



APPENDIX D

POTENTIAL ENVIRONMENTAL CONSEQUENCES



Potential Environmental Consequences

The following summarizes likely environmental consequences of the proposed Minnie Street Improvement project. Applicable chapters of the PEL Study are referenced.

Rights-of-Way Impacts (8.1.1.2)

Partial acquisitions of approximate 47 commercial and residential properties will result from the project, and no permanent easements are anticipated. Most of these properties are at the minimum lot size and will require a variance from the FNSB.

Socioeconomic Effects (8.1.1.3)

The project improves travel patterns and accessibility and positively affects community cohesion, by making non-motorized and motorized use safer and reducing congestion. The project will not change school boundaries or affect recreation areas, churches, businesses, police and fire protection, etc. The project will benefit the elderly, handicapped, nondrivers, transit-dependent, minority and ethnic groups, or the economically disadvantaged as the project will meet Americans with Disabilities Act (ADA) standards and support the development of connected bicycle and pedestrian facilities consistent with the Non-Motorized Transportation Plan. Approximately 55 percent of the study area is a minority population, and approximately 28 percent is low income, which qualifies as an Environmental Justice (EJ) population. The minority population is above state and national average, therefore effects from the project may disproportionately impact environmental justice populations. The percentages are derived from the EPA EJ Screen mapping tool and calculates low income and minority population based on the current MSCS study area.

Economic Impacts (8.1.1.4)

The project is not anticipated to have adverse economic impacts on the regional and/or local economy, such as effects on development, tax revenues and public expenditures, employment opportunities, accessibility, and retail sales. The project will not adversely affect established businesses or business districts.

Land Use and Transportation Plans (3.7.2, 8.1.1.1)

The project is consistent with land use and transportation plans, including the FNSB Comprehensive Plan, FAST Planning 2045 MTP (December 2018) and FAST Planning Freight Mobility Plan (January 2019). The project is not anticipated to induce adverse indirect and cumulative effects on land use or transportation.

Impacts to Historic Properties (3.2, 3.7.3, 8.1.1.4)

Historical and cultural resources have been identified and previously evaluated for eligibility for the National Register of Historic Places (NRHP). The Illinois Street Historic District (Alaska Heritage Resources Survey (AHRS) Site No. FAI-00349) is listed in the Alaska Department of Natural Resources (ADNR) Office of History and Archaeology. The District is located between the 300-700 blocks of Illinois Street. The District contains the site of the Fairbanks Exploration Company's 1925 industrial complex, which signaled the start of large-scale corporate mining in Fairbanks. Additionally, there are 30 structures that are older than 45 years where formal determinations of eligibility have not been determined and therefore their listing cannot be ruled out. The project does not likely qualify as a Programmatic Allowance under the Section 106 Programmatic Agreement.

Wetland Impacts (8.1.1.8)

No wetlands are anticipated to be impacted by the project, but a minor amount of effects to Waters of the U.S. will occur during bridge replacement in Noyes Slough.

Water Body Improvements (8.1.1.6)

Noyes Slough is a navigable waterbody and is listed by the Alaska Department of Fish and Game (ADF&G) as Anadromous (#334-40-11000-2490-3301-4015), providing habitat for chinook and chum salmon. A minor amount of in-water work will potentially occur in Noyes Slough, during bridge replacement. No wild and scenic rivers are present.

Fish and Wildlife (8.1.1.7)

For in-water work as a result of bridge replacement at Noyes Slough, a Title 16 permit will be obtained. Bridge replacement is not anticipated to adversely affect habitat, migration corridor, or subsistence species, or Essential Fish Habitat. The project is not in an area of high wildlife/vehicle accidents and would not bisect or segment wildlife habitat.

Threatened and Endangered Species (NA)

There are no federally listed threatened or endangered species present in Fairbanks.

Invasive Species (8.1.1.7)

The Alaska Exotic Plants Information Clearinghouse (AKEPIC) was checked in March 2019, and just one instance of waterweed (Elodea), was observed within the project limits. The project includes all practicable measures to minimize introduction or spread of invasive species.

Contaminated Sites (8.1.3)

There are known or potentially contaminated sites within or adjacent to the existing and/or proposed ROW. There are also contaminated sites within 1,500 feet of where excavation dewatering is anticipated. Contaminated site impacts. Sites with ICs usually require coordination with Alaska Department of Environmental Conservation (ADEC) if construction is on or immediately adjacent to the site boundary. ADEC manages land use decisions and may require a number of different conditions, such as notification requirements for certain actions and further remediation in the future.

Air Quality (8.1.2.1)

A portion of the Fairbanks/North Pole area is designated as a carbon monoxide (CO) maintenance area and a larger portion has been designated as a PM_{2.5} (fine particulate matter) non-attainment area. The study area is located within the PM_{2.5} non-attainment boundary and a significant portion within the CO maintenance boundary. Air quality analysis requirements for the study area are dictated by the Fairbanks North Star Borough (FNSB), Regional Transportation Improvement Programs, and FAST Planning. The project is not exempt from air quality analysis per 40 CFR 93.126, but is listed in the FFY2019-23 TIP, for which an air quality conformity analysis has been completed and was approved June 26, 2019 by FHWA.

Floodplain Impacts (8.1.1.6)

The project will encroach into a minor portion of the base (100-year) flood plain during replacement of the Noyes Slough bridge, but is not anticipated to be significant per 23 CFR 650.1059(q) or increase the base flood elevation.

Noise Impacts (8.1.2.2)

The project will alter the horizontal alignment of Minnie Street per 23 CFR 772.5, and will require a noise analysis.

Water Quality Impacts (8.1.1.6)

The project would increase storm water runoff within the Fairbanks Urbanized Area covered by Alaska Pollutant Discharge Elimination System (APDES) Permit No. AKS-053406. Under this permit, public projects disturbing an acre or more must ensure that controls are in place to prevent or minimize water quality impacts.

Project 1 includes work near Noyes Slough, which has a TMDLs for residue (debris), hydrocarbons, oils, and grease. The project will reduce debris by reducing human activity under the bridge. Compliance with the APDES will protect the slough during construction and compliance with the Green Streets policy and Engineering Plan Review by ADEC will ensure permanent storm water controls will treat the urban runoff.

DOT&PF policy for projects within the Fairbanks Urbanized Area is that design must follow criteria set forth in the Fairbanks and North Pole Storm Water Management Program Guide (Cities of Fairbanks and North Pole, 2017).

Construction activities may cause a temporary degradation of water quality. Clearing and grading activities would expose soils to wind and rain erosion until those areas can be temporarily or permanently stabilized. New ground disturbance could increase sedimentation and increase turbidity of all receiving waters. Implementation of best management practices for minimizing storm water impacts would reduce the potential for water quality effects during construction.

The project will result not involve a public or private drinking water source.

Construction Impacts (8.1)

The following construction (temporary) impacts are anticipated: degradation of water and air quality, delays and detours of traffic, impacts on businesses, noise and other impacts (e.g. utility relocations, staging areas, etc.).

Section 4(f)/6(f) (8.1.1.5)

The project will not affect Section 6(f) resources. Although a detailed Section 4(f) resource evaluation has not been completed for the project, there are potential Section 4(f) resources identified that will need evaluation, including the Illinois Street Historic District.

Permits and Authorizations (8.2)

The following permits and authorizations are anticipated to be required for the project:

- Section 404/10 Nationwide Permit (USACE)
- Section 401 Water Quality Certification (ADEC)
- Fish Habitat Permit (ADF&G)
- Flood Hazard Permit (FNSB)
- Section 4(f) Determination (DOT&PF)
- NHPA Section 106 Concurrence (SHPO)

Environmental Commitments and Mitigation Measures

Construction Impacts

- A traffic control plan will be used to minimize delays, provide detours, and maintain traffic flow through the project corridor. Businesses would retain access during construction; however, limiting or altering access may result in minor economic losses to businesses during construction. The public affected local schools, public service organizations, and emergency personnel would be notified in advance of construction.
- Measures to control fugitive dust, such as pre-watering sites prior to excavation, covering or stabilizing material stockpiles, covering truckloads, removing particulate matter from wheels prior to leaving the construction site, and removing particulate matter deposited on public roads, will be implemented during construction. No vehicles, trucks, or heavy equipment would be allowed to idle unnecessarily, and they would be routinely maintained and serviced.
- Measures to control construction noise such as; equipping construction-equipment engines with adequate mufflers, intake silencers, and engine enclosures and limiting the timing of the noisiest construction activities, will be implemented during construction. The contractor will comply with MOA noise ordinances. The public would be notified in advance of construction activities.
- The contractor will work through an Erosion and Sediment Control Plan and prepare a SWPPP to specify BMPs to be utilized during construction to prevent erosion and prevent untreated runoff from reaching nearby waterbodies.
- The SWPPP would also include a Hazardous Materials Control Plan to identify procedures for responding to accidental spills. If leaks or spills should occur, all contaminated material and soils would be contained and disposed of off-site in an approved location. All construction waste would be managed and disposed of in accordance with all state and federal solid-waste-management laws and regulations.
- Vehicles and heavy equipment would be kept within construction limits and operated to limit unnecessary ground disturbance.

Migratory Birds

- Clearing and grubbing is not permitted within the migratory bird window of May 1 to July 15, except as permitted by federal, State, and local laws and as approved by the Project Engineer.

Bald and Golden Eagles

- The project area would be surveyed for the presence of eagles and/or their nests prior to construction in order to avoid impacts to nests or nesting birds. If active bald or golden eagle nests are found within the project area, a primary zone of a minimum 330 feet would be maintained as an undisturbed habitat buffer around nesting eagles. If bald eagle nests are documented within 0.5 mile during the pre-construction survey, consultation with USFWS will occur prior to the start of construction for any nests within 660 feet of the cut and fill limits or 0.5 mile of pile driving.

Invasive Species (8.1.1.7)

- Construction equipment would be pressure washed to remove soil, seed, and plant material prior to moving onto or off the project site.
- Clean fill material, native plants, and certified native seed would be used. If certified native seed is not available, locally produced products would be used to minimize potential importation of new weed propagules from outside Alaska.
- Stabilization of disturbed areas would occur as soon as practicable. Stabilization can include paving and/or seeding and vegetating. Certified native seed would be used when seeding is the selected stabilization method. If certified native seed is not available, locally produced products would be used to minimize potential importation of new weed propagules from outside Alaska.

Cultural Resources (8.1.1.4)

- If unanticipated historic, cultural, or archeological resources are discovered during construction, all work that may impact these resources shall stop immediately, and the contractor shall notify the Project Engineer. Work will not resume at these sites until a Section 106 consultation is conducted with SHPO.

Hazardous Materials (8.1.3)

- In the event that contaminated soil or groundwater is encountered during construction, the contractor shall immediately notify the Project Engineer, and all work shall stop until coordination with the ADEC in accordance with 18 Alaska Administrative Code 75.300 has been completed. All contamination will be handled and disposed of in accordance with an ADEC-approved corrective action plan.