

May 11, 2021

James Hyun

Alaska Department of Natural Resources
Division of Oil and Gas
550 W. 7th Avenue, Suite 1100
Anchorage, Alaska 99501-3563

Re: AS 38.05.850 Easement ADL #421218
Pikka Development Access Road

Dear Mr. Hyun,

Oil Search (Alaska), LLC (OSA), requests modification of AS 38.05.850 Easement ADL #421218 for the Pikka Development Access Road, formerly called the Nanushuk Project Access Road. The Pikka Development Access Road easement was approved January 2, 2020 and authorized an approximately 646-acre construction easement and a 208.9-acre operational easement (Figure 1). Consistent with previous authorizations, this reflects a 300-foot construction easement measuring 150-foot from centerline and a variable width operations easement, which would extend 50-feet beyond the toe of gravel.

OSA is proposing to increase the construction easement acreage by 12.2 acres, to total approximately 658.2 acres, and the operational easement by 6.8 acres, to total approximately 215.7 acres. The easement is being revised to reflect advanced engineering design and project optimization. The updated project components with project component details are listed in Table 1. Project plans may also include installation of a fiber optic cable (FOC) trenched in the road between the Mustang pad and the Nanushuk Operations Pad (NOP). The FOC will be permitted and installed by a third-party contractor.

Table 1. Project Components and Locations

Project Component	Ownership/ Unit	ADL Number	Latitude/ Longitude	MTRS	Construction Acreage	Operational Acreage
Pump House Pad	State of Alaska/None	392964	70.290161N/ 150.502473W	U11N06E24	3.4	1.58
Valve Pad w/Tundra Access Ramp	State of Alaska/ Southern Miluveach	390692	70.258360N/ 150.341970W	U11N07E34	2.29	1.24
Valve Pad	State of Alaska/ Southern Miluveach	390691	70.259552N/ 150.305792W	U11N07E36	0.76	0.66

Project Component	Ownership/ Unit	ADL Number	Latitude/ Longitude	MTRS	Construction Acreage	Operational Acreage
East Miluveach Pipeline Crossing	State of Alaska/ Southern Miluveach	390691	70.2588N/ 150.2865N	U11N07E35	5.76	3.39
Total Increase in Easement Acreage					12.2	6.8

Pump House Pad

OSA proposes to adjust the footprint of the pump house pad at Lake MC7903 to accommodate updated safety and logistics considerations for water truck access to the water pump which will be located on the pad (Figure 2). The modification will increase the pad footprint by 0.7-acre.

The pump house pad layout is being modified to avoid potential vehicle backing related risks/injuries and to follow the Alaska Safety Handbook guidance for Safe Driving Rules (CPAI et al., 2018:53). OSA also has internal policies and procedures for heavy equipment which include designing pads to have “pull-through only” parking spaces to eliminate risks associated with heavy-equipment backing. The proposed enlargement is designed to accommodate the approach angle and turning radius of a 300-barrel water truck (minimum interior wheel turning radius restricted to 70 feet). This will allow a truck to access the pump module, drive around the pad and return to the water source access road without having to back up.

Proposed Valve Pads

OSA proposes to add two valve pads on the north side of the access road (Figure 1). The 0.54-acre valve pad on the west side of the Miluveach River will be constructed with a tundra access ramp (Figure 3). The tundra access ramp will allow year-round access to the north side of the pipeline for inspections, maintenance, and access for spill response. The valve pad located on the east side of the Miluveach River will be 0.3-acre total (Figure 4).

East Miluveach Pipeline Crossing

OSA proposes to add the East Miluveach Pipeline Crossing at a location on the access road near the Mustang Road (Figure 5). OSA proposes to construct the 0.2-mile long road (1.4 acres) to provide year-round spill response and access to the north side of the Project pipelines. The proposed road will be 32 feet wide at the surface (approximately 52 feet at the base). The pipeline crossing road will be wider at the intersection with the access road to accommodate large vehicle turning. At the end of the proposed road, north of the pipeline alignment, there will be a tundra access ramp. The pipeline crossing road was designed to allow staging of spill response containers and equipment along the road year-round so OSA can more readily respond in the unlikely event of a spill.

Should you have questions or clarifications regarding this request, please contact me at 907-440-0270 or Julie.Lina@oilsearch.com.

Warm regards,



Julie Lina
Permitting Manager
Julie.Lina@oilsearch.com

Enclosures: Alaska Division of Oil and Gas – Easement Application AS 38.05.850
Figures 1-5
Application Fee

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS



550 W. 7th Ave, Suite 1100, Anchorage, AK 99501-3563
 Phone: 907-269-8800 Fax: 907-269-8943
 Permitting Email: dog.permitting@alaska.gov



Easement Application AS 38.05.850

Non-refundable application fee: \$1200

ADL# _____
 (to be filled in by state)

SECTION I. APPLICANT INFORMATION	
Applicant Name: Julie Lina	Title: Permitting Manager
Company: Oil Search (Alaska), LLC	
Mailing Address: PO Box 240927	
City/State/Zip Code: Anchorage, Alaska 99524-0927	
Phone: 907-440-0270	Email: Julie.lina@oilsearch.com
SECTION II. PROJECT LOCATION/LAND STATUS	
State of Alaska Surface Lands:	
Are supplemental pages for Land Status included in Appendix A? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Meridian, Township, Range, and Section(s): The Meridian, Township, Range, and Sections are listed on the enclosed cover letter in Table 1.	
Oil and Gas Unit Division of Oil and Gas Units associated with a project component is listed in Table 1.	
Is there an Oil and Gas Mineral Estate Lease? If yes, list ADL(s) Any Oil and Gas Mineral Estate Lease associated with a project component is listed in Table 1.	
Other Considerations (Existing easement and/or leases): OSA is proposing a modification to the Pikka Development Access Road (formerly called the Nanushuk Project). The Pikka Development Access Road was approved January 2, 2020 and was assigned ADL #421218.	
Letter of non-objection or third-party commercial agreement obtained from other interested parties? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If no, please explain. A portion of the proposed upgrades to the Pikka Development Access Road are located in the Southern Miluveach Unit that is currently operated by the Alaska Industrial Development and Export Authority (AIDEA). OSA plans to obtain Letters of Non-Objection or other arrangements from AIDEA or Southern Miluveach Unit operators for the work proposed in this application.	
SECTION III. PROJECT INFORMATION	
1. Project Name: Pikka Development	
2. Construction Start/End Date: November 1, 2021 to December 31, 2023	Easement Duration: 35 Years
3. Project Activities:	

<p>A. Project Description: OSA is proposing to revise the easement for the Pikka Access Road to expand the Pump House Pad, add two valve pads on either side of the Miluveach River, and add a pipeline crossing east of the Miluveach River. The easement is being revised to reflect advanced engineering design and project optimization. OSA is proposing to increase the construction easement acreage by 12.2 acres, to total approximately 658.2 acres, and increase the operational easement by 6.8 acres, to total approximately 215.7 acres. Please see the enclosed cover letter for additional details.</p>							
<p>B. Methods of Construction The proposed components will be constructed in winter using a combination of both ice roads and existing gravel roads. Ice roads will allow direct access to the mine site. Standard-duty ice roads on the North Slope area a minimum of six inches thick and an average of 12 inches thick due to terrain features. Gravel will be hauled from a local mine site and gravel will be placed during winter. The proposed components will then be farmed during the subsequent summers to allow the gravel to dry. Steel pipeline casing will be installed at the Valve Pad w/Tundra Access Ramp and the East Miluveach Pipeline Crossing during summer to allow pipeline construction the following winter.</p>							
<p>C. Easement Parameters: OSA requests a 300-foot construction easement measuring 150-foot from centerline of the project component and a variable width operations easement, which would extend 50-feet beyond the toe of gravel. Please see the enclosed project description and figures. The enclosed figures show the construction easement.</p>							
Construction Easement (including buffers)				Operation Easement (including buffers)			
Projects	Length (ft)	Width (ft)	Size (acre)	Projects	Length (ft)	Width (ft)	Size (acre)
Gravel Pad	N/A	300	12.2	Gravel Pad	N/A	50 from toe	6.8
Gravel Road	N/A	N/A	N/A	Gravel Road	N/A	N/A	N/A
Pipeline	N/A	N/A	N/A	Pipeline	N/A	N/A	N/A
Wellbore	N/A	N/A	N/A	Wellbore	N/A	N/A	N/A
Other	N/A	N/A	N/A	Other	N/A	N/A	N/A
Total	N/A	300	12.2	Total	N/A	~150	6.8
<p>D. Waste Management: A range of wastes will be generated during construction and operations. A Waste Management Plan will be prepared to address the types and quantities, regulatory controls, and management options for solid and liquid wastes. OSA will also use other resources, such as the Alaska Waste Disposal and Reuse Guide (Red Book), to guide waste management decisions.</p>							
<p>E. Staging and Storage Areas: Equipment and materials will be stored on ice pads and gravel pads on the North Slope. Gravel pads used during construction could include the Nanushuk Processing Facility Pad, Nanushuk Operations Pad, or other existing gravel pads in the vicinity of the proposed easement.</p>							
<p>F. Airstrips and Landing Zones: An airstrip will not be constructed as part of this activity. OSA will use existing North Slope airstrips and landing zones as needed for construction and operation.</p>							
<p>G. Historical Properties and Cultural Resources: Cultural resource surveys were conducted in the project area in 2015, 2016, 2017, and 2019. The surveys and proposed project locations were coordinated with the Alaska Department of Natural Resources, Office of History and Archaeology (OHA) and the North Slope Borough. During the NEPA review process, the U.S. Army Corps of Engineers conducted a Section 106 Consultation with the OHA, which determined that no historic properties would be adversely affected by the Project.</p>							
<p>H. Anadromous Fish Streams and Other Streams: Fish passage culverts are placed along the Pikka Development Access Road and are located at stream crossings where fish or fish habitat may be present. Culvert design is in accordance with Alaska Department of Fish and Game Title 16 Fish Passage Standards.</p>							

I. Fuel and Hazardous Substances:
The transport of diesel and gasoline to the area will be required to support activities during construction and operations. During construction, dedicated temporary storage areas for diesel and gasoline will be selected and placed either at the material mine site or on ice pads and, once complete, moved onto the project gravel pads. Waste management activities will be conducted in general accordance with best environmental practices as described in the North Slope Environmental Field Handbook and the Alaska Red Book. All fuels and chemicals will be stored in appropriate primary containment. Secondary containment areas will be designed in compliance with all applicable permits and regulations.
J. Air Quality
Emissions from construction activities would originate primarily from on-road and non-road heavy equipment. Gravel installation will occur during winter construction seasons and maintenance of the gravel roads will implement measures to suppress generation of road dust as needed.
K. Water Quality
Seasonal ice roads would be used to facilitate construction. Non-potable freshwater would be withdrawn from local permitted lakes in the area to construct the ice roads. Based on the water withdrawal conditions in ADNIR temporary water use permits (i.e., OSA must adhere to 22 standard conditions of which 13-19 specifically address issues of water quality) and spring recharge, water quality impacts (decreased DO, increased conductivity, and changes to pH values) in lakes from which winter water withdrawal occurs would be minor. Summer potable water withdrawal would have no effect on water quality.
L. Utilities:
Temporary camps will be used to support the activity and will have power, communications, and water/wastewater systems.
M. Material Sites:
Clean gravel material for project development will be obtained from one or more of the existing mine sites located on the North Slope in the vicinity of the project area.
N. Water Supplies:
During construction and operations, non-potable fresh water from local permitted lakes will be used for ice road and pad construction, road maintenance, and dust suppression.
O. Roads:
The Project access road was constructed in 2019/2020 and will provide access to the project for construction and operations.
4. Associated Structures:
The Project has constructed gravel roads and pads, and a multi-span bridge structure across the Miluveach River.
5. Is this an existing use?: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, provide documentation verifying existing use, such as easement atlas, affidavits attesting to use and existence, pictures, etc.
Yes, the Pikka Development Access Road is an existing use and was constructed during the 2019/2020 winter season. The access road, operations pad, processing facility pad, and the ND-B drillsite are existing uses. OSA is requesting to increase the easement for the remaining portions of the Project that are not covered in the previously authorized Pikka Development Access Road.
6. Are you applying to be granted a Private Easement? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
7. Other permits or authorizations applied in conjunction with this proposed project:
A permit/authorization list was previously submitted to the Alaska Division of Oil and Gas. A North Slope Borough development permit and administrative approvals will be obtained for these activities.
8. Generally outline your plans for rehabilitating the affected project area after completion of operations.
At the conclusion of production, abandonment of Project facilities will be conducted in accordance with ADNIR DOG North Slope Areawide Lease Mitigation Measures and in compliance with all permit and lease requirements.

9. Operating procedures designed to mitigate, minimize, or avoid adverse effects

Describe operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the project area and adjacent areas, including fish and wildlife habitats, historic and archaeological sites, and public use areas. Any training related to minimizing adverse effects. i.e. cultural awareness, wildlife awareness etc. should be included. Describe project specific procedures.

The U.S. Army Corps of Engineers prepared a Final Environmental Impact Statement (FEIS) for the Nanushuk Project (now called the Pikka Development) in November 2018. Chapter 6.0, titled Avoidance, Minimization, and Mitigation of the FEIS describes the OSA procedures that prevent or minimize adverse effects as a result of the project. Standard procedures for North Slope construction are listed below.

1. Ice roads will be used support gravel installation.
2. Water pumps to construct ice roads will be screened to prevent fish entrapment.
3. Spill prevention measures and fuel storage will be in accordance with OSA's, Alaska Department of Environmental Conservation-approved Oil Discharge Prevention and Contingency Plan (C-Plan); requisite Spill Prevention, Control, and Countermeasure (SPCC) Plan(s); and other pertinent regulatory requirements.
4. Wastes will be handled, transported, and disposed in accordance with the OSA Waste Management Plan. Waste will also be managed in accordance with the North Slope Environmental Field Handbook and the Alaska Red Book.
5. OSA will seek approvals from the North Slope Borough's Department of Inupiat History, Language, and Culture (IHLC) as well as the State Historic Preservation Office (SHPO) for gravel placement and ice road and pad construction. If prehistoric, historic, or other cultural resources are discovered during OSA activities, all work in the vicinity of the discovery will cease and SHPO and IHLC will be notified.
6. Food waste will be stored inside of wildlife-resistant containers while onsite.
7. OSA staff and contractors will coordinate with U.S. Fish and Wildlife Service and the Alaska Department of Fish and Game to minimize impacts to wildlife.
8. Trained North Slope employees and contractors who are familiar with North Slope oilfields will be employed, providing personnel who are familiar with industry requirements regarding environmental and regulatory compliance standards. Personnel will be trained on OSA operational plans, including oil handler training, waste management, snow removal, spill prevention, and wildlife interaction, which will minimize the potential for impacts during daily operations.

SECTION IV. PERFORMANCE GUARANTY

Bonded Company: JPMorgan Chase Bank, N.A.

Type: Standby Letter of Credit	Bond Number: NUSCGS032193	Amount: \$1,000,000
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Bonding Company: JPMorgan Chase Bank, N.A., C/O JPMorgan Treasury Services

Mailing Address: 10420 Highland Manor Dr., 4th Floor, Tampa, FL 33610

Phone: 813-432-1210	Fax: N/A	Email: N/A
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SECTION V. INSURANCE

Comprehensive General Liability Insurance:

Amount of Insurance: \$2,000,000 per each occurrence and \$4,000,000 general aggregate

Insurer Name: March & McLennan Agency LLC

Mailing Address: 1031 W. 4th Avenue, Suite 400, Anchorage, AK 99501

Phone: 907-276-5617	Fax: N/A	Email: N/A
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If this authorization is granted, I agree to construct and maintain the improvements authorized in a workmanlike manner, and to keep the area in a neat and sanitary condition; to comply with all the laws, rules, and regulations pertaining thereto;

and provided further that upon termination of the easement for which application is being made, I agree to remove or relocate the improvements and restore the area without the cost to the state and to the satisfaction of the Director of the Division of Oil and gas.



Applicant's signature

May 11, 2021
Date

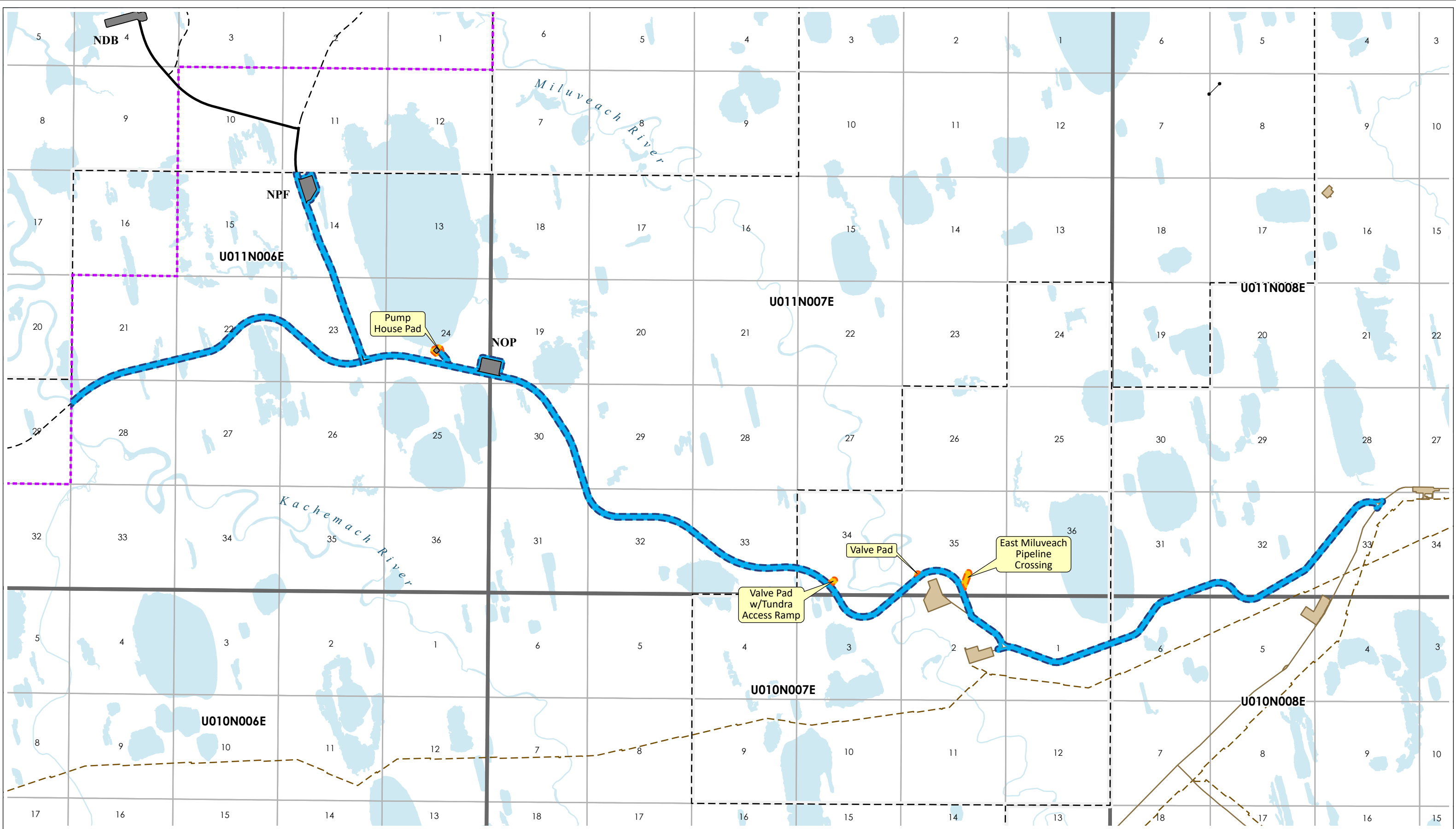
INSTRUCTIONS:

Maps

Attach a USGS map (scale of 1:63,360) or a state status plat showing the location of the proposed easement. Please see the easement guidance document for further map requirements.

The final granting of easement will be contingent upon our receipt of as-built depicting the post construction location of the improvements. If your application is approved, instructions for the completion of the as-built will be provided by the Survey Section in the Division of Mining, Land, and Water.

AS 38.05.035 (a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(9) and confidentiality is requested). Public information is open to inspection by you or any member of the public. A person who is subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210.



- BUILT GRAVEL PAD
- BUILT GRAVEL ROAD
- PERMITTED GRAVEL ROAD
- EASEMENT MODIFICATION AREAS

- PERMITTED CONSTRUCTION EASEMENT
- EXISTING GRAVEL PAD
- EXISTING GRAVEL ROAD
- EXISTING PIPELINES

- PRODUCTION UNITS
- KUUKPIK BONDARY

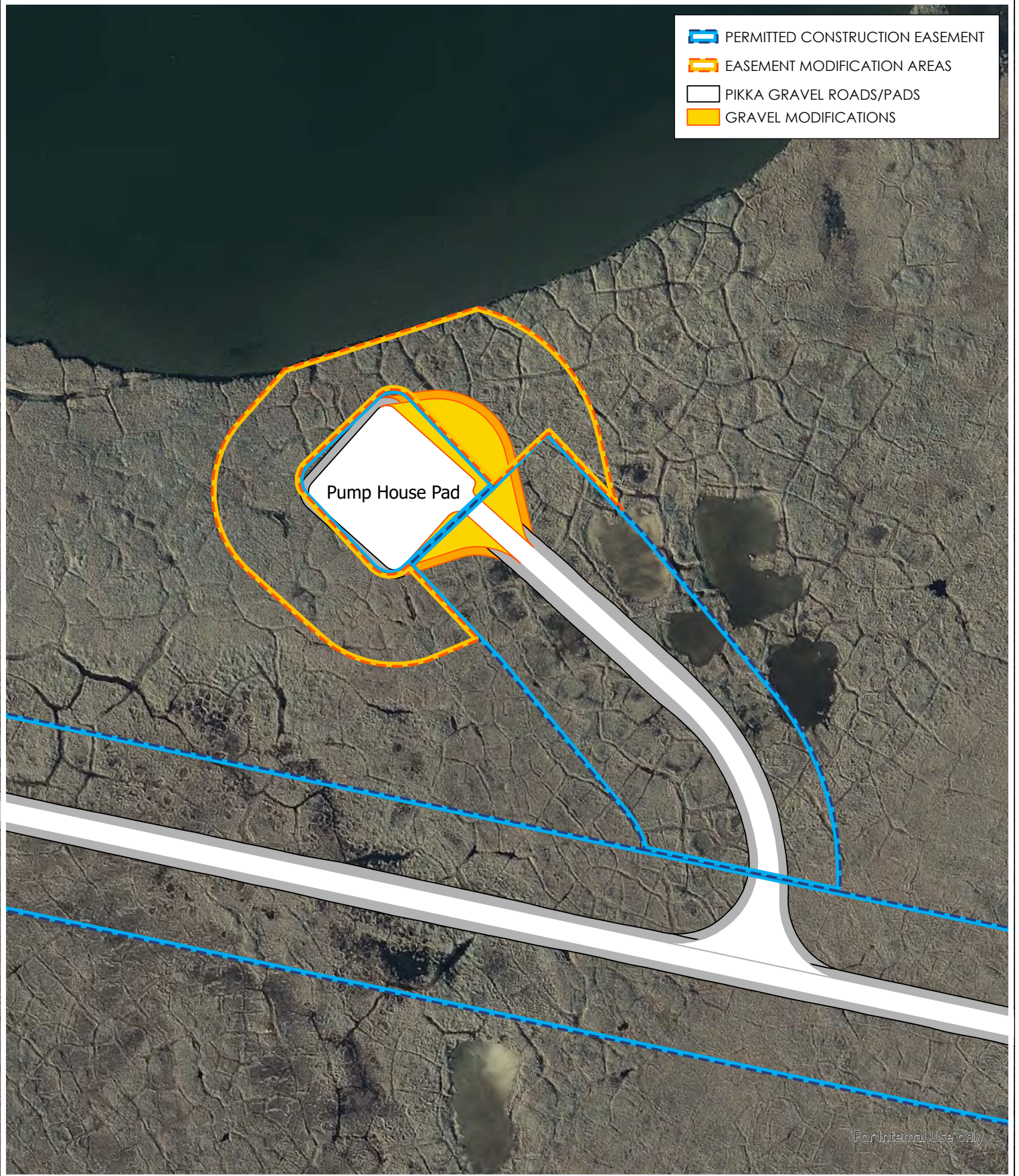


0 0.25 0.5 Miles
0 0.5 1 Kilometers

OIL SEARCH (ALASKA) LLC
PIKKA DEVELOPMENT
Figure 1
PROJECT OVERVIEW

Coordinate Reference: NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet
DATE: 3/25/2021. REV: 2.1. By: JB
Document name: AP-DEV-PE-DF_projectPermits

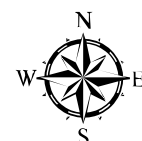




OIL SEARCH ALASKA LLC.
PIKKA DEVELOPMENT
PROPOSED MODIFICATIONS AT PUMP HOUSE PAD

Figure 2

GCS: NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet
 DATE: 3/18/2021. REV: 1.0. By: JB
 Document name: AP-DEV-PE-DF_projectPermits

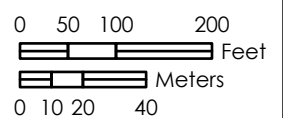
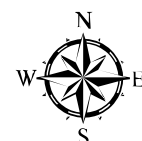


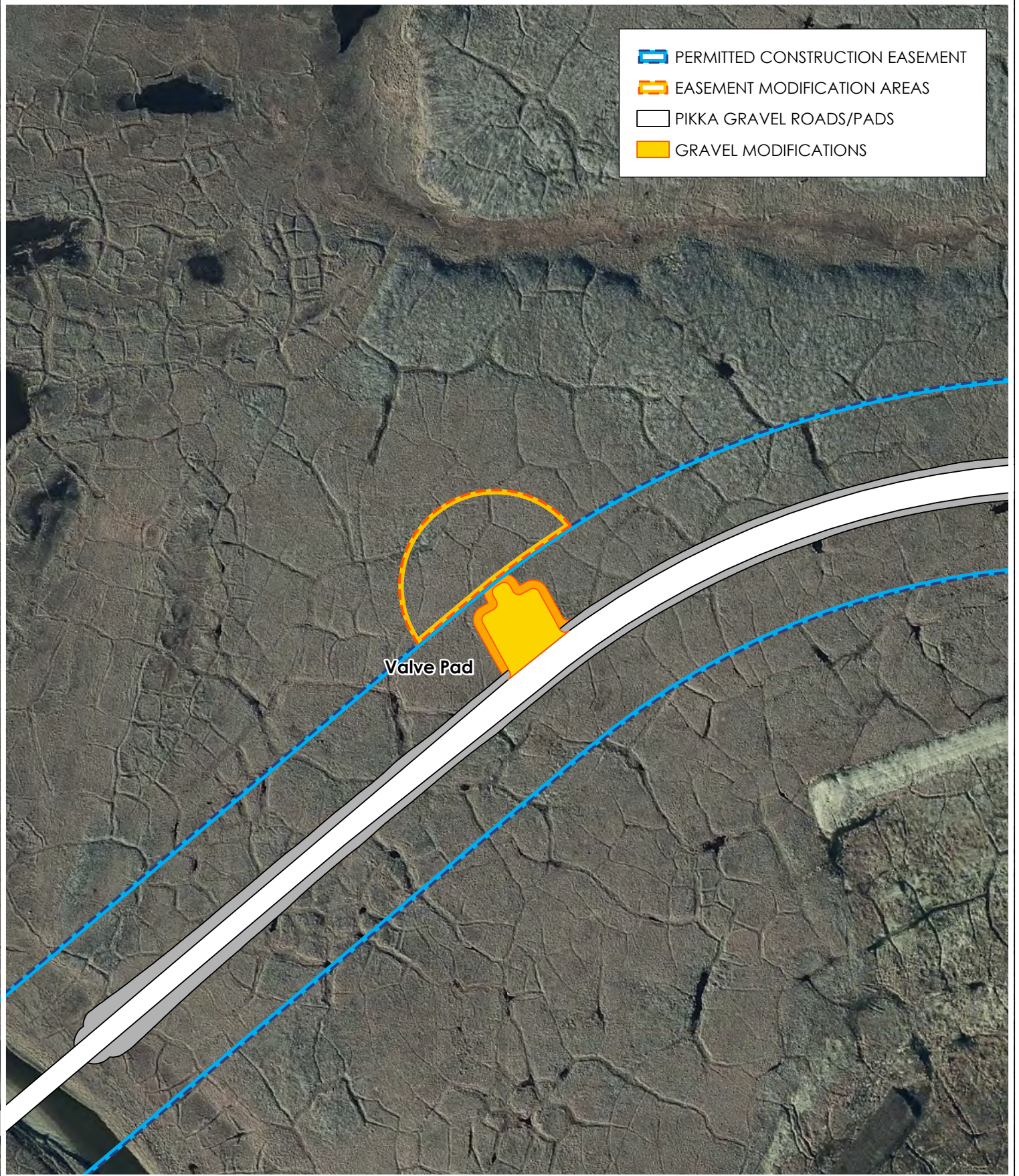


OIL SEARCH ALASKA LLC.
PIKKA DEVELOPMENT
PROPOSED VALVE PAD
WITH TUNDRA ACCESS RAMP

Figure 3

GCS: NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet
 DATE: 3/18/2021. REV: 1.0. By: JB
 Document name: AP-DEV-PE-DF_projectPermits

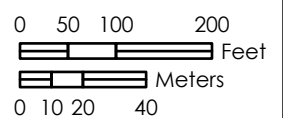
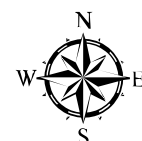


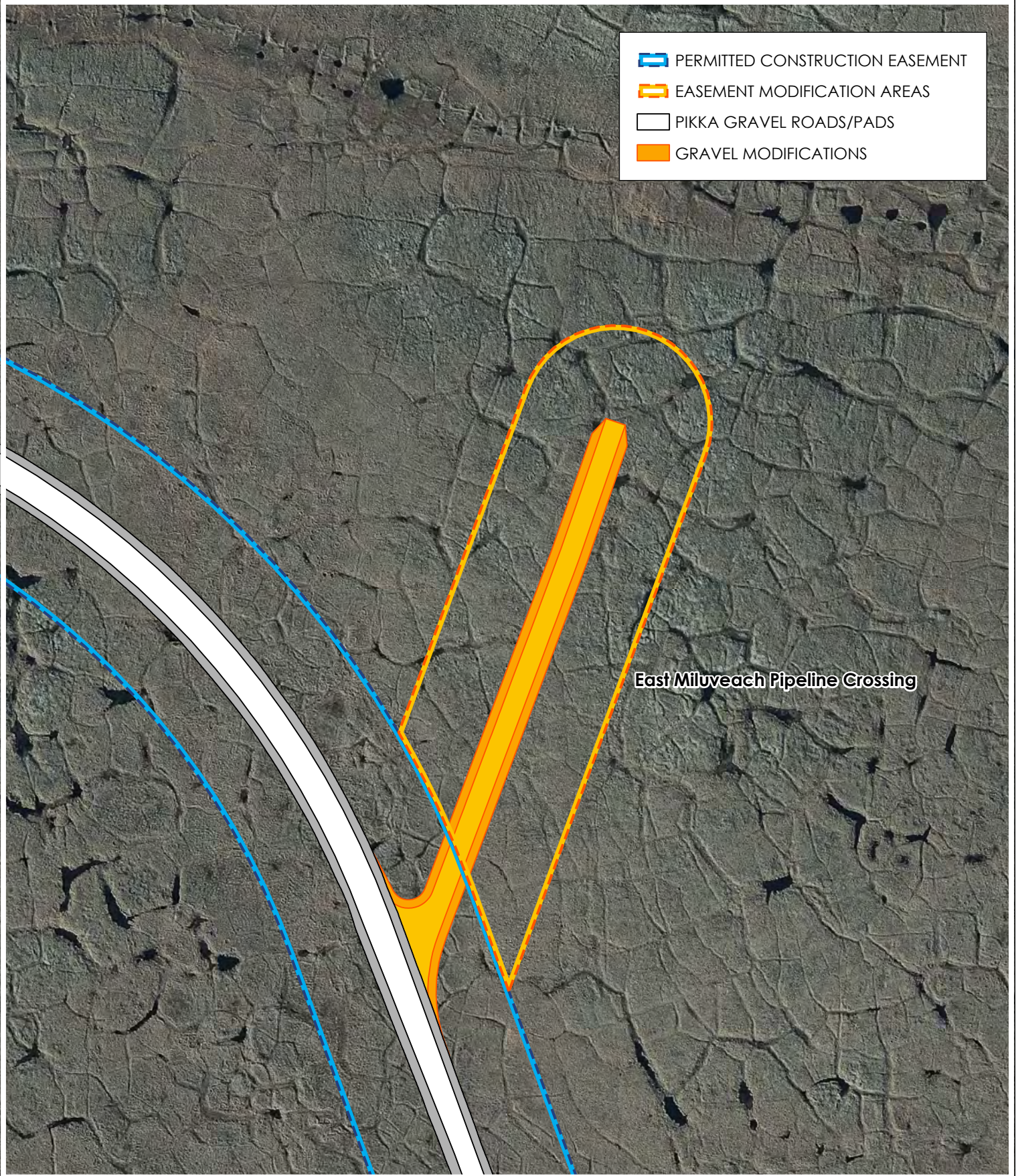


OIL SEARCH ALASKA LLC.
PIKKA DEVELOPMENT
PROPOSED VALVE PAD

Figure 4

GCS: NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet
 DATE: 3/18/2021. REV: 1.0. By: JB
 Document name: AP-DEV-PE-DF_projectPermits





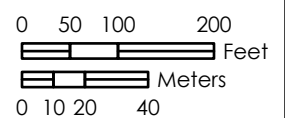
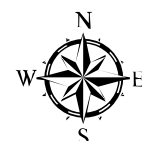
OIL SEARCH ALASKA LLC.
PIKKA DEVELOPMENT
PROPOSED EAST MILUVEACH
PIPELINE CROSSING

Figure 5

GCS: NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet

DATE: 3/18/2021. REV: 1.0. By: JB

Document name: AP-DEV-PE-DF_projectPermits



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OIL SEARCH (ALASKA), LLC

510 L STREET, SUITE 310
ANCHORAGE, AK 99501

DATE 21 APR 2021 1-2/210

PAY
TO THE
ORDER OF

State of Alaska Dept Natural Resources

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Security Features
Indicated
Details on Back.



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www.Chase.com

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