

FAIRBANKS FIELD OFFICE Regulatory Division (1145) CEPOA-RD 1046 Marks Road Fort Wainwright, Alaska 99703

Public Notice of Application for Permit

PUBLIC NOTICE DATE: September 30, 2025

EXPIRATION DATE: October 31, 2025

REFERENCE NUMBER: POA-2018-00210

WATERWAY: Graphite Creek

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

All comments regarding this public notice should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the project manager's email as listed below or to regpagemaster@usace.army.mil. All comments should include the public notice reference number listed above.

All comments should reach this office no later than the expiration date of this public notice to become part of the record and be considered in the decision. Please contact Greg Mazer at (907) 347-9059, toll free from within Alaska at (800) 478-2712, or by email at Gregory, i.mazer@usace.army.mil if further information is desired concerning this public notice.

APPLICANT: Graphite One LLC, 471 W 36th Ave., Suite 100, Anchorage, AK 99503

AGENT: Simon Wigren, HDR, Inc.

<u>LOCATION</u>: The project site including the mine site and the 17.3-mile access road is located in 34 sections within the Kateel River Meridian; the proposed mine is at Latitude 65.0380° N., Longitude 165.5399° W., 37 miles north of Nome and 28 miles east-southeast of Teller, Alaska.

<u>PURPOSE</u>: The applicant's purpose is to mine graphite from mineral leases on State of Alaska land and process the graphite into commercially viable ore concentrate for transport to the Port of Nome via a new 17.3-mile gravel access road and the existing Seward Peninsula public

road system. The ore concentrate would be shipped out of Alaska for further processing and manufacturing of Coated Spherical Graphite, which would supply material needed for electric vehicle lithium-ion batteries and energy storage as well as other high-grade graphite products.

PROPOSED WORK: The proposed project would permanently discharge approximately 16,400 cubic yards (cy) of fill material into 2.21 acres of waters including wetlands that have been asserted by the applicant as jurisdictional and requiring permitting under Section 404 of the Clean Water Act. The project would also incur temporary impacts to 0.39 acres of applicant-determined jurisdictional waters. The total extent of permanent impacts to wetlands and other waters would be 414.68 acres and the total extent of temporary impacts to wetlands and other waters would be 1.18 acres. In addition, approximately 12,440 linear feet of stream would be diverted into artificially constructed channels away from the mine site. The total extent of jurisdictional waters that would be impacted by the discharge of fill is unknown at this time and will be determined through completing an approved jurisdictional determination.

Mine Site

Construction of the mine pit and facilities would involve the permanent discharge of fill into 0.21 acres of waters (predominantly streams) and 0.13 acres of wetlands asserted by the applicant as jurisdictional. A total of 381.2 acres of waters including wetlands would be permanently eliminated within the 1,176.0-acre footprint of the mine site. A total of 0.12 acres of applicant-asserted jurisdictional waters would be temporarily filled via construction of the access ramp for the construction staging pad along the edge of the Imuruk Basin.

The mine site would include the mine pit, a processing plant, a waste management facility (WMF), a water treatment facility, electrical power generation and distribution, fuel storage and dispensing, explosive and emulsion storage, a helipad, and roads (not including the access road). Additionally, it would include administration offices, warehousing, a metallurgical lab, a crusher, a mill, tailing filtration and thickening, concentrate loading, a truck shop, parts storage, a wastewater (sewage) treatment plant, a drinking water well, emergency accommodations for employees, concentrate container storage, and emergency response. The mine would operate 365 days per year, 24 hours per day.

Mining would occur via open pit mining using conventional drill, blast, load, and haul to deliver ore to a crusher where the ore process begins. The mine is designed to deliver up to 11,000 tons of ore daily. With a life-of-mine strip ratio of 3.2:1, on average, approximately 35,400 tons of waste would also be handled daily. The overall size and design of the pit was based on open pit economic optimization and geotechnical considerations.

Mine facilities would be shipped as modularized units to the Port of Nome for transport to the mine. The facility modules and mine construction equipment would be brought to the mine either via the new access road or barged to the construction staging pad via the Imuruk Basin.

The buildout of the mine site would occur in three distinct development phases. Phase 1 would occur within the first five years; Phase 2 would occur from Years 6 through 12; Phase 3 would occur from Years 13 through closure. These phases are closely linked to the water management strategy and are intended to minimize contact water generation throughout the

life of the mine. The largest infrastructure element, and the one driving all others, would be the WMF. The first phase of the WMF, mill facility construction and initial pit development, would involve the most land disturbance.

To reduce the quantity of contact water and reduce the need for pit dewatering, Graphite Creek would initially be diverted downslope (north) of the mine pit during the establishment of the first phase of the WMF. The surface diversion would take the flow from Graphite Creek to the Glacier Canyon Creek channel west of the WMF final footprint. Once the mine pit progresses to Graphite Creek, an upstream diversion structure would be constructed to redirect creek flows around the pit and all operational areas into Glacier Canyon Creek to the west. North of the pit, Lower Graphite and Ruby Creeks would be conveyed in a diversion that would flow south and west around the WMF. Glacier Canyon Creek would flow into this diversion with Lower Graphite and Ruby Creeks, then flow northward into the original Glacier Canyon Creek channel north of the mine facilities. A total of 12,440 feet of stream would be diverted at full buildout. Additionally, five culvert crossings would be established for roads within the mine site.

The processing plant would use crushing, grinding, and flotation processes. A jaw crusher would reduce ore, which would then be conveyed to a covered stockpile. The crushed ore would then be conveyed to a semi-autogenous grinding mill. Ground ore would pass through seven stages of flotation and three stages of regrinding, producing a 95 percent pure graphite concentrate. The concentrate would be dewatered and dried before being placed in fully enclosed shipping containers for truck transport to Nome.

A process water pond would support operational needs at the mill and capture runoff from the mill area. Sediment basins would be constructed to settle out sediments in the runoff from the mill area before it enters the process water pond. The process water pond would be hydraulically linked with the water treatment ponds to maintain the balance between re-use and treatment.

The waste management facility would store both waste rock material (non-ore) from the pit and tailings (coarse and fine) produced from the milling operation. The fine, wet tailings would be stored in a conventional tailings pond that would be constructed within the WMF. The dam for the tailings pond would be built in stages using compacted waste rock material and coarse tailings. Upon filtering and drying to 8-12 percent moisture content, the coarse tailings would be co-mingled with waste rock as dry-stack storage. Co-mingling and compaction would occur in the WMF using heavy equipment, such as dozers, roller compactors, and graders. The objective of the co-mingling strategy is to create blended, compacted, low-permeability material. Placement of co-mingled material over the life of the operation would result in a very large, stabilizing buttress adjacent to the tailings dam. The WMF would be constructed in multiple stages, and contemporaneous closure activities would be used wherever practical.

The tailings pond would be constructed during the initial stage of WMF development. The elevation of the dam would be raised over time, as operations progress and more tailings storage is needed. Wet tailings would be pumped from the processing pad to the tailings pond

by a pipeline. Approximately 25 to 30 percent of the milled material is expected to be diverted to the wet tailings pond for disposal.

A high-density polyethylene (HDPE) or clay basin liner would be installed under the WMF prior to material placement. Additionally, the inside slope of the tailings dam would be lined. An underdrain system would be installed with the WMF. This system would assist in transporting water that drains through the co-mingled material to collection sumps that would deliver this water to the water management ponds. Water from the collection pond would either be recycled for use at the mill or treated for discharge.

Water management facilities would include water management ponds, a water treatment plant (WTP), diversion ditches, contact water ditches, stormwater settling structures, and a diversion structure for Graphite Creek above the mine pit. Water management ponds would be used to store water that runs off from within the mine (contact water) and settle sediments prior to recycling or treatment. The WTP would treat all contact water to State of Alaska standards prior to discharging to Glacier Canyon Creek. The WTP would use precipitation, flocculation, settling, filtration, and reverse osmosis processes prior to discharge. Monitoring wells would be installed downgradient of the WTP and within Glacier Canyon Creek to detect any changes in water quality that may result from the mining operation.

Diversion ditches along the mine site perimeter would route surface runoff away from site facilities so that surface water remains unaffected by project activities. Graphite Creek would require diversion in Year 1 of mine operations to allow for the tailings pond construction and once again in Year 5 when the pit footprint encroaches on this non-fish bearing stream. A diversion structure would be constructed uphill from the mine site to convey water in a pipeline that would discharge the flow into Glacier Canyon Creek west of the pit footprint. With the exception of supporting very few slimy sculpin (*Cottus cognatus*) on an intermittent basis, Glacier Canyon Creek is also non-fish bearing and is the natural ultimate discharge point of Graphite Creek. Small sections of other streams in the mine footprint would also be diverted away from the mine and into artificially constructed channels that would lead to natural channels downstream.

Due to lack of other power sources within the region, diesel powered generators would be used to provide electrical power at the mine site. Two 7.5-megawatt (MW) generators would operate to supply the 12.5 MW of nominal electrical operating load. A third 7.4-MW generator would be installed as a standby spare for a total 22.5 MW of generating power installed. These generators would be located on the same pad as the processing plant.

Fuel for power generation, concentrate drying, and mobile equipment would be trucked from a bulk fuel tank farm in Nome. Two weeks of fuel storage would be located at the Project site in a double-walled, 850,000-gallon, steel tank. The fuel tank would be located within a containment structure adjacent to the power generation facility. A fueling station and 4,000-gallon gasoline tank for light vehicles would be co-located in the containment.

High- and low-explosive materials would be stored on a gravel pad along the main mine haul road connecting the pit with the WMF on pads built specifically for this purpose. The

magazines would be situated a sufficient distance from occupied facilities to meet regulatory safety requirements. The two magazines would be adequately barricaded by berms, isolated from mine traffic, and properly located away from one another to provide the required physical separation distance.

Construction Staging Pad

A 5-acre gravel staging pad and temporary access ramp would be constructed near Imuruk Basin to support mine site construction, mine facility staging and transport, access road construction, and bulk ore sample shipment. This staging pad and temporary ramp would be developed in coordination with the landowner, Bering Straits Native Corporation, who would lease the site to Graphite One for use during the Project construction phase. As mentioned above, a total of 0.12 acres of applicant-asserted jurisdictional waters would be temporarily filled via construction of the access ramp.

The gravel fill to construct the staging pad would likely be sourced from Brevig Mission and brought to the site by barge via the Imuruk Basin. The temporary ramp would be constructed using mats and clean gravel to allow vehicles equipped with low-pressure tires to transport the construction equipment and modules to the staging pad. It is expected that the ramp would be in place for less than three years. Once the construction equipment and mine facility modules are transported to the mine, the temporary ramp would be removed. The area within the temporary ramp would be re-contoured to preconstruction conditions.

Graphite One would use a shallow-draft barge or landing craft, which can be moored on the shoreline of Imuruk Basin, to offload and store construction equipment and modularized mine facilities during the open-water season. Equipment and facility modules would be staged on the gravel pad until winter, when an approximately four-mile long ice and snow road could be constructed to transport these materials to the mine. The staging pad would also be used to store a bulk ore sample from the mine until the following open water season for barging to the Port of Nome.

Access Road

Construction of the access road would involve the permanent discharge of gravel fill into 1.27 acres of waters (predominantly rivers and streams) and 0.20 acres of wetlands asserted by the applicant as jurisdictional. A total of 33.5 acres of waters including wetlands would be permanently eliminated within the 568.2-acre footprint of the access road and associated material sites. A total of 0.27 acres of applicant-asserted jurisdictional waters would be temporarily filled via construction of the temporary bridge access roads and placement of the temporary piles for trestles during bridge construction.

The access road would begin at approximately Milepost 30 of Kougarok Road, north of Nome, and traverse through Mosquito Pass to the mine site. The access road would be used to transport graphite concentrate to the existing road system in custom, polymer-lined, 20-foot shipping containers with a net capacity of 21 tons. A single truck would haul two graphite concentrate containers at a time. The access road has been designed to meet American Association of State of Highway Traffic Officials (AASHTO) standards for design speed or

specialized carrier requirements for oversized loads. The road would be built across land owned by the Alaska Department of Natural Resources (ADNR) and may be closed to the public for vehicle access. ADNR would make the final determination on public vehicle access and use of the roadway.

The access road surface would be 28 feet wide to accommodate two-way traffic, with side slopes that range from 2:1 to 3:1 (horizontal to vertical). To insulate the permafrost and thereby construct a stable road, the fill for the road would be typically 10 feet thick; the road surface would be typically 10 feet above the ground surface. In locations with soft spots or poor underlying material, additional road prism borrow or geo-fabric may be required. A dust palliative such as calcium chloride may be mixed in with the crushed aggregate surface course material to control dust.

Typical road construction methods would be used to construct road segments in wetlands. Construction would consist of clearing, grubbing, and placing fill; blasting existing rock, in some cases; and/or excavating existing material to reach the proposed design grade. The overall embankment width would generally vary from 50 to 80 feet. The construction limits would include a 20-foot buffer on either side of the toe of slope to account for temporary activities during construction, such as vegetation clearing and/or equipment operating. With the construction limits, the overall disturbance footprint would range between 100 to 120 feet. No grubbing would occur within the temporary disturbance limits, and vegetation would be cleared above the ground surface.

Locally sourced material extracted from several proposed gravel borrows and rock quarry sites along the route would provide the vast majority of the material needed for road construction. Road construction would typically entail fill placement over native soils. However, cut-to-fill road construction would occur in areas with substantial side slopes and suitable subgrade conditions.

Several streams would be traversed by the access road. Table 1 divides the stream crossings by stream width category and shows the number of streams that would be crossed by culverts and bridges and the number of streams that support anadromous fish or only resident fish (streams that only support fish species that complete their entire life cycle within the stream). Crossings would be accomplished with culverts or bridges, depending upon the ordinary high water (OHW) stream widths, stream characteristics, and various topographic considerations.

Table 1. Stream Crossings

Table 1. Calcam Greecinge						
	Stream	Stream	Anadromous	Resident Fish		
Stream	Crossings –	Crossings –	Fish Stream	Only Stream		
width (ft)	Culvert	Bridge	Crossings	Crossings		
0-1	11	0	0	0		
>1-5	26	0	2	0		
>5-10	3	0	1	1		
>10-15	2	0	1	1		
>15-25	3	0	1	1		
>25	1	6	5	1		
Total	46	6	10	4		

Most of the stream crossings along both the access road and within the mine (outside the pit) would be accomplished with culverts ranging from 3 feet to 55 feet wide. As part of the design effort, culvert crossings were categorized based on stream width and fish presence, as shown in Table 2. Culverts in categories #4 and #7 would be placed in streams that do not support fish as determined by baseline monitoring that began in 2018. There are no streams within the project area that require installment of culverts in category #5.

Table 2. Culvert Stream Crossing Categories

Culvert	Crossing Type	Mapped Stream	Design for Fish		
Category #	and Size	Width at OHW	Passage?	Count	
1	Circular culvert	For wetland	No	To be	
	3-foot diameter	swales; Not for		determined at	
		mapped streams		final design	
2	Circular culvert	Up to 2 feet	No	29	
	4-foot diameter				
3	Circular culvert	>2 to 6 feet	Yes	7	
	9-foot diameter				
4	Circular culvert	Up to 6 feet	No	3	
	9-foot diameter				
5	Pipe arch 15	>6 to 10 feet	No	0	
	feet wide				
6	Pipe arch 15	>6 to 10 feet Yes		1	
	feet wide				
7	Site-specific	>10 to 17 feet	No	2	
	pipe arch up to				
	20 feet wide				
8	Site-specific	>13 to 55 feet	Yes	4	
	pipe arch up to				
	50 feet wide				

The same approach to culvert design would be followed for the five culvert crossings needed at the mine site. Where the access road would cross seasonally flowing drainages and wetlands, minor culverts consisting of corrugated metal pipe with a minimum diameter of 3 feet

would be installed to maintain hydrological connectivity and prevent ponding immediately adjacent to the road.

Full span bridges would be constructed across six named rivers, each of which is over 25 feet in width at OHW. Table 3 lists these bridge crossings and their key details. All bridges would be designed as steel plate girder bridges with a concrete deck. The bridges would be designed for 80-ton capacity and have overall width of 16 feet.

Table 3. Bridge Crossings

	Access Road	Approximate	Number of
Stream Name	Milepost	Length (feet)	Spans
Nome River	0.1	80	1
Buffalo Creek	0.8	95	1
Sinuk River	4.3	80	1
Windy Creek	6.7	131	1
Osborn Creek	13.7	90	1
Cobblestone River	16.5	160	2

Nome Support Facilities

New support facilities in Nome would include ore concentrate storage areas, additional fuel storage capacity, and employee housing.

Ore concentrate storage would occur at two sites located in Nome. One is on an approximately 23-acre parcel owned by the Bering Straits Native Corporation (BSNC). The BSNC pad site is partly constructed, and it was permitted for full construction for the purpose of rock and gravel storage by a Department of the Army permit POA-2020-00218 issued on November 20, 2020. The second concentrate storage location is an existing pad that is approximately 10-acres and is owned by the City of Nome and situated very near the BSNC pad site.

Graphite concentrate would only ship during the ice-free season; therefore, Graphite One would need to stage the 20-foot shipping containers at a facility near the Port of Nome. The containers would be stacked three to four high in rows until container ships are able to access the port during ice-free months. Graphite One has assumed that the Port of Nome expansion project would have progressed sufficiently to allow self-loading container ships to load containers dockside. The design-basis ship for transporting the graphite concentrate is assumed to have a 37-foot draft. If the Port of Nome expansion does not proceed, Graphite One would examine options to use shallow draft boats to transport concentrate containers to a vessel anchored in deeper water.

Fuel storage would occur within a 1.6-acre portion of an existing gravel pad located in Nome and owned by the Sitnasuak Native Corporation (Sitnasuak) and their subsidiary Bonanza Fuel. Graphite One is working with Sitnasuak to add bulk tankage in addition to the existing nine tanks at that location.

In order to support year-round mine operations, the Project would require eight million gallons of fuel to be stockpiled in Nome by October 1 each year. Due to sea ice formation on the Bering Sea and Norton Sound, shipping of fuel, concentrates, and other bulk commodities can only occur between approximately June and October. Graphite One has assumed that it would use excess capacity in existing bulk storage owned by the BNSC, but an additional four million gallons of diesel fuel storage would be required. Graphite One is negotiating the construction and operation of that storage with local businesses, which would also be contracted to deliver the fuel to the Graphite Creek Mine. Two 14,000-gallon truck/trailer loads would be required daily.

Graphite One intends to provide long-term housing by constructing a subdivision with singleand multi-family housing as well as apartments for Nome-based employees. Housing would be constructed within a set of adjoining parcels totaling 157 acres, owned by BSNC, and located just north of Nome. This area is in proximity to utilities (electrical, sewer, & drinking water) and is predominantly barren land recently disturbed by placer mining and lacking permafrost.

In addition, Graphite One would construct camp-style accommodations at the mine site to be used during the construction phase of the project. During mine operation, this facility would be used for emergency housing for workers when a storm or some other event causes the access road to become temporarily impassable. During normal operations, Graphite One would bus all workers to and from Nome each day.

Improvements to and Use of Public Roads

The Alaska Department of Transportation and Public Facilities (ADOT&PF) intends to improve Kougarok Road and other existing roads within Nome in ways that would accommodate transportation of ore concentrate from the mine site. The improvements would include widening, curve straightening, and capping existing roads.

Both construction and operation of the Project would use highway-legal vehicles that do not require additional road design standards and improvements. Currently, ADOT&PF conducts year-round maintenance of the Kougarok Road from its origin in Nome to milepost 13. Graphite One estimates that transporting dried ore concentrate from the mine to the Port of Nome would increase the average daily traffic on the Kougarok Road by 12 round trips per day.

ADOT&PF performed an initial investigation of deficiencies of the existing Kougarok Road in 2024 and made recommendations for improvements. Negotiations between ADOT&PF and Graphite One are on-going and would determine the funding mechanism and responsible parties for improvements and maintenance to milepost 30 of the Kougarok Road. ADOT&PF will determine whether these improvements would require fill in Waters of the United States.

All work would be performed in accordance with the enclosed plan (Sheets 1-11), dated August 2025.

Mine Closure and Reclamation

After mining operations conclude, the site would transition into final reclamation and closure activities. All facilities and foundations at the mine site would be demolished and removed. The debris would be disposed in the final pit and covered in accordance with Alaska mining regulations. The last phase of the WMF would also be regraded and fully closed. The haul roads, access roads, and facility pads would be dismantled and regraded to approximate original contours. Topsoil material that was salvaged during operations would be spread on the regraded areas where suitable and reseeded according to permit requirements. The Graphite Creek diversion structure would remain in perpetuity and would require intermittent maintenance.

Due to the site's remote location, all reclamation activities would be self-performed using the equipment fleet that supported the mining operation. Given the relatively small size of the operation and reclamation activities of the WMF that would occur during the life of the mine, it is assumed that the demolition and most reclamation activities would be completed in approximately one year. WMF reclamation during the life of the mine would include closing sections of the WMF once they are no longer needed, draining down surface water, backfilling the basin with brines and mine waste up to final grade, and installing a cover liner. The cover liner would be covered with growth media and revegetated.

<u>ADDITIONAL INFORMATION</u>: The applicant has acquired several permits and authorizations that are currently valid (Table 4).

Table 4. Permits and Authorizations that the Applicant has Acquired and are Currently Valid

Permits and Authorizations	Agency	Description
Four Temporary Water Use Authorizations (No. F2022-077, 078, 079, and 080	ADNR	Authorizes water removal from surface waterbodies for exploration activities. Issued by ADNR Water Section and valid until December 31, 2026
Miscellaneous Land Use Permit No. LAS-34100	ADNR	Authorizes two staging areas along Kougarok Road
Land Use Permit No. LAS-34054	ADNR	Authorizes the placement of a communications repeater and meteorological station
APDES General Permit for Storm Water Discharges No. AKR06H00N	ADEC	Multi-Sector General Permit Activity
Title 1 Fish Habitat Permit No. FH22-III-0125	ADF&G	Authorizes activities in fish bearing waters, primarily for water withdrawal structures

Notes: ADNR = Alaska Department of Natural Resources; ADEC = Alaska Department of Environmental Conservation; APDES = Alaska Pollutant Discharge Elimination System; ADF&G = Alaska Department of Fish and Game; APMA = Application for Permits to Mine in Alaska; No. = Number

There are several other permits and authorizations that the applicant is currently attempting to acquire in addition to the Department of the Army permit that would be issued by the Corps (Table 5).

Table 5. Permits and Authorizations that the Applicant is Actively Attempting to Acquire

Department of the Army permit (authorization under Clean Water Act Section 404 and Rivers and Harbors Act Section 10) Bald and Golden Eagle Protection Act CWA Section 401, Certificate of Reasonable Assurance ADEC Required for "take" of eagles including disturbance of nests CWA Section 401, Certificate of Reasonable Assurance ADEC Required for assurance that the proposed activity would comply with applicable water quality requirements Air Quality Permits – Title I and/or Title V Operating Permits Title 16 Fish Habitat Permit ADF&G Required for work, structures, or water withdrawal within water bodies containing fish Permit to Mine in Alaska ADNR Required for construction of tailings storage dam and water supply dam Right-of-Way, Easement, Surface Use Agreement, and/or Temporary Land Use Permit ADNR Required for restablishment of staging areas, communications repeater and meteorological station, and geotechnical drilling on state land Tidelands Lease ADNR Required for lease of state tidelands needed for barge landing establishment and use Millsite lease ADNR Required for establishing mine facilities not located on the upland mining lease or claim Required for the use of unappropriated water for	Permits and Authorizations	Agency	Description
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Notes: CWA = Clean Water Act; RHA = Rivers and Harbors Act; USACE = United States Army Corps of Engineers

The proposed construction is expected to cause some indirect impacts to aquatic resources within proximity to the project area. Specifically, vegetation clearing as well as soil compaction and rutting from heavy machinery during construction would adversely impact wetlands and streams within the temporary disturbance area along the access road. Further, there is a possibility of petrochemical spills during construction and the elevated level of human activity would repel fish and sensitive aquatic and semi-aquatic wildlife such as mink and moose.

<u>APPLICANT PROPOSED MITIGATION</u>: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

a. Avoidance: Given the size and location of the project footprint, complete avoidance of jurisdictional wetlands and waters is not possible. However, the project has been designed to avoid direct impacts to wetlands and other waters as much as practicable.

The following actions would be taken to avoid adverse impacts to wetlands and other waters:

 All mine facilities have been sited within the Graphite Creek and Glacier Canyon Creek drainages to avoid potential impacts to the Cobblestone River and other fish bearing streams.

At the processing facilities pad, the crushed ore stockpile would be covered to eliminate effects from dust after the mined rock has been crushed.

- Most of the mine tailings would be dry-stacked and co-mingled with waste rock to reduce the size of the tailings pond.
- There would be no permanent facilities located on the shoreline of Imuruk Basin.
- b. Minimization: The following design measures would be implemented to minimize adverse impacts to wetlands and other waters:
 - The proposed mine layout has been minimized to the greatest extent practicable given the project purpose.
 - The proposed road alignment is routed to minimize unavoidable impacts on waters, especially those supporting anadromous fish species, to the extent practicable and in consideration of design criteria constraints.
 - The proposed access road alignment would be routed so stream crossings are as close to perpendicular to the axis of the channel as engineering and routing conditions allow to minimize culvert and bridge length as well as reduce stream impacts.
 - Properly sized and designed culverts and bridges would be constructed in appropriate locations to maintain the natural flow patterns and timing of surface water inflows to adjacent wetlands and waters.
 - Culverts would be sized to reduce maintenance associated with debris clogging, icing, ponding, and sediment deposition.

- Properly sized and designed culverts would be installed to minimize impacts to fishbearing streams and all anadromous fish stream crossings would be permitted according to ADF&G Title 16 guidelines.
- The access road would have minimal extent of roadside ditches to promote sheet flow of runoff water from the road surface, increasing infiltration and vegetative filtration and thereby reducing impacts to water quality resulting from concentrated runoff.
- Roadside ditches would be designed to accommodate maintenance demands and snow storage.

The following construction best management practices (BMPs) would be implemented to minimize adverse impacts to wetlands and other waters:

- Stormwater pollution prevention control measures would be implemented during construction. A Storm Water Pollution Prevention Plan would be prepared prior to the start of construction.
- No vehicles or equipment would be fueled or serviced within 100 feet of wetlands or fish bearing streams. Fuel would be stored a minimum of 100 feet from any wetland or waterbody.
- Areas where grading and fill would occur would be stabilized using appropriate BMPs and revegetated with native seed mix within the first growing season following the work.
- Bridge construction, culvert installation, and earthwork within and near fish-bearing waters would adhere to fish timing windows to avoid impacts on salmonids.
- Erosion control techniques would be used to prevent siltation and erosion that would be more likely to occur snow melt or high rainfall events.
- Appropriate measures, including working during low-flow and winter periods, would be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable.
- Sloping of site containment would be used to direct all spills and/or leachate in contaminated soil to a catchment pond.
- Coordination with USFWS would occur prior to construction to avoid and minimize impacts on nesting eagles in compliance with the Bald and Golden Eagle Protection Act.
- Timing windows would be implemented to avoid clearing, grubbing, and other site preparation and construction activities during critical life stages for migratory birds, in

compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

- ADF&G would determine timing windows for in-water work to minimize potential impacts on sensitive fish life stages such as spawning and/or migration periods. Timing windows for in-water work would be incorporated into the construction schedule.
- Construction activities would not result in a migration barrier for resident or anadromous fish. Fish passage would be maintained using temporary stream diversion channels, unless otherwise approved by the ADF&G Division of Habitat. Diversion techniques would likely involve creating a temporary diversion channel, plugging the natural channel upstream and downstream of the construction area, and temporarily rerouting flow into the diversion channel.
- c. Compensatory Mitigation: Due to the Project's small impact on waters that the applicant has asserted are jurisdictional, the distribution of these impacts over multiple watersheds, and the extensive avoidance and minimization measures, Graphite One proposes no compensatory mitigation for the loss of 2.21 acres of applicant-asserted jurisdictional waters. However, Graphite One stated that if compensatory mitigation is required, it would work with the Corps and mitigation providers in the region to develop a compensatory mitigation plan.

<u>WATER QUALITY CERTIFICATION</u>: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

<u>CULTURAL RESOURCES</u>: Qualified archaeologists conducted desktop studies and field investigations to determine the presence of historic properties in the project vicinity. Desktop studies included review of the latest published version of the Alaska Heritage Resources Survey (AHRS). Field investigations entailed aerial reconnaissance, pedestrian surveys, and subsurface testing within the proposed mine site and access route from 2023, through 2025. A total of 28 cultural resources including both prehistoric and historic sites have been identified within the study area. Of these, three properties have been determined eligible for listing on the National Register of Historic Places. The remaining 26 cultural resource sites are currently undergoing evaluation.

This application will be coordinated with the State Historic Preservation Office (SHPO), Federally recognized Tribes, and other consulting parties pursuant to Section 106 of the National Historic Preservation Act. At this time, USACE has not made an effect determination. Any comments that SHPO, Federally recognized Tribes, or other consulting parties may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

<u>ENDANGERED SPECIES</u>: The project area is within the known or historic range of three species listed as 'threatened' under the Endangered Species Act (ESA): polar bear (*Ursus maritimus*), Steller's eider (*Polysticta stelleri*), and spectacled eider (*Somateria fischeri*).

Polar bear critical habitat includes the Imuruk Basin. Steller's and spectacled eiders do not breed on the Seward Peninsula, though they are known to use coastal habitats at and near Port Clarence, which is approximately 30 miles from the mine site.

We are currently gathering information regarding these species and have yet to make a determination of effect. Should we find that the described activity may affect the species listed above, and/or their designated critical habitat, we will follow the appropriate consultation procedures under Section 7 of the Endangered Species Act of 1973 (87 Stat. 844). Any comments the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described action.

<u>ESSENTIAL FISH HABITAT</u>: The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is within mapped EFH for Chinook salmon (*Oncorhynchus tshawytscha*), sockeye salmon (*O. nerka*), chum salmon (*O. keta*), coho salmon (*O. kisutch*), and pink salmon (*O. gorbuscha*).

We are currently gathering information regarding this/these species and have yet to make a determination of effect. Should we find that the described activity may adversely affect EFH for the species listed above, we will follow the appropriate course of action under Section 305(b)(2) of the Magnuson-Stevens Act. Any comments the NMFS may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Corps fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Corps, Alaska District, on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This public notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal rights or resources. Consultation may be initiated by the affected Tribe upon written request to the District Commander. This application is being coordinated with federally recognized tribes and other consulting parties. Any comments that federally recognized tribes and other consulting parties may have concerning presently unknown archeological or historic artifacts that may be lost or destroyed by the work under the requested permit will be considered in the Corps final assessment of the described work.

<u>PUBLIC HEARING</u>: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments would be used in the preparation of an Environmental Assessment pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

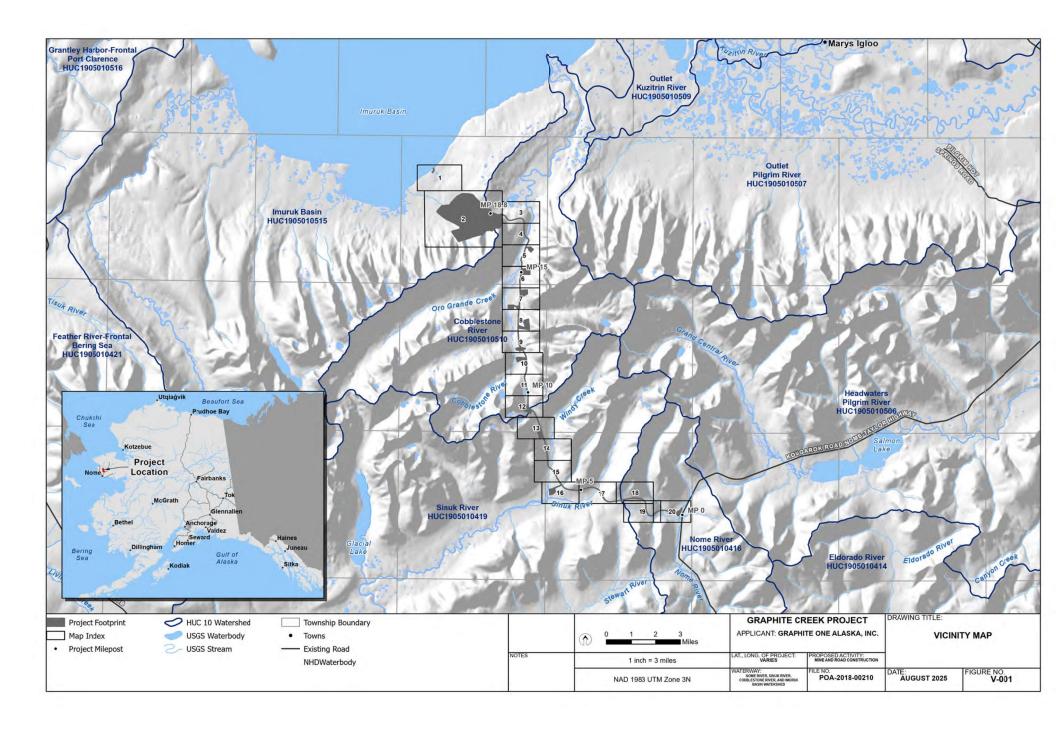
AUTHORITY: This permit will be issued or denied under the following authorities:

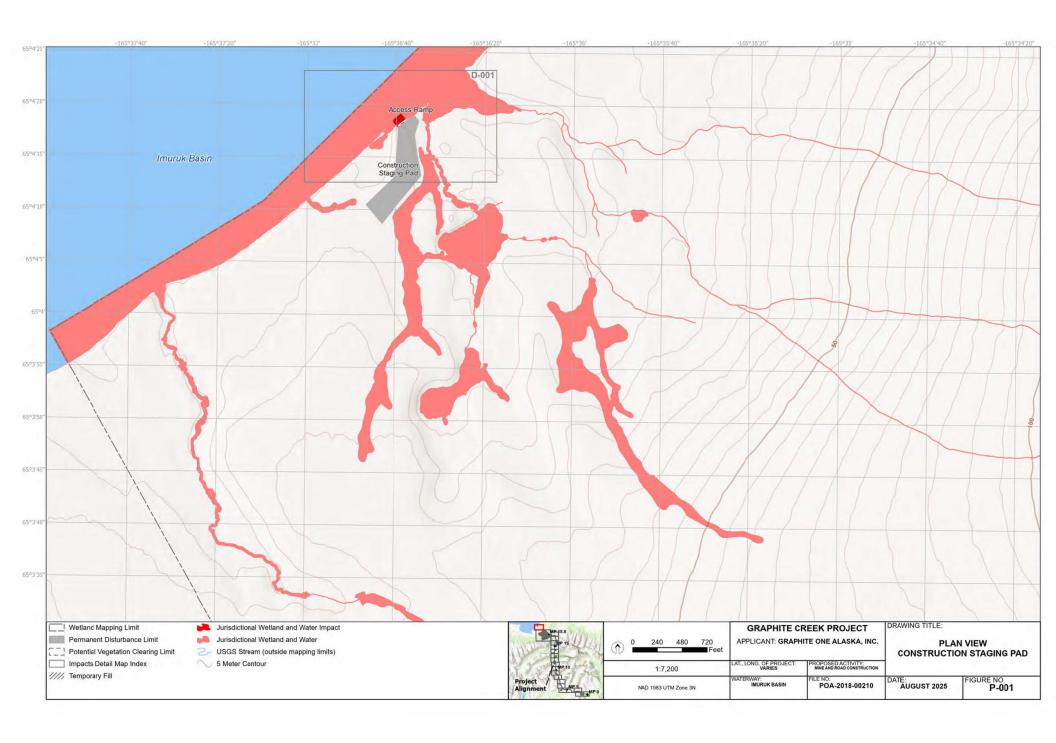
(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

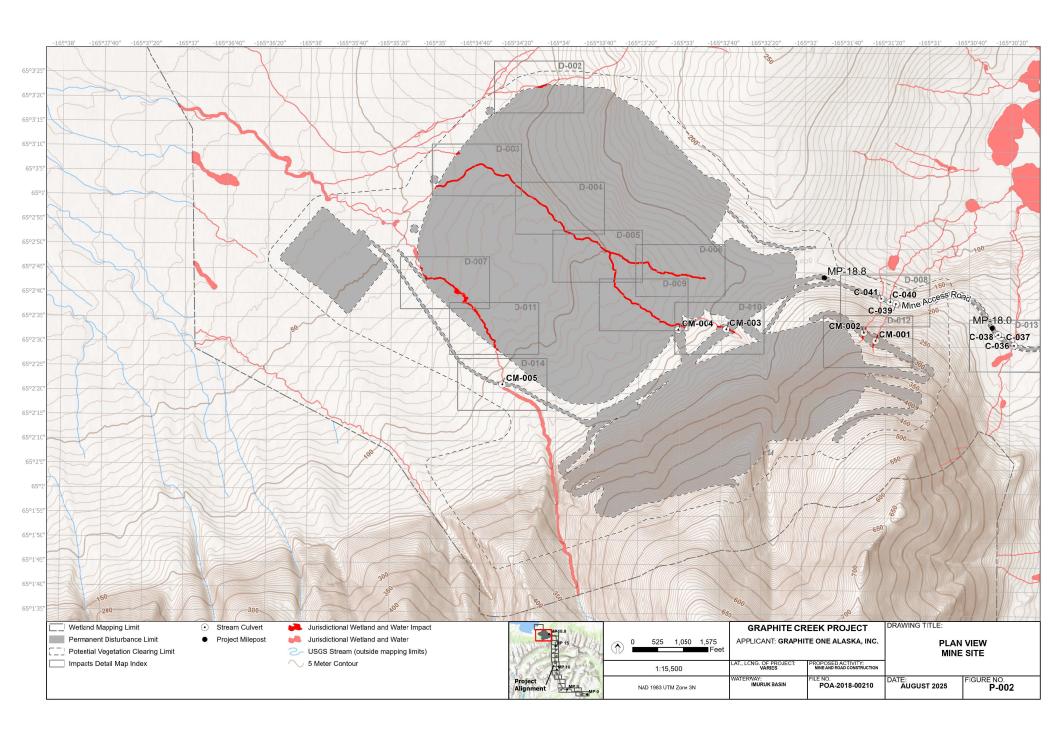
Project drawings are enclosed with this public notice.

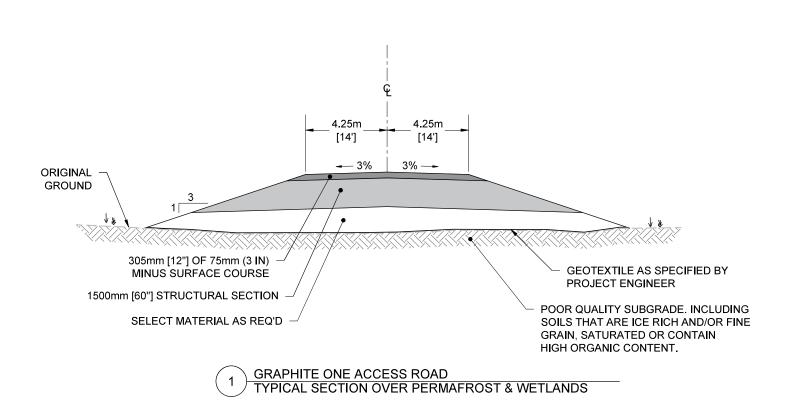
District Commander U.S. Army, Corps of Engineers

Enclosures





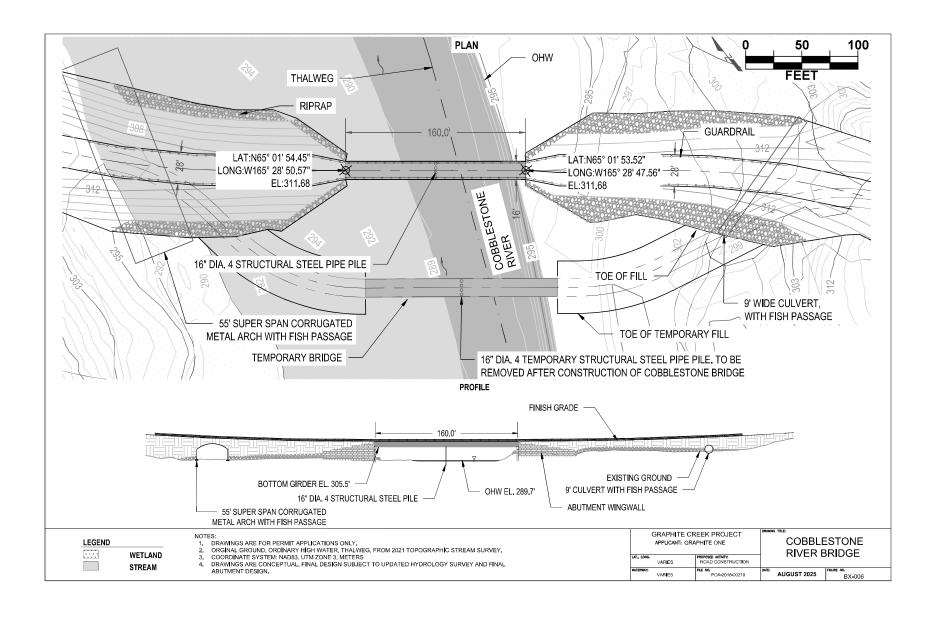


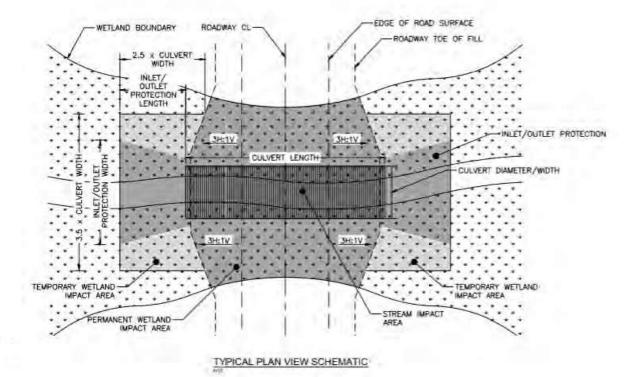


NOTES:

- 1. CLEARING LIMITS MIN. 1.5M [5FT] BEYOND TOP OF CUT OR TOE OF FILL.
- SURFACE COURSE TO CONSIST OF 75MM [3IN] MINUS, WELL GRADED, DURABLE, GRANULAR MATERIAL WITH 6 TO 10% PASSING THE NO. 200 SIEVE.
- STRUCTURAL SECTION & SELECT MATERIAL TO CONSIST OF COARSE ROCK FILL.
- 4. ALL MATERIAL TO BE FREE OF ORGANICS, FROZEN MATERIAL, MUCK, OR OTHER DELETERIOUS MATERIAL. ALL MATERIAL IS TO BE NON FROST SUSCEPTIBLE.
- 5. WHEN CONSTRUCTING OVER PERMAFROST OR WETLANDS THE NATIVE VEGETATION & GROUND SURFACE TO BE LEFT IN PLACE TO THE EXTENT POSSIBLE.

GRAPHITE CREEK PROJECT APPLICANT: GRAPHITE ONE		ROAD DESIGN TYPICAL SECTION			
VARIES	PROPOSED ACTIVITY: ROAD CONSTRUCTION				
WATERWAY: VARIES	FILE NO. POA-2018-00210	DATE:	AUGUST 2025	FIGURE NO.	RX-001





NOTES:

- 1. CULVERT SHALL SPAN ENTIRE TOE OF FILL WIDTH.
- CULVERT DIAMETER VARIES BASED ON STREAM CATEGORIZATION, SEE TYPICAL DETAILS ON CATEGORIES 2. THROUGH 7 SHEETS.
- PERMANENT WETLAND IMPACT AREA IS ASSUMED FOR CULVERT CONSTRUCTION, LIMITS INCLUDE ROADWAY PRISM SURROUNDING CULVERT AND INLET/OUTLET PROTECTION. SEE TYPICAL DETAIL SHEETS FOR CATEGORIES 2 THROUGH 7 FOR INLET/OUTLET PROTECTION DIMENSIONS.
- 4. TEMPORARY WETLAND IMPACT AREA IS ASSUMED FOR CULVERT CONSTRUCTION AND DOES NOT OVERLAP WITH THE PERMANENT IMPACT AREA. LIMITS APPROXIMATELY EXTEND IN LENGTH BEYOND TOE OF FILL 2.5 TIMES THE DIAMETER OF A ROUND CULVERT AND IN WIDTH 3.5 TIMES THE DIAMETER OF A ROUND CULVERT. FOR A PIPE ARCH, USE THE RISE DIMENSION AS EQUAL TO DIAMETER.
- STREAM IMPACT AREA EQUALS STREAM WIDTH TIMES CULVERT LENGTH PLUS THE AREA ASSOCIATED WITH INLET/OUTLET PROTECTION.
- 6. FISH PASSAGE CULVERTS SHALL BE EMBEDDED WITH STREAM BED MATERIAL PER MEMORANDIUM OF AGREEMENT REQUIREMENTS. THIS IS ONLY APPLICABLE TO CULVERT CATEGORIES 4, 6, AND 7. SEE TYPICAL DETAIL SHEETS FOR CATEGORIES 4, 6 AND 7.
- STREAM BED SLOPE THROUGH CULVERT SHALL MATCH STREAM SLOPE TO MAXIMUM EXTENT PRACTICABLE. FOR FISH PASSAGE CULVERT CATEGORIES 4, 6, AND 7 SLOPE THROUGH CULVERT SHALL BE NO GREATER THAN STREAM SLOPE ±1%.
- FILL DEPTH WILL BE DETERMINED BASED ON EQUIPMENT LOADING AND CULVERT DESIGN.
- EROSION AND STORMWATER RUNOFF CONTROL MEASURES AND STABILIZATION OF DISTURBED AREAS WILL BE IMPLEMENTED AS NECESSARY AND IN ACCORDANCE WITH BEST PRACTICES.
- FOR CULVERT LENGTH REFER TO APPENDIX B CULVERT IMPACTS TABLE.

GRAPHITE CREEK PROJECT
APPLICANT: GRAPHITE ONE
LIEF, LONG.
VARIES

PROPOSED ACTION
POOR CONSTRUCTION

WATER VARIES

POOR 2018-00210

AUGUST 2025

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