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Leslie Grey
Environmental Program Manager
FAA Alaskan Region, Airports Division
222 W. 7th Avenue #14
Anchorage, AK 99513-7587

Dear Ms. Grey:

Project: Taxiway A Rehabilitation and Runway Incursion Mitigation
CBJ Contract No. E17-040

Re: Class of Action Determination/Section 106 Consultation

The City and Borough of Juneau, in cooperation with the Federal Aviation Administration (FAA), proposes to make improvements to the Juneau International Airport (JNU). These improvements include rehabilitating pavement on Taxiway A, widening of pavement formerly designated as Taxiway H, replacing a portion of the Jordan Creek Culvert, modification of infield drainage areas, realignment of Taxiway E, and utilization of geothermal loop field for taxiway deicing. The CBJ is seeking a class of action determination for this work. We believe the proposed project qualifies for a Categorical Exclusion (CatEx) in accordance with FAA Order 1050.1F. This letter outlines our support for a CatEx determination. We are also seeking FAA's concurrence that the proposed project has no potential to cause effects to historic properties and determine if a Section 106 finding is required. See Figures 1 and 2 (attached) for project location and overview.

Project Description

Rehabilitate pavement on Taxiway A
In 2015, Taxiway A was used as a temporary runway while Runway 8-26 was rehabilitated. Due to the increased pavement loading and pavement age, the surface has deteriorated and needs rehabilitation. CBJ is proposing a project to rehabilitate the Taxiway A pavement in construction phases to minimize impacts to airport operations. In order to construct these improvements, the taxiway would be shut down for a minimum of 60 days. To accommodate this closure, a portion of the aircraft parking ramp (known as Taxiway H during the recent Runway 8-26 rehabilitation project) would be used as a parallel taxiway.

Reconstruct shoulder pavement on Taxiway A
Much of the existing shoulder pavement along Taxiway A does not meet FAA strength requirements and needs to be reconstructed. Work will include a full depth shoulder pavement replacement and will occur concurrently with the taxiway pavement rehabilitation and edge lighting improvements.

Rehabilitate taxiway edge lighting system
The underground portions of the taxiway edge light system were installed in phases concurrently with taxiway construction. The oldest portions of the system are more than 50 years old and the newest portions of the system are more than 20 years old. The project will replace the conduit, cans, junction boxes, and conductors throughout the taxiway edge light system. The fixtures will be removed and re-installed since they will be less than five years old at the time of construction.

Figure 3 (attached) shows the boundary of the Taxiway A pavement rehabilitation, shoulder reconstruction, and lighting system upgrades.

Widen former Taxiway H
The proposed project would improve the airport service road to be used as a taxiway as was done during the Runway 8-26 Rehabilitation project. This taxiway will provide a taxi-route for aircraft with wingspans up to 118 feet and will maintain connectivity to the medivac apron while Taxiway A is being rehabilitated. This will minimize the need for aircraft to back taxi on the runway. See the attached Figure 4 for the extents of the former Taxiway H widening and typical section.

Replace the remaining portion of Jordan Creek culvert
This project will replace the existing 8-foot diameter Jordan Creek culvert under Taxiway A with a new 14-foot wide, 352-foot long bottomless pipe arch to meet fish passage requirements. The culvert will be installed while Taxiway A is closed for rehabilitation and will connect to the portions of the existing fish passage culvert that were constructed as part of the previous Runway Safety Area (RSA) and Runway 8-26 Rehabilitation projects. This work was included in the 2007 EIS which covered airport improvements recommended as part of the 1999 Airport Master Plan. During construction, a temporary 48-inch culvert will be placed parallel to the existing culverted stream reach beneath Taxiway A. During installation, flow will be diverted into the temporary culvert until the new culvert installation is complete. The diversion allows time to form foundations, install the pipe arch, and backfill/create the streambed and pipe arch cover. Figure 5 (attached) shows the location of the Jordan Creek culvert replacement and shows the details of the replacement culvert.

Modify airfield drainage
Infield areas between Runway 8-26 and the ramp will be re-contoured to eliminate standing water and, where possible, to direct flow to the Float Pond. Recommended improvements include an additional crossing underneath Taxiway A. These changes will aid the airport in improving water quality discharges, eliminate the potential for standing water, and provide safe slopes for maintenance vehicles. These changes would also direct flows away from Jordan Creek which is an

anadromous stream on the State's Impaired Waters list, as well as the Mendenhall wetlands to the northeast of Runway 8-26 which connect to the Mendenhall State Game Refuge and Gastineau Channel. Flows would instead be directed to the Float Pond to the south of Runway 8-26 which serves as a large retention and settling pond. There is a tidally influenced culvert at the west end of the float pond which connects the pond with the Mendenhall River. Figure 6 (attached) highlights the areas where modification to airfield drainage is being proposed and Figure 6 shows the typical sections for these improvements.

Runway Incursion Mitigation (RIM)

Since 2004 there have been 50 runway incursions at JNU, the most recent occurring in August 2016. Three runway incursions within one year (2012) at Taxiway D triggered the Airport's inclusion in the FAA RIM Program. Mitigation techniques implemented for Taxiway D included new lighting and enhanced markings. As part of this project, several mitigation techniques are being developed for the airport to proactively address incursion concerns at Taxiways C and E. The recommended RIM strategy that will be included in the taxiway rehabilitation project involves correcting design and geometry deficiencies including removing excess pavement from Taxiway E and re-marking it so it is perpendicular to Runway 8-26 and Taxiway A. Taxiway C mitigation will be addressed in a separate project. Figure 7 (attached) show the extents of the Taxiway E pavement removal.

Geothermal pavement clearing

Elevated levels of de-icing chemicals have been detected in runoff at the east end of the Taxiway A. This project proposes to utilize an existing geothermal loop field to melt snow and ice. This will allow the airport to reduce pavement de-icing operations along Taxiway E-1, Taxiway F, and Taxiway A. Geothermal pavement clearing involves excavating portions of taxiway pavement to install insulation and piping. A new building will be required to house heat pump equipment. This would be located next to the existing Wings of Alaska hangar in the Northeast Development area. Figure 8 (attached) shows the location of the existing ground source heat pump loop field as well as the proposed building location and extents of geothermal pavement clearing.

Environmental Class Action Justification

We believe the project work outlined above qualify for Categorical Exclusion because the proposed actions/project components outlined above are covered under the following paragraphs from Order 1050.1F.

- Rehabilitate pavement on Taxiway A [5-6.4.e.]
- Rehabilitate taxiway edge lighting system [5-6.3.b]
- Widen Taxiway H [5-6.4.e.]
- Replace the remaining portion of Jordan Creek culvert [5-6.4.k.]
- Modify airfield drainage [5-6.4.k.]
- Runway Incursion Mitigation (RIM) [5-6.4.e.]
- Geothermal Pavement Clearing [5-6.4.d.] or [5-6.4.e.] and [5-6.4.f.].

Impact Category Documentation

The following impact category descriptions serve to further clarify the environmental impacts of the proposed project as well as to support the claim that no extraordinary circumstances exist for the proposed work as defined in Order 1050.1F paragraph 5-2. We have not included impact categories considered to be a non-issue for this project.

National Historic Preservation Act resources (NRHP)

Identified cultural resources within the Juneau Airport property have previously been determined as not eligible for inclusion on the NRHP. The 2007 EIS defined an area of potential effects for cultural resources as all previously undisturbed and unsubmerged locations that are being considered for development or alteration in relation to the proposed project (see the attached Cultural Resources section from the EIS). The work proposed as part of this project does not include any previously undisturbed or unsubmerged locations. Work is proposed only on previously disturbed/developed areas.

Department of Transportation Act Section 4(f) and 6(f) Resources

The Mendenhall Wetlands State Game Refuge is directly adjacent to the airport. All work for the proposed project will remain within Airport property; therefore, no direct or constructive "use" of Section 4(f) resources is anticipated.

Threatened and Endangered Species

An Official Species List received from the U.S. Fish and Wildlife Service (USFWS) on January 3, 2017, identified no threatened or endangered species within the project area. A review of the USFWS's IPaC website identified no critical habitat within the project area.

Fish and Wildlife Coordination Act

The culvert replacement on Jordan Creek is a mitigation project developed as part of the 2007 EIS which covered the expansion of the Jordan Creek culvert below Runway 8-26. This project will replace the remaining portion of 8-foot diameter culvert with a 14-foot wide bottomless pipe arch culvert. The new culvert installation will meet fish passage requirements and will require approval from the Alaska Department of Fish and Game through the issuance of a Fish Habitat Permit.

Wetlands and Waters of the U.S.

The Airport is surrounded to the east and south by the Mendenhall Wetlands State Game Refuge. Duck Creek runs along the northwest portion of the airport and flows into the Mendenhall River which runs along the western boundary of the airport. Jordan Creek bisects the airport property and is conveyed via culvert underneath former Taxiway H, Taxiway A and Runway 8-26. Wetlands occur along Jordan Creek, Duck Creek and the Mendenhall River on portions of the airport property. Wetlands are also located around the western edge of Runway 8-26 and to the south of the float pond. A wetland delineation was performed in 2006 as part of the EIS for improvements recommended in the 1999 Master Plan. Jordan Creek and the adjacent riparian area will be impacted as part of the culvert replacement project. Avoidance, minimization and mitigation strategies will be explored as the project progresses and as part of the USACE 404/10 Wetland

Permitting process. The infield drainage ditches will be regraded to allow for easier maintenance and to prevent standing water. Although not originally delineated as wetlands, they do drain to Waters of the U.S. and are likely to be considered jurisdictional wetlands. Although these ditches will be impacted, their function as storm water conveyance will not be diminished and any reduction in slopes for maintenance will result in longer travel times and, therefore, a greater opportunity for sediment and pollutants to settle out. Work on the infield drainage ditches and the Jordan Creek culvert is anticipated to be covered under a Nationwide Permit 3. This coverage was confirmed with Matthew Brody of the U.S. Army Corps of Engineers on December 28, 2016.

Floodplains

Portions of the airport are located within the floodplain. A CBJ Flood Zone Exemption will be obtained for work within the floodplain. A conversation with the Eric Feldt on February 21, 2017, indicated that the CBJ's only concern was that the new Jordan Creek culvert be able to convey the 100 year storm event.

Noise

The project is not anticipated to result in an increase in aircraft operations, nighttime operations or a change in fleet mix. A temporary change in runway use and airfield configuration will occur during construction but will cease once the project is implemented.

Air Quality

The Mendenhall Valley area of Juneau has been designated a moderate non-attainment area for PM10. This area does not include the airport although the southern edge of the maintenance area is adjacent to the northern boundary of the airport. The project will not increase landside or airside capacity nor include an increase of surface vehicles.

Water Quality

Duck Creek, Jordan Creek and the Mendenhall River are all anadromous fish streams within or adjacent to the project area. Jordan Creek runs through the airport property and is conveyed via culverts under Taxiway's A and H, as well as Runway 8-26. A float pond (water runway) is located just south of Runway 8-26. The float pond serves as a large retention and settling pond. A tidally influenced culvert at the west end of the float pond connects with the Mendenhall River. Duck Creek runs along the northwest border of the airport and flows into the Mendenhall River which forms the western boundary of the airport. The Mendenhall Wetlands State Game Refuge (MWSGR) forms the southern and eastern boundary of the airport. Several drainage channels and wetlands connect the northeast corner of the airport with the wetlands of the MWSGR. These wetlands discharge to Gastineau Channel to the south. Installation of the geothermal pavement clearing will reduce the use of chemical deicers that currently drain to Jordan Creek. Replacement of the Jordan Creek culvert under Taxiway A will improve fish passage. Proper BMPs will be utilized during construction to reduce sediment loads into the Creek. Fiber rolls or similar devices will be specified around disturbed ground surfaces to prevent the transport of sediment-laden water. Inlet protection will be placed at storm water inlets near construction areas to further prevent sediment from reaching the outfalls to Jordan Creek. Silt fences will be utilized at or near the toe of

embankments to trap sediment. Silt curtains may be utilized in conjunction with stream diversion methods to ensure that sediment is not transported downstream during culvert replacement. There will be a slight increase in impervious surface due to the widening of former Taxiway H. The drainage improvements proposed for this project include reducing the slopes of the infield drainage ditches. This will slow the flow of water which should offset the increase in storm water runoff from the site. Flows are also being diverted away from Jordan Creek and wetlands to the northeast of the airport and toward the float pond to the south. Jordan Creek is on the ADEC Impaired Waters list and has approved TMDLs for residues, sediment and dissolved oxygen. BMPs will be utilized during construction of this project, particularly the Jordan Creek culvert replacement, to ensure that sediment levels in Jordan Creek do not exceed allowable limits. An ADEC Section 401 Water Quality Certification and APDES Construction General Permit will be needed for this project.

Highly Controversial on Environmental Grounds

A pre-application meeting was held with relevant federal, state, and local government agencies on February 14, 2017 in Juneau. No agencies have expressed significant concerns about the proposed project.

Hazardous Materials

Three Active DEC contaminated sites are within 1,500 feet of the proposed project area based on a review of the Alaska Department of Environmental Conservation's Contaminated Sites Database on January 4, 2017. The closest site is a discovery of petroleum contaminated soil roughly 350 feet north of former Taxiway H. All three sites are associated with petroleum contaminants. Visual and olfactory monitoring will be employed during ground disturbing activities to identify any contaminated soil in the work area. If signs of contamination are encountered, work activities will be halted and DEC will be notified.

Sincerely,

Patricia K. Wahto
Airport Manager

Attachments: Figure 1 Location and Vicinity Map
Figure 2 Project Overview
Figure 3 Taxiway A Improvements
Figure 4 Former Taxiway H Widening
Figure 5 Jordan Creek Culvert Replacement
Figure 6 Infield Drainage Improvements
Figure 7 Taxiway E Runway Incursion Mitigation
Figure 8 Geothermal Pavement Clearing
Cultural Resources section from 2007 EIS

cc: Ken Nichols, PE, Nichols Engineering LLC
Angela Smith, PE, PDC