Noatak Airport Relocation

Section 10/404 Permit Application

Supplemental Information

November 11, 2025

Prepared for:

Alaska Department of Transportation
and Public Facilities
2301 Peger Road
Fairbanks, AK 99709

Prepared by:

Stantec
3900 C Street, Suite 902
Anchorage, Alaska 99503

This document entitled Noatak Airport Relocation was prepared by Stantec Consulting Services Inc. (“Stantec”) for the account of Alaska Department of Transportation and Public Facilities (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by: Kacy D. Hillman, PWS

Reviewed by: Zach Baer, PWS

Approved by: Victor Ross

Table of Contents

LIST OF TABLES

LIST OF ATTACHMENTS

Acronyms

ADF&G	Alaska Department of Fish and Game
BMPs	best management practices
CKNM	Cape Krusenstern National Monument
DMTS	DeLong Mountain Transportation System
DNR	Alaska Department of Natural Resources
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	*Final Environmental Assessment Noatak Airport Relocation*
FAA	Federal Aviation Administration
LEDPA	Least Environmentally Damaging Practicable Alternative
MOA	Memorandum of Agreement
NAB	Northwest Arctic Borough
ORV	Off Road Vehicle
PRM	Permittee Responsible Mitigation
SWPPP	Stormwater Pollution Protection Plan
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
WOUS	waters of the U.S.

INTRODUCTION

This document supplements the information in the attached Engineering Form 4345, a permit application by the Alaska Department of Transportation and Public Facilities (DOT&PF) to build a new airport and access roads for the community of Noatak. Source material and additional information regarding this project is provided in the *Final Environmental Assessment Noatak Airport Relocation* (EA) (Federal Aviation Administration [FAA] 2024).

APPLICATION BLOCK 15: LOCATION OF PROJECT

The project is in the Northwest Arctic Borough (NAB), 48 miles northeast of Kotzebue. The airport relocation project is located west of the current Noatak Airport and community of Noatak.

The locations of the key project components are shown in Table 15-1.

Table 15-1: Decimal Degree Location of the Key Project Components

Project Component	Latitude N	Longitude W
Airport Relocation	67.5558	-163.0447
Airport Access Road	67.5692	-162.9860
Airport Access Road Bridge – Kuchoruk Creek	67.5564	-163.0222
Pioneer Road	67.5562	-163.9672
Staging Areas	67.5562	-163.9672
South River Material Source	67.5270	-163.0011

The overall project location and reviewed alternatives are shown in Attachment 1, Sheets.

APPLICATION BLOCK 16: OTHER LOCATION DESCRIPTIONS

The study area is located within two of U.S. Geological Survey (USGS) quadrangle maps (1:63,360): Noatak C-2 and C-3.

The study area is in the Kateel River Meridian and intersects 8 sections of the local township and range (Table 16-1).

Table 16-1: Project Location

USGS Quadrangle Map	Township and Range	Sections
Noatak C-2, C-3	T25N, R19W	16-21, 28, 29

APPLICATION BLOCK 21: TYPES OF MATERIAL DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

Table 21-1 lists the project components and impacts to waters of the U.S. (WOUS) to include wetlands, ponds, lakes, rivers, and streams. Cubic yards of fill are estimated and may vary based on site-specific conditions. The permanent fill acreage is 87.44 acres.

The material site would be excavated, not filled. Excavation would have a 190.9-acre footprint but would occur in an active gravel bar of the Noatak River; there would be no loss of WOUS.

Table 21-1: Project Impacts

Project Component	WOUS Acres Impacted	Impacted Habitat	Cubic Yards Fill in WOUS	Fill Type
Section 404				
Airport	39.19	Wetland	436,000	River Gravels
Access Road	30.77	Wetland	145,000	River Gravels
Five Staging Areas	14.34	Wetland	61,100	River Gravels
Pioneer Road	2.17	Wetland	53,000	River Gravels
Airport Access Road Bridge - Kuchoruk Creek	0.97	Wetland	2,973	River Gravels
Total Permanent Impacts and Fill	**87.44**	**Wetland**	**698,073**	**River Gravels**
Section 10				
South River Material Source	190.9	Riverine	1,000,000 (includes non-suitable materials)	Excavation
Total Excavated Material	**190.9**	**Riverine**	**1,000,000**	**Excavation**

APPLICATION BLOCK 23: DESCRIPTION OF AVOIDANCE, MINIMIZATION, AND COMPENSATION ACTIVITIES BOTH UNDERTAKEN AND PROPOSED

23.1 Avoidance and Minimization by Planning and Design

During the preliminary and final planning and design process, DOT&PF evaluated various locations for a new airport that, combined with the access road and material site, helped to identify the Least Environmentally Damaging Practicable Alternative (LEDPA). During the process, DOT&PF made substantial efforts to reduce and avoid impacts to important higher-value wetlands, including open waters, in the study area. These avoidance and minimization measures were incorporated in the preferred alternative (i.e., the design presented in this application). Alternatives considered but dismissed in favor of the airport location with the lowest impact design submitted are addressed in detail in the *Final Environmental Assessment Noatak Airport Relocation* (FAA 2024). In addition, the EA reviewed

equipment mobilization routes to Noatak. The final alternatives are shown in Sheet 7 and their projected wetland impacts summarized in Tables 23.1-1 and 23.1-2.

23.1.1 Alternatives and Revisions Considered

Wetlands and deep-water habitats in Alaska account for 50.7 percent of the state's total surface area (Hall et al. 1994). This project is located in the Arctic Foothills ecoregion in western Alaska, where wetlands are estimated to be 83.2 percent of the surface area (Hall et al. 1994).

ABR, Inc. performed a desktop wetland delineation for a 2,705.2-acre study area for the Noatak Airport Relocation project in 2006 (ABR, Inc. 2006). Since 2006, the study area has expanded to 6,112.6 acres to cover all proposed project alternatives. In 2019, Stantec expanded and updated the 2006 ABR, Inc. mapping using 2018 high resolution aerial photography and consolidated Cowardin (Cowardin et al. 1979) and Viereck (Viereck et al. 1992) habitat classifications (Stantec 2019). The Noatak community road network and supporting infrastructure, as well as a short section of riverbank, were considered uplands (79.3 acres). The rest of the study area is considered WOUS.

Total avoidance of wetland impacts during any type of development in the study area would neither be practicable nor possible. The EA evaluated numerous alternatives to determine the preferred route.

Airport Relocation Alternatives

For more than a decade, DOT&PF, the community of Noatak, and the NAB have evaluated the feasibility of various airport locations, mobilization routes, and material source locations that would allow for continued safe and reliable air transportation. Alternatives were evaluated based on the available vehicles owned by the local community which includes off road vehicles (ORV), to include snow machines and four wheelers. Alternatives to improve the existing airport in the current location were considered but dismissed because river erosion continues to threaten the runway. While installing erosion control along the river may provide temporary protection to the existing airport, several previous community attempts have not been successful. In addition, the current airport is deficient to current FAA standards. It is not practicable to fix deficiencies at the existing airport when the location is threatened by erosion. All feasible alternatives would involve relocation of the airport (DOT&PF and Stantec 2020).

Three site locations were considered for the airport. Each alternative access road and airport site would impact wetlands and would require fill material to be mined for the project. The impacts to WOUS from fill, access, and mining are detailed in Table 23.1-1.

The preferred alternative is the closest option to Noatak. The proposed action would relocate the airport 2 miles west of Noatak and would require an approximate 2-mile access road and a bridge across Kuchoruk Creek. The location is not subject to Noatak River erosion, is an adequate distance from the landfill to meet FAA setback criteria and is preferred by the community as it allows for the shortest access road to the new airport.

Option 1 would relocate the airport 4 miles west of Noatak and would require an approximately 4-mile access road and a bridge across Kuchoruk Creek. This alternative is dismissed from further evaluation as it would require a longer access road and additional wetland disturbance in the form of embankment fill

than the proposed action. The community also rejected this option due to travel distance on ORVs in adverse weather conditions.

Option 2 would relocate the airport 5 miles northwest of Noatak and would require a 5-mile access road. This alternative is dismissed from further evaluation as it would require the longest access road, requiring more wetland disturbance in the form of embankment fill than the proposed action and option 1. The community also rejected this option due to travel distance on ORVs in adverse weather conditions.

Table 23.1-1: Avoidance Screening Level: Airport Relocation Alternatives

Airport Relocation Screening	Access Road Length (miles)	Access Road Width (feet)	Disturbance (acres)
Proposed Action	~2.2	70	~30.77
Option 1	~3	72	~26.3
Option 2	~5	72	~43.8

After avoidance screening was completed, the design was further developed to provide the actual acreages listed in Table 21-1 for the Proposed Action

Material Source Alternatives

Material quantities required for the project would be substantial (estimated at 1,000,000 cubic yards of material) for the new pioneer road, runway, apron, and pads for lease lots, snow removal equipment, lighting, and navigational features. Sheet 7 shows the four material sources considered.

East River Material Source. This site is located just east of Noatak on a Noatak River gravel bar and contains fine-grained and course grade materials. This source has an existing access route and has been used by the community in the past. The use of this site avoids opening a new material site in wetlands but was dismissed from further evaluation as the source is small and currently used by the community for local maintenance projects.

South River Material Source. This site is located south of Noatak on a Noatak River gravel bar and contains fine-grained and course grade materials. The material source would require development of a new approximately 2-mile-long pioneer road. This material site is considered practicable and is proposed for this project. **The use of this site would avoid opening a new material site in wetlands.**

Inland Material Source. This material site is located just northwest of the Proposed Action and contains fine-grained materials. The material at this site is not of suitable quality. It would also require development of an approximately 2,000-foot-long pioneer route. This alternative is dismissed from further evaluation as the material is not suitable quality for project construction, and the material is of poor quality.

Distant Material Source. This 3,378-acre site (2,564 acres of WOUS) is located in the hills to the west, positioned to support airport relocation Options 1 or 2, and contains both fine-grained and organic materials. The material site would require development of an approximately 4-mile-long pioneer route.

This alternative is dismissed from further evaluation as it is located much farther from the Proposed Action than other material site alternatives and the material is of poor quality and not suitable for project construction.

Table 23.1-2: Avoidance Screening Level: Material Site Alternatives

Material Site Screening	Pioneer Road Length (miles)	Pioneer Road Width (feet)	Disturbance (acres)	Suitable Material?
Proposed Action: South River Material Source	~2	60	~14.5	Yes
East River Material Source	~0	60	~0	Yes
Inland Material Source	~0.4	60	~2.9	No
Distant Material Source	~4	60	~29.0	No

After Avoidance Screening was completed, the design was further developed to provide the actual acreages listed in Table 21-1 for the Proposed Action. Sheet 7 of the 404-permit application shows the locations considered.

Equipment Mobilization Alternatives

The mobilization alternatives considered would use the existing DeLong Mountain Transportation System (DMTS) and Port system to connect an existing overland access route to the Noatak project area via a winter road. Numerous winter routes were considered during analysis to connect the DMTS to the proposed project site both through and around Cape Krusenstern National Monument (CKNM). Route evaluation criteria included the following:

- Overall route length from the port site
- Overland distance between DMTS and the project area
- Grades
- Channel crossings
- Vegetation impacts
- Community input
- Right-of-Way considerations
- Time needed to permit the route

The preferred 67.6-mile route would avoid CKNM conservation lands. No permit or authorization would be required from the National Park Service. The route has an estimated maximum grade of 7.5 percent (other routes had grades up to 21 percent), crosses only five stream channels and traverses only 1 mile of forested lands. The selected alternative would require no permanent cut and fills on the steep slopes and would be safe for the proposed equipment hauling. **No permanent impacts to wetlands or waters are expected** (FAA 2024).

Two other routes examined in the EA would cross protected CKNM lands, either five or six stream channels, and significant portions of steep slopes (FAA 2024).

23.2 Minimization Activities Proposed during Construction

Following the preliminary and final WOUS avoidance and design reviews, DOT&PF evaluated a suite of best management practices (BMPs) to further minimize anticipated impacts from the proposed project.

Construction Methods

Material Site

The DOT&PF plans to use material from one site located on a gravel bar within the Noatak River. **Material extraction from the gravel bar would ensure no net loss of WOUS**, as the material site would be expected to be excavated on a gravel bar that would 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. As discussed in the EA, the terrestrial alternatives were of lower quality, which would likely need an expanded area or additional locations to provide the quantity of quality material needed for the project.

The material site would be permitted for use through the Alaska Department of Natural Resources (DNR) Division of Mining Land & Water. DOT&PF would submit a Mining and Reclamation Guideline document to DNR for the material site. The construction contractor would use the guidelines to create a Project Mining and Reclamation Plan for the site to be submitted to DOT&PF and DNR for approval. The guidelines would consist of appropriate BMPs to minimize impacts to WOUS at the material site location. The gravel source would be mined to maximize mineral extraction from the smallest possible footprint.

At the material source location, an adequate setback from the active river channel would be maintained to not impact fish and avoid sediment outflow in the active channel. Excavation would occur during months when the river waters are at a low-flow level. No fuels or hazardous materials would be stored/stockpiled on the gravel bar. Material stockpiles would be moved out of the active gravel bar before river break-up in the spring.

Roads

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 to 8 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 70 feet.

Excavation along the route would be avoided to minimize thermal degradation of the frozen soils. Dust control measures would be implemented as needed to reduce suspension of fugitive dust during construction and as part of ongoing road maintenance.

Temporary work areas would be used during construction for equipment access, culvert installation, and placement of sediment controls. All roads, the bridge and approaches, and permanent pads would have a 25-foot-wide temporary work area buffer.

The power poles for airport utilities would be contained in the road right-of-way. The power pole footprint is included within the access road calculations.

The Pioneer Road, although wider than the access road at 28 feet, would only have an average height of 4 feet. The Pioneer Road would only be used for gravel extraction and is not being built to the standards of the access road. The Pioneer Road would have an average embankment base width of 60 feet.

Snow and Ice Roads

The project design incorporates the use of existing port and road facilities in the region, minimizing new impacts to wetlands and WOUS. The DMTS and Port would be used to bring in and remove equipment but not improved or expanded for the Proposed Action. The equipment for the construction would be offloaded at the DMTS Port during the summer.

During winter, the equipment would be used to construct a snow road to Noatak as there are no existing roads or barge access to Noatak. The winter snow road would depart the DMTS haul road and travel 67 miles to Noatak. The proposed route would minimize stream crossings and would propose ice bridge construction to cross five channels, including Kiyak Creek. **No fill material would be placed in stream channels or any other portion of the winter road.** DOT&PF would survey the ice road route in advance so that vegetation clearing and winter trail construction would occur with frozen ground and adequate snow cover.

Drainage Construction Minimization Measures

Swales and other concave landscape features that collect water would have hydrologic connectivity maintained using culverts along the pioneer and airport access road.

Ice Road: The number of stream crossings was a route design criterion. The route was adjusted to reduce the number of crossings. The stream channels to be crossed would be filled with snow and ice, with no surface excavations or cuts made into adjacent substrate. The streams would be frozen and would allow for vehicle passage. **No fill material would be placed in stream crossings.**

Airport Access: Appropriately sized culverts would be placed along the route to maintain hydrologic connectivity of the adjacent wetlands. A two-lane bridge would cross Kuchoruk Creek and would be designed to accommodate high water and aufeis. Abutments would be placed on either side of the creek within the floodplain but supports would not be needed within the creek. The creek would only be crossed once.

Pioneer Road: Appropriately sized culverts would be placed along the route to maintain hydrologic connectivity of the adjacent wetlands. The Pioneer Road from the South River Material Source would connect with the airport access road prior to the Kuchoruk Creek bridge to limit creek crossings to one location.

Erosion Sediment Control Plans (ESCP) and Stormwater Pollution Prevention Plans (SWPPPs) would be developed and implemented to prevent introduction of sediments and consequent turbidity into WOUS during construction.

BMPs would be used project-wide to maintain in-stream water quality and stream bank stability.

Best Management Practices

Erosion Control Measures

For the Construction General Permit AKR100000, DOT&PF would file a Notice of Intent with the Alaska Department of Environmental Conservation to comply with the Alaska Pollutant Discharge Elimination System. A SWPPP would be included.

BMPs for embankment stabilization including contouring and seeding may be required for the project to reduce embankment erosion and potential sediment runoff into wetland areas.

Temporary Water Use Authorizations from the state may be required. Water withdrawals may be needed for dust control during construction and during regular road maintenance. Dust is expected to have minimal impacts to the adjacent vegetation due to the low volume of traffic and short distance from Noatak to the airport. Water and ice may also be needed if ice roads are built during the initial phases of the project. BMPs for water intakes would be used.

Construction Timing and Sequencing

The project would be built over three full construction seasons, and construction activities would be conducted over multiple seasons each year.

Initial deployment and movement of materials and equipment during the winter would minimize incidental impacts to vegetation and soils. Winter trails and frozen soils would support construction equipment during initial mobilization.

Airport and drainage structure construction will/would continue during summer months after equipment is brought in during the winter and may require temporary bridges and culverts to provide for seasonal drainage.

Fish and Wildlife Avoidance

A discussion of fish and wildlife found in the project area is included in the EA (FAA 2024). Section 7 Endangered Species Act consultation is part of the EA process, and recommendations from the agencies are included in the project EA.

The DMTS Port is on the Chukchi Sea shoreline but would not be improved or expanded for the Proposed Action. The winter snow road from the Port to Noatak would cross five channels, including Kiyak Creek, that would require ice bridge construction to preserve flow and fisheries.

Vegetation below the airport pad would be cleared during migratory bird timing windows to avoid nesting birds. A caribou plan has been adapted to avoid impacts to migrating animals. The caribou policy would include procedures for road users to minimize caribou impacts by vehicular traffic, including temporary road closures or halted traffic to accommodate caribou movement.

The river material source would be excavated when water levels are low, exposing the targeted gravel bar. Main channel water levels would be lower than other times of the year, allowing for material extraction in the gravel bar without impacting water quality or fish passage.

Invasive Species Control Measures

Post-construction stabilization would include seeding and stabilizing embankment fill and other disturbed areas. To minimize the introduction of invasive species to the project area, DOT&PF would comply with Executive Order 13112 to mitigate the spread of invasive species.

Temporal Impacts

Noise: Construction machinery and vehicle activity would temporarily increase noise along the haul routes. Although trucks would haul fill material around the north end of the existing airport to construct the access road, the closest residence is approximately 1,100 feet away.

Air Quality: The operation of heavy equipment and hauling fill material would create dust during dry conditions, which may cause temporary air quality impacts. This effect would be temporary and would be controlled by BMPs prescribing water control of dust.

Water Quality: The project would require an ESCP and SWPPP(s) prior to construction. Post-construction stabilization would include seeding and stabilizing embankment fill and other disturbed areas. A mining and reclamation plan would be prepared for the material site. Water withdrawals would be temporary for winter haul route construction, dust control, road compaction, and temporary construction camps.

Material Site: Material site development would result in temporary disturbance of the exposed gravel bar of the Noatak River during the winter. Some sedimentation and turbidity may take place, which would be minimized through the implementation of a SWPPP for the project. Fish habitat would be protected by conducting operations in dewatered, winter conditions away from the mainstem of the Noatak River.

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 DNR (water use permit) and Alaska Department of Fish and Game (ADF&G) (fish habitat permit) for local waterbodies. The route would experience temporary increases in vehicle traffic and noise and air emissions typical of heavy machinery.

23.3 Minimization as Part of the Project

The proposed material source for the project, located in the Noatak River channel, would be mined on a gravel bar during low water in the winter. The project EA evaluated two terrestrial material sources for potential use and found that neither contained the quality of material needed for the project. The in-river option means there would be no net loss of WOUS. The material source boundaries would include a river gravel bar and vegetated islands mapped as wetlands (no field verification). After the project is completed, any wetland island areas used for material extraction would likely be ponded due to a high-water table, and/or connected to the river through flooding or design. The material source, after

construction is complete, would remain as WOUS and a functioning gravel bar or river channel within the Noatak River.

The in-river mining at the proposed material source would provide functional lift to the Noatak River by creating valuable overwintering fish habitat. On the North Slope's Sagavanirktok River, the ADF&G noted the potential for creation of overwintering habitat for fish through gravel extraction and started recommending gravel extraction in-river (Morris 2000). McLean (1993) noted that mining in-river would provide net benefits for fish while avoiding many of the costs and impacts of terrestrial mining. Mining in-river on the Sagavanirktok River would provide overwintering fish habitat, "…for a considerable period of time" (McLean 1993).

23.4 Compensatory Mitigation

23.4.1 Compensatory Mitigation Steps

Compensatory mitigation includes three options: the purchase of mitigation bank credits, the purchase of in-lieu fee program credits, and performing Permittee Responsible Mitigation (PRM) projects under a watershed approach. There are no mitigation banks servicing this watershed, nor are there any in-lieu fee options available, leaving PRM as the only possible mitigation option.

The goal of PRM under a watershed approach is to maintain and improve the quality and quantity of aquatic resources within the impacted watershed through the selection of mitigation sites and projects. PRM includes the restoration, establishment, enhancement, or preservation of wetlands undertaken by a permittee to compensate for wetland impacts resulting from the project. The Mitigation Rule identifies three types of PRM projects:

- PRM through onsite and in-kind mitigation: PRM projects are in the same watershed, and within the same wetland habitat types.
- PRM through onsite and out-of-kind mitigation: PRM projects are in the same watershed, but within different wetland habitat types.
- PRM through offsite mitigation: PRM projects are located in the watershed, to the extent possible. The restoration or enhancement work can be completed outside the watershed of the impact site and does not necessarily replace in-kind habitat.

Compensatory Mitigation: Background

The 2008 Mitigation Rule (USACE and EPA 2008) outlines a process that includes avoiding wetland losses where practicable, minimizing wetland impacts where avoidance is not practicable, and compensating for impacts to the extent appropriate and practicable. The term practicable is defined as, "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes" (USACE and EPA 2018). Such terminology affords discretion and flexibility to the U.S. Army Corps of Engineers (USACE) to craft day-to-day decisions for highly diverse environmental, economic, and geographical conditions. On June 15, 2018, the U.S. Environmental Protection Agency and USACE signed a Memorandum of Agreement (MOA) providing additional guidance on flexibilities for Section 404 Clean Water Act permit mitigation requirements. The

2018 MOA details how flexibilities can be applied in the State of Alaska given the abundance of wetlands and unique circumstances involved with permitting in the state. The MOA recognized six guiding principles that are specific to the State of Alaska:

1) *Avoiding wetlands may not be practicable where there is a high proportion of land in a watershed or region which is jurisdictional wetlands;*

2) *Restoring, enhancing, or establishing wetlands for compensatory mitigation may not be practicable due to limited availability of sites and/or technical or logistical limitations;*

3) *Compensatory mitigation options over a larger watershed scale may be appropriate given that compensation options are frequently limited at a smaller watershed scale;*

4) *Where a large proportion of land is under public ownership, compensatory mitigation opportunities may be available on public land;*

5) *Out-of-kind compensatory mitigation may be appropriate when it better serves the aquatic resource needs of the watershed; and*

6) *Applying a less rigorous permit review for small projects with minor environmental impacts is consistent with the Section 404 program regulations.*

Compensatory Mitigation Considerations for the United States Army Corps of Engineers, Alaska District Regulatory finalized in January 2025 further elaborated upon criteria that should be considered for requiring compensatory mitigation include:

1. “Direct and indirect impacts to wetlands or other waters known to support species listed under the Endangered Species Act or are within critical habitat designated under the Endangered Species Act, wetlands or other waters within Important Bird Areas (Audubon Alaska 2024), wetlands or other waters within or adjacent to National Wild and Scenic River segments, wetland types identified in Wetlands of Conservation Concern in Alaska according to Wetlands across Alaska: Statewide wetland map and Assessment of rare wetland ecosystems (Flagstad et al. 2018), and wetlands or other waters with exceptionally high performance of functions or services. Exceptionally high performing wetlands or other waters are those that receive high ratings or scores for at least two grouped functions or several individual functions as indicated by a regionally appropriate functions assessment method.

2. Direct and indirect impacts to tidal waters or tidally influenced waters that are special aquatic sites or are adjacent to special aquatic sites. Tidally influenced waters are subject to the ebb and flow of the tides though they are positioned above the mean high-water mark of tidal waters. Special aquatic sites are defined as sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle and pool complexes (see 40 CFR §230.40 through §230.45).

3. Direct and permanent impacts to waters including wetlands that fish are known to inhabit or are likely to inhabit at least periodically.

4. Direct and permanent impacts to >1/10 of an acre of wetlands and/or other waters or >3/100 of an acre of stream where the encompassing sub watershed (12-digit Hydrologic Unit Code (HUC)), 14-digit HUC, or other appropriately sized review area is significantly degraded or under imminent threat of becoming significantly degraded. Significant degradation within a HUC-12, HUC-14 or similar-sized area may be indicated by one or more of the following factors (note that there may be other indicators not listed here):

    a. Waters within the encompassing area are listed as impaired (Category 4 or 5) by the Alaska Department of Environmental Conservation under CWA Section 303(d).

    b. Cover of impervious and nearly impervious surfaces such as paved and gravel roads, building foundations, laydown areas, etc. is >5 percent."

These principles and understanding were used to develop a mitigation strategy for this project.

Project Purpose

The Noatak Airport and Access Road purpose is to satisfy a public need for safe, reliable transportation. This airport is the only link to supply the Noatak community fuel for power, heat, and other commodities. The airport must meet FAA safety standards and be a reliable link for fuel and medical evacuation for the community. The village is totally dependent on a functional airport for fuel and supplies. There are no other options but to build this airport.

Restoration

The material source in the exposed gravel bar of the Noatak River total 190.9 acres. After restoration of the source is complete, the material source location would still be WOUS, with a functioning gravel bar or river channels within the Noatak River. The direct impacts to the fish habitat are not negative to the river. Mining at the proposed material source would provide functional lift to the Noatak River by creating valuable overwintering fish habitat.

Wetlands and Waters

The desktop wetland mapping for the 6,112-acre study area found only 79 acres to be uplands, including the existing developed Noatak community footprint and banks of the Noatak River. There is no nearby upland alternative for this project. Wetlands and waters impacts are unavoidable for any community expansion projects. Impervious surfaces are not readily available within the HUC. Degraded wetlands that can be restored and rehabilitated within the region are limited. The village is surrounded by wetlands that have not been degraded.

Conservation Lands

Noatak is in between two National Park Service units; the Cape Krusenstern National Monument and the Noatak National Preserve. The CKNM is 649,531 acres, located less than 9 miles to the west of Noatak, between the community and the Chukchi Sea. The 6.6 million-acre Noatak National Preserve is less than 5 miles to the east of the Noatak River from Noatak. These conservation lands occupy 58.2 percent of the 12,433,500-acre Hydrologic Unit Code 6 Noatak River – Lisburne Peninsula watershed. Both of these conservation units were established long after the founding of establishment of the village of Noatak. These conservation units provide for the permanent preservation of wetlands and WOUS in the region. “Noatak National Preserve was established to maintain the largest undisturbed watershed in North America” (National Park Service 2015).

Cumulative Impacts

The Noatak community is the only settlement on the 396-mile-long Noatak River (NAB 2019). The community footprint, including all roads and houses, is roughly 103.5 acres. The airport relocation project would increase the community footprint by 87.44 acres.

There are few existing impacts or developments in the region. The Red Dog Mine is approximately 35 miles from Noatak, and the port site is 30 miles away on the coast. Kivalina is 40 miles to the northwest, and Kotzebue is 50 miles south across Kivalina Sound.

The total footprint of Noatak, Kivalina (with evacuation road), DMTS, and Red Dog Mine is approximately 2,050 acres.

The addition of 87.44 acres of airport facilities and roads would have no measurable impact to impervious cover in the vast undeveloped and protected watersheds that surround Noatak.

NAB Zoning

The project area and Noatak community fall within the NAB, which has zoned these lands as a subsistence conservation district (NAB 2019). This zoning designation protects these lands for local community subsistence harvest. The proposed project would improve access to subsistence lands. A NAB Title 9 Use Permit will be completed for this project.

Public Interest

The project would provide Noatak residents with a safe and reliable airport. The current airport would soon be eroded away. There are no roads for the community to use to leave the community or receive fuel and supplies. Snow machine and river access are neither rapid nor reliable in all seasons. The airport is the main artery for the town, and there are no other alternatives for supply delivery or medical evacuation for the community.

Least Environmental Damaging Practicable Alternative

DOT&PF has selected a new airport location, with local concurrence that has been demonstrated to be practicable for the community of Noatak. **DOT&PF has avoided wetland impacts by not developing terrestrial material sources.** Material for the project would use an existing gravel bar within the Noatak River channel. The proposed material site would provide sufficient material for the project while completely avoiding larger, poorer quality terrestrial wetland material site impacts through extraction and haulage.

An ice road would be used to move construction equipment to the site. **DOT&PF avoided WOUS impacts by not requiring the material source to support a gravel road to Noatak from the Red Dog Port Site. The use of the DMTS port and road avoided construction of a permanent road to Noatak, most of it in wetlands.** The ice road route was designed to avoid passage through conservation units while traversing acceptable slopes for the equipment. In addition, the ice road route minimized the number of winter stream crossings.

The preferred airport location is sited the closest to town of any alternative, is outside of the area subject to erosion from the Noatak River, meets safety requirements, and has been shown to be the LEDPA by only crossing one stream and avoiding the highest-value wetlands (lakes, ponds, and wetlands with surface water, floodplains) while obtaining material within the Noatak River gravel bar, which would reduce the permanent impacts of this project.

The reason for this project is public safety; there are no economic drivers. **Due to the avoidance and minimization efforts DOT&PF has undertaken with community input during the planning and design of this project, minimal cumulative impacts, the in-river material site location and the functional lift associated with fisheries, the vast homogeneous wetland landscape within the watershed, NAB subsistence zoning, the permanent protection of wetlands and WOUS in conservation lands within and adjacent to the project, and by following the 404(b)(1) Guidelines sequence adhering to current Alaska regulatory guidance, no additional compensatory mitigation would be offered to offset the 87.44 acres (or less) of permanent losses to wetlands and waters.**

REFERENCES

ABR, Inc. 2006. *Noatak, Alaska, Airport Relocation: Wetland and Habitat Study*. Prepared for USKH, Inc. Prepared by Erik Pullman. April 2006.

Cowardin, LM., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. US Fish and Wildlife Service. FWS/OBS-79/31.

FAA (Federal Aviation Administration). 2024. *Final Environmental Assessment Noatak Airport Relocation*. Prepared on behalf of the sponsor: State of Alaska Department of Transportation and Public Facilities, Northern Region.

Hall, J.V., W.E. Frayer, and B.O. Wilen. 1994. *Status of Alaska Wetlands*. US Fish and Wildlife Service. Anchorage, Alaska.

McLean, R.F. 1993. *North Slope Gravel Pit Performance Guidelines*. ADF&G Technical Report No. 93-9. Habitat and Restoration Division.

Morris, W. 2000. *North Slope Gravel Mines: Reconstruction for Fish Habitat. Where We've Been and Where We Go from Here.* Presentation for Workshop-Alaska Conference. April 2006.

NAB (Northwest Arctic Borough). 2019. Northwest Arctic Borough website. https://www.nwabor.org/. Accessed November 2019.

National Park Service. 2015. *Nature and Science*. https://www.nps.gov/noat/learn/nature/index.htm. Accessed May 2025.

Stantec (Stantec Consulting Services Inc.). 2019. *Noatak Airport Relocation Project: Waters of the U.S. Verification Memo*. Prepared for Alaska Department of Transportation and Public Facilities, Fairbanks. April.

U.S. Army Corps of Engineers and Environmental Protection Agency. 2008. *40 CFR Part 230: Compensatory Mitigation for Losses of Aquatic Resources; Final Rule*. Federal Register, April 10, 2008.

USACE and EPA (U.S. Army Corps of Engineers and Environmental Protection Agency). 2018. *Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning Mitigation Sequence for Wetlands in Alaska under Section 404 of the Clean Water Act*. June 15, 2018. https://www.epa.gov/sites/production/files/2018-06/documents/epa_army_moa_alaska_mitigation_cwa_404_06-15-2018_0.pdf

Viereck, L.A., C.T. Dyrness, A.R. Batten, and K.J. Wenzlick. 1992. *The Alaska Vegetation Classification. General Technical Report. PNW-GTR-286.* Portland, OR: US. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

ATTACHMENT 1 404 SHEETS