Attachment C Applicant's Proposed Mitigation Statement Alaska DOT&PF Northern Region Pilot Station Airport Relocation Project POA-2004-1223

April 2015

Introduction

This mitigation statement was prepared as an attachment to the Section 404 Individual Permit application for the Pilot Station Airport Relocation Project. The purpose of the mitigation statement is to (1) describe the avoidance and minimization of impacts to wetlands, and (2) identify the proposed compensatory mitigation for unavoidable impacts to 76.51 acres of wetlands for the construction of the project. Please see the attached project description for information on project actions.

A Preliminary Jurisdictional Determination and map for the project area was provided to the U.S. Army Corps of Engineers (USACE) in 2004 and an updated map, produced in January 2012 using high quality aerial photography is included in Section 404 Individual Permit Application package (Attachment B: Permit Figures).

Applicant's Proposed Mitigation

Unavoidable impacts to wetlands would result from the construction of the airport access road, installation of drainage culverts, construction of runway, taxiway, and apron facilities and embankment (Table 1). The project has been designed to avoid and minimize impacts to wetlands to the maximum extent practicable.

Project Component	Permanent Impacts Wetlands and Waters (acres)	Temporary Impacts Wetlands and Waters (acres)	
Runway	41.55	3.35	
Apron	10.14	0.94	
Access Road	24.82	9.28	
Total	76.51	13.57	

Table 1: Summary of Wetland Impacts

1. Avoidance and Minimization of Impacts

The project has been planned and designed to avoid impacts to wetlands and other waters of the U.S. where practicable through measures such as runway and apron placement, access route selection, design refinements to minimize construction footprint, and planning of construction methods. Due to the prevalence of wetlands in the landscape, complete avoidance of wetlands is not feasible.

The following avoidance and minimization measures for the project have been incorporated:

Design avoidance and minimization measures

- Nearly all ridgelines surrounding Pilot Station are wetlands, and finding practicably located uplands for a new airport and access road is not possible.
- Proximate uplands are located on steep side hills where a runway cannot be located. It must be constructed on a ridgeline to maintain a primary surface free of penetrations.
- Local geotechnical conditions will not support location of an access road on a side hill.
- Substantial snow drifting occurs in valley bottoms and side hills near Pilot Station. Any road built on a valley bottom or side hill would be difficult to maintain in winter.
- The beginning of the proposed access road was relocated north to uplands resulting in fewer wetland impacts.
- The proposed access road maximizes use of wetlands previously disturbed by ATV trails.
- A low profile embankment has been designed to minimize wetland impacts and fill quantities in wetlands.
- Development of a material site at Pilot Station is no longer required. Existing material from cut sections would be used for embankment material, and surfacing material would be supplied by the construction contractor.
- Cross-drainage culverts are installed through fill slopes in appropriate locations to maintain natural flow patterns for surface water
- No streams or waterbodies will be impacted by the project.

Construction avoidance and minimization measures

- To the extent practicable, staging and work areas will be located in uplands at least 50 feet away from wetlands and/or water's edge. Previously disturbed uplands will be used when possible.
- Contaminant-free surface materials will be used during construction to avoid introducing contaminated material to the project area.
- Temporarily disturbed areas, including slopes, will be re-graded to match existing contours and stabilized within seven days of completion of construction in the area. All silt fences, curtains, and other structures would be properly installed and maintained in a functioning manner for the construction period duration where exposed fill or soils might facilitate transport of sediment or turbidity beyond the immediate construction site.
- Project limits in waters of the U.S. will be clearly identified in the field (e.g., staking, flagging, silt fence, existing footprint for maintenance activities, etc.) prior to clearing and construction to ensure avoidance of impacts to waters of the U.S. (including wetlands) beyond project footprints.
- Equipment would remain inside the identified project limits, and would not be stored, maintained, or repaired in waters of the U.S. Temporary stockpiles and equipment

staging areas will be located in uplands or previously disturbed areas whenever possible.

- Excess excavated material that is either unsuitable or not used as embankment would be disposed of at an upland disposal site.
- The DOT&PF will prepare, or will require the construction contractor to prepare, a Stormwater Pollution Prevention Plan (SWPPP) and will require compliance with that plan. The plan will clearly describe best management practices (BMPs) required during construction to prevent erosion and runoff from entering aquatic habitats.
- Erosion and sediment control measures (perimeter protection) such as silt fences and straw wattles will be placed around wetlands and waters within the disturbance limit (within 20 feet).
- The work will not adversely alter existing hydrology of waters of the U.S., including wetlands. Construction methods will be chosen to prevent the draining of wetlands.
- Standard spill-prevention measures will be implemented during construction; spill cleanup equipment (e.g., oil-absorbent pads) will be available onsite during construction.

2. Compensation for Unavoidable Impacts

In accordance with Section 404 of the Clean Water Act, the project must avoid impacts to wetlands and waterbodies wherever practicable, minimize impacts where impacts are not avoidable, and where impacts are unavoidable often compensate for the loss of wetland functions. Impacts to wetlands are unavoidable as all ridgelines in the vicinity of Pilot Station are wetlands. Wetlands in the project corridor have been categorized as Category III per USACE guidance dated May 1, 2014. The definition of Category III is:

Category III: These wetlands are usually plentiful in the watershed often with the least biodiversity. Category III wetlands are not rare or unique and overall productivity and species diversity in Category III wetlands are relatively low. These wetlands may be impacted by man (or by fire or other natural events) and are not considered to be "pristine" examples and as a result in some cases require less than 1:1 [compensation].

The project area is located on a ridgeline that borders the following three watersheds:

- Iotha-Southern East Fork Andreafsky River HUC 1904080506
- Hills Island HUC 1904080518
- Marshall-Yukon River HUC 1904080512

Overall, these watersheds as shown in Figure 1 are predominately composed of pristine wetlands and waters. National Wetland Inventory mapping does not exist for this area.

Wetlands impacted by the proposed project include disturbed graminoid/tundra wet meadows containing ridgetop ATV trails Pilot Station residents frequently use to connect to other trails, villages, and subsistence areas. Figure 2 shows a portion of the ATV trail disturbance near the proposed access road. The meadows have a saturated hydrologic regime unassociated with a waterbody. Severely rutted and compromised by tire damage to their surface vegetation and humus layer, these areas have limited productivity, species diversity and function.



Figure 1. Watersheds affected by the proposed project.



Figure 2. Existing wetland disturbance near proposed access road.

It is expected Pilot Station residents will use the new road for ATV travel versus continuing to ride rough, variegated, poorly-drained trails lacing wet meadows parallel to it. Consequently, access road construction will effect a natural uplift of wetland function on 32 acres of currently degraded wetlands, approximately three times the permanent impact due to access road fill placement, by cessation of the current practice of driving ATV traffic through them (Figure 3).



Figure 3. Existing wetland ATV trail impacts and degraded acres expected to experience natural uplift from consolidation of traffic on access road.

Table 2 reports the anticipated values for permanent wetland impacts associated with the project and the proposed mitigation ratio of 0.5 to 1; and reflects:

- a) the commonness of pristine wetlands and waters located elsewhere in the watershed;
- b) the current, generally high- to moderate-degree of anthropogenic disturbance over the approximately 76.51 acres of project wetlands anticipated to be filled; and
- c) the severely disturbed nature of 14.0 of the 76.51 acres anticipated to be filled which currently exhibit substantial vegetation/soil profile damage.

Additionally, Table 2 incorporates expectation of natural, functional uplift due to consolidation of ATV traffic onto the proposed road from adjacent wetlands. This would restore significant function to 32.0 acres of moderately disturbed, degraded Category III graminoid/tundra wetland classified as PSS1/EM1B by the National Wetlands Inventory (NWI) Code.

	Table 2: Summary of Wetland Impacts and Proposed Mitigation Ratios				
Wetland Category	NWI Code	Proposed Mitigation Ratio for Permanent Impacts	Permanent Impact (acres filled)	Offsets to Project Impacts (acres uplifted)	Credits Needed to Offset Permanent Impacts
Category III - Disturbed	PSS1/EM1B	0.5:1	62.51		31.255
Category III - Severely Disturbed	PSS1/EM1B	0.5:1	14.00		7.00
Category III – non-project area wetlands expected to undergo uplift	PSS1/EM1B	0.5:1		32.00	(16.00)
Totals			76.51	32.00	22.255

To address the permanent loss of DOT&PF proposes to develop a compensatory mitigation plan that would preserve the equivalent of 22.255 credits of wetlands either through an In-Lieu Fee provider or through permittee-responsible mitigation.

Permittee-responsible mitigation may include DOT&PF offering portions of the existing airport lands to Pilot Station Inc. for residential or other community development in exchange for deed restrictions on local property to preserve existing wetlands and functions. Another option for permittee-responsible mitigation may include restoration of wetland functions along the proposed access road corridor that have been damaged by continued ATV use.

A final compensatory mitigation plan will be prepared and submitted to the Corps of Engineers during the permit application review period.

No long-term affect is expected from the temporary construction activities, therefore no compensatory mitigation credits are proposed. The temporarily disturbed wetlands would be recontoured and seeded, as necessary, with plant species native to the area and suitable for the hydrologic regime. It is anticipated that native wetland vegetation will naturally regenerate quickly within areas of temporary ground disturbance. If reseeding is necessary for stabilization of substrate, appropriate native species' seed will be applied as recommended.



LEGEND

Wetland Mapping Limits



🔀 Wetlands (HDR 2012)

* All mapped wetlands were identified as PSS1/EM1B wetland type.

PILOT STATION AIRPORT RELOCATION PROJECT

Desktop Wetland Delineation Results



Projection: Alaska State Plane Zone 7, NAD 83 Date: January 08, 2015 Sources: HDR Alaska, Inc.; ADOT&PF Aerial Photo Date: June 01, 2005 Author: HDR Alaska, Inc.