



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

FAIRBANKS FIELD OFFICE
Regulatory Division (1145)
CEPOA-RD
2175 University Avenue, Suite 201E
Fairbanks, Alaska 99709-4927

PUBLIC NOTICE DATE:	November 25, 2015
EXPIRATION DATE:	December 24, 2015
REFERENCE NUMBER:	POA-2015-591
WATERWAY:	Piledriver Slough

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.

Comments on the described work, with the reference number, 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 Melissa Riordan at (907) 474-2166, or by email at melissa.c.riordan@usace.army.mil if further information is desired concerning this notice.

APPLICANT: Great Northwest Incorporated, P.O. Box 74646, Fairbanks, Alaska 99707

AGENT: Travis/Peterson Environmental Consulting Incorporated, 329 2nd Street, Fairbanks, Alaska 99701

LOCATION: The project site is located within Section 28, T. 2 S., R. 3 E., Fairbanks Meridian; USGS Quad Map Fairbanks C-1; Latitude 64.7107° N., Longitude 147.1622° W.; TL-2863, near Eielson Air Force Base, Alaska.

PURPOSE: The applicant's stated purpose is to develop a new material site for expected infrastructure needs at and in near proximity to Eielson Air Force Base.

PROPOSED WORK: Develop material site within 37.6 acre property that includes a material extraction area, work bench, vegetated perimeter berms, work pads, and material storage area resulting in the discharge of fill into 2.09 acres of wetlands. All work would be performed in accordance with the enclosed plans (sheets 1-5), dated September 25, 2015 and (sheets 5-10), dated September 15, 2015.

APPLICANT PROPOSED MITIGATION: 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: The meandering slough channel in the middle of the property makes it logistically impossible to avoid all wetlands. Note: This is an old slough channel that no longer maintains surface flow or connection to Piledriver Slough, since the construction of the Richardson Highway, and now functions as a wetland.
- b. Minimization: The proposed action has been located in uplands to the extent practicable. The project is primarily located in uplands, with a small proportion of the overall development occurring in wetlands.
- c. Compensatory Mitigation: The applicant proposes permittee responsible mitigation, with the creation of 2.48 acres of wetlands located next to a large (9.04 acres) open water area that would be created with the dredging of a 40' deep material site. See attached permit application project description for more details (sheets 1-5).

WATER QUALITY CERTIFICATION: 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.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRS constitutes the extent of cultural resource investigations by the District Commander at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO 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.

ENDANGERED SPECIES: No threatened or endangered species are known to use the project area.

We have determined the described activity would have no effect on any listed or proposed threatened or endangered species, and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management 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).

No EFH species are known to use the project area. We have determined the described activity would not adversely affect EFH in the project area.

TRIBAL CONSULTATION: The Alaska District 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 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 right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: 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 of Engineers 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 of Engineers 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 are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement 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 authority:

(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 and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
401 Certification Program
Non-Point Source Water Pollution Control Program

ANCHORAGE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WQM/401 CERTIFICATION
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501-2617
PHONE: (907) 269-7564/FAX: (907) 334-2415

NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. **POA-2015-591, Piledriver Slough**, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project, with respect to Water Quality Certification, may submit written comments to the address above by the expiration date of the Corps of Engineer's Public Notice.

**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
ATTACHMENT TO APPLICATION**

Applicant: Great Northwest Inc.
Anton Johansen
2975 Van Horn Road
Fairbanks, Alaska 99707

Agent: Travis/Peterson Environmental Consulting, Inc.
Edmond C. Packee, Jr. PhD.
329 2nd Street,
Fairbanks, Alaska, 99701
Tel: (907) 455-7225
Fax: (907) 455-7228
Email: eddie@tpeci.com

Facility: Moose Creek Material Site
Moose Creek, Alaska 99705

Property: 3477 Old Richardson Highway,
North Pole, Alaska 99705
Tax Lot 2863
Section 28, Township 2 South, Range 3 East, Fairbanks Meridian

BLOCK 18 – NATURE OF ACTIVITY (Description of project, include all features)

The proposed project is to create a new materials site on Tax Lot 2863. The material site will consist of:

- 1.) Open water material site (9.04 acres);
- 2.) Created wetland area 2.48 acres);
- 3.) Working bench (9.18 acres);
- 4.) Vegetated perimeter berms (3.85 acres);
- 5.) Material stockpiling areas (0.96 acres); and
- 6.) Work pad and material storage area (7.74 acres).

A location and vicinity map is shown on Sheet 1 of 5;
The approved wetland delineation is shown on Sheet 2 of 5;
A plan view of the proposed material is shown on Sheet 3 of 5;
The proposed reclamation plan is shown on Sheet 4 of 5;
Cross-sections of the proposed facility are shown on Sheet 5 of 5.

BLOCK 19 – PROJECT PURPOSE (Describe the reason or purpose of the project)

The purpose of this project is to create a new material site by:

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1. Clearing vegetation from approximately 36 acres;
2. Creation of wetland area in west end of property;
3. Excavation of material site;
4. Stockpiling of usable silty overburden; and
5. Placement of gravel fill in old excavated area and across work pad and material storage area.

BLOCK 20 – REASON(S) FOR DISCHARGE

The reason for the discharge of gravel fill into wetlands is to create a material site and associated infrastructure in Moose Creek, Alaska.

BLOCK 21 – TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

The quantity of dredge and fill material for each part of the facility is described in Table 1.

TABLE 1: ESTIMATED QUANTITIES

Feature	Material Type	Quantity (cubic yards)	Dredge	Fill	Surface Area (acres)†
Open water material site	Gravel	48,300	X		1.00
	Organics	3,220	X		1.00
Created wetland area	Native soils	40,000	X		0.00
	Organics	6,645		X	0.00
Working bench	Gravel	1,660		X	0.52
	Organics	1,660	X		
Vegetated perimeter berms	Native Soils	12,200		X	0.34
	Organics	1,100	X		
Material stockpiling area	Gravel	4,000		X	0.21
	Organics	665	X		
Work Pad and Material Storage Area	Gravel	0.00			0.00
TOTAL		74,805	54,945	17,860	2.06

†wetland acreage rounded to hundredths of an acre

Created wetland area is in uplands. Dredge and fill volumes not included in column totals.

BLOCK 22 – SURFACE AREA IN ACRES OF WETLANDS FILLED

The surface area involving wetlands proposed for dredge and fill activity is provided in Table 1.

BLOCK 23 – DESCRIPTION OF AVOIDANCE, MINIMIZATION, AND COMPENSATION

Avoidance:

Great Northwest Inc. (GNI) had been interested in obtaining either land with material site development potential or an existing material site between the Chena Flood Control Project and Eielson Air Force Base. The material site will serve Eielson AFB projects and pursuant government procurement rules must be certified as clean material by an environmental professional on an annual basis. Existing material sites in the Moose Creek area are all close to

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 Applicant: Great Northwest, Inc.
 Moose Creek Material Site
 Sheet 2 of 10, Date: 9/25/2015

either Garrison Slough or Moose Creek. Garrison Slough is listed as an impaired water body by the Alaska Department of Environmental Conservation (ADEC). The contaminants of concern in Garrison Slough include polychlorinated biphenyls (PCBs) and military munitions.

GNI purchased Tax Lot 2863 for material site development in 2015. No other similarly situated property was available in the area at the time of purchase.

The existing development has avoided wetlands to the extent possible. The projected impacts are unavoidable due to the configuration of the land parcel and the need for the material site and pit infrastructure.

Plan views of the proposed development are provided in Appendix 1 (Sheet 3 of 5 and Sheet 4 of 5, respectively). The cross section views of the proposed development are provided in Appendix 1 (Sheet 5 of 5).

Minimization:

The existing facility has been located in uplands to the extent practicable. The meandering slough channel on the property makes it impossible, logistically, to avoid or minimize impacts. It is the intention of the operator to develop the west end of the material site into an open water/emergent wetland as mitigation for the 2.06 acres of wetlands being impacted.

Mitigation:

The applicant proposes to performed applicant sponsored mitigation for unavoidable impacts to wetlands on the subject property. The area proposed for cover material mining has been mapped as uplands. The applicant proposes to excavate material for landfill cover from the upland areas and convert them into wetlands. The applicant proposes enhancement of these upland areas by creating a shallow (approximately 10 feet deep) emergent wetland that will ultimately become the west end of the gravel pit.

Enhancement Process

The JDR provided to the Alaska District has wetland observation points located in the wetland types proposed for enhancement. The general sequence of actions required for wetland creation and enhancement includes:

- Trees and large woody debris would be removed mechanically;
- Approximately 10 feet of silty material will be removed from the 2.48 acre upland area;
- Organic overburden from the impacted slough channel will be placed on the floor of the excavated 2.48 acre upland site. The organic material will contain plants and seeds for wetland plants; and
- The shallow emergent wetland area will encompass approximately 2.48 acres and provide habitat for waterfowl and moose.

The total wetland acreage disturbed as a result of proposed activities is 2.06 acres. The total created wetlands area resulting from the proposed project will be 2.48 acres. Of the 2.48 acres applicant sponsored mitigation, 2.48 acres will be completed at the start of mining operations with remaining acreage to be completed as reclamation of the material site occurs.

Monitoring

The applicant proposes monitoring the site following final grading. The purpose of the monitoring is to evaluate the success of emergent revegetation and waterfowl usage. Monitoring data will be provided to the U.S. Army Corps of Engineers annually for evaluation. Proposed vegetation monitoring will include:

- Year 1 – pictures of reclaimed littoral area and open water area;
- Year 2 – pictures of reclaimed littoral area and open water area;
- Year 3 – quantitative vegetation sampling within littoral zone to document vegetation percent cover and species diversity;
- Year 4 – pictures of reclaimed littoral area and open water area; and
- Year 5 – pictures of reclaimed littoral area and open water area.

General Expectations and Benchmarks for Revegetation

Stabilization of surface soils will be by scarification (trackwalking) which reduces erosion potential by 52-55 percent based on studies performed by California Department of Transportation. This should be sufficient to protect the sloped exposed reclaimed littoral surface until vegetation is established.

Providing a timeline frame for the completion of revegetation following disturbance from material extraction is problematic. Methods and actions used successfully in other parts of the United States have not been shown to be practical or cost effective in Interior Alaska. Studies performed by the University of Alaska Fairbanks in the early 1990’s indicate that seeding relatively barren placer gravels with commercially available seed does not enhance, and may indeed retard, vegetation establishment in riparian areas. The scientifically supported method for revegetating material sites is volunteer recruitment.

The drainage surrounding the areas proposed for mining is heavily vegetated with a mix of both upland and wetland species. Thus, the natural seed sources are available for successful volunteer recruitment of vegetation. Based on empirical evidence, the following benchmarks are proposed for revegetation:

Time Frame	Succession Stage	Expected Outcomes Visual Monitoring	Anticipated Vegetation Cover (Percent)
>1 year	Nudation	Scattered forbs	<5
1 – 5 years	Migration/Ecesis	Patchy vegetation Clumps of vegetation Forb dominated cover Scattered seedlings Scattered shrubs	5 - 20
5 – 10 years	Competition I	Irregular vegetation Codominant forbs and shrubs (dwarf/low) Subdominant trees	20 - 40
10 -20 years	Competition II	Where vegetation established <5 years: Forbs declining in areal coverage Shrubs dominant (tall/low)	>40

		Subdominant trees	
		Where vegetation established 5-10 years Competition I stage	20 – 40
		Where vegetation established >10 years Migration/Ecesis Stage	5 - 20

The applicant proposes the following revegetation objectives, monitoring, cessation of monitoring, indications of conditions requiring remedial actions, and remedial actions:

Revegetation Objective: 20 percent total vegetation cover (Competition I Stage) across 50 percent of reclaimed areas with no more than 20 percent of reclaimed areas in Migration/Ecesis Stage.

Monitoring: Visual Monitoring with pictures from an established observation point.
 Photographs will be taken annually at the height of the growing season (early August) and before senescence.

Cessation of Monitoring: Competition I Stage

Indications of Remedial Actions: Described in Table (Column 3)

Proposed Remedial Action: Continue monitoring the site for evidence of Migration/Ecesis in denuded areas.

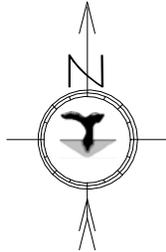
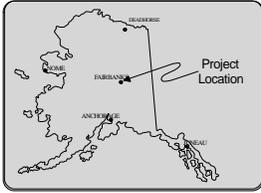
Revegetation will be considered successful when 50 percent (total) of the monitored area has achieved the Competition I stage and no more than 20 percent (total) of the monitored area is in the mitigation/ecesis stage.

Anticipated Wetland Compensation Ratios for Applicant Sponsored Mitigation

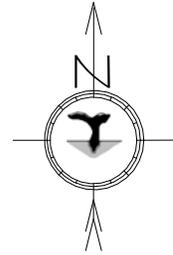
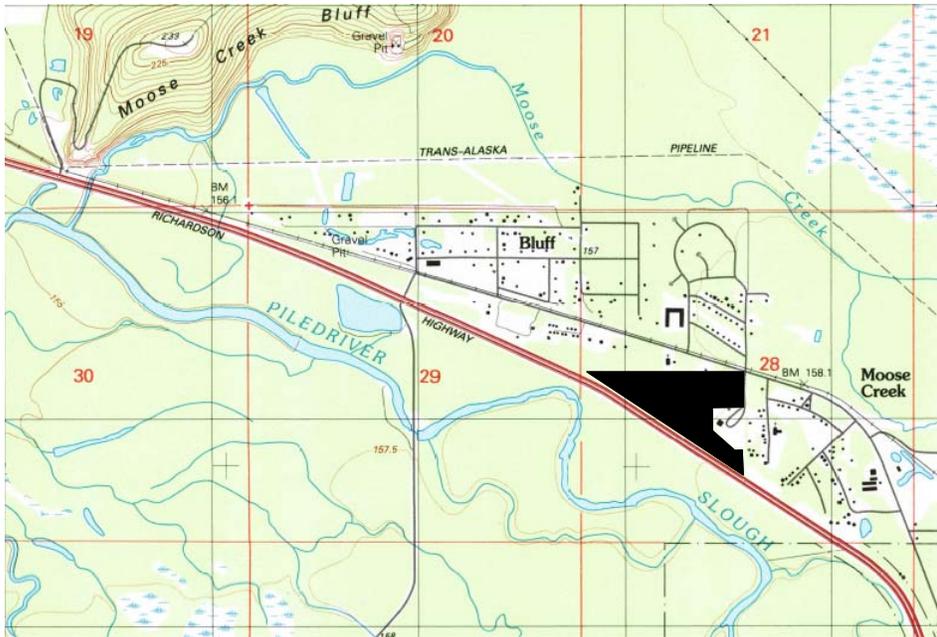
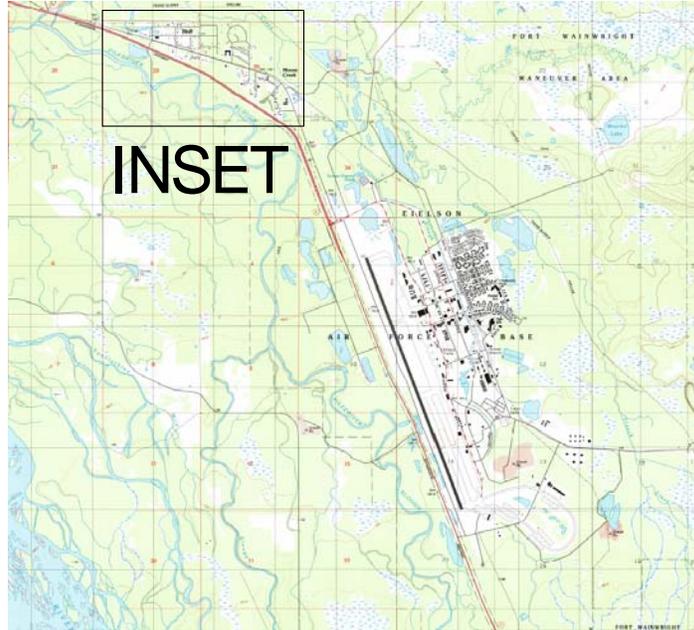
Based on the information, base compensation ratios for the upland conversion will be 2:1 (Class I) for 2.48 acres and a total wetland credit of 4.96 acres. The net wetland loss is 2.06 acres which should have a compensation ratio of 1:1 due to existing development in adjacent uplands and the relatively low habitat value (Class III) for a total wetland compensation of 2.06.

Corrective Actions

If either photographic monitoring or quantitative monitoring indicates a deficiency, the applicant will develop a corrective action plan to rectify identified deficiencies. The corrective action plan will be submitted to the U.S. Army Corps of Engineers for approval.

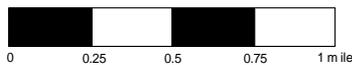


GRAPHIC SCALE



SUBJECT PROPERTY

Graphic Scale



GNI MOOSE CREEK MATERIAL SITE

Activity: Project Location and Vicinity Map

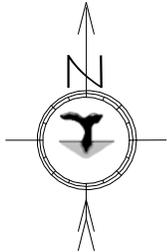
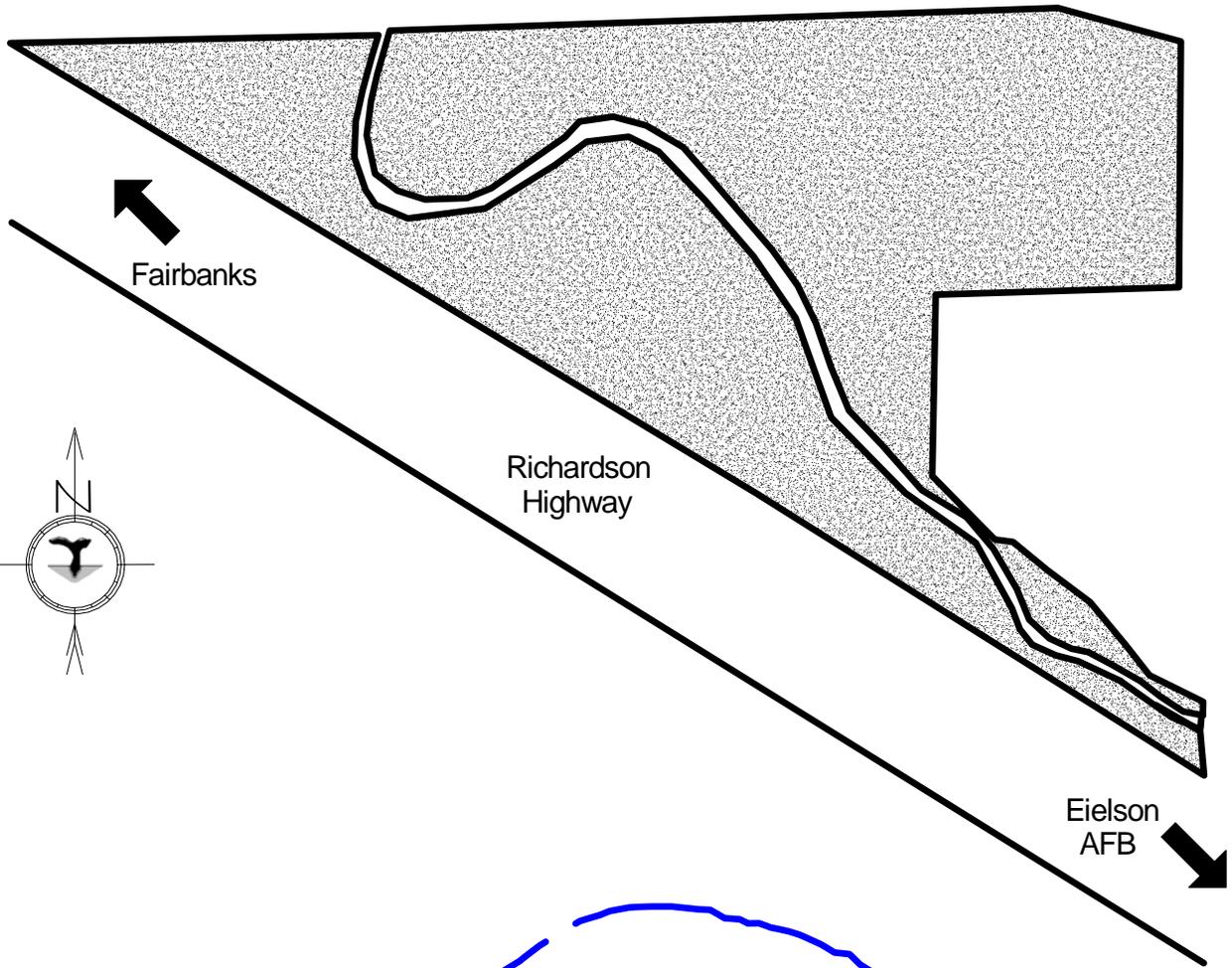
Purpose: Develop a material site on T.L. 2863

TRAVIS/PETERSON ENVIRONMENTAL CONSULTING, INC.
329 2ND STREET
FAIRBANKS, ALASKA 99701

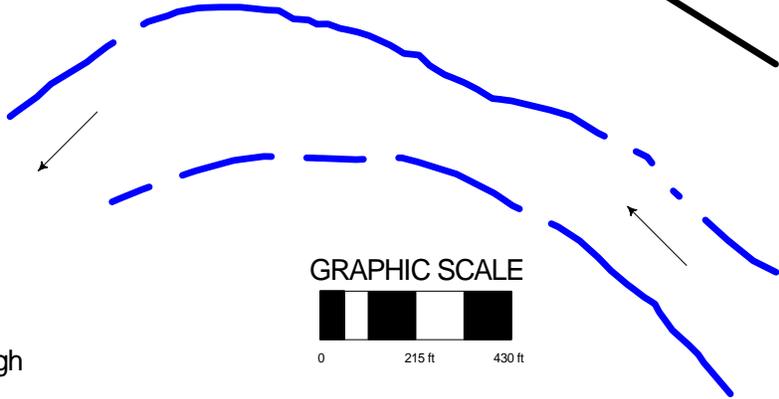
PROJECT No: 1008-42

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Applicant: Great Northwest, Inc.
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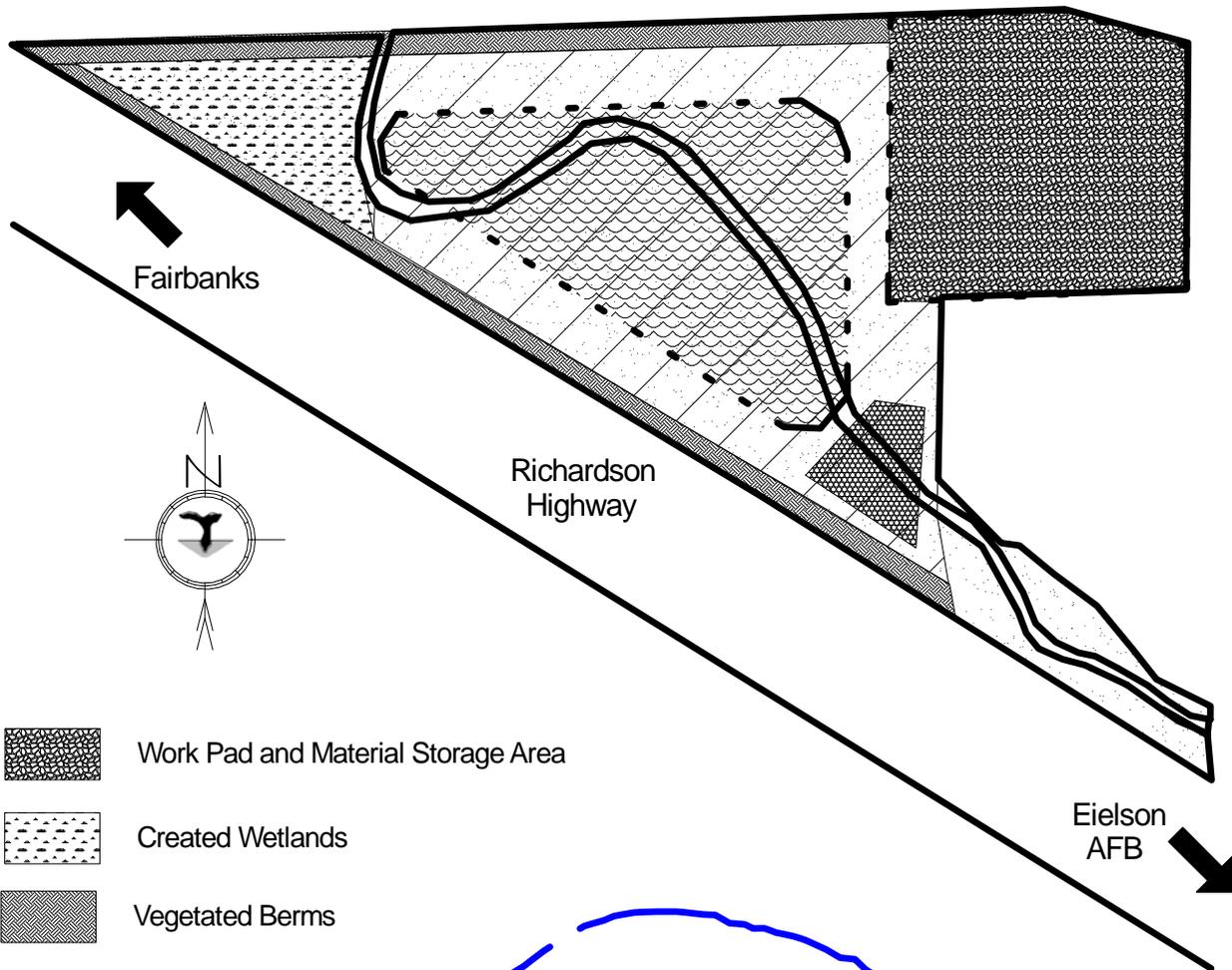


-  PSS1E/EM1
-  Uplands
-  Property Boundary
-  OHWM Pile Driver Slough



GNI MOOSE CREEK MATERIAL SITE
 Activity: Preliminary Wetland Determination
 Purpose: Develop a material site on T.L. 2863

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 329 2ND STREET
 FAIRBANKS, ALASKA 99701



 Work Pad and Material Storage Area

 Created Wetlands

 Vegetated Berms

 Material Storage Area

 Material Source Area

 Property Boundary

 OHWM Pile Driver Slough

 Surface flow direction

GRAPHIC SCALE



GNI MOOSE CREEK MATERIAL SITE

Activity: Proposed Material Site Development

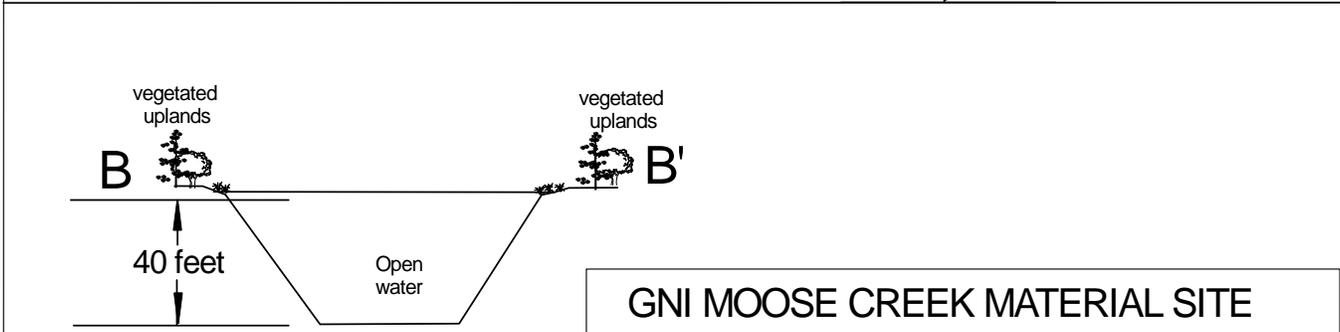
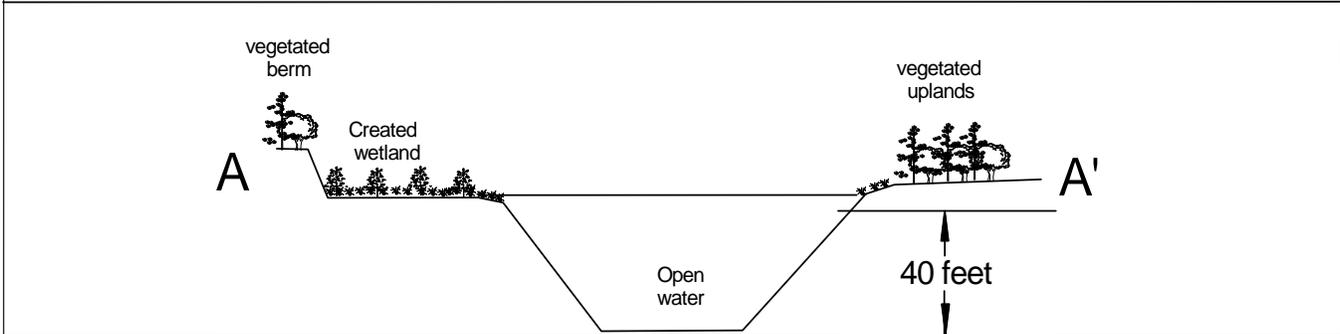
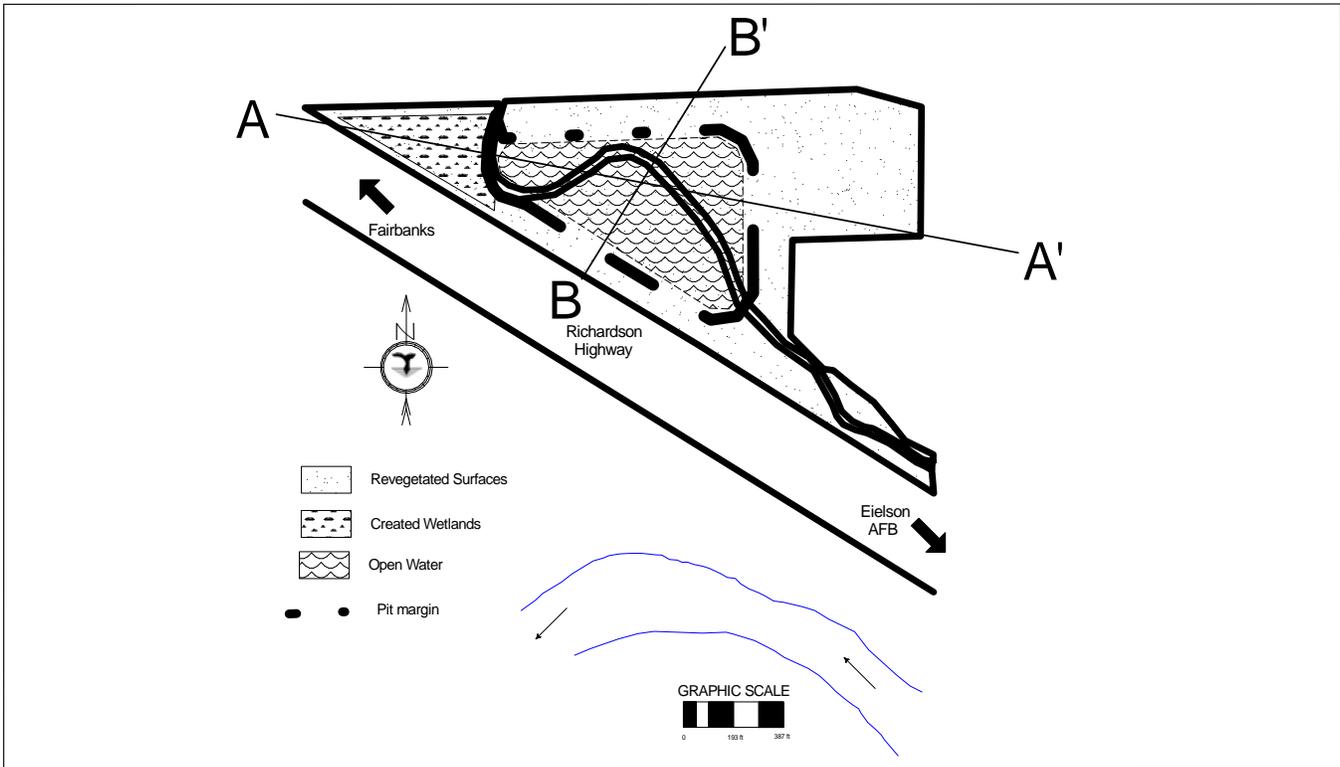
Purpose: Develop a material site on T.L. 2863

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PROJECT No: 1008-42

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Applicant: Great Northwest, Inc.
Moose Creek Material Site
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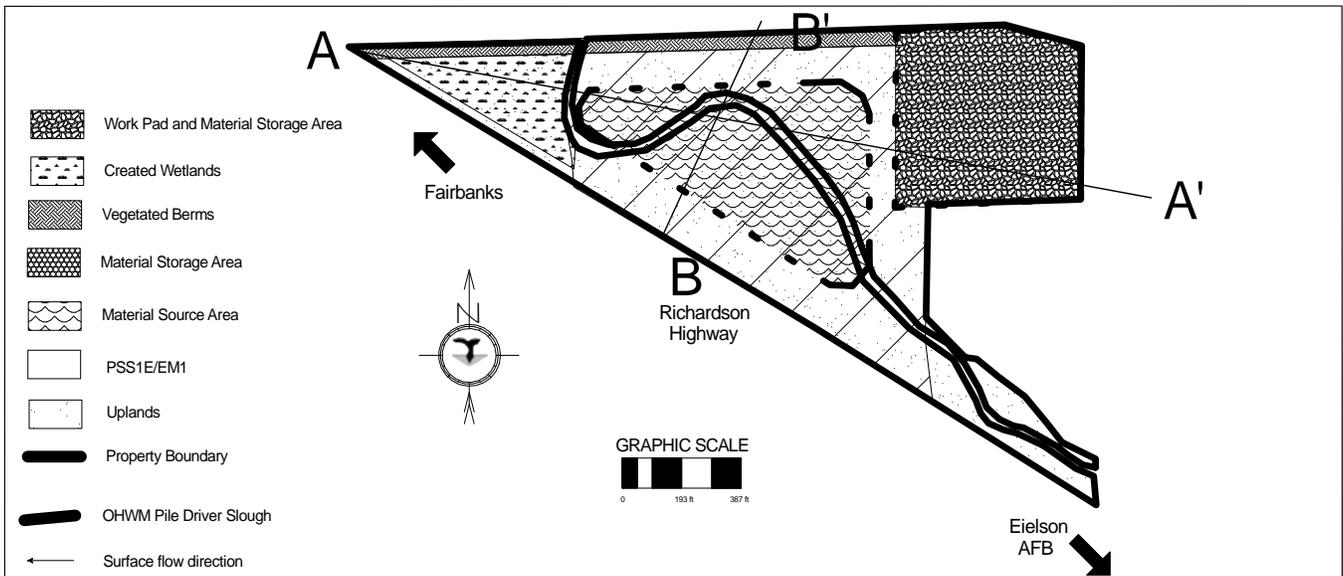
GNI MOOSE CREEK MATERIAL SITE
 Activity: Proposed Reclamation Plan and Cross Sections
 Purpose: Develop a material site on T.L. 2863

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 329 2ND STREET
 FAIRBANKS, ALASKA 99701

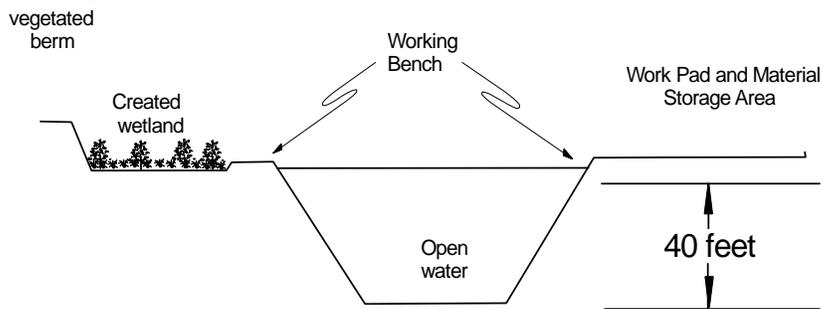
PROJECT No: 1008-42

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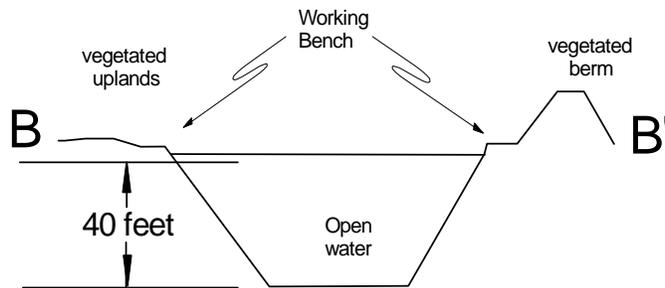
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CROSS SECTION A to A'



CROSS SECTION B to B'



GNI MOOSE CREEK MATERIAL SITE

Activity: Proposed Development Cross Section View

Purpose: Develop a material site on T.L. 2863

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PROJECT No: 1008-42

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Applicant: Great Northwest, Inc.
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