and Economic Development 2023b).

As of 2022, the Grand Portage Reservation has an unemployment rate of 8.2 percent, which is one of the area’s highest rates since 2010. The unemployment rate has been increasing since 2019, when it was 2.5 percent. The labor force participation rate (as measured by the U.S. Census Bureau) has also decreased slightly during this time as shown in Table 3.10-3.



Source: BLS 2000; BLS 2010; BLS 2020; BLS 2022; BLS 2023b; USCB 2010b^a; USCB 2020b; USCB 2022c
^a Unemployment data for the Grand Portage Reservation prior to 2010 is unavailable.

Figure 3.10-1. Unemployment Rates in Cook County and Minnesota, 2000 – 2022

Employment by Industry

The largest industries in Cook County as of 2022 were leisure and hospitality; local government; trade, transportation, and utilities; and education and health services. These four industries accounted for nearly 80 percent of total employment in Cook County. Additionally, the construction industry employs 121 workers across 53 different establishments, while the federal government employs 134 workers across 12 different establishments (BLS 2022).

Earnings

A primary measure used to describe earnings in the ROI includes per capita personal income (PCPI). Personal income is the income received by all persons from all sources, or the sum of net earnings by a place of residence, property income, and personal current transfer receipts. This includes earnings from work received during the period, interest and dividends received, and government transfer payments, such as social security checks. It is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars. PCPI is the personal income for county residents divided by the county’s total population (BEA 2023).

Table 3.10-4 contains annual PCPI in 2000, 2010, and 2022 for Cook County and Minnesota. All dollar estimates are in current dollars (not adjusted for inflation). Since 2000, the State of Minnesota has consistently had a higher PCPI than Cook County by about 5 to 17 percent. Cook County and Minnesota’s respective PCPI more than doubled from 2000 to 2022, with Minnesota’s growing about 6 percent faster than Cook County’s. The Grand Portage Reservation is not specifically included in the comparison of earnings statistics with Cook County and Minnesota, as the Bureau of Economic Analysis Labor Statistics does not distinguish tribal land data from county or state datasets.

Table 3.10-4. Annual Per Capita Personal Income in Cook County and Minnesota (in dollars)

	Per Capita Personal Income			
	2000	2010	2022	Percent Change 2000 – 2022
Cook County	27,453	40,263	56,795	106.9
Minnesota	32,348	42,539	68,840	112.8

Source: BEA 2023

Local Economy of the Grand Portage Reservation

The Grand Portage Reservation is a rural area between northeast Minnesota abutting Lake Superior and shares a border with Canada. The Grand Portage Band is a sovereign Indian nation federally recognized by the U.S. government. Major businesses that support the Reservation include the Grand Portage Lodge & Casino, Hollow Rock Resort, the Grand Portage Marina, and the Grand Portage Trading Post. These businesses support tribal government operations, Reservation infrastructure, and community programs (Grand Portage Band of Lake Superior Chippewa 2023). The Grand Portage Development Corporation was established in 1971 to spur economic development on the Reservation. Their most successful operation is the Grand Portage Lodge & Casino that opened in 1975, which has provided a continuously increasing source of employment and income for the Tribe. The hotel is located on the shore of Lake Superior, off Highway 61 and has 95 rooms.

Local recreational opportunities within the Reservation, notably the Grand Portage State Park and the Grand Portage National Monument, draw tourists to the area.

Community Services

Recreational Resources

The Grand Portage Reservation has over 100 miles of hiking trails, a marina, campgrounds, and passenger ferries that are able to provide access to Isle Royale National Park, which located is 19 miles out from the bay on Lake Superior in Michigan. The recreational area closest to the Grand Portage LPOE is Grand Portage State Park, which borders the area to the north and south of the LPOE.

The Grand Portage Community Center, nearly 6 miles southwest of the LPOE, was built in 1994 and offers a wide variety of recreational activities, a swimming pool, a senior center, a teen center, a computer room, library, and powwow grounds (Minnesota Indian Affairs Council 2023).

Police, Fire, and Medical Services

The Grand Portage Police Department is located approximately 6 miles southwest of the LPOE and is the primary provider of law enforcement and police protection services in the area. The Cook County North Shore Hospital & Care Center Emergency Department is located approximately 36 miles southwest of the existing LPOE. Additionally, Grand Portage Health Services, a small medical clinic, is located approximately 6 miles southwest of the LPOE near the police and fire departments.

Fire protection and emergency services are provided by the Grand Portage Ambulance and Fire Department, located approximately 6 miles southwest of the LPOE.

Schools

Students on the Grand Portage Reservation can attend school at Oshki Ogimaag Charter School, located at the Grand Portage Community Center approximately 4.8 miles from the existing Grand Portage LPOE. The Grand Portage Daycare Center is located approximately 5.9 miles from the existing Grand Portage LPOE. The Grand Portage Head Start program, located on Blaze’s Road, is a comprehensive early childcare and education program dedicated to serving low-income families (Grand Portage Band of Lake Superior Chippewa 2023). Students from Grand Portage in middle and high school attend school in Grand Marias (Minnesota Indian Affairs Council 2023).

3.10.2 Environmental Consequences

3.10.2.1 Methodology

To evaluate the impacts on socioeconomic resources, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Alter the local economy;
- Change housing characteristics (types of units, occupancy, housing values, etc.) or residential development patterns;
- Alter population growth or demographic patterns;
- Displace populations, residents, or businesses to accommodate construction;
- Require an amount of public or private resources (time and/or money) that interferes with the performance of other local government functions or the viability of proposed projects; or
- Induce growth without adequate supporting community services (e.g., education, public health and safety).

A major adverse impact to socioeconomics would occur if the Proposed Action would result in:

- Substantial changes to the local economy without the capacity to absorb a decrease or increase;
- Substantial changes in housing characteristics or residential development patterns;
- A demand on suitable housing that exceeds availability;
- Changes to population growth or demographic patterns in ways that alter the overall character of communities;
- An amount of public or private resources (time and/or money) that substantially interferes with the performance of other local government functions or the viability of proposed projects; or
- Induced growth that exceeds the capacity of supporting community services, including:
 - Change in the number of users of community services that exceed existing capacity;
 - Change in the demand for emergency and public protection services that would increase response times based on existing personnel resources and equipment; or
 - Change in the funding needed to sustain services or to increase access to services.

3.10.2.2 Proposed Action

Construction

Direct, short-term, minor to moderate, adverse, local impacts to housing are anticipated from the Proposed Action during construction as a result of an influx of construction workers, which would temporarily increase demand for local housing. Peak demolition and construction activities are anticipated to occur during the months of April through October in the years of 2026 through 2029. Peak construction would require a potential maximum of 100 workers; non-peak construction would require approximately 50 workers. Due to the remoteness of the project location, GSA anticipates that most construction workers may need to relocate to be closer to the limits of construction or would, at a minimum, require temporary lodging. Temporary lodging in the region on the U.S. side of the border is limited and located away from the proposed limits of construction. Additional temporary lodging options are located across the border in Thunder Bay. The extent of impacts would depend on where construction workers currently live, if they require temporary housing, and if they chose to move families with them to the area for the multi-year

construction period. The availability of temporary housing could be a concern in this rural, isolated area. To minimize housing impacts, GSA would coordinate closely with the Grand Portage Band and other local governments as described in Section 3.10.2.4, including considering allowing construction contractors to house workers across the border in Canada.

Overall impacts on population locally and regionally would be direct, short-term, minor, and adverse during construction. Compared to the Reservation population, a temporary increase of up to 100 workers would represent an approximate 16 percent increase in population on the Reservation for 7 months per year between 2026 and 2029. As discussed above, given the scarcity of housing, it is expected that many of these workers would seek temporary lodging outside of the Reservation. Further, temporary relocation would be seasonal, and construction workers are not expected to relocate with their families due to the intermittent nature of peak construction, including during summer months. Compared to the county population, if construction workers relocate from outside of Cook County, a temporary increase of up to 100 workers would represent only 1.8 percent increase in population. Seasonal increases in population are common in the region due to weather and the nature of the area as a tourist destination during warmer months. Therefore, project construction is not expected to affect population growth or demographic patterns in ways that alter the overall character of the surrounding community; affect the ability of individuals on the Reservation or in Cook County living on a fixed income to pay rent; adversely impact Cook County's tax base; or adversely affect Cook County's ability to provide funding for social services, health services, or schools.

Increases in population could result in direct, short-term, negligible to minor, adverse, local and regional impacts on community services due to the temporary increase in residents in the area regionally resulting in increased demand for police, fire, and emergency medical services. The extent of the impact would depend on the distribution of where temporary workers are housed and the proximity to services. Impacts to schools are not expected as it is unlikely that construction workers would relocate with their families that have school age children, due to the seasonal nature of peak construction, including during summer months. Impacts on recreational resources are not anticipated from the Proposed Action.

As the Grand Portage LPOE would remain fully operational throughout construction, there are no anticipated impacts to CBP staff, commuting workers, or tourists traveling to the Grand Portage Reservation. However, it may be more difficult for tourists to find accommodations in the region while construction is underway, which could discourage some travel and result in direct, short-term, minor, adverse, local impacts on the economy. There would be a direct, short-term, minor, beneficial, local impact on unemployment and income on the Grand Portage Reservation and any surrounding communities where construction workers temporarily relocate. Because construction workers would be hired and/or would stay locally or regionally, most of their expenditures (e.g., rent, day-to-day spending) for the duration of their employment would remain in or flow back into the local economies.

Indirect, short-term, minor to moderate, beneficial, local and regional socioeconomic impacts would result from directly affected industries purchasing supplies and materials from other industries. Spending would likely occur within the local and regional economy on construction labor and materials. Materials and equipment would be purchased from local vendors when possible, including lumber used in construction. Indirect jobs would be created when the construction firm makes purchases from local vendors, and construction workers shop at local retail stores and establishments. Induced impacts would occur when employees of the directly and indirectly affected industries spend the wages they receive. The types of indirect and induced jobs that would be created during the construction phase would likely be relatively low-wage jobs, such as restaurant workers or convenience store clerks.

Operations

Operation of the modernized and expanded Grand Portage LPOE and three-phase power line would have no long-term impact to local population, housing, labor force, or community services. Following construction of the new facilities for the Grand Portage LPOE, CBP does not expect to add more full-time employees to the current staff of 25 workers.

Shorter wait times for tourists at the modernized and expanded LPOE during peak travel periods have the potential to result in a slight increase in tourism and in turn spending in the area. As a result, there could be direct and indirect, long-term, negligible to minor, beneficial, local and regional impacts on earnings and employment within the Reservation and throughout Cook County.

3.10.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current staffing at the existing LPOE would remain essentially unchanged. No new infrastructure construction would occur; therefore, there would be no impacts on existing population and housing, labor and income, the local economy, or public services within the Grand Portage Reservation.

3.10.2.4 Impact Reduction Measures

GSA would coordinate closely with the construction contractor and local governments both (the Grand Portage Band, Cook County, and potentially communities in Canada) to manage impacts related to a potential lack of sufficient temporary housing. This could include allowing construction workers to seek housing across the U.S.-Canada border in and around Thunder Bay, Ontario where housing options are more plentiful. GSA would consider developing a housing plan with the contractor, and the aforementioned governments, to identify a plan to provide for sufficient housing in the region, including managing potential impacts to the Grand Portage Reservation. If construction workforce-related housing needs could impact tourist accommodation availability, the noted housing plan may need to include measures to mitigate impacts to tourists and businesses that rely on tourism.

Measures described in Section 3.8, Land Use and Visual Resources, may also benefit socioeconomic conditions and community services.

3.11 CULTURAL RESOURCES

This section describes baseline conditions for cultural resources within the ROI, as defined below, and assesses historic and archaeological resources within the ROI that may affect, or be affected by, implementation of the Proposed Action or the No Action Alternative, as detailed in Chapter 2, Description of the Proposed Action and Alternatives. This EIS uses the following terms related to cultural resources:

- Historic properties are defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. This term also includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the NRHP criteria (listed in Section 3.11.1.2).
- Traditional cultural properties are a type of historic property eligible for the NRHP because of their association with cultural practices or beliefs of a living community that: (1) are rooted in that community's history or (2) are important in maintaining the continuing cultural identity of the community.
- Cultural resources include the remains and sites associated with human activities, such as prehistoric and ethno-historic Native American archaeological sites, historic archaeological sites, historic buildings, structures, objects, and elements or areas of the natural landscape. Cultural resources determined to be NRHP-eligible are historic properties.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding cultural resources:

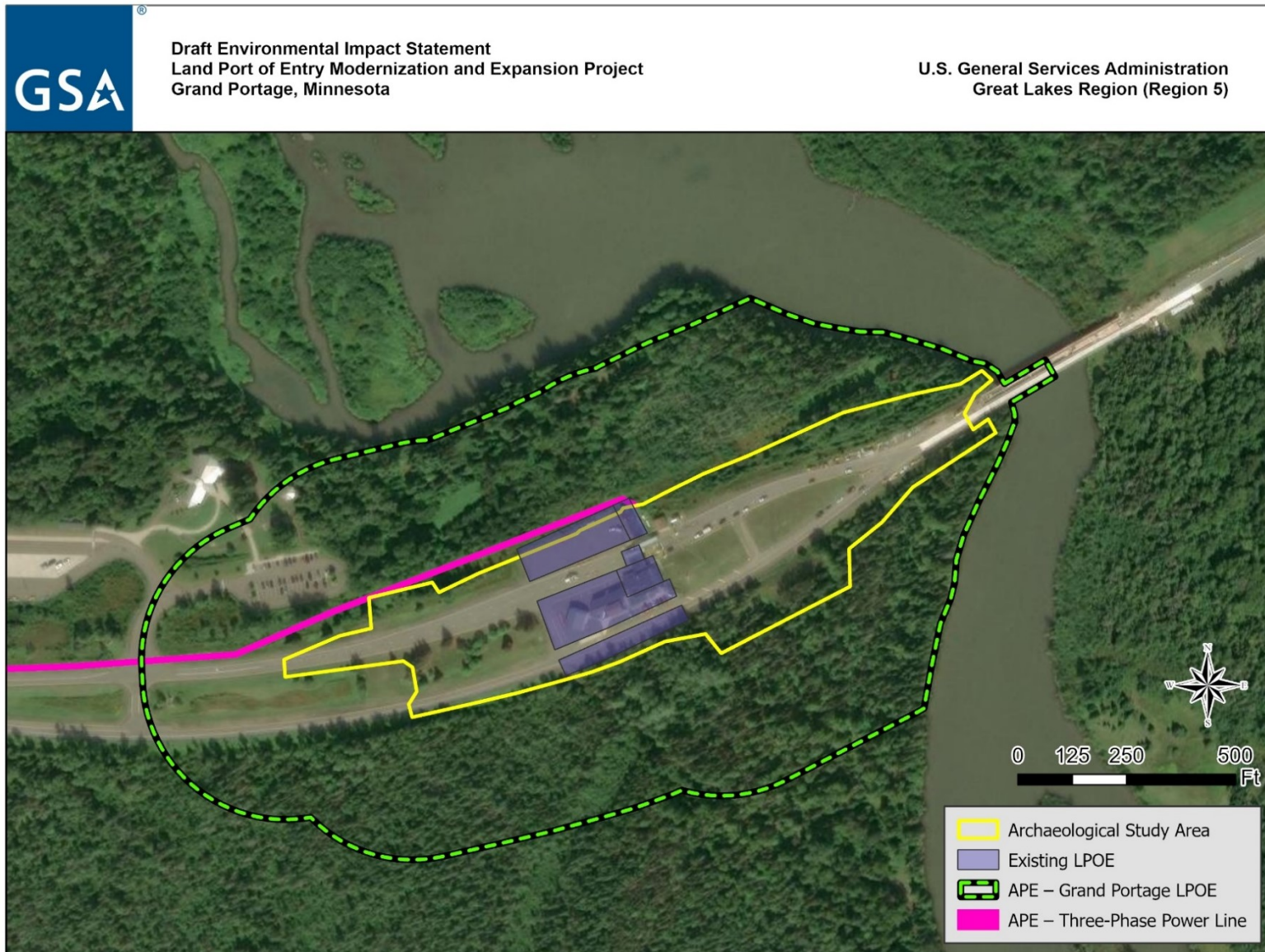
- The 2019 Feasibility Study Section 2.4 provides a description of cultural resources near the existing Grand Portage LPOE as well as previous cultural resource investigations (GSA 2019a).
- *An Archaeological Literature Search for the Grand Portage Land Port of Entry Modernization Project in Cook County, Minnesota* (SEARCH 2023) evaluates the potential for archaeological resources to occur near the existing Grand Portage LPOE. An update to this report addressing the potential for archaeological resources to occur along the three-phase power line route is in progress. Results from the updated report will be incorporated into the Final EIS.
- *Historic Architectural Survey for the Grand Portage Land Port of Entry Modernization Project in Cook County, Minnesota* (SEARCH 2024) provides an inventory and evaluation of aboveground historic-age resources near the existing Grand Portage LPOE.

3.11.1 Affected Environment

3.11.1.1 Region of Influence

The ROI for cultural resources is referred to as the APE. The APE defines the geographic area or areas within which an undertaking may disturb archaeological resources, if present, and/or directly or indirectly cause alterations in the character or use of historic properties, if such properties exist. In this context, an undertaking is defined as a project, activity, or program funded in whole, or in part, under the direct or indirect jurisdiction of a federal agency, including, among other things, processes requiring a federal permit, license, or approval. For this project, the undertaking is synonymous with the Proposed Action and includes any demolition and construction activities occurring within the APE.

The APE, displayed in Figure 3.11-1, is defined as the limits of construction at the Grand Portage LPOE as well as an additional 100-meter buffer that includes the U.S. half of the Pigeon River International Bridge. In addition, the APE includes the limits of construction for the three-phase power line, displayed in Figures 3.11-1 and 3.11-2.



Source: SEARCH 2023

Figure 3.11-1. APE for the Grand Portage LPOE Modernization and Expansion Project

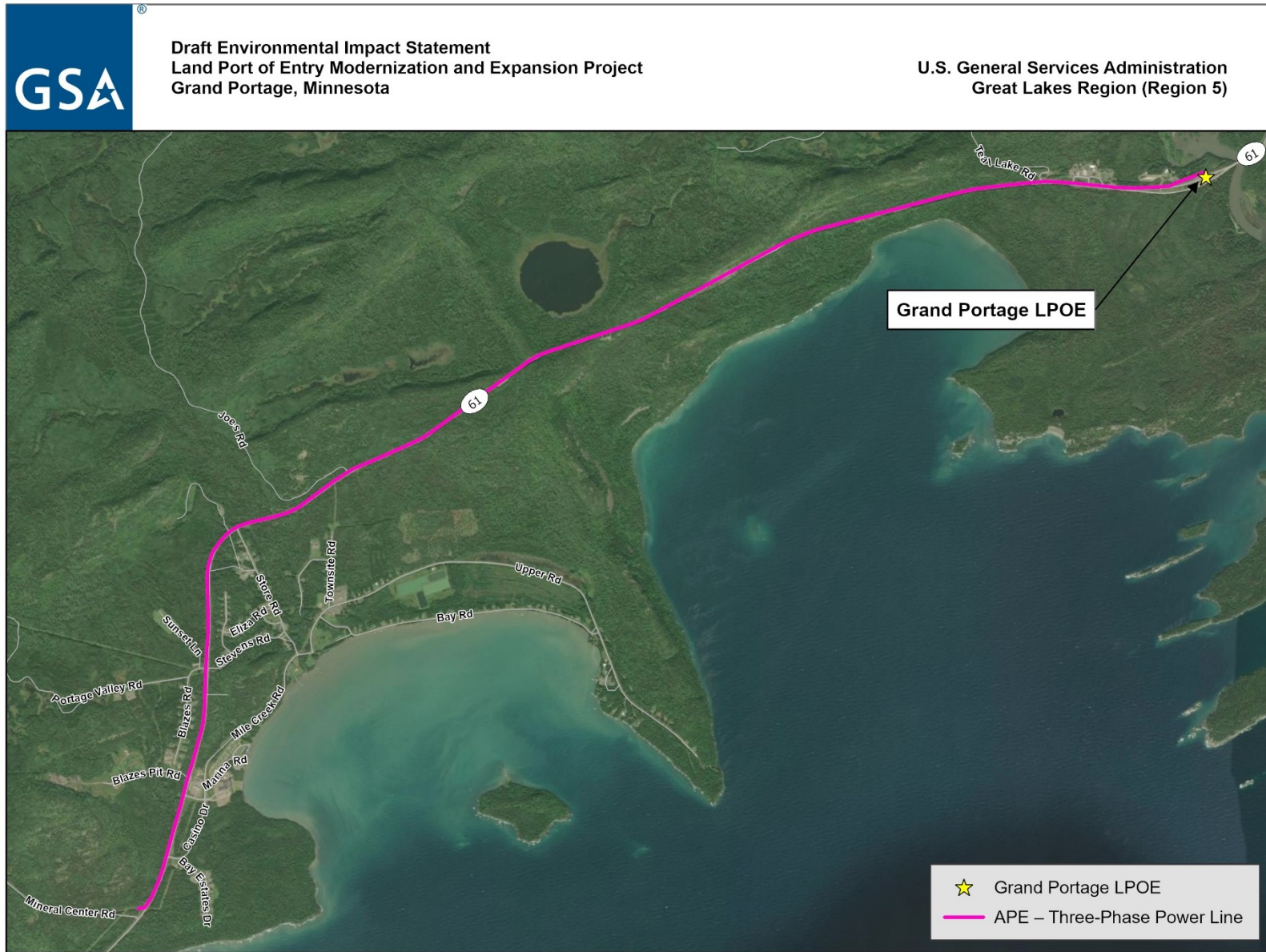


Figure 3.11-2. APE for the Three-Phase Power Line Route

The APE at the Grand Portage LPOE is defined by a geographic buffer that can reasonably be expected to be within the project viewshed based on up to three-story building heights as well as the current landscape, which serves as a visual barrier insulating any new construction and associated project activities. The APE for this project includes the archaeological study area, which is defined as all areas of potential ground disturbance and where changes to land use and public access might take place as shown in Figure 3.11-1. A buffer has not been applied to the limits of construction to the segment of the APE along the three-phase power line as there would be no impacts to viewsheds based on the nature of the work (i.e., temporary use of a plow laying cable along an existing utility ROW, with work moving in a linear fashion along the ROW and only taking place in any one location for approximately a few days).

Adverse effects to archaeological resources are generally the result of impacts from ground-disturbing activities. The APE for such resources therefore coincides with those areas where impacts from the construction and operation of a proposed facilities would occur (i.e., the project footprint). Adverse effects to architectural resources may occur through impacts that could change the character of a property's use or the physical features within a property's setting that contribute to its historic significance, or through impacts that could introduce visual, atmospheric, audible, or vibration elements that diminish the integrity of a property's significant historic features.

3.11.1.2 Regulatory Setting and Requirements

National Environmental Policy Act. NEPA establishes guidelines to “preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice” (42 U.S.C. 4331 (b)(4)). Impacts considered under NEPA include those on cultural and historic-age resources (40 CFR 1508.8).

National Historic Preservation Act. The NHPA (16 U.S.C. 470), as amended, establishes a program for the preservation of historic properties throughout the nation and sets forth guidelines to determine the eligibility of historic properties for inclusion in the NRHP. Under the law, federal agencies must approach historic properties in the spirit of stewardship and must appropriately involve the public. The two portions of the law most often applied to projects on GSA properties are: Section 110, which mandates proactive identification and management of cultural resources actions; and Section 106, which requires agencies to consider the effects of their actions on historic properties.

National Register of Historic Places. The NRHP is authorized by the NHPA and is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria. The NRHP is part of a national program managed by the NPS to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources.

The following criteria are used to identify resources that qualify for listing in the NRHP. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that:

- Criterion A – Are associated with events or activities that have made a significant contribution to the broad patterns of our history; or
- Criterion B – Are associated with the lives of persons significant in our past; or
- Criterion C – Embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D – Have yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily, cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years are not considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- A building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
- A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- A property primarily commemorative in intent, if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- A property achieving significance within the past 50 years if it is of exceptional importance.

In order to be eligible for listing in the NRHP, a property must be significant under one or more of the NRHP criteria and they must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation* establishes how to evaluate the integrity of a property: “Integrity is the ability of a property to convey its significance” (NPS 1995). The evaluation of integrity must be grounded in an understanding of a property’s physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property (or properties) must possess several, and usually most, of the following aspects of integrity:

- **Location** is the place where the historic property (or properties) was/were constructed or the place where the historic event(s) occurred.
- **Design** is the combination of elements that create the form, plan, space, structure, and style of a property (or properties).
- **Setting** is the physical environment of a historic property (or properties) and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.
- **Materials** are the physical elements that were combined to create the property (or properties) during any given period in history or prehistory.
- **Workmanship** is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property (or properties) as a whole or to individual components.

- **Feeling** is a property's (or properties') expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's (or properties') historic character.
- **Association** is the direct link between the important historic event(s) or person(s) and a historic property (or properties).

NRHP-eligible districts must possess a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. NRHP-eligible districts, buildings, and structures must also possess historic significance, integrity, and context.

Section 106 Consultation. Section 106 of the NHPA (36 CFR 800) requires GSA to consult with the SHPO or THPO on the determination of eligibility on any property within the APE and on any determination of effect on historic properties. Further, it allows the ACHP an opportunity to comment on any finding of effects on historic properties. If Native American properties have been identified, Section 106 also requires that GSA consult with interested tribes who might attach religious or cultural significance to such properties.

Archaeological and Historic Preservation Act of 1974. The purpose of the Archaeological and Historic Preservation Act (54 U.S.C. 312501-312508) is to preserve significant historical and archeological data which might otherwise be irreparably lost or destroyed as a result of a number of incidents or developments, including federal construction projects. These data may include sites, buildings, objects, and antiquities of national significance. Protection of these resources may include surveys and recovery efforts when deemed appropriate.

Archeological Resources Protection Act of 1979. The Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) governs the excavation of archaeological sites on federal and tribal lands and the removal and disposition of archaeological collections from those sites. This Act provides legal penalties and establishes a permitting system to authorize excavation or removal of archaeological resources by qualified applicants.

Native American Graves Protection and Repatriation Act of 1990. The Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 *et seq.*) provides for ownership and control of Native American cultural items that are excavated or discovered on federal or tribal lands since the passage of the Act. The Act provides a process for museums and federal agencies to return certain Native American cultural items to lineal descendants and culturally affiliated Indian tribes.

3.11.1.3 Existing Conditions

In compliance with Section 106 of the NHPA, cultural resources studies were conducted to determine the presence or absence of historic properties within the project APE and to determine the project's potential to impact identified cultural resources. These studies include archaeological literature searches and a historic architectural survey. Findings from the studies are used by GSA to assess potential impacts to cultural resources and to provide data to aid in consultation with the Grand Portage Band and its THPO, ACHP, other federally recognized tribes, and other consulting parties as applicable.

Archaeological Resources

The archaeological literature searches (SEARCH 2023) included records held at the Minnesota SHPO, the Office of the State Archaeologist, and additional background information held by GSA, including records of previous archaeological investigations. At the Grand Portage LPOE, one potential archaeological resource intersects the study area. This potential archaeological resource is a historic cemetery mapped in an October 2021 literature search by Two Pines Resource Group, LLC (Two Pines 2022); however, its location has not been confirmed. One additional archaeological site, 21CKf, was identified within a 1-mile radius of the study area.

Two Pines conducted a Phase I archaeological survey in 2022 as part of the MnDOT Trunk Highway 61 Bridge 5923 Rehabilitation Project, which overlapped the study area. The 2022 survey by Two Pines did not identify any archaeological resources (Two Pines 2022). Therefore, GSA recommends no additional archaeological investigations at the Grand Portage LPOE as part of this undertaking.

An additional archaeological literature search is being conducted for the three-phase power line. Preliminary results from this search indicate one potential archaeological resource intersecting the study area. This potential archaeological resource is a historic cemetery. GSA is consulting with the Grand Portage Band THPO regarding the need for further investigation in this area as part of the Section 106 process and will update results in the Final EIS.

Aboveground Historic-Age Resources

In October 2023, a reconnaissance-level historic architectural survey was conducted in compliance with Minnesota SHPO survey guidance, specifically the 2017 *Historic and Architectural Survey Manual* (MN SHPO 2017), which provides survey procedures for the location, investigation, and recordation of historic-age resources 45 years old or older. In addition to a search of the Minnesota Statewide Inventory for previously recorded historic-age resources within the APE and NRHP database for NRHP-listed resources, architectural historians reviewed USGS quadrangle maps and historic aerial photographs. Architectural historians reviewed construction dates available through site maps, historic topographic maps, and aerial photograph review to determine which resources were surveyed for this project. Architectural historians photographed historic-age architectural resources with a digital camera and recorded pertinent information regarding architectural style, distinguishing characteristics, and condition. Field survey covered 100 percent of the approximately 39.7-acre APE for the Grand Portage LPOE as shown in Figure 3.11-1.

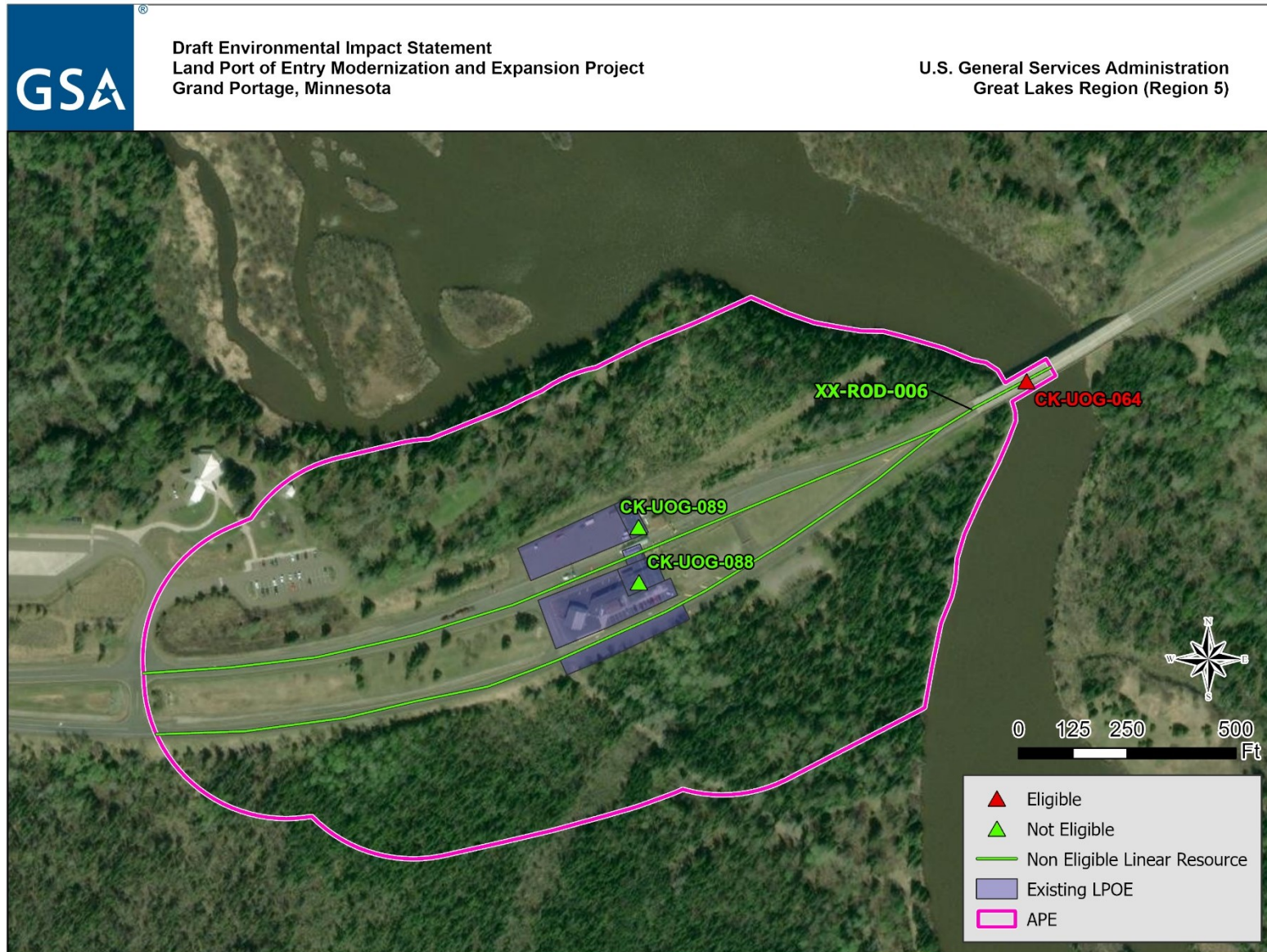
The historic architectural survey identified four historic-age resources within the APE, as presented in Table 3.11-1, all of which were previously recorded. Of the four identified resources, GSA recommends one resource as individually NRHP-eligible, as denoted in Table 3.11-1. Figure 3.11-3 displays the historic-age resources identified within the APE, and brief discussions of each follow. No historic architectural survey was conducted for the three-phase power line as no adverse effects are anticipated based on the nature of the work (i.e., temporary use of plow laying cable along an existing utility ROW, with work moving in a linear fashion along the ROW and only taking place in a single location for approximately a few days).

Table 3.11-1. Surveyed Historic-Age Buildings/Structures within the APE

Inventory Number	Historic Name	Address	Build Date	Previous NRHP Recommendation	NRHP Recommendation
CK-UOG-064	Pigeon River International Bridge	Crosses Pigeon River	ca. 1962	Eligible (Mead and Hunt 2018)	Eligible
CK-UOG-088	Grand Portage Border Station	400 2 nd St	1965	Not eligible (McGuire, Igleski & Associates, Inc. 2013)	Not eligible
CK-UOG-089	Truck Inspection Building	Crosses Rainey River	1965	Not eligible (McGuire, Igleski & Associates, Inc. 2013)	Not eligible
XX-ROD-006	Trunk Highway 61	N/A	N/A	Not eligible (Mead and Hunt 2018)	Not eligible

Source: SEARCH 2024

NRHP = National Register of Historic Places; N/A = not applicable



Source: SEARCH 2024

Figure 3.11-3. Surveyed Historic-Age Resources within the APE

Pigeon River International Bridge (CK-UOG-064)

The Pigeon River International Bridge (Bridge No. 5923) is one of the eight international border crossings within Minnesota. The ca. 1962 bridge crosses Pigeon River, connecting Canada and the northeastern-most section of Cook County, Minnesota via the Grand Portage Reservation. The steel stringer/multi-beam or girder bridge consists of six spans, each measuring 61.5 feet in length, with a total bridge length of 374 feet. Five rectangular concrete piers that stretch the full width of the bridge support the steel stringers and concrete deck. Steel railings line the two-lane structure on the northwest and southeast sides. The only remnants of the bridge's Art Deco-style decorations include lined, concrete railing caps on the northeast and southeast ends of the bridge. Despite minor alterations, the ca. 1962 bridge retains integrity of location, setting, association, and feeling, which allows the bridge to convey its historical significance. The historic architectural survey report concurred with the previous determination and recommended the resource as eligible for NRHP inclusion at the state level under Criterion A as an international border crossing in the area of Transportation.

Grand Portage Border Station (CK-UOG-088)

The Grand Portage Border Station (i.e., the existing Main Building) was constructed in 1965 and designed by Jyring and Whiteman. The building is rectangular in plan, measuring approximately 75 feet by 45 feet, with a two-story central mass flanked by one-story wings extending to the east and west. The central mass and wings each have a flat roof and are clad with vinyl siding. Fenestration consists of fixed and casement windows with a glass curtain wall located on the north façade of the central mass, facing the vehicular lanes. The Border Station has been subjected to numerous alterations since its construction, the most significant being the removal of the original redwood vertical siding and the installation of vinyl siding. Other alterations include modifications to the entrance for accessibility upgrades, and canopy and signage modifications. Four associated buildings are located in the immediate vicinity; however, only the Truck Inspection Building (CK-UOG-088; discussed below) is of historic age. The historic architectural survey report concurred with the previous determination and recommended the resource as not eligible for NRHP inclusion.

Truck Inspection Building (CK-UOG-088)

The Truck Inspection Building (i.e., the existing Commercial Inspection Building) was constructed in 1965 and presumably designed by Jyring and Whiteman. The building is rectangular in plan with a flat roof and measures approximately 80 feet by 25 feet. Approximately one half of the building is set at grade, while the other half is slightly raised to accommodate a loading dock. Two vehicular bays are located on the west façade of each section, each with a roll-up door. The bays located in the raised section are sheltered by a flat awning. The building has been clad with vinyl siding, replacing the original redwood vertical siding. The historic architectural survey report concurred with the previous determination and recommended the resource as not eligible for NRHP inclusion.

Trunk Highway 61 (XX-ROD-006)

Trunk Highway 61 historically extended approximately 450 miles along the eastern border of Minnesota, from La Crescent to the international border with Canada, north of Grand Portage. As a result of the construction of Interstate Highway (I-) 35 and I-90, Trunk Highway 61 is currently a discontinuous highway corridor consisting of an approximately 83-mile corridor from La Crescent to Wyoming and an approximately 150-mile corridor extending from Duluth to the international border. The historic architectural survey report concurred with the previous determination and recommended the resource as not eligible for NRHP inclusion.

3.11.2 Environmental Consequences

3.11.2.1 Methodology

Per NHPA and 36 CFR 800 of its implementing regulations, adverse effects to historic properties occur when an undertaking may alter any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP.

Adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (36 CFR 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

3.11.2.2 Proposed Action

Construction

Archaeological Resources

Construction under the Proposed Action would result in ground disturbance within the APE. The nearest known archaeological sites at both the Grand Portage LPOE and along the three-phase power line route, described in Section 3.11.1.3, occur outside the area of ground disturbance and would not be impacted by the Proposed Action. Because the property lies within the Grand Portage Reservation, GSA would conduct construction monitoring in consultation with the Grand Portage Band during ground disturbing activities. If archaeological resources are identified during construction, GSA would develop measures in coordination with the Grand Portage Band and its THPO to avoid, minimize, or mitigate any potential adverse effects under NHPA, which would reduce impacts to less-than-significant under NEPA.

Aboveground Historic-age Resources

Construction under the Proposed Action at the Grand Portage LPOE would introduce a new visual element to the landscape, which would have varying levels of visibility throughout the APE, as well as result in demolitions and physical changes to the built environment. The introduction of a modern visual element to the setting or surroundings of a historic property alone is not enough for a determination of Adverse Effect under Section 106 of the NHPA. Per 36 CFR 800.5, to be considered adverse, an effect must alter a

characteristic of the property that qualifies the property for NRHP listing and the alteration must diminish the property's historic integrity, or those physical aspects that convey a property's significance. Therefore, each historic property's significance was considered along with the respective aspects of integrity that convey that significance.

Of the aboveground historic-age resources considered above, only the Pigeon River International Bridge (CK-UOG-064) is recommended as NRHP-eligible in Section 3.11.1.3. The Proposed Action does not include plans for any physical changes to the bridge; therefore, it would not affect the bridge's integrity of location, design, materials, or workmanship. While construction efforts would be visible from the bridge, the viewshed would remain consistent with roadways and a border crossing station; therefore, the Proposed Action would not impact the bridge's integrity of setting, feeling, or association. The Proposed Action would not diminish the integrity of CK-UOG-064, nor detract from its ability to display the characteristics that make it eligible for listing in the NRHP. Therefore, GSA has concluded that implementation of the Proposed Action would have no adverse effect to this historic property under the NHPA, and there would be no major effects under NEPA.

GSA has concluded that construction of the three-phase power line would result in no adverse effects to historic structures due to the nature of the work (i.e., temporary use of plow laying cable along an existing utility ROW, with work moving in a linear fashion along the ROW and only taking place in a single location for approximately a few days).

Operations

Operation of the Proposed Action would not result in additional subsurface disturbance, other than for occasional repair and maintenance activities; therefore, there would be limited potential for the disturbance of archaeological resources. Impact reduction measures, including inadvertent discovery procedures, would be implemented as necessary during maintenance activities. No adverse effects under NHPA or impacts to archaeological resources under NEPA would be anticipated during operations. No additional effects under NHPA or impacts under NEPA would occur to aboveground historic-age resources beyond those described above under Construction.

3.11.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. No ground or subsurface disturbance from new facility or infrastructure construction would occur. No impacts to archaeological or aboveground historic-age resources would be anticipated.

3.11.2.4 Impact Reduction Measures

Because the property lies within the Grand Portage Reservation, GSA would conduct construction monitoring in consultation with the Grand Portage Band during ground disturbing activities.

3.12 HUMAN HEALTH AND SAFETY

This section describes the baseline conditions for human health and safety resources in the ROI and potential human health and safety impacts that could result from implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. Human health and safety include direct and indirect factors that have the potential to affect the human population or workers associated with the Proposed Action and No Action Alternative. Direct factors include exposure to chemicals, extreme temperatures, and weather, while indirect factors include physical safety and security of the surrounding environment. Factors in the ROI that could affect human health and safety include automobile or pedestrian accidents, workplace accidents, criminal activities, extreme weather, and exposure to hazardous waste and chemicals.

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding human health and safety resources.

- The 100 percent PDS (GSA 2024) provides an overview of the project, a description of the existing conditions within the ROI, and updated project plans for the Proposed Action and the anticipated conditions, needs, and impacts on human health and safety.
- Three Phase I ESAs, conducted in 2007 (CCA 2007), 2021 (BB&E 2021), and 2023 (PHE 2023b), provide information regarding the affected environment of the existing Grand Portage LPOE, and the 2023 Phase I ESA also assessed the proposed limits of construction. The three reports were incorporated in this EIS to update and verify existing conditions of potential hazards to human health and safety within the ROI. Other primary data sources used include an LSI Report conducted in 2016 (NTS 2016), water test results for the potable well onsite from 2019 and 2020, and the LPOE's SPCC Plan.
- The 2023 Phase II ESA Letter Report (PHE 2023a) was used to provide data and current conditions of hazardous areas of concern within the ROI as identified in the 2023 Phase I ESA. The Phase II ESA includes results of soil and groundwater contamination testing and confirms existing conditions within the ROI. The 2024 Phase II ESA Letter Report (PHE 2024) was used to provide additional information on potential mercury contamination at the LPOE.
- A report from Environmental Data Resources, Inc. (EDR) (EDR 2024) was used to identify properties along the three-phase power line route with confirmed or possible contamination concerns.

3.12.1 Affected Environment

3.12.1.1 *Region of Influence*

The ROI for human health and safety focuses on the limits of construction and areas within a 1-mile radius.

3.12.1.2 *Regulatory Setting*

Hazardous Waste and Materials

The purpose of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. The federal Resources Conservation and Recovery Act of 1976 (RCRA) provides for “cradle to grave” regulations of hazardous wastes. Other federal laws applicable to hazardous waste and materials include Community Environmental Response Facilitation Act of 1992; CWA; CAA; Safe Drinking water Act; Occupational Safety and Health Act; Atomic Energy Act; Toxic Substances Control Act; and Federal Insecticide, Fungicide, and Rodenticide Act.

In addition to the acts and laws mentioned above, EO 12088, *Federal Compliance and Pollution Control*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Although the MPCA has been granted primacy by USEPA to enforce its own hazardous waste program within Minnesota, the LPOE site is located on tribal land. Tribal rules defer solely to USEPA's RCRA regulations with respect to hazardous waste management. MPCA does not have jurisdiction over hazardous waste regulations on tribal lands.

For this analysis, the terms hazardous waste, hazardous materials, and toxic substances include those substances defined as hazardous by CERCLA, RCRA, and the SPCC Rule. In general, they include substances that, because of their quantity; concentration; or physical, chemical, or toxic characteristics, may present moderate danger to public health or welfare or the environment when released into the environment.

With regard to soil and groundwater contamination, the Grand Portage Band uses USEPA Regional Screening Levels (RSLs) and USEPA National Primary Drinking Water Regulations (NPDWR) MCLs to dictate clean-up thresholds for soil and groundwater, respectively. For analytes that do not have a corresponding RSL or MCL, comparable MPCA Residential and Commercial Soil Reference Values (SRVs), MDH HRLs, or other applicable regulatory threshold levels are used.

Worker Safety

The occupational health and safety concerns of federal employers and employees are the responsibility of OSHA. OSHA regulations applicable to the Proposed Action include 29 CFR 1910 and 29 CFR 1926, which cover general industry and construction regulations, respectively. Hazards faced by personnel at construction sites or in commercial workplaces could include injuries sustained from collisions with moving vehicles, lifting and moving equipment, and contact with hazardous substances during inspections.

Health Advisories

The 1854 Treaty Authority specifies fish consumption guidelines for lakes and rivers based on levels of contaminants in fish. For the Pigeon River, the general population guidelines for species with contamination concerns primarily recommend consuming no more than four servings per week of fish of any size, while the guidelines for walleye and northern pike recommend no more than one serving per week. The guidelines for sensitive populations, such as pregnant women and children under the age of 15, are stricter, with limits to one serving per week for most species with contamination concerns and one serving per month for walleye and northern pike (1854 Treaty Authority 2023).

3.12.1.3 Existing Conditions

LPOE Operational Footprint

A Phase I ESA was completed in July 2023 to verify existing conditions within the Grand Portage LPOE's operational footprint (PHE 2023b). This Phase I ESA was used to identify potential Recognized Environmental Conditions (RECs), as defined by the guidelines (E1527-21) of the American Society for Testing and Materials (ASTM), associated with current and past uses of the property (ASTM International 2021). ASTM E1527-21 defines an REC as:

“the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition.”

The 2023 Phase I ESA also identified two specific subsets of RECs, namely Controlled RECS (CRECs) and Historic RECs (HRECs). Per ASTM E1527-21 (ASTM International 2021) these terms are defined as:

“Controlled Recognized Environmental Condition” is defined as “recognized environmental condition affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations).”

“Historical Recognized Environmental Condition” is defined as “a previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the Subject Property to any controls. A historical recognized environmental condition is not a recognized environmental condition.”

The existing Grand Portage LPOE was built in the early 1960s and has historically been the only use of the land within the ROI since development. Prior to development, the ROI consisted of an undeveloped and densely wooded area until at least 1959 when Highway 61 was depicted as under construction. The existing LPOE and the proposed limits of construction exist entirely within the Grand Portage Reservation.

The 2023 Phase I ESA included a site visit and assessment of existing hazardous materials and wastes currently within the LPOE’s operational footprint. The Grand Portage LPOE is registered as a Minnesota minimal quantity generator of hazardous waste under USEPA ID No. MNS000190231. Minor amounts of hazardous materials, including paints, solvents, cleaners, and oils were observed onsite. No evidence of spills or releases was observed. One floor drain was observed in the GSA Garage, and another in the Secondary Inspection Garage. Facility staff indicated that oil changes on ground service equipment are occasionally performed in the GSA Garage and vehicle oil changes are occasionally performed in the Secondary Inspection Garage. The floor drain in the GSA Garage daylight to surface water to the north side of the building, while the floor drain in the Secondary Inspection Garage discharges to an onsite septic tank system. Although no evidence of illicit discharges was observed, the potential exists. The leach field for the onsite septic system is located along the south-central portion of the LPOE’s operational footprint. This leach field replaced and abandoned one located east-northeast of the Main Building. A small armory is also located in the Secondary Inspection Garage. Potentially hazardous waste in the form of weapons cleaning rags, swabs, patches, and other related materials are generated at the armory. Additionally, the application of herbicides (weed killer) is performed once per year by a third-party contractor. GSA is in the process of coordinating with the Grand Portage Band to explore environmentally safe alternatives to herbicide applications at the LPOE.

The 2023 Phase I ESA identified that the existing Grand Portage LPOE has a 10,000-gallon diesel fuel UST located on the southern exterior of the Main Building. The UST provides fuel to an emergency generator located in the basement of the Main Building. The UST was installed in 2015 and is a double-walled, fiberglass-reinforced plastic tank connected to an automatic tank gauge which monitors fuel level and leaks. This UST replaced a previous 10,000-gallon fuel oil UST and a 4,000-gallon leaking UST (LUST) installed in 1965 and removed in 2015. During the removal of these historic tanks, soil contamination was encountered under both USTs. Approximately 115 cubic yards of contaminated soil were removed from around the former 10,000-gallon UST prior to installation of the new UST (NTS 2016). According to the 2016 *Excavation Report* (MSA 2015), after removal of the 4,000-gallon LUST, the surrounding contaminated soil was placed back in the excavation basin and no soil was removed pending further investigation and evaluation. An LSI was conducted and found diesel-range organics (DRO) concentrations exceeding the MPCA petroleum guidance concentrations in one groundwater and one soil sample. The LSI recommended closure of the site investigation based on an evaluation of potential exposure pathways (NTS 2016). In 2017, MPCA followed suit and recommended closure of the site investigation, concluding

that contamination did not appear to pose a threat to public health or the environment. However, the letter also stated, “*please be aware that file closure does not necessarily mean that all petroleum contamination has been removed from this site... If future development of this property or the surrounding area is planned, it should be assumed that petroleum contamination may still be present*” (MPCA 2017b). Because the UST leaked, and subsequent sampling revealed concentrations in both soil and groundwater that exceed regulatory levels, the resulting contamination must be addressed and remediated. Due to the planned redevelopment, contaminated soil may be impacted or exposed. Historically, this area has been covered with asphalt, protecting the underlying soil from precipitation and helping to keep contaminated soil in the vadose zone (unsaturated area between the surface and top of the water table) in place. However, the presence of a shallow groundwater table may have carried some of the contamination downgradient. The results of the Phase II ESA are discussed later in this section.

In addition to the USTs, there are currently six ASTs in use at the LPOE as identified in the Phase I ESA. The ASTs consist of the following:

- Two 1,000-gallon liquid propane ASTs. One is located along the eastern exterior of the Commercial Inspection Building, and one is located between the public restroom building and the Secondary Inspection Garage.
- A small day tank associated with the UST and generator located in the basement of the Main Building. The exact volume of the day tank is unknown; however, based on measurements it appears to be approximately 50 to 60 gallons in capacity.
- A 1,000-gallon No. 2 fuel oil AST and a 50-gallon gasoline AST located along the eastern exterior of the GSA Garage, and approximately 8 to 10 feet of double-walled underground piping part of the connection from the 1,000-gallon AST to the boiler room inside the warehouse.
- An emergency generator with a 1,125-gallon diesel fuel belly tank located farther east of the GSA Garage.

In accordance with 40 CFR 112.6, the Grand Portage LPOE qualifies as a Tier I Self Certified Facility and has a required SPCC Plan.

In addition to assessing the existing LPOE, the 2023 Phase I ESA also established existing conditions outside the operational footprint of the existing LPOE within the proposed limits of construction. These findings are summarized as follows:

The Grand Portage State Park is serviced by a septic system leach field located nearby to the northwest of the proposed limits of construction. The Grand Portage State Park was completed in 1994, which likely represents the age of the septic system as well.

The 2023 Phase I ESA also identified that the MPCA previously collected 20 radon samples across Cook County. The results ranged from 0.3 picocuries per liter (pCi/L) to 59.9 pCi/L, with an average concentration of 10.4 pCi/L. The USEPA action level for radon is 4.0 pCi/L. Therefore, there is the potential for elevated radon levels to be present in new or existing buildings onsite. Testing for radon was not conducted during the Phase I ESA as it is out of scope for a typical Phase I ESA per ASTM E1527-21 guidelines. Additionally, radon is typically more of a concern in residential environments, and testing procedures would involve sealing off buildings for a number of days rendering the LPOE buildings, and therefore port operations, inoperable during that time.

Due to the potential for soil and groundwater contamination to be present within the ROI as described in the 2023 Phase I ESA and summarized above, soil and groundwater sampling and laboratory testing was conducted in a Phase II ESA around areas identified with potential contamination concerns to characterize the extent of current contamination conditions and prevent exposure to workers or the release of hazardous waste and materials to the environment.

The Phase II ESA was conducted in October 2023 with a scope of work designed to investigate the presence of potential contamination associated with the septic system leach field servicing Grand Portage State Park,

and the historical presence of contamination associated with the 4,000-gallon LUST formerly located west of the Commercial Inspection Building. Results of the sampling and testing from the Phase II ESA are provided in the 2023 Phase II ESA Letter Report (PHE 2023a) and are summarized below. The Phase II ESA compares contamination levels within collected soil and groundwater samples to USEPA RSLs and USEPA NPDWR MCLs, respectively. For analytes that do not have a corresponding RSL or MCL, comparable MPCA Residential and Commercial SRVs, MDH HRLs, or other applicable regulatory threshold levels are used, as appropriate.

A total of five soil samples from four separate boring locations were collected along the northern boundary of the LPOE adjacent to the offsite septic leach field associated with the Grand Portage State Park. At least one soil sample was collected from each boring location, with the borings ranging in total depth from 16 to 22 feet bgs, and sample depths ranging from 5 to 10 feet bgs. All samples were analyzed for semi-volatile organic compounds (SVOCs), pesticides/herbicides, and RCRA metals plus copper (RCRA metals include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). All soil samples were compared to USEPA Residential RSLs and Industrial RSLs; the Industrial RSLs would apply to operation of the LPOE, but Residential RSLs are also examined as they are more stringent. All 5 soil samples contained a concentration of arsenic (ranging from 5.22 milligrams per kilogram (mg/kg) to 8.14 mg/kg) which exceeded both its Residential (0.68 mg/kg) and Industrial (3.00 mg/kg) RSL. The samples that exceeded for arsenic were collected within apparent native soils located beneath the fill material, indicating that it is likely the result of natural background arsenic and not a result of anthropogenic contamination. However, it should be noted that arsenic is also an anthropogenic contaminant, having been historically present in commercial pesticides. Notwithstanding, arsenic is a naturally occurring element that is commonly found throughout areas of Minnesota. The Phase II ESA recommends that if any soil in this area is excavated during construction activities, it should be further tested for arsenic prior to placement elsewhere onsite or offsite, in order to determine if any precautions (e.g., placement beneath a cap of clean soil or under impervious cover) are warranted. If any soil is sent for offsite disposal, it should also be sampled and tested in accordance with the requirements of the destination facility. GSA is continuing to coordinate with the Grand Portage Band regarding arsenic within soils at the project site and will provide updates regarding any decision to conduct further investigation or revise recommended management actions in the Final EIS. No other soil sample results from the leach field adjacent area exceeded either the Residential or Industrial RSLs for any contaminants analyzed. Groundwater samples collected within the area adjacent to the offsite septic leach field did not result in any contaminant exceedances. The two groundwater samples in this area were analyzed for VOCs, SVOCs, and RCRA metals plus copper, and were compared to USEPA's NPDWR MCLs (PHE 2023a).

A total of six soil samples from five separate boring locations were collected around the former location of the historic 4,000-gallon UST. At least one sample was collected from each boring location ranging in depths from 8.5 to 16 feet bgs, and sample depths ranging from 7 to 13.5 feet bgs. Four of the samples were analyzed for VOCs, SVOCs, and DRO. Due to limited recovery of one boring location, one soil sample (CREC-3-2) was collected for just DRO analysis. However, a secondary boring was installed immediately adjacent to it, and a secondary sample (CREC-3-2-A) was collected for VOC and SVOC analysis. Similarly, all soil sample results in this area were compared to both USEPA Residential and Industrial RSLs, with the exception of DRO which was compared to MPCA threshold levels. None of the soil samples exceeded their respective RSLs. Two soil samples (CREC-2-1, sample depth of 7 to 8 feet bgs; and CREC-3-2, sample depth of 8 to 8.5 feet bgs) contained elevated concentrations of DRO (377 mg/kg and 1,080 mg/kg, respectively). For comparison, these concentrations exceed the MPCA threshold level of 100 mg/kg for DRO. Additionally, during the Phase II ESA field screening and sample collection process of the borings around the former 4,000-gallon UST, notable photoionization detector (PID) (used to inspect for the presence of VOCs typically associated with petroleum products) readings and diesel fuel odors were observed within several of the boring locations. Groundwater samples were also taken within and immediately downgradient of the former UST area using installed temporary well points (TWPs). Three groundwater samples were collected, one from each TWP (one within the former UST area, and two

downgradient). A visible sheen was observed on groundwater purged from the TWP prior to sampling. Two groundwater samples (one within the former UST area, and one downgradient) were analyzed for VOCs, SVOC, DRO, and RCRA metals plus copper. Due to low water volume, the other sample (downgradient) was only analyzed for VOCs, SVOCs, and RCRA metals plus copper. All groundwater sample results were compared to USEPA NPDWR MCLs, with the exception of DRO which was compared to the MDH HRL. None of the compounds analyzed exceeded their respective MCLs. Results from the groundwater samples located within the former 4,000-gallon UST area contained concentrations of DRO (339 µg/L, 265 µg/L, and 78,400 µg/L); exceeding the MDH HRL (50 micrograms per liter [µg/L]).

As indicated, elevated DRO concentrations were observed in both soil and groundwater. Soil concentrations of DRO exceeded the MPCA threshold level (100 mg/kg), while the groundwater concentration observed exceeded the MDH HRL (50 µg/L). DRO generally refers to petroleum hydrocarbons with a range of 10 to 28 carbon atoms and a boiling point range of approximately 170 degrees Celsius (°C) to 430 °C and can encompass potentially hundreds of regulated and unregulated compounds. In addition to DRO, as discussed above, samples for VOCs and SVOCs were also analyzed, which covered a wide range of regulated organic compounds, including many related to petroleum distillates that would be included in the DRO analysis. When comparing the compounds listed in the VOC and SVOC scans analyzed to the petroleum-related organic compounds which are listed in the MCLs, only ethylene dibromide (dibromoethane) has an MCL and was not included in the VOC or SVOC scans analyzed. However, ethylene dibromide was used in the past as an additive to leaded gasoline. Since the 4,000-gallon former UST located in this CREC contained heating oil and not gasoline, this compound is not anticipated to be present, and its omission is not considered to be of concern.

The presence of petroleum-related impacts evidenced from the soil odors and PID readings (as well as the observed presence of DRO) do indicate that petroleum-impacted soils and groundwater are present onsite. This was subsequently confirmed by laboratory analysis. Based on the observations made during the Phase II ESA, it appears that the affected areas of both soil and groundwater are of limited extent around the location of the 4,000-gallon former UST CREC, with the area of impacted soil estimated to be approximately 300 cubic yards. To address the petroleum contamination impacts, the Phase II ESA recommends that any soil encountered that appears to be contaminated based on visual or olfactory properties should be managed properly and transported offsite for disposal/treatment prior to or during construction activities. This also includes excavation, segregation (from non-contaminated soils), and characterization (e.g., analytical sampling) of soil to determine proper management. After the soil has been removed, two permanent monitoring wells should be installed: one within the excavation area and one downgradient adjacent to the property line at the closest point to the former UST area. The well in the excavation would monitor the highest concentrations onsite while the downgradient well would provide assurance that the contamination is not migrating offsite. Additionally, installation of a vapor barrier is recommended on any new enclosed buildings as a precaution to provide protection against vapor intrusion from any residual contamination in groundwater (PHE 2023a).

Three-Phase Power Line Route

GSA reviewed numerous environmental databases maintained by state and federal agencies in an effort to identify areas of potential contamination concern along and adjacent to the three-phase power line route. Databases were reviewed that identify properties with confirmed or possible contamination; facilities that generate hazardous wastes; sites with USTs; and properties involved in federal, state, or municipal enforcement actions were reviewed to assess the environmental status of the proposed three-phase power line utility corridor. The search radii for each database were based on the recommendations made in ASTM E 1527-21 as minimum search distances.

Table 3.12-1 provides a summary of the findings of the database search. The facilities or locations listed below have the potential for contamination which could be encountered during construction of the proposed three-phase power line. Contamination could be encountered in the form of direct contact with contaminated soil and/or vapors emanating from contaminated soils or groundwater.

Table 3.12-1. EDR Database Search Report Summary

Site Name and Location	EDR Location	Summary	Potential for Contamination	Contaminants of Potential Concern
<p>US Customs and Border Patrol</p> <p>9403 East State Highway 61, Grand Portage, MN</p>	<p>Within corridor</p>	<p>A 4,000-gallon heating oil UST was formerly located on Site at the Grand Portage LPOE located to the west of the current Commercial Inspection Garage. It was reportedly installed in 1973 and removed on October 19, 2015. According to information gathered during the 2023 Phase I ESA, the UST was observed to be in poor condition with noticeable holes during removal. Soil beneath the 4,000-gallon fuel oil UST was visibly stained and exhibited a strong fuel oil odor.</p> <p>During the October 2023 Phase II ESA, petroleum-impacted soils were observed based on PID readings and other field observations. The area of impacted soil is estimated to be approximately 300 cubic yards.</p>	<p>The EDR report has identified this leaking UST case as being “within the corridor” based on the address of the facility. However, the actual location of the proposed three-phase power line is located approximately 50 feet north of the former UST and outside of the area of contamination as delineated during the October 2023 Phase II ESA. Therefore, the potential to encounter contaminated soil during construction is considered to be low.</p>	<p>Petroleum hydrocarbons</p>
<p>Grand Portage Ranger Station</p> <p>8357 East State Highway 61, Grand Portage, MN</p>	<p>Within corridor</p>	<p>A petroleum release occurred at this location from a leaking underground storage tank (LUST) reported on October 26, 1995. The site was subsequently remediated, and the case was closed by MPCA on September 2, 1998.</p> <p>Despite the site closure, the possibility exists that residual contamination might still be present.</p>	<p>Low</p>	<p>VOCs, petroleum hydrocarbons</p>
<p>Arrowhead Electric Co-op</p> <p>State Highway 61 and Mile Creek Road, Grand Portage, MN</p>	<p>Within corridor</p>	<p>On April 14, 2010, a caller reported a leak from a pad-mounted transformer onto the concrete pad and to the soil under it and around one side. The drain valve on the transformer cracked and caused the leak. Approximately 86 gallons of mineral oil was released and ultimately cleaned up and the site was closed with MPCA.</p> <p>Despite the site closure, the possibility exists that residual contamination might still be present.</p>	<p>Low</p>	<p>polychlorinated biphenyls (PCBs)</p>

Table 3.12-1. EDR Database Search Report Summary

Site Name and Location	EDR Location	Summary	Potential for Contamination	Contaminants of Potential Concern
Ryden's Phillips 66 9293 Ryden Road, Grand Portage, MN	Approximately 200 feet north of corridor	During removal of a 4,000-gallon gasoline UST on April 22, 1996, a release of fuel was discovered. The site was subsequently remediated, and the case was closed by MPCA on July 23, 1996. Despite the site closure, the possibility exists that residual contamination might still be present.	Low	VOCs, petroleum hydrocarbons
Grand Portage Trading Post 77 Mile Creek Road, Grand Portage, MN	Approximately 330 feet east of the corridor	This is an active retail gas station with several USTs. Although no leaks, spills, or other releases have been reported, due to the nature of the facility, it is possible that as yet unknown contamination could be present.	Low	VOCs, petroleum hydrocarbons
Grand Portage Lodge & Casino 70 Casino Drive, Grand Portage, MN	Approximately 650 feet east of the corridor	This facility contains two gasoline USTs, two diesel fuel USTs, and one heating oil UST. Although no leaks, spills, or other releases have been reported, due to the nature of the facility, it is possible that as yet unknown contamination could be present.	Low	VOCs, petroleum hydrocarbons
Grand Portage Marina State Highway 61 and Marina Road, Grand Portage, MN	Approximately 1,100 feet east of the corridor	Release of product from UST – no other information available.	Unknown; however, based on distance, potential is expected to be low.	Unknown (presumed petroleum)
Grand Portage Dump Off Highway 61, Grand Portage, MN	Approximately 1,160 feet west of the corridor	This site was listed in multiple regulatory databases for multiple investigations and remedial activities. Most recently, a Vapor Investigation Report was submitted in 2023.	Vapors (VOCs); Unknown; however, based on distance, potential is expected to be low.	VOCs; unknown

Table 3.12-1. EDR Database Search Report Summary

Site Name and Location	EDR Location	Summary	Potential for Contamination	Contaminants of Potential Concern
Grand Portage Tribal Council 77 Mile Creek Road, Grand Portage, MN	Approximately 1,225 feet east of the corridor	This site formerly contained one 2,000-gallon fuel oil UST and two 6,000-gallon gasoline USTs which were removed in the late 1990s. A leak from one of the tanks was discovered in 1998. The site was subsequently remediated, and the case was closed by MPCA on December 20, 2004. Despite the site closure, the possibility exists that residual contamination might still be present.	Low	VOCs, petroleum hydrocarbons
Forestry Garage and Voyageurs Marina Grand Portage, MN	Approximately 1,300 feet east of the corridor	Both facilities have reported releases from presumed petroleum-containing USTs. No other details are provided.	Unknown; however, based on distance, potential is expected to be low.	Unknown (presumed petroleum)
Grand Portage Trading Post 101 Store Road, Grand Portage, MN	Approximately 1,600 feet south-southeast of the corridor	This site was the location of two separate leaking petroleum USTs. One LUST received closure from MPCA on December 7, 2000; the second received closure on February 28, 2007. Despite the site closure, the possibility exists that residual contamination might still be present.	Low	VOCs, petroleum hydrocarbons
Mr. C. Melby Location unknown	Unknown	Fuel oil release to basement of residential unit during filling on April 1, 1999. Quantity is unknown; spilled was cleaned up using rags.	Negligible (no release to environment)	None expected.

Source: EDR 2024

EDR = Environmental Data Resources, Inc.; ESA = environmental site assessment, LUST = leaking underground storage tank, MPCA = Minnesota Pollution Control Agency, MN = Minnesota, PCB = polychlorinated biphenyls, PID = photoionization detector, UST = underground storage tank, VOC = volatile organic compound

In addition to the site listed in Table 3.12-1, other unknown or unreported sites with potential contamination could exist along and adjacent to the corridor.

Asbestos-Containing Materials and Lead-Based Paint

A survey for ACM and LBP was conducted as a part of the 2007 Phase I ESA for the existing LPOE. The ACM survey analyzed asbestos content in 43 samples, and ACM was present in two materials (fittings on fiberglass pipe insulation and duct insulation). Roof materials were not tested, and the report stated they should be considered presumed ACM. The LBP survey did not identify any LBP within the facility buildings (CCA 2007).

ACM and LBP are not expected to be encountered along the area of disturbance for the proposed three-phase power line route.

Mercury Contamination

A 2015 assessment of ecosystem sensitivity and ecological risk at the Grand Portage National Monument (Rolfhus et al. 2015), which is entirely within the bounds of the Grand Portage Reservation, analyzed mercury levels in the streams within the monument corridor and found high traces of mercury in dragonfly larva. Additionally, the study found that some areas within the monument corridor are contaminated with mercury, with some soils and sediments containing approximately four-fold more total mercury per unit of organic matter. The 2015 study suggests that the increased enrichment of mercury may be the result of historic anthropogenic activity related to the fur trade that occurred in the 18th century, in addition to some atmospheric deposition. Vermilion, a synthetic mercuric sulfide pigment derived from cinnabar ore, was a principal trade item and gift in the fur trade that once existed in large quantities in Grand Portage. An inventory of the Northwest Fur Company's goods in Grand Portage from 1797 found more than 100 lbs of vermilion (Rolfhus et al. 2015).

The 2023 Phase II ESA did not find elevated levels of concern for mercury; however, analyzed soil samples were taken from a range of 5 to 13.5 feet bgs. If mercury contaminants came from airborne/anthropogenic sources and were deposited at the surface, contamination would exist primarily in shallow soils (uppermost 1 to 2 feet bgs). Within the developed footprint of the existing Grand Portage LPOE, all shallow soils appear to have been removed during initial construction and replaced with fill (sand and gravel) up to 4 feet in depth and topped with asphalt. However, areas within the limits of construction that have not been disturbed within the three-phase power line route may contain native surface soils potentially impacted by the historic mercury contamination. This is especially true for any wetlands as they tend to act as an environmental sink, absorbing contaminants.

To address potential mercury concerns in shallow soil at the LPOE, soil sampling was performed by GSA across the currently undeveloped portions of the LPOE (but still within the anticipated footprint of construction for the Proposed Action) on May 16, 2024. A total of 8 shallow soil samples (ranging in depth from just below the surface up to 8 inches bgs) were collected and analyzed for mercury. All 8 soil samples contained detectable concentration of mercury, ranging from 0.0223 mg/kg to 0.0695 mg/kg, well below both the Residential (1.1 mg/kg) and Industrial (4.6 mg/kg) RSLs for mercury. The results were also well below the more stringent RSL for methyl mercury of 0.78 mg/kg. In addition, a total of 4 aqueous (water) samples were collected from standing water present within adjacent wetland areas. Mercury was not detected above the reporting limit in any of the water samples collected.

Migration of mercury contaminants outside the existing LPOE boundary in native soils would generally occur vertically through leaching or horizontally through runoff into streams/wetlands, uptake into plants and biota, and volatilization back to the atmosphere. Contamination from offsite sources through subsurface soils would not be a concern for the developed footprint of the LPOE, which was previously disturbed during original construction. It is also unlikely mercury contaminants migrate vertically enough to reach and contaminate groundwater. Due to the impervious surface of the existing LPOE site any mercury-

contaminated surface runoff reaching the LPOE site would quickly make its way to stormwater systems and into the Pigeon River. However, based on the results of sampling, the likelihood of potential mercury contamination in surrounding soils at the LPOE is considered low.

Mercury can accumulate in fish populations and pose a risk to people if consumed. Fish consumption guidelines are in place in the region to provide safety recommendations when consuming different species of fish caught in the area (1854 Treaty Authority 2023). Further discussion on this can be found in 3.13, Environmental Justice.

3.12.2 Environmental Consequences

3.12.2.1 Methodology

To evaluate impacts on human health and safety, GSA reviewed the Proposed Action to determine whether any activities have the potential to cause the following within the ROI:

- Adverse impacts on public or occupational health and safety;
- New sources of construction materials and operational supplies to be developed;
- Create the need for a hazardous waste treatment, storage, or disposal permit for the project;
- Create reasonably foreseeable conditions that would increase the risk of a hazardous materials or hazardous waste release;
- Affect the capacity of waste collection services and treatment, storage, and disposal facilities; or
- Create hazards that would affect the capacity of fire protection or emergency medical services to respond to needs of the public.

A major adverse impact to human health and safety would occur if the Proposed Action would result in:

- Conflict with and federal laws, regulations, or tribal ordinances relating to public health and safety, including occupational safety and health;
- An unacceptable increased risk of adverse impacts to human health;
- Violations of applicable federal standards related to the management of hazardous materials or wastes;
- Increase in the use of hazardous materials or generation of hazardous wastes to such an extent that would lead to an elevated risk of human health or environmental effects; or
- Additional demand or hazards that would exceed the capacities of fire protection or emergency response services.

The potential impacts of the Proposed Action on occupational health and safety relate directly to the size of the workforce needed for construction, operation, and maintenance activities. Workers at any facility are subject to risks of injuries and fatalities from physical hazards. Such risks include exposure to extreme weather conditions, hazardous equipment, and large moving vehicles. This EIS estimates the potential occupational safety and health impacts of construction of the Proposed Action using data collected by the Bureau of Labor Statistics based on the North American Industry Classification System (NAICS). NAICS Codes 2362 (construction of nonresidential buildings) and 2373 (highway, street, and bridge construction) were used to predict the probability of the workforce to experience recordable injuries, illnesses, lost workdays, or fatalities during the construction phase of the Proposed Action.

3.12.2.2 Proposed Action

Construction

Table 3.12-2 summarizes the Bureau of Labor Statistics data for occupational injuries and fatalities in the construction industry, specifically NAICS Codes 2362 (construction of nonresidential buildings) and 2373 (highway, street, and bridge construction). These data summarize the incidence rate for injury or illness cases per 100 worker-years (or 200,000 hours) for total recordable cases and cases involving lost workdays. The table also lists the total number of fatalities in each industry by year.

Table 3.12-2. Occupational Injuries and Fatalities for Relevant Construction Industries (2014 – 2020)

Year	Average Employment (thousands)		Total Recordable Injury or Illness Cases (rate per 100 workers)		Cases with Days Away from Work, Transfer, or Restriction (rate per 100 workers)		Total Fatal Injuries in Industry	
	2362 ^a	2373 ^b	2362 ^a	2373 ^b	2362 ^a	2373 ^b	2362 ^a	2373 ^b
2014	698.4	294.4	2.7	3.8	1.4	2.3	69	94
2015	730.3	309.7	2.4	3.6	1.3	2.2	62	108
2016	762.3	319.3	2.4	3.5	1.3	2.3	50	107
2017	792.5	327.7	2.7	3.2	1.4	1.9	56	104
2018	827.1	341.2	2.5	3.6	1.4	2.0	71	100
2019	840.9	348.6	1.9	3.4	1.1	2.0	69	104
2020	797.7	346.0	1.8	2.7	1.0	1.6	58	105
Average	778.4	326.7	2.3	3.4	1.3	2.0	62.1	103.1

Source: BLS 2023a

^a. NAICS Code 2362 is the industry code for construction of nonresidential buildings.

^b. NAICS Code 2373 is the industry code for construction of highways, streets, and bridges.

The average annual number of fatal injuries for workers in the nonresidential building construction industry is approximately 62, based on the years from 2014 to 2020, for an average workforce of approximately 778,000 employees. The average probability of a fatal injury during the period was approximately 0.00008 per worker per year (less than 1 in 10,000). The average annual number of fatal injuries for workers in the highway, street, and bridge construction industry is approximately 103, based on the years from 2014 to 2020, for an average workforce of approximately 327,000 employees. The average probability of a fatal injury during the period was approximately 0.0003 per worker per year (less than 1 in 1,000). During peak construction activity under the Proposed Action, it is assumed that up to 100 construction workers could be onsite simultaneously (GSA 2024). A conservative estimate would still expect no fatalities to occur over the course of construction (projected maximum of 0.09 fatality to occur over the 3-year total construction period).

Under the Proposed Action, risks to health and safety of personnel and patrons would increase slightly during the construction phase. Risks would be minimized by adhering to occupational safety and health regulations, the use of protective gear and equipment, and implementation of BMPs. Access to the limits of construction would be restricted to construction workers; however, parts of the LPOE would remain open and operational 24 hours per day, 7 days per week throughout construction. Risks to human health and safety during construction under the Proposed Action would therefore be direct, short-term, negligible to minor, and adverse locally.

The Proposed Action would result in direct and indirect, short-term, minor, adverse, local and regional impacts from hazardous materials use and waste handling during construction. Prior to construction a regulated materials survey would be conducted of the existing facilities to further identify any ACM, LBP, mercury containing items, or any items suspected of containing polychlorinated biphenyls (PCBs). During demolition, there would be an increase of hazardous or otherwise regulated wastes such as fluorescent, halide, or sodium vapor lamps containing mercury; smoke detectors and emergency exit signs containing low-level radioactive sources; mercury switches; electronic ballasts containing PCBs and/or other fluids; and various equipment containing batteries. Hazardous materials associated with construction would be used in accordance with federal regulations. All wastes including hazardous waste, construction and demolition debris, and other waste materials would be removed from the limits of construction and disposed of in accordance with applicable regulations. The increased amounts of hazardous materials such as diesel fuel, gasoline, paint, adhesives, and solvents used onsite during construction could increase the potential for spills. Any spills from construction activities would be immediately contained and disposed of properly in accordance with all applicable plans and regulations. In addition, any project-specific hazards affecting workers would be reduced based on strict adherence to OSHA standards and other relevant safety laws, rules, and regulations. Therefore, there would be a low likelihood of hazardous material spills or associated human health impacts from hazardous materials or waste handling during construction activities.

Additionally, for all ACM and potential ACM in facilities proposed for demolition or renovation, a licensed abatement contractor would be retained to remove and properly dispose of ACMs prior to commencing construction operations. Demolition would be conducted in accordance with all appropriate federal NESHAP related to asbestos (see Section 3.5, Air Quality and Climate Change).

Contaminated soil would likely be encountered in the LPOE's anticipated limits of construction during excavation activities as a result of current and historical land uses within the ROI. As discussed earlier, during the Phase II ESA, petroleum-related soil contamination was confirmed onsite. The soil contamination observed is anticipated to be of limited extent and is estimated to be approximately 300 cubic yards in volume. Prior to or during construction activities, any soil encountered that appears to be contaminated based on visual or olfactory properties would be managed properly. This includes excavation, segregation (from non-contaminated soils), and characterization to determine proper management. Contaminated soil would be sent offsite for treatment/disposal. The soil would be sent to a properly licensed facility to be treated (or disposed) as petroleum-contaminated soil per applicable regulatory requirements. Treated soil would be returned to the LPOE site to the extent possible. After the contaminated soil has been removed from the ground, post-excavation soil sampling for suspected contaminants (e.g., DRO) should be performed to ensure all impacted soil has been removed to USEPA and MDH standards, in coordination with the Grand Portage Band. Additionally, due to the elevated levels of arsenic found near the adjacent septic system leach field on the northwest boundary of the LPOE, any soil excavated in that area during construction activities should be further tested prior to placement elsewhere onsite in order to determine if any precautions (e.g., placed beneath a cap of clean soil or under impervious cover) are warranted. If any soil is sent for offsite disposal, it should also be sampled and tested in accordance with the requirements of the destination facility. Construction and excavation activities would likely be too shallow to come into contact with groundwater. However, if groundwater is encountered in the area of the former 4,000-gallon UST, it would also need to be properly managed in a similar manner as contaminated soil prior to transportation offsite for proper disposal or treatment per applicable regulations. After contaminated soil has been removed in this area, at least two permanent monitoring wells would be installed: one within the excavation area and one downgradient adjacent to the property line at the closest point to the former UST area to monitor DRO concentrations. Additionally, a vapor barrier would be installed on any new enclosed buildings as a precaution to provide protection against vapor intrusion from any residual contamination in groundwater.

Based on a review of state and federal databases, the potential to encounter contaminated soil during construction of the three-phase power line is considered to be low based on the location of known nearby releases and depth of excavation (no more than 3 feet). During construction, soils would be monitored using an organic vapor meter capable of detecting lower explosive limit (LEL), oxygen, carbon monoxide, hydrogen sulfide, and methane. Any soil suspected of being contaminated, either by visual evidence (e.g., staining), olfactory evidence (soil odors), or organic vapor meter readings would be managed properly, similar to as described for the soils at the Grand Portage LPOE as applicable.

Based on the results of sampling at the LPOE, the likelihood of potential mercury contamination in surrounding soils at the LPOE is considered low. Native soils within the three-phase power line route could have the potential to contain mercury contamination. Soils disturbed by construction activities in these areas should be sampled and analyzed for mercury contamination prior to offsite disposal in accordance with all applicable regulations. GSA would coordinate closely with the Grand Portage Band on any soil clean-up activities, including particularly prior to any hauling of soil offsite. Soil runoff from potential mercury-contaminated soil generated during construction containing mercury has the potential to further impact fish populations already impaired by mercury contamination, which would adversely contribute to ongoing human health risks related to fish consumption locally. However, the potential for soil runoff from the three-phase power line route is considered to be low as soil would be stabilized shortly after disturbance. construction. These effects would be further avoided or mitigated through the implementation of BMPs to prevent soil runoff (see Sections 3.2, Geological Resources and 3.3, Water Resources).

Treatment and/or removal of contaminated soils and groundwater encountered during construction activities, and installation of groundwater monitoring wells would result in direct, long-term, beneficial, local impacts. Any encountered soil or groundwater would be remediated or removed from the site, thus removing exposure risk to workers and the public within the ROI. The groundwater monitoring wells would allow for long-term monitoring ensuring groundwater contamination concentrations do not exceed risk levels, and implementation of a vapor barrier would provide long-term protection against vapor intrusion from any potential residual contamination.

Per the Grand Portage Band Land Use Ordinance, GSA would also be required to apply for an excavation permit prior to construction, which authorizes the movement, removal, or fill of more than ten cubic yards of material. Prior to approval by the Land Use Committee, a restoration plan must be developed (and subsequently approved). Requirements of the excavation permit are discussed in Section 3.2, Geological Resources.

Construction for the Proposed Action would not cause demands or create hazardous conditions that would exceed the capacities of existing fire protection and emergency services (as described in Section 3.10, Socioeconomics) to respond. Similarly, construction for the Proposed Action is not expected to affect the capacities of these services to meet the demands of the community and region.

Operations

There would be direct, long-term, negligible to minor, adverse impacts on human health and safety locally during operations of the modernized and expanded Grand Portage LPOE. Operations would be conducted in accordance with applicable building and safety codes. Employees would adhere to fire and safety standards set forth in the National Fire Protection Association Standard 101, *Life Safety Code*. Overall operations of the modernized and expanded Grand Portage LPOE are not expected to increase demands on emergency services.

There would be direct and indirect, long-term, negligible to minor, adverse local and regional impacts related to hazardous materials and waste handling from operations of the Proposed Action. The new facility would not include any ACM or LBP that would result in occupant exposure, nor contain any PCB-containing electrical equipment, and prior site contamination would be remediated. There may be petroleum storage tanks associated with the new facility; these would be installed and operated in accordance with

applicable regulations and current industry standards including leak-detection systems and secondary containment. Hazardous materials such as paints and cleaners would be used in facility maintenance activities, but these would likely be used in small amounts. Small amounts of hazardous waste may also be generated periodically from maintenance activities. All hazardous materials and waste would be managed in accordance with applicable federal regulations. Regularly scheduled sampling of two permanent monitoring wells installed to address the petroleum-contamination observed at the former UST excavation area would be conducted to ensure that DRO contamination is not migrating offsite and/or is naturally attenuating over time.

GSA would construct geothermal heat pumps in a manner consistent with Minnesota Rules, Chapter 4725, including use to use food grade propylene glycol as a heat exchange fluid to minimize environmental impacts in the event of a release or upset condition. Regular maintenance of these systems would minimize any potential for leaks from these systems. Any adverse impacts would be long-term but negligible locally.

Operation of the three-phase power line would not be anticipated to have any impact on human health and safety.

3.12.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current infrastructure at the existing LPOE would remain essentially unchanged. Therefore, long-term, negligible impacts would continue as there would be no change in risks to human safety, hazardous materials usage, or waste generation. Ongoing maintenance to the LPOE would continue, which would require negligible amounts of hazardous materials usage and generate negligible amounts of hazardous waste. Risks to health and safety associated with existing conditions and operations at the LPOE would remain unchanged from current conditions.

3.12.2.4 Impact Reduction Measures

Measures that would limit impacts related to human health and safety during building construction and operations are discussed below:

- Prior to demolition, a thorough ACM inspection of the facilities to be demolished or renovated would be performed by a licensed asbestos inspector in accordance with all asbestos NESHAP regulations. The Asbestos NESHAP notification provisions generally require owners and operators of demolition and renovation activities to provide USEPA with written notification of a regulated operation at least 10 business days prior to commencement of work. Similarly, the Tribe would be notified of inspections, and other demolition/renovation activities within reasonable anticipation prior to commencement of work.
- Divert at least 50 percent of nonhazardous construction and demolition waste from a landfill per Section 207 of EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. The project goal is to divert at least 75 percent of construction and demolition waste.
- All spills or releases of petroleum, oils, and lubricants; hazardous materials; pollutants; or contaminants would be handled in accordance with measures outlined in a Spill Prevention and Response Plan prepared for construction.
- GSA would update the SPCC Plan during final design for operations of the facility, assuming the facility continues to meet the requirements to prepare a plan per 40 CFR 112.
- A Soil Management Plan may be prepared to address the potential for encountering areas of environmental concern (e.g., contaminated soil) during grading, excavation, or other subsurface disturbance. The Soil Management Plan would identify specific measures to address hazardous waste and materials cleanup efforts, including monitoring, handling, stockpiling, characterization, onsite reuse, export, and disposal protocols for excavated soil. GSA would coordinate closely with

the Grand Portage Band on all soil clean-up activities, including particularly prior to any hauling of soil offsite.

- All personnel would follow federal regulations and standard handling procedures as specified in product safety data sheets for hazardous materials.
- All potentially hazardous wastes generated would be properly characterized, segregated, and managed onsite prior to offsite disposal.
- Potentially hazardous wastes generated during project-related construction activities would be disposed of or recycled at appropriate facilities in accordance with associated regulatory requirements.
- If PCB-containing materials are identified onsite, appropriate abatement actions for their disposal would be implemented in accordance with regulatory requirements, and soils beneath transformers would be evaluated for evidence of releases. If present in underlying soils, appropriate actions for removal and disposal would be implemented in accordance with applicable regulatory requirements.
- Any existing municipal (household) trash, construction debris, and other waste materials would be removed from the limits of construction and disposed of in accordance with applicable regulations.
- Construction workers would adhere to safety standards promulgated in 29 CFR 17 to protect against workplace hazards. To minimize potential exposure or safety concerns to workers, appropriate personal protective equipment would be worn.
- Signs, barriers, and traffic cones would be installed to direct vehicles and non-construction personnel away from the limits of construction.
- Two permanent monitoring wells would be installed: one within the excavation area at the Grand Portage LPOE and one downgradient adjacent to the LPOE property line at the closest point to the former UST area. The well in the excavation would monitor the highest concentrations onsite while the downgradient well would provide assurance that the contamination is not migrating offsite. Regularly scheduled monitoring would become an ongoing action as a part of regular site operations.
- A vapor barrier would be installed on any new enclosed buildings as a precaution to provide protection against vapor intrusion from any residual contamination in groundwater.
- During construction of the three-phase power line, soils would be monitored using an organic vapor meter capable of detecting LEL, oxygen, carbon monoxide, hydrogen sulfide, and methane.
- Any soil suspected of being contaminated, either by visual evidence (e.g., staining), olfactory evidence (soil odors), or vapor meter readings would be managed in accordance with federal regulations in and coordination with the Grand Portage Band.

3.13 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN'S HEALTH AND SAFETY

This section describes the baseline conditions for race, income, and populations of children in the ROI and potential disproportionate impacts that could result on minority and low-income populations, and on children's health and safety from implementing the Proposed Action and No Action Alternative as discussed in Chapter 2, Description of the Proposed Action and Alternatives. In evaluating environmental justice under NEPA, agencies must recognize the interconnected cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action (CEQ 1997a).

This EIS uses the following documents and data sources to characterize the affected environment and assess potential impacts regarding environmental justice and protection of children's health and safety:

- U.S. Census Bureau data was used to quantify minority, low-income, tribal, and disabled populations within the ROI, and to determine the meaningfully greater criteria based on the demographics of the Grand Portage Reservation, Cook County, and the State of Minnesota.
- The USEPA's EJSCREEN model (USEPA 2024) serves as a screening-level tool to identify areas that may have a higher susceptibility to environmental justice concerns because of their demographic composition and existing exposure to contaminants or proximity to facilities. The model uses environmental indicators (as quantified in 13 pre-determined indices) to quantify susceptibility to exposure to various environmental contaminants, including proximity to O₃ and other air toxins, LBP, USTs, and hazardous waste sites, among other sources.

3.13.1 Affected Environment

3.13.1.1 Region of Influence

The ROI for environmental justice and children's health and safety focuses on a 1-mile radius of the proposed limits of construction. In addition, regional impacts on the Grand Portage Reservation are considered, due to the project's location within the Reservation. Potential impacts with the greatest intensity and longest duration (e.g., air quality, noise, transportation, changes in socioeconomic conditions) would occur nearest to the ROI.

3.13.1.2 Regulatory Setting

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to consider whether impacts on human health or the environment (including social and economic aspects) would be disproportionately high and adverse for minority and low-income populations, and would outweigh impacts on the general population or other comparison group.

EO 13990, *Protecting Public Health and the Environment and Restoring Science to Address the Climate Crisis*, directs federal agencies to prioritize both environmental justice and employment. EO 13990 supports the national goal of improving public health and the environment by ensuring access to clean air and water, limiting exposure to dangerous chemicals and pesticides, and holding polluters accountable, including those who disproportionately harm people of color and low-income people.

EO 14030, *Climate-Related Financial Risk*, outlines the government approach to mitigating climate-related financial risks and ensuring financial security for workers, families, and businesses who may be disproportionately affected by climate change. The EO advises federal agencies to assess their government programs, assets, and liabilities, and to identify causes of and address disparate impacts on disadvantaged communities and communities of color.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, places a high priority on the identification and assessment of environmental health and safety risks that may disproportionately

affect children. The EO requires that each agency “shall ensure that its policies, programs, activities, and standards address disproportionate risks to children.” It considers that physiological and social development of children makes them more sensitive than adults to adverse health and safety risks, and it recognizes that children in minority and low-income populations are more likely to be exposed to and have increased health and safety risks from environmental contamination than the general population.

EO 14096, *Revitalizing Our Nation’s Commitment to Environmental Justice for All*, directs federal agencies to consider whether impacts from a Proposed Action on human health or the environment (including social and economic aspects) would be disproportionately high and adverse for minority, low-income, tribal, and disabled populations, and would outweigh impacts on the general population or other comparison group.

The *Memorandum Addressing Children’s Health through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act* recommends that an EIS “describe the relevant demographics of affected neighborhoods, populations, and/or communities and focus exposure assessments on children who are likely to be present at schools, recreation areas, childcare centers, parks, and residential areas in close proximity to the project area, and other areas of apparent frequent and/or prolonged exposure” (USEPA 2012).

3.13.1.3 Existing Conditions

Environmental Justice

Relevant definitions to the environmental justice analysis are presented below:

- **Minority** – Individual(s) who are members of the following population groups as designated in the U.S. Census: Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, as well as Hispanic or Latino of any race.
- **Low-income** – The U.S. Census Bureau uses a set of income thresholds that vary by family size and composition to determine who is in poverty (i.e., classified as ‘low-income’). If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically but are updated for inflation using the Consumer Price Index. The official poverty definition uses income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps) (USCB 2023).
- **Minority or low-income population** – Populations where either: (a) the total number of minority or low-income individuals of the affected area exceeds 50 percent of the overall population in the same area, or (b) the total number of minority or low-income individuals within the affected area is meaningfully greater (e.g., 120 percent greater) than the minority or low-income population percentage in an appropriate comparison unit of geographic analysis (CEQ 1998). A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds. In identifying minority or low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Indigenous people), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body’s jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as not to artificially dilute or inflate the affected minority population.
- **Meaningfully greater** – A meaningfully greater minority or low-income population within a geographic unit affected by a federal action is determined by comparing the minority or low-income composition of the geographic unit to the minority or low-income composition of the general population. As with selecting the appropriate unit of geographic analysis, a comparison population

should be selected so as not to artificially dilute or inflate the affected minority populations. For this analysis, the comparison population is the total population of Cook County.

- **Tribal Nation (Tribal)** - An American Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges as a federally recognized Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 5130-5131).

There is only one block group within the Grand Portage Reservation (i.e., Census Tract 4801.01, Block Group 1, Cook County). Therefore, the unit of geographic analysis analyzed throughout this section is the Grand Portage Reservation, although where appropriate the proximity of residences relative to the ROI (i.e., 1 mile from the limits of construction) is considered.

USEPA typically considers a project to be in an area of potential environmental justice concern when an EJSCREEN analysis for the impacted area shows 1 or more of the 13 indices at or above the 80th percentile in the nation and/or state. Based on a review of the USEPA’s EJSCREEN model, Census Tract 4801.01, Block Group 1 was not identified as meeting or exceeding the 80th national percentile threshold for any environmental justice indicators (USEPA 2024).

To further assess the potential for disproportionate impacts to minority and low-income populations beyond the EJSCREEN analysis, this EIS considers available U.S. Census Bureau data for the Grand Portage Reservation. Data for Cook County, Minnesota is provided as a comparison for the analysis. State level data is provided throughout for reference. Table 3.13-1 summarizes the percentage of minority and low-income populations within the Grand Portage Reservation, Cook County, and State of Minnesota for comparison purposes.

Table 3.13-1. Minority and Low-Income Population within the Region of Influence

Population Group	Grand Portage Reservation		Cook County		Minnesota	
	Pop.	Total (%)	Pop.	Total (%)	Pop.	Total (%)
Nonminority	188	30.5	4,749	84.6	4,423,442	77.7
Black or African American	0	0	18	0.3	377,173	6.6
Total Hispanic or Latino	2	0.3	142	2.5	327,049	5.7
American Indian or Alaska Native	335	54.4	413	7.4	43,877	0.8
Asian	16	2.6	50	0.9	284,384	5.0
Other Minority ^a	75	12.2	239	4.3	239,367	4.2
Total Minority	428	69.5	862	15.4	1,271,850	22.3
Total Population	616	100	5,611	100	5,695,292	100
Low Income	106	17.2	477	8.5	516,284	9.1

Source: USCB 2022a and USCB 2022d

^a Other minority is defined in this table as Native Hawaiian or Other Pacific Islander; some other race; or two or more races. Pop = population; % = percentage.

Minorities comprise approximately 15 percent of Cook County’s population. If the Grand Portage Reservation’s percentage of minority individuals meets the 50 percent criterion or exceeds 120 percent of the total minority population within Cook County (i.e., 18.5 percent), the area is considered to have a minority population of environmental justice concern as defined above. The minority population within the Grand Portage Reservation is approximately 70 percent of the entire population, which meets the 50 percent criterion for a population with environmental justice concerns. Minority populations here are predominantly American Indian or Alaska Native, followed by Other Minority, which includes Native Hawaiian or other Pacific Islander; some other race; or two or more races.

Low-income populations were evaluated using the 50 percent criterion and the relative 120 percent or greater criteria for potentially affected groups within the ROI. If the Grand Portage Reservation’s percentage of low-income individuals meets the 50 percent criterion or is more than 120 percent of the total low-income population within Cook County (i.e., 10.2 percent), then the area is considered to have a low-income population of environmental justice concern as defined above. The low-income population within the Grand Portage Reservation is higher than it is in Cook County, comprising 17.2 percent of the population and exceeding the secondary threshold of 10.2 percent used to identify areas with meaningfully greater low-income populations.

Table 3.13-2 summarizes the percentage of disabled populations within the Grand Portage Reservation, Cook County, and Minnesota for comparison purposes. On the Grand Portage Reservation, approximately 17.4 percent of the population has at least one disability.

Table 3.13-2. Disabled Populations in the Region of Influence

Age Group	Grand Portage Reservation		Cook County		Minnesota	
	Pop.	Total (%)	Pop.	Total (%)	Pop.	Total (%)
Under 18 Years	9	1.5	14	0.2	52,041	0.9
18 to 64 Years	64	10.4	265	4.7	313,760	5.5
65 Years and Older	34	5.5	454	8.1	264,727	4.6
Total Disabled	107	17.4	733	13.1	630,528	11.1
Total Population	616	100	5,611	100	5,695,292	100

Source: USCB 2022a and USCB 2022e.
Pop = population; % = percentage.

Protection of Children’s Health and Safety

Table 3.13-3 shows the population of children under age 5 and between ages 5 to 19 within the Grand Portage Reservation, Cook County, and Minnesota for comparison purposes. Section 3.5, Air Quality and Climate Change, and Section 3.6, Noise, discuss locations of air pollutant- and noise-sensitive receptors, which may involve use by children. On the Grand Portage Reservation, children under age 5 comprise approximately 4.7 percent of the total population, while children aged 5 to 19 comprise approximately 19.6 percent of the total population.

Table 3.13-3. Youth Populations in the Region of Influence

Location	Children under Age 5 (%)	Children 5 to 19 Years (%)
Grand Portage Reservation	4.7	19.6
Cook County	4.2	11.6
Minnesota	6.0	19.6

Source: USCB 2022f
% = percentage

3.13.2 Environmental Consequences

3.13.2.1 Methodology

Consideration of the potential consequences for environmental justice and effects on children’s health and safety requires three main components:

1. A demographic assessment of the affected community to identify the presence of minority or low-income and youth populations that may be affected.

2. An assessment of potential impacts identified to determine if any result in significant adverse impacts to the affected environment.
3. An integrated assessment to determine whether any disproportionate and adverse impacts exist for minority or low-income groups and youth populations present in or near the project ROI.

To evaluate the impacts on environmental justice populations and on the health and safety of children, the Proposed Action was reviewed for the potential to result in the following:

- A disproportionate and adverse effect on a low-income, minority, tribal, or disabled population; or
- A disproportionate and adverse environmental health and safety risks to children.

Determination of disproportionate impacts for environmental justice is informed by the USEPA's *Promising Practices for EJ Methodologies in NEPA Reviews* (USEPA 2016). Context and intensity of impacts on the protected communities is considered when determining whether impacts from the Proposed Action would be considered disproportionate under NEPA. Factors considered when determining significance of impacts to environmental justice populations include:

- Whether the action results in environmental, economic, or health impacts due to special vulnerabilities, unique routes of exposure, or cultural practices;
- The degree to which the action may establish a precedent for future actions with major effects;
- Whether the action results in loss of significant cultural or historical resources; or
- Whether the action results in impacts with specific concern to low-income or minority populations that are highly controversial.

Determination of disproportionate impacts on children's health and safety is informed by USEPA's *Memorandum Addressing Children's Health through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act* (USEPA 2012).

3.13.2.2 Proposed Action

Construction

The proposed limits of construction are located within the Grand Portage Reservation, which contains a minority and low-income population of environmental justice concern, and a disabled population that is greater proportionally than either the county or the state. This EIS identified the following impacts that could occur during construction.

- **Air Quality Impacts** – The Proposed Action construction/demolition activities would cause short-term, minor adverse impacts to air quality locally and would represent a negligible, incremental contribution to global GHG emissions and climate change.
- **Noise Disturbance** – The Proposed Action would have short-term, negligible to minor and local adverse noise and vibration impacts and short-term, minor, and regional adverse noise impacts during construction.
- **Traffic** – A temporary increase in traffic volumes due to an increase in onsite staff and truck deliveries is not expected to adversely impact traffic operations during construction.
- **Vegetation and Soils** – The Proposed Action would result in long-term, minor, site-specific and local adverse impacts to soils from increased erosion and topsoil loss and short and long-term, minor adverse impacts to vegetation from ground disturbance and the removal of existing vegetation, including the removal of 0.8 acre of trees.

- **Water Resources** – The Proposed Action construction/demolition activities would cause short and long-term, minor to moderate, adverse local and regional impacts to water resources from increased erosion, sedimentation, and pollutants to receiving waters, as well as permanent loss of wetlands. Native, previously undisturbed soils outside the existing LPOE footprint may contain historic mercury contamination. Wetlands in particular are likely to have readily absorbed past contaminants. Under the Proposed Action, these soils would be disturbed, which could result in mercury contamination of receiving waters if stormwater is not managed properly.
- **Human Health and Safety.** Any additional mercury contamination resulting from the Proposed Action would further impact fish populations already impaired by current mercury levels (mercury is the dominant fish contaminant across the watershed). This would represent a marginal increase in adverse impacts to human health on individuals who consume fish from local waterways.
- **Recreation** – The Proposed Action would cause minor disruptions to access to the boat launch area, which is frequented by members of the Grand Portage Band. Construction activities may also cause minor to moderate short-term disturbances to users of Grand Portage State Park, particularly near the welcome center, Picnic Trail, and High Falls Trail, from dust, noise levels, and traffic conflicts.
- **Job Opportunities** – Short-term, minor to moderate, beneficial impacts on employment locally would result from the creation of direct, indirect, and induced jobs during construction as described in Section 3.10, Socioeconomics.

Environmental Justice

With implementation of identified management practices throughout this EIS, the Proposed Action would not have a disproportionate and adverse impact on environmental justice during construction. Although populations living, working, and recreating within the Grand Portage Reservation, particularly those within 1 mile of the proposed limits of construction, may be adversely affected by activities during construction of the Proposed Action, impacts described above and elsewhere in this chapter would either be of low intensity (i.e., negligible or minor impacts) or would be managed or reduced such that they would not disproportionately affect a minority, low-income, or disabled population. Adverse impacts from construction air emissions, noise, or traffic would be negligible to minor because the most-affected populations are at such a distance and are physically separated from the proposed limits of construction by wooded areas, such that the extent of any adverse impacts during construction described above would be diminished. Impact reduction measures related to managing air emissions, noise levels, and traffic conditions would further reduce impacts. Adverse impacts to water resources and water quality have the potential to disproportionately affect the Grand Portage Band as any increase in pollutants of surrounding waterways would adversely impact culturally significant fishing practices. The addition of soil runoff containing mercury would also contribute to adverse fishing impacts, as fishing consumption advisories for mercury are already in place in the area. However, as described in Sections 3.3, Water Resources and 3.12, Human Health and Safety, the likelihood of such impacts is considered low. Further, GSA would follow applicable stormwater permit requirements, BMPs, and tribal ordinances which are expected to minimize potential adverse impacts to water resources and in turn impacts on local fishing. Access to the boat launch, which is utilized by tribal members, is within the ROI; however, GSA would coordinate with the Grand Portage Band to provide access to the boat launch area. There may be temporary, minor disturbances to users of the boat launch from construction activity (see Section 3.8, Land Use and Visual Resources).

Tribal traditions are interwoven into the ecosystems, from hunting and gathering to places and activities that have spiritual and artistic meaning. Impacts analyzed within an EIS generally rely heavily on quantitative data and a western worldview of science and its applications, which can fail to consider and incorporate Native American perspectives and values regarding the environment (Dongoske et al. 2015). Tribal values for natural and cultural resources are generally not quantifiable. The traditional tribal

worldview may consider the natural, cultural, and spiritual value of a resource instead of the total number of affected resources, meaning some tribes may consider an adverse impact on a single natural resource as harmful as an impact on multiple resources. Actions that result in the loss of a resource, such as soils or vegetation, or access to the resource are generally considered equally detrimental by tribes. Construction of the Proposed Action is not expected to impact any known sites that are culturally or artistically significant to tribal populations. The proposed limits of construction or immediately adjacent areas are not commonly used for hunting and gathering or other subsistence means (e.g., wild rice); therefore, the Proposed Action is not expected to adversely affect subsistence practices. The Proposed Action would result in up to 10.4 acres of soil disturbance and 0.8 acre of tree removal in support of the modernization and expansion of the LPOE and 13.3 acres of soil disturbance in support of the three-phase power line; however, the majority of the land within the proposed limits of construction has been previously disturbed due to the construction and operation of the existing Grand Portage LPOE and location in the existing utility ROW along Highway 61. Further, as described in Section 2.1, Alternatives Development Process, GSA has worked closely with the Grand Portage Band to reduce the operational footprint of the Proposed Action to remain entirely within the MnDOT easement to limit overall disturbance. Only a small, temporary incursion outside of the easement would be necessary during construction. GSA would make a concerted effort to ensure as much soil remain on site as possible in consideration of Grand Portage Band requests and cultural practices. GSA would implement appropriate requirements to reduce soil erosion and soil loss via project design plans, as well as through erosion and sediment controls and site stabilization measures as specified through applicable NPDES permit and tribal permitting requirements. GSA would also use developed native seed mixes specific to wet and dry areas of the Grand Portage Reservation to revegetate disturbed areas following construction. Therefore, while overall impacts from land disturbance would fall disproportionately on the Grand Portage Band, GSA would implement measures such that the extent of any adverse impacts during construction described above would be diminished.

Concerns exist about the link between an influx of temporary workers and the potential for an associated increase in violence against tribal populations, particularly indigenous women, including sexual abuse or sex trafficking. Traffickers seek out people they perceive to be vulnerable, with individuals being at a higher risk if they are minors, low-income, homeless, have a lack of resources, chemical dependency, or prior experiences of abuse, among other factors that may be found in tribal communities (National Congress of American Indians Policy Research Center 2016). The addition of a temporary, cash-rich workforce increases the likelihood that sexual abuse or trafficking could occur. Additionally, rural areas often do not typically have the resources necessary to detect and prevent these activities. This is not a certain direct impact from the Proposed Action; however, it is an issue that requires consideration under impact reduction measures (see Section 3.13.2.4).

Disabled populations within the Grand Portage Reservation are not expected to be affected by the construction or operation of the Proposed Action, as there will be no impact to public transportation or assistance services. During construction, Americans with Disabilities Act (ADA) compliant access points would be maintained during construction for both visitors and workers at the LPOE. The contractor would be required to ensure ADA access is appropriate and, where necessary, includes conspicuous signage to ensure continuity of access and service at the LPOE for all visitors and workers. In addition, buildings, parking areas, sidewalks, and other facilities would be designed to comply with ADA requirements to ensure full access to all, including disabled populations, during operation of the expanded LPOE.

Protection of Children's Health and Safety

The Proposed Action would not have a disproportionate and adverse impact on children's health and safety during construction. While children are especially vulnerable due to higher relative doses of air pollution, smaller diameter airways, more active time spent outdoors and closer to ground-level sources of vehicle exhaust, the only area within 1 mile of the proposed limits of construction at the Grand Portage LPOE that children may regularly visit is Grand Portage State Park, which is directly adjacent to the proposed limits of construction. Adverse impacts would generally be negligible to minor because the areas of the park

where children would most likely be present are physically separated from the proposed limits of construction by wooded areas, such that the extent of any adverse impacts during construction described above would be diminished. Further, use of the park by children in the area closest to the limits of construction is expected to be highly intermittent and sporadic. Along the three-phase power line route, the Oshki Ogimaag Charter School, Grand Portage Headstart, and the Grand Portage Daycare Center are all located within a 0.5-mile radius of the proposed limits of construction. However, adverse impacts would generally be negligible because these facilities are physically separated from the proposed limits of construction by wooded areas, such that the extent of any adverse impacts during construction would be diminished. Construction in proximity to these facilities would only last over a period of a few days.

Operations

The EIS identified the following impacts that could occur during operations and that may affect minority and low-income populations and children's health and safety within the ROI.

- **Air Quality Impacts** – Operations under Proposed Action would likely have some beneficial impacts on air quality from a reduction in the wait time for POVs to be processed.
- **Traffic** – The Proposed Action would result in beneficial local impacts by providing more queuing space which would improve traffic flow, reduce delays, and improve traffic safety.
- **Job Opportunities** – Long-term, negligible to minor, beneficial impacts on employment locally are expected.

Environmental Justice

The impacts described above and elsewhere in this chapter during operations are not expected to be disproportionate and adverse for environmental justice, because operations for the Proposed Action would generally remain comparable to current operations of the existing Grand Portage LPOE but would be more efficient. The new facilities would be ADA compliant as noted previously. Impacts would generally be negligible to minor beneficial, and the most-affected populations are at such distance and are physically separated from modernized and expanded LPOE by wooded areas, such that the extent of any adverse impacts during operations described above would be diminished.

Protection of Children's Health and Safety

The impacts described above and elsewhere in this chapter are not expected to be disproportionate and adverse for children's health and safety, because operations for the Proposed Action would generally remain comparable to current operations of the existing LPOE but would be more efficient. Impacts would generally be negligible to minor and beneficial. The most-affected child populations and areas used regularly by children are at such distance and are physically separated from the modernized and expanded LPOE by wooded areas, such that the extent of any adverse impacts during operations described above would be diminished.

Climate Risk

Long-term impacts related to climate change are discussed in Section 3.5.2. The Proposed Action would result in negligible incremental contributions to global GHG emissions and climate change. Generally, these impacts include long-term increases in temperatures, increases in extreme weather events, impacts on food production, and health impacts associated with these conditions. Tribal nations are especially vulnerable to climate risks because of their reliance on natural resources for their cultural, subsistence, and economic needs. However, the Proposed Action would have a negligible adverse contribution to climate risk, and could, through implementation of green infrastructure and use of green energy, result in reduced emissions, which would positively benefit climate change prospects. The Proposed Action would not have any disproportionate impacts on environmental justice populations or children's health related to climate risks.

3.13.2.3 No Action Alternative

Under the No Action Alternative, GSA would not modernize or expand the Grand Portage LPOE or install the three-phase power line; current facilities and infrastructure at the existing LPOE would remain. There would be no change in conditions relating to environmental justice populations or children's health and safety.

3.13.2.4 Impact Reduction Measures

The contractor would develop a plan to ensure access to and throughout the site is provided during construction, including any necessary ADA accessibility areas. Because the LPOE would remain open during construction, full access for all people (visitors and workers, including disabled populations) would be maintained. Buildings, parking areas, sidewalks, and other facilities would also be designed and constructed in compliance with ADA requirements to ensure full access to all visitors and workers.

To prevent or reduce the occurrence of construction related impacts to vulnerable populations discussed previously (i.e., sex trafficking, abuse), GSA may consider implementing an educational awareness plan with the companies and subcontractors it hires to construct the modernized and expanded LPOE. Additionally, construction workers would undergo security screenings and background checks to ensure workers with a history of violence or criminal activity are prohibited from working on the project.

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CHAPTER 4 CUMULATIVE IMPACTS

4.1 INTRODUCTION

Cumulative impacts are defined by the CEQ regulations in 40 CFR 1508.1(g)(3) as “*effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.*” Taken together, these land use activities may result in cumulative effects on a variety of natural resources, such as vegetation, species and their habitats, water resources, and air quality. The construction and operations of these actions also can contribute to cumulative impacts on the urban environment, such as changes in community character, traffic patterns, noise, housing availability, and employment. According to CEQ’s cumulative impacts guidance, the cumulative impact analysis should be narrowed to focus on important issues at a national, regional, or local level (CEQ 1997b).

4.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

The cumulative effects analysis presented in this EIS is based on the potential effects (direct and indirect) resulting from the construction and operation of the modernized and expanded Grand Portage LPOE (as described in Chapter 2, Description of the Proposed Action and Alternatives), combined with other past, present, and reasonably foreseeable future actions that could have effects in the ROI.

4.2.1 Past and Ongoing Actions

Original construction of the existing Grand Portage LPOE (as well as construction of Highway 61 through the LPOE, including the Pigeon River International Bridge) occurred on a previously undisturbed area in the early 1960s. The area surrounding the existing LPOE is sparsely developed; development primarily includes Ryden’s Border Store and the Grand Portage State Park Welcome Center. Periodic, past, and ongoing actions in this area include routine maintenance of Highway 61 by MnDOT and maintenance of existing trails and local roadways within the Grand Portage State Park. Recent past projects in the project vicinity include the re-decking of the Pigeon River International Bridge in early 2023. The bridge project replaced the bridge deck in its entirety, including new bridge surfacing, railing, guardrail, lighting, and grading of existing approaches. One ongoing project located on a 4-acre parcel within the Grand Portage Reservation approximately 3.5 miles southwest of the Grand Portage LPOE includes the demolition and expansion of the Hat Point Ferry Terminal to provide two safe harbor terminals for the Grand Portage Isle Royale Transportation Line. This project includes rebuilding the Hat Point Ferry Terminal dock, public docks, ticketing, and restroom building; parking lot improvements, electrical upgrades; and relocation and rebuilding the boat ramp. The Hat Point Ferry Terminal project is scheduled to be completed in September 2024.

Another ongoing project considered includes construction of the proposed Grand Portage Timber Bridge 16529 by the Cook County Highway Department, NPS, and the Grand Portage Band. The bridge would be constructed at the site of the Grand Portage National Monument and is expected to be completed in 2025, with the goal of moving vehicular traffic off the historic stone bridge over Grand Portage Creek and onto a new alignment of Mill Creek Road. While construction is occurring, traffic would continue to utilize the current bridge/roadway. When the project is complete, the new intersection would control traffic and allow for pedestrian crossing to adjacent trails and Grand Portage National Monument features. This bridge project area is located almost 6 miles south of the existing Grand Portage LPOE and is well outside of the ROI for most resource areas.

4.2.2 Potential Future Actions

No potential future actions were identified that would contribute to cumulative impacts when added to the Proposed Action.

4.2.3 Impacts Analysis

The Proposed Action would consist of modernization and expansion of the Grand Portage LPOE, as well as construction of a new underground three-phase power line. The operational footprint for the modernized and expanded LPOE would be wholly located within the existing MnDOT easement that was set-aside for Highway 61 and the LPOE. Only temporary, limited incursions outside of the MnDOT easement would occur during construction, which would limit impacts to mostly previously disturbed areas. The existing LPOE is located within an area with a land use classification of “Parks and Recreation”; the three-phase powerline route runs through crosses through areas designated as “Commercial”, “Forestry”, “Residential”, and “Preservation”, in addition to “Parks and Recreation” (Grand Portage Band of Lake Superior Chippewa 2023).

At the time of original construction of the LPOE, Highway 61, and associated facilities, the landscape of the area, including wetlands, contiguous forested areas, habitat, and soils, was impacted. The current environment within the ROI is a result of those initial changes. Due to a lack of continuing and consistent disturbance in this area, and due to large, adjacent areas of undeveloped land, the ecosystem surrounding the existing LPOE is expected to have mostly recovered from or adapted to past development and is generally in good condition or health. Resources analyzed in this EIS are not at risk of nearing any threshold at which the resource would be unable to sustain itself in the future. As such, a negligible or minor impact from the Proposed Action would do little to contribute to an adverse cumulative impact and have little to no potential to negatively affect the long-term productivity or sustainability of a given resource.

Impacts of greater intensity would generally be reduced through proper controls and procedures during construction, and other mitigation measures, as summarized in Chapter 3, Affected Environment and Environmental Consequences. The location of the LPOE within an area of land designated for Parks and Recreation further reduces the potential for cumulative impacts from future reasonably foreseeable projects, as any such projects would need to be compatible with a such land use. Because the operational footprint of the modernized and expanded LPOE would occur entirely within the MnDOT easement that has been previously disturbed, and because construction of the three-phase power line would occur within an existing, previously disturbed, and maintained utility ROW, the majority of disturbance from the Proposed Action would occur in previously disturbed areas. The Proposed Action would not degrade any resource’s health or current condition to the point where the resource would no longer be viable or sustainable. Table 4-1 provides a summary of potential impacts that could result from the Proposed Action, and a description of any potential cumulative effects. If only negligible or minor impacts are expected from the Proposed Action for a given resource area, it is assumed that no cumulative impacts would occur for that resource area, for the reasons described above. If greater than minor impacts are anticipated from the Proposed Action for a resource area, additional analysis of potential cumulative impacts is provided.

Table 4-1. Cumulative Impacts of Proposed Action

Resource	Proposed Action		No Action Alternative	Analysis of Cumulative Effects for Proposed Action Impacts Greater than “Minor”	Contributes to Adverse Cumulative Effect?
	Construction	Operations			
Geological Resources – Geology	Long-term, minor, adverse	No effect	No effect	N/A	No
Geological Resources – Topography	Long-term, negligible, adverse	No effect	No effect	N/A	No
Geological Resources – Soils	Long-term, minor, adverse	Long-term, minor, adverse	No effect	N/A	No
Water Resources – Surface Waters	Short-term, minor, adverse	Long-term, minor beneficial	No effect	N/A	No
Water Resources – Floodplains	No effect anticipated	No effect anticipated	No effect	N/A	No
Water Resources – Wetlands	Short- and long-term, minor to moderate, adverse	No effect	No effect	0.9 acre of wetland would be permanently removed as a result of the Proposed Action, adding to permanent wetland loss that occurred during original construction of the existing LPOE and associated facilities. Through permitting requirements and anticipated mitigation of wetland losses, no net loss of wetlands would be anticipated.	Yes – but not adverse with mitigation / restoration
Water Resources – Groundwater	Short-term, minor adverse	Long-term, negligible, adverse	No effect	N/A	No
Biological Resources – Vegetation	Short- and long-term, minor, adverse	No effect	No effect	N/A	No
Biological Resources – Wildlife	Short-term, minor, adverse	No effect	No effect	N/A	No
Biological Resources – Special Status Species	May affect, not likely to adversely affect	No effect	No effect	N/A	No
Air Quality and Climate Change – Air Quality	Short-term, minor, adverse	Long-term, minor, beneficial impact	No effect	N/A	No

Table 4-1. Cumulative Impacts of Proposed Action

Resource	Proposed Action		No Action Alternative	Analysis of Cumulative Effects for Proposed Action Impacts Greater than “Minor”	Contributes to Adverse Cumulative Effect?
	Construction	Operations			
Air Quality and Climate Change – GHGs	Short-term, negligible, adverse	Long-term, negligible, adverse	No effect	N/A	No
Noise (and vibration)	Short-term, minor to moderate, adverse	Long-term, negligible, adverse (vibration – no effect)	Long-term, minor, adverse (vibration – no effect)	No projects (ongoing or future) have been identified within the project vicinity that would contribute to any cumulative noise impacts. Both the proposed demolition and expansion of the Hat Point Ferry Terminal and Grand Portage Timber Bridge projects would be completed before the Proposed Action is started and would not contribute to any cumulative noise in the ROI.	No
Traffic and Transportation	Short-term, minor, adverse	Long-term, minor, beneficial effects	Long-term, minor to moderate, adverse	N/A	No
Land Use and Visual Resources – Land Use	Short-term, minor to moderate, adverse	No effect	No effect	Both the proposed demolition and expansion of the Hat Point Ferry Terminal and Grand Portage Timber Bridge projects would be completed before the Proposed Action is started and would not contribute to temporary disturbances to users of the Grand Portage State Park. Coordination between GSA, the Grand Portage Band, MnDOT, and other relevant stakeholders would minimize land use conflicts.	No
Land Use and Visual Resources – Visual Resources (including haze)	Long-term, minor, adverse	Long-term, moderate, beneficial	Long-term, minor, adverse	Long-term moderate beneficial impacts are not expected to result in cumulative impacts to visual resources within the ROI.	No
Land Use and Visual Resources – Night Sky	Short-term, minor, adverse	Long-term, minor, adverse	No effect	N/A	No

Table 4-1. Cumulative Impacts of Proposed Action

Resource	Proposed Action		No Action Alternative	Analysis of Cumulative Effects for Proposed Action Impacts Greater than “Minor”	Contributes to Adverse Cumulative Effect?
	Construction	Operations			
Infrastructure & Utilities – Infrastructure	Short-term, minor, adverse	Long-term, major, beneficial	No effect	Long-term major beneficial impacts are not expected to result in cumulative impacts to infrastructure within the ROI.	No
Infrastructure & Utilities – Utilities	Short-term, minor, adverse	Long-term, negligible, adverse; long-term, major, beneficial	No effect	Long-term major beneficial impacts are not expected to result in cumulative impacts to utilities within the ROI.	No
Socioeconomics – Housing	Short-term, minor to moderate, adverse	No effect	No effect	The demolition and expansion of the Hat Point Ferry Terminal is scheduled to be completed (2024) before the Proposed Action is started. The proposed Grand Portage Timber Bridge project is anticipated to be completed in 2025 before the Proposed Action is started. Both of these projects when combined with the Proposed Action are not anticipated to contribute to a shortage of housing available to construction workers in the ROI.	No
Socioeconomics – Population/ Community Services	Short-term, negligible to minor, adverse	No effect	No effect	N/A	No
Socioeconomics – Local Economy	Short-term, minor, adverse; short-term, minor to moderate, beneficial	Long-term, negligible to minor, beneficial	No effect	The demolition and expansion of the Hat Point Ferry Terminal is scheduled to be completed (2024) before the Proposed Action is started. The proposed Grand Portage Timber Bridge project is anticipated to be completed in 2025 before the Proposed Action is started. Both of these projects when combined with the Proposed Action are not anticipated to contribute to a cumulative increase in spending in the area, boosting the local economy, or contribute to a decreased unemployment rate for the duration of construction in the ROI.	No
Cultural Resources – Archaeology	Less-than-significant adverse impact	No effect	No effect	N/A	No
Cultural Resources – Aboveground	No adverse effect	No effect	No effect	N/A	No

Table 4-1. Cumulative Impacts of Proposed Action

Resource	Proposed Action		No Action Alternative	Analysis of Cumulative Effects for Proposed Action Impacts Greater than "Minor"	Contributes to Adverse Cumulative Effect?
	Construction	Operations			
Historic-age Resources					
Human Health and Safety	Short-term, negligible to minor, adverse	Long-term, negligible to minor, adverse	Long-term, negligible, adverse	N/A	No
Environmental Justice and Protection of Children's Health and Safety	Disproportionate impacts would be reduced through various measures	Disproportionate impacts would be reduced through various measures	No effect	N/A	No

GHG = Greenhouse Gas; GSA = General Services Administration; MnDOT = Minnesota Department of Transportation; N/A = not applicable; ROI = Region of Influence; Pop = population; % = percentage.

CHAPTER 5 ENVIRONMENTAL TRADE-OFFS AND COMMITMENTS OF RESOURCES

5.1 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE HUMAN ENVIRONMENT AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Section 102(C)(iv) of NEPA [42 U.S.C. § 4332] and 40 CFR 1502.16 require an EIS to address “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.” This involves environmental tradeoffs and the consideration of whether a Proposed Action is sacrificing a resource value that might benefit the environment in the long-term, for some short-term value to the project proponent (i.e., GSA) or the public.

The purpose of the Proposed Action is to support the mission of CBP and other tenant agencies by bringing the Grand Portage LPOE facilities and operations in line with current land port design standards and operational requirements while addressing existing deficiencies identified with the ongoing port operations. As described in Section 1.2, Purpose and Need, these deficiencies relate to the inadequate capacity of existing facilities to meet increasing demand and spatial constraints that cause traffic congestion and safety issues for employees and users of the LPOE.

The area impacted under the Proposed Action includes the existing 5.7-acre LPOE site, the LPOE’s proposed limits of construction (10.4 acres), and the proposed limits of construction to install the proposed three-phase power line (13.3 acres). The existing LPOE has been fully developed with facilities and paved surfaces supporting the CBP and other tenants. The proposed limits of construction for the LPOE and three-phase power line encompasses the existing LPOE and both the LPOE and three-phase power line are wholly located within the existing MnDOT easement or Arrowhead’s existing utility ROW. This area has been disturbed by prior activities and does not provide high-quality native habitat for local species as discussed in Section 3.4, Biological Resources.

The existing, mostly developed or disturbed nature of the proposed limits of construction for the LPOE and three-phase power line do not possess substantial environmental resources whose long-term potential benefits would be sacrificed to provide for short-term value to the project proponent (GSA). The Proposed Action, if implemented, would last for many decades. The short-term impacts on the environment would be offset by the benefits that the Proposed Action would generate in the long term. The Proposed Action would fulfill capacity needs and provide mitigation for current adverse traffic conditions. If the LPOE would not be expanded at the current location, the need for adequate CBP facilities could require consideration of an entirely new location for a LPOE that would involve potentially far greater environmental tradeoffs.

5.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF FEDERAL RESOURCES

Section 102(C)(v) of NEPA [42 U.S.C. § 4332] requires an EIS to address “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” Irreversible and irretrievable commitments of resources mean losses to or impacts on natural resources that cannot be recovered or reversed.

More specifically, “irreversible” implies the loss of future options. Irreversible commitments of resources are those that cannot be regained, such as permanent conversion of wetlands and loss of cultural resources, soils, wildlife, agricultural and socioeconomic conditions. The losses are permanent and incapable of being reversed. “Irreversible” applies mainly to the effects from use or depletion of nonrenewable resources, such as fossil fuels or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time.

“Irretrievable” commitments are those that are lost for a period of time, such as the temporary loss of timber productivity in forested areas that are kept clear for use as a ROW, road, or winter sports site. The lost forest production is irretrievable, but the action is not irreversible. If the use changes back again, it is possible to resume timber production.

5.2.1 Irreversible Commitments of Federal Resources

Under the Proposed Action, the following irreversible commitments of resources would occur:

- Consumption of fossil fuels (primarily diesel) and lubricants by heavy construction equipment (e.g., bulldozers, graders, scrapers, excavators, loaders, trucks) used to demolish structures, excavate land, and develop structures for the upgraded LPOE and associated facilities;
- Materials used to construct the new facilities, including cement/concrete, soil cement, steel, iron and other metallic alloys, copper wiring, PVC pipe, plastic, etc.;
- Energy, supplied by fossil fuels or some other source of electricity, used over the operational life and maintenance of the upgraded LPOE, associated facilities, and connected actions;
- Land required for development within the proposed limits of construction; and
- Water used for construction purposes.

5.2.2 Irretrievable Commitments of Federal Resources

As noted above, “irretrievable” commitments of resources are those that are lost for a period of time but not permanently. The Proposed Action would entail the long-term loss of vegetation and habitat within the proposed limits of construction. Most of this vegetation and habitat was disturbed during previous activities, has since re-established, and is not characterized as high-quality native vegetation for native or protected species.

CHAPTER 6 CONSULTATION AND COORDINATION

6.1 SCOPING AND PUBLIC INVOLVEMENT

The NEPA process provides several opportunities for public involvement to include public scoping and a public comment period following publication of the Draft EIS. During each opportunity for public involvement, interested and affected parties (i.e., stakeholders) may express their concerns and provide their views about:

- The project and its possible impacts on the natural and human environment;
- What should be addressed in the analysis and evaluation of the Proposed Action; and
- The adequacy of the NEPA analysis and documentation of potential impacts in the EIS.

Public participation with respect to decision-making on the Proposed Action is guided by GSA's implementing procedures for compliance with NEPA (GSA Order ADM 1095.1F, *Environmental Considerations in Decision Making*). GSA considered comments from interested and affected parties in the preparation of the Draft and Final EIS.

6.1.1 Scoping Phase for the Draft EIS

Scoping is an early and open process for determining the scope of issues to be addressed and for identifying potential major issues related to a proposed action. Internal scoping began with GSA and CBP staff identifying the purpose of and need for the project, defining the proposed action, determining the environmental issues potentially required for detailed analysis, eliminating issues that are out of scope of the project, listing data needs, identifying cumulative actions, and confirming the appropriate NEPA path. External scoping began when the public and all interested stakeholders were notified about the proposed action and comments on the project and potential environmental issues were solicited.

To formally initiate the NEPA process for the Draft EIS, GSA published a Notice of Intent (NOI) to prepare a Draft EIS in the *Federal Register* on September 22, 2023. After issuing the NOI, GSA conducted a scoping process that included hosting a hybrid virtual and in-person public scoping meeting and consultation with various interested governmental agencies and stakeholders. GSA also published advertisements in the Grand Portage, MN local newspaper and on social media, and mailed letters to interested parties, in the days preceding the public scoping meeting. An advertisement was published in the *Cook County Herald* on September 29, 2023. Announcements were posted on GSA's social media accounts on September 26, 2023. The advertisement and announcements indicated GSA's intent to prepare a Draft EIS and conduct a public scoping meeting; provided a brief description of the project; identified the public scoping meeting location and time; and included instructions on how to access the meeting and submit a comment. GSA also coordinated with the Grand Portage Band to post announcements on their social media accounts on September 27, 2023 and distribute flyers within the community.

A hybrid virtual and in-person public scoping meeting was held on October 5, 2023, from 5:00 p.m. to 7:00 p.m. Central Standard Time at the Grand Portage State Park Welcome Center at 9393 E, Highway 61, Grand Portage, MN 55605. The public also had the opportunity to attend the meeting virtually via Zoom. Approximately 11 and 7 people attended the meeting, virtually and in-person, respectively. The meeting began with a presentation and then was followed by a public comment session where members of the public had an opportunity to provide feedback or questions on the project. After the scoping meeting, GSA posted the scoping meeting presentation, recording, and handout to GSA's project website. GSA accepted public scoping comments through October 22, 2023.

Outside of the public scoping meeting, GSA invited written comments to be submitted via mail or email throughout the scoping period. More specifically, GSA invited comments on the key topics that should be covered in the Draft EIS; examples of potential adverse and beneficial impacts from the Proposed Action;

and any other relevant information. Comments were submitted using comment forms and emails. A total of 11 unique commenters provided input during the scoping period. GSA used the results of the scoping efforts to further define the scope and areas of emphasis (or focus) of the Draft EIS. A Public Comments Summary Report was prepared for this EIS and includes a detailed description of comments received, location addressed in this EIS, as well as details on the Public Scoping Meeting (see Appendix A).

6.2 DRAFT EIS PHASE

6.2.1 Notification of a Draft EIS Public Hearing

GSA is soliciting comments from interested persons and stakeholders on the Draft EIS during a 45-day comment period. The public was notified of the Draft EIS public hearing through publication of a Notice of Availability as a display advertisement in the *Cook County Herald*, as well as letters mailed to interested parties. Comments received during the 45-day comment period will be considered in preparation of the Final SEIS and will be made part of the Administrative Record.

6.2.2 Draft EIS Public Hearing

GSA invites public comment on the Draft EIS during a hybrid virtual and in-person public hearing to be held during the Draft EIS public comment period, similar to the public scoping meeting held for the project. The public will have an opportunity to interface with GSA representatives as well as have the opportunity to provide comments on the Draft EIS. Information on attending the public hearing can be found at the following website:

<https://www.gsa.gov/about-us/gsa-regions/region-5-great-lakes/buildings-and-facilities/minnesota/grand-portage-land-port-of-entry>

6.3 FEDERAL AGENCIES

GSA initially coordinated with the USFWS as per Section 7 of the Endangered Species Act related to construction and operations at the Grand Portage LPOE. GSA completed the Northern Long-eared Bat Rangewide Determination Key on November 15, 2023, documenting its determination of effects to the federally protected species. GSA also coordinated directly with USFWS per Section 7 requirements to determine effects to federally protected species. GSA has determined there would be no adverse effects to federally threatened or endangered species with the implementation of impact avoidance measures summarized in Section 3.4.2.4. GSA sent a letter to USFWS on April 2, 2024 requesting concurrence with GSA's effects determinations; USFWS concurred with this determination on May 24, 2024.

GSA submitted an updated letter to USFWS on October 1, 2024 documenting updated findings related to construction of the three-phase power line route. GSA has determined there would still be no adverse effects to federally threatened or endangered species with the implementation of impact avoidance measures summarized in Section 3.4.2.4. Responses from USFWS will be included in the Final EIS.

Copies of all correspondence with USFWS to date can be found in Appendix B.

6.4 TRIBAL CONSULTATION

GSA has entered into a Memorandum of Understanding with the tribal government of the Grand Portage Band of Lake Superior Chippewa dated July 6, 2023, to serve as a cooperating agency for the development of this EIS. GSA is working closely with the Grand Portage Band in preparing the EIS and regularly shares project updates.

GSA is in the process of conducting formal consultation with the Grand Portage Band THPO and consulting parties under Section 106 of the NHPA. GSA initiated consultation with the THPO via a letter dated July 11, 2023, and included a proposed description of the APE. The THPO concurred with the APE in an email dated October 20, 2023.

GSA provided the archaeological literature search related to the undertaking at the Grand Portage LPOE to the THPO via email on January 12, 2024; and submitted a historic architectural survey report documenting the findings described in this EIS to the THPO via email on July 12, 2024. The Grand Portage THPO concurred with the findings of these reports in a letter dated July 25, 2024. GSA is currently updating the archaeological literature search to include construction of the three-phase power line as part of the undertaking and will continue consultation under Section 106. The results of this consultation process, as well as any applicable impact reduction measures, will be included in the Final EIS.

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CHAPTER 9 DISTRIBUTION LIST

Tribal Nations and Organizations

Grand Portage Band of Lake Superior Chippewa

U.S. Federal Agencies

Bureau of Indian Affairs, Midwest Region

Customs and Border Protection

Federal Emergency Management Agency, Region 5

Federal Highway Administration, Minnesota Division

Federal Transit Administration, Region 5

International Joint Commission, Great Lakes Regional Office

National Oceanic and Atmospheric Administration, Greater Atlantic Regional Fisheries Office

National Park Service, Region 3

National Park Service, Voyageurs National Park

National Resources Conservation Service, Duluth MLRA Soil Survey Office

NOAA Fisheries

U.S. Army Corps of Engineers, St. Paul District

U.S. Department of Homeland Security, Customs and Border Protection

U.S. Department of Housing and Urban Development, Region 5

U.S. Department of Interior, Office of Environmental Policy & Compliance

U.S. Environmental Protection Agency, NEPA Compliance Division

U.S. Environmental Protection Agency, Region 5

U.S. Fish and Wildlife Service, Minnesota-Wisconsin Ecological Services Field Office

U.S. Geological Survey, Upper Midwest Water Science Center

Canadian Government/Agencies

Canada Border Services Agency

Canadian Parliament

Canadian Transportation Agency

Municipality of Neebing

Ontario Ministry of Transportation

Ontario Provincial Parliament

Thunder Bay Community Economic

Transport Canada

State Agencies

Minnesota Department of Transportation, District 1
Minnesota Indian Affairs Council
Minnesota Office of the State Archaeologist
Minnesota Public Utilities Commission
Minnesota State Historic Preservation Office

Miscellaneous Organizations

Arrowhead Regional Development Commission
Grand Marais Public Library

Elected Officials

Thomas Bakk, State Senator
Roger Skraba, State Representative
Amy Klobuchar, Senator
Tina Smith, U.S. Senator
Pete Stauber, U.S. Representative
Tim Walz, Governor of Minnesota

Other Interested Parties

Grand Portage Lodge & Casino
Grand Portage National Monument
Ryden's Border Store