



## FISH HABITAT PERMIT

**FH18-III-0148**

ISSUED: June 25, 2018

EXPIRES: Upon Removal of Structures

Paul Karczmarczyk  
Alaska Department of Transportation & Public Facilities  
2301 Peger Road  
Fairbanks, AK 99709

Dear Mr. Karczmarczyk:

RE: Culvert Installations along Kivalina Evacuation Road  
Ponds and abandoned channels near the Wulik River  
Sections 2, 11, 35, T27N, R26W, KM, Noatak C-5

Culvert P-30	Location Coordinates (NAD83):	67.7459	N	164.507	W
Culvert P-31	Location Coordinates (NAD83):	67.7510	N	164.488	W
Culvert P-32	Location Coordinates (NAD83):	67.7514	N	164.482	W
Culvert P-33	Location Coordinates (NAD83):	67.7515	N	164.479	W
Culvert P-34	Location Coordinates (NAD83):	67.7516	N	164.476	W
Culvert P-35	Location Coordinates (NAD83):	67.7670	N	164.452	W
Culvert P-36	Location Coordinates (NAD83):	67.7721	N	164.444	W
Culvert P-37	Location Coordinates (NAD83):	67.7724	N	164.443	W
Culvert P-38	Location Coordinates (NAD83):	67.7728	N	164.442	W
Culvert P-39	Location Coordinates (NAD83):	67.7790	N	164.433	W
Culvert P-40	Location Coordinates (NAD83):	67.7873	N	164.407	W
Culvert P-41	Location Coordinates (NAD83):	67.7912	N	164.402	W

Pursuant to AS 16.05.841 (Fishway Act), the Alaska Department of Fish and Game (ADF&G), Division of Habitat has reviewed your proposal to install multiple culverts to facilitate drainage and maintain connectivity under the all season evacuation road between the community of Kivalina and Kisimigiqtuq Hill (K-Hill). We received your initial application by email on May 17, 2018, and additional information by email and telephone through June 24, 2018.

### **Project Description**

The Alaska Department of Transportation and Public Facilities (ADOT&PF) proposes to build a 7.5 mile long road from the community of Kivalina northeast to Kisimigiutquq Hill (K-Hill). Appropriately sized culverts will be used along the route to maintain hydrologic connectivity and occasional fish presence. Larger culverts will be placed at permanent and seasonal water crossings. These culverts will be designed to prevent icing conditions and may also require rip rap aprons to prevent erosion in areas with high flow. Enhanced Hydraulic Design culverts will be installed at all water crossings. These culverts will be oversized by 1 to 2 feet in diameter based on hydraulic criteria, with the invert embedded 1 to 2 feet in the substrate. Culvert diameters will range from 5-10 feet based on site hydrology. Two 10-foot diameter culverts will be placed in a potential fish bearing waterbody (see application materials for detail).

Wet swales, abandoned semi-permanently flooded channels, and other concave landscape features collecting water will have hydrologic connectivity maintained through the use of culverts. Erosion Sediment Control Plans and Stormwater Pollution Prevention Plans (SWPPP) will be developed and implemented to prevent introduction of sediments and consequent turbidity into Kivalina Lagoon and other waters during construction.

The following methods are anticipated for construction of the road and installation of the associated culverts:

- Road construction would begin in the winter after the ground freezes.
- Road and drainage structure construction would continue during summer months and may require temporary bridges and culverts to provide for seasonal drainage.
- Vegetative clearing would be limited to brush removal within the roadway footprint. However, the existing organic mat would not be removed.
- Temporary construction impacts may occur within a 25 feet area outside the roadway embankment footprint, and would be permitted for use for contractor equipment access, culvert installation, and placement of sediment control (BMPs).
- Water crossings would include placement of appropriately sized drainage structures, with additional cross culverts installed along the roadway as needed to equalize drainage.
- Excavation would be avoided to minimize thermal degradation of subgrade permafrost.
- Installation of larger culverts needing bedding materials for fish passage or for maintaining stream flow would require diverting flow into a temporary channel while constructing the structure.
- Use of temporary bridges, temporary culverts, and pumping may also be employed.
- Disturbed areas outside the roadway footprint would be stabilized.
- Ongoing maintenance and operations would take place to ensure year-round use, and maintenance of drainage structures.

Additional project details are presented in your application materials.

### **Fish Resources**

During high water events it is very likely that fish flood into the abandoned channels and ponds adjacent to the Wulik River and provide rearing habitat for juvenile resident species. Your project as proposed is not anticipated to obstruct the efficient passage and movement of fish.

### **Determination**

In accordance with AS 16.05.841, project approval is hereby given subject to the project description above with the following stipulations:

- 1) Prior to initiation of construction, ADOT&PF shall provide ADF&G Habitat final construction plans and specifications for all aspects of the project (including water withdrawals and temporary culverts, bridges and diversions). After reviewing the final plans ADF&G will provide a determination in writing, as to whether additional fish habitat permits or an amendment to this permit will be required.
- 2) All aspects of this project shall be designed, installed, and maintained to accommodate the efficient passage and movement of fish, both upstream and downstream, for the life of the structures. Any obstruction to the free passage of fish (including, but not limited to, excessive velocities, outwash gravels, bank destabilization, or potential fish entrapments) shall be restored to the satisfaction of the ADF&G Division of Habitat.

You are responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project. For any activity that significantly deviates from the approved plan, you shall notify the Division of Habitat and obtain written approval in the form of a permit amendment before beginning the activity. Any action that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the Division of Habitat. Therefore, it is recommended you consult the Division of Habitat immediately when any deviation from the approved plan is being considered.

For the purpose of inspecting or monitoring compliance with any condition of this permit, you shall give an authorized representative of the state free and unobstructed access, at safe and reasonable times, to the permit site. You shall furnish whatever assistance and information as the authorized representative reasonably requires for monitoring and inspection purposes.

This letter constitutes a permit issued under the authority of AS 16.05.841 and must be retained on site during project activities. Please be advised that this determination applies only to activities regulated by the Division of Habitat; other agencies also may have jurisdiction under their respective authorities. This determination does not relieve you of your responsibility to secure other permits; state, federal, or local. You are still required to comply with all other applicable laws.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The Division of Habitat reserves the right to require mitigation measures to correct disruption to fish and game created by the project and which was a direct result of the failure to comply with this permit or any applicable law.

You shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or your performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

Any questions or concerns about this permit may be directed to Audra Brase at 907-459-7282 or by email: [audra.braser@alaska.gov](mailto:audra.braser@alaska.gov).

Sincerely,

Sam Cotten, Commissioner



BY: Audra L. J. Brase, Regional Supervisor  
Division of Habitat  
Alaska Department of Fish and Game

ecc: James Menard, ADF&G CF, Nome  
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