

Preliminary Decision Kootznoowoo Inc. ADL 108736 – Easement AS 38.05.850

I. Requested Authorization

An application dated January 19, 2017 was received from Kootznoowoo, Inc. (Applicant) requesting an easement of approximately 154 acres of state-owned tide and submerged land located in the Chatham Strait and approximately 6.5 miles from the City of Angoon north to the Thayer Creek outlet on Admiralty Island for placement of a submarine electric transmission cable associated with the Thayer Creek hydropower project. Applicant requests a lease with a term of 55-years.

Applicant proposes to lay approximately 6.37 miles of submarine transmission cable with two landings. One landing at Thayer Creek and one at the City of Angoon, where the cable will connect to Angoon's existing electrical grid. Applicant plans to discharge 1,500 cubic yards of clean rock fill into 0.46 acres of state land below mean high water to secure and armor 1000 linear feet of 4-inch diameter electric transmission line.

Kootznoowoo, Inc. has also applied for a lease of state tide and submerged lands, for a marine access facility approximately 0.4 miles north of Thayer Creek. That application is being considered concurrently under file ADL 108566.

Proposed Action

The Southeast Regional Office of DNR, Division of Mining, Land and Water (DMLW) intends to issue the applicant a private nonexclusive easement over state-owned tide and submerged land for laying and maintaining a submarine transmission cable along an approximate 6.37-mile-long section of Chatham Strait immediately north of Angoon with an initial term of 30 years. During the entry authorization period, Applicant will be granted an approximate 200 ft wide authorization for laying the cable. Once laid, an as-built survey will finalize the easement location and establish an approximate 30-foot width. A thirty-year term is concurrent with the term of the applicant's 30-year special use authorization that the U.S. Forest Service will issue to the Applicant for the related upland hydropower project.¹

¹ Angoon Hydroelectric Project, Record of Decision, May 2009, p. 7 Preliminary Decision Page 1 of 12

II. Statutory Authority

AS 38.05.035, AS 38.05.850 and Alaska Administrative Code 11 AAC 55.

III. Administrative Record

Case file ADL 108736 is the administrative record for this case. Also, incorporated by reference is the Northern Southeast Area Plan 2002.

IV. Scope of the Decision

The scope of administrative review for this authorization [AS 38.05.035(e)(1), (2)] is limited to (1) reasonably foreseeable, significant effects of the uses to be authorized; (2) applicable statutes and regulations; (3) the facts pertaining to the land or resources; and (4) issues that are material to the determination that issuing the authorization will best serve the interest of the State of Alaska.

V. Location Information

Geographic Location

Subject parcel is an unsurveyed parcel of state owned tide and submerged land located in Chatham Strait, approximately 6.4 miles between the City of Angoon north to the outlet of Thayer Creek, Admiralty Island, Alaska.

Legal Description

Copper River Meridian, Township 49 South, Range 67 East, Section 34 and 35, and Township 50 South, Range 67 East, Section 2, 3, 11, 14, 23, 25, 26, and 36 on approximately 154 acres of tide and submerged land.

Latitude and Longitude (DD)

57.5782°N, 134.6290°W at Thayer Creek

Other Land Information

- **i. Municipality:** Angoon (at south end of transmission cable)
- ii. (ANCSA) Regional Corporation: Sealaska Corporation
- iii. Village Corporation: Kootznoowoo, Inc.
- iv. Federally Recognized Tribe: Central Council of the Tlingit and Haida Indian Tribes

VI. Land Status Information

Title

The State of Alaska owns the tide and submerged lands of the project area under the Equal Footing Doctrine and the Submerged Lands Act of 1953.²

The United States retains all its navigational servitude control of said lands and navigable waters for the constitutional purposes of commerce, navigation, national defense, and international affairs, all of which shall be paramount to, but shall not be deemed to include, proprietary rights of ownership, or the rights of management, administration, leasing, use, and development of the lands and natural resources which are specifically recognized, confirmed, established, and vested in and assigned to the respective States and others by section 1311 of the Submerged Lands Act, 43 U.S.C.

Planning and Classification

Per 11 AAC 55.040(c), "A classification identifies the primary use for which the land will be managed, subject to valid existing rights and to multiple use."

The proposed site is subject to the Northern Southeast Area Plan 2002 (NSEAP), and is located within Management Unit AT-18, Thayer Creek (1,204 acres). The area within AT-18 is designated as both habitat (Ha) and harvest (Hv). The habitat designation converts to Wildlife Habitat land classification. The goals of land designated as habitat and harvest are to: 1) ensure access to public lands and waters, 2) mitigate habitat loss, and 3) contribute to economic diversity. The NSEAP states that "all land use activates will be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish, wildlife, or their habitats."

The NSEAP lists the resources and uses in AT-18 as follows:

Chum and pink salmon use this unit for rearing, schooling, spawning, and migration. This unit contains an anadromous stream estuarine area where brown bears concentrate, anadromous stream 112-17-10500. There are eagle nests within this unit. There are also known spring concentrations along fish streams of brown bears in this unit. The area is also used by local communities for sport fishing. Brown King crab are also harvested within this unit.⁵

² RPT 9532 DNR Realty Services

³ NSEAP chap.2, p.10

⁴ NSEAP chap.2, p.10

⁵ NSEAP chap.3, p.161

Parcels designated habitat and harvest are to be managed to ensure minimal disturbance to the harvest resources identified for a given area. When issuing leases, or authorizing the use or development of state lands, DNR, Department of Environmental Conservation (DEC), and Alaska Department of Fish and Game (ADF&G) will recognize the requirements of the activity or development and the benefits it may have to habitat when determining stipulations or measures needed to protect fish, wildlife, or their habitats.⁶

The NSEAP continues to note that, since there is a distinct seasonality associated with the critical life periods of certain marine mammals and fish, seasonality shall be taken into consideration during project review and approval. It may be possible that uses and facilities may be appropriate within areas designated "Ha" and/or "Hv" if the seasonality criteria are satisfied by including mitigating measures in project design.⁷

The Applicant and permitting agencies have recognized the diverse resources and habitat in unit AT-18. These concerns have been addressed throughout the planning stage of the project, most notably in the project's environmental impact statement undertaken by the U.S. Forest Service with input from the National Marine Fisheries Service (NMFS), and Alaska Department of Fish and Game (ADF&G). Additionally, the U.S. Army Corps of Engineers (USACE) permit to Applicant to place fill material for the proposed project also considers environmental impacts.

Mineral Orders

The prospective easement area is not covered by a mineral order. (AS 38.05.185, 300).

Traditional Use Finding

AS 38.05.830 requires the consideration of effects that the proposed lease will have on the density of the population near the proposed site, and potential for conflicts with the traditional uses of the land that could result from the lease.

The proposed lease is likely to have little or no effect on the population in the immediate vicinity and there is little potential for conflict with the known traditional uses of the land. If we are provided information that clearly demonstrates the lease and the associated development and use have the potential to adversely impact traditional uses, we will, in the Final Finding and Decision, address the potential impacts and present mitigation measures that will either minimize or avoid impacts to traditional uses.

⁶ NSEAP chap.3, p.10

⁷ NSEAP chap.3, p.11-12, 16

USDA, Angoon Hydroelectric Project Final Environmental Impact Statement, Feb 2009; USACE POA-2001-86,
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VII. Third Party Interests

There are no third party property interests in the prospective tide and submerged lands requested by the Applicant.

VIII. Background

The Applicant, Kootznoowoo, Inc., was formed under the Alaska Native Claims Settlement Act (ANCSA) as a village corporation for the City of Angoon. In the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), Congress granted Kootznoowoo rights to develop a hydroelectric facility at Thayer Creek and exempted the project from the requirements of the Wilderness Act. However, the Secretary of Agriculture (through the Forest Service) can prescribe conditions for the project for the protection of the water, wildlife, recreational, and scenic values of Admiralty Island. In January 2001, the Federal Energy Regulatory Commission (FERC) ordered that the Thayer Creek project would not require a FERC license, as FERC does not have jurisdiction over National Monument lands administered by the Forest Service. The Forest Service released a final EIS for the project in February 2009, and plans to issue a special use authorization to the Applicant for a 30-year term.

The proposed hydropower project is a run of the river 0.85 MW facility, comprised of a 55-foot tall diversion dam on Thayer Creek above the barrier falls and about 1200 feet from the Chatham Strait shoreline. A 550-foot long penstock will carry water to a powerhouse where the generators and switchgear will be located. A submarine transmission line will convey electricity to Angoon.

The applicant applied to DNR for the easement of the subject tide and submerged land for the laying of the transmission cable in January 2017. On May 2, 2017, the applicant received a necessary proffered permit from the U.S. Army Corps of Engineers to place fill material along the transmission cable route at landings. ¹²

Related Actions

Kootznoowoo, Inc. has also applied for a lease of state-owned tide and submerged lands for the construction of a marine access facility just north of Thayer Creek. That lease application is being considered congruent with this decision under ADL 108566. An application for water rights is being adjudicated separately under LAS 30426.

⁹ ANILCA 506(a)(3)(B)

 $^{10 \}text{ Id}$

¹¹ Angoon Hydroelectric Project Final EIS, U.S. Forest Service, February 2009, 1-6

¹² USACE POA-2001-86

IX. Agency Review

DNR provided notice and requests for input regarding the proposed lease site to relevant state agencies in August 2016. ADF&G commented that they have been involved in evaluating the project throughout the planning process and had no objections to the submarine transmission cable.

X. Access

Physical and Legal Access

Public access and use of the prospective easement area shall be maintained at all times with only reasonable exceptions to protect the project's operations, and temporarily restricted in specific areas as required for public safety during installation and maintenance.

Access To and Along Public Waters:

Pursuant to AS 38.05.126(a), the public has a constitutional right to free access to, and use of, navigable or public waters of the State of Alaska. Under 11 AAC 51.045 and AS 38.05.127, DMLW is required to reserve specific public-access easements to and along these waters.

XI. Environmental Considerations

It is our management responsibility to protect the overall public interest if there is a reasonable expectation that a hazardous condition, or hazardous, toxic or radiological material or contamination from such material exists or is known to exist on the land proposed for lease. There are no hazardous conditions known to exist at the proposed site.

The applicant is expected to inspect the prospective lease site and familiarize itself with the condition and quality of the land. The state makes no representations and no warranties, express or implied, concerning the existence or absence of any hazardous substances, hazardous wastes, contaminants, or pollutants on the land. The State of Alaska does not assume any liability for the removal of hazardous substances, hazardous wastes, contaminants, or pollutants, nor for the remediation of the site should such substances ever be identified.

Some disturbance to marine life during the construction phase of the project from increased vessel traffic and laying the transmission line could impact whales and other marine mammals in the Chatham Straight. These possible impacts have been addressed in the Applicant's EIS and in the subsequent Change Analysis, which provided an updated Biological Assessment & Evaluation (BA/BE). Based on the final project design, the Biological Evaluation determined that there would be no effects on humpback whales and stellar sea lions. Additionally, existing law prohibits harassing, or coming within 100 yards of humpback whales, or 50 yards of other marine mammals.

During the environmental impact assessment phase the National Marine Fisheries Service commented that, "the laying of 5 miles of submarine lines 600ft deep in Chatham Strait would not affect nearshore, littoral, or benthic habitats. The amount of space taken up by the lines relative to the habitat within Kootznahoo Inlet or Chatham Strait would be minor."¹³

XII. Performance Guaranty

In accordance with 11 AAC 96.060, performance guaranties are means to assure performance and to provide ways to pay for corrective action if the permittee fails to comply with the requirements set forth in the project plans and easement. The amount of the performance guaranty is based on the scope and the nature of the activity and the potential cost of restoring the site. In order to ensure the responsible construction and development of the proposed project and execution of the easement, a performance guaranty of \$78,000 shall be required during the early entry permit period of the project through the completion of project construction. An asbuilt survey and a construction completion report shall be submitted to DNR proving that the project was completed according to plan and without any unplanned impacts to state land. Upon DNR's approval of the construction completion report, DNR will release the performance guaranty. In order to ensure site restoration, three years before the expiration of the easement, the grantee shall apply to DNR for a new easement for the same site, or post a commensurate performance guaranty and submit to DNR a site restoration plan. If at any time during the easement term, DNR reasonably determines that the project's continued operation is in jeopardy, DNR may require the lessee to provide a commensurate performance guaranty and restoration plan.

Performance guaranties are subject to periodic adjustments being made during the term of the authorization to address increases or decreases in risk associated with the project, the costs of rectifying problems, and restoring state land due to inflation, changes in the level or nature of development, or other appropriate factors.

XIII. Insurance

Insurance is a means to protect the state from liabilities incurred through the use of state property, or from damage to state property as a result of accidental or catastrophic events. This type of protection is necessary in the event of an accident or negligence that was consequentially connected to activities conducted on state land, and/or if the state is named in a lawsuit as a result of an accident or negligence.

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- Commercial **General Liability Insurance:** Such policy shall have minimum coverage limits of \$1,000,000 combined single limit per occurrence.
- Workers' Compensation Insurance: The Applicant shall provide and maintain, for all its employees, Workers' Compensation Insurance as required by AS 23.30.045. Where applicable, coverage must comply with any other statutory obligations, whether Federal (i.e., U.S.L.&H., or, Jones Act) or other state laws in which employees are engaged in work on the leased premises. The insurance policy must contain a waiver of subrogation clause in favor of the State of Alaska.

If the Applicant's general liability policy contains higher limits, we shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to us prior to the issuance of this lease and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. The Applicant must provide for a 60-day prior notice to the State of Alaska before they cancel, not renew or make material changes to conditions to the policy. Failure to furnish satisfactory evidence of insurance, or lapse of the policy, is a material breach of this lease and shall be grounds, at the option of the State of Alaska, for termination of the lease.

XIV. Survey

Upon receiving an Early Authorization from DNR, the Applicant shall conduct an as-built survey acceptable to the standards of the DMLW Survey Section prior to the expiration of the Grantee's Entry Authorization. The Applicant will be responsible for all costs associated with conducting the survey.

XV. Fees/Appraisal

Fee Narrative: 11 AAC 05.010

As required by 11 AAC 05.010(e)(11) the fee for this non-exclusive private easement under AS 38.05.850 will be an annual fee of \$100 per acre.

XVI. Term

EA Term: Three years, or shorter if the easement is issued prior to the EA expiration.

Easement Term: Thirty years, a term concurrent with the Applicant's authorization from the U.S. Forest Service, or until such time the easement is no longer used for the requested purpose.

XVII. Economic Benefit and Development of State Resources

AS 38.05.850(a) requires that in the granting of easements DNR give preference to the use of the land that will be of greatest economic benefit to the state and the development of its resources.

XVIII. Discussion

As discussed in section VI above, the proposed easement on state-owned tide and submerged land and the use of the area is compatible with the land classification in the NSEAP. Additionally, the easement is non-exclusive and public access in and around the easement area will be maintained with only reasonable and limited exceptions for public safety.

An alternatives analysis for the hydropower project and the submarine cable, including a no-action alternative, was conducted by the U.S. Forest Service during the environmental assessment process. That process resulted in moving the marine facility location closer to the upland project site, and the use of the subject submarine transmission line in place of an above ground option. In May 2017, USACE issued the applicant a proffered permit under section 404(b)(1) of the Clean Water Act to place fill along the submarine cable route. Similarly, USACE must follow guidelines under 40 CFR 230.10(a) on alternatives considerations for all section 404 permit applications.

The National Marine Fisheries Service was invited to comment on the submarine cable during the U.S. Forest Service's environmental impact assessment process. NMFS concluded that: "the laying of 5 miles of submarine lines 600ft deep in Chatham Strait would not affect near-shore, littoral, or benthic habitats. The amount of space taken up by the lines relative to the habitat within Kootznahoo Inlet or Chatham Strait would be minor."

With these considerations, the Southeast Regional Office of DNR, Division of Mining, Land and Water is prepared to issue Applicant an easement over the subject lands for a 30-year period congruent with its authorization from the U.S. Forest Service. It is thus recommended that the applicant be issued a non-exclusive private easement for approximately 1.7 acres of tide and submerged land in Copper River Meridian, Township 49 South, Range 67 East, Section 34 and 35, and Township 50 South, Range 67 East, Section 2, 3, 11, 14, 23, 25, 26, and 36 on total of approximately 78 acres of tide and submerged land, subject to the terms and conditions stated below.

XIV. Recommendation

Authorization Type and Term

Pursuant to AS 38.05.850, we recommend the issuance of a 30-year easement to begin at the end of construction to coincide with U.S. Forest Service issued authorization for the upland project to the applicant for installing and maintaining a submarine transmission line in Chatham Strait.

Special Stipulations and the terms and conditions set forth therein (Attachment 2).

This is a preliminary decision and subsequent public review may result in changes or disapproval of the proposed action altogether.

Terms and Conditions

- 1. Public access shall be maintained as required by AS 38.05.126, 127.
- 2. The Permittee shall use only clean fill material for this project..
- 3. Provide access to DNR, ADF&G and DEC during the construction phase to monitor compliance.
- 4. The easement and entry authorization shall contain modifications and/or provisions that are justified by public comment.
- 5. The grantee shall restore the easement area to a good and marketable condition, acceptable to the commissioner. Reclamation of the site may require full dismantling and removal of the fill upon expiration or termination of the easement. A future decision will determine the extent of required reclamation and will consider whether, due to naturalization and habitat growth, it would be more detrimental to the environment to remove all or a portion of the fill or dredged materials.
 - a. In order to ensure site restoration, three years before the expiration of the easement, the Applicant shall apply to DNR for a new easement for the same site, or post a commensurate performance guaranty and submit to DNR a site restoration plan. Alternatively, if at any time during the term of the permit, DNR reasonably determines that the project's continued operation is in jeopardy, DNR may require the lessee to provide a restoration plan and a commensurate performance guaranty.
 - b. The performance guaranty amount may be adjusted during the term of the permit to reflect newly discovered risks or costs for full reclamation of the site.

Signature page follows

Adam Moser, Natural Resource Specialist III	June 8, 2017 Date
Regional Manager's Decision	

Benjandin M. White Southeast Regional Manager

June 8, 2017 Date

 $Attachments: \quad A-Development\ Plan$

B – Easement and Stipulations C – Early Authorization

PUBLIC NOTICE, FINAL DECISION AND APPEAL PROCESS:

In accordance with the provisions of AS 38.05.945, public notice seeking comments on this preliminary decision will be given to: City of Angoon, Sealaska Corporation; Central Council of the Tlingit and Haida Indian Tribes, and those parties that have previously requested written notice. We will also request that the Angoon and Juneau Post Offices post the notice. It will be available on the internet as the Alaska Online Public Notice website, which can be accessed at www.state.ak.us.

The public is invited to comment on this preliminary decision. Comments must be received in writing by the DNR Division of Mining, Land & Water by mail at 400 Willoughby Avenue, P.O. Box 111020, Juneau, AK 99811-1020; by fax at (907) 465-3886; or by electronic mail to adam.moser@alaska.gov by the close of business on **July 7, 2017** to ensure consideration. Please include your mailing address and telephone contact. In order to establish appeal rights regarding this decision, you are required by law to meaningfully participate in the decision process by commenting on the decision, in writing, prior to the comment deadline. Following the deadline, all timely written comments will be considered, and DNR may modify this decision based on public comments received.

If DNR determines that public comments in response to this notice indicate the need for significant changes to the decision, additional public notice will be given. If no significant changes are required, the preliminary decision, after any necessary minor changes, will be issued as a final decision. A copy of the final decision, along with instructions on filing an appeal, will be sent to all persons who comment on the preliminary decision. Persons who do not submit written comments during the comment period will have no legal right to appeal the final decision.

Attachement A: Development Plan

THAYER CREEK HYDROELECTRIC PROJECT

Marine Facility Usage Plan

(Attachment to Alaska DNR Lease Application for Marine Facility)

Table of Contents:

- I. Project Description
- II. Development Rights
- III. Project Status
- IV. Transportation Plan

Appendix - Acronyms and Abbreviations

I. Project Description:

Kootznoowoo, Inc. proposes to construct a 0.85 MW hydroelectric power generating facility (Thayer Creek Hydroelectric Project or Project) at Thayer Creek on lands within the Tongass National Forest, Admiralty Island National Monument. Thayer Creek is the only watershed close enough to the Village of Angoon, Alaska (Angoon) and outside the Kootznoowoo Wilderness capable of supporting a small hydropower facility that can meet the current and future electric power needs of Angoon. The Project will provide electric power to Angoon, replacing higher cost diesel generators about 97 percent of the time.

In November 2015, the Board of Directors of Kootznoowoo Inc. selected a location at the anadromous barrier falls near the mouth of Thayer Creek for the Project (Figure 1). The Project will utilize the existing natural elevation drop (head) of Thayer Creek and operate run-of-river. The proposed Project has a much smaller footprint and fewer Project effects on natural resources than the option selected and approved by the U.S. Department of Agriculture, Forest Service (Forest Service) in the 2009 Angoon Hydroelectric Project, Record of Decision (ROD).

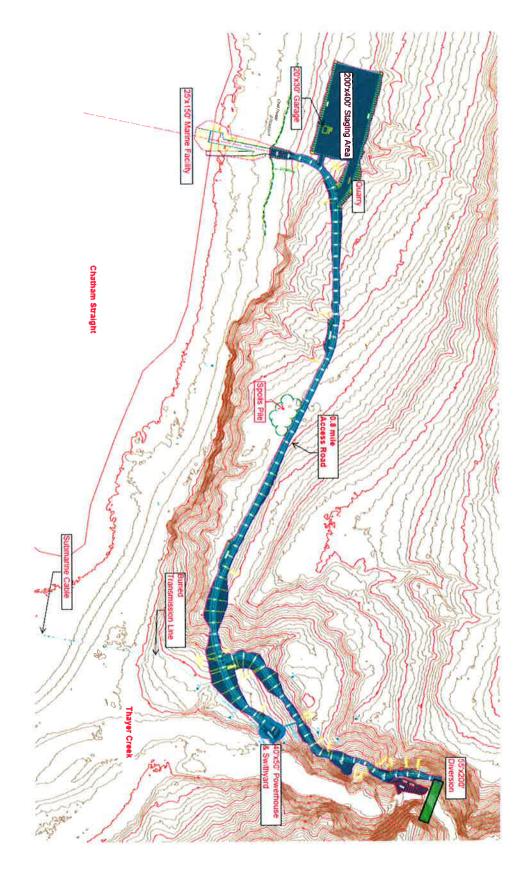


Figure 1: Project Location and Layout

The Project design includes:

- A marine facility north of Thayer Creek to provide sheltered barge and boat access for construction and operations (see Figure 2)
- A 2 acre staging area and quarry located in the forest near the marine facility
- 0.8 miles of access road from the marine facility to the dam and powerhouse
- A 55-foot tall diversion dam located above the barrier falls and about 1200 feet from the Chatham Strait
- A 60-inch 550-foot long penstock from the dam to the powerhouse
- A powerhouse with a 0.85 MW turbine, generator, switchgear and controls
- A switchyard at the powerhouse to provide monitoring and protection,
- An 800-foot long buried 12.5kV transmission line from the powerhouse to the submarine cable in Chatham Straight
- A 6.5 mile 12.5 kV submarine cable going from Thayer Creek to Angoon via Chatham Straight
- A buried or overhead 12.5kV transmission line in Angoon connecting the submarine cable to IPEC's substation.

Based on the work of several engineering and construction firms experienced in hydro development, the preliminary cost estimate for completing development and project construction is \$16 million.

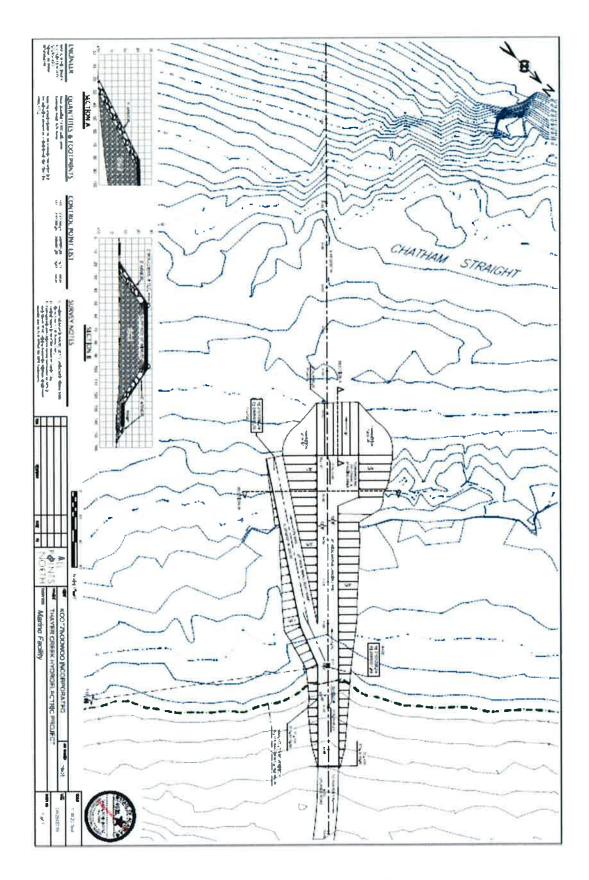


Figure 2: Marine Facility Design

II. Project Development Rights:

The development rights for the Project were granted to Kootznoowoo Inc. in 1982 by federal statute. Kootznoowoo, Inc., the Angoon village corporation, was created in 1971 when the Alaska Native Claims Settlement Act (ANCSA) was signed into law by President Richard M. Nixon. The law was passed to extinguish all aboriginal land claims in Alaska. As a result, there were 12 regional corporations and over 200 village corporations that were expected to bring sustainable economic benefits to Alaska Natives through a combination of land and cash distributions from Congress. Kootznoowoo, Inc. opted to postpone receiving ANCSA entitlements and rights until 1982 when the Alaska National Interest Lands Conservation Act (ANILCA) was signed by President Jimmy Carter. ANILCA, Section 506, defined Kootznoowoo's ANCSA lands entitlement and rights. One of the ANCSA entitlements was the exclusive right to develop the hydroelectric resources of Thayer Creek just north of Angoon to meet the needs of the village since Angoon was surrounded by federal Monument and Wilderness lands.

III. Project Status:

The conceptual design for the Project has a completed and the detailed engineering is now underway. The Project is also well along in the permitting process. In 2009, the Forest Service selected a larger more complex design in the Angoon Hydroelectric Project, Record of Decision. Using value-engineering techniques, a smaller, lower cost design has been selected that will reduced Project effects on natural resources than the alternatives evaluated in the Final Environmental Impact Statement (FEIS) and ROD. Therefore, the Forest Service requested a change analysis to the ROD. The change analysis was provided to the USFS for review on March 6, 2016. The project will also require permits from Alaska Department of Natural Resources, Alaska Department of Fish and Game, US Fish and Wildlife Services, the Alaska Department of Dam Safety and the U.S. Army Corp of Engineers. Outreach meetings with all of these agencies are underway.

The project engineering, permitting and construction will be competed in two phases. Phase 1 includes site access and initial site preparation for the marine facility, staging area and quarry, access roads, and preliminary site clearing at the powerhouse and dam. Phase 2 includes construction of the powerhouse, dam, penstock, and transmission line.

IV. Marine Facility Usage Plan

The Project site is remote and currently has no established access facilities or roads. The marine facility is designed to provide sheltered barge and boat access. The marine facility barge landing is a 25' wide and 150' long facility to provide barge access, primarily during construction for landing of equipment and materials. Incorporated in the facility is a boat ramp that will enable landing boats during construction and for access for hydropower system operations and maintenance.

<u>Transportation Activities During Construction – Phase 1</u>

Phase 1 of the project includes construction of the marine facility, access road, staging area and quarry, as well as initial site preparation at the dam and powerhouse sites. Phase 1 of the project construction is estimated to take about 6 to 12 weeks, depending upon whether major project elements are done in parallel or not. This work is described in more detail in the Construction Schedule.

A relatively small crew of 5-10 staff will be needed during Phase 1. Equipment transportation to the site will initially be a barge equipped with a landing ramp that will unload equipment on the beach near Thayer Creek until the marine facility is completed. Given the small crew size, transportation of the crew will average one roundtrip from Angoon to the site per day. Materials for use in the construction of the marine facility will be brought in by barge. This includes a combined total of 13,300 cubic yards of 5' armor rock and 6-10" core rock. Delivery of this material will require about 6 barge trips to the site.

Once the marine facility is completed, materials and crew will use that facility for site access. Gravel and surface rock for the road construction will be stockpiled at the staging area. Since a local quarry is being developed at the Project site, the exact amount of materials needed to be imported by barge to augment what will be produced at the quarry is unknown. But it is estimated that an additional 5 barge deliveries will be required to augment the quarry. It is also expected that materials needed for the dam construction will begin to be stockpiled at the staging area during Phase 1. Total quantities of materials for the dam are estimated to be about 10,000 cubic yards of aggregate and concrete. Some portion of the aggregate may be able to be sourced from the local quarry. But if this is not possible, about 5 barge deliveries will be required to bring in the materials for the dam during 2016 and 2017.

Fuel will also need to be brought in during construction. The current proposal for fuel handling is that during Phase 1 road construction, a 2500 gallon tanker truck will be brought in to provide fuel for the construction vehicles. During Phase 2 construction, two 2500 gallon tanker trucks will be brought in as well as a 5000 gallon tanker trailer. When the tanker truck is empty, the entire truck will be loaded on the barge, refueled and returned as necessary.

<u>Transportation Activities During Construction - Phase 2</u>

Phase 2 of the project includes construction of the dam, powerhouse, penstock, tailrace and transmission line. This phase of the project is estimated to take about 6-9 months during 2017. The estimated crew size will be about 25-30 people, expected to work five to six ten hour days per week. The current plan is lodge the workers in Angoon and have a boat that makes one round trip from Angoon to the marine facility per day.

Delivery of equipment for dam construction and all other Phase 2 activities is estimate to be 3-4 barge deliveries. Delivery of materials needed for the dam is discussed in the Phase 1 section above. In addition, the 500' penstock will also entail a single barge delivery to the marine facility. The delivery of the turbine and generator, switchgear and controls will also require another barge delivery. And the submarine cable will involve another barge delivery, with the associated equipment to lay the cable which is expected to take 2-3 days.

During Phase 2 construction, the current plan for fuel handling is to bring in two 2500 gallon tanker trucks and a 5000 gallon tanker trailer. When the tanker trailer is empty, the entire trailer will be loaded on the barge, refueled and returned as necessary. Current estimate is that about 100,000 gallons of fuel will be needed during Phase 2, requiring about 20 trips to bring in this amount of fuel. Many of these barge landings will be combined with the equipment and materials delivery described above.

Transportation Activities During Operations

The hydropower system and all related equipment will be remotely monitored and controlled from Angoon or Juneau, so no staff will be required on-site. Routine operations, system inspection and required monitoring activities will entail 1-2 trips per month for 1-2 staff per trip. Annual planned maintenance of the hydropower system, dam, roads, etc. is expected to require 5-10 days per year, which will mean a trip from Angoon to the site by 2-5 staff per day.

A double walled 500 gallon fuel tank will be located at the staging area to provide fuel needed for system operations and infrastructure maintenance.

APPENDIX A

Acronyms and Abbreviations

ACOE U. S. Army Corps of Engineers

ANCSA Alaska Native Claims Settlement Act

ANILCA Alaska National Interest Lands Conservation Act

Angoon Village of Angoon, Alaska

barrier falls the natural upstream barrier to anadromous fish ECM Plan Environmental and Compliance Monitoring Plan

FEIS Final Environmental Impact Statement

Forest Service U.S. Department of Agriculture, Forest Service

IPEC Inland Passage Electric Cooperative

kV kilovolt MW Megawatt

Project Thayer Creek Hydroelectric Project

ROD Record of Decision

SUA Special-Use Authorization

Attachement B: Easement with Stipulations

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF MINING, LAND AND WATER

ADL 108736 Kootznoowoo Inc.

MENT OF NAT

Private Easement, Nonexclusive

THIS EASEMENT is granted this ______day of ______, 20 _____ by and between the STATE OF ALASKA, acting by and through the **Department of Natural Resources, Division of Mining, Land and Water**, hereinafter referred to as the Grantor, whose address is 400 Willoughby Ave. 4th FL, DMLW Juneau, AK 99811-1020, and Juneau Hydropower Inc, whose address is PO Box 22775, Juneau, AK 99802, is hereinafter referred to as the Grantee.

WHEREAS, it is understood and agreed that, as a condition to the granting of said easement, this easement shall be used for no purpose other than the construction of a coastal access road in Gilbert Bay and laying submarine transmission cable on submerged lands in connection to the Sweetheart Lake Hydropower project, over and across portions of the following described state lands:

Within the Copper River Meridian, Township 49 South, Range 67 East, Section 34 and 35, and Township 50 South, Range 67 East, Section 2, 3, 11, 14, 23, 25, 26, and 36 on approximately __ acres of tide and submerged land.

IN accordance with the provisions of AS 38.05.850, and the rules and regulations promulgated thereunder, the grantor hereby reserves a nonexclusive easement over and across the above described state land within the Juneau Recorder's Office as shown on the ______ identified as Attachment B revealing the easement location granted herein.

This easement shall terminate on the __ day of _____, 204_, or when the Grantor determines that the easement is abandoned, is no longer necessary, is no longer in use for the purpose(s) authorized, or is revoked as a result of violations of the terms, conditions and stipulations of this easement.

This easement is private, nonexclusive. Grantor reserves the right to allow other like or compatible uses of the easement and the right to require such users to enter into an equitable maintenance agreement with the holder of this easement. The equitableness of any such agreement shall be determined by the Grantor.

The Grantee and entry persons who may exercise the rights and privileges granted by this document shall comply with all regulations now in effect or as hereafter established by the Division of Mining, Land & Water, all other federal, state or local laws, regulations or ordinances applicable to the area herein granted. In addition, the Grantee shall maintain the premise in a neat and orderly manner and shall adopt and apply such safety measures as shall be necessary, proper and prudent with respect to the use to which the land is subjected.

In the event that the easement granted shall in any manner conflict with or overlap a previously granted easement the Grantor recognizes that the easement granted herein shall be used in such a manner as not to interfere with the peaceful use and enjoyment of the previously issued easement or right-of-way.

The State of Alaska shall be forever wholly absolved from any liability for damages which might result from any claims, suits, loss, liability and expense for injury to or death of persons and damage to or loss of property arising out of or in connection with this easement.

NOW THEREFORE, in accordance with the provisions of AS 38.05.850 and the rules and regulations promulgated thereunder and in accordance with the conditions and stipulations as set forth in Attachment A of this easement, and including all documents that are incorporated by reference, the Grantee is authorized to operate and maintain said easement.

IN WITNESS WHEREOF, the Grantor has signed this easement on the day and year first above written.

[Signature Page Follows]

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES GRANTOR REGIONAL MANAGER Division of Mining, Land and Water STATE OF ALASKA My Commission expires: State Of Alaska State Of Alaska State Of Alaska My Commission expires: State Of Alaska My Commission expires: State Of Alaska

GRANTEE			
STATE OF ALASKA Judicial Distr) ss.		
THIS IS TO CERTIF before me personally the person named in voluntarily signing the	Y THAT ON THIS appeared_ and who executed sa e same.	day of, aid document and ac	, 20 , known by me to be knowledged
Notary Public in and	for the State of Alask	ia	
My Commission expi	res:		
FEE:	THIS IS OFFIC	IAL STATE BUSINE	SS, NO CHARGE
RETURN TO:	DMLW, DNR 400 Willoughby Juneau, AK 998	Avenue, 4 th Floor 311	

Attachment A – Stipulations

I. Authorized Officer

The Authorized Officer (AO) for the Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW) is the Southeast Regional Manager or designee. The AO may be contacted at 400 Willoughby Avenue, Juneau, AK 99811, or (907) 465 3400.

II. Annual Fee

The Grantee shall pay an annual rental fee of \$100 per acre, with total acreage based on an approved as-built survey. This fee is subject to adjustment based on changes in DNR's fee regulations.

III. Indemnification

Grantee assumes all responsibility, risk and liability for its activities and those of its employees, agents, contractors, subcontractors, licensees, or invitees, directly or indirectly related to this authorization, including environmental and hazardous substance risk and liability, whether accruing during or after the term of this authorization. Grantee shall defend, indemnify, and hold harmless the State of Alaska, its agents and employees, from and against any and all suits, claims, actions, losses, costs, penalties, and damages of whatever kind or nature, including all attorney's fees and litigation costs, arising out of , in connection with, or incident to any act or omission by Grantee, its employees, agents, contractors, subcontractors, licensees, or invitees, unless the proximate cause of the injury or damage is the sole negligence or willful misconduct of the State or a person acting on the State's behalf. Within 15 days, Grantee shall accept any such cause, action or proceeding upon tender by the State. This indemnification shall survive the termination of the authorization.

IV. Authorized Use

Improvements shall be consolidated within smallest practicable area, not to exceed the total acreage explicitly approved on page 1 of this authorization. Only those uses and temporary improvements depicted on Attachment A are allowed, unless prior Division approval is obtained for additional improvements. Use of the site for any unapproved purpose is prohibited. Grantee, its agents and employees are responsible for accurately siting authorized uses and structures within the authorization area. Any unauthorized use of State lands outside the authorization area, either by Grantee or by its agents or employees, is strictly prohibited. Any proposed revisions to the development plan/plan of operations must be approved in writing by the AO before the change in use or development occurs.

The authorized area shall be maintained in a neat, clean, and safe condition, free of any debris or litter. Grantee will, at its own expense, during the term of the authorization: 1. Maintain the authorized area and any improvements in good repair, 2. Promptly repair or remedy any damage to the authorized area, and 3. Promptly compensate the owner for any damage to or destruction of property within the authorized area for which Grantee is liable.

V. Assignment

This authorization may not be transferred or assigned without the prior written consent of the AO.

VI. Alaska Historic Preservation Act

The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury, or destruction of any state-owned historic, prehistoric (paleontological) or archaeological site without a permit from the commissioner. Should any sites be discovered within the authorization area, activities that may damage the site will cease and the Office of History and Archaeology in the Division of Parks and Outdoor Recreation shall be notified immediately at (907) 269-8721.

VII. Public Trust Doctrine

This authorization is issued subject to the Public Trust Doctrine, which guarantees public access to, and the public's right to use, all navigable and public waters and the land beneath them for navigation, commerce, fishing, and other purposes. The Division of Mining, Land and Water reserves the right to grant other interests consistent with the Public Trust Doctrine.

VIII. Public Access

All operations must be conducted in a manner that will ensure minimum conflict with other users of the area. There shall be no unreasonable interference with free public use of state lands and waters.

Pursuant to provisions of AS 38.05.127(a)(2), access to public waters surrounding the permit site may be temporarily restricted for short periods when operations are occurring that may pose a risk to public safety. DMLW will defer to the Grantee to determine the appropriate level of notification to be provided to the public should temporary closure occur. If DMLW receives notification of concerns or issues related to access at this site, DMLW may require alternative measures to address site-specific access issues to ensure that public access can be reasonably provided.

IX. Reservation of Rights

The DMLW reserves the right to grant additional authorizations to third parties for compatible uses on or adjacent to the land under this authorization. Authorized concurrent users of State land, their agents, employees, contractors, subcontractors, and licensees shall not interfere with the operation or maintenance activities of each user.

The AO reserves the right to modify these stipulations or use additional stipulations as deemed necessary. Grantee will be notified in writing prior to the implementation of any change in the terms or conditions exercised by the AO under this provision. Grantee will be afforded the opportunity to review and comment regarding the effect of any proposed change to this authorization. Failure of the Grantee to notify the AO of any change to current officers or addresses shall not be sufficient grounds to invalidate the AO's compliance with this notification process.

X. Appraisal

DMLW, at its discretion, may require the Grantee to obtain and submit a new Fair Market Value Appraisal for this site at five-year intervals. The appraisal is to be completed at Grantee's expense by a qualifying firm acceptable to DMLW.

XI. Survey

The Grantee shall submit an as-built survey acceptable to the standards of the Survey Section prior to the expiration of the Grantee's Entry Authorization. Please contact the DMLW Survey Section at 907-269-8523 to obtain survey instructions within 30 days of the execution of an Entry Authorization. A survey instruction fee may be required in accordance with 11 AAC 05.010(a)(13). The Grantee is required to submit a preliminary draft as-built survey prior to the expiration of the Entry Authorization to allow adequate time for the State's review and approval of a final as-built survey. The final easement will not be issued until the survey has been approved by the DMLW.

XII. Performance Guaranty

The Grantee shall provide a surety bond or other form of security acceptable to the AO in the amount of \$78,000 payable solely to the State of Alaska, DNR. Such performance guaranty shall remain in effect until the construction phase of the hydropower project is completed to secure performance of the Grantee's obligations hereunder. The amount of the performance guaranty may be adjusted by the AO upon approval of amendments to this authorization, changes in the development plan, changes to the project timeline, changes in the activities conducted on the premises, and for increased risks to state lands and resources. The guaranty may be utilized by the Division of Mining, Land and Water, at the discretion of the AO, to cover costs incurred by the State of Alaska to pay for any necessary corrective actions in the event the Grantee does not comply with site utilization and project guidelines. The provisions of this authorization shall not prejudice the State's right to obtain remedy under any law or regulation. The performance guaranty may only be released in writing by the AO after approval of the Grantee's construction completion report (see stipulation XVII).

XIII. Insurance

Pursuant to 11 AAC 96.065 the Grantee shall secure or purchase at its own expense, and maintain in force at all times during the term of this authorization, the following policies of insurance to protect both the Grantee and the Grantor (the State, its officers, agents and employees). If the Grantee's policy contains higher limits, the State shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the AO prior to the issuance of this authorization and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. The Grantee must provide for a 60-day prior notice to the State before they cancel, not renew or make material changes to conditions to the policy. Failure to furnish satisfactory evidence of insurance, or lapse of the policy, are material breaches of this authorization and shall be grounds, at the option of the State, for termination of the authorization. All insurance policies shall comply with, and be issued by, insurers licensed to transact the business of insurance under Alaska Statute, Title 21. The policy shall be written on an "occurrence" form and shall not be written as a "claims-made" form unless specifically reviewed and agreed to by the Division of Risk Management, Department of Administration. The State must be named as an additional named insured on the policy with respect to the operations of the Grantee on or in conjunction with the authorized premises, referred to as ADL 108736.

In the event the Grantee becomes aware of a claim against any of its liability coverage, the Grantee shall notify, and provide documentation and full disclosure of the claim to the AO within 20 days.

<u>Commercial General Liability Insurance</u>: Such policy shall have minimum coverage limits of \$1,000,000 combined single limit per occurrence.

<u>Workers' Compensation Insurance</u>: The applicant shall provide and maintain, for all its employees, Workers' Compensation Insurance as required by AS 23.30.045. Where applicable, coverage must comply with any other statutory obligations, whether Federal (i.e., U.S.L.&H., or, Jones Act) or other state laws in which employees are engaged in work on the leased premises. The insurance policy must contain a waiver of subrogation clause in favor of the State of Alaska.

XIV. Fuel and Hazardous Substances

The use and/or storage of hazardous substances by the Grantee must be done in accordance with existing federal, state and local laws, regulations and ordinances. Debris (such as soil) contaminated with used motor oil, solvents, or other chemicals may be classified as a hazardous substance and must be removed and disposed of in accordance with existing federal, state and local laws, regulations and ordinances.

- (a) During equipment maintenance operations, the site shall be protected from leaking or dripping hazardous substances or fuel. The Grantee shall place drip pans or other surface liners designed to catch and hold fluids under the equipment or develop a maintenance area by using an impermeable liner or other suitable containment mechanism. "Surface liner" means any safe, non-permeable container (e.g., drips pans, fold-a-tanks, etc.) designed to catch and hold fluids for the purpose of preventing spills. Surface liners should be of adequate size and volume based on worst-case spill risk.
- (b) Vehicle refueling shall not occur within the annual floodplain or below Ordinary High Water Mark or Mean High Water. This restriction does not apply to water-borne vessels.

XV. Spill Notification

The Grantee shall immediately notify Alaska Department of Environmental Conservation by telephone, and immediately afterwards send Alaska Department of Environmental Conservation a written notice by facsimile, hand delivery, or first class mail, informing Alaska Department of Environmental Conservation of: any unauthorized discharges of oil to water, any discharge of hazardous substances other than oil; and any discharge or cumulative discharge of oil greater than 55 gallons solely to land and outside an impermeable containment area. If a discharge, including a cumulative discharge, of oil is greater than 10 gallons but less than 55 gallons, or a discharge of oil greater than 55 gallons is made to an impermeable secondary containment area, the Grantee shall report the discharge within 48 hours, and immediately afterwards send Alaska Department of Environmental Conservation a written notice by facsimile, hand delivery, or first class mail. Any discharge of oil, including a cumulative discharge, solely to land greater than one gallon up to 10 gallons must be reported in writing on a monthly basis. The posting of information requirements of 18 AAC75.305 shall be met. The provisions of 18 AAC 75.310 (Scope and Duration of Initial Response Actions) and other reporting requirements of 18 AAC 75.300 – 18 AAC 75.396 also apply. The Grantee shall supply Alaska Department of Environmental Conservation with all follow-up incident reports. Notification of a discharge must be made to the nearest Alaska

Department of Environmental Conservation Area Response Team during working hours: Juneau (907) 465-5340, fax (907) 465-2237. The Alaska Department of Environmental Conservation oil spill report number outside normal business hours is (800) 478-9300. The Grantee shall supply Alaska Department of Environmental Conservation with all follow-up incident reports. All fires and explosions must also be reported. The DNR 24-hour report number is (907) 451-2678; the fax number is (907) 451-2751. DNR or the appropriate land manager and Alaska Department of Environmental Conservation shall be supplied with all follow-up incident reports.

XVI. Waste Disposal

All waste/debris generated from activities conducted under this easement shall be removed as required by State and Federal law on a routine and timely basis. Additionally, easement area shall be free of waste/debris on or before termination or expiration of this Easement.

XVII. Inspections

Authorized representatives of the State of Alaska shall have reasonable access to the subject parcel for purposes of inspection and may inspect the authorized area at any time without notice.

The Grantee may be charged fees under 11 AAC 05.010(a)(7)(M) for routine inspections of the subject parcel, inspections concerning non-compliance, and a final close-out inspection.

For purposes of information and review, the AO at any time during normal business hours, may require the Grantee to furnish data related to preconstruction or construction activities undertaken in connection with the project. The Grantee shall furnish the required data as soon as possible or as otherwise required under the terms of the authorization.

XVIII. Construction Phase Completion Report

Upon completion of the project's construction phase, Grantee shall submit a construction completion report to DNR DMLW for the AO's approval. This report shall contain, at a minimum, the as-built exhibits referenced in the preliminary decision.

Failure to submit a satisfactory report subjects the site to a field inspection requirement for which the Grantee may be assessed, at the AO's discretion, either the actual cost incurred by the DMLW or a minimum of \$100.00.

XIX. Project Completion and Site Restoration

Three years before the expiration of the easement, Grantee shall apply to DNR for an extension or a new easement for the same site, or post a commensurate performance guaranty and submit to DNR a site restoration plan. If at any time during the easement term, DNR reasonably determines that the project's continued operation is in jeopardy, DNR may require the Grantee to provide a commensurate performance guaranty and restoration plan.

XX. Stop Work Orders

Stop Work Orders may be issued if there is a deviation from design criteria, project specifications, stipulations, state statutes, or state regulations and that deviation is causing or is likely to cause significant damage to state resources. Under a Stop Work Order, work

at the area subject to the Stop Work Order may not resume until the deviation is cured and corrective action is taken. Corrective action may include halting or avoiding specific conduct, implementing alternative measures, repairing any damage to state resources that may have resulted from the conduct, or other action as determined by the AO. The AO has the right but not the obligation, to undertake corrective action at the expense of the Grantee by moving against the performance bond when such action is necessitated by neglect or inaction on the part of the Grantee to take corrective action.

XXI. Violations

Pursuant to 11 AAC 96.145, a person who violates a provision of this authorization is subject to any action available to the DNR for enforcement and remedies, including revocation of the authorization, civil action for forcible entry and detainer, ejectment, trespass, damages, and associated costs, or arrest and prosecution for criminal trespass in the second degree. The DNR may seek damages available under a civil action, including restoration damages, compensatory damages, and treble damages under AS 09.45.730 or 09.45.735 for violations involving, gathering geotechnical data, or taking mineral resources.

XXII. Choice of Law and Jurisdiction

This authorization shall be construed under the laws of the State of Alaska. The Grantee confers personal jurisdiction on the courts of the State of Alaska for any litigation under this authorization.



Department of Natural Resources

Division of Mining Land & Water Southeast Region

400 Willoughby Ave 4th FL Juneau, Alaska 99801 Main: (907) 465 3400 Fax: (907) 465 3886

Attachment C: Entry Authorization Entry Authorization

ADL 108736

Kootznoowoo Inc., herein known as the Grantee, is issued this Entry Authorization authorizing the use of state land within:

Legal Description:

Copper River Meridian, Township 49 South, Range 67 East, Section 34 and 35, and Township 50 South, Range 67 East, Section 2, 3, 11, 14, 23, 25, 26, and 36 on approximately 154 acres of tide and submerged land.

This Entry Authorization is issued for the purpose of authorizing the following:

To lay and maintain a submarine transmission cable along an approximate 6.37-mile-long and 200-foot-wide section of Chatham Strait north of Angoon, Admiralty Island. The transmission cable is related to the Thayer Creek hydropower project.

Prior to issuing the final Easement, and during the EA period, the Grantee shall conduct and submit an Alaska Tidelands Survey to DNR for approval.

This authorization is effective beginning	and ending	_, unless sooner
terminated		

This Entry Authorization is issued subject to the following:

- Payment of the annual use fee in the amount of \$7,800.00 (seven thousand eight hundred dollars) due on or before the annual anniversary date and any additional fees identified in the stipulations below.
- Remittance of a Performance Guaranty in the amount of \$78,000 (seventy-eight thousand dollars) as required in the stipulations to the Easement.
- Proof of insurance as described in the stipulations to the Easement.

The non-receipt of a courtesy billing notice does not relieve the Grantee from the responsibility of paying fees on or before the due date.

All activities shall be conducted in accordance with the stipulations provided in Attachment A of the draft Easement.

DNR has the authority to implement and enforce these conditions under AS 38.05.850. Any correspondence on this authorization may be directed to the Department of Natural Resources,

Division of Mining, Land and Water, Southeast Region, 400 Willoughby Avenue, Juneau AK, 99811-1020, Phone: (907) 465 3400.

I have read and understand all of the foregoing and attached stipulations. By signing this authorization, I agree to conduct the authorized activity in accordance with the terms and conditions of this authorization.

Signature of Grantee or Aut	thorized Representative	Title	Date
Grantee's Address	City	State	Zip
Contact Person	Home Phone	Work Phone	
Signature of Authorized Sta	ate Representative	Title	Date