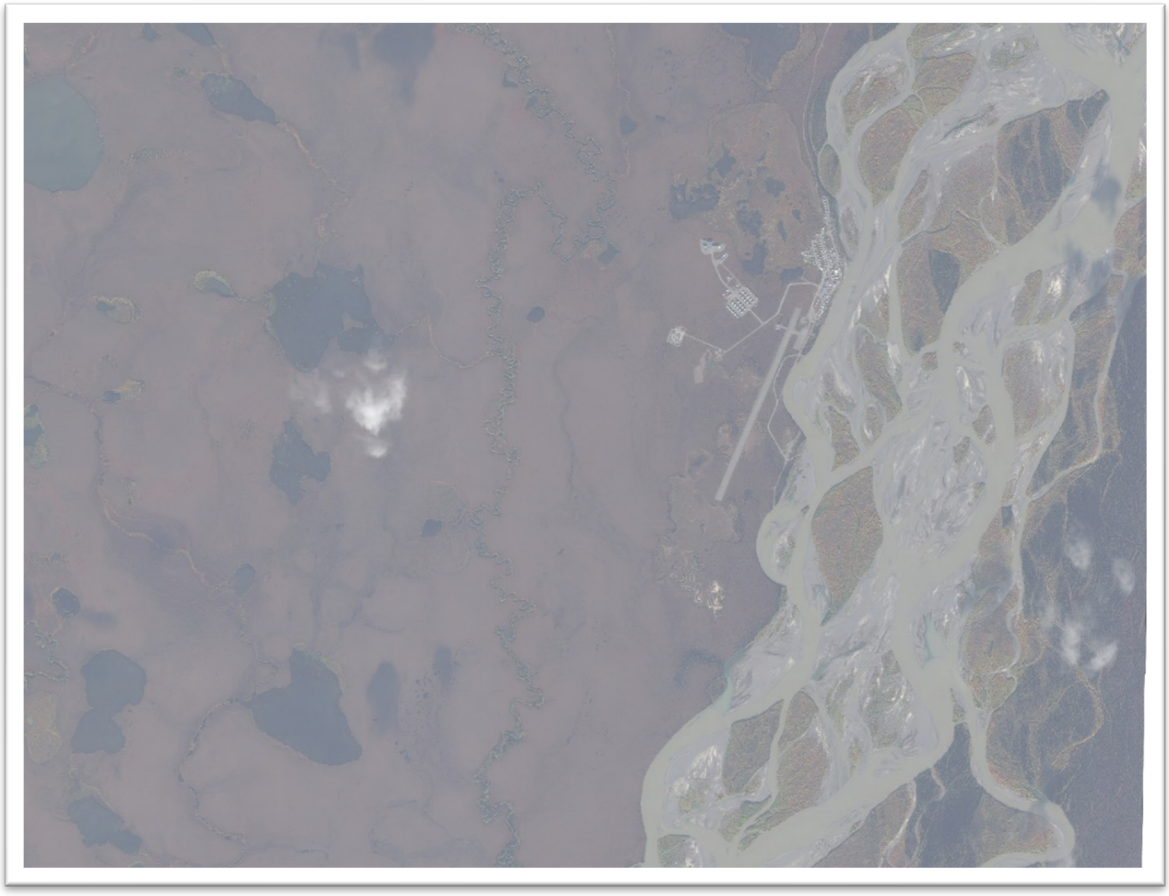
FAA
Alaska Region
Office of Airports

FINAL ENVIRONMENTAL ASSESSMENT

Noatak Airport Relocation
Project No. Z614780000



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August 7, 2024

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FINAL ENVIRONMENTAL ASSESSMENT
Noatak Airport Relocation

State Project Number: Z614780000

Prepared for:

United States Department of Transportation
Federal Aviation Administration
222 West 7th Avenue
Anchorage, Alaska 99513-7587

On behalf of the sponsor:

State of Alaska Department of Transportation & Public Facilities
Northern Region
2301 Peger Road
Fairbanks, Alaska 99709

The Environmental Assessment becomes a federal document when evaluated, signed, and dated by the Responsible FAA Official.

RODNEY E CLARK Digitally signed by RODNEY E CLARK
Date: 2024.08.07 11:10:41 -08'00'

August 7, 2024

Responsible FAA Official Date

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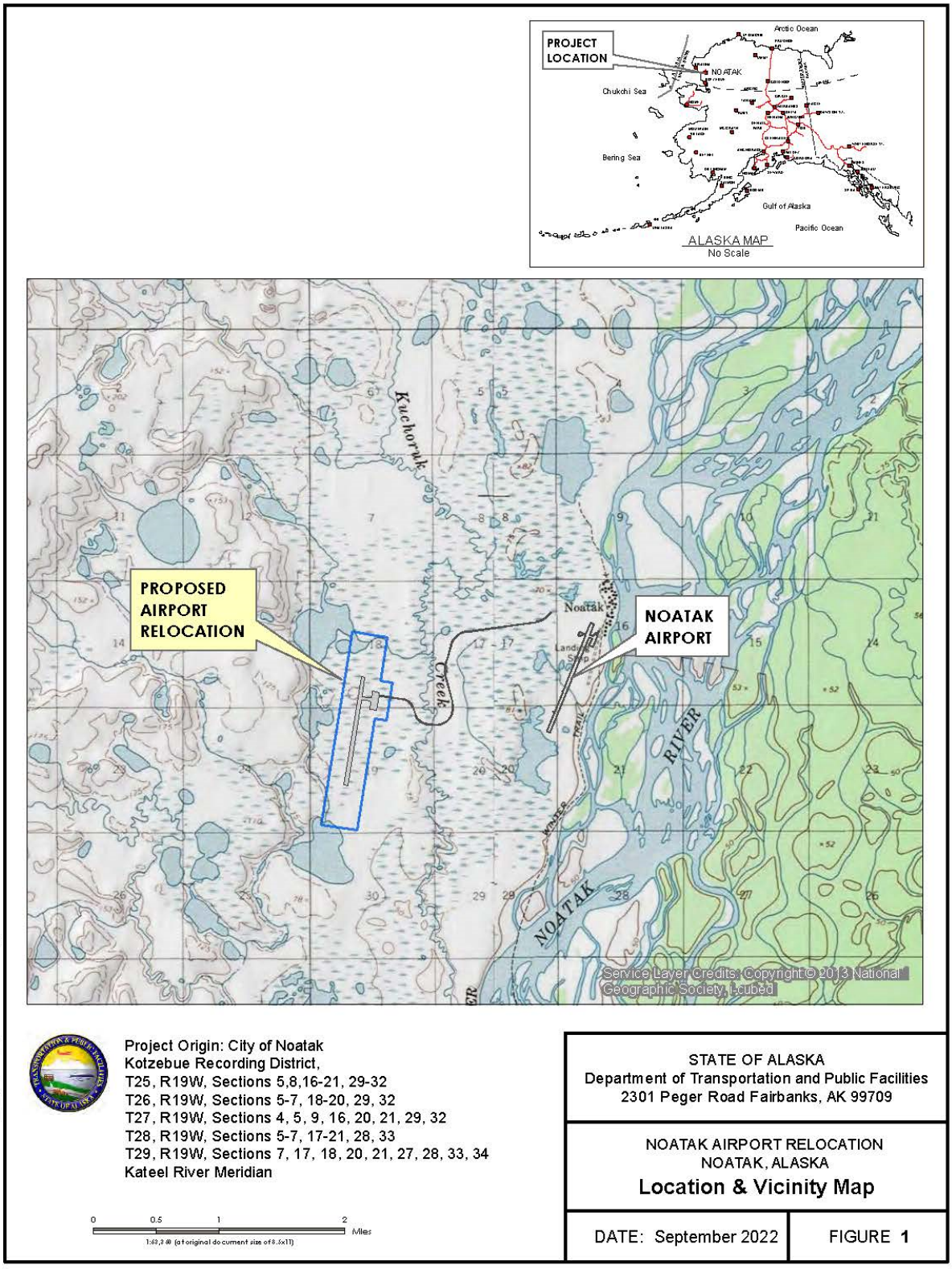
ACRONYMS

ADEC ..... Alaska Department of Environmental Conservation
ADF&G ..... Alaska Department of Fish and Game
ADNR ..... Alaska Department of Natural Resources
AHRS ..... Alaska Heritage Resources Survey
AKARNG ..... Alaska Air National Guard
APDES ..... Alaska Pollutant Discharge Elimination System
APE ..... Area of Potential Effect
BIA ..... Bureau of Indian Affairs
BLM ..... Bureau of Land Management
BMP ..... Best Management Practice
CFR ..... Code of Federal Regulations
CGP ..... Construction General Permit
CKNHL ..... Cape Krusenstern National Historic Landmark
CKNM ..... Cape Krusenstern National Monument
DMLW ..... Division of Mining Land and Water
DMTS ..... .DeLong Mountain Transportation System
DOT&PF ..... Alaska Department of Transportation and Public Facilities
DPS ..... Distinct Population Segment
EA ..... Environmental Assessment
EFH ..... Essential Fish Habitat
ESA ..... Endangered Species Act
FAA ..... Federal Aviation Administration
FSA ..... Federal Scout Armories
ft ..... . foot or feet
GHG ..... Greenhouse Gas
IPaC ..... Information for Planning and Consultation
IRA ..... Indian Reorganization Act
IWG ..... Interagency Working Group on Social Cost of Greenhouse Gases
MBTA ..... Migratory Bird Treaty Act
MMPA ..... Marine Mammal Protection Act
NAB ..... Northwest Arctic Borough
NEPA ..... National Environmental Policy Act
NLURA ..... Northern Land Use Research Alaska, LLC
NMFS ..... National Marine Fisheries Service
NPS ..... National Park Service
PFAS ..... per-and poly-fluoroalkyl substances
REC ..... recognized environmental condition
ROI ..... region of influence
SHPO ..... State Historic Preservation Officer
SREB ..... Snow Removal Equipment Building
SWPPP ..... Stormwater Pollution Prevention Plan
U.S. ..... United States
USACE ..... U.S. Army Corps of Engineers
USFWS ..... U.S. Fish and Wildlife Service
VEC ..... valued environmental component

1.0 INTRODUCTION

Noatak, Alaska is located 48 miles northwest of Kotzebue, 71 miles north of the Arctic Circle (Figure 1). Noatak is off the road system with transportation limited to air travel, snow machine, and small river boats. Regular barge service was suspended in 1986, and all freight and fuel are transported through the Noatak Airport. Noatak Airport was obligated under the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems, making it eligible for development under the FAA Airport Improvement Program. The current aircraft fleet mix serving Noatak consists primarily of the Cessna 208B and PA31 Piper Navajo, with larger deliveries made by DC-6 and C-130, and medevac services by Beechcraft 200.

Figure 1: Location and Vicinity Map



2.0 PROPOSED ACTION

The Proposed Action is to relocate the Noatak Airport including the following elements (Figures 2-6):

Airport

- Construct runway, taxiway, apron, lighting, a Snow Removal Equipment Building (SREB).
    - The runway and taxiway would be built to FAA standards for a category B-II airport capable of handling passenger and cargo aircraft and accommodate ground maneuvering larger aircraft such as DC-6 and C-130 that serve the airport unscheduled.
    - The apron area would be constructed for temporary loading of passengers and/or cargo as well as itinerant parking and access to lease lots.
    - Construct a building and pad capable of housing snow removal equipment and lighting/navigational controls.
    - Construct pads and install new and relocated navigational aids, and other airport related equipment and shelter(s).
- Relocate or demolish and reconstruct FAA-owned facilities for navigational aids, communications, and maintenance.
- Deobligate existing airport. Deobligation releases the existing airport from all existing FAA grant assurances identified during the asset recovery process and transfers the assurances' encumbrances to the new, relocated airport.
- Deactivate the existing airport. Deactivation closes the existing airport to all aircraft operations and removes FAA equipment that is not transferred to the new airport.

ROW

- Acquire approximately 323 acres of land for the relocated airport and access road through various temporary and permanent interests from federal, state, and private entities.
- Acquire temporary interest for approximately 160 acres for mobilization and haul roads during construction of the project.
- Dispose existing airport land and non-FAA infrastructure once the land is no longer required for airport use. Disposal of existing airport property will occur in accordance with Federal and State regulations and FAA grant assurance requirements.

- Three parcels of airport property, totaling 9.60 acres, are perpetual easements from NANA Regional Corporation (NANA) and will revert to NANA per the terms of the easements. It is likely these parcels will continue to see similar undeveloped use due to their location.
- The remaining 116.45 acres will either be transferred back to the Bureau of Land Management (BLM), per the terms of the deed, or if the reversionary clause is waived by both FAA and BLM, disposed of through a property sale at fair market value or transferred to a governmental agency for public use. FAA cannot reasonably foresee what use this land will have following disposal because the future landowner will not be known until after a record of decision has been issued.
    - If the reversionary clause is not waived, the land would return to BLM control, with no further involvement by either FAA or DOT&PF once the property transfer is complete. The property transfer process would be in accordance with FAA and BLM requirements.
    - If the reversionary clause is waived, DOT&PF would begin the land disposal process upon the conclusion of the NEPA process with the steps as follows:
        - Obtain approval from the FAA to dispose of Noatak Airport Tracts I-A, I-B, I-C, and I-D
        - Perform internal DOT&PF disposal review and receive appropriate approvals.
        - Complete land disposal in accordance with applicable Alaska Statues, Alaska Administrative Code, and FAA requirements.
        - After the new airport opens and any other conditions of the land transfer are complete, DOT&PF would record a commissioner's quitclaim deed finalizing the disposal of the old airport property.
        - Proceeds from the land disposal would be used to offset airport development costs.
- FAA approval of the Noatak Airport property (Tract 1, Parcel A) not reverting to federal government land when no longer needed for airport property purposes.
- FAA approval of the Noatak Airport property (Tract 1, Parcel B-D) reverting to NANA when no longer needed for airport property purposes, in accordance with terms of the perpetual easement.

- Upon the ultimate land disposal determination, the need for further environmental impact analysis to consider the potential environmental impacts for which the existing airport property and non-FAA infrastructure will be used will be assessed.

Access Road

- Construct a road from Noatak to the relocated airport, with a bridge crossing Kuchoruk Creek.
    - The road would be approximately 2 miles long and 24-feet (ft.) wide, with side slopes that include other safety features (e.g., signage) where required, and culverts would be installed to maintain drainage patterns.
    - A two-lane bridge would cross Kuchoruk Creek and be designed to accommodate high water and aufeis. Abutments would be placed on either side of the creek within the floodplain. Work may be required below ordinary high water of the creek, however no in-water work is anticipated.

Material Sources

- Develop local material sources and access.
    - Local gravels within the Noatak River drainage would be used for construction; excavation would be completed during low flow.
    - A pioneer material access road would accommodate safe summertime access and prevent damage to underlying soil hydrology.

Mobilization

- Transport material and equipment utilizing a combination of air, water, and overland access.
- Construct gravel pads for staging areas.

Utilities

- Extend existing community above-ground utility lines to the relocated airport. The new power poles would be placed in the right-of-way (ROW) of the new airport access road.
- Mitigate loss of existing fuel transfer system due to decommissioning the existing airport by constructing pads for relocated fuel transfer and storage.

Connected Action

- A new community provided fuel transfer system would be required (Figure 7). Bulk fuel storage is not planned on the new airport property.
- Contaminant remediation on existing airport lease lots would be required by responsible lessees.

Airport Layout Plan

- FAA conditional approval of the Noatak Airport Layout Plan.

Figure 2: Proposed Action

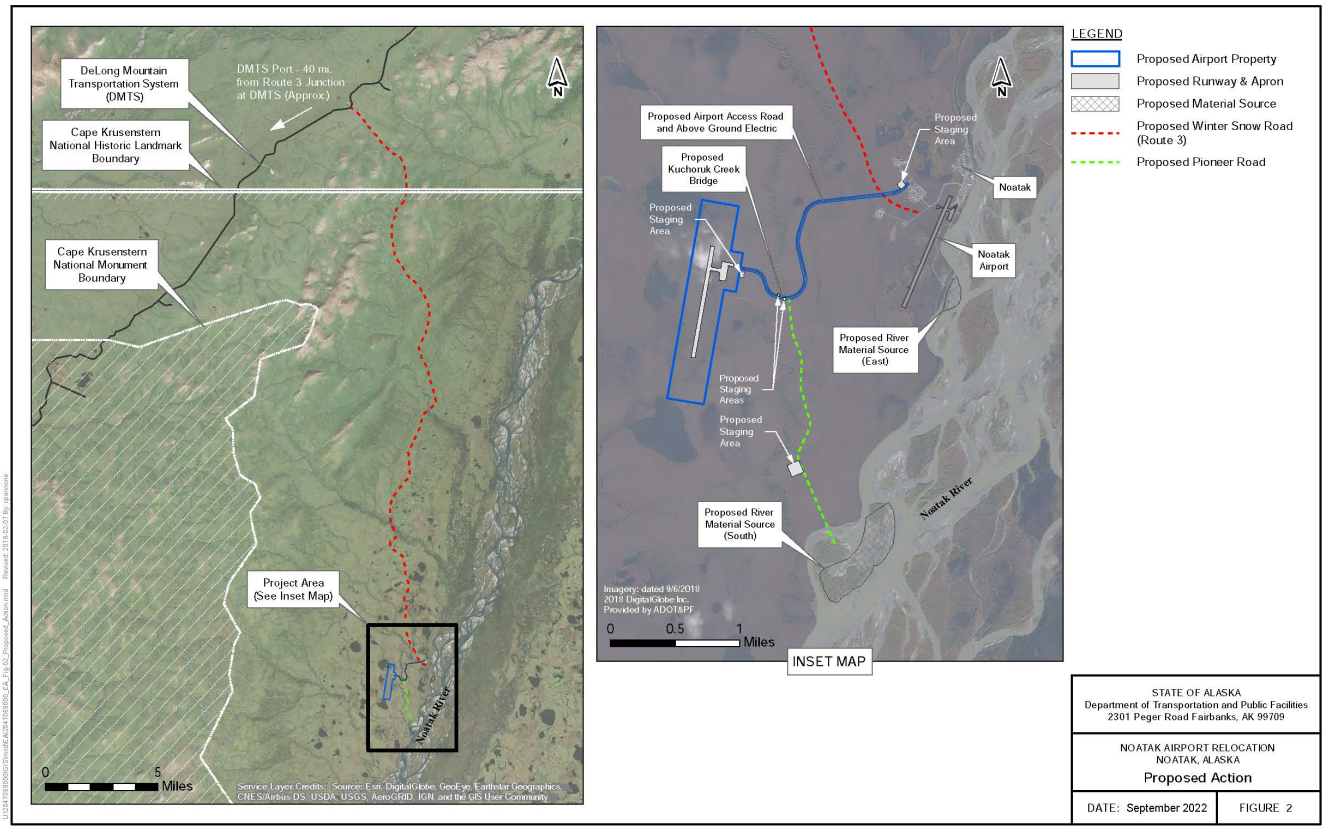


Figure 3: Proposed Action Site Plan

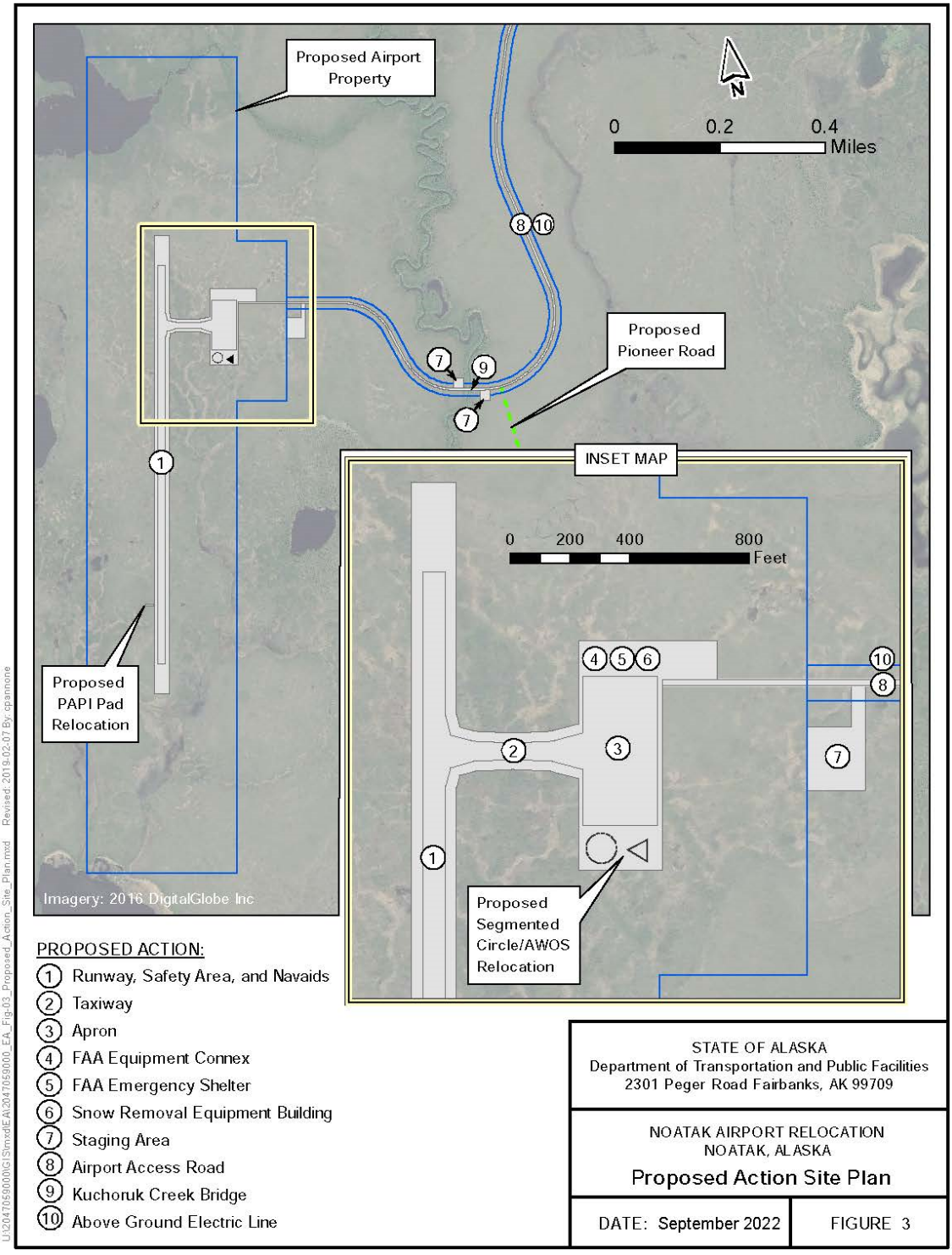


Figure 4: Airport Typical Sections

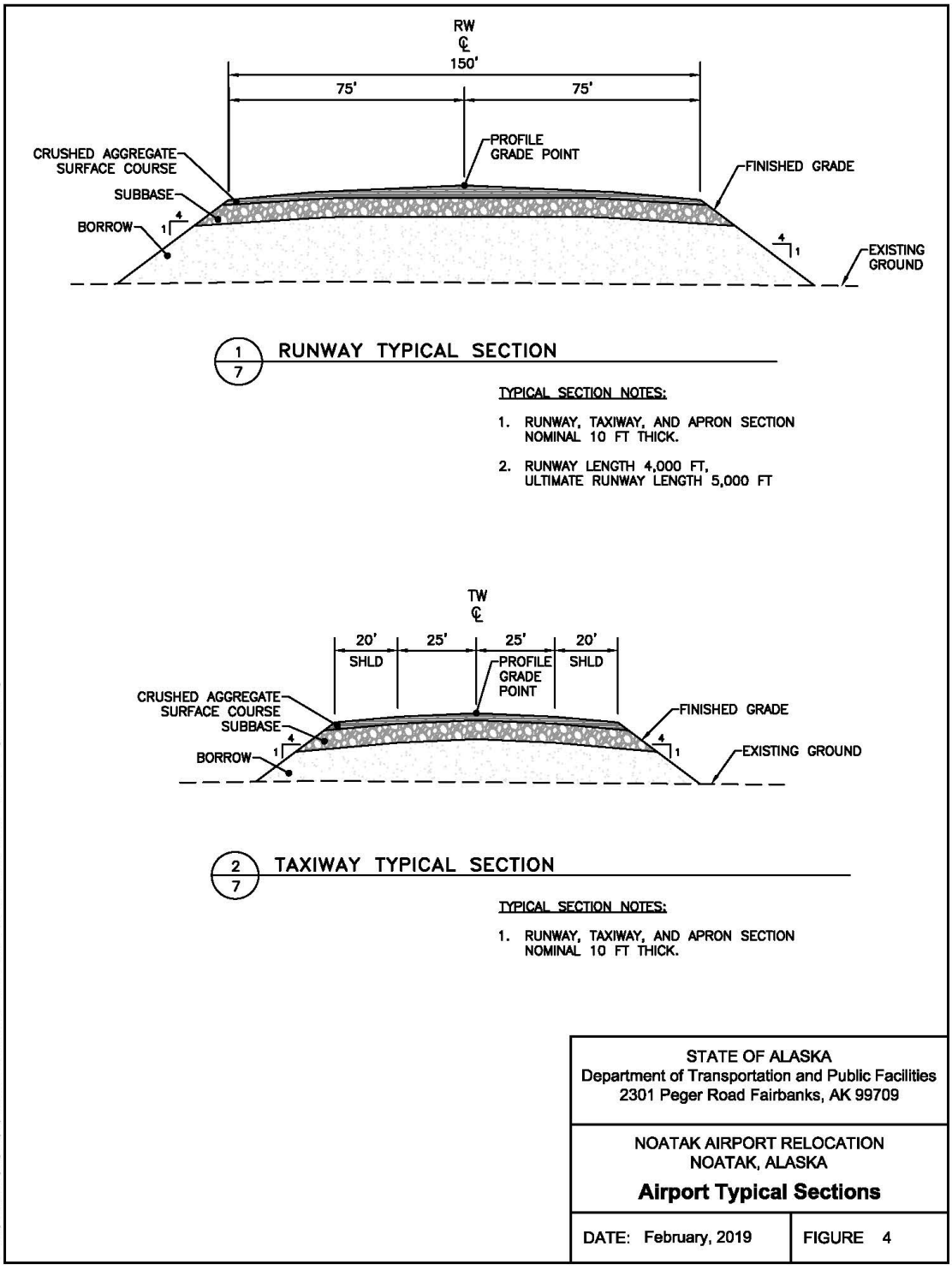


Figure 5: Airport/Road Typical Sections

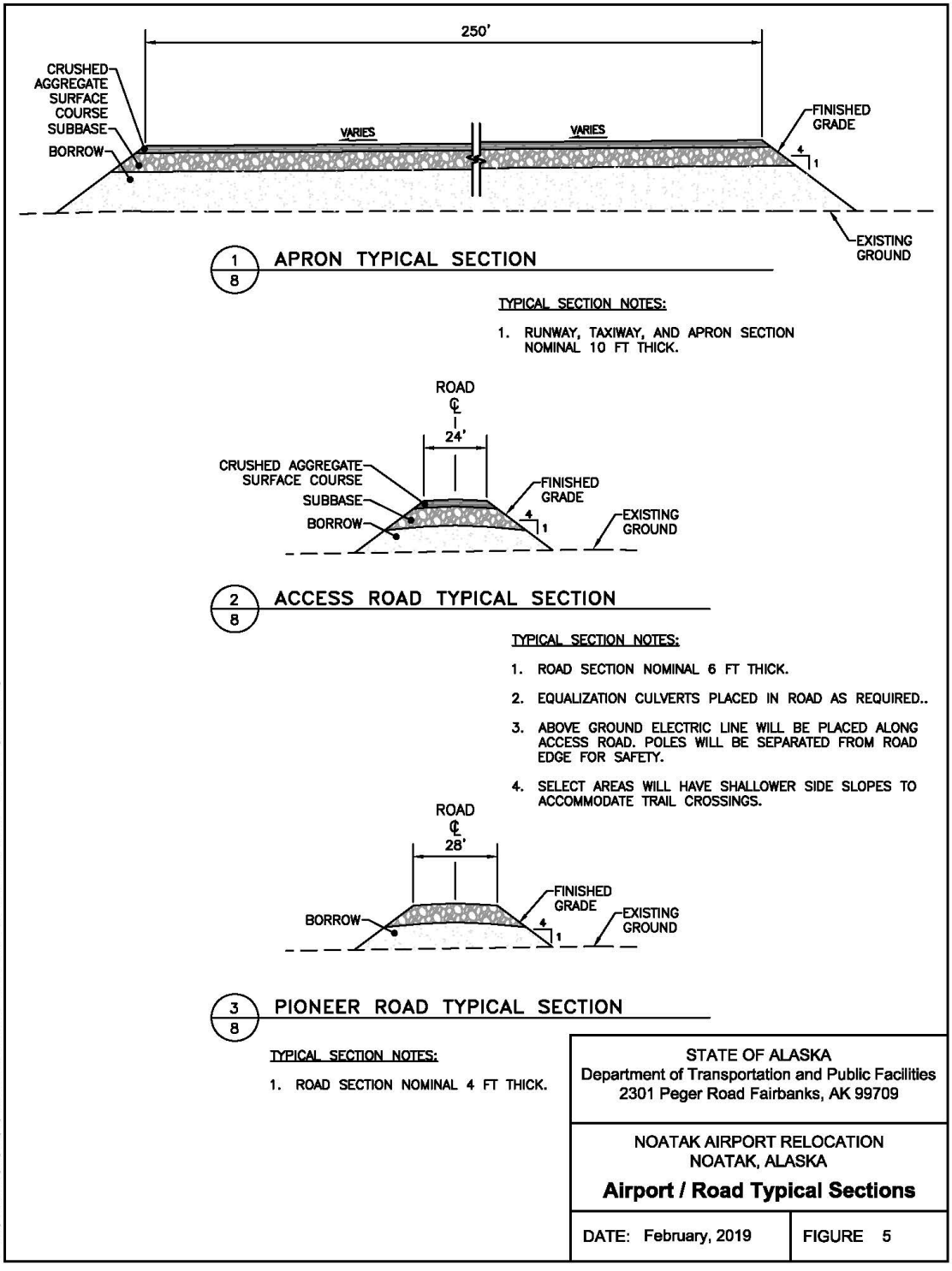


Figure 6: Bridge Concept

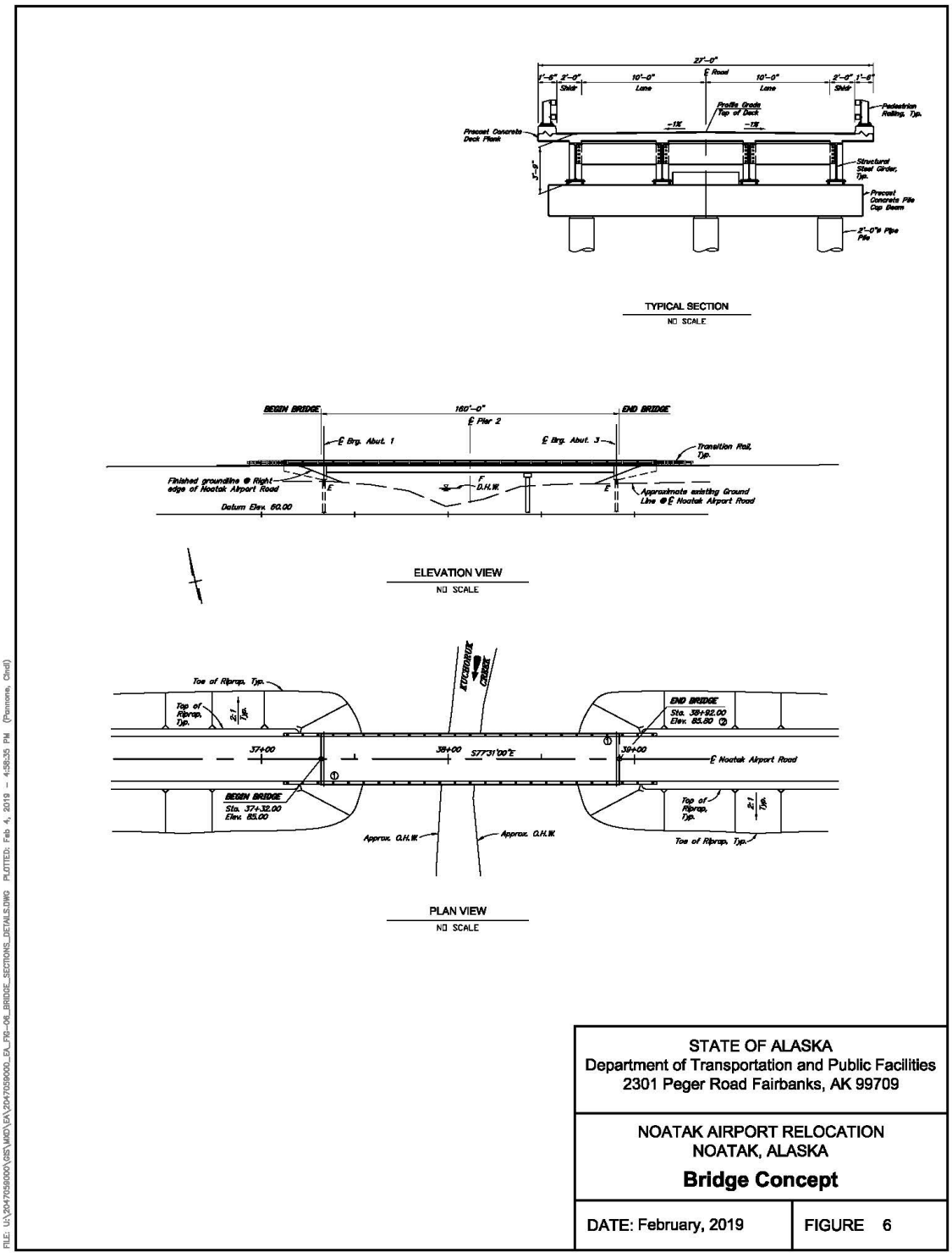
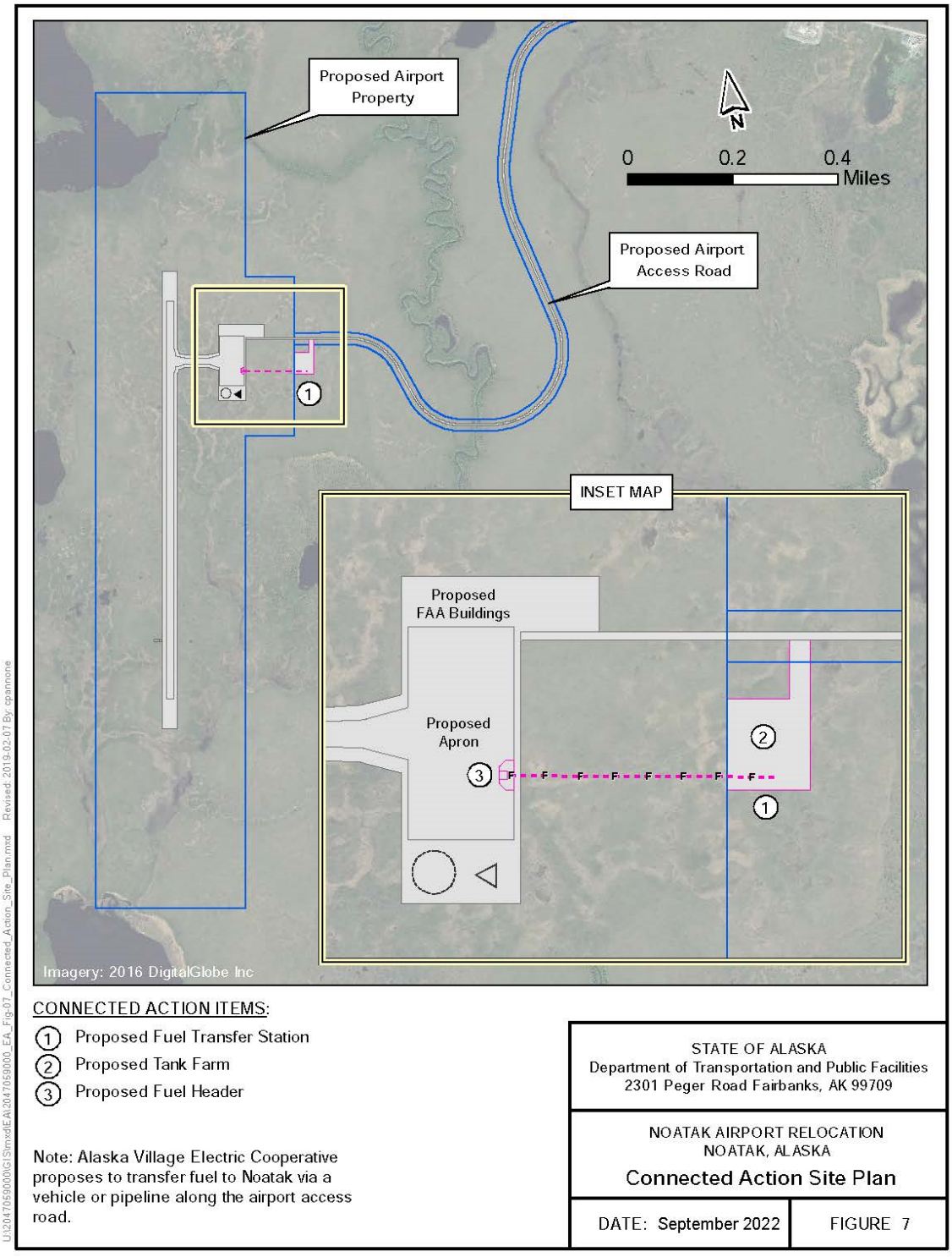


Figure 7: Connected Action Site Plan



3.0 PURPOSE AND NEED

In 2016 DOT&PF assessed the needs of the Noatak Airport and its ability to safely serve the community of Noatak and identified deficiencies, which are fully described below. To address the deficiencies and ensure safe operation of the airport, the DOT&PF pursued FAA Airport Improvement Program (AIP) funding. The airport is located near the Noatak River, which has seen accelerated riverbank erosion towards the airport property in recent decades. Studies and analysis assessing Noatak Riverbank Erosion were conducted in 2003, 2013 and 2015 (Appendix B) and concluded that Noatak Riverbank erosion will continue for the foreseeable future. While exact erosion timelines are difficult to predict with accuracy, continued erosion is a virtual certainty. The continued erosion jeopardizes the existing airport and therefore also jeopardizes the Noatak community which relies on safe and reliable air transportation service.

Further investment to maintain and repair existing airport infrastructure could be compromised, as the airport itself is threatened by the river erosion. Countering erosion with a revetment structure was not seen to the practicable due to the difficulty in sourcing material for such a structure (large aggregate or concrete in large quantities), concerns over long-term stability of such structure, and the continued maintenance it would require. Time critical airport relocation would ensure continued safe and reliable air transportation for Noatak. The purpose of the proposed project is to mitigate the threat of loss of runway infrastructure due to river erosion. In addition, the community would be provided with adequate access, supporting the community's long-term development goals and meeting current FAA design standards (FAA AC 150-5300-13). The project purpose would also provide an airport that supports the community's transportation needs in a safe manner to and from the airport. Additionally, the runway length needs to be sufficient to maintain the current level of regional cargo aircraft service currently available to the community (Appendix A).

Noatak River Erosion - More than 1,000 ft. of land has eroded between the runway and the river, forcing relocation of the cemetery, sewage lagoon, and access road to a gravel source. Less than 300 ft. of land remain (USKH, 2013; DOT&PF, 2015; Figures 8-9; Appendix B).

Existing Airport Deficiencies - Current airport design is based on use by the Cessna 208B and PA31 Piper Navajo. However, Noatak is an isolated and remote community requiring service by large cargo aircraft such as the Cessna 408, CASA C-212, Douglas DC-6, and Boeing L-100 L-100/L-382, and medevac aircraft such as the Beechcraft 200. The aircraft parking apron is undersized for these larger aircraft. The width of the runway and the runway safety areas are below standard for the design aircraft. The community's proximity to the airport creates health and safety concerns regarding dust control. Incompatible adjacent land uses include proximity (less than 5,000 ft.) of the runway to the community

landfill, sewage lagoon, and bulk fuel storage. In addition, the airport lighting, segmented circle, wind cone, and SREB are in need of replacement, and the airport surface requires rehabilitation.

Figure 8: Photographs of River Bank Erosion

1959 Aerial Photograph

2003 Aerial Photograph

Note: Observation of bank erosion between the river and apron from 1959 to 2003.

STATE OF ALASKA
Department of Transportation and Public Facilities
2301 Peger Road Fairbanks, AK 99709

NOATAK AIRPORT RELOCATION
NOATAK, ALASKA

Photographs of River Bank Erosion

DATE: September 2022 | FIGURE 8

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Figure 9a: Noatak River Bank Erosion

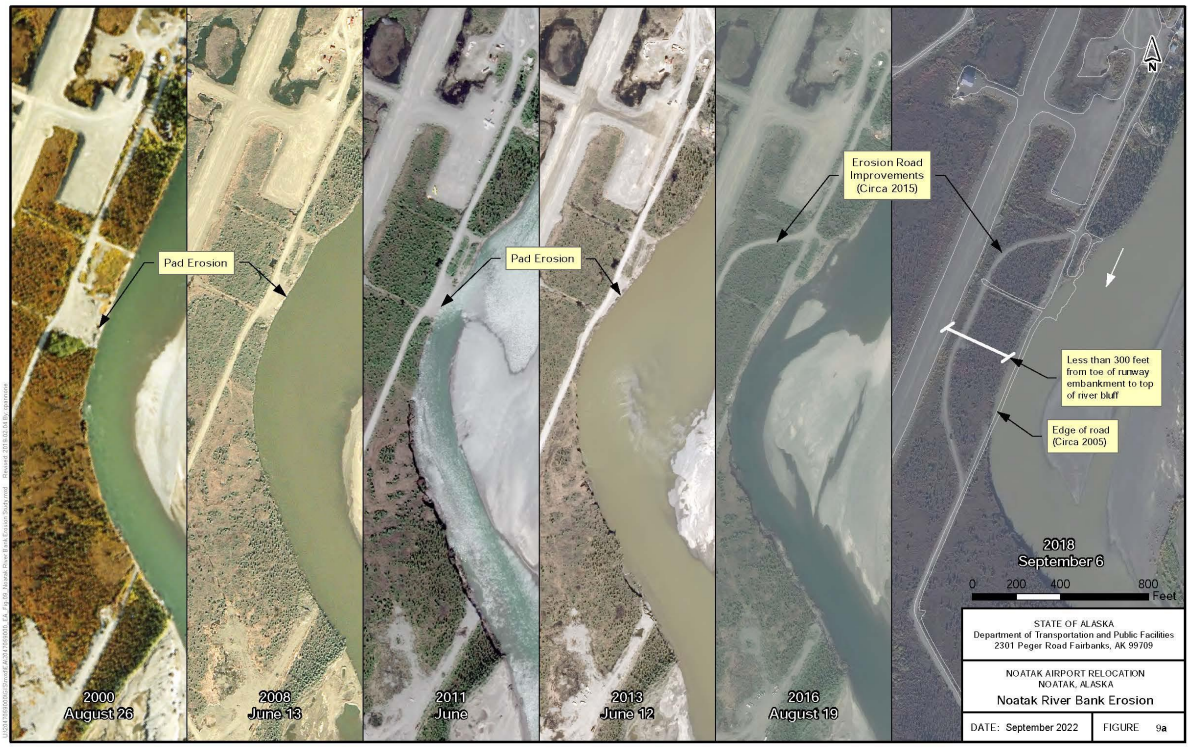
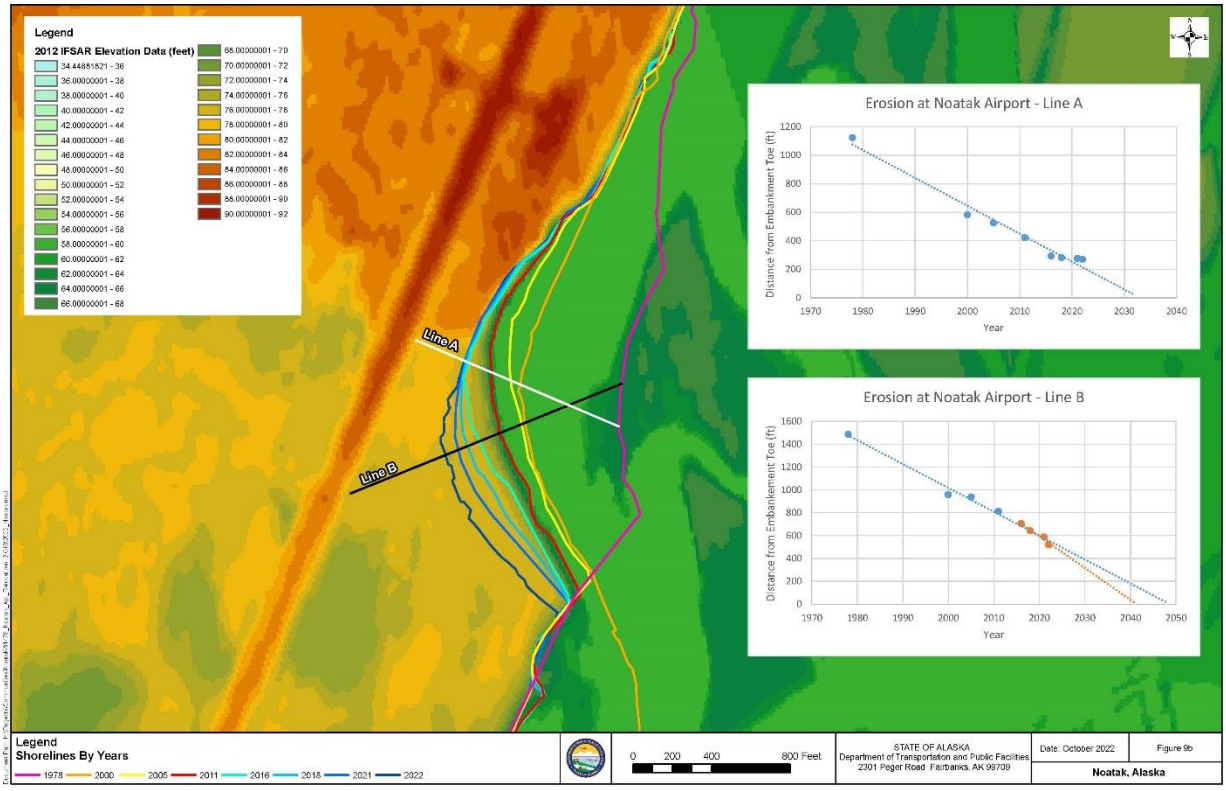


Figure 9b: Noatak River Bank Erosion



4.0 SCOPE OF ENVIRONMENTAL ANALYSIS

This EA considers relevant environmental resources which are the ecosystems, and human communities of concern that could be affected by the Proposed Action. The environmental resources evaluated in this EA are identified in Chapter 9.0. The scope of this EA includes the geographic area potentially influenced by the Proposed Action as well as the area of potential environmental effect, which varies by resource. The main study area encompasses the current Noatak Airport area, the proposed Noatak Airport relocation area, access road, material sources, and mobilization routes. However, such as for climate change, air quality, and socioeconomic impacts, the study area expands to a regional area. The geographic scope for each resource area is identified in Chapter 9.0 within the discussion for each resource topic.

5.0 REGULATORY FRAMEWORK

The FAA is guided by relevant statutes (and their implementing regulations) and executive orders (EOs) that established standards and provide guidance on environmental compliance, including natural and cultural resources management and planning in support of their mission to provide the safest, most efficient aerospace system in the world. The FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, provides FAA's agency-wide policies and procedures to ensure agency compliance with the requirements set forth in the CEQ Regulations for implementing NEPA. In addition to FAA Order 1050.1F, there are other NEPA-implementing policies and procedures that may be applicable to your proposal, including FAA Order 5050.4B, NEPA Implementing Instructions for Airport Actions. Other major statutes and EOs that apply to the Proposed Actions are as follows:

- Archaeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa–470mm)
- Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668–668c) • CAA (42 U.S.C. §§ 7401–7671q)
- Clean Water Act (CWA), Sections 401, 402, and 404 (33 U.S.C. §§ 1251–1387)
- CEQ (Council on Environmental Quality). 2023. National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change. 88 FR 1196. Interim Guidance. January 2023.
- Endangered Species Act (16 U.S.C. §§ 1531–1544)
- EO 11514 as amended by EO 11991, Protection and Enhancement of Environmental Quality
- EO 11593, Protection and Enhancement of the Cultural Environment

- EO 11988, Floodplain Protection
- EO 11990, Protection of Wetlands
- EO 12088, Federal Compliance with Pollution Control Standards
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 13985, Executive Order on Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government
- EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- EO 13175, Consultation and Coordination with Indian Tribal Governments
- EO 13834, Efficient Federal Operations
- Migratory Bird Treaty Act (16 U.S.C. §§ 703–712)
- National Historic Preservation Act of 1966 (54 U.S.C. § 300101)
- Pollution Prevention Act of 1990 (42 U.S.C. §§ 13101–13109)

6.0 DECISION TO BE MADE

The Federal Action requested of the FAA Alaska Region, Airports Division by the DOT&PF is to participate in the funding of the Noatak Airport relocation under FAA's Airport Improvement Program, deobligate, deactivate, and dispose the old airport land, and approve the new airport's Airport Layout Plan. There are no proposed modifications to FAA Design Standards (AC 150-5300-13B) included in this project.

7.0 SCREENING CRITERIA

In compliance with the FAA and CEQ regulations implementing NEPA, the FAA must consider reasonable alternatives to the Proposed Action. Only those alternatives determined to be reasonable relative to their ability to fulfill the purpose and need for the Proposed Action warrant detailed analysis. To be considered reasonable, an alternative must fulfill the purpose and need for the action, as well as be technically and fiscally feasible. This section presents the criteria used to determine whether alternatives were considered to be reasonable and, therefore, should be carried forward for analysis.

The FAA and DOT&PF established 4 screening criteria to identify appropriate alternatives to meet the purpose and need of the Proposed Action:

- **Screening Criterion 1:** Relocate the Noatak Airport to a location that meets FAA airport design standards in AC 150/5300-13B while maintaining a reasonably accessible location to the Noatak community, and a sufficient distance away from anticipated Noatak River erosion.
- **Screening Criterion 2:** Provide a suitable grade material with sufficient quantity for the Noatak Airport relocation construction from a material source with a short haul distance to the new airport location.
- **Screening Criterion 3:** Provide a feasible transportation route for equipment and material mobilization to Noatak. Feasible routes would need to be cost effective for the scale of the project and provide reasonable assurance that the route could be used within the project timeline.
- **Screening Criterion 4:** Minimize environmental impacts by avoiding or mitigating environmental resources to the greatest extent practicable.

8.0 ALTERNATIVES

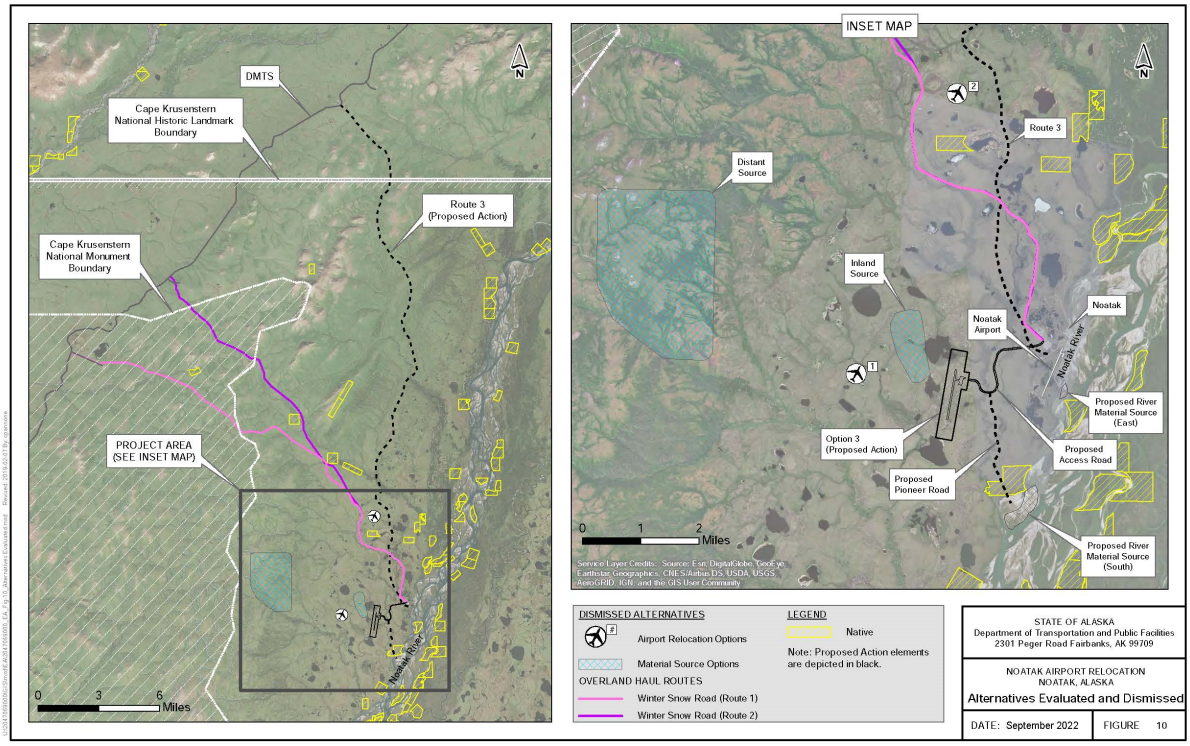
This section provides proposed alternatives evaluated for the airport relocation, material sources, and equipment and material mobilization. New airport locations were evaluated, and subsequently material sources and mobilization alternatives were evaluated.

For over a decade, Alaska Department of Transportation and Public Facilities (DOT&PF) Northern Region, the community of Noatak, and the Northwest Arctic Borough (NAB) have evaluated the feasibility of various new airport locations, mobilization routes, and material source locations that would allow for continued safe and reliable air transportation (Appendix C, Noatak Road and Airport-Project Information).

Alternatives to improve the existing airport in the current location were considered but dismissed because river erosion will continue to threaten the entire airport. While installing erosion control along the riverbank may provide temporary protection to the existing airport, several previous community attempts at riverbank protection have been unsuccessful. In addition, remedying deficiencies at the existing airport is not feasible at its current location. Therefore, all feasible alternatives would require relocation of the Noatak Airport. A detailed discussion of all evaluated airport sites considered during the airport site selection process is included in Appendix C (Noatak Airport Relocation – Airport Site Selection). Major factors evaluated during airport site selection include wind analysis, geotechnical and drainage

considerations, proximity to Noatak, compatible land use, land ownership, approach and Part 77 obstructions, development costs, and environmental consequences. Alternatives considered feasible and/or preferred in Appendix C (Noatak Airport Relocation – Airport Site Selection) are carried forward for further evaluation and are shown on Figure 10 and summarized in Table 1 below.

Figure 10: Alternatives Evaluated and Dismissed



8.1 Proposed Action Alternative

The Proposed Action alternative relocates the airport by creating a safe, reliable, and cost-effective air transportation facility that provides the community with adequate road access, supports the community's long-term development goals and is consistent with current FAA safety regulations.

The Proposed Action includes the following features:

- Airport Relocation Option 3.
- Material Source Options: River Material Sources (South and East) with overland access roads.
- Equipment and Material Mobilization Route 3.

Section 9.14 includes a list of permits and authorizations that will be obtained for the Proposed Action prior to construction to comply with applicable federal, state, and local regulations.

8.2 No Action Alternative

No airport improvements would occur under this alternative. All the existing deficiencies would remain present at the airport. This alternative would not bring the Noatak Airport into compliance with FAA safety guidelines, and the airport would remain vulnerable to erosion by the Noatak River. The 2013 Noatak Riverbank Erosion Assessment (USKH [Stantec]; Appendix B) previously estimated erosion would extend into the apron by 2010 and into the runway by 2020. While predicted erosion has not occurred to this extent to-date, erosion continues to cause Noatak Riverbank loss and will soon impact the runway, requiring airport closure that would result in loss of commercial, passenger, medevac, and cargo air services.

Table 1. Alternatives Evaluated

Alternative	Description	Alternative Evaluation
Airport Relocation		
Option 1	Relocate the airport 4 miles west of Noatak and require an approximate 4-mile access road and a bridge across Kuchoruk Creek.	This alternative is dismissed from further evaluation as it would require a 2-mile longer access road than Option 3, requiring approximately 31 acres more ground disturbance in the forms of embankment fill and material source than the Proposed Action. This option did not meet Screening Criterion 1 due to travel distance on off road vehicles in adverse weather conditions, and Screening Criterion 4 due to greater environmental impacts, compared to other options.
Option 2	Relocate the airport 5 miles northwest of Noatak and require a 5-mile access road.	This alternative is dismissed from further evaluation as it would require a 3-mile longer access road than Option 3, requiring approximately 47 acres more ground disturbance in the form of embankment fill and material source than the Proposed Action. This option did not meet Screening Criterion 1 due to travel distance on off road vehicles in adverse weather conditions, and Screening Criterion 4 due to greater environmental impacts, compared to other options.
Option 3	Relocate the airport 2 miles west of Noatak and require an approximate 2-mile access road and a bridge across Kuchoruk Creek.	This alternative is considered feasible and is incorporated in the Proposed Action. This option meets Screening Criterion 1 since the location is not subject to Noatak River erosion, and meets Screening Criterion 4 allows for the shortest access road to the new airport thus minimizing environmental impacts, compared to other options.
Option 4	Relocate the airport to the east side of Kuchoruk Creek.	This site is favorable due to the shorter access road and no bridge required over Kuchoruk Creek, which reduces cost and direct environmental impacts. However, this option does not meet Screening Criterion 2 and **this alternative is**

Alternative	Description	Alternative Evaluation
		dismissed from further evaluation because the geotechnical investigation indicates higher degrees of ice rich permafrost than the surrounding areas. The close proximity to Kuchoruk Creek is likely to cause an increased risk of thaw-instability in the embankment. The site is further constrained to the east, which would require the apron and taxiway be built on fill over existing drainage. This site is within 5000 feet of the community land fill, which does not meet separation distances from wildlife attractants per AC 150/5200-33C.
Option 5	Relocate the airport approximately 1 mile west of Site 3 along a ridgeline.	This site overlaps with one the 2006 geotechnical investigation as a potential material source, however option does not meet Screening Criterion 2 and is **dismissed from further evaluation** because the investigation showed thaw unstable permafrost. The topography of this site has more variation, which would require substantially more fill material, or cutting into existing ground (which increases the risk of causing thaw-unstable conditions in the embankment). This site is also farther from the community, requiring a longer access road which does not meet Screening Criterion 3. It also does not meet Screening Criterion 4 as it results in greater direct environmental impacts and greater logistical burden on the community to transport passengers, fuel, and cargo to and from the airport.
Material Sources		
South River Material Source	Located south of Noatak on a Noatak River gravel bar and contains fine-grained and course grade materials. Requires development of an approximately 2-mile-long access route.	This alternative is considered feasible and is incorporated in the Proposed Action. This option meets Screening Criterion 2 since the site provides suitable grade material available with a short haul distance to the new airport location compared to other river bars within the Noatak.
East River Material Source	Located just east of Noatak on a Noatak River gravel bar and contains fine-grained and course grade material. This source has an existing access route, has been used by the community in the past, and could provide supplemental material to construct the project.	This alternative is considered feasible and is incorporated in the Proposed Action. This option meets Screening Criterion 2 since the site is actively used and provides suitable grade material with the least haul distance to the new airport location compared to other river bars within the Noatak.
Inland Material Source	Located just north of the Proposed Action and contains fine-grained materials. Requires development of an approximately 2,000-ft long access route.	This alternative is dismissed from further evaluation **since it does not meet** Screening Criterion 2 as the available material is not of suitable grade material for project construction.
Distant Material Source	Located further inland, positioned to support airport relocation Options 1 or 2, and contains fine-grained and organic materials. Requires development of an approximately 4 miles long access route.	This alternative is dismissed from further evaluation as it is located 2 miles farther from the Proposed Action than the other material site alternatives, requiring a longer access route, and does not meet Screening

Alternative	Description	Alternative Evaluation
		Criterion 2 since it is not of suitable grade material for project construction.
Equipment and Material Mobilization		
These alternatives would provide overland access between Delong Mountain Transportation System (DMTS) Port Site and the Project Area via a winter snow road. Numerous routes were considered both inside and outside the Cape Krusenstern National Monument (CKNM) during preliminary analysis. Some routes were consolidated, and all routes were realigned slightly to provide the most feasible alignment. Alternative development and evaluation criteria include: overall route length from the port site, overland distance between DMTS and the project area, grades, channel crossings, vegetation impacts, community input, ROW considerations, and time needed to obtain authorizations. Presence of adequate snow depth would be required for winter route use therefore snow depth was not considered as an evaluation criterion.		
Route 1	This 42.3-mile route would traverse overland for 23.6 miles and follows the Noatak to Kivalina winter trail. The route crosses 9.5 miles of CKNM and 9.5 miles of Bureau of Land Management (BLM) lands. It is most similar to the route permitted by the National Park Service (NPS) in 2015 and is the most preferred by the community. This route would require a SF299-09b Transportation and Utility Systems Access permit from the NPS as well as temporary access easements from BLM. The route has a maximum grade of 10%, crosses 5 channels*, and traverses approximately 9 miles of forested, 6 miles of scrub shrub wetland, and 8 miles of emergent habitat**, some portion of which has been significantly disturbed by past community trail use.	The route is preferred by the community, has the shortest overall distance, and minimizes impacts to vegetation as it follows an existing winter trail for the majority of the route. However, this alternative is dismissed from further evaluation since it does not meet Screening Criterion 3 because there are other feasible alternatives that would be more cost effective for the scale of the project and provide reasonable assurance that the route could be used within the project timeline. Additionally, this route does not meet Screening Criterion 4 because other feasible alternatives would avoid impacting and traversing the CKNM, thereby reducing the time needed to obtain easement authorizations.
Route 2	This 47.7-mile route would traverse overland for 21.6 miles and is located north of the Route 1. The route crosses 4.5 miles of CKNM lands and 9.5 miles of BLM lands and is approved by the community as an alternative to Route 1. This route would require a SF299-09b Transportation and Utility Systems Access permit from the NPS as well as temporary access easements from BLM. The route has several short steep sections, an overall maximum grade of 21%, crosses 6 channels*, and traverses approximately 8 miles of forested, 7 miles of scrub shrub wetland, and 6 miles of emergent habitat**.	The route crosses the shortest distance within CKNM and is preferred by the community as an alternative to Route 1. However, this alternative is dismissed from further evaluation since it does not meet Screening Criterion 3 because there are other feasible alternatives that would be more cost effective for the scale of the project and provide reasonable assurance that the route could be used within the project timeline. Additionally, this route does not meet Screening Criterion 4 because other feasible alternatives would avoid impacting and traversing the CKNM, thereby reducing the time needed to obtain easement authorizations and the route requires traversing very steep grades.
Route 3	This 67.6-mile route would traverse overland for 28.2 miles and is located north of the Route 2 route. The route	This alternative is considered feasible and is incorporated as part of the Proposed Action **since it meets Screening Criterion 3 and 4 because** the route

Alternative	Description	Alternative Evaluation
	would use the DMTS road ROW through CKNM lands, and cross NANA, private, and state lands. This route would require temporary access easements from these private landowners. The route has an estimated maximum grade of 7.5%, crosses 5 channels*, and traverses approximately 1 mile of forested, 16 miles of scrub shrub wetland, and 11 miles of emergent habitat**.	is cost effective for the scale of the project and provides reasonable assurance that the route could be used within the project timeline and minimizes impacts to forested areas. Additionally, the route remains on an established, active transportation easement and facility across CKNM lands, has the lowest grades of all the alternatives, and would require the shortest estimated timeframe to receive temporary ROW use authorizations.
These remaining alternative mobilization routes from Kotzebue evaluate feasibility of mobilizing material.		
Noatak River Ice Road	This route would follow the Noatak River between Kotzebue and Noatak for approximately 75 miles during the winter months when the Noatak River is frozen. This route may include a combination of a river ice road and winter overland travel.	This alternative is dismissed from further evaluation **since it does not meet Screening Criterion 3 or 4 because it does not provide reliable access and does not minimize environmental impacts.** The alternative follows the Noatak River, a valuable subsistence and commercial resource for the surrounding communities. This alternative would pose a potential risk of impacting Noatak River fish and other resources if a contaminated spill, or equipment breaking through the ice road, occurred. Hauling equipment may also be unpredictably infeasible due to insufficient weather-related river ice conditions possibly precluding safe or timely mobilization to Noatak via an ice road.
Noatak River Barge	This route would barge equipment and material via the Noatak River to a privately held staging area 21 miles south of Noatak and then transport them overland to the project site. This alternative would require development of a barge landing, staging area, and overland hauling (winter).	This alternative is dismissed from further evaluation **since it does not meet Screening Criterion 3 because the Noatak River depths to not reliably support barging. Commercial barging to Noatak was suspending in 1986.** Additionally, this route does not meet Screening Criterion 4 **because it does not minimize environmental impacts.** The alternative would require in water work during community subsistence use periods and activities along the Noatak River and use of the few feasible overland routes between the staging area and project site would also add additional risks associated with water crossings along their routes.
Fly-in	This route would fly all equipment and materials into the existing Noatak airport from supply locations via aircraft. Equipment and material unavailable in Kotzebue would first be barged from other source ports to Kotzebue.	This alternative is dismissed from further evaluation **since it does not meet Screening Criterion 3 or 4 because it does not provide a cost-effective route for the scale of the project and does not minimize environmental impacts.** The alternative would require air freighting heavy equipment via multiple trips is not feasible. The aircraft required to facilitate such mobilization would not have reliable access to the airstrip due to strict landing condition requirements. In addition, fly-in mobilization would be prohibitively costly, as heavy equipment would need to be disassembled into multiple pieces, with each piece flown separately, and then reassembled in Noatak.

* Channel crossings are locations where a temporary ice bridge would be needed. For purposes of the alternatives analysis, it is assumed the remaining channel crossings would be frozen to the channel bottom and special crossing considerations would not be required.
** *Forested* includes areas of dense tree cover, *scrub shrub* includes areas of sparse tree and/or shrub cover, *emergent* includes areas of little to no shrub cover with visible open water ponds.

9.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the existing environment and environmental impacts to resource categories identified in FAA Orders 1050.1F and 5050.4B. A region of influence (ROI) is described for each resource area. The ROI varies among resources and defines the geographic extent of potential effects from the alternatives on the important elements of that resource. Each section in this chapter delineates its ROI and identifies the topics and resources addressed by that section.

Direct effects are caused by the action and occur when the action is implemented. Indirect effects of the action occur later in time or farther removed in distance. Connected actions are automatically triggered by another action, cannot or will not proceed unless another action occurs, and are interdependent parts of a larger action. Cumulative impacts result from incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes other actions.

The qualitative terms used to assess the anticipated impacts associated with each of the alternatives are defined as:

- **None** – No measurable impacts are expected to occur.
- **Less than Significant** – Adverse impacts are expected to occur; impacts would be noticeable and would have a less than significant effect on the resource.
- **Significant** – Adverse impacts are expected to occur; impacts would be obvious and would have serious consequences on the resource.

9.1 Past, Present, and Potential Future Actions

Projects considered during the cumulative impacts analysis include:

Past projects at Noatak over the past decade:

- K-12 School Replacement and Teacher Housing
- Delivery of fuel truck to Noatak via winter haul route from the DMTS

Current and reasonably foreseeable future projects at Noatak:

- Water and Sewer Distribution Upgrades
- Bulk Fuel Facility Relocation (includes new facility construction and demolition of existing facility)

- Generator Relocation
- Community Haul Road to Port Site
- Noatak West Cemetery Spur Road
- Community Road to the new Landfill, Bulk Fuel Facility, and Powerplant

9.2 Non-Issue Resource Categories

This Environmental Assessment (EA) is an issue-based EA, meaning that only resource categories that were identified as an issue through project development and agency and public involvement are evaluated in detail. Table 2 summarizes non-issue resource categories.

Table 2. Non-issue Resource Categories

Resource Category	Evaluation
Air Quality	• The Alaska Department of Environmental Conservation (ADEC) *Air Non-Point Mobile Source* website (ADEC, 2019a) indicated the proposed project is not in an air quality maintenance or non-attainment area for National Ambient Air Quality Standards. • No air quality analysis is needed because forecasted operations are less than 1.3 million passengers and less than 180,000 operations annually (FAA Order 5050.4B Desk Reference; FAA, 2007). • Noatak is a community with reported suspended particulate matter problems and has PM_{10} monitoring data (ADEC, 2019b). Relocating the airport would reduce air quality impacts from aviation operations near the community associated with wind-blown dust.
Coastal Resources	• The Alaska Coastal Management Program expired on June 11, 2011, and is no longer in effect. The *NAB Comprehensive Plan* (NAB, 1993) and the *Northwest Area Plan for State Lands* (ADNR, 2008) were evaluated to confirm no adverse coastal impacts would occur within the Study Area and the project is consistent with coastal resource management guidelines in these plans.
Farmlands	• There are no prime or unique farmlands in the Study Area, as defined by the Farmland Protection Policy Act of 1981, Public Law 97-98.
Natural Resources and Energy Supply	• Material extractions are not expected to impact area mineral mining that is taking place or would take place. • Fill material is required for construction. Adequate supplies are expected to be available through local sources. • The Proposed Action increases residents' fuel needs for ground travel to a new airport farther away from the community. • A new fuel transfer station would be needed at the new airport to replace the existing station at the current airport. The new fuel transfer station would distribute fuel by either a truck or pipeline. Due to funding limitations, it is anticipated a fuel trucking system would be used to distribute fuel. A proposed replacement fuel transfer station is addressed under “Connected Actions” below.

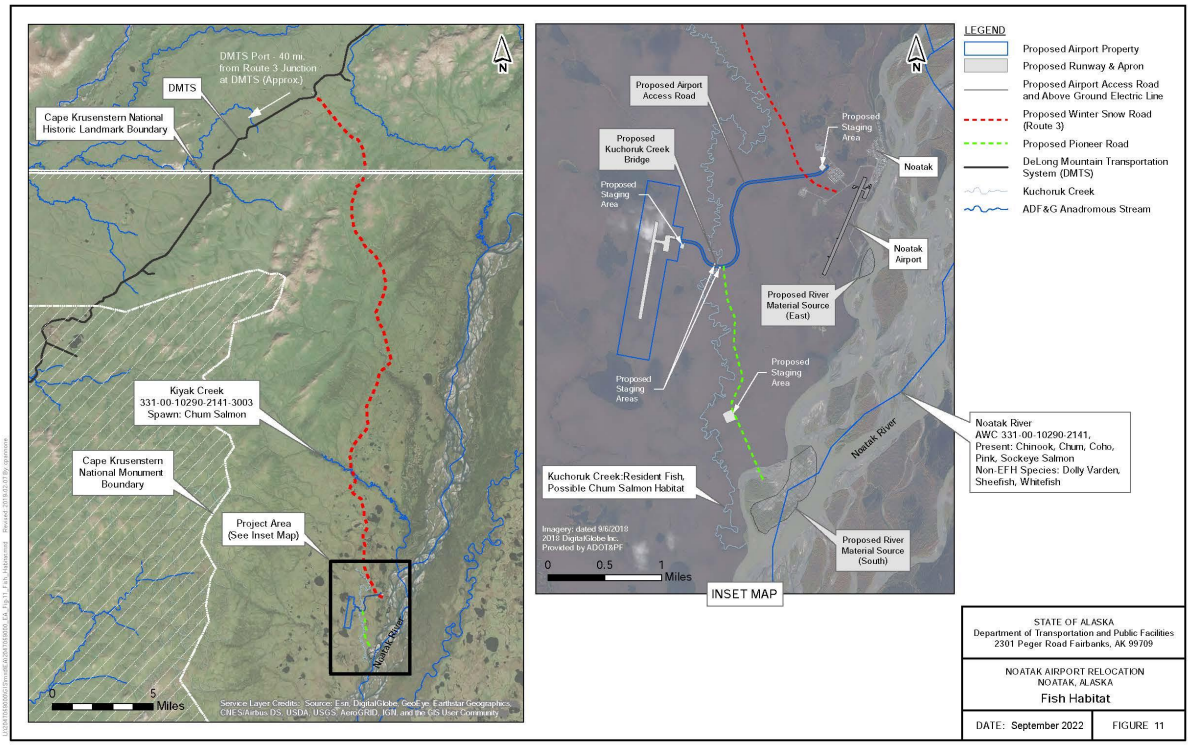
Resource Category	Evaluation
Noise and Noise-Compatible Land Use	• The Proposed Action is anticipated to significantly reduce aircraft noise to residential and other noise sensitive areas within Noatak. The existing airport is immediately adjacent and aligned with the main townsite. There are residential structures approximately 900-feet left of the departure end of Runway 1, as well as approximately 1,600-feet beyond, in-line with the runway. This configuration could place arriving and departing aircraft, if flying low approaches relative to the 20:1 clear surface, less than 100-feet above residential housing. • The relocated airport would place the anticipated Runway 18 end approximately 8,500 feet from the nearest noise-sensitive community infrastructure (School). Conventional air traffic pattern for non-towered airports would default to left-hand turns, and the downwind leg would be flown one-half to one mile parallel to the intended runway for landing at an altitude of 1,000 feet above ground. Traffic in pattern for the anticipated Runway 18 landing could be as close as 2,500 feet offset, and 1,000 feet above the school when navigating a conventional airport traffic pattern. Given the expected attenuation of noise, this could indicate 20 to 30 decibel reduction compared to the noise level expected during a low departure directly overhead from the existing runway. • Additionally, traffic at pattern altitude is expected to generate significantly less levels of noise than aircraft in a full-power takeoff, further reducing anticipated noise levels reaching noise-sensitive areas. • Development of straight-in instrument flight procedures may be evaluated by the FAA to accommodate the new runway. Similarly, the approaches for these would relocate traffic over a mile away from the residential housing and other community infrastructure, replacing traffic that is currently routed directly in-line and overhead these areas. • The airport access road is routed away from the community and there are no sensitive noise receivers or any planned community development around the airport access road. The new airport access road does not reconfigure the community's direction of travel from within Noatak to the proposed relocation site. • The proposed action would not result in an increase in aviation operations or a change in aircraft fleet mix. • Material haul routes, during construction, would be routed to avoid the community, where practicable. • No noise analysis is needed since the new airport would not accommodate Design Group I and II airplanes in Approach Categories A-D and operations would not exceed 90,000 annual propeller operations (FAA, 2020).

9.3 Biological Resources (Fish, Wildlife, and Plants)

9.3.1 Affected Environment

Fish: The Noatak River, adjacent to the community, is a listed anadromous fish stream (Alaska Department of Fish and Game [ADF&G], 331-00-10290) and Essential Fish Habitat (EFH) for: chum salmon (*Oncorhynchus keta*), Coho salmon (*O. kisutch*), Chinook salmon (*O. tshawytscha*), pink salmon (*O. gorbuscha*), and sockeye salmon (*O. nerka*) (ADF&G, 2017). Non-EFH species present are Dolly Varden (*Salvelinus malma*), sheefish (*Stenodus leucichthys)*, and several species of whitefish (*Coregonus nasus* and *pidschuan*) (ADF&G, 2017). Both proposed material sources are gravel bars within the Noatak River flood plain (Figure 11).

Figure 11: Fish Habitat



Kuchoruk Creek is neither listed as an anadromous stream nor has been surveyed by ADF&G, although communication with ADF&G indicated chum salmon are likely present (ADF&G, 2006). Bridging across Kuchoruk Creek would be required to access the airport from the community.

The DMTS Port, proposed for project mobilization, is located on the Chukchi Sea shoreline. EFH for all five species of Pacific salmon (see above), as well as for saffron cod (*Eleginus gracilis*) and arctic cod (*Boreogadus saida*), are present within that area of the Chukchi Sea (NOAA, 2018).

Kiyak Creek, a listed anadromous fish stream (ADF&G, 331-00-10290-2141-3003), is a tributary to the Noatak River and EFH for chum salmon (ADF&G, 2017). The proposed winter snow road would require crossing Kiyak Creek with an ice bridge.

Wildlife: Species of terrestrial mammals that periodically occur in the vicinity are: caribou (*Rangifer tarandus*), moose (*Alces alces*), brown bear (*Ursus arctos*), black bear (*Ursus americanus*), lynx (*Lynx canadensis*), grey wolf (*Canis lupus*), wolverines (*Gulo gulo*), arctic fox (*Alopex lagopus*), red fox (*Vulpes vulpes*), and muskoxen (*Ovibos moschatus*). These and common furbearers are important to hunters/trappers in the region for subsistence and their pelts are used for traditional Alaska Native crafts. Caribou and moose are important subsistence food resources for Noatak (ADF&G, 2007). The Western

Arctic Caribou Herd is the primary herd in northwestern Alaska. Caribou from this herd are present in the Noatak region from approximately September through June (CARMA, 2017).

Marine Mammals: Marine mammal species that can occur in the coastal waters near DMTS include: beluga whale (*Delphinapterus leucas*), gray whale (*Eschrichtius robustus*), bowhead whale (*Balaena mysticetus*), bearded seal (*Erignathus barbatus*), ringed seal (*Phoca hispida*), spotted seal (*Phoca largha*), and polar bear (*Ursus maritimus*).

Threatened and Endangered Species: The United States Fish and Wildlife Service (USFWS) *Information for Planning and Consultation* (IPaC; USFWS, 2017) list the threatened polar bear, spectacled eider (*Somateria fischeri*), and Steller's eider (*Polysticta stelleri*) as all potentially occurring in the project area. No designated critical habitats for any of these species are located within the project area (USFWS personal communication, 2018).

DMTS area Endangered Species Act (ESA) marine mammal species include: bowhead whale, bearded seal, and ringed seal. If project specific barging occurs for mobilization and de-mobilization or other purposes, additional ESA species could include the western Distinct Population Segment (DPS) Steller sea lions (*Eumetopias jubatus*), western North Pacific DPS humpback whales (*Megaptera novaeangliae*), Mexico DPS humpback whales, fin whales (*Balaenoptera physalus*), sperm whales (*Physeter macrocephalus*), North Pacific right whale (*Eubalaena japonica*), and bowhead whales. Vessel traffic may also occur within Steller sea lion, North Pacific right whale, and proposed ringed seal designated critical habitat while in route to the DMTS port site from shipping origination ports.

Migratory Birds: IPaC also lists potential project-area migratory bird species as including: American golden-plover (*Pluvialis dominica*), bar-tailed godwit (*Limosa lapponica*), black turnstone (*Arenaria melanocephala*), buff-breasted sandpiper (*Tryngites subruficollis*), dunlin (*Calidris alpina*), red knot (*Calidris canutus*), red-throated loon (*Gavia stellata*), semi-palmated sandpiper (*Calidris pusilla*), whimbrel (*Numenius phaeopus*), and yellow-billed loon (*Gavia adamsii*). Favored eagle nesting habitat does not exist, and there are no known eagle nests, in the immediate project vicinity.

Plants: The area is dominated by wetland plant habitats, including lake, and riverine systems (Figure 11, 15). The Scrub Shrub habitats are scattered throughout the area. Low shrubs may include dwarf birch (*Betula nana*), Labrador tea (*Rhododendron* sp.) and a variety of *Vaccinium* sp. Taller shrubs include stunted black spruce (*Picea mariana*) and varieties of willow (*Salix* sp.). Dense stands of riverine (riparian) scrub shrub are present along the northern portions of Kuchoruk Creek. Moist Graminoid Meadows are the largest vegetation classification in the area and are saturated with a variety of deciduous, needleleaf, and graminoid species. They are characterized by a mix of emergent graminoid and shrub

plants. Few tall trees are present in these communities. Deciduous Forest habitats are scattered, primarily found along riparian corridors. They include dense stands of trees on sandbars of the Noatak River. The southern part of Kuchoruk Creek also has dense stands of trees.

9.3.2 Environmental Consequences

9.3.2.1 Proposed Action

Significance Threshold: Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for biological resources. A significance impact to biological resources would occur when: *The U.S. Fish and Wildlife Service or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a federally-listed threatened or endangered species, or would result in the destruction or adverse modification of federally-designated critical habitat.* The FAA has not established a significance threshold for non-listed species.

- Significance Determination: Less than Significant

Direct and Indirect Impacts:

Fish: Over one million cubic yards of material, from two Noatak River gravel bar material sources, would be required to construct the Proposed Action. Material site development would result in temporary disturbance of the active floodplain and potential fish habitat of the Noatak River. Some sedimentation and turbidity may take place, which would be minimized through the implementation of a SWPPP for the project. At each material source location, adequate setbacks from the active river channel would be maintained to not impact fish or their habitats, and to avoid release of sediment outflow in the active channel. Excavation would occur during winter months when the ground is frozen, and the river waters are at a low-flow level (Appendix E). Material stockpiles would be moved out of the active floodplain before river breakup in the spring. Fish habitat is expected to be protected by conducting operations during dewatered, winter conditions and away from the mainstem of the Noatak River. A reclamation plan would be prepared for the material site during development.

The airport access road would require bridge construction over Kuchoruk Creek to allow access between Noatak and the new airport. The DMTS and Port would be used but would not be improved or expanded for the Proposed Action. The winter snow road would cross five channels, including Kiyak Creek, that would require ice bridge construction. None of these project impacts are expected to have a temporary or permanent adverse effect on EFH. Impacts to fish other than EFH will be mitigated as required by the ADF&G Fish Habitat Permit. An EFH Assessment and National Marine Fisheries Service (NMFS) consultation was completed, FAA obtained concurrence from the NMFS on a determination of no adverse

EFH effects (Appendix D), and an ADF&G Fish Habitat Permit application was completed for the Proposed Action.

Wildlife: The Proposed Action would result in terrestrial mammal habitat alteration. Vegetation alteration would result in 72 acres of potential wildlife foraging habitat converted to gravel embankment, resulting in wildlife likely moving to neighboring territories containing similar type and quality habitats

Threatened and Endangered Species: On May 12, 2006 and March 22, 2018, the USFWS concluded the Proposed Action is "not likely to adversely affect" listed species, and preparation of a Biological Assessment or further consultation under Section 7 of the ESA is not necessary (Appendix E).

Marine Mammals: To mitigate polar bear impacts associated with Chukchi Sea barging and use of the DMTS Port, Marine Mammal Protection Act (MMPA) informal consultation and Section 7 ESA formal consultation took place with the USFWS as noted above (Appendix E). Other listed species may be encountered along barge routes, including Western DPS Steller sea lions, North Pacific right whales, Western North Pacific and Mexico DPS humpback whales, fin whales, sperm whales and bowhead whales. To mitigate impacts to these species MMPA and Section 7 ESA consultations took place with the NMFS and life history summaries for these species can be found in the MMPA and Section 7 consultation letters (Appendix E).

Migratory Birds: Migratory bird species may travel through the Proposed Action area and may be disturbed by clearing operations. Construction activities may also result in direct injury or mortality of birds or their nests. Birds, and their nests and eggs, are protected under the Migratory Bird Treaty Act (MBTA). DOT&PF would require the construction contractor to comply with the MBTA and provide the USFWS recommended time-period to avoid vegetation clearing (May 1-July 15) as a method of compliance. Ground disturbance would occur while the ground is still frozen, and geotextile would be placed to deter nesting during the subsequent breeding season.

Plants: The Proposed Action would result in approximately 72 acres of native vegetated, primarily palustrine scrub shrub and palustrine emergent, cover converted to gravel pads for the runway, apron, access road, pioneer road, and staging areas (Figure 14). This conversion of habitat would be minor; however, as similar vegetation community types are widespread throughout the region and vegetation loss represents only a minor portion of the total habitat available. The Proposed Action is bounded by a landscape of intact habitats, such as the CKNM (nearly 500,000 acres) and the Noatak National Preserve (6,500,000 acres). While there are no known occurrences of invasive species in and around disturbed areas in Noatak (AKEPIC, 2019), it is likely that some exist. To minimize the introduction of additional invasive species to the area, the contractor would comply with Executive Order 13112 to mitigate

invasive species by; 1) ensuring that ground disturbing activities are minimized, and disturbed areas are re-vegetated with seed recommended for the region by Alaska Department of Natural Resources (ADNR)'s A Revegetation Manual for Alaska; 2) construction equipment would be inspected and cleaned prior to enter and exiting the construction site to minimize spread of vegetative materials; and 3) erosion and sediment control materials would be locally produced products to minimize potential importation of new propagules from outside Alaska.

Connected Actions:
Construction of a new fuel transfer station (Figure 7) would result in additional fish and wildlife habitat loss (vegetation clearing and filling) adjacent to the new Noatak airport. This facility would be constructed abutting the new Noatak airport facilities and would be necessary to continue fuel transport to Noatak with the airport relocation. This additional habitat loss is anticipated to be minor compared to the vast undeveloped surrounding habitat; thus, there would be no substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitat or their populations.

Secondary (Induced) and Cumulative Impacts:
Past and future projects listed in Section 9.1 could result in additional fish and wildlife habitat loss proximate to the new Noatak airport through vegetation clearing, filling, and other disturbances. However, these additional impacts are anticipated to be minor and result in the same impact as the connected actions.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential biological impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.3.2.2 No Action Alternative

The No Action Alternative would have no effect on fish, wildlife, and plants. Erosion risk to the airport would remain, with the potential to detrimentally impact the community over time.

9.4 Climate

9.4.1 Affected Environment

The FAA 1050.1F Desk Reference, Version 2, Chapter 3 Climate (FAA, 2015a) provides limited guidance for qualitatively or quantitatively evaluating GHGs under the NEPA), though references the FAA Air Quality Handbook (FAA, 2015b) regarding the establishment of appropriate GHG assessment

area boundaries. FAA (2020) notes that for project-level actions, the affected environment for climate is defined as the entire geographic area that could be directly or indirectly affected by the proposed project. While the FAA Air Quality handbook outlines ROI in part based on factors including topography, landscape roughness and vegetation, albedo and values associated with either rural or urban settings, these recommendations are generally applied in assessing pollutants resulting from ongoing airport operations versus construction activities. One model recommended by FAA (2015b) for construction project assessment is a former EPA pollutant model, "NONROAD", now obsolete and replaced by a broader-based model named MOVES3 (USEPA, 2023a). One variant of MOVES3 (MOVES-Nonroad) is noted as capable of forecasting emissions inventories for off-road equipment generated pollutants as well as modeling their dispersion, with its smallest (and default) modeled ROI based on 'county' units. For an equivalent of that modeling unit, Alaska substitutes political subdivisions referred to as 'boroughs', with Noatak Airport located within the Northwest Arctic Borough (NAB). MOVES-Nonroad is designed to estimate potential emissions from multiple off-road equipment use sectors (construction, agriculture, etc.), with outputs based on detailed inventories of known-populations of county-level nonroad equipment fleets and activities (USEPA, 2023b). This information is not obtainable for the NAB, nor even for the Proposed Action prior to the selection of the construction contractor. Additionally, there is no guarantee that equipment sources for the Proposed Action would be resident in the NAB and thus capture by a MOVES-Nonroad assessment, instead likely being imported to the project site from other parts of Alaska in yet unknown quantities and types. However, to remain consistent with the conceptual MOVES-Nonroad model ROI, and potentially allow for indirect incorporation/comparison of Proposed Action GHG emission data into potential future MOVES-Nonroad modeling efforts in the NAB, the Proposed Action ROI for GHG emission assessment for the purposes of this EA will be considered as the NAB.

9.4.2 Environmental Consequences

9.4.2.1 Proposed Action

Significance Threshold: FAA has not established significance thresholds for aviation or commercial space launch GHG emissions, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions (FAA, 2020). However, GHG emissions should follow the basic procedure of considering the potential incremental change in CO2 emissions that would result from the proposed action and alternative(s) compared to the no action alternative for the same timeframe, and discussing the context for interpreting and understanding the potential changes. Consistent with the National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and

Climate Change, 88 Fed. Reg. 1196 (Interim Guidance Jan. 9, 2023),[1] the Agency will try when reasonably possible to quantify GHS emissions, compare GHS emission quantities across alternative scenarios, and place emissions in relevant context. As the proposed action does not occur within a regulated airshed, nor will it result in a change of operations or relocated facility type (i.e. SREB), the depth of analysis conducted within this EA consists of a quantitative disclosure of estimated GHG emissions associated with the temporary construction and long-term operation of the relocated airport. The significance threshold that would warrant further analysis for this proposed action is: if the project occurs within a regulated air shed identified for a criteria pollutant within the project area; and if the proposed action would result in the establishment of a permanent new source of emissions (i.e. additional facilities or structures that would emit pollutants as a result of their operation).

CEQ (2023) additionally notes that agencies can use monetized estimates of the social cost of greenhouse gas emissions (SC-GHG) to help decisionmakers and the public understand and contextualize emissions and potential climate damages. For monetized damages associated with CO2 emissions, a federal Interagency Working Group on Social Cost of Greenhouse Gases (IWG) produced a table of estimated, monetized social costs in dollars per metric-ton of GHGs emitted, individually applied over a span of modeled years (IWG-SCGHG, 2021). The IWG notes that what they previously used as a social rate of return on capital to discount future benefits of reducing GHG emissions inappropriately underestimated impacts of climate change for the purposes of estimating that social cost. Consequently, and to address disagreements on an appropriate single discount rate to use in this context as well as uncertainty on how rates may change, the IWG published tables containing three certainty-equivalent, constant discount rates spanning the plausible range of social costs: 2.5, 3, and 5 percent average per year, reported as future, year-specific dollar costs (in 2020 dollars) per metric ton GHG emitted. IWG SC-GHG tables also provide a fourth year-specific discount rate which can be used to determine a "3% discount in the 95th percentile", statistically qualified SC-GHG. This fourth value was included to provide information on potentially higher-than-expected economic impacts from climate change, conditional on the 3% estimate of the discount rate (IWG-SCGHG, 2021).

IWG tables individually report monetized social costs for CO2 emissions as well as for other less prevalent GHGs. Due to a lack of data on individual, component GHGs emissions for the proposed action, for this EA a proxy range of monetized social costs solely for CO2 emissions (SC-CO2) was estimated, with recognition that costs based solely on CO2 emissions slightly underestimate total SC-GHG.

[1] The interim guidance is not binding, but may be considered.

For the purposes of capturing uncertainties involved in social cost analyses, the IWG emphasizes the importance and value of including all four listed discount values (2.5%, 3%, 5%, and 3% at the 95th percentile) provided in social cost monetization tables (IWG-SCGHG, 2021). For analysis of the proposed action construction impacts, a range of total, potential monetized CO2 emission costs was estimated by applying the IWG SC-CO2 table-year 2025 per-metric ton emission costs of:

- $83 for the 2.5% discount rate.
- $56 for the 3.0% discount rate.
- $17 for the 5.0% discount rate; and,
- $169 for the 3.0% at the 95th percentile discount rate.

To inform these project construction SC-CO2 monetization estimates, DOT&PF made quantifiable estimates of proposed action construction process CO2 and CO2e emissions to reasonable, appropriate levels utilizing recent, efficient and accessible models (Appendix F).

- Significance Determination: Less than Significant

Direct and Indirect Impacts:

Construction: Proposed Action emissions of carbon dioxide (CO2) and carbon dioxide equivalents (CO2e) were modeled for temporary construction emissions of the Proposed Action using several relevant models freely and readily available to the public on the internet (Mathers et al., 2023; USEPA, 2023c; Feng Ma et al., 2016; Klanfar et al., 2016). CO2 is the most prevalent GHG, on average representing more than 95 percent of emissions impacts on climate that come from burning transportation fuels. Available models used and referenced in this EA variously provided outputs for either CO2 or CO2e emissions and are identified accordingly. Methane (CH4) and nitrous oxide (N2O) are other GHGs associated with fuel combustion, and models that report only CO2 emissions slightly underestimate overall GHG emission totals. Model outputs for which emissions calculations included all GHGs associated with fuel combustion are noted as CO2e – where "e" stands as a CO2 equivalent including other GHGs that have been factored in (Mathers et al., 2023).

USEPA (2023d) emissions equation calculators impartially allow “CO2 or CO2e” as input values to derive associated values for fuel volume burned, etc., and thus for the purposes of this EA, CO2 and CO2e outputs are generally accorded equal weighting and reported as “CO2 and CO2e” in the combined models’ output totals summary. While these summary totals may slightly underestimate total GHG-suite emissions as do the two individual models (Mathers et al., 2023 and USEPA, 2023d) reporting only CO2

outputs, the minor unaccounted for CH4 and N2O components are insignificant, generally representing only a combined <~5% of total climate impact potential (Mathers et al., 2023).

An estimated proxy construction fleet was developed using project engineers' expertise, and estimated power, weight, operation component and schedule, and fuel use inputs for equipment were approximated using readily internet-available manufacturers data sheets and third-party fuel consumption tables (J.S. Cole, 2023). Due to the complex blend of processes for some construction tasks (notably asphalt construction), several models were at times co-employed to yield the most reasonably accurate level of combined CO2 and CO2e emissions.

Based on predicted emissions modeling outputs for its anticipated construction process (Appendix F), the Proposed Action would produce total estimated emissions of approximately 8,881 metric tons of combined CO2 and CO2e over the project construction duration. Across the proposed three-year construction schedule, this total would average an emission loading of approximately 2,960 metric tons of combined CO2 and CO2e per year. There was a lack of information on conversion factors and other inputs that could be applied to the models to estimate output variance due to Proposed Action constructed in an arctic location, and with some processes scheduled to be conducted during winter months.

As per CEQ (2023) and IWG-SCGHG (2021) recommendations, an estimated range of total monetized value of SC-CO2 for the 2-year (2024-2026) proposed action construction schedule was determined to potentially range between $124,334 and $1,500,889 as illustrated below:

Total proposed action construction CO2 and CO2e emissions: 8,881 metric tons (see Appendix F)

- SC-CO2 at 3% 95th percentile discount rate:…8,881 metric tons x $169 = $1,500,889
- SC-CO2 at 2.5% average discount rate:.....8,881 metric tons x $83 = $737,123
- SC-CO2 at 3% average discount rate:…….....8,881 metric tons x $56 = $487,336
- SC-CO2 at 5% average discount rate:……...8,881 metric tons x $17 = $150,977

Operation: The emissions associated with operation of the airport consist of airport operations, maintenance equipment, and the SREB heating system. These operations are expected to produce similar levels of emissions at the new airport as at the existing airport.

Accordingly, the Proposed Action would result in less than significant GHG impacts to climate as temporary construction and long-term emissions are quantitatively disclosed above, and the proposed action does not occur within a regulated air shed so further analysis is not determined to be warranted. The proposed action will also not result in the establishment of a permanent new source of emissions.

Connected Actions:

It is anticipated the new fuel transfer station would be constructed concurrently with the Proposed Action, which would combine construction material and hauling needs concisely. This would reduce the overall construction duration and combine truck hauling which would therefore reduce GHG emissions.

Secondary (Induced) and Cumulative Impacts:

The Proposed Action would neither increase the current facility energy requirements for future airport operations nor change the nature of the aircraft fleet or operations schedule for landings or takeoffs. Resultantly, there would be no net increase in GHG emissions via future operations of the constructed Proposed Action. Additionally, the cumulative impacts of the Proposed Action and other present, past, and/or reasonably foreseeable projects are not anticipated. Consequently, the Proposed Action would generate no significant cumulative impacts on climate.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential climate change impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.4.2.2 No Action Alternative

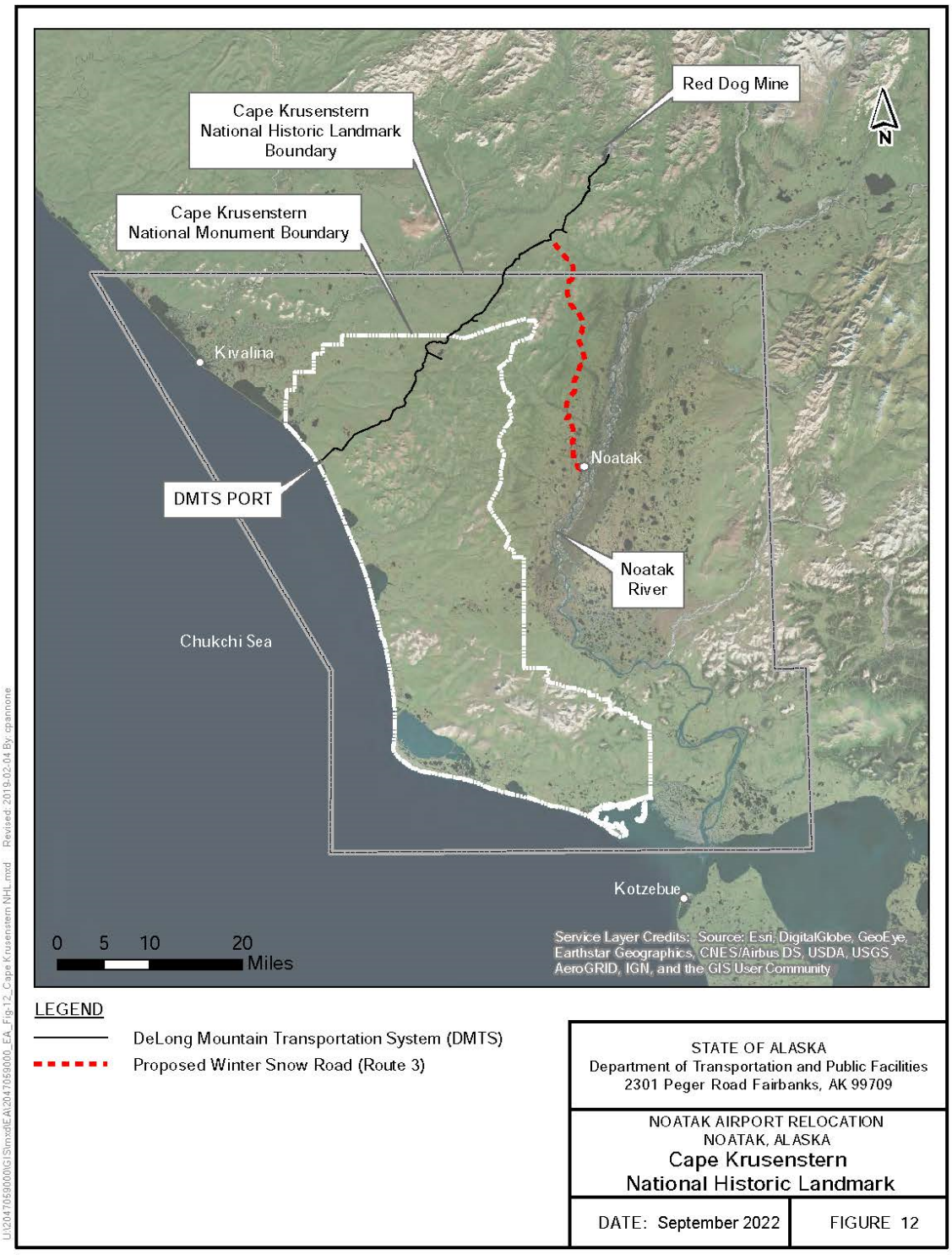
The No Action Alternative would result in no additional impacts to climate over current conditions. However, caribou and other mammals would continue to have free access to airport operational surfaces and infield ponds, resulting in the occasional need for aircraft to abort takeoff or landing operations to avoid collisions. These operations would require additional fuel to be burned, contributing some unknown levels of jet-fuel combustion GHG emissions to the environment. Additionally, there would remain a continued potential threat of aircraft or airport service vehicle collisions with wildlife that could result in their injury or death as well as posing a serious threat to public safety and airport operations.

9.5 Department of Transportation Act, Section 4(f)

9.5.1 Affected Environment

Noatak, the existing airport, and the Proposed Action are located entirely within the Cape Krusenstern National Historic Landmark (CKNHL). The CKNHL boundary (Figure 12), is managed by the NPS and established to preserve archeological resources in the area (NPS, 2018). Additionally, the CKNM is located within the CKNHL, which encompasses the DMTS port and a portion of the DMTS haul route. The CKNM eastern boundary lies approximately 12 miles south and west of the overland portion of the mobilization haul route and proposed new airport project respectively.

Figure 12: Cape Krusentern National Historic Landmark



9.5.2 Environmental Consequences

9.5.2.1 Proposed Action

Significance Threshold: Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for Section 4(f) properties. A significance impact would occur when: *The action involves more than a minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource.* A significant impact under NEPA would not occur if mitigation measures eliminate or reduce the effects of the use below the threshold of significance.

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
Section 4(f) of the *U.S. Department of Transportation Act* would apply under criteria 23 CFR 774.17(1), since the Proposed Action is within the CKNHL. The Proposed Action would permanently incorporate a minor portion of the CKNHL (approximately 72 acres of the 650,000 acres) into the airport and roads and temporarily incorporate 192 acres for material site use (Figure 12).

Pursuant to 36 CFR 800.5(d)(2), implementing regulations of Section 106 of the National Historic Preservation Act, FAA found, and the NPS and State Historic Preservation Officer (SHPO) concurred (on October 6, 2021, and September 22, 2021, respectively) that the Proposed Action would not adversely affect the CKNHL. Based on the undertaking not adversely affecting the function or historic qualities of the CKNHL and that agreement from the NPS and SHPO has been obtained in writing, the Proposed Action appears to meet a *de minimis* use (23 CFR 774.17) (Appendix G).

FAA determined no feasible and prudent alternatives meet the purpose and need and avoid CKNHL use. A Section 4(f) *De Minimis* Finding was completed for the Proposed Action (Appendix G). The NPS and SHPO concurred with the Section 4(f) *de minimis* determinations and *de minimis* impact finding that the Proposed Project would not adversely impact the CKNHL on July 21, 2022 and May 17, 2022, respectively.

Connected Actions:
Section 4(f) would not apply to the fuel transfer station because it would not be U.S. Department of Transportation-funded.

Secondary (Induced) and Cumulative Impacts:
Other past, current and future projects in the region could have a cumulative effect on the CKNHL. However, Section 4(f) would only apply to current or future projects funded by the U.S. Department of Transportation.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential Section 4(f) impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.5.2.2 No Action Alternative

The No Action Alternative would not impact Section 4(f) properties as no equipment would be mobilized to Noatak through the CKNM or CKNHL, and no additional area within the CKNHL would be permanently converted to transportation use.

9.6 Hazardous Materials, Solid Waste, and Pollution Prevention

9.6.1 Affected Environment

The ADEC Contaminated Sites Program database (ADEC 2018) identifies two active sites near Noatak (Figure 13). The AKARNG (Alaska Air National Guard) Noatak Federal Scout Armories (FSA) (Hazard ID 2496), listed for petroleum contamination, is 0.5-mile northeast of the proposed airport access road connection to the community road. Plume mapping indicates contaminants may have migrated onto the current airport property (Stantec 2017a). Since that time, the ADEC identified a clean-up plan that was developed and carried out by the USACE (ADEC 2019b). As of September 28, 2021, the ADEC is in the process of evaluating the site for a "cleanup complete" determination (ADEC 2021a). The Red Dog Mine (Hazard ID 1423), listed for dust containing heavy metal contamination from ore transportation, is located along the DMTS. The mine has taken steps to reduce the dust releases (ADEC 2018). Teck Alaska Inc. maintains use of the DMTS for truck transport between the mine and Red Dog Port and works with ADEC to clean up zinc concentrate spills if they occur. Teck Alaska Inc. maintains BMPs for DMTS use to reduce dust and roadbed soil spread (ADEC 2021b).

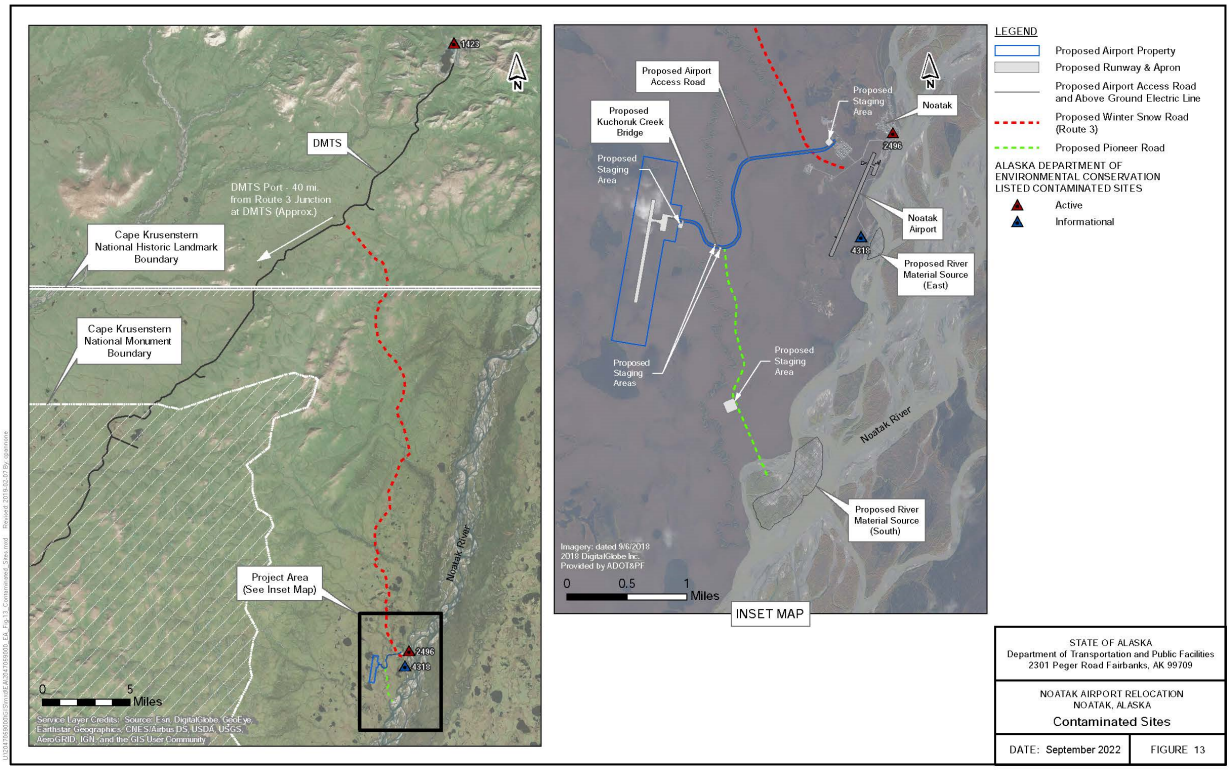
ADEC identifies one informational site, Noatak Former Dumpsite (Hazard ID 4318), which is listed for various contaminants and located 1.3 miles east of the proposed airport access road (Figure 13). All contaminants are below cleanup levels at the site, which currently has a status of "no further remedial action planned" (ADEC 2018). However, this site is now eroding into the Noatak River.

A Phase I Environmental Site Assessment found 20 recognized environmental conditions (REC) (e.g., abandoned 55-gallon drums, soil staining, old fuel lines, uncontrolled non-code compliant tank farms), 4 historical RECs (e.g., old dump, 3 historic spills), and 5 *de minimis* conditions within the existing airport property (Stantec 2017a). Further site investigation would be conducted to determine required remediation actions associated with disposal of the existing airport property and non-FAA infrastructure upon the ultimate land disposal determination, when the future purpose of the existing property and non-FAA infrastructure will be known.

The sewage lagoon and landfill are located 1,200 ft. north of the existing airport. This is less than the FAA recommended 5,000-ft. separation distance.

The existing airport property and proposed airport location are not known to contain concentrations of per-and poly-fluoroalkyl substances (PFAS) (ADEC 2022).

Figure 13: Contaminated Sites



9.6.2 Environmental Consequences

9.6.2.1 Proposed Action

Significance Threshold: The FAA has not established a significance threshold for hazardous materials, solid waste, or pollution prevention in FAA Order 1050.1F; however, the FAA has identified factors to consider in evaluating the potential environmental impacts for hazardous materials, solid waste, or pollution prevention. If these factors exist, there is not necessarily a significant impact; rather, the FAA must evaluate these factors to determine if there are significance impacts. The factors are if the proposed action would have the potential to: violate applicable federal, state, tribal or local laws or regulations regarding hazardous materials and/or solid waste management; involving a contaminated site; produce an appreciably different quantify or type of hazardous waste; generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or, adversely affect human health and the environment.

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
The Proposed Action would relocate the airport farther than the FAA recommended 5,000-ft. separation distance from the sewage lagoon and landfill. Transfer of existing airport property may require remediation of onsite REC's that would be determined through further site investigation. Mitigation would be completed through required remediation actions according to an approved ADEC plan, such as a Contaminated Materials Management Plan. There are no known contaminated sites within the new proposed embankment of the airport construction area. The DOT&PF will remove and/or decommission airport facilities and perform other actions to dispose of airport property as required to decommission and dispose of airport property.

Prior to construction, the contractor would develop a Best Management Practice (BMP)-based Solid Waste and Hazardous Material Control Plan to address hazardous materials management, including storage, handing, and cleanup of potential fuel and lubricant spills. Therefore, construction activities would pose a low risk of incidental contaminant spills.

The DMTS would be used for a winter haul route to transport construction materials between the Red Dog Port and the winter snow road to Noatak. Teck Alaska Inc. maintains use of the DMTS and would be coordinated with prior to DMTS use for transport of construction materials for the project (ADEC 2021b). If actions are needed to ensure the protection of people, human health and the environment ADEC will be contacted.

Connected Actions:

The new fuel transfer station would be constructed to consolidate facilities at the new Noatak airport to distribute fuel to the community of Noatak. It is anticipated the fuel transfer station would be funded and constructed by another entity concurrently with the proposed project. The existing fuel transfer station at the current airport would be removed and remediated as appropriate in accordance with ADEC requirements.

Secondary (Induced) and Cumulative Impacts:

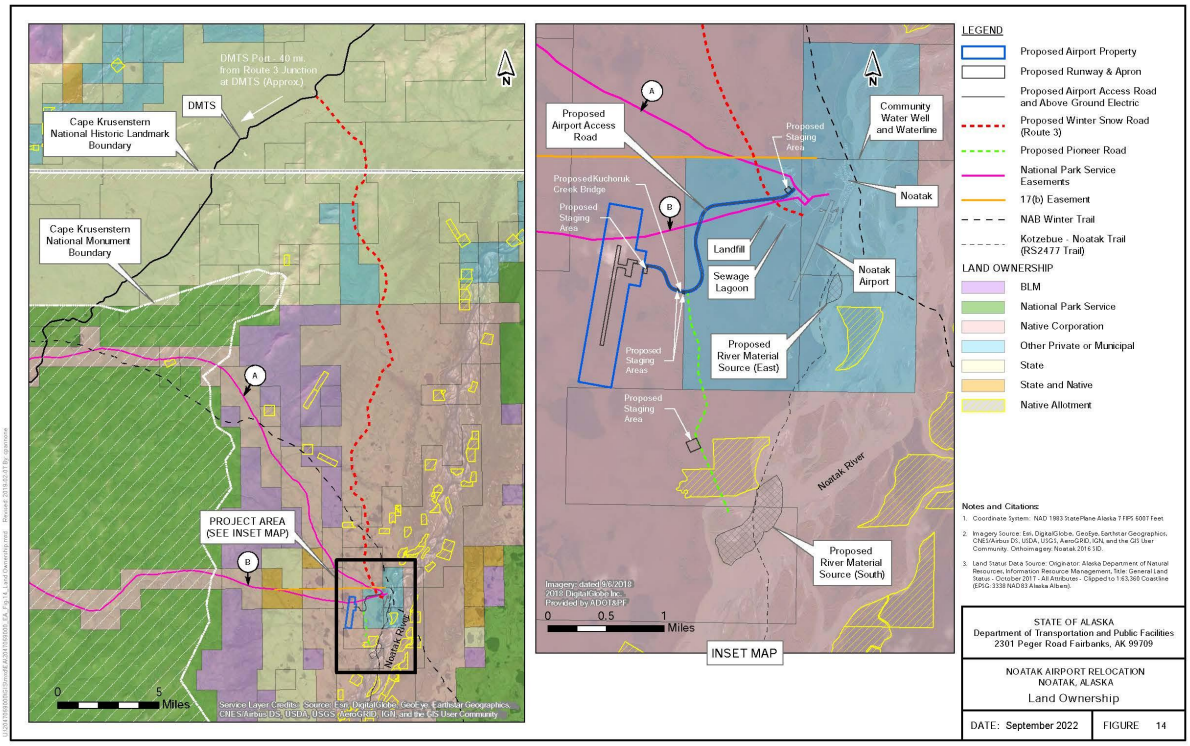
The Noatak landfill (Figure 14) is located between the current airport and the Proposed Action. The community has discussed moving the landfill north of town after the airport is relocated. Personal communication with Jennifer at the Noatak IRA on October 27, 2021, indicated a new landfill location has not been identified, but they will be completing necessary studies to site it in a location away from standing water where there would be more of a bird attractant. Any past, current, or future projects have the potential to generate additional solid waste and may produce or discover contamination near Noatak. Upon the identification of the new landfill location, the need for further environmental impact analysis associated with the relocation of the landfill will be assessed.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the known contamination at the existing airport property and non-FAA infrastructure will be addressed as part of the ultimate land disposal determination to prevent a release of hazardous material into the environment.

9.6.2.2 No Action Alternative

The No Action Alternative would not meet FAA's separation distance from the sewage lagoon and landfill. The community would continue to use non-code compliant fuel pipelines, storage tanks, and other aging infrastructure on airport property.

Figure 14: Land Ownership



9.7 Historical, Architectural, Archaeological and Cultural Resources

9.7.1 Affected Environment

In 2006 and 2019, archaeological investigations were completed for the Area of Potential Effect (APE), which included the proposed airport site, airport access road, Kuchoruk Creek bridge, Noatak River and inland material sources, and material and mobilization haul routes. No pre-contact or historic resources were identified within the APE (Mobley, 2007; Stantec, 2019a). On December 21, 2007, DOT&PF, on behalf of FAA, determined that no historic properties would be affected by the Proposed Action, and SHPO concurred with DOT&PF's determination on January 31, 2008 (File No.: 3130-IRFAA).

In 2018 the APE was extended to encompass the DMTS Port Site and the DMTS to its connection with the winter snow road. A review of the Alaska Heritage Resources Survey (AHRS) on January 17, 2019, indicated additional cultural resources were recorded within one mile of the APE. There are currently 24 cultural resources identified within one mile of the APE, five of which are inside the APE including:

- *NOA-00042, Cape Krusenstern Archaeological District National Monument National Historic Landmark* – The district covers over 2 million acres, extending along the beach 8 miles and

varying in width from 1-3 miles. These former coastal margins contain houses, burials, cache pits, and other remains of the peoples who have occupied these beaches progressively for at least 5,000 years. This horizontal stratigraphy includes virtually the entire range of known cultural history in NW Alaska. Listed on the National Register of Historic Places as a National Historic Landmark under Criterion D in 1974, there is evidence that the Cape Krusenstern area has been inhabited almost continuously for 11,000 years and that sites in the Noatak Valley may provide important information about early migrations.

- *NOA-00361, Kotzebue-Noatak Trail* – In 2009 the Bureau of Indian Affairs (BIA) recorded the route of the Kotzebue-Noatak Trail along the west bank of the Noatak River south of the Village of Noatak. This winter trail runs north from Kotzebue along the coast and crosses Hotham Inlet to the mouth of the Noatak River, then continues north along the Noatak River to the Village of Noatak (Garcia, 2009). The proposed haul route north of the River Material Source (South) would follow a portion of this trail south of the Village of Noatak. BIA recommended that the recorded segments of the Kotzebue-Noatak Trail were not eligible for National Register of Historic Places listing (Garcia, 2009; Goade, 2014). The full extent of the trail has not been formally evaluated.
- *NOA-00601, Log Cabin 1* – In 2016 Northern Land Use Research Alaska, LLC (NLURA) recorded a log cabin within the current APE, immediately east of the existing Noatak Airport aircraft ramp, and approximately 425 feet east of the airport runway (Blanchard and Baxter-McIntosh, 2016). According to a long-time Noatak resident this cabin was built during the 1960s or 1970s. No determination of NRHP eligibility was completed for this site.
- *NOA-00602, Log Cabin 2* – In 2016 NLURA recorded a log cabin within the current APE, approximately 530 feet northeast of the existing Noatak airport runway (Blanchard and Baxter-McIntosh, 2016). This cabin in within the Historic Village of Noatak (NOA-00341) and according to a long-time Noatak resident this cabin was built during the 1960s or 1970s. No determination of NRHP eligibility was completed for this site.
- *NOA-00603, Log Cabin 3* – In 2016 NLURA recorded a log cabin within the current APE, approximately 610 feet northeast of the existing Noatak airport runway (Blanchard and Baxter-McIntosh, 2016). This cabin in within the Historic Village of Noatak (NOA-00341) and according to a long-time Noatak resident this cabin was built during the 1960s or 1970s. No determination of NRHP eligibility was completed for this site.

9.7.2 Environmental Consequences

9.7.2.1 Proposed Action

Significance Threshold: The FAA has not established a significance threshold for this impact category; however, the FAA has identified a factor to consider when evaluating the potential environmental impacts for historical, architectural, archaeological, and cultural resources. This factor includes, but is not limited to, situations in which the proposed action or alternative would result in a finding of Adverse Effect through the Section 106 process. For historic properties subject to Section 4(f) of the DOT Act, a significance impact would occur when the action involves more than minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource (see Section 9.5 above).

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
Section 106 consultation was initiated on October 31, 2007, to the SHPO, Native Village of Noatak, Maniilaq Association, NANA Corporation, and NAB (Appendix H), and no comments or concerns regarding historic or cultural resources were raised.

Based on a review of past archaeological investigations, AHRS data, consultation efforts, and the prevalence of wetlands, the DOT&PF, on behalf of the FAA, determined that the project would not adversely affect historic properties. On January 31, 2008, the SHPO concurred with a finding of no historic properties affected by the Proposed Action (File No. 3130-IRFAA) (Appendix H). Due to the time since the last consultation efforts took place and the project extension to the DMTS Port Site, an updated finding of no historic properties adversely affected consultation letter was sent to SHPO and other consulting parties on August 26, 2021, and concurrence was received from the SHPO on September 22, 2021 (File No. 3130-IR FAA / 2021-00989) and the NPS on October 6, 2021 (Appendix H).

Connected Actions:
The fuel transfer station would be located directly adjacent to the new Noatak airport and is located entirely within the proposed project APE. SHPO concurred with a finding of no historic properties adversely affected for the proposed project APE; therefore, it is anticipated construction of the fuel transfer station would not have an adverse impact on any historic properties.

Secondary (Induced) and Cumulative Impacts:
The Proposed Action would not adversely affect any historic properties within the APE, including the CKNHL and the CKNM. The Proposed Action is not expected to impact historical, archaeological, or cultural resources; therefore, secondary and cumulative impacts are unlikely.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential

historic, architectural, archaeological, and cultural impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.7.2.2 No Action Alternative

The No Action alternative would not affect historic, archaeological or cultural resources.

9.8 Land Use

9.8.1 Affected Environment

The Noatak community lies on the west bank of the Noatak River, and currently has no road or regular barge access. Fuel and freight are delivered by air, with limited consumer goods transported by snow machine from Kotzebue. Community residents use all-terrain vehicles, snow machines, and small boats for transportation and subsistence purposes (ANTHC, 2011). Land ownership surrounding Noatak is diverse and includes Federal, State, Local & Private entities (Figure 14).

The following describes land uses and long-range transportation goals within the Noatak area:

- The Proposed Action is on NANA Regional Corporation, other private, municipal (Native Village of Noatak), and state lands.
- The Proposed Action is within the CKNHL (Figure 12; NPS, 2018). The CKNM is 12 miles west of the proposed new airport.
- 17(b) trail easements exist to provide public land access (Figure 14; BLM, 2017).
- The DMTS, leased by the Alaska Industrial Development and Export Authority from NANA, is used to support development in Northwest Alaska.
- The *Noatak Community Comprehensive Development Plan* (2011-2016; NAB, 2006) identifies relocating the airport as a high priority community development need.
- NAB Zoning Districts include Village, Subsistence Conservation, General Conservation, and Transportation Corridor Districts (NAB, 2011). The Subsistence and General Conservation Districts are of high importance for subsistence resources and activities (NAB, 1993).
- The *NAB Comprehensive Plan* (NAB, 1993) states existing industrial transportation systems (e.g., DMTS) should be utilized, not duplicated, to the greatest extent possible.
- The *Northwest Alaska Transportation Plan* (DOT&PF, 2004) notes Noatak is the only NAB community that does not receive summer barge freight service to deliver heavy goods and fuel.

- The Native Village of Noatak signed a resolution on February 8, 2022 supporting proposed airport relocation Option 3, and the winter snow road R3 to the DMTS Port Site.

9.8.2 Environmental Consequences

9.8.2.1 Proposed Action

Significance Threshold: The FAA has not established a significance threshold for land use, and the FAA has not provided specific factors to consider in making a significance determination for land use in FAA Order 1050.1F. The determination that significant impacts exist in the last use impact category is normally dependent on the significance of other impacts categories. If the proposed action would result in other impacts that have land use ramifications, for example, disruption of communities, relocation, and induced socioeconomic impacts, the impacts on land use are analyzed within these contexts and described under the appropriate impact category.

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
Consistency with Land Use Plans: The Proposed Action is consistent with local land use and transportation plans and would meet high priority community needs (NAB, 1993; NAB, 2006).

Impacts to Land Ownership: The Proposed Action would require acquisition of approximately 323 acres of vacant NANA-owned land, with no identified permanent usage other than non-historic winter trails which would remain usable for local transportation.

Most of the existing airport property is granted by patent from the U.S. Government to the State of Alaska. Once the airport is relocated, that portion of the existing airport property would revert to Federal ownership unless the land reversal clause is extinguished. Existing avigation easements will be reverted to NANA. Refer to the description of the proposed action's ROW process in Chapter 2.0 of this EA for further detail. Upon completion of the new airport the existing Noatak airport property would represent a significant development opportunity for the Noatak community with an advantageous location immediately adjacent to the community (Appendix A).

FAA cannot reasonably foresee what use this land will have following disposal because the future landowner will not be known until after a record of decision has been issued. The need for further environmental impact analysis to consider the potential impacts to land ownership of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

Impacts to Zoning and Easements: The Proposed Action would be located within NAB Subsistence Conservation and Village Districts, which would require a NAB Title 9 Use Permit.

The airport access road would cross a BLM trail easement. Access roadside slopes are proposed at 4:1 or flatter to provide recoverable roadside slopes and traversable trail crossings.

Airport access and material haul routes would cross Village, and regional corporation lands. The winter snow road would tie into the DMTS to utilize that existing route to the Red Dog Port. Landowner and lessee coordination would be completed to avoid conflict.

Connected Actions:
The fuel transfer station would be located directly adjacent to the new Noatak airport apron and access road which is currently located on vacant land within NAB Subsistence Conservation District and would require a NAB Title 9 Use Permit.

Secondary (Induced) and Cumulative Impacts:
No other past, current, or future projects are known to have Proposed Action area impacts.

9.8.2.2 No Action Alternative

The No Action Alternative would not impact land ownership as the DOT&PF currently maintains the existing airport ROW. This alternative would not ensure compatible land uses, as the existing airport is in proximity (less than 5,000 ft.) to the sewage lagoon, landfill, and bulk fuel storage per FAA recommended separation distance.

9.9 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

9.9.1 Affected Environment

Socioeconomics: Noatak was originally established as a camp, but the rich subsistence resources of the region enabled the development of a permanent settlement (DCCED, 2017). Residents continue to rely on caribou, moose, reindeer, whale, seal, waterfowl, berries, greens, and chum salmon. Several residents hold commercial fishing permits, and many families travel to seasonal fish camps. The proposed project would be constructed within zoned Subsistence Conservation and Village District lands (NAB, 2011). In Resolution 04-08, the Native Village of Noatak requested agency assistance to construct a new airport.

Environmental Justice: Executive Order 12898: Environmental Justice addresses impacts from Federal Actions to minority and low-income populations. Noatak is primarily Inupiat, and 94.8 percent of the population is Alaska Native or part Native (DCRA, 2010). The proposed project is not anticipated to cause adverse effects on minority or low-income populations. Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was enacted on April 21, 2023. E.O. 14096 on environmental justice does not rescind E.O. 12898 – "Federal Actions to Address

Environmental Justice in Minority Populations and Low-Income Populations," which has been in effect since February 11, 1994 and is currently implemented through DOT Order 5610.2C. This implementation will continue until further guidance is provided regarding the implementation of the new E.O. 14096 on environmental justice.

Children's Health and Safety Risks: Children's health and safety are currently at risk due to noise, aviation generated dust and proximity of aircraft flying directly over the community. The U.S. Census Bureau data for Noatak (2015) estimates 58 children ages newborn-5 years, and 45 children ages 5-9 years. There is one school with 184 students, and two health care providers (DCCED, 2017).

Subsistence: Subsistence activities are an integral part in Noatak residents' lives. A 2007 survey found 100% of respondents reported using subsistence resources, 96% reported harvesting at least one kind of wild food, and 80% of the total community harvest consisted of caribou, moose, marine mammals, trout, and salmon (ADF&G, 2007).

9.9.2 Environmental Consequences

9.9.2.1 Proposed Action

Significance Threshold: The FAA has not established a significance threshold for socioeconomics in FAA Order 1050.1F; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts for socioeconomics. Factors to consider that may be applicable are: induced substantial economic growth in an area, either directly or indirectly; disrupt or divide the physical arrangement of an established community; cause extensive relocation when sufficient replacement housing in unavailable; cause extensive relocation of community businesses that would cause severe economic hardship for affected communities; disrupt local traffic patterns and substantially reduce the levels of service of roads and serving an airport and its surrounding communities; or produce a substantial change in the community tax base.

- Significance Determination: Less than Significant

Direct and Indirect Impacts:

Socioeconomics: Other than the access road, the Proposed Action would not permanently relocate any residence or business, alter surface transportation patterns, divide or disrupt established communities, produce a substantial change in the community tax base, or disrupt planned development. There may be a temporary increase in local employment during construction, but long-term employment effects are not expected. The pioneer road, between the material source (south) and the airport access road, would be

used to haul material to avoid community roads and reduce impacts from hauling through the community. Hauling equipment through the community may impact water and sewer lines buried under existing community roads. The contractor would be required to protect utilities, repair any damage caused by their activities, and maintain community roads associated with the haul route.

Environmental Justice: The Proposed Action would not specifically cause adverse effects to minority or low-income populations. However, travel time and costs for all residents to access the airport would increase as the distance to the airport would be 2 miles greater than at present. DOT&PF would dispose of the existing airport lands and those funds would immediately be reinvested in the new airport thereby reducing property costs to acquire lands for new airport construction (Appendix A). Fair market value would be provided for approximately 323 acres of NANA land for a fee interest for the new airport lands. Additionally, operation and maintenance costs would increase due to a new fuel transfer system at the relocated airport to service the community. It is anticipated the fuel transfer system would be constructed concurrently with the Proposed Action and a fuel trucking system would be used due to funding limitations.

Children's Health and Safety Risks: Children's health and safety risks from noise and aircraft operations proximity would decrease due to a greater distance from the airport to the community.

Subsistence: The Proposed Action, including material site development, is located in community subsistence areas used for animal harvesting, fishing, and berry picking. Approximately 72 acres of terrestrial habitat and 192 acres of Noatak River gravel bars would be lost for subsistence activities; however, the airport access road and Kuchoruk Creek bridge, and pioneer road to the new material site, would improve access to these areas. Material site gravel bars would be naturally reestablished by river hydraulic processes and again be available for subsistence use some relatively short time in the future.

Connected Actions:

The fuel transfer system at the new Noatak airport would provide a method for consumer fuel to be off-loaded from arriving airplanes to the fuel transfer station and distributed via a fuel trucking system to the Noatak community for use. The existing fuel transfer system is located at the current Noatak airport and without a fuel transfer system at the new Noatak airport there would not be the ability to distribute fuel to the community.

Secondary (Induced) and Cumulative Impacts:

The Proposed Action, combined with past, current, and future projects is not expected to cause negative cumulative impacts with environmental justice, socioeconomics, or children's health and safety risks.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential environmental justice, socioeconomics, or children's health and safety risk impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.9.2.2 No Action Alternative

The No Action Alternative would impact community socioeconomics and maintain existing children's environmental health and safety risks. Noatak River erosion would compromise the airport, closing the only transportation option to this minority and low-income community.

9.10 Visual Effects

9.10.1 Affected Environment

Noatak is a small community surrounded by rolling hills, tundra flats, kettle lakes, and the Noatak River.

Light Emissions: The existing airport has medium-intensity runway lighting, wind cone lighting, and a rotating beacon. Runway lighting is typically activated for short periods of time prior to take-off and landing. Lighting is most visible to Noatak residents during periods of aircraft activity and operation of the rotating beacon. No concerns about light emissions have been raised by the community.

Visual Resources/Visual Character: The visual, or aesthetic, resources of the project area range from disturbed lands, consistent with community development, to undisturbed lands comprised of rolling hills, tundra flats, and kettle lakes.

9.10.2 Environmental Consequences

9.10.2.1 Proposed Action

Significance Threshold: The FAA has not established a significance threshold for visual effects in FAA Order 150.1F; however, the FAA has identified factors to consider when evaluating the potential impacts for visual effects. These factors are: the degree to which the action would have the potential to create annoyance or interfere with normal activities from light emissions; and the degree to which the action would have the potential to affect the visual character of the area due to the light emissions; the degree to which the action would have the potential to affect the nature of the visual character of the area; the degree to which the action would have the potential to contrast with the visual resources and/or visual character in the area; and the degree to which the action would have the potential to block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
Airport relocation would result in light emissions where none previously existed, although they would be located farther away from the community. New light sources would include medium-intensity runway lighting, wind cone lighting, and a rotating beacon, similar to existing airport. The existing airport lighting system would be decommissioned.

The visual character of the area would be permanently modified with the addition of a new airport and access road in a previously vegetated area. Excavation and fill activities would disturb wetlands to the south and west of the community.

Connected Actions:
The fuel transfer station would result in a minor visual change to the current landscape and would be constructed directly adjacent to the new Noatak airport, which would minimize fill activities.

Secondary (Induced) and Cumulative Impacts:
Other current and future projects referenced in Section 9.1 may result in a cumulative increase in light emissions and visual change. The cumulative impact would still be minor; however, as light emissions would be commensurate with community activities and visual change would represent only minor changes to the current landscape.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential visual effects impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.10.2.2 No Action Alternative

The No Action Alternative would maintain existing visual conditions, including airport lighting, close to the community.

9.11 Water Resources

9.11.1 Affected Environment

Wetlands: Proposed Action lands consist of a mixture of wetland types, surface waters, and a few existing developed gravel pads (Table 3, Figure 15, Appendix I, Stantec, 2019b and ABR, 2006). Wetland studies

(Stantec, 2019b and ABR, 2006) included habitat classification and mapping, and a functional assessment.

Table 3. Wetlands, Waters of the U.S. and Uplands in Proposed Action Area

Wetlands, Waters of the U.S. and Uplands Type	Acres
Palustrine Scrub Shrub Dominated	1,936
Palustrine Emergent Dominated	2,445
Palustrine Forested Dominated	56
Lacustrine	198
Pond	33
Riverine	1,353
Total	6,021
Uplands	45

Floodplains: The Federal Emergency Management Agency has not published regulatory flood maps for the community of Noatak. A 1976 community map (DCRA, 1976) depicts a floodplain elevation at a level of 30 ft. above the normal channel height. U.S. Army Corps of Engineers (USACE) identified an approximate 25-ft. high water mark, and the Noatak River floodplain has an average to low flood hazard (USACE, 2012).

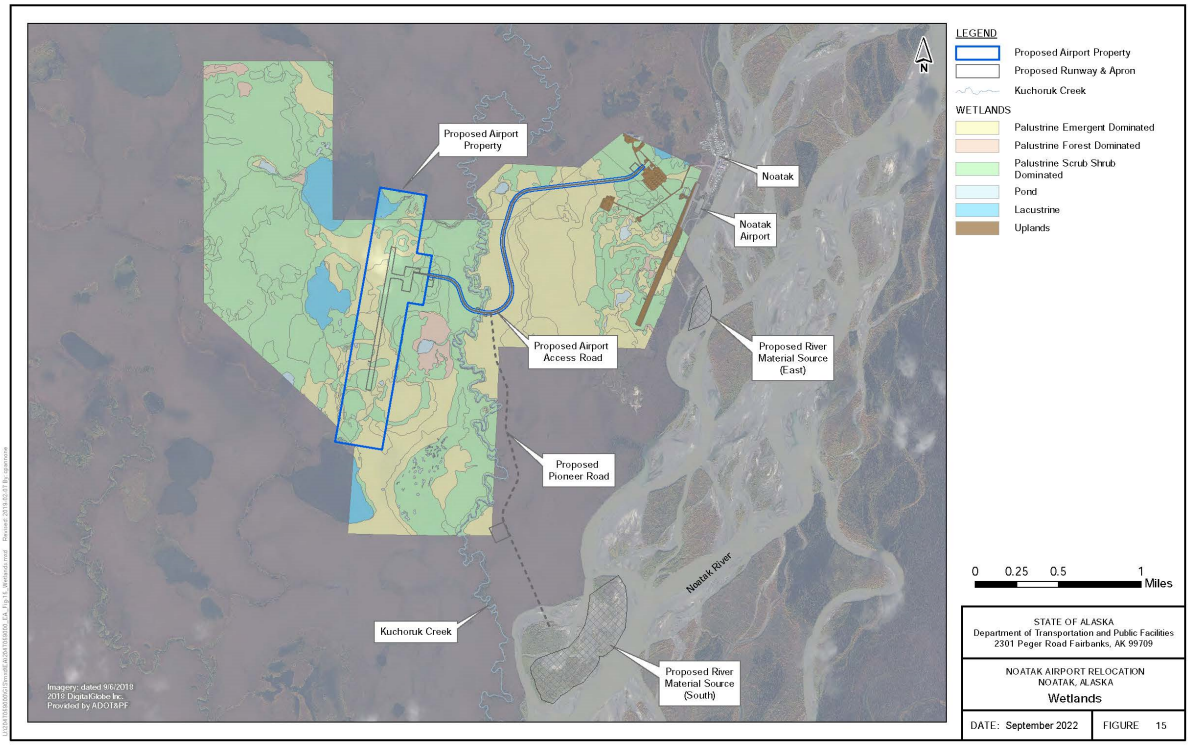
A 2008 hydrologic study of Kuchoruk Creek determined a 65.2-ft. ordinary high-water height and 75.9 ft. 500-year flood event (HDL, 2008).

Surface Waters: Noatak and the existing airport are located along the Noatak River's west bank. The Noatak River is not listed as an impaired waterbody, and there are no known water quality impairments to area surface waters (ADEC, 2010; Figure 11). The Noatak River is a navigable waterway as defined by the USACE. The river is navigable for 400 miles from its mouth at Kotzebue Sound to Portage Creek (USACE, 2020).

Groundwater: There is groundwater contamination in Noatak due to the AKARNG Noatak FSA petroleum contamination plume; however, the community's water supply is not affected as it relies on a series of groundwater wells on Noatak River's west bank and a gravel bar with water pumped through water lines to the community water treatment plant (Figure 14). The wells are classified by ADEC as "Groundwater Under the Influence of Surface Water".

Wild and Scenic Rivers: The river segment in the vicinity of the Proposed Action is not designated as a Wild and Scenic River, however, a Wild and Scenic designation for the Noatak River begins about 30 miles upriver from Noatak and continues from that point upriver for some distance (NWSRS, 2017).

Figure 15: Wetlands



9.11.2 Environmental Consequences

9.11.2.1 Proposed Action

Significance Threshold: Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for surface waters. A significant impact exists if: *The action would exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate public drinking water supply such that public health may be adversely affected.*

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
Wetlands: The Proposed Action would be located entirely within wetlands; however, the project was designed to avoid and minimize impacts to wetlands and waters of the U.S. to the maximum extent practicable (Appendix I).

Avoidance and Minimization of Wetland Impacts
Equipment Mobilization to Site

This feature of the project avoided and minimized wetland impacts by design. Equipment would use the existing Delong Mountain Transportation System (DMTS) and Port system to connect an overland access route to the Noatak project area via a winter road. The DMTS and Port would be used for equipment, but not improved or expanded. No additional fill pads and facilities in wetlands or waters for a barge landing or equipment storage are required. The equipment for the construction would be offloaded at the DMTS Port during the summer.

Snow and Ice Road to Noatak
This feature of the project avoided wetland impacts by design. During winter, the equipment would be used to construct a snow road to Noatak. The winter snow road would depart the DMTS haul road and travel 67.6 miles to Noatak. The proposed route minimizes stream crossings and would use ice bridge construction to cross five channels, including Kiyak Creek. No fill material would be placed in stream channels or wetlands for the winter road. The access route to Noatak avoids travel over Cape Krusenstern National Monument lands by utilizing the existing DMTS transportation facility crossing it. The route has an estimated maximum grade of 7.5 percent (other routes had grades up to 21 percent), and crosses only five stream channels. The winter route, constructed of snow and ice only, requires no ground disturbance or permanent cut and fill on slopes and would be safe for proposed equipment travel. No permanent fill would be placed in wetlands or waters.

Permanent Access Roads

This feature of the project minimized wetland impacts by design. The access road alignment overlies ground that is subject to thaw settlement and has a high potential for snow drifting. The road would be engineered to an estimated average height of 6 feet to minimize potential road surface snow drifting, to provide thermal protection for the underlying permafrost, and to provide a drivable surface above the 100-year flood event. The road would have an average width of 24 feet and an average embankment base width of 72 feet.

Excavation along the route would be avoided to minimize thermal degradation of the frozen soils. Temporary work areas would be used during construction for equipment access, culvert installation, and placement of sediment controls.

The power poles for airport utilities are contained in the road ROW and do not require a separate access. The power pole footprint is within the access road calculations.

The East River Material Source is already in use by the community and the existing road would be used for access.

Material Sites

This featured avoided and minimized impacts to wetlands by using mineral material from gravel bars within the Noatak River. Material extraction from gravel bars would ensure no net loss of WOUS, as each material site would be excavated below the water table, and eventually reflood from the river's natural rise and fall during the seasons. The in-river mining of material would reduce the need for terrestrial material sites and wetland disturbance for the project.

At each material source location, adequate setbacks from the active river channel would be maintained to not impact fish and avoid sediment outflow in the active channel. Excavation would occur during winter months when the ground is frozen, and the river waters are at a low-flow level. Material stockpiles would be moved out of the active floodplain before river breakup in the spring. Main channel water levels would be lower than other times of the year, allowing for material extraction in gravel bars without impacting water quality or fish passage.

Project construction would require approximately 72 acres of unavoidable wetlands impacts (Table 4). Impacts associated with the Noatak River material sources would be temporary. Work within wetlands and waters of the U.S. would be covered under a USACE Individual Permit.

The two predominate wetlands filled by this project are Palustrine Scrub Shrub and Palustrine Emergent wetlands. These wetlands were rated for wildlife and fish habitat as well and other functions such as ground water discharge, ground water recharge, sediment retention, nutrient retention, production export,

and subsistence use. The wetlands in the area and region are similar. Wetlands associated with streams and riverine systems rate highest for fish habitat and subsistence. The riverine wetlands rate high for wildlife habitat. While not all functions of any wetland are equal, the value for these two wetlands score low to medium for ground water discharge, ground water recharge, sediment retention, nutrient retention, production export, subsistence use, and fish and wildlife habitat. The wetlands are part of large complex of wetlands that provide functions for the region as a whole. The two wetlands filled as a whole were rated to be low value wetlands. This does not mean the wetlands have no function or values. This means subjectively the wetlands provide lower rated functions and values compared to other wetlands in the region. The fill for the airport and access road does not impact wetlands associated with highest subjective value of fish habitat and subsistence use.

Table 4. Proposed Action Wetland and Riverine Impacts

Project Component	Fill Type	WOUS Acres Impacted	Overall Wetland Value	Cubic Yards Fill in WOUS
Section 404				
Airport	River Gravels	26.7	Low value	300,000
Access Road		21.3	Low value	160,000
Staging Areas		11.3	Low value	160,000
Pioneer Road		12.7	Low value	105,000
Total Permanent Impacts and Fill		72.1		725,000
Section 10				**Cubic Yards Excavated**
Material Site East	Excavation	1.4	In water work	1,000,000 (includes non-suitable materials)
Material Site South	Excavation	190.9		
Total Excavated Material		192.3		

Project Impacts

Floodplains: The River Material Sources (East and South) excavations would occur within the floodplain. Excavation would occur during winter months when the ground is frozen, and water is at a low-flow level. Haul activities would also occur during the winter months using ice or snow roads.

The bridge at the Kuchoruk Creek crossing would be above the 100-year flood plain (HDL, 2008). Floodplain drainage patterns would not be altered by the Proposed Action.

Surface Waters: Large-scale drainage patterns surrounding the project area would not be altered; however, localized drainage could be affected. Culverts along roads would maintain cross drainage and hydrologic function. No permanent changes to water quality are expected. The Proposed Action would

not adversely affect community water supply and would not affect long-term water quality. Water quality impacts during construction would be minimal and temporary.

Groundwater: The Proposed Action does not include subsurface excavation or construction which would affect flow and recharge of groundwater.

Wild and Scenic Rivers: No change is expected for Wild and Scenic Rivers because the nearest river segment with that designation is greater than 30 miles upriver of Noatak.

Connected Actions:
The fuel transfer system would result in additional wetland and water quality impacts that would be minimized to the extent practicable through USACE wetland permitting.

Secondary (Induced) and Cumulative Impacts:
Past, present, and future actions may result in the loss of additional wetlands or water quality impacts, although wetland permitting would reduce or minimize the extent of these impacts.

As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the need for further environmental impact analysis to consider the potential water resources impacts of the existing airport property and non-FAA infrastructure will be assessed upon the ultimate land disposal determination.

9.11.2.2 No Action Alternative

The No Action alternative would not affect wetlands, floodplains, surface water, ground water, or Wild and Scenic Rivers.

9.12 Construction Impacts

9.12.1 Environmental Consequences

9.12.1.1 Proposed Action

- Significance Determination: Less than Significant

Direct and Indirect Impacts:
Construction impacts would be local in nature and occur over three full construction seasons. The Proposed Action would cause the following temporary construction impacts:

- Noise – Construction machinery and vehicle activity would temporarily increase noise along the haul routes. Although trucks would likely haul fill material around the north end of the existing airport to construct the access road, the closest residence is approximately 1,100 ft away.
- Air Quality – The operation of heavy equipment and hauling fill material can create dust during dry conditions, which may cause temporary air quality impacts. This effect would be temporary and would be controlled by BMPs.
- Water Quality – Water quality impacts during construction would be minor and short term associated with stormwater runoff on disturbed road embankments before final stabilization is complete. The Proposed Action could result in some sedimentation in streams during construction. Since the project requires more than one acre of ground disturbance, an Erosion and Sediment Control Plan and Storm Water Pollution Prevention Plan (SWPPP) would be completed prior to construction. Post-construction stabilization would include seeding/stabilizing embankment fill and other disturbed areas. A mining and reclamation plan would be prepared for the two material sites. Water withdrawals may be required for winter haul route construction, dust control, road compaction, and temporary construction camps. Water to support these activities would likely be sourced from surface waterbodies or the Noatak River; an ADF&G permit may be required.
- Airport Operations – Airport operations would not be impacted by the Proposed Action. The existing airport would remain in service only until the new airport is commissioned.
- Material Sites – Material site development would result in temporary disturbance of the active floodplain and potential fish habitat of the Noatak River. Some sedimentation and turbidity may take place, which would be minimized through the implementation of a SWPPP for the project. At each material source location, adequate setbacks from the active river channel would be maintained to not impact fish and avoid sediment outflow in the active channel. Excavation would occur during winter months when the ground is frozen, and the river waters are at a low-flow level (Appendix E). Material stockpiles would be moved out of the active floodplain before river breakup in the spring. Fish habitat is expected to be protected by conducting operations in dewatered, winter conditions; away from the mainstem of the Noatak River. A reclamation plan would be prepared for the material site during development.
- Winter Snow Road – A winter route would be constructed to facilitate overland transportation. This would include construction of snow roads and ice bridges to protect the tundra, lakes, and streams. Water withdrawal would be permitted through the Alaska Department of Natural

Resources (ADNR) (water use permit) and ADF&G (fish habitat permit) for local waterbodies. The route would experience temporary in vehicle traffic, and noise and air emissions typical of heavy machinery during use of the route.

Connected Actions:
It is anticipated the fuel transfer system would be constructed concurrently with the Proposed Action which would combine construction material and hauling needs concisely. This would reduce the overall duration of construction noise and reduce dust impacts and air emissions from combined truck hauling.

Secondary (Induced) and Cumulative Impacts:
Cumulative impacts may occur if other construction projects overlap with construction of the Proposed Action. Other projects concurrently scheduled with the construction of the Proposed Action include a fuel transfer system and a fuel truck vs. a pipeline would be used due to funding limitations. The cumulative impacts of the Proposed Action and these projects are not anticipated to have a significant adverse effect to noise, air quality, water quality, or airport operations.

9.12.1.2 No Action Alternative

The No Action Alternative would not result in construction impacts.

9.13 Summary of Environmental Commitments & Mitigations

The following environmental commitments, consisting of applicable standard operating procedures and best management practices, would be included as part of the proposed action to reduce environmental impacts:

- Measures to control sedimentation and turbidity will be minimized through the implementation of a SWPPP for the project.
- At each material source location, adequate setbacks from the active river channel will be maintained to not impact fish or their habitats, and to avoid release of sediment outflow in the active channel.
- Material stockpiles will be moved out of the active floodplain before river breakup in the spring.
- Fish habitat will be protected by conducting operations during dewatered, winter conditions and away from the mainstem of the Noatak River.
- A mining and reclamation plan will be prepared for the material sites during development.

- Impacts to fish other than EFH will be mitigated as required by the ADF&G Fish Habitat Permit.
- DOT&PF will require the construction contractor to comply with the MBTA and provide the USFWS recommended time-period to avoid vegetation clearing (May 1-July 15) as a method of compliance. Ground disturbance will occur while the ground is still frozen, and geotextile will be placed to deter nesting during the subsequent breeding season.
- To minimize the introduction of additional invasive species to the area, the contractor will comply with Executive Order 13112 to mitigate invasive species by; 1) ensuring that ground disturbing activities are minimized, and disturbed areas are re-vegetated with seed recommended for the region by Alaska Department of Natural Resources (ADNR)'s A Revegetation Manual for Alaska; 2) construction equipment will be inspected and cleaned prior to enter and exiting the construction site to minimize spread of vegetative materials; and 3) erosion and sediment control materials will be locally produced products to minimize potential importation of new propagules from outside Alaska.
- Prior to construction, the contractor will develop a Best Management Practice (BMP)-based Solid Waste and Hazardous Material Control Plan to address hazardous materials management, including storage, handing, and cleanup of potential fuel and lubricant spills.
- Once the airport is relocated, that portion of the existing airport property will revert to Federal ownership. Existing avigation easements will be reverted to NANA.
- The contractor will be required to protect utilities, repair any damage caused by their activities, and maintain community roads associated with the haul route.
- Excavation will occur during winter months when the ground is frozen, and water is at a low-flow level.
- Haul activities will also occur during the winter months using ice or snow roads.
- Air quality impacts will be controlled by BMPs.
- An Erosion and Sediment Control Plan and Storm Water Pollution Prevention Plan (SWPPP) will be completed prior to construction.
- Post-construction stabilization will include seeding/stabilizing embankment fill and other disturbed areas.

The following environmental mitigations would be included as part of the proposed action to mitigate environmental impacts:

- As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure, or anticipate the landfill relocation decision by the community, the FAA will assess the need for further environmental impact analysis upon the ultimate land disposal determination and the Noatak community's landfill relocation decision. If further environmental impact analysis is determined to be required, this EA will be supplemented or re-evaluated as necessary.
- As the FAA cannot reasonably foresee what use the existing airport land and non-FAA infrastructure will have following disposal, the contamination at the existing airport property and non-FAA infrastructure will be addressed as part of the ultimate land disposal determination to prevent a release of hazardous material into the environment.
- Transfer of existing airport property may require remediation of onsite REC's that will be determined through further site investigation. Mitigation will be completed through required remediation actions according to an approved ADEC plan, such as a Contaminated Materials Management Plan.

9.14 Permits and Authorizations

9.14.1 Proposed Action

The permits and authorizations listed in the following table, unless otherwise noted, will be obtained for the Proposed Action prior to construction to comply with applicable federal, state, and local regulations:

Table 5. Permits and Authorizations

#	Permit/Authorization; Agency	Why Permit/Authorization is Required
Federal Permits and Authorizations		
1	Section 404 Clean Water Act Wetland Fill Permit; USACE	Project elements were designed to avoid and minimize wetland impacts to the maximum extent practicable. A Section 404 individual permit will be obtained prior to construction for the placement of fill within jurisdictional wetlands and waters of the U.S.
2	Migratory Bird Treaty Act compliance; USFWS	USFWS recommendations will be followed by the construction contractor to avoid migratory bird take during vegetation clearing.
3	Magnuson-Stevens Fishery Conservation and Management Act EFH consultation and assessment; NMFS	DOT&PF prepared an EFH Assessment to describe potential EFH impacts and propose conservation measures to reduce impacts. Based on EFH consultation with NMFS, the proposed project actions are not likely to adversely affect threatened or endangered species or critical habitat (Appendix D).

#	Permit/Authorization; Agency	Why Permit/Authorization is Required
4	ESA Section 7; USFWS	Section 7 consultation with USFWS covers potential impacts to Spectacled and Steller's Eiders and Polar Bear Critical Habitat. USFWS has concurred with a finding of not likely to adversely affect listed species or critical habitat under USFWS jurisdiction (Appendix E).
5	MMPA Consultation; NMFS	Consultation with NMFS covers potential impacts to marine species that may be encountered along project specific barge routes (if required). NMFS has concurred with a finding of not likely to adversely affect marine species or critical habitat under NMFS jurisdiction (Appendix E).
6	Section 4(f) U.S. Department of Transportation Act; NPS and SHPO	There are no feasible and prudent alternatives that meet the project's purpose and need which avoid CKNHL use. A Section 4(f) *De Minimis* Finding and consultation with the NPS and SHPO was completed to verify the Proposed Action will not have adverse effects to the CKNHL.
7	Government to Government Consultation	Consultation in accordance with Executive Order 13175 was conducted with the Native Village of Noatak to obtain meaningful and timely input regarding proposed FAA actions and address relevant community concerns/issues.
State Permits and Authorizations		
8	Section 106 Consultation; SHPO, Tribes, and Consulting Parties	Section 106 compliance is required as part of NEPA and provides for the identification and protection of cultural and historic resources that are listed or eligible for listing in the National Register of Historic Places. Consultation has been completed with SHPO, Tribes, and other consulting parties, with mitigation measures and agreements amongst stakeholders completed. The SHPO concurred with FAA's finding of no historic properties adversely affected.
9	Section 401 Certification – Certificate of Reasonable Assurance; ADEC, Division of Water Quality	A 401-water quality certification would be issued prior to the USACE 404 permit and will notify compliance with state water quality administrative code. Measures to protect water quality in accordance with permit stipulations will include the use of BMPs to minimize potential for erosion and sedimentation of wetlands and waterbodies.
10	Material Site Designation; ADNR, Division of Mining Land and Water (DMLW)	To develop a new material site within state-owned lands, ADNR DMLW will need to designate those sites as material sites/sources which will require a decision that this is in the best interest of the State of Alaska.
11	Alaska Pollutant Discharge Elimination System (APDES) Construction General Permit (CGP); ADEC, Division of Water Quality	For projects with disturbance of over 1 acre, compliance with the APDES CGP is required. A SWPPP and notice of intent to seek coverage under the CGP will be required prior to construction. The CGP requires implementation of BMPs to protect water quality during construction.
12	Title 16 Fish Habitat Permit; ADF&G	A Title 16 permit will be required for project activities occurring below ordinary high water of a fish bearing stream. Measures to maintain fish passage, and avoid and minimize impacts to fish and their habitats, within these waters will be implemented in consultation with ADF&G.
13	Temporary ROW interests; NANA, ADNR, and private landowners	All required temporary ROW interests for project activities will be obtained from the landowners.
Local Permits and Authorizations		

#	Permit/Authorization; Agency	Why Permit/Authorization is Required
14	Title 9 Land Use Permit; NAB, Planning Department	The Proposed Action is within the NAB and will require a Title 9 Permit.

9.14.1.1 No Action Alternative

No permits or clearances would be needed under the No Action Alternative.

10.0 PUBLIC INVOLVEMENT AND AGENCY COORDINATION

The public, numerous agencies, the Native Village of Noatak, and various local entities were consulted throughout project planning and design. Public and agency involvement for this project has been ongoing since the 2004 formal request for assistance from the Native Village of Noatak IRA Council. Public involvement has been used to inform the purpose and need and alternatives analysis within this EA. Table 6 summarizes the tasks and activities undertaken to ensure involvement and coordination. Project scoping correspondence, materials, and available meeting notes are included in Appendix E.

Table 6. Public Involvement and Agency Consultation Activity

Date	Activity	Description
11/2/2004	Tribal Resolution 04-08	The Native Village of Noatak IRA Council (Noatak IRA) formally requested DOT&PF and FAA assistance with planning, design, and construction of a new airport.
11/18/2004	Public Meeting	DOT&PF held a public meeting in Noatak to discuss airport relocation options.
12/10/2004	Public Questionnaire	Tribal members of the Noatak IRA were interviewed about the airport relocation.
3/6/2006	Agency Scoping Letters	DOT&PF issued letters to local governments, Tribal entities, Federal and State agencies, and staff describing the project and soliciting comments. Comments were received from ADNR, USACE, USFWS, and DOT&PF.
3/7/2006	Government to Government Consultation Initiation	FAA issued a letter to the Noatak IRA describing the project and requesting comments and input on future coordination.

Date	Activity	Description
7/24/2006	Public Meeting	DOT&PF held a public meeting in Noatak to update residents on the airport relocation project.
8/10/2006	Public Service Announcement	DOT&PF issued a public service announcement concerning the upcoming public meeting.
8/14/2006	Newsletter	DOT&PF issued a newsletter to Noatak residents concerning the upcoming public meeting.
8/17/2006	Public Meeting	DOT&PF held a public meeting in Noatak to update residents on the airport relocation project.
10/22/2007	Meeting	DOT&PF held a meeting with NANA on the airport relocation project.
10/31/2007	Section 106 Initiation of Consultation Letter	DOT&PF issued a letter to the SHPO requesting concurrence that cultural resources would not be impacted by the project.
11/7/2007	EFH Letter	DOT&PF issued a letter to NMFS requesting concurrence that EFH would not be impacted by the project.
9/24/2009	Public Meeting	DOT&PF held a public meeting in Noatak to update residents on the airport relocation project.
3/25/2015	Public Meeting	DOT&PF held a public meeting in Noatak to update residents on the airport relocation project.
04/28/2016	Meeting	DOT&PF held a meeting with NAB and Noatak IRA to update them on the airport relocation project.
11/22/2017	Agency Scoping Letters	DOT&PF, on behalf of FAA, issued letters to local governments, Tribal entities, Federal and State agencies, and staff describing the project and soliciting comments.
11/27/2017-12/22/2017	Agency Comments	Agency comments were received from agency scoping letters and DOT&PF responses.

Date	Activity	Description
1/23/2018	Meeting	DOT&PF held a meeting with NANA to provide an update to the organization on the airport relocation project.
02/20/2018	Section 7 Consultation	DOT&PF, on behalf of FAA, issued letters to NMFS and USFWS requesting determinations on Section 7 Consultation.
03/07/2018	Meeting	DOT&PF, FAA, and Stantec held a teleconference with NPS and BLM to discuss overland haul route alternatives.
03/22/2018	USFWS Letter to FAA	Section 7 Consultation
03/26/2018	FAA Scoping Response	FAA responded to DOT&PF regarding the scoping comments solicitation.
10/10/2018	Meeting	DOT&PF held a meeting with Noatak IRA officials to gather input on the updated Proposed Action elements including the overland haul route to DMTS.
10/12/2018	Meeting	DOT&PF held a meeting with USFWS to discuss updated Proposed Action elements and gather USFWS input.
10/12/2018	Meeting	DOT&PF held a meeting with ADF&G to discuss updated Proposed Action elements and gather ADF&G input.
10/30/2018	Meeting	DOT&PF held a meeting with NPS to discuss updated Proposed Action elements and gather NPS input.
02/21/2019	Section 106 Initiation Letters	DOT&PF, on behalf of FAA, issued letters to SHPO and other consulting parties to confirm concurrence that no historic properties would be affected by the Proposed Action.
02/21/2019	Government-to-Government Consultation Initiation	FAA issued a letter to the Noatak IRA describing the project and requesting comments and input on future coordination.

Date	Activity	Description
02/22/2019	MMPA Letter	FAA issued a letter to NMFS requesting determinations on ESA Section 7 Consultation.
08/26/2021	Section 106 Findings Letters	DOT&PF, on behalf of FAA, issued letters to SHPO and other consulting parties to confirm concurrence that no historic properties would be affected by the Proposed Action.
09/22/2021	Section 106 Finding Concurrence	SHPO concurred with the finding of No Historic Properties Adversely Affected and requested an inadvertent discovery plan distributed to NPS and the AK State Medical Examiner.
10/06/2021	Section 106 Finding Concurrence	NPS concurred with the finding of No Historic Properties Adversely Affected.
02/08/2022	Tribal Resolution 20-23	The Noatak IRA signed a resolution supporting the draft environmental document Proposed Action elements.
06/16/2022	Section 4(f) *De Minimis* Determinations	FAA issued a letter to the NPS with the Section 4(f) *de minimis* determination and requested NPS concurrence.
07/21/2022	Section 4(f) *De Minimis* Determinations Concurrence	NPS concurred with FAA's Section 4(f) *de minimis* determinations and *de minimis* impact finding that the project will not adversely impact the CKNHL.

11.0 LIST OF PREPARERS

The following individuals were primarily responsible for the content of this EA, or for providing senior management leadership during the development and production of this document:

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