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WAPPROVED

Title 9 Conditional Use Permit No.: 125-03-22
Alaska Department of Transportation & Public Facilities
Cape Blossom Road Phase 2: Sadie Creek to Cape Blossom Road
& Sadie Creek Bridge Construction

Date of Issue: February 6, 2023 Permit Expires: December 31, 2025

Permit Issued By:

Northwest Arctic Borough Planning Department c/o Gem Belamour PO Box 1110

Kotzebue, AK 99752

Tel 907.442.8212 / 800.478.1110 extension 112

Fax 907.442.3740

gbelamour@nwabor.org

Permittee:

State of Alaska, Department of Transportation & Public Facilities

2301 Peger Road Fairbanks, AK 99709

Tel 907.451.5479 Fax 907.451.5126

william.sexton@alaska.gov

http://dot.alaska.gov/nreg/capeblossomroad/

Permittee Contact Information:

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Tel 907.451.5479 Fax 907.451.5126

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Project Description:

The State of Alaska Department of Transportation & Public Facilities (AKDOT&PF&PF) submitted a Title 9 application for Phase 2 of the Cape Blossom Project which involves the construction of the Sadie Creek Road and Sadie Creek Bridge.

This permit is for the construction of Stage II of the Cape Blossom Road Project, which would construct the remainder of the road from Sadie Creek to Cape Blossom, including a bridge over Sadie Creek.

The Project consists of:

• Construct 6.9 miles of new road from Sadie Creek to Cape Blossom



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• Construct a 240' long x 27' wide, three span, precast deck bridge across Sadie Creek.

This portion of the Cape Blossom Road Project is anticipated to begin in the Summer of 2023 with contractor mobilization. Construction will then begin in Fall of 2023 with an anticipated end date in Fall of 2025.

The following Uses make up this project in the Subsistence Conservation District:

- 'Bulk fuel storage' Conditional Use
- 'Placement of fill in a wetland' Conditional Use
- 'Roads' Conditional Use
- 'Temporary construction facilities' Major Use

Specific details of the project are contained in the Title 9 application (22-02-125) and documents submitted by AKDOT&PF to the Borough Planning Department. These documents are incorporated into the Borough's administrative record. Project Activities are summarized below.

Project Location:

This Project will consist of 6.9 miles of new construction located within Title 9 jurisdiction. The proposed project will begin at Sadie Creek and end at Cape Blossom (all within the Subsistence Conservation District).

The project will begin at Township 16 North, Range 18 West, Sections 1,2 11, 12, 13, and continue through Township 16 North, Range 17 West, Sections 18, 19, 30, 31.

The project will end at Township 15 North, Range 17 West, Section 6.



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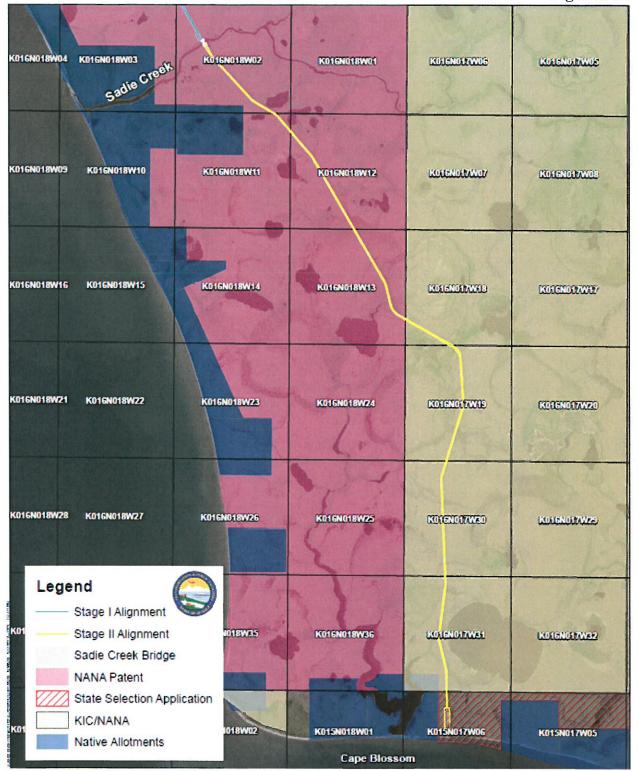


Figure 1: Location of Sadie Creek Bridge and Sadie Creek to Cape Blossom Road



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Sadie Creek to Cape Blossom Road Construction:

Construct 6.9 miles of new road from Sadie Creek to Cape Blossom. Construction will require approximately 313,000 cubic yards (CY) of gravel material. The project gravel materials will be sourced by the Contractor from currently unknown locations of their choice. Insulation board will be installed midway in the road embankment to mitigate thawing of the underlying permafrost. Geotextile fabric may be utilized in areas that require additional stabilization.

Initial ground preparation is anticipated to commence as soon as ground is frozen in the fall months to minimize thaw of permafrost. Any deep snow covering would be removed, and to minimize thermal degradation of subgrade soils the existing organic layer would not be removed and excavation would be avoided; however, clearing and removal of woody vegetation/brush may occur within the proposed roadway footprint.

When ground preparation is completed, frozen fill would be placed on existing tundra to establish the initial road embankment. An initial lift of approximately 2 to 3 feet of embankment elevation will be placed prior to installation of two to four inches of insulation board. Approximately 2 feet of additional embankment fill would then be placed over the insulation board. Final roadway embankment will be constructed to 3:1 or steeper side slopes, with toe-of-slope width varying by location and immediate topography. A temporary ice/snow road may be constructed parallel and immediately adjacent to the new road embankment to support haul traffic.

After the embankment has achieved adequate compaction for equipment to operate on, a final 6-inch lift of surfacing material would be placed, resulting in a minimum final road prism thickness of approximately 5 feet and top width of 20-24 feet.

Water use in summer months will be for dust control along all Contractor haul routes and areas of new construction. Water will also be required in the summer to achieve adequate compaction of the embankment and roadway surfacing. Water may also be required in winter months to construct a temporary ice/snow road. It is estimated that approximately 250,000 gallons per day would be required for construction activities, with a total water construction requirement of approximately 15 million gallons.

Water for construction will be Contractor furnished and could be sourced from either a commercial or municipal source from the City of Kotzebue, from Kotzebue Lagoon if it is found to be adequate in terms of low salinity, or from several small lakes within the project vicinity.

Water use permits will be acquired by the contractor prior to the start of physical construction.

Cross-drainage culverts will be installed along the length of the road from Sadie Creek to the terminus pad at Cape Blossom in order to maintain area hydrologic/ecological function and to prevent surface water flow from being impounded by and/or eroding road embankments. Due to the relatively flat terrain of the project area, culverts placement will be determined during construction of the road.



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Bridge Construction at Sadie Creek:

Construction of a three-span bridge at Sadie Creek is anticipated to begin in Winter 2023/24 and end in Fall 2025. The bridge is approximately 27' wide, to accommodate two-way traffic, and is 240' long in order to span the entire width of the floodplain. Six 3'-diameter pipe piles across two piers will be installed within the ordinary highwater limits of Sadie Creek to support the bridge structure. Bridge structural members and piling are anticipated to be steel, while the bridge deck is anticipated to be precast concrete. Placement of about 3,820 cubic yards of rock will occur around the bridge abutments on either side of Sadie Creek for erosion protection. See **Figure 2** for bridge details.

Contractor may construct a temporary ice bridge in order to support erection of the bridge structure. The temporary ice bridge would be anticipated to be required for one winter season between January and April.

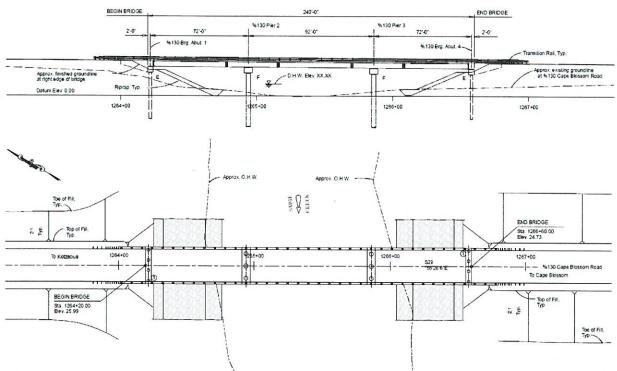


Figure 2. Sadie Creek Bridge Details

Bulk Fuel Storage and Refueling:

Fuel will be provided by the Contractor and handled in accordance with the Contractor's approved Spill Prevention Control and Countermeasures Plan (SPCC). Fuel will likely be obtained partially from commercial sources within Kotzebue and transported to the project area by fuel truck(s) ranging in capacity from 1,500 to 5,000 gallons. Fuel will also be barged to the project site and staged at a temporary and centrally located bulk fuel tank farm at the constructed pad at Cape Blossom. Fuel tanks area is anticipated to range in size from 5000 gallons up to



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25,000 gallons. Refueling/oiling of equipment within the project area will be performed by fuel trucks as identified above. No fueling will be allowed within 100 feet of any surface waters.

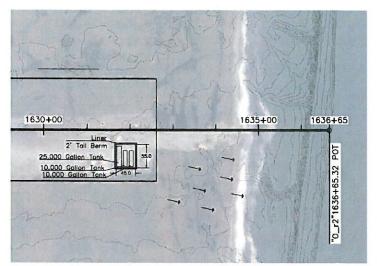


Figure 3: Bulk Fuel Storage and Refueling Area

Wetland Fill Impacts:

Impacts of the placement of fills on wetlands are summarized in the table in Figure 4 below:

SUMMARY OF PROJECT IMPACTS					
Duration	Disturbance	Wetlands		Below OHW	
		Area (Acres)	Fill (yd ³)	Area (Acres)	Fill (yd ³)
Permanent	Roadway / Embankment	107.06	995,000	0.091	1,000
	Culverts	0.13	447	0.015	27
	Culvert Riprap	0.08	264	0.004	12
	Bridge Riprap	0.14	456	0.017	54
	Bridge Piers	N/A	N/A	0.001	20
	Permanent Impact Total	107.41	996,167	0.128	1,113
Temporary	Work Zone	27.77	N/A	0.046	N/A
	Vegetative Buffer	69.65	N/A	0.073	N/A
	Bridge Work Zone	0.29	N/A	0.388	N/A
	Temporary Impact Total	97.71	0	0.507	0
All	TOTAL	205.12	996,167	0.63	<u>1,113</u>

Figure 4: Summary of Wetland Fill Impacts



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Current Approvals:

- Endangered Species Act (Section 7 Informal Consultation) and Marine Mammal Protection Act (MMPA)
- National Historic Preservation Act (NHPA; Section 106)
- Alaska DNR, Office of History & Archaeology and State Historic Preservation Officer (SHPO)
- Department of Transportation Act (Section 4(f)
- Section 404/10 Clean Water Act (CWA) Wetlands Dredge or Fill Permit
- Migratory Bird Treaty Act compliance; USFWS
- Magnuson-Stevens Fishery Conservation and Management Act
- Section 401 Certification Certificate of Reasonable Assurance; ADEC Division of Water Quality
- ROW (State-owned non-marine waters and submerged lands); ADNR, Division of Mining Land and Water
- APDES Construction General Permit for Stormwater Discharges Associated with Large and Small Construction Activities; ADEC, Division of Water
- Title 16 Fish Habitat Permit; ADF&G (05/25/2022)
- Temporary Water Use Permit (TWUP); ADNR DMLW (Contractor to acquire)

Permit Authorization and Documentation:

AKDOT&PF submitted a Title 9 Land Use Permit application (22-02-125) for the following Uses in the **Subsistence Conservation District:**

- 'Bulk fuel storage' Conditional Use
- 'Placement of fill in a wetland' Conditional Use
- 'Roads' Conditional Use
- 'Temporary construction facilities' Major Use

The Title 9 application was received on October 4, 2022. On November 2, 2022, the Borough Planning Department deemed the application was complete. The 20-day public comment period for this permit started November 4, 2022. There were no public comments.

Permit fees due totaled \$1,050.00. AKDOT&PF will submit payment.

Pursuant to Northwest Arctic Borough Code (NABC) 9.12.030, the **Planning Director** has the authority to permit:

• 'Temporary construction facilities' (Major Use in the Subsistence Conservation District)

Pursuant to Northwest Arctic Borough Code (NABC) 09.12.030, the **Planning** Commission has the authority to permit:

- Bulk fuel storage (Conditional Use in the Subsistence Conservation District)
- Placement of fill in a wetland, greater than one acre (Conditional Use in the Subsistence Conservation District)



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• Roads (Conditional Use in the Subsistence Conservation District)

Proposed Permit Terms and Conditions:

- 1. The State of Alaska Department of Transportation & Public Facilities (AKDOT&PF) shall comply with the terms of the permission, permits and/or agreements granted by the federal government, State of Alaska, NANA Regional Corporation, Northwest Arctic Borough and other applicable agencies.
- 2. AKDOT&PF shall comply with any and all applicable local, Borough, state and federal laws. The Borough reserves the right to conduct periodic inspections of the permitted operations as well as work with the permittee to observe operations and/or trips for permit compliance.
- 3. Road and bridge construction activities are required to be sited, designed, constructed and operated in a manner that does not substantially interfere with the use of a site that is important for significant cultural uses or essential for transportation to subsistence use areas.
- 4. All project activities shall utilize measures to avoid or minimize disrupting wildlife and bird migration, or subsistence activities including fishing, trapping, waterfowl hunting, egg gathering, berry picking and caribou hunting. The applicant will ensure reasonable access to subsistence users to subsistence resources.
- 5. All vehicles shall be operated in a manner such that the vegetative mat of the tundra is not disturbed. Vehicles shall not be abandoned. Vehicles must avoid areas where species that are sensitive to noise or movement are concentrated.
- 6. All trash and human waste generated at the sites must be properly disposed in accordance with Northwest Arctic Borough Code Section 9.25.020 M., establishing standards of disposal of refuse, human body waste, and chemicals. All remedial activities shall comply with any and all other applicable state and federal laws, including all applicable hazardous waste and disposal requirements, all waste disposal and landfill requirements, and all open burning and air quality standards.
- 7. The applicant must conduct activities in a manner to maintain natural drainage pattern, watershed protection, and permafrost stability; to prevent runoff and erosion into water supplies; to minimize alteration of vegetation; and to conserve natural features and the general environment of the area.
- 8. The Borough recognizes that this area within the Baldwin Peninsula is periodically subject to flooding that may result in the loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the health, safety and general welfare of Kotzebue residents. The Borough has adopted the necessary regulations of the Federal Emergency Management Agency (FEMA) to enable its



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communities and residents to participate in the National Flood Insurance Program (NFIP). See NABC 9.25.020.

To promote the public health, safety and general welfare by minimizing flood damage and loss and promoting access to disaster relief, the following conditions must be met:

- a. Encourage protection of land uses vulnerable to floods, including public facilities and utilities that serve such uses, against flood damage at the time of initial construction or substantial improvement.
 - Ensure that those persons who occupy areas of special flood hazards assume responsibility for occupying such flood hazard areas.
- b. All new construction and substantial improvements shall meet the following general standards, as applicable:
 - 1. Anchoring. All new construction and substantial improvements shall be designed, modified, constructed and adequately anchored to prevent flotation, collapse or lateral movement of the structure; all manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement.
 - Construction Materials and Methods. All new construction and substantial improvements shall be constructed with materials and utilize equipment resistant to flood damage and use methods and practices that minimize flood damage, including waterproofing, watertight construction, use of substantially impermeable materials and other construction techniques.
- 9. Uses permitted shall cease upon the discovery of archaeological, prehistoric, historic or cultural resources during the project activities, and AKDOT&PF shall immediately contact the Planning Director at the NAB to determine the conditions to continue.
- 10. All fuel/oil/hazardous substance storage, including waste oil, must meet all applicable state and federal containment laws. Any project fuel storage at the terminus pad sites shall meet all applicable state and federal containment laws to prevent fuel spills and protect against fire danger. If a spill occurs, it must be reported immediately to the Alaska Department of Environmental Conservation and the NAB Planning Department (at least within 24 hours). Appropriate spill kits and absorbent pads must be stored at the road construction sites. Fuel/oil drums or other storage containers shall not be abandoned.
- 11. Project equipment servicing and fueling operations are prohibited within 100 feet of any surface water body, including any rivers, drainage channels, sloughs and lakes. Equipment must be monitored daily for hydraulic leaks. Project equipment shall not be abandoned.
- 12. AKDOT&PF shall immediately notify the Borough (at least within 24 hours) of any change in the plans and seek modification of the permit.



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- 13. AKDOT&PF is subject to all penalties and civil actions pursuant to section 9.08.240 for violation of the permit conditions and stipulations prescribed herein.
- 14. Annually by December 31st, the permittee shall file a written report with the NAB Planning Department describing the following:
 - a. A complete report of any fuel or other hazardous substances discharges and cleanup activities completed,
 - b. Other matters as reasonably required by the Administrator/NAB Planning Director.
- 15. At the conclusion of each season the Borough Planning Department shall evaluate the effectiveness of the permit conditions. The Title 9 Administrator shall be authorized to adopt corrective measures for ineffective or inadequate permit conditions.
- 16. AKDOT&PF and/or land owners shall allow the NAB and/or their representatives access to the permitted sites and properties, during the term of this permit or within 5 years after permit expiration, to conduct scheduled or unscheduled inspections to determine compliance with this permit or respond to emergency situations.
- 17. Application was received in October 4, 2022 and deemed complete in November 2, 2022. This permit will expire December 31, 2025, unless revoked by the Title 9 Administrator and/or AKDOT&PF.

Permit Approval

NORTHWEST ARCTIC BOROUGH

Conditional Use Permit Approved by the Northwest Arctic Borough Planning Commission through PC Resolution 23-04

Clay Nordlum,

Planning Director/Title 9 Administrator

February 6, 2023

Date

CC:

City of Kotzebue, Kotzebue IRA Council, NANA Regional Corporation,

Maniilaq Association, State of Alaska Department of Transportation & PF-

Kotzebue Office

Posted at:

NAB Bulletin Board, Kotzebue's Post Office, Kotzebue's AC, Kotzebue's

Rotman's Store, www.nwabor.org