



The Nikolai Nickel Project

POA-2025-00491

Clean Water Act Section 404
Permit Application

Supplemental Information

January 14, 2026

Prepared for:

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Acronyms

ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
AEMC	Alaska Energy Metals Development Corporation
AOI	Area of Interest
BMPs	best management practices
LEDPA	Least Environmentally Damaging Practicable Alternative
MSGP	Multi-Sector General Permit
OHW	Ordinary High Water
PIP	Priority Invasive Plant
ROW	Right of Way
SWPPP	Stormwater Pollution Protection Plan
U.S.	United States
USDOE	Department of Energy
USBLM	Bureau of Land Management
USGS	United States Geological Survey
WOUS	Waters of the U.S.

SUPPLEMENTAL INFORMATION

INTRODUCTION

This document supplements the information in the attached Engineering Form 4345, a permit application by Alaska Energy Metals Development Corporation (AEMC) to advance mineral exploration at the Nikolai Project. As part of this application the applicant will be completing further wetland verification on site this summer. An updated wetland delineation report will be submitted in August of 2026 to USACE. AEMC is willing to permit the Nikolai Project based on the initial preliminary wetland mapping as shown in this application. AEMC is not requesting an Approved Jurisdictional Determination.

APPLICATION BLOCK 15: LOCATION OF PROJECT

The Nikolai Nickel Project is located approximately 55 miles southwest of Delta Junction, Alaska, off the Richardson Highway. The project area is located on State land administered by the Alaska Department of Natural Resources. The project is in the Mount Hayes B-4, B-5, and A-5 United States Geological Survey (USGS) quadrangle maps, in the Fairbanks Meridian (Figure 1). Location information is shown in Table 15-1.

Table 15-1: Area Location Information

USGS Quadrangles		Public Land Survey System			
Scale – 1:250,000	Scale – 1:63,360	Meridian	Township	Range	Section
Mount Hayes	A-5, B-4, B-5	Fairbanks	18 S	10 E	25, 26, 35
			19 S	10 E	2, 6-11
			19 S	9 E	2-8, 11, 12
			19 S	8E	12-16, 21-23, 26

The locations of the key project components are shown in Table 15-2 and in the attached figure set.

Table 15-2: Decimal Degree Location of the Key Project Components

Project Component	Latitude	Longitude
Delta River Bridge Crossing	63.3256° N	145.7552° W
Eureka Creek Bridge Crossing	63.2722° N	146.1164° W
Centroid of Mineral Exploration Area	63.2502° N	146.1744° W

APPLICATION BLOCK 18: NATURE OF ACTIVITY

AEMC proposes to construct and operate a temporary access road and associated exploration support facilities to conduct mineral exploration activities at the Nikolai Nickel Project.

The project will provide safe, reliable, and practicable access to the Nikolai Project nickel exploration area to collect subsurface geological data to evaluate the critical mineral resource potential. Due to the prevalence of wetlands and drainage features throughout the project area, the project purpose cannot be met without either the mechanized land clearing of or the discharge of fill material into waters of the United States (WOUS). The activity includes rehabilitation and maintenance of existing roads, construction of new temporary exploration roads, low water crossings, and temporary exploration facilities. Exploration facilities include an exploration camp, drill pads, drill pad access roads, fueling storage, laydown areas, and equipment storage and parking.

The project will begin with rehabilitation of an existing 17-mile gravel road known as the Rainy Creek Mining Road. The existing road is located between the Delta River and Eureka Creek. The road is not currently passable due to multiple washouts and talus slides. Road maintenance will focus on returning the road to safe operating condition for light trucks and tracked vehicles. Rehabilitation will consist of blading and recontouring the travel surface within the existing right of way. Where the existing road crosses streams or seeps, temporary mats or GeoBlocks will be used to prevent further degradation of water quality when crossing streams. No fills would be needed or used for the rehabilitation of the surface of the Rainy Creek Mining Road.

In addition to the rehabilitation, the project will involve construction of 6 miles of new temporary gravel access road, averaging 13 feet wide toe-to-toe, to access the exploration site from the west end of the Rainy Creek Mining Road. The alignment of the new road was selected following evaluation of multiple access alternatives and was designed to minimize impacts to jurisdictional wetlands and waters to the maximum extent practicable.

New road construction will involve mechanized land clearing of vegetation, placement of geotextile fabric, and placement of a gravel road prism. To maintain hydrologic connectivity, low water crossings will be installed at surface water crossings. The new road will disturb approximately 0.14 acres of wetland. Gravel will be sourced from uplands.

A temporary bridge will be placed over the Delta River (Sheets 3, 18). The structure will measure approximately 195 feet in length with a 14-foot-wide deck and will be 10 feet above the water surface. Eight driven pipe piles (18–24-inch diameter) will be used to support the bridge with 4 driven into the river channel below Ordinary High Water (OHW). Fill material for the abutments will total 1,830 cubic yards and cover 0.17 acres. Fill material will be sourced locally from an upland location, supplied by the construction contractor and hauled to the location. Shore bridge abutments will be located above the OHW on both BLM administered lands (west side) and State of Alaska submerged lands (east side).

A second temporary bridge will be situated over Eureka Creek (Sheets 7, 19). The crossing structure will measure approximately 300 feet in length with a 14-foot-wide deck from four feet to approximately 18 feet above the water surface. Fourteen driven pipe piles (18–24-inch diameter) will be used to support the bridge

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with 12 driven into the river channel below OHW. Fill material for the abutments will total 1000 cubic yards in 0.25 acres with an additional 1000 cubic yards excavated above OHW. Fill material will be sourced locally from an upland location. Shore abutments will be located above the OHW, with no fill placed below OHW

The project includes construction of temporary exploration-related facilities, including a 15-acre pad for a man camp, staging area and seasonal equipment laydown and parking, as well as up to 100 drill pads (totaling approximately 9.4 acres in wetlands, primarily in scrub-shrub and emergent wetlands. Drill pads will be sited on previously disturbed areas or at upland edges where it is practicable to reduce wetland impacts.

Exploration activities will consist of diamond core drilling using tracked drill rigs. Drill pads will be lined, and drilling fluids and cuttings dewatered using a hydrocyclone. No process chemicals will be used, and no drill cuttings will be discharged to wetlands or surface waters.

APPLICATION BLOCK 21: TYPES OF MATERIAL DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

Table 21-1 lists the project components and impacts to waters of the U.S. (WOUS) to include wetlands, ponds, and streams. Cubic yards of fill are estimated and may vary based on site-specific conditions. The temporary impacts to jurisdictional WOUS are approximately 9.54 acres.

Table 21-1: Project Impacts

Project Component	WOUS Acres Impacted	Cubic Yards Fill in WOUS	Fill Type
Section 404			
New Access Road	0.14	450	Clean gravel
Exploration Area - Access Roads and Drill Pads	9.40	15,000	Clean gravel
Totals	9.54	15,450	

APPLICATION BLOCK 23: DESCRIPTION OF AVOIDANCE, MINIMIZATION, AND COMPENSATION ACTIVITIES BOTH UNDERTAKEN AND PROPOSED

23.1 Avoidance and Minimization by Planning and Design

During the preliminary and final planning AEMC considered exploration road configurations, and route alternatives to reach the potential geologic area of interest (AOI). Multiple scenarios were evaluated to identify the Least Environmentally Damaging Practicable Alternative (LEDPA). AEMC made substantive efforts to avoid and minimize impacts to wetlands and waters at the Nikolai Nickel Project. These avoidance and minimization measures were incorporated in the preferred alternative (i.e., the design presented in this application).

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23.1.1 Alternatives and Revisions Considered

In 2023, Stantec conducted wetland field delineations and mapping for an initial exploration area of interest.

In 2025 wetland mapping was expanded using NWI data and updated imagery to cover the new exploration AOI and proposed exploration facilities.

Access to the Exploration Area

The existing Rainy Creek Mining Road was used as the starting point. The Rainy Creek Road starts from an existing entry to the Alyeska Pipeline Service Company's pipeline Right of Way (ROW). From the pipeline, the Road crosses the Delta River. The road fords the Delta River, using braided islands to cross the waterbody. A bridge is proposed to cross the deepest channel section of the Delta River. The Delta River bridge was proposed to reduce sediment impacts to the Delta River. The existing road ROW is then followed for 17 miles to the end of the Rainy Creek Mining Road near Eureka Creek. To reach the exploration area a second temporary bridge is proposed to cross Eureka Creek. The project requires construction of six miles of new temporary access road, averaging a toe-to-toe width of 13 feet, to reach the exploration area from the west end of the Rainy Creek Mining Road. The new route was selected by using field-verified wetland mapping to minimize fill in wetlands along the route. The new road crosses streams and surface drainage features perpendicular to flow and wetlands at narrowest points. Streams are crossed using low water crossings. The design submitted with this permit application has been developed to avoid and minimize fill in wetlands.

Alternative Air Access

Helicopter trips were considered for drilling support and to access the AOI. It was determined that a five-year program of helicopter drilling was not practical considering weather, safety, cost, and the logistics required to support helicopter flight for this level of mineral exploration.

Analysis

Drilling must commence where the Nickel resource is located. The mineral exploration requires construction of temporary facilities, including a 15-acre pad for a man camp, staging and parking areas, and seasonal equipment laydown. The camp, laydown and staging area were sited adjacent to the new exploration access road in uplands. No wetlands will be filled or graded for these facilities. Initial drilling has pinpointed the AOI requiring detailed drilling and geologic investigation. The drill pads need to be located over the resource. The required 100 drill sites will be constructed with the minimum required grading. Temporary impacts from drilling including access and pads total 9.40 acres in wetlands. Where practicable, drill pads have been sited on previously disturbed areas or uplands to reduce wetland fill.

Exploration drilling will use track mounted core drilling rigs. Tracked rigs reduce grading for access and drill pad set up. Tracked equipment was selected as it does not require the precise road grades of wheel mounted drill rigs. The track rigs will be able to travel in terrain with less grading and minimize wetland disturbance. To contain drill mud and cuttings, drill sumps will be lined and drilling fluids and cuttings dewatered on site using a hydrocyclone. No chemicals will be used in drilling muds or to process cuttings. There will be no discharge of drill cuttings or muds to surface waters or wetlands. Support equipment will

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use the same access roads as the drill rigs. Conterminous reclamation of drill sites will be completed as practicable. Drills will move systematically through each area allowing reclamation to follow drilling when further access is no longer required.

The project is anticipated to operate five years. Upon completion of exploration activities, all temporary facilities will be decommissioned. Decommissioning will include removal of crossing structures and abutments, recontouring of road prisms and pads, replacement of salvaged organic material, and revegetation using native species to restore site conditions in compliance with Alaska Department of Natural Resources (ADNR) reclamation standards.

23.2 Minimization Activities Proposed during Construction

Following the preliminary and final WOUS avoidance design reviews, AEMC implemented a suite of BMPs to further minimize anticipated impacts from the proposed project.

Construction Methods

Project Planning

Preliminary wetland mapping for the project was used to minimize impacts to wetlands along the access corridor. Uplands and prior disturbance were prioritized for access routes and facilities. Bridges were incorporated at the Delta River and Eureka Creek to reduce sedimentation and improve safety for operators moving equipment and supplies to site.

Material Sites

No material sites will be opened in wetlands for exploration. Only on-site, non-mineralized rock (clean fill) from uplands will be used for road construction.

Rainy Creek Mining Road

The first 17-mile portion of the road route utilizes existing road disturbance. The route follows an existing road to Eureka Creek. GeoBlocks will be used in wet areas to eliminate the development of multiple parallel pathways around wet low areas. GeoBlocks will be left in place for the duration of the project to support long-term benefits to water quality from reduced sedimentation runoff from the road.

Best Management Practices

Erosion Control Measures

Erosion control and construction methods will be described in the Stormwater Pollution Prevention Plan (SWPPP) required by the Alaska Pollutant Discharge Elimination System Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity Permit (MSGP). BMPs for embankment stabilization, including contouring and seeding, will be employed. The project will comply with all Alaska Department of Environmental Conservation (ADEC) Water Quality Standards. BMPs for growth media stockpiles will include contouring and seeding to reduce erosion and sediment runoff during storage.

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Surface drainage will be monitored on site to ensure flow connectivity. Water will not be allowed to pond on road fills by using low water crossings. Existing surface drainage will not be adversely impeded. If ponding is observed on exploration roadways corrective action will be undertaken. This will include reestablishing drainage, grading, and seeding as appropriate for the location.

Invasive Species Control Measures

Post-construction stabilization would include grading, recontouring, and seeding fill in disturbed areas. To minimize the introduction of invasive species to the project, AMEC will follow BLM guidelines identified in Alaska Instruction Memorandum No AK IM 2025-13. Including Attachment 1 - BLM Standard Stipulations and Design Features, and Attachment 2 - Priority Plant List, (BLM 2025).

1. AMEC will ensure that all equipment, vehicles (e.g., trucks, trailers, and gear) is free of visible soil, seeds, and vegetative parts before deploying to the project site and before moving from areas of known Priority Invasive Plant (PIP) infestations.
2. AMEC will not park or stage equipment, supplies, or materials in areas known to be infested with PIP. When feasible, activities shall commence from known un-infested areas and progress toward known infested areas.
3. AMEC will only use feed (e.g., hay), bedding (straw), mulch, erosion control materials, and seed that is certified as weed-free through the ADNR Weed-Free certification programs. Other sources, including stockpiled items from the site, may be used on a case-by-case basis. If Alaska certified weed-free products are unavailable, then Alaska-grown material is preferred. Documentation must be provided to the BLM indicating that certified weed-free products are unavailable.
4. AMEC will use Native weed free seed mixes for revegetation.

23.3 Minimization as Part of Drilling

The Nikolai Project incorporates an existing access route that minimizes impacts to WOUS. Seventeen miles of travel follow an established route.

Impacts on wetlands and in waters are largely due to exploration drill roads and pads at the AOI. The routing shown in the represents the smallest impact on wetlands and waters, with spacing of drill pads and access set to meet mineral deposit feasibility standards.

Reclamation and Restoration

When all drilling ceases in 2030, exploration facilities will be restored to stable landforms with stored growth media placed on surfaces and recontoured. The regraded areas will be reseeded with native seeds. All laydown and facility areas, camp, roads and drill pads will be regraded and seeded. All supplies and equipment will be removed. Temporary bridges will be removed as the last step as equipment is demobilized.

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23.4 Compensatory Mitigation

On Site Wetland Restoration

The Nikolai Nickel Project will be fully bonded for reclamation and closure with ADNR. At the end of exploration surface disturbance will be reclaimed. The new access road to the drill area and drill sites will be restored. The impacts to WOUS are temporary. These areas will be reseeded, and surface hydrology reestablished.

The improvements to Rainy Creek Mining Road will be left in place to facilitate safe travel for other users. The GeoBlocks will be left in wet areas to maintain water quality improvements along the road.

Public Interest

There are no identified alternatives that will impact less wetlands than the proposed action and satisfy the project purpose. The impacted wetlands are not associated with fish habitat. The project will be constructed to meet State of Alaska Water Quality Standards. AEMC will apply for an ADEC Clean Water Act 401 water quality certification. There will be no discharges of toxic materials from the project. No endangered species will be impacted by the project. AEMC has commissioned a complete cultural resource report under the direction of the ADNR State of Alaska Historic Preservation Officer. The cultural survey and report will be completed during the summer of 2026. AEMC also committed to additional wetland studies in the drilling area for 2026. A Preliminary Jurisdictional Determination Report will be completed for the study area and submitted to the USACE in late 2026. The crossing of the Delta River is being coordinated and permitted by the United States Bureau of Land Management (BLM) and ADNR. The Nikolai Project is pursuing a strategic domestic supply of Nickel and associated minerals which have been identified as critical minerals and materials by the USGS and United States Department of Energy (USDOE) (USGS 2025, USDOE 2025).

Least Environmental Damaging Practicable Alternative

The Nikolai Nickel Project has been designed to avoid and minimize aquatic resource impacts consistent with the 404(b)(1) Guidelines. Alternatives considered include helicopter-only access, alternate road alignments, winter-only iced road access, and no-action. Helicopter-only access was determined to be impracticable due to safety concerns, logistical limitations, and substantially higher cost. Alternate road alignments were evaluated but would have resulted in greater wetland impacts and additional stream crossings. Winter-only access was determined to be unreliable due to variable freezing conditions and safety issues associated with winter travel in low visibility on ice and snow roads. The no-action alternative would not satisfy the basic project purpose. The selected alternative represents the LEDPA capable of meeting the overall project purpose.

AEMC proposes to reclaim and reseed all wetland fills and grading on site. All exploration facilities will be removed. All site waste will be hauled to an approved solid waste disposal facility. Fuel will be stored in compliance with state and federal regulations. All storage facilities will be removed when work is complete. The 9.54 acres of temporary wetland disturbance from drill pads, exploration roads, and the new access

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will be bonded and reclaimed under direction of ADNR. No further compensatory mitigation is proposed for this critical mineral exploration project.

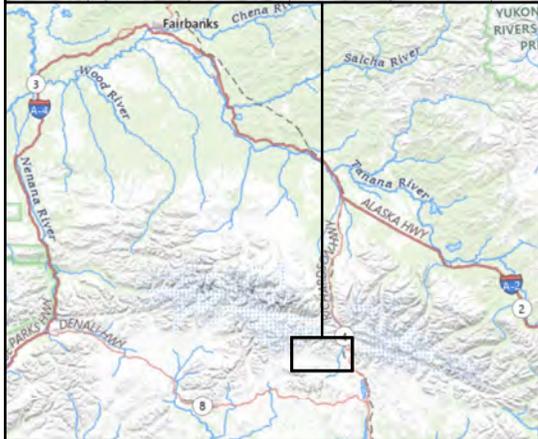
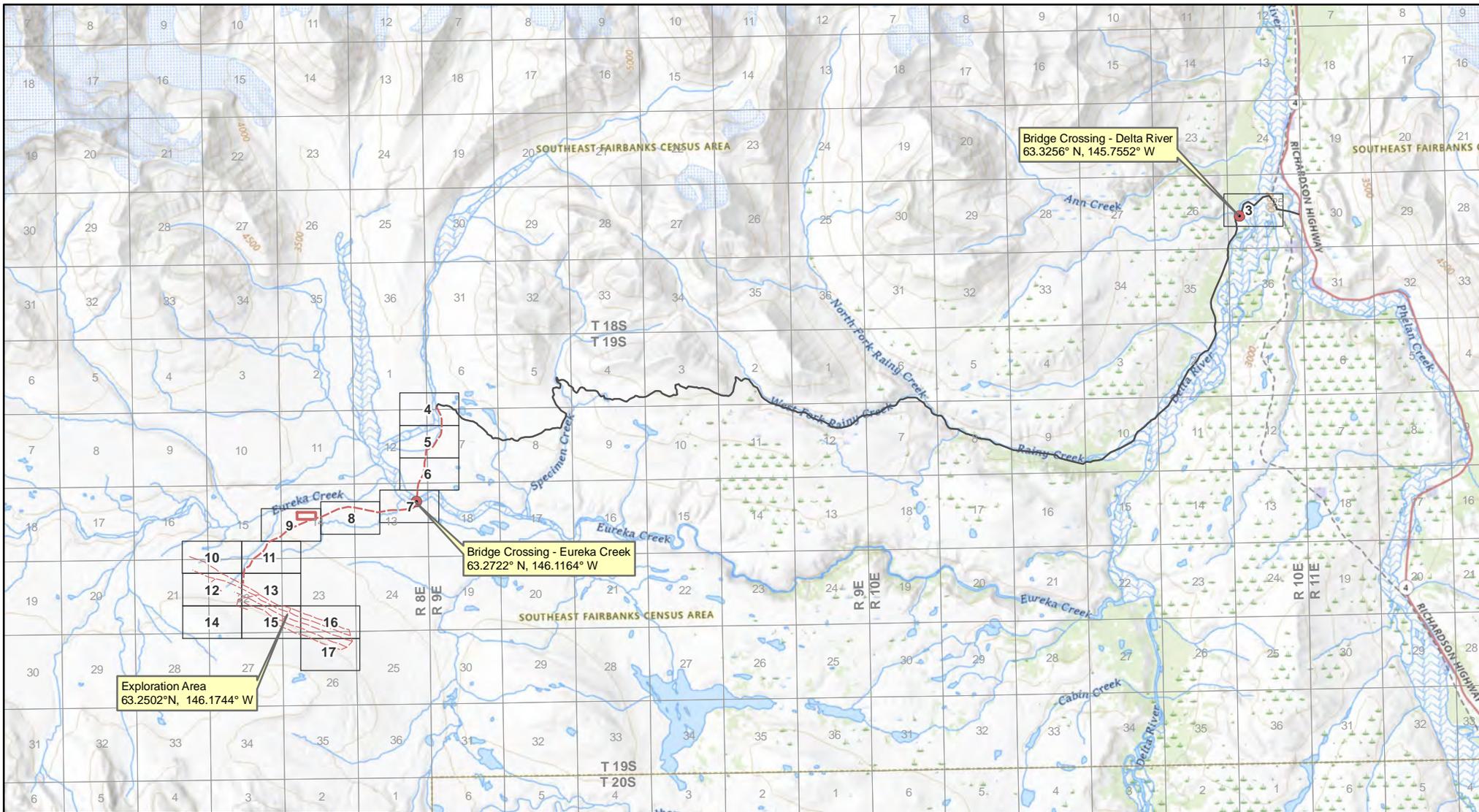
REFERENCES

United States Bureau of Land Management Instruction Memorandum, 2025. AK IM 2025-13 with Attachment 1 Stipulation Template, and Attachment 2 Invasive Species Priority Plant List, July 1, 2025.

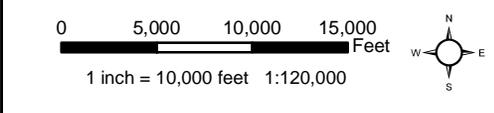
United States Geological Survey. 2025. Final 2025 List of Critical Minerals. Federal Register Citation 90: FR 50494, published November 7, 2025.

United States Department of Energy, 2025. Critical Minerals and Materials List, Federal Register Citation: 90 FR 22711, published May 29, 2025

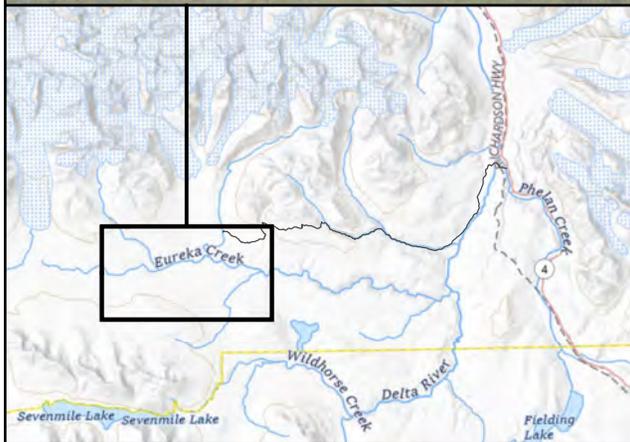
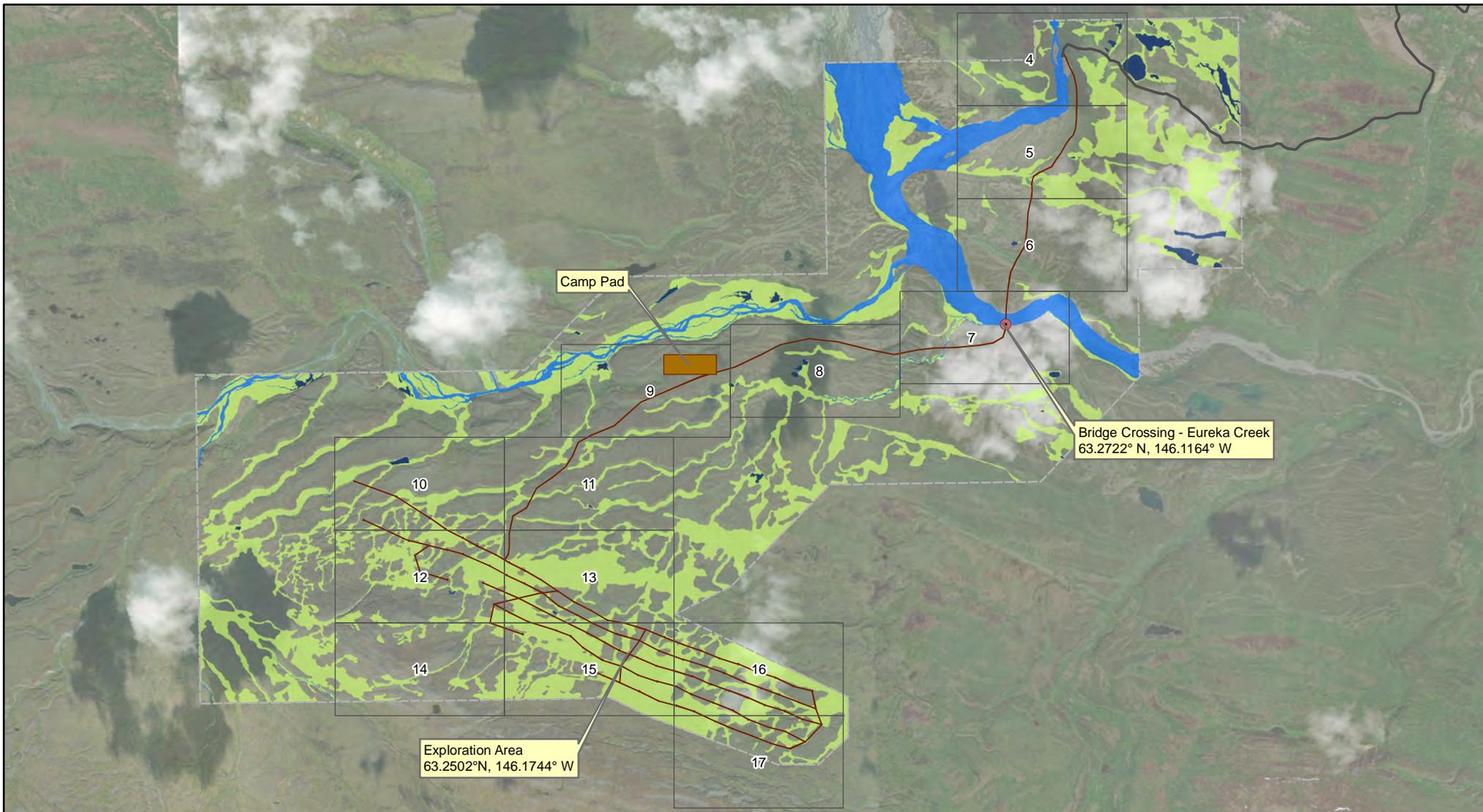
ATTACHMENT 1 FIGURES



- Bridge Crossing Location (Proposed)
- Drill Roads (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Rainy Creek Mining Road (Existing)
- Camp Pad (Proposed)
- Detail Map Grid
- Public Land Survey Section



Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
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Sheet: 1 of 23	January 2026

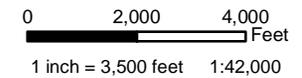


- Bridge Crossing Location (Proposed)
- Rainy Creek Mining Road (Existing)
- Detail Sheet
- Project Footprint (Proposed)

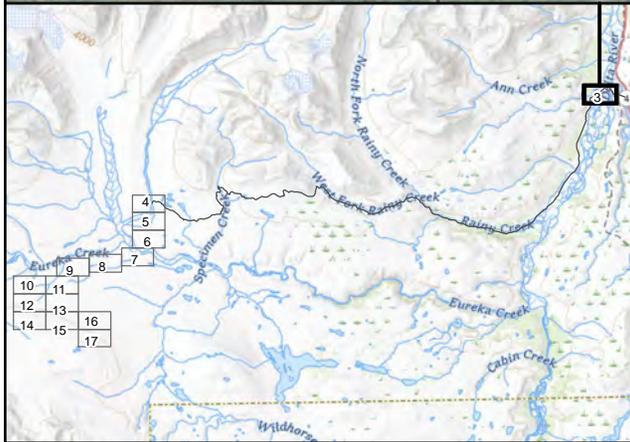
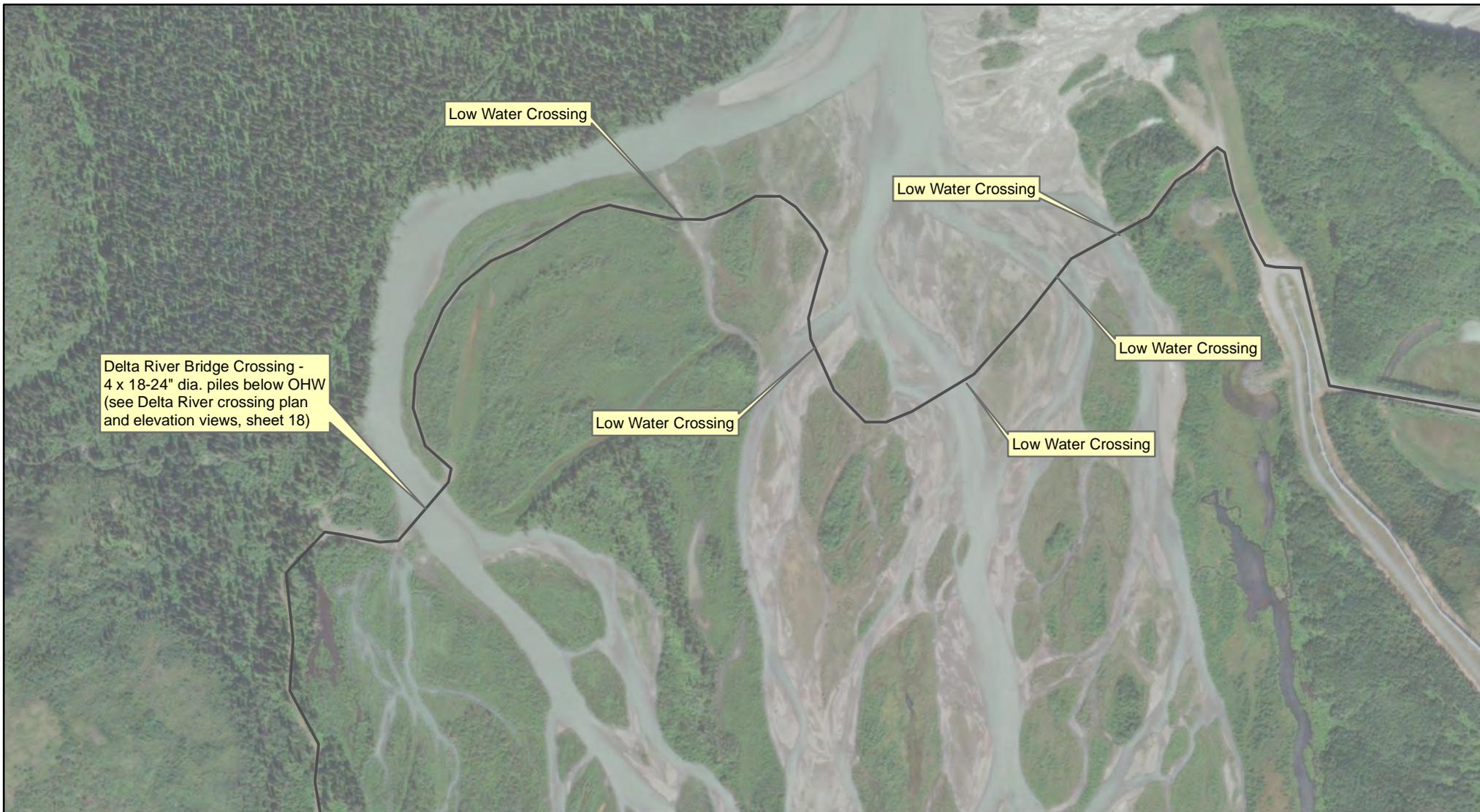
□ Aquatic Resources Study Area

Aquatic Resource Status

- Stream
- Waterbody
- Wetland

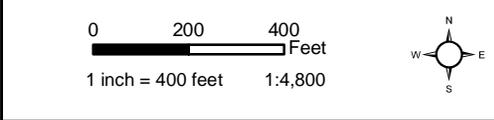


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Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
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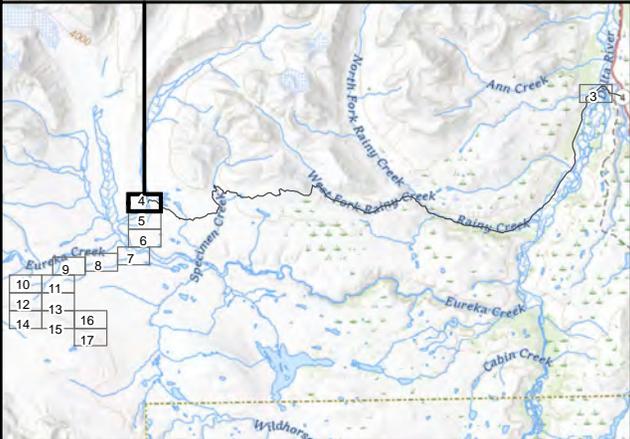


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

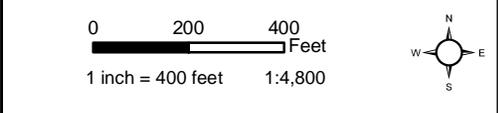
- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
- ~ Waterbody
- ~ Wetland



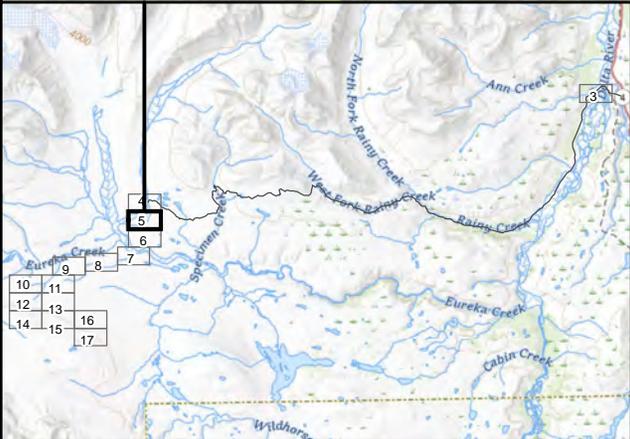
Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.3263	Long.: -145.7496
Sheet: 3 of 23	January 2026



- Aquatic Resource Impact
 - Rainy Creek Mining Road (Existing)
 - Drill Pad (Proposed)
 - Drill Road (Proposed)
 - Rainy Creek Mining Road Extension (Proposed)
 - Camp Pad (Proposed)
 - Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
 - ~ Waterbody
 - ~ Wetland

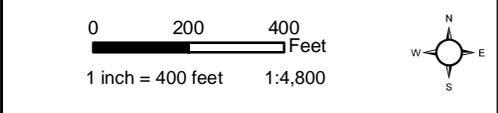


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Proposed Activity: Nikolai Project Mineral Exploration	
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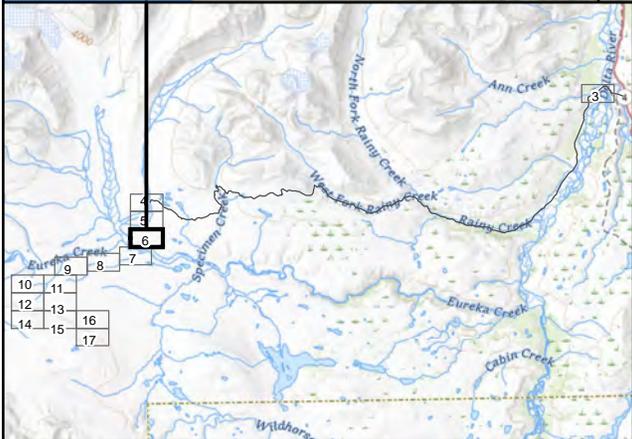
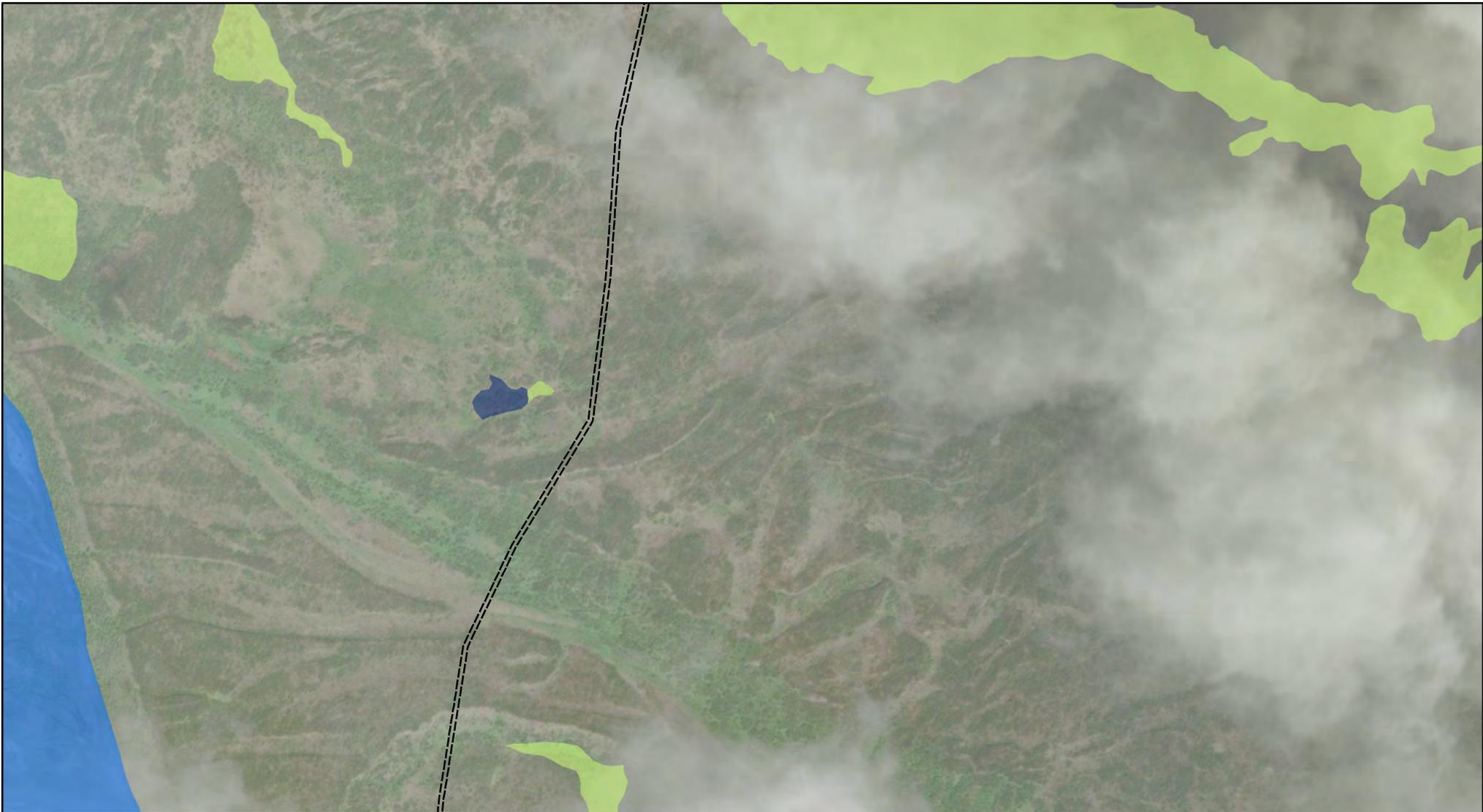


- Aquatic Resource Impact
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- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

- Aquatic Resources Study Area
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- ~ Wetland

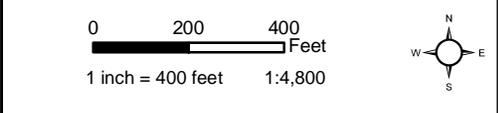


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Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
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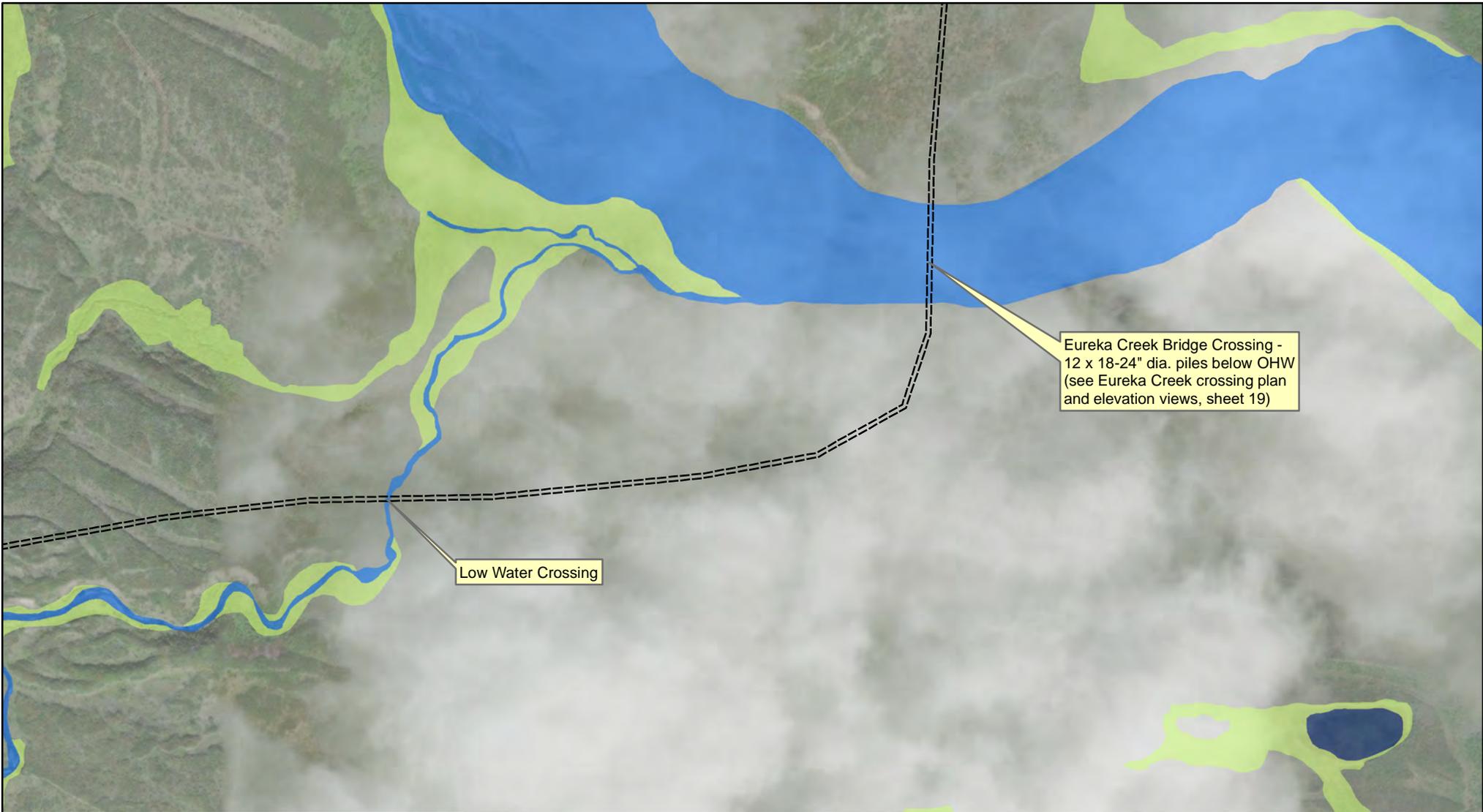


- Aquatic Resource Impact
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- Drill Pad (Proposed)
- Drill Road (Proposed)
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- Camp Pad (Proposed)

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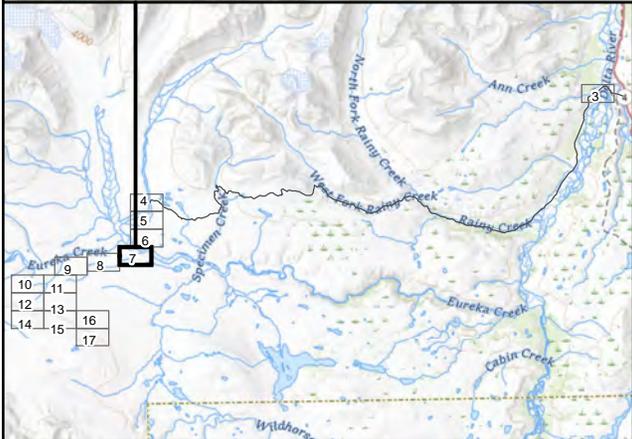


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Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
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Sheet: 6 of 23	January 2026



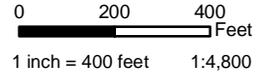
Eureka Creek Bridge Crossing -
12 x 18-24" dia. piles below OHW
(see Eureka Creek crossing plan
and elevation views, sheet 19)

Low Water Crossing

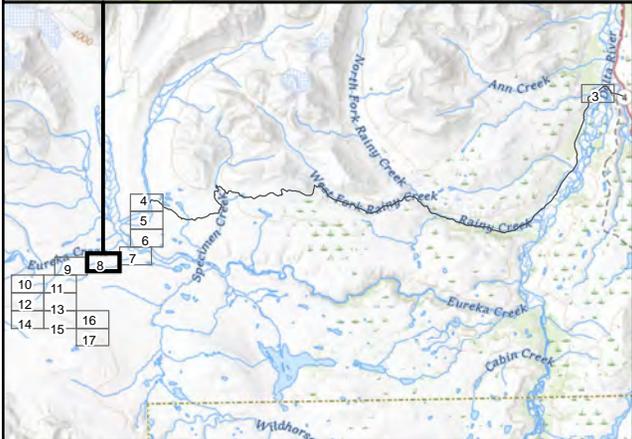
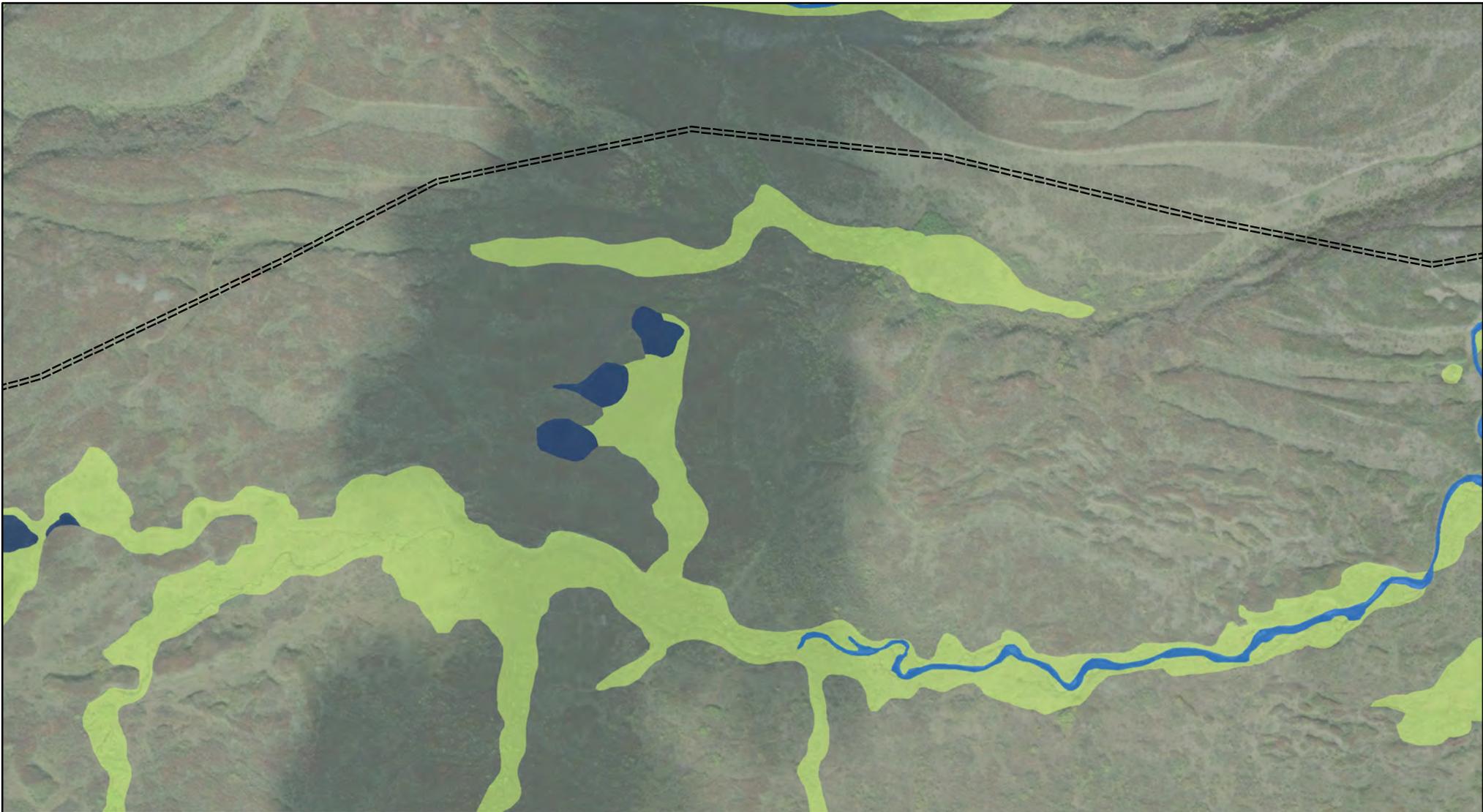


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
- ~ Waterbody
- ~ Wetland

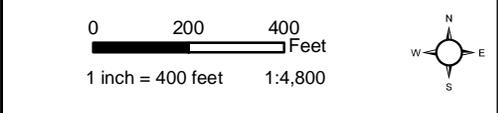


Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2710	Long.: -146.1197
Sheet: 7 of 23	January 2026

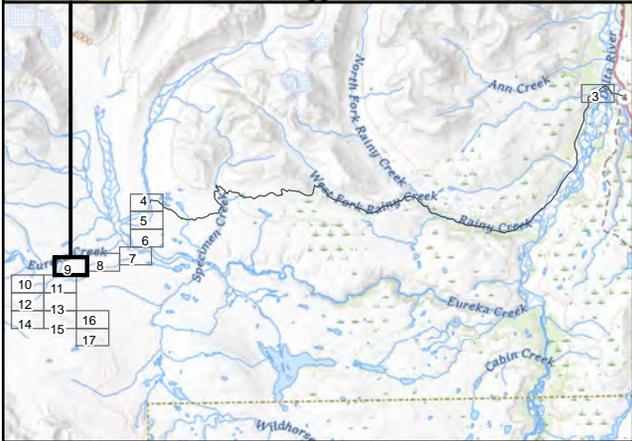


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
- ~ Waterbody
- ~ Wetland

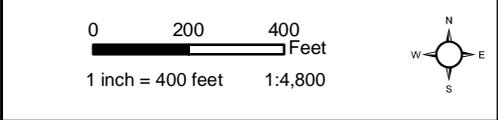


Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2689	Long.: -146.1455
Sheet: 8 of 23	January 2026

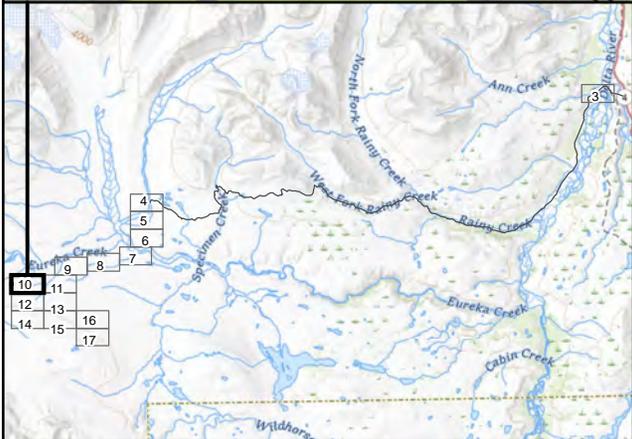


-  Aquatic Resource Impact
-  Rainy Creek Mining Road (Existing)
-  Drill Pad (Proposed)
-  Drill Road (Proposed)
-  Rainy Creek Mining Road Extension (Proposed)
-  Camp Pad (Proposed)

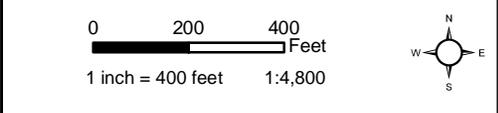
-  Aquatic Resources Study Area
- Aquatic Resource Status**
-  Stream
-  Waterbody
-  Wetland



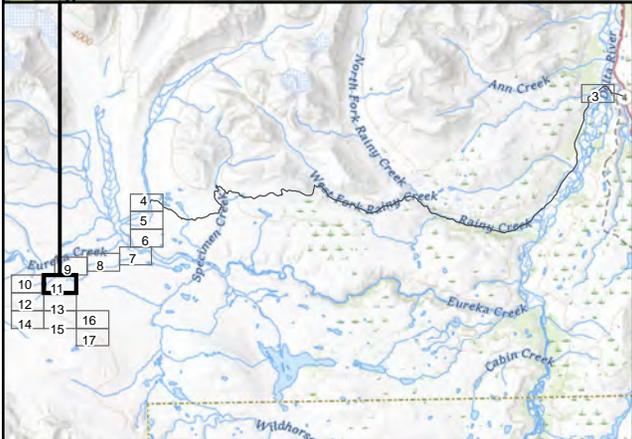
Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2677	Long.: -146.1713
Sheet: 9 of 23	January 2026



- Aquatic Resource Impact
 - Rainy Creek Mining Road (Existing)
 - Drill Pad (Proposed)
 - Drill Road (Proposed)
 - Rainy Creek Mining Road Extension (Proposed)
 - Camp Pad (Proposed)
 - Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
 - ~ Waterbody
 - ~ Wetland

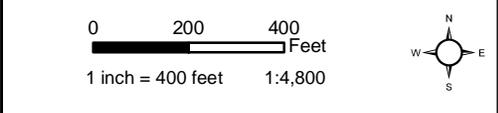


Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2615	Long.: -146.2059
Sheet: 10 of 23	January 2026

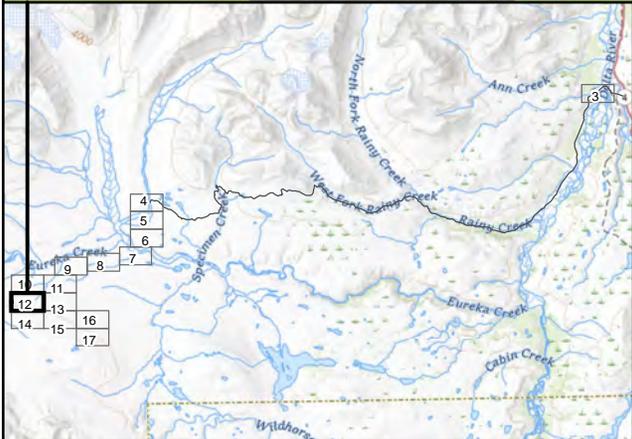


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
- ~ Waterbody
- ~ Wetland

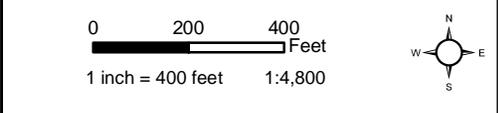


Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2614	Long.: -146.1802
Sheet: 11 of 23	January 2026

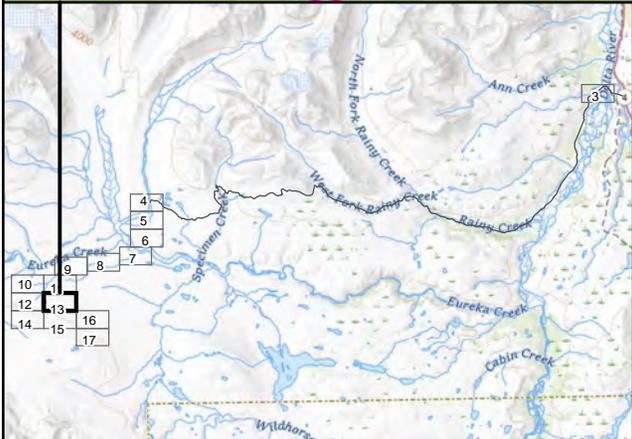


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

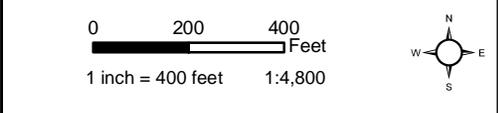
- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
- ~ Waterbody
- Wetland



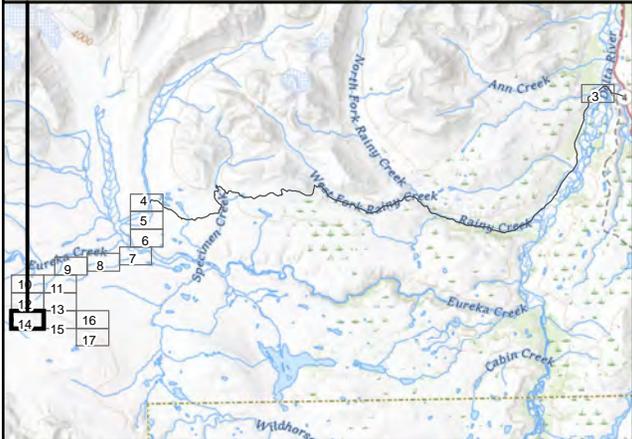
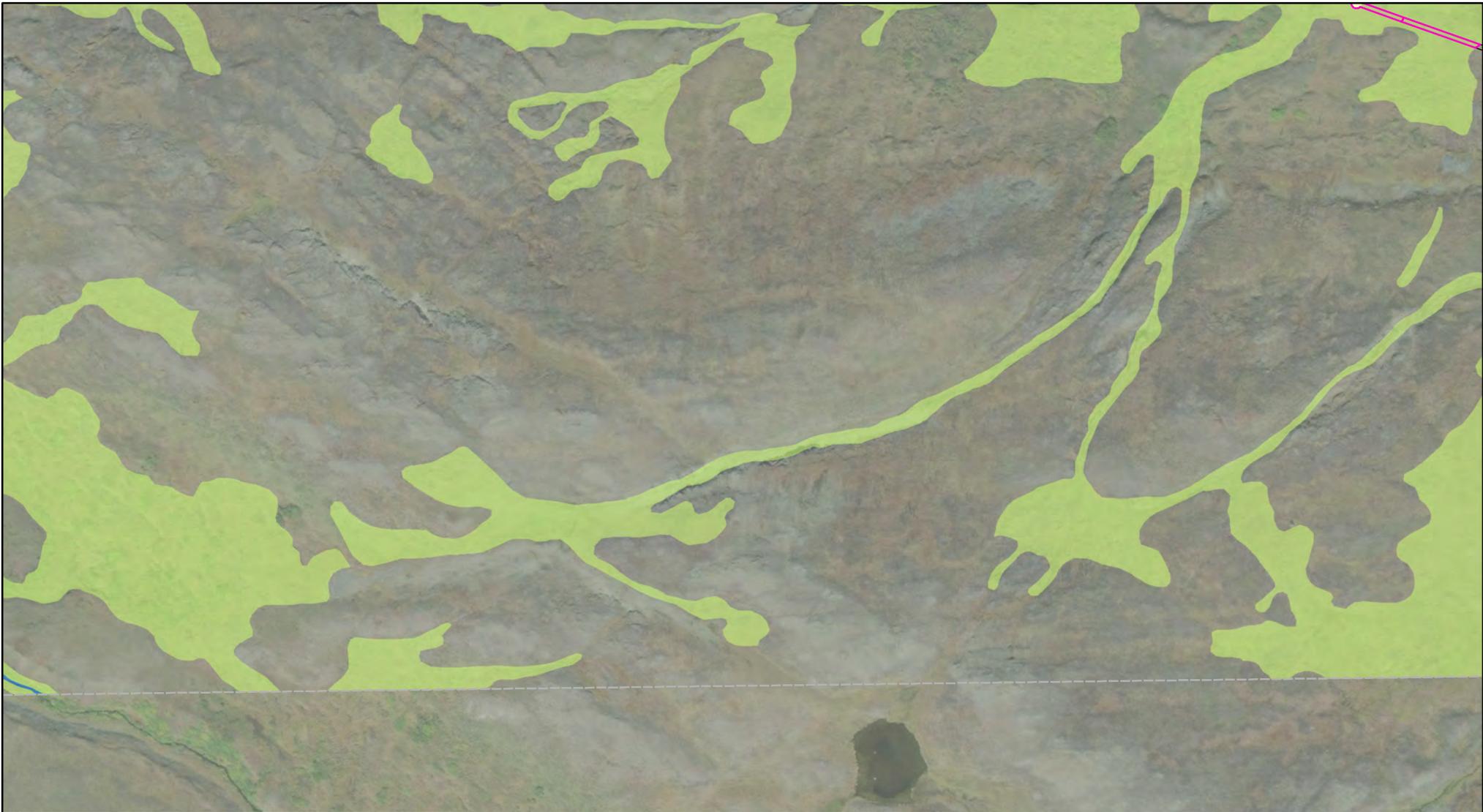
Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2552	Long.: -146.2060
Sheet: 12 of 23	January 2026



- Aquatic Resource Impact
 - Rainy Creek Mining Road (Existing)
 - Drill Pad (Proposed)
 - Drill Road (Proposed)
 - Rainy Creek Mining Road Extension (Proposed)
 - Camp Pad (Proposed)
 - Aquatic Resources Study Area
- Aquatic Resource Status**
- Stream
 - Waterbody
 - Wetland

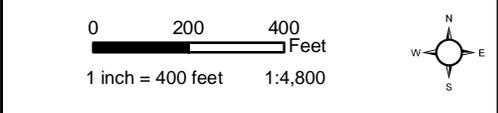


Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2550	Long.: -146.1803
Sheet: 13 of 23	January 2026

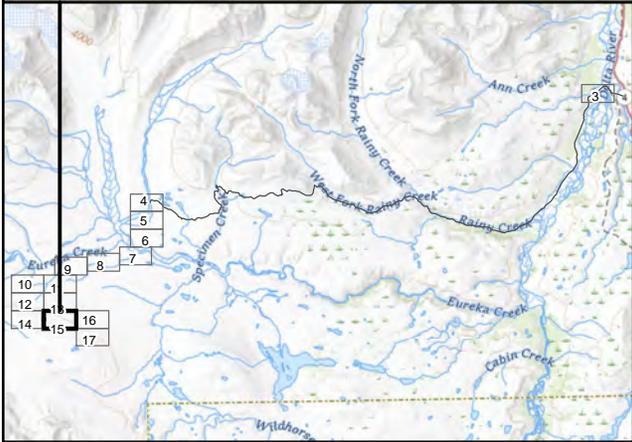


-  Aquatic Resource Impact
-  Rainy Creek Mining Road (Existing)
-  Drill Pad (Proposed)
-  Drill Road (Proposed)
-  Rainy Creek Mining Road Extension (Proposed)
-  Camp Pad (Proposed)

-  Aquatic Resources Study Area
- Aquatic Resource Status**
-  Stream
-  Waterbody
-  Wetland



Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2488	Long.: -146.2063
Sheet: 14 of 23	January 2026

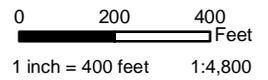


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

Aquatic Resources Study Area

Aquatic Resource Status

- ~ Stream
- ~ Waterbody
- ~ Wetland



Applicant: Alaska Energy Metals

File No.: POA-2025-00491

Waterway: Delta River

Proposed Activity: Nikolai Project Mineral Exploration

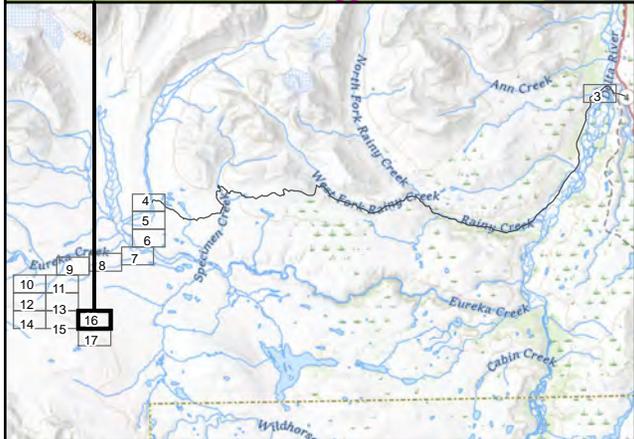
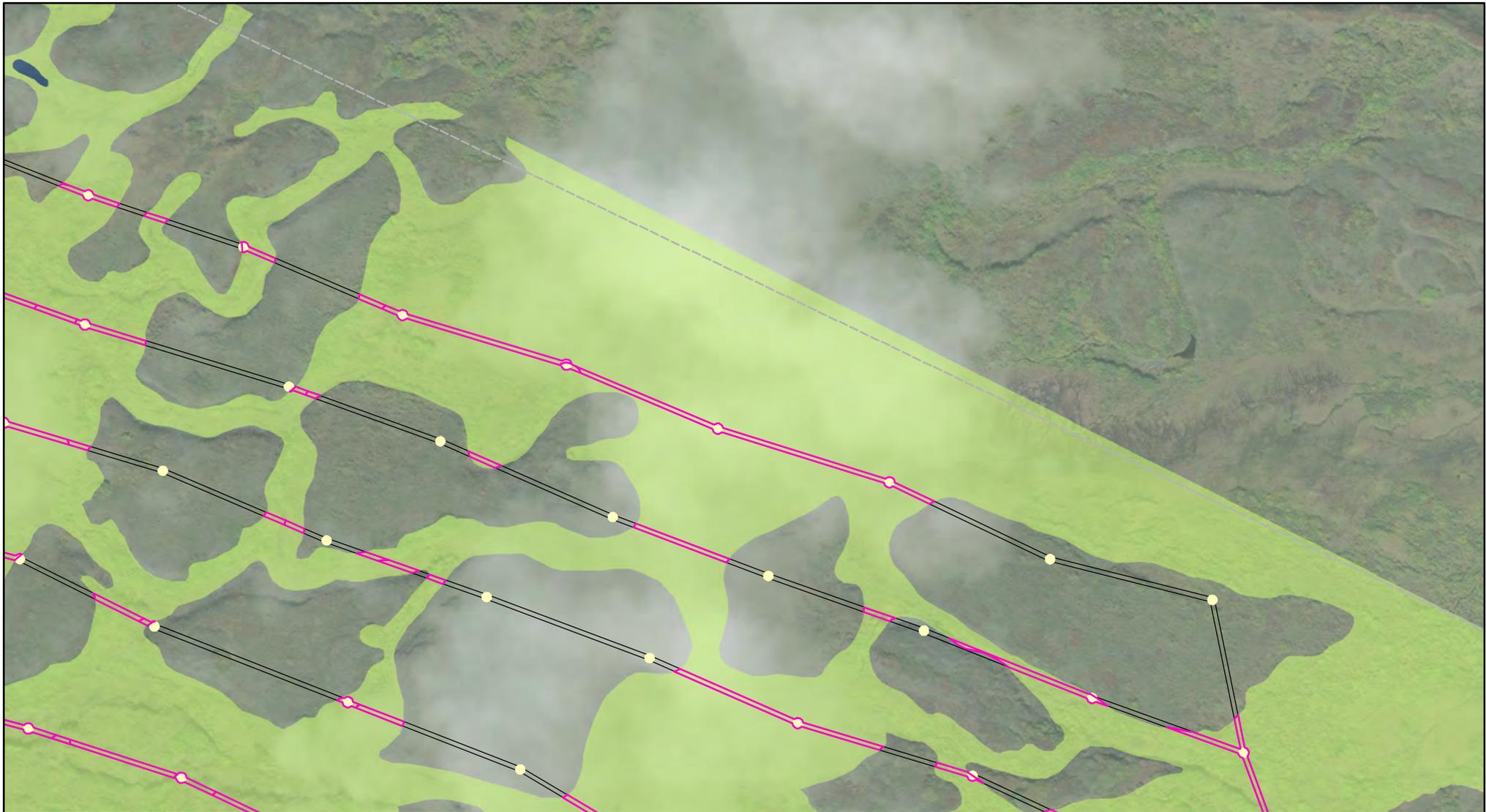
Fairbanks Merid. | T18S, R10E | T19S, R9E | T19S, R8E

Lat.: 63.2487

Long.: -146.1805

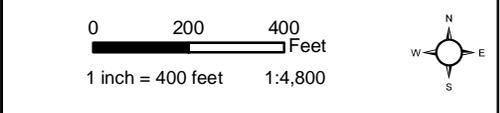
Sheet: 15 of 23

January 2026

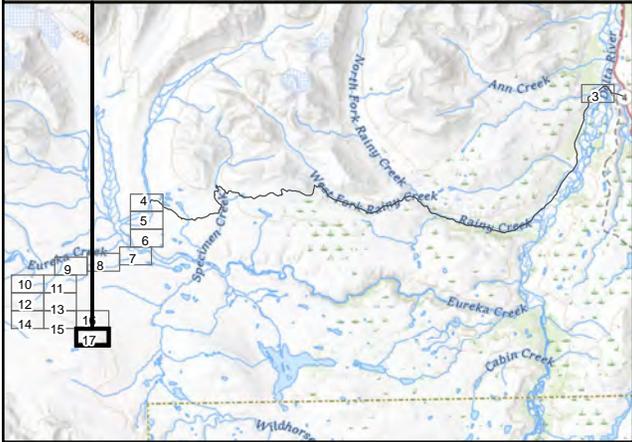
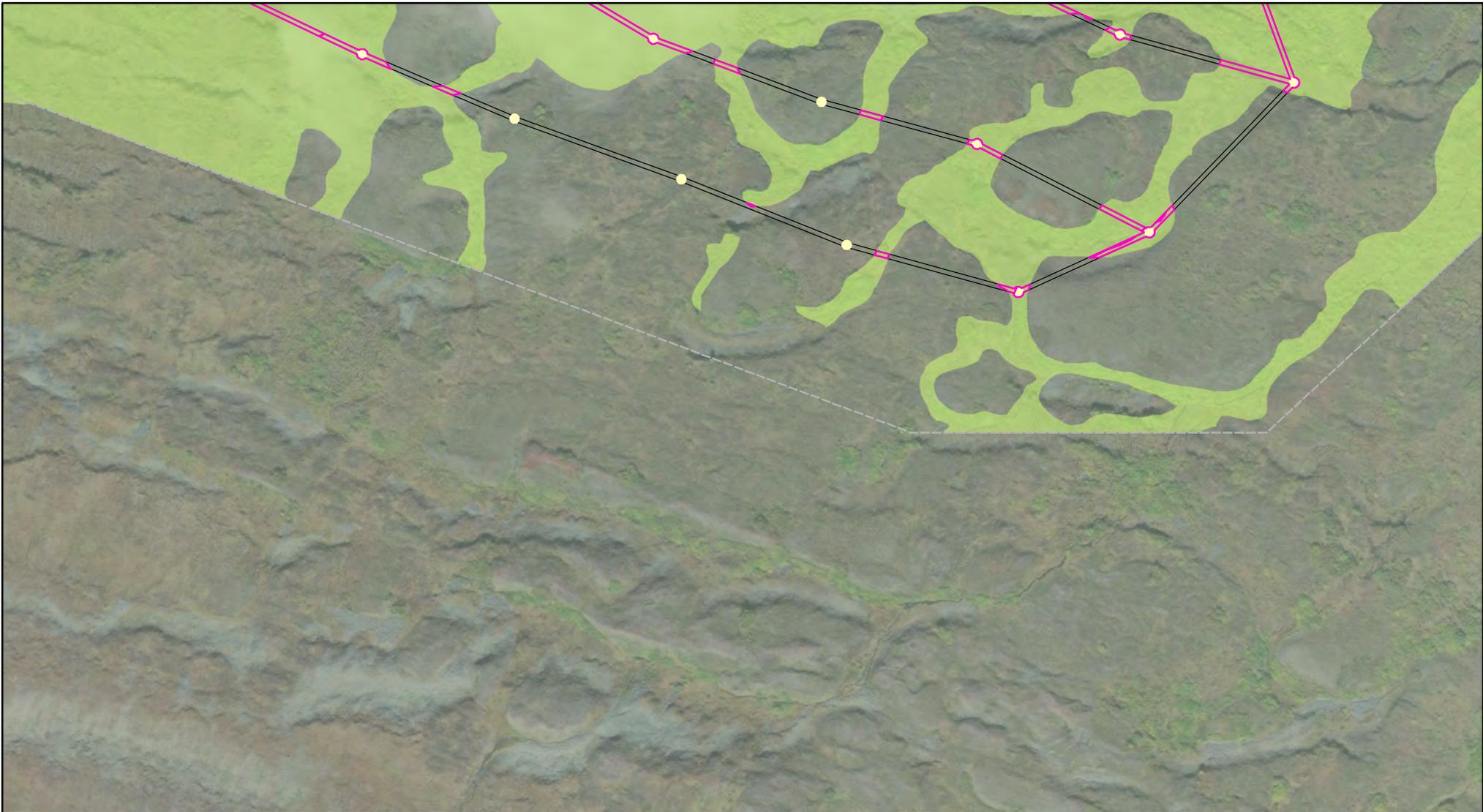


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
- ~ Waterbody
- ~ Wetland

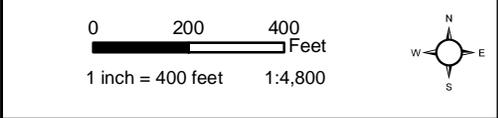


Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2485	Long.: -146.1547
Sheet: 16 of 23	January 2026

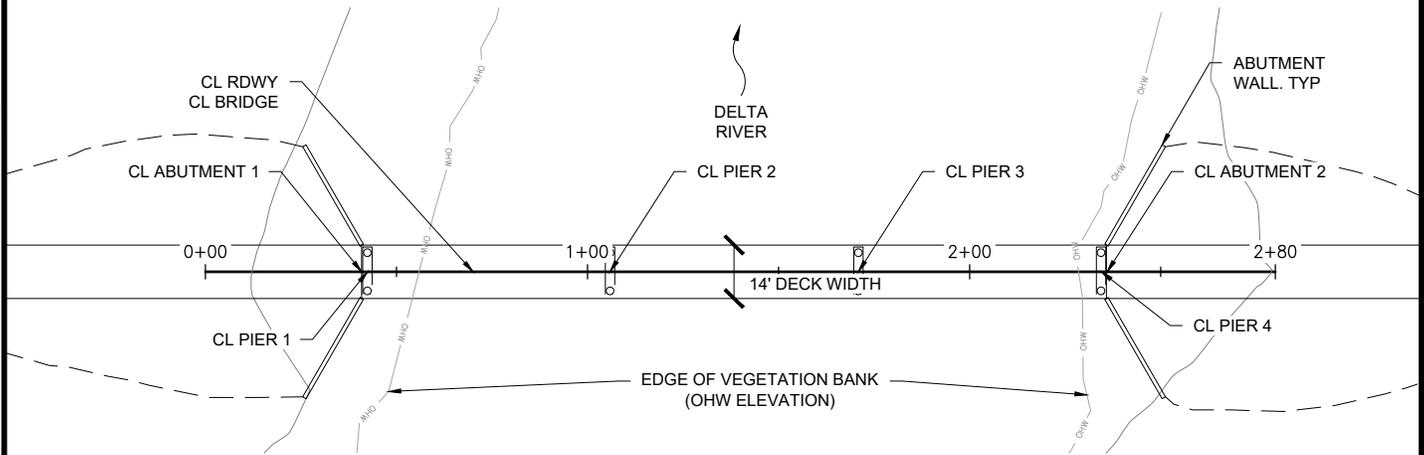
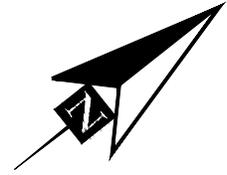


- Aquatic Resource Impact
- Rainy Creek Mining Road (Existing)
- Drill Pad (Proposed)
- Drill Road (Proposed)
- Rainy Creek Mining Road Extension (Proposed)
- Camp Pad (Proposed)

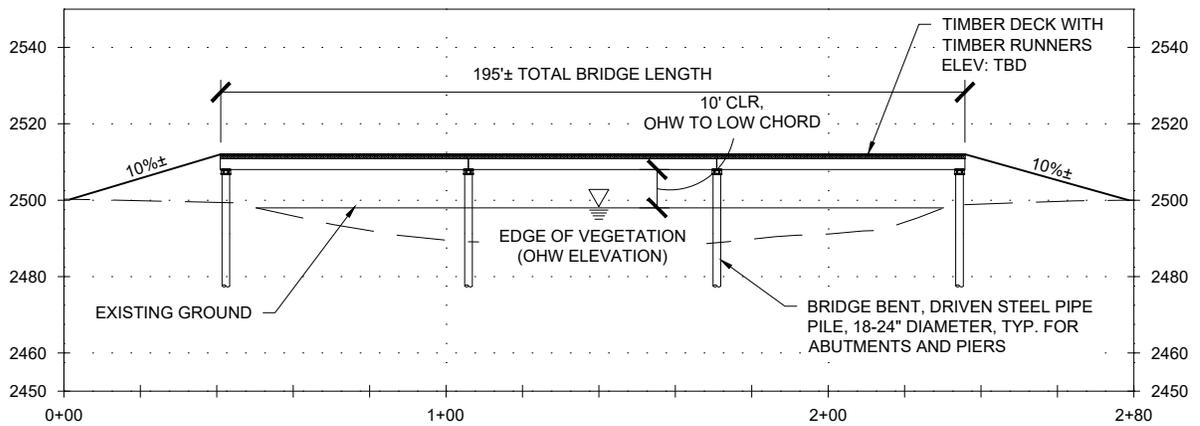
- Aquatic Resources Study Area
- Aquatic Resource Status**
- ~ Stream
 - ~ Waterbody
 - ~ Wetland



Applicant: Alaska Energy Metals	
File No.: POA-2025-00491	
Waterway: Delta River	
Proposed Activity: Nikolai Project Mineral Exploration	
Fairbanks Merid. T18S, R10E T19S, R9E T19S, R8E	
Lat.: 63.2422	Long.: -146.1549
Sheet: 17 of 23	January 2026



PLAN VIEW



ELEVATION VIEW

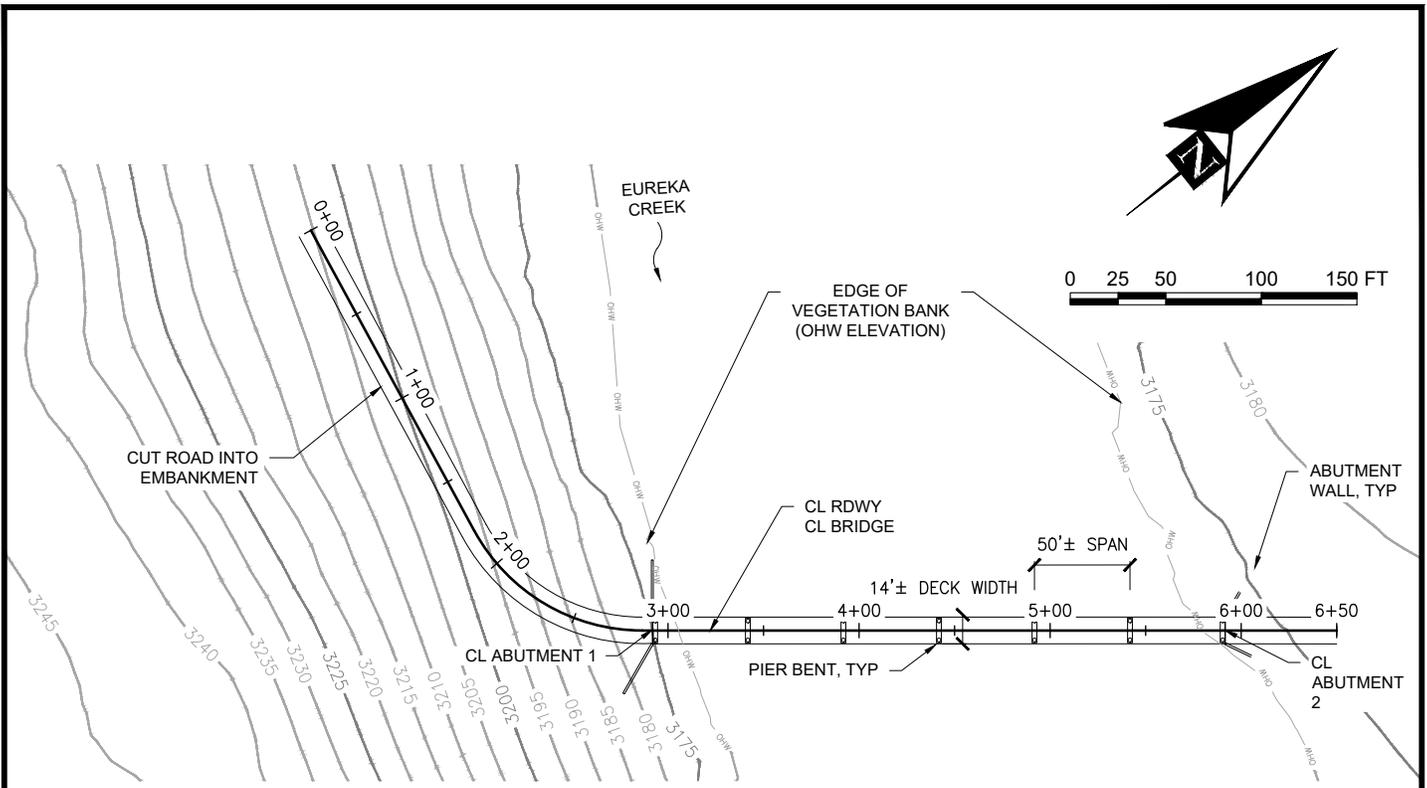
PILE QUANTITIES		
ITEM	ABOVE OHW	BELOW OHW
	QUANTITY (LPSM)	QUANTITY (LPSM)
BRIDGE PILES	4	4

PROJECT QUANTITIES						
ITEM	ABOVE OHW		BELOW OHW		PROJECT TOTAL	
	VOLUME (CY)	FOOTPRINT (ACRES)	VOLUME (CY)	FOOTPRINT (ACRES)	VOLUME (CY)	FOOTPRINT (ACRES)
STRUCTURAL FILL	1830	.17	0	0	1830	.17

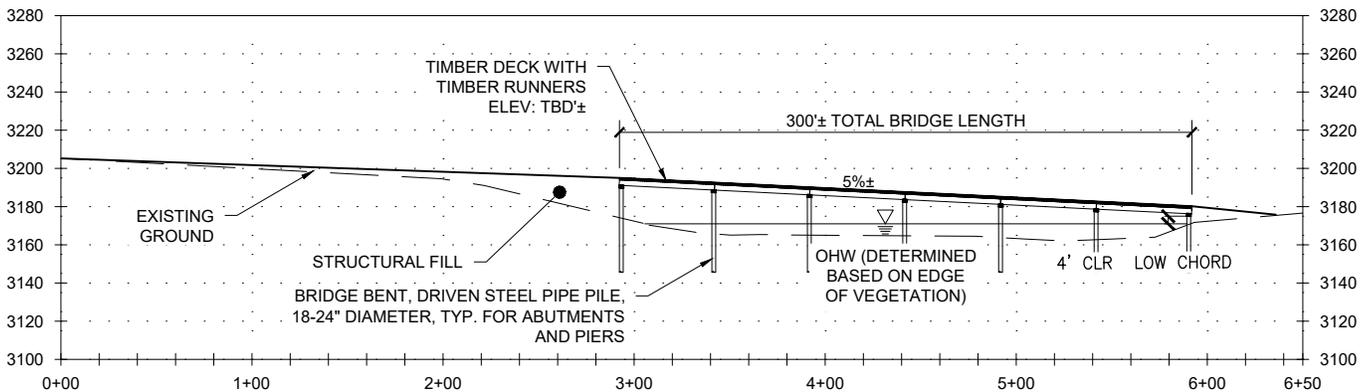
DELTA RIVER

NOTE: ALL INFO SHOWN HEREIN ARE BASED ON PUBLICALLY AVAILABLE LIDAR AND ARE INTENDED FOR PLANNING-LEVEL EVALUATION ONLY.

REFERENCE: POA-2025-00491
 APPLICANT: ALASKA ENERGY DEVELOPMENT CORP/POA
 PROPOSED: NIKOLAI PROJECT MINERAL EXPLORATION
 WATERWAY: DELTA RIVER, ALASKA
 SHEET **18 of 23** 1/14/2026



PLAN VIEW



ELEVATION VIEW

PILE QUANTITIES		
ITEM	ABOVE OHW	BELOW OHW
	QUANTITY (LPSM)	QUANTITY (LPSM)
BRIDGE PILES	2	12

PROJECT QUANTITIES						
ITEM	ABOVE OHW		BELOW OHW		PROJECT TOTAL	
	VOLUME (CY)	FOOTPRINT (ACRES)	VOLUME (CY)	FOOTPRINT (ACRES)	VOLUME (CY)	FOOTPRINT (ACRES)
STRUCTURAL FILL	1000	0.25	0	0	210	0.25
EXCAVATED CUT	1000	0.3	0	0	1120	0.3

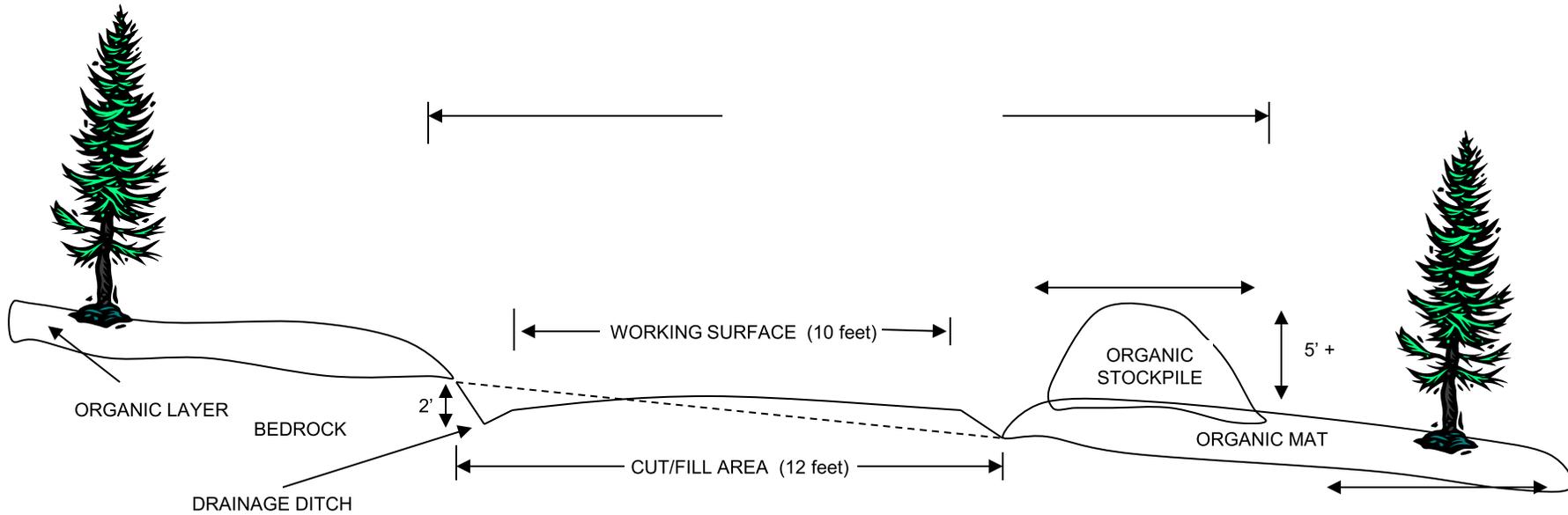
*EXCAVATED CUT USED AS ROAD FILL. NO IMPORT OR EXPORT OF MATERIAL IS PLANNED.

EUREKA CREEK

REFERENCE: POA-2025-00491
 APPLICANT: ALASKA ENERGY DEVELOPMENT CORP/POA
 PROPOSED: NIKOLAI PROJECT MINERAL EXPLORATION
 WATERWAY: EUREKA CREEK, ALASKA
 SHEET **19 of 23** 1/14/2026

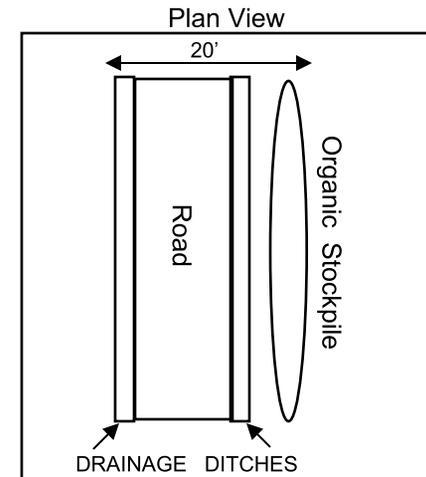
NOTE: ALL INFO SHOWN HEREIN ARE BASED ON PUBLICALLY AVAILABLE LIDAR AND ARE INTENDED FOR PLANNING-LEVEL EVALUATION ONLY.

Temporary Access Road Typical Section

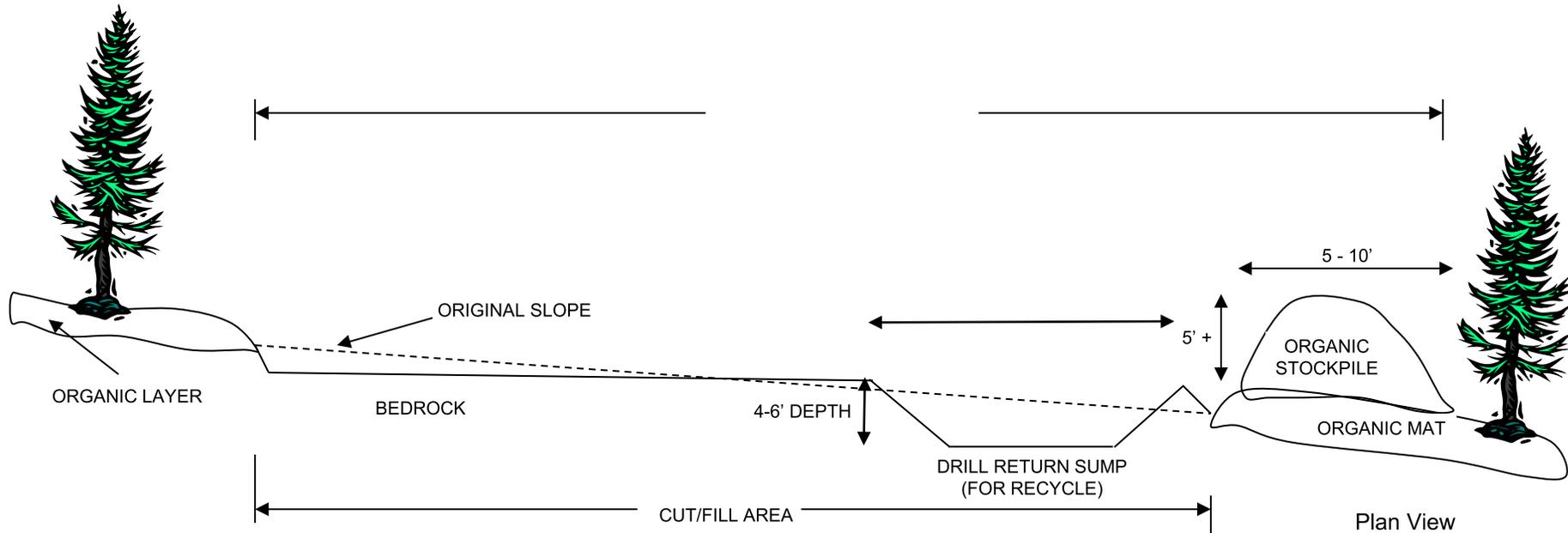


NOTES:

- ACCESS ROAD OPERATING SURFACE IS 12 FEET IN WIDTH.
- FILL WILL BE EITHER EXCAVATED BEDROCK FROM CUT PORTION OF ROAD OR GRAVEL.
- WHERE APPLICABLE, TOPSOIL AND ORGANIC MATERIALS WILL BE STOCKPILED ON DOWNGRADIENT SLOPE TO MINIMIZE IMPACTS TO ADJACENT WETLANDS.
- DURING RECLAMATION, ACCESS ROADS WILL BE RECONTOURED AND CAPPED WITH ORGANICS. IF AVAILABLE, CUT TREES WILL BE SCATTERED OVER THE RECONTOURED TRENCH TO PROMOTE REVEGETATION AND DISCOURAGE ACCESS.
- DEPTH OF CUT AND FILL WILL DEPEND ON SIDE SLOPE – ASSUME AVERAGE OF 2-FOOT CUT DEPTH ON UPSLOPE SIDE.
- RECLAMATION: ROADS WILL BE RECONTOURED WITH BEDROCK AND SOIL USED TO MAKE ROAD BED, THEN ORGANIC STOCKPILE WOULD BE DISTRIBUTED OVER AREA TO MITIGATE SHEET AND CHANNEL EROSION AND FOSTER REVEGETATION.

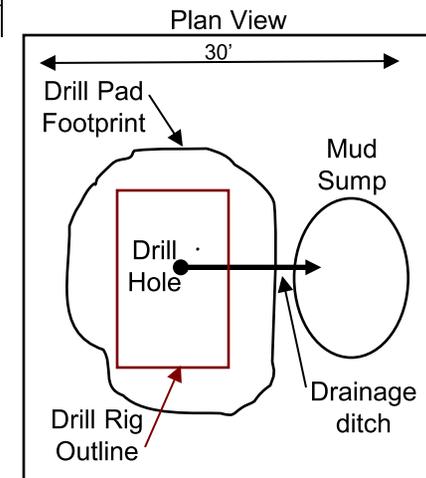


Bulldozer Supported Drill Pad Typical Section

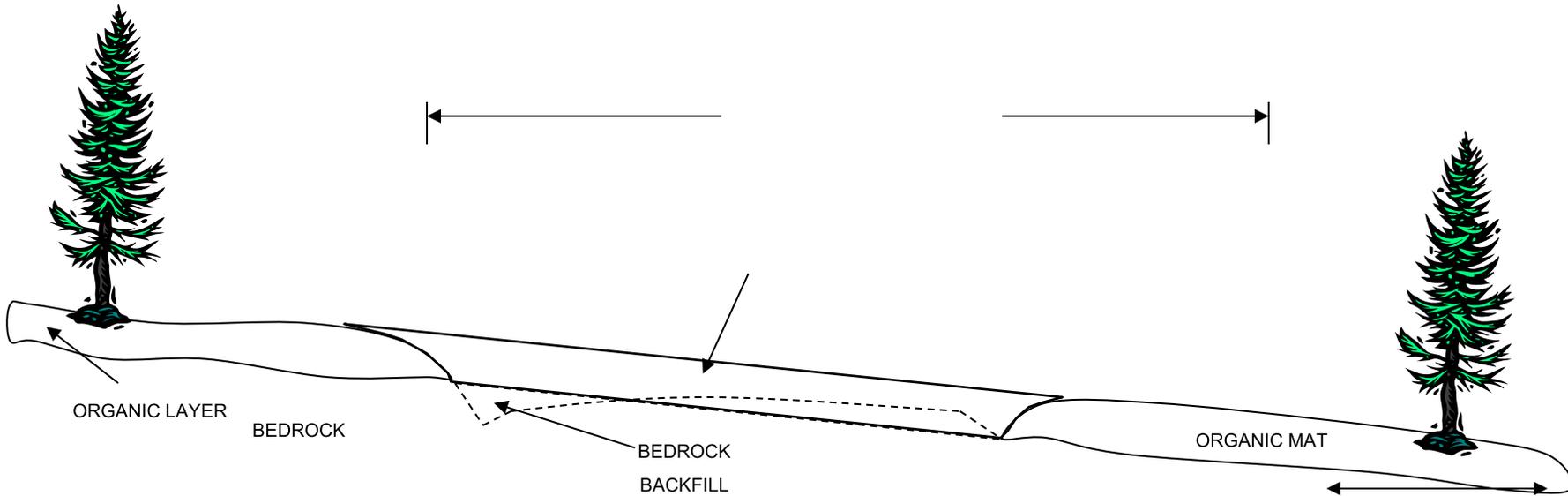


NOTES:

- DRILL PAD VARIES TO MAX OF 30 FEET DIAMETER.
- WHERE APPLICABLE, TOPSOIL AND ORGANIC MATERIALS WILL BE STOCKPILED ON DOWNGRADIENT SLOPE TO MINIMIZE IMPACTS TO ADJACENT WETLANDS.
- DURING RECLAMATION, DRILL PAD WILL BE RECONTOURED AND CAPPED WITH ORGANICS. IF AVAILABLE, CUT TREES WILL BE SCATTERED OVER THE RECONTOURED TRENCH TO PROMOTE REVEGETATION AND DISCOURAGE ACCESS.
- DEPTH OF CUT AND FILL WILL DEPEND ON SIDE SLOPE – ASSUME AVERAGE OF 2-FOOT CUT DEPTH ON UPSLOPE SIDE
- AVERAGE PAD SIZE 30' DIAMETER AND COVERING 0.03 ACRES
- DRILL WATER RECYCLE SUMP IS UNLINED AND AVERAGES 10 FEET IN DIAMETER AND 4-6 FEET DEEP, CONTAINING 34 CUBIC YARDS
- DIESEL FUEL FOR DRILL RIG AND SUPPORT EQUIPMENT IS STORED IN EACH UNIT'S ON-BOARD FUEL TANK AND EITHER 55-GAL DRUMS OR 110-GAL TANKS IN COMMERCIAL FUEL CONTAINMENT. THIS FUEL IS REPLENISHED FROM 100 GALLON TANKS IN DRILL SUPPORT PICKUP TRUCKS. MAXIMUM OF 330 GALLONS FUEL STORAGE ON-SITE.
- RECLAMATION: DRILL PADS AND SUMP WILL BE RECONTOURED WITH BEDROCK AND SOIL USED TO MAKE PAD, THEN ORGANIC STOCKPILE WOULD BE DISTRIBUTED OVER AREA TO MITIGATE SHEET AND CHANNEL EROSION AND FOSTER REVEGETATION.

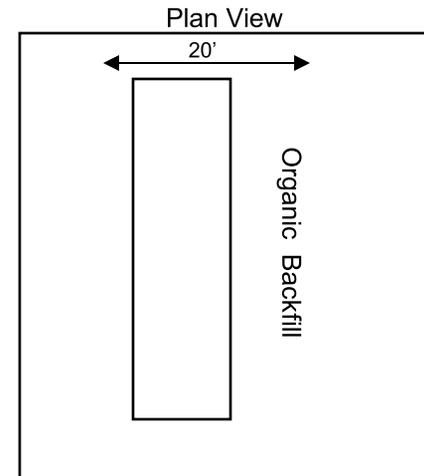


Reclaimed Temporary Access Road Typical Section

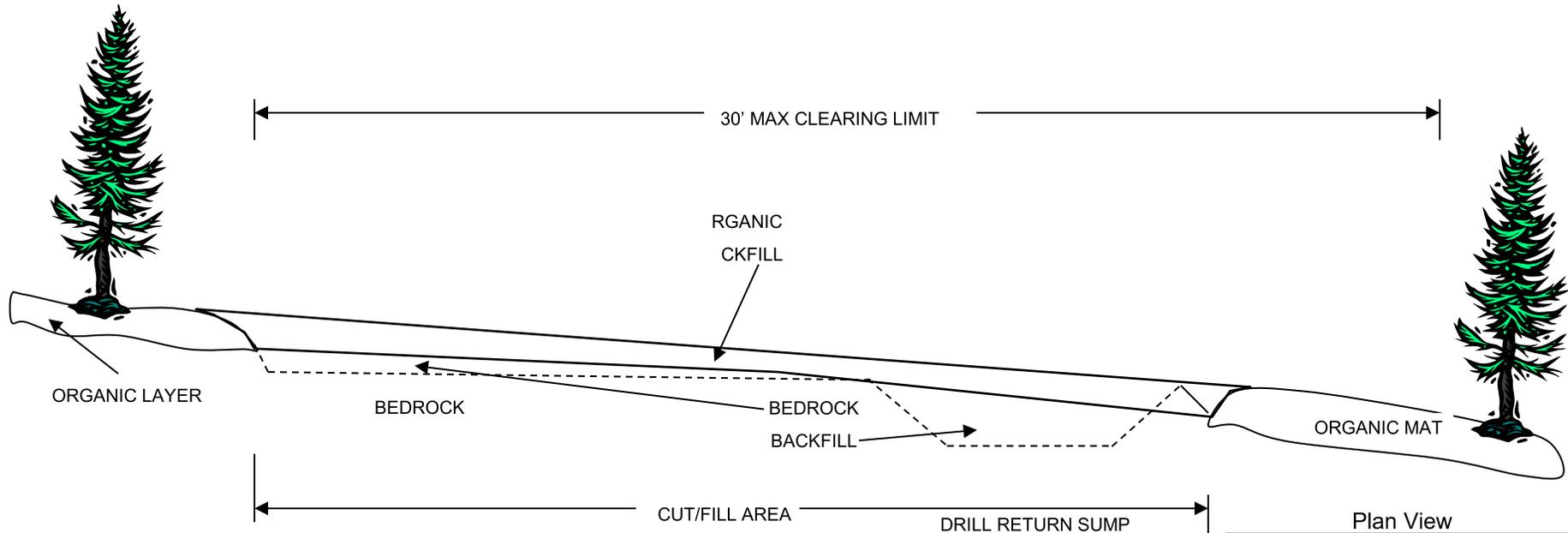


NOTES:

- ACCESS ROAD OPERATING SURFACE IS 12 FEET IN WIDTH.
- FILL WILL BE EITHER EXCAVATED BEDROCK FROM CUT PORTION OF ROAD OR GRAVEL.
- WHERE APPLICABLE, TOPSOIL AND ORGANIC MATERIALS WILL BE STOCKPILED ON DOWNGRADIENT SLOPE TO MINIMIZE IMPACTS TO ADJACENT WETLANDS.
- DURING RECLAMATION, ACCESS ROADS WILL BE RECONTOURED AND CAPPED WITH ORGANICS. IF AVAILABLE, CUT TREES WILL BE SCATTERED OVER THE RECONTOURED TRENCH TO PROMOTE REVEGETATION AND DISCOURAGE ACCESS.
- DEPTH OF CUT AND FILL WILL DEPEND ON SIDE SLOPE – ASSUME AVERAGE OF 2-FOOT CUT DEPTH ON UPSLOPE SIDE.
- RECLAMATION: ROADS WILL BE RECONTOURED WITH BEDROCK AND SOIL USED TO MAKE ROAD BED, THEN ORGANIC STOCKPILE WOULD BE DISTRIBUTED OVER AREA TO MITIGATE SHEET AND CHANNEL EROSION AND FOSTER REVEGETATION.



Reclaimed Bulldozer Supported Drill Pad Typical Section



NOTES:

- DRILL PAD VARIES TO MAX OF 30 FEET DIAMETER.
- WHERE APPLICABLE, TOPSOIL AND ORGANIC MATERIALS WILL BE STOCKPILED ON DOWNGRADIENT SLOPE TO MINIMIZE IMPACTS TO ADJACENT WETLANDS.
- DURING RECLAMATION, DRILL PAD WILL BE RECONTOURED AND CAPPED WITH ORGANICS. IF AVAILABLE, CUT TREES WILL BE SCATTERED OVER THE RECONTOURED TRENCH TO PROMOTE REVEGETATION AND DISCOURAGE ACCESS.
- DEPTH OF CUT AND FILL WILL DEPEND ON SIDE SLOPE – ASSUME AVERAGE OF 2-FOOT CUT DEPTH ON UPSLOPE SIDE
- AVERAGE PAD SIZE 30' DIAMETER AND COVERING 0.03 ACRES
- DRILL WATER RECYCLE SUMP IS UNLINED AND AVERAGES 10 FEET IN DIAMETER AND 4-6 FEET DEEP, CONTAINING 34 CUBIC YARDS
- DIESEL FUEL FOR DRILL RIG AND SUPPORT EQUIPMENT IS STORED IN EACH UNIT'S ON-BOARD FUEL TANK AND EITHER 55-GAL DRUMS OR 110-GAL TANKS IN COMMERCIAL FUEL CONTAINMENT. THIS FUEL IS REPLENISHED FROM 100 GALLON TANKS IN DRILL SUPPORT PICKUP TRUCKS. MAXIMUM OF 330 GALLONS FUEL STORAGE ON-SITE.
- RECLAMATION: DRILL PADS AND SUMP WILL BE RECONTOURED WITH BEDROCK AND SOIL USED TO MAKE PAD, THEN ORGANIC STOCKPILE WOULD BE DISTRIBUTED OVER AREA TO MITIGATE SHEET AND CHANNEL EROSION AND FOSTER REVEGETATION.

