

APPENDIX A

**Project Area Preliminary Environmental Resource Impact Review
Deadhorse Airport Fence Installation
Project Number NFAPT00549**

BIOLOGICAL RESOURCES (FISH, WILDLIFE, & PLANTS)

Fish

A review of the Alaska Department of Fish and Game (ADF&G) *Fish Resource Monitor* and the National Oceanic and Atmospheric Administration (NOAA) *Essential Fish Habitat (EFH) Mapper* websites in December 2021 identified that the west channel of the Sagavanirktok River (Anadromous Waters Catalog (AWC) Code: 330-00-10361), an anadromous fish stream, is located approximately 500 feet (ft) east of the nearest potential project construction area hydraulically connected by an unnamed anadromous-cataloged tributary (AWC Code: 330-00-10361-2090) to the proposed project material site area west of Dalton Highway milepost (MP) 411-412 located approximately 6,000 ft south of the Deadhorse Airport.

USFWS Protected Threatened and Endangered Wildlife

The United States Fish and Wildlife Service (USFWS) *Information for Planning and Consultation* website (accessed December 2021) indicates polar bears (*Ursus maritimus*; a threatened species) may be present; however, no critical habitats are listed as present within the proposed project area. The proposed project is also within the migratory ranges for spectacled eider (*Somateria fischeri*) and Steller's eider (*Polysticta stelleri*) (both threatened species); however, it does not overlap with designated critical habitat for either eider species. Four migratory birds of conservation concern are expected to occur within the project area which include the snowy owl (*Bubo scandiacus*), dunlin (*Calidris alpina arctica*), American golden plover (*Pluvialis dominica*), and bar-tailed godwit (*Limosa lapponica*). Bald eagles (*Haliaeetus leucocephalus*) may also be present or travel through the proposed project area; however, favored eagle nesting habitat does not exist in the immediate project vicinity and no known eagle nests are located throughout the project area.

Other migratory bird species may travel through or nest within the proposed project area, and 2017 USFWS *Timing Recommendations for Land Disturbance & Vegetation Clearing* would be followed to avoid potential impacts.

NOAA Fisheries Protected Threatened and Endangered Marine Mammals

The United States Department of Commerce, National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) *Endangered Species Conservation* program website (accessed December, 2021) provides information on threatened and endangered marine mammal species that may occur along established commercial barge routes through the Gulf of Alaska, Bering Sea, Chukchi Sea, Beaufort Sea, and other marine areas, and which terminate at any of several established road-connected landings located at Prudhoe Bay between 9 and 15 miles north of the project area. Dependent on location, these routes may overlap areas of presence for threatened species, or endangered species and their critical habitats, for any or several of the bowhead whale (*Balaena mysticetus*), North Pacific gray whale (*Eschrichtius robustus*), North Pacific right whale (*Eubalaena japonica*), fin whale (*Balaenoptera physalus*), humpback whale (*Megaptera novaeangliae*), sperm whale (*Physeter macrocephalus*), Cook Inlet beluga (*Delphinapterus leucas*), Steller sea lion (*Eumetopias jubatus*), bearded seal (*Erignathus barbatus*), ringed seal (*Phoca hispida*), and other NOAA trust species currently under petitioned Endangered Species Act (ESA) review and potentially listed by the time project construction occurs.

Plants

The Alaska Exotic Plants Information Clearinghouse website was reviewed in September, 2021, and the databasemapper indicated that no data is available for the proposed project area.

CLIMATE

FAA Order 1050.1F provides that FAA has not established a significance threshold for climate. Executive Order 13783, Promoting Energy Independence and Economic Growth (82 Federal Register 16093 [March 31, 2017]) revoked CEQ's 2016 Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas (GHG) Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, and directed agencies to suspend, revise, or rescind actions related to or arising from this guidance. However, EO 13783 was revoked by EO 13990 of January 20, 2021 (86 FR 7037 [January 25, 2021]), which directs federal agencies to account for benefits of reducing climate pollution by publishing interim guidance documents on the full costs, and estimated monetized social damages, associated with changes in greenhouse gas emissions resulting from regulations and other relevant agency actions. FAA NEPA environmental reviews should consider GHG impacts as appropriate. The proposed project would not permanently increase aviation traffic. As no GHG change is anticipated, no further consideration of GHGs impacts is necessary.

COASTAL RESOURCES

The Alaska Coastal Management Program expired on June 11, 2011, and is no longer in effect. Although an Alaska state coastal consistency determination is no longer required, the 2019 North Slope Borough (NSB) *NSB Comprehensive Plan* and the 2021 Alaska Department of Natural Resources (ADNR) *North Slope Area Plan for State Lands* were evaluated in September 2021 to assess potential adverse coastal impacts occurring within the project area. The project as proposed is consistent with coastal management strategies referenced in these plans.

DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) RESOURCES

National Park Service (NPS), United States Forest Service (USFS), United States Fish and Wildlife Service, Bureau of Land Management (BLM), ADNR Alaska Heritage Resource Survey (AHRs), and ADNR Division of Parks and Outdoor Recreation websites were reviewed in December, 2021 for the presence of any of publicly owned lands including public parks, recreation areas, wildlife or waterfowl refuges of national, state, or local significance, or historic sites of national, state, or local significance, within the project area. Of these, one ADNR-listed AHRs historic site eligible for the National Register of Historic Places (NRHP), the Dalton Highway, lies directly adjacent to the proposed action at its terminus at Deadhorse Way.

HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

A December 2021 search of ADEC's Contaminated Sites Program database website identified 12 contaminated sites within the proposed project airport construction area, and an additional 9 within approximately 1,500 feet of that area within other on-airport operation areas and lease properties. An additional 15 contaminated sites of varying status are located from 1,500 feet to 1 mile away from the proposed airport construction area.

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

An August 2021 desktop review of the ADNR AHRs determined there are four AHRs historic resource sites located within the boundaries of the Deadhorse Airport property. Three of these sites are listed as historic structures related to airport operations, including the air traffic control tower, a flight service

station, and a generator building. These three sites have been determined not eligible for the NRHP. However, a segment of the Dalton Highway originating at its intersection with Deadhorse Way on airport property, then eastward along Colleen Lake, then south from Deadhorse to milepost (MP) 398, has been determined eligible.

LAND USE

Within Deadhorse Airport property, the proposed project is consistent with the 2012 DOT&PF *Deadhorse Airport Master Plan Update*, which provides in Section 4.2.11 *Airport Safety Fencing and Security Fencing* that “Critical portions of the airport are fenced, but the fence does not encircle the entire airport. Fencing causes snow drifting, which becomes a maintenance issue. The TSA has requested additional fencing and gates; therefore, the existing fencing is not adequate.”

The proposed project is consistent with the 2021 ADNR *North Slope Area Plan* (ADNR 2021a), which notes that State land will be managed consistent with its Resource Allocation designation. Deadhorse Airport, in Plan Management Unit A-13, carries a Resource Designation of “Pr” (Public Facilities) with a management intent of remaining under ADOT&PF management with a use as a primary access point for commercial airfreight and passengers.

North Slope Borough transportation planning is embedded in the 2019 *North Slope Borough Comprehensive Plan 2019-2039*, which identifies transportation issues and priorities. The NSB Municipal Code (NSBMC) requires Planning Commission review for all major transportation projects constructed or funded in the borough by the State of Alaska or federal government. NSBMC Title 19 requires land use permits for all developments and uses within the NSB boundaries, out to three nautical miles offshore. The person(s) responsible for the use or development, including private entities and state or federal agencies, must submit a NSB permit application for any developments and uses within NSB boundaries.

The NSB Department of Planning and Community Services has previously applied for the permitting of “Mine Site 3” and its associated access road located at approximately MP 412 of the Dalton Highway under NSB 19-555, Development Permit, Mine Site 3 Development Phase 1 Excavation, Access Road & Gravel Pad Construction, T10N, R14E, Section 36, T10N, R15E, Section 31, Transportation Corridor District. This permit application was approved on June 6, 2019.

A September 2021 review of BLM Spatial Data Management website indicated there are no 17(b) easements near the Deadhorse Airport.

NOISE AND NOISE-COMPATIBLE LAND USE

Per the FAA 1050.1F Desk Reference, a noise analysis is required if annual airport operations exceed 90,000 propeller operations or 700 jet operations. The 2012 DOT&PF *Deadhorse Airport Master Plan Update* has forecasted approximately 16,000 annual propeller operations and 3,800 annual jet operations by 2024. Although the proposed project would not increase operations to exceed those currently existing, a preliminary noise analysis of the proposed on-airport project may be required if the 700 annual jet operations threshold is currently exceeded.

WATER RESOURCES

Wetlands

A September 2021 review of the May 2021 update to the USFWS National Wetlands Inventory

(NWI) online mapper depicts the Deadhorse Airport as surrounded by freshwater emergent wetlands. A Deadhorse Airport Wetlands Functions and Values/Delineation and Site Characterization Report, completed by Shannon & Wilson/ABR for the United States Army Corps of Engineers, Alaska District in June of 1996, is available. However, there has been no more recent wetland mapping completed for the proposed on-airport project area. The NSB Mine Site 3 material site at approximately MP 412 Dalton Highway has been previously permitted by the NSB Department of Planning and Community Services under USACE Individual permit POA-2017-427, issued on May 10, 2019, with an expiration date of May 31, 2024.

An updated wetland mapping effort should be completed for the on-airport project area, as well as for any other contractor-proposed material site or offroad haul route used other than “Mine Site 3” and the Dalton Highway.

Floodplains

A September 2021 review of the Federal Emergency Management Agency (FEMA) floodplain mapper website indicated that no flood maps have been published for the Deadhorse Airport area. No other data on Deadhorse or Prudhoe Bay-area floodplains was found available. Accurate, ordinary floodplain elevations should be determined prior to design of perimeter road geometry to ensure resiliency to anticipated long-term sea level rise. Additionally, as catastrophic ice-jam-initiated flooding of the Sagavanirktok River in 2015 substantially overtopped and severely damaged the Dalton Highway between MPs 390-415 while also flooding Deadhorse Airport property, development of proposed project alternatives should include incorporation of available hydrologic information from that event.

All proposed material sites’ and haul routes’ ordinary floodplain locations should be determined, and likewise evaluated for potential effects on their feasibility due to ice-jam initiated flooding.

Surface Waters

The Sagavanirktok River is located approximately 500 feet east of the nearest on-airport project construction area and approximately 500 feet east of the proposed project material site west of the Dalton Highway at approximately MP 411-412. Colleen Lake is located approximately 1,400 feet north of the project northern extent at Deadhorse Way. Numerous smaller, unnamed lakes and ponds are located on and near airport property and the Dalton Highway MP 411-412 material site. Neither the Sagavanirktok River nor Colleen Lake are listed as an impaired waterbody on the online ADEC 303(d) List of Impaired Waterbodies reviewed in September of 2021. Additionally, there are no known water quality impairments to other surface waters surrounding Deadhorse Airport.

Coastal Resources

The 2021 ADNR *North Slope Area Plan* notes the siting and construction of infrastructure and facilities should minimize potential adverse impacts to the environment and surrounding resources to the maximum extent practicable without jeopardizing other resources and activities (Objective C). Guideline C-5 of Objective C notes that to avoid potential relocation costs due to climate change induced sea-level rise and diminished winter sea ice, placement of infrastructure in coastal areas susceptible to sea-level rise should be minimized to the extent practicable. Therefore, a long-term analysis of the proposed project area’s susceptibility to anticipated sea-level rise over the project expected lifetime would aid in determining if the proposed project is strictly consistent with Plan Objective C.

Anticipated Agency Permitting, Consultations, Evaluations and Approvals

- USFWS and NOAA Section 7 Threatened and Endangered Species Consultations
- Section 106 Historic Resources Initiation, Consultation and Finding of Effect
- Section 4(f) Property Use Evaluation
- Section 404 of Clean Water Act USACE Wetland Fill Individual Permitting
- Section 401 ADEC Water Quality Certificate of Reasonable Assurance
- North Slope Borough Form 500 Permitting (IHLC Traditional Land Use Inventory)
- North Slope Borough Form 400 Field Study Permitting as required
- North Slope Borough LMR/Form 100 Permitting
- ADF&G Title 16 Fish Habitat Permitting